Iron Age and Roman Settlement in the Upper Thames Valley

Excavations at Claydon Pike and other sites within the Cotswold Water Park

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Preface

The Oxford Archaeological Unit, (now Oxford Archaeology) was established in 1973 with the intention of developing research opportunities out of what was then conventionally called rescue archaeology. 'Rescue' had some unfortunate connotations – of grabbing archaeology at speed from the teeth of the bulldozers; of recording for recording's sake; of reaction rather than direction. As a result the Unit's founders deliberately left the word out of its title and consciously promoted a problem-orientated research agenda for the Thames Valley and the towns of the region.

In the 1970s massive areas of land were being consumed by urban and suburban expansion in the Oxford region, notably around Abingdon, Bicester, Witney, Didcot and Oxford itself. Gravel extraction was also a major agent of archaeological loss and landscape change. These developments presented opportunities, however. The archaeological agenda was set by a series of surveys, notably of historic towns and the river gravels. *The Upper Thames Valley: an archaeological survey of the river gravels* (Benson and Miles 1974) mapped fifty years of aerial photographic evidence for the first time, revealing the palimpsest of historic landscapes and the sheer extent and variety of archaeology, mostly flattened by centuries of ploughing, but visible in startlingly clear images as cropmarks, and captured by a small number of dedicated aerial photographers. The Upper Thames Survey was also a homage to another work, the RCHM(E)'s *A Matter of Time* (1966), a pioneering attempt to draw attention to the enormous losses from quarrying in our river valleys and the potential of aerial archaeology.

Unfortunately, instead of pursuing this mission to influence environmental conservation and management the Royal Commission retreated into its stately survey volumes. One such, launched in 1976 and composed over the previous decade or more, was *Iron Age and Romano-British Monuments in the Gloucestershire Cotswolds* (RCHM(E) 1976). This was a typical grand volume, produced with care and precision, yet oblivious to the sordid issues of land-use, and the impact on the sites which were so lovingly recorded. No reader then or now would guess that many of these monuments were in the process of being ploughed away or gobbled up by draglines. For since the 1950s most of the upper reaches of the Thames Valley were being transformed into the Cotswold Water Park. The work of RCHM(E) did, however, map the cropmarks which criss-crossed the area, and a follow up to the Benson and Miles survey, *The Upper Thames Valley in Gloucestershire and Wiltshire* by Robert Leech (1977) graphically illustrated the extent of archaeological loss and the ongoing transformation of the landscape. With the evidence presented with such clarity the case for action was, frankly, easily made. Local authority planners, minerals operators and the Department of Environment and its Inspectorate of Ancient Monuments (as it then was) rapidly accepted the need to respond.

Through the seventies from the aerial evidence, we built up a hierarchy or network of prehistoric and Romano-British settlements in the region, modelling their economic roles and inter-relationships. In particular environmental sampling was systematically built in to investigations of specific site types, ranging from in the Iron Age, for example, mixed farms with an emphasis on arable production such as Ashville (Abingdon) and Gravelly Guy (Stanton Harcourt) to seasonally occupied pastoral settlements in the floodplain such as Farmoor.

It was against this background that our attention was drawn to Claydon Pike between Lechlade and Fairford (Glos). Here one of the largest complexes of cropmarks covered much of 2 square kilometres which in 1979 had received planning permission for gravel extraction. Not surprisingly archaeology had failed even to register on the local planning authority radar. The *Cotswold Water Park* (Cotswold Water Park Joint Committee 1969) had set out future proposals for gravel extraction in the Gloucestershire and Wiltshire Thames Valley. It scanned issues such as hydrology, recreation, transport and wildlife conservation but failed to register any interest in the rich archaeological heritage of the area. So for a decade the destruction continued with no archaeological investigation (in spite of the valiant appeal by Chris Gingell in *A Penny for your Past* (1972).

Attitudes were changing in 1979, not least in the minerals industry itself. The initial evaluation work at Claydon Pike – an early example of what is now a standard procedure in archaeology – was funded by ARC (Southern). This confirmed the late prehistoric and Roman-British dates of the site, and the relatively good state of preservation of both archaeological and biological deposits. The settlement complex ideally fit the research framework of the time: at least three distinct settlement areas of different character linked by trackways and watercourses and with relatively well-defined boundaries. The project offered the opportunity to examine landscape change through time and the relationship between topologically different settlements and their land-use. The intention was to

investigate on a macro-scale, and not to use limited resources to unravel every aspect of micro-stratigraphy. We also targeted specific areas to maximise data gathering, for example intersections of cropmark complexes.

Initially the entire cropmark complex was referred to as Claydon Pike. When expenditure rules necessitated Treasury approval for each new phase of the ongoing project a division was drawn between the east and west site, with the latter renamed as Thornhill Farm (Published in Jennings *et al.* 2004). Conceptually however, Claydon Pike and Thornhill Farm were approached as one coherent project.

While excavations were being undertaken at Claydon Pike itself fieldwork (including systematic metal-detecting) was carried out in surrounding areas. Other sites were also located in advance of gravel extraction. The most significant of these was Neigh Bridge, Somerford Keynes. With the support of the then current job creation schemes funded by the Manpower Services Commission excavations were undertaken to complement the Claydon Pike investigations. Inevitably given the limited resources these excavations were limited in scope. However, they have, I believe, added substantially to our knowledge of the wider landscape – and thanks to English Heritage support they have been included in this volume.

As with all good projects we learnt from our mistakes at Claydon Pike; and from our ambitious attempts to work on such a scale. Our first on-site computers were in use from 1980 but these did little more than generate lists. However, from this experience came the much more sophisticated approaches used in later projects. Partly because of the problems of data handling we have taken longer to produce this report than, ideally, should have been the case. Nevertheless its completion is an achievement and a record of a significant phase in the archaeology of the Thames Valley.

David Miles November 2005

Summary

The Cotswold Water Park Project is a landscape study centred upon parts of the Upper Thames Valley in the southern and eastern hinterland of the Roman town of Cirencester, within what is now the Cotswold Water Park. The report is based upon four key excavated sites.

Excavations on the 1st gravel terrace at Claydon Pike between 1979 and 1983 revealed two areas of settlement, ranging from the middle Iron Age to the medieval period. The middle Iron Age settlement appears to have shifted across three gravel islands over time. The inhabitants were pastoralists with a subsistence led mixed animal economy. In the early 1st century AD a nucleated settlement was established about 120 m to the south at Longdoles Field, characterised by a series of large and intensively recut enclosures, gullies, pits and substantial boundary ditches. Within the site was identified a number of activity areas associated with domestic habitation, small-scale metalworking, and stock management. It appears to have operated a largely subsistence economy associated with cattle ranching. The early 2nd century saw dramatic changes, with the enclosures, gullies and ditches of the earlier phase being replaced by two large rectangular enclosures, a substantial aisled barn and an aisled house. The economic basis of the site incorporated the management of hay-meadows, probably on a commercial basis to sustain the needs of growing local population centres such as Cirencester. At some point during the early 4th century AD, there appears to have been deliberate and widespread clearing of the site, which was undoubtedly connected with the establishment of a modest masonry footed villa on the site comprising two separate structures, the southern of which incorporated a hypocaust room. A small inhumation cemetery and circular shrine were also part of the wider complex. The final abandonment of the villa at Claydon Pike is unclear, but there is some evidence to indicate activity of some kind until the start of the 5th century. A small group of inhumation burials cut through the villa building, three of which were radiocarbon dated to the middle Saxon period. Further intermittent activity took place on site in the medieval period.

A series of salvage excavations between 1986 and 1988 at Neigh Bridge, Somerford Keynes revealed part of a late Iron Age and Roman settlement. A late Iron Age/early Roman farmstead was replaced by a system of trackways and ditched enclosures and a large aisled building in the early 2nd century AD. The building was associated with a large quantity and variety of tile, and there are some indications that it may have been at least in part a tile depot. Sculptural fragments of the Capitoline triad point to an official religious presence. No features can be securely dated much beyond the end of the 2nd century AD, although a substantial number of late 3rd and 4th century coins and small finds suggests late Roman activity of some kind.

Three archaeological investigations were undertaken at Whelford Bowmoor in 1983, 1985 and 1988. The earliest features revealed during excavations comprised a regular system of sub-rectangular enclosures, dating to the early/mid 2nd century AD. The enclosures were probably used for livestock management. A rubble building platform and associated 'midden' deposits, date from the later 2nd to early/mid 3rd century AD, when many of the earlier enclosures had gone out of use. There is no evidence for late Roman activity.

Archaeological evaluation and excavation took place at Stubbs Farm, Kempsford from 1991 to 1995, specifically targeting a multi-ditched circular and rectangular enclosure known from cropmark evidence. The two enclosures would seem to relate to separate phases of activity, with the circular feature having a very tentative Iron Age/early Roman date. The rectangular enclosure clearly belongs to a later phase of activity, in the 2nd and 3rd centuries AD. The overall character of this phase is indicative of a low status rural farmstead operating a largely pastoral economic regime amidst the grasslands of the lower gravel terrace and floodplain. The settlement appears to have gone out of use by the second half of the 3rd century AD.

Zusammenfassung

Das Cotswold Water Park Project ist ein Landschaftsforschungsprojekt, das sich auf jene Teile des oberen Themse Tals im südlichen und östlichen Hinterland der römischen Stadt Cirencester konzentriert, die heute den Cotswold Water Park bilden. Der vorliegende Bericht beruht auf den vier wichtigsten Grabungsstellen.

Zwischen 1979 und 1983 brachten Ausgrabungen auf der ersten Schotterterrasse in Claydon Pike zwei Siedlungsabschnitte zutage, welche von der mittleren Eisenzeit bis ins Mittelalter datieren. Die Siedlung der mittleren Eisenzeit scheint sich im Laufe der Zeit über drei Schotterinseln verlagert zu haben. Die Bewohner waren Hirten mit einer auf den eigenen Unterhalt ausgerichteten gemischten Tierhaltung. Im 1. Jh. n. Chr. entstand etwa 120 m südlich davon, in Longdoles Field, ein Siedlungskern, der durch eine Reihe großer und intensiv instand gehaltenen Einfriedungen, Rinnen, Gruben und ausgeprägten Grenzgräben charakterisiert ist. Innerhalb dieser Fundstelle wurde eine Reihe von häuslichen Arbeitsbereichen festgestellt und in geringem Umfang Metallverarbeitung und Vorratshaltung. Es scheint vor allem Subsistenzwirtschaft, verbunden mit Viehhaltung, betrieben worden zu sein. Im frühen 2. Jh. fanden drastische Änderungen statt. Die Einfriedungen, Rinnen und Gräben der früheren Phase wurden durch zwei große rechtwinkelige Einfriedungen, einen beachtlichen mehrschiffigen Stall und ein mehrschiffiges Haus ersetzt. Die wirtschaftliche Grundlage der Anlage bildete unter anderem die Unterhaltung von Heuwiesen, wahrscheinlich auf einer kommerziellen Basis, um die Bedürfnisse der wachsenden lokalen Bevölkerung von Zentren wie Cirencester zu befriedigen. Im Verlauf des frühen 4. Jh. n. Chr. scheint eine absichtliche, breit angelegte Bereinigung der Anlage stattgefunden zu haben, die zweifelsohne in Verbindung mit der Errichtung einer bescheidenen Villa mit gemauerten Fundamenten stand. Die Villa bestand aus zwei separaten Teilen, der südlichere davon hatte einen mit Hypocausten versehenen Raum. Ein Grabgruppe mit Körpergräbern und ein kreisförmiger Schrein waren ebenfalls Teil der Anlage. Zu welchem Zeitpunkt die Villa in Claydon Pike letztendlich aufgegeben wurde ist unklar, aber die Befunde deuten auf nicht näher bestimmbare Aktivitäten bis in den Beginn des 5. Jh. n. Chr. Die Villa wird von einer kleinen Körpergräbergruppe geschnitten, von der drei Gräber in die mittlere sächsische Periode C14-datiert wurden. Eine weitere sporadische Nutzung der Fundstelle fand im Mittelalter statt.

Eine Reihe von Rettungsgrabungen zwischen 1986 und 1988 in Somerford Keynes Neigh Bridge brachte Teile einer späteisenzeitlichen und römischen Siedlung zutage. Ein späteisenzeitlicher Hof wurde im frühen 2. Jh. n. Chr. durch ein System von Wegen, Gräben und ein großes mehrschiffiges Gebäude ersetzt. Im Gebäude kam eine große Menge und Typenvielfalt von Dachziegeln zum Vorschein, und es gibt Hinweise darauf dass es sich dabei, zumindest teilweise, um ein Depot für Dachziegel handelt. Statuenfragmente der Kapitolinischen Trias deuten auf eine Präsenz der römischen Staatsreligion hin. Keine der Strukturen kann sicher über das Ende des 2. Jh. n. Chr. hinaus datiert werden, aber eine bemerkenswerte Anzahl an Münzen aus dem 3. und 4. Jh. n. Chr. lässt auf eine unbestimmte Weiternutzung in spätrömischer Zeit schließen.

Drei archäologische Untersuchungen fanden 1983, 1985 und 1988 in Whelford Bowmoor statt. Die frühesten Befunde stellen ein regelmäßiges System von annähernd rechtwinkeligen Einfriedungen dar, die in das frühe bis mittlere 2. Jh. n. Chr. datieren. Die Einfriedungen wurden wahrscheinlich zur Viehhaltung genutzt. Eine Gebäudeplattform aus Bruchstein und damit verbundene Abfallschichten datieren in das späte 2. und frühe/mittlere 3. Jh. n. Chr., d.h. in eine Zeit als viele der früheren Einfriedungen nicht mehr genutzt wurden. Es gibt keinen Nachweis für eine spätrömische Nutzung.

Die archäologische Evaluierung und die Ausgrabungen in Stubbs Farm fanden von 1991 bis 1995 statt und zielten speziell auf eine mehrfache kreisförmige und eine mehrfache rechtwinkelige Grabenanlage ab, die bereits durch Bewuchsmerkmale bekannt war. Die zwei Anlagen beziehen sich auf zwei unterschiedliche Nutzungsphasen. Die kreisförmige Anlage kann mit Vorbehalten in die Eisenzeit/frühe Römerzeit datiert werden, während die rechtwinkelige Anlage eindeutig zu einer späteren Nutzungsphase, im 2. und 3. Jh. n. Chr. gehört. Der allgemeine Charakter dieser Phase weist auf einen ländlichen Hof von niederem Status, der hauptsächlich Viehwirtschaft im Grasland der unteren Schotterterrasse und im Augebiet unterhielt. Die Siedlung scheint in der zweiten Hälfte des 3. Jh. n. Chr. aufgelassen worden zu sein.

Résumé

Le projet de Cotswold Water Park est une étude de paysage centrée sur des parties de la vallée supérieure de la Tamise dans l'arrière-pays sud et est de la ville romaine de Cirencester, au sein de ce qui constitue maintenant le Cotswold Water Park. Le rapport se base sur la fouille de quatre site majeurs.

Les fouilles sur la première terrasse de gravier à Claydon Pike entre 1979 et 1983 ont révélé deux zones de site d'habitation, dont la datation s'échelonne depuis l'âge du Fer moyen à la période médiévale. Le site d'habitat de l'âge du Fer moyen semble s'être déplacé à travers les trois îles de gravier au cours du temps. Les habitants pratiquaient un système de pastoralisme avec une économie mixe de subsistance dominée par la production animale. Vers le début du Ier siècle ap. J.-C, un site d'habitats groupés fut établi quelques 120 m au sud de Longdoles Field, qui se caractérisait par une série de larges enceintes s'entrecoupant les unes avec les autres, des petits fossés, des fosses et des fossés substantiels de délimitation. Un certain nombre de zones d'activités furent identifiées au sein du site, associées en particulier avec les habitats domestiques, le travail du métal sur une échelle réduite et la gestion du bétail. Il semble qu'il ait opéré largement une économie de subsistance associée avec l'élevage de bovins. Le début du IIème siècle ap. J.-C. vit des changements dramatiques avec le remplacement des enceintes et fossés de la phase la plus ancienne par deux larges enceintes rectangulaires, une grange à nef substantielle et une maison à nef. La base économique du site inclus la gestion de prairies de foin, qui s'inscrit probablement dans un contexte commercial destiné à subvenir aux besoins des centres de populations locales en plein essor, tel que Cirencester. Au cours du début du IVème siècle ap. J.-C., le site semble avoir été délibérément déblayé de manière extensive, ce qui fut sans nul doute associé à l'établissement d'une modeste villa sur fondation de maçonnerie. Celle-ci comprenait deux structures distinctes, dont celle du sud qui incorporait une pièce à hypocauste. Une petite nécropole à inhumation ainsi qu'un sanctuaire circulaire faisaient également parti du complexe dans son ensemble. L'abandon final de la villa à Claydon Pike est incertain, mais il existe des traces d'activité jusqu'au début du Vème siècle. Un petit groupe de sépultures à inhumation recoupait le bâtiment de la villa. Trois d'entre elles furent datées par radiocarbone au milieu de la période saxonne. D'autres activités intermittentes eurent lieu sur le site au cours de la période médiévale.

Une série de fouilles de sauvetage, conduites entre 1986 et 1988, à Somerford Keynes Neigh Bridge, ont révélé partie d'un site habitat de la fin de l'âge du Fer et de l'époque romaine. Une ferme datée de la fin de l'âge du Fer/début de l'époque romaine fut remplacée par un système de chemins et d'enceintes à fossés ainsi que par un large bâtiment à nef vers le début du IIème ap. J.-C. siècle. Le bâtiment était associée à une quantité importante et variée de tuiles, et d'autres indices semblent indiquer qu'il s'agissait au moins en partie d'un dépôt de tuiles. Des fragments sculptés de la triade capitolienne indiquent une présence religieuse officielle. Aucun fait archéologique ne put être daté de manière sure au delà de la fin du IIème siècle, bien qu'un nombre important de pièces de monnaie et d 'autres mobiliers isolés datés de la fin du IIIème et IVème siècles suggèrent une activité de quelque sorte vers la fin de l'époque romaine.

Trois fouilles archéologiques furent entreprises à Whelford Bowmoor, en 1983, en 1985 et en 1988. Les faits archéologiques plus anciens révélés au cours des fouilles comprenaient un système régulier d'enceintes pseudo-rectangulaires et daté du début ou du milieu du IIème siècle ap. J.-C. Les enceintes étaient probablement utilisées pour la gestion du bétail. Une plate-forme de bâtiment en gravats associée à des dépôts d'ordures est datée de la fin du IIème au début ou milieu du IIIème siècles ap. J.-C., alors que nombre des enceintes d'époque plus précoce étaient tombées à l'abandon. Aucune trace d'activités de la fin de l'époque romaine ne fut mise en évidence.

Des opérations de diagnostic et de fouilles eurent lieu à Stubbs Farm entre 1991 et 1995, qui ciblaient en particulier deux enceintes à fossés multiples, une de forme circulaire et une rectangulaire, connues à partir d'indices phytographiques. Les deux enceintes semblent être rattachées à des phases distinctes d'activités. L'enceinte circulaire fut datée très approximativement à l'âge du Fer ou au début de l'époque romaine. L'enceintes rectangulaire appartient de manière certaine à une phase d'activité plus tardive, vers les IIème ou IIIème siècles ap. J.-C. Les caractéristiques générales attachées à cette phase indiquent une ferme rurale de bas statut qui fonctionnait largement à partir d'un régime économique pastoral parmi les prairies de la terrasse de gravier inférieure et de la plaine d'inondation. Le site d'habitat semble avoir été abandonné vers la seconde moitié du IIIème siècle.

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In a project of this scale and longevity there are large numbers of people who have provided contributions both large and small over the years, and we wish to gratefully acknowledge all of their work.

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For assistance with aerial photography provision and interpretation John Hampton and Colin Bowen of the RCHM(E), Bob Bewley and Katy Whitaker of English Heritage and David Wilson of Cambridge University. At Gloucestershire County Council's Sites and Monuments Record, archaeologist Alison Alden helped us to establish the project. Mark Maillard revealed to us the enormous benefit of properly-used metal detectors. David Viner, Director of Corinium Museum, Cirencester, helped greatly with storage and conservation facilities and was a fount of local knowledge.

Several hundred people helped to excavate the site and process the finds. There are too many to mention by name. We are grateful to all of them and especially site supervisors Alan Hardy, Phil and Wendy Page, Pete Rooke, Judith Russen, Chris Storey and Gerry Wait, who also undertook finds analysis along with Sarah Green and John Hedges.

Dr JTS Stead and Lieutenant Colonel JE Kendal enabled the Alamein Platoon from the Light Infantry Dept to provide energetic assistance. The training excavations for Oxford University's then Department of Continuing Education were organised with the assistance of Trevor Rowley. Many of the site workers were provided by Youth Opportunities Programmes and the Manpower Services Commission. Tom Hassall, then Director of the Oxford Archaeological Unit backed the project and headed the administrative and financial support.

The Inspectorate of Ancient Monuments (Department of Environment) which was transformed into English Heritage provided financial support and advice from beginning to end. We would particularly like to thank Geoffrey Wainwright, Brian Davison, Christopher Young, Rob Isles and Helen Keeley, the post-excavation project monitor.

The Oxford Archaeological Unit (now Oxford Archaeology) provided a stimulating environment for research and we would particularly like to thank our colleagues for assistance and advice, Professor Sheppard Frere and Professor Peter Salway (successively Chairmen), George Lambrick, Tim Allen, Mark Robinson; David Jennings and Gill Hey who continued the excavation of the Thornhill Farm area; at Cambridge University Professor Martin Jones, Marsha Levine and Dr Richard Hingley of Durham University; and Dr Ian Hodder, Stanford University. I must thank my wife Gwyn Miles, both for assistance with the project and for moving house while I stayed on site.

Finally we must acknowledge our debt to all our co-authors and specialists who persisted with the project, notably Alex Smith who brought the report though to completion. All of the finds work was managed by Leigh Allen, the environmental work by Dana Challinor and the archives by Nicola Scott. The illustrations were produced in the most part by Ros Smith and Pete Lorimer, and their patience, skill and enthusiasm has been greatly appreciated. Many thanks to Steve Hilton, Dennis Mitcham, Paul and Sally Thorold for acting as models for the reconstruction drawings.

The excavation and post-excavation programmes for Kempsford Multi-Agg Quarry were funded by Multi-Agg Limited, on behalf of which Gordon Varley and Richard Adams provided on-site assistance. The work was monitored for Gloucestershire County Council by Charles Parry, whose interest and support for the project is acknowledged; Gloucestershire Sites and Monuments Record staff kindly provided information on sites in the Kempsford area. The site work was carried out by a small team, excellently supervised by Jim Mumford. Post-excavation work was carried out by Jennifer Coolidge and principally by Dan Stansbie, who drafted the site narrative. Thanks are also owed to all the specialist contributors. Dana Challinor and Elizabeth Stafford wish to record thanks to Dr Mark Robinson of the Oxford University Museum of Natural History for his useful comments on the charcoal and mollusc reports respectively. Survey and digital mapping support was provided by Matt Bradley and Mark Storey and the illustrations were produced by Amy Tucker. Alex Smith kindly provided information on current OA work on Cotswold Water Park sites. The project was managed throughout by Paul Booth and the report was edited for publication by Anne Dodd.

David Miles

CD-Rom

The CD-ROM accompanying this volume contains detailed archive reports on the stratigraphy, finds and environmental evidence for the four key Cotswold Water Park sites and the survey sites. Digital Section 1 is an introduction to the Project. Digital sections 2 to 4 contain archive reports for Claydon Pike, along with a comprehensive set of illustrations and full context and finds tables for this site. The remaining sections (5 to 8) contain the archive reports and supporting material for the other Cotswold Water Park sites, including Kempsford, Multi-Agg Quarry. The latter site has been included in the digital volume only.
All of the data within the CD is intended to support the interpretations and discussions outlined within this print volume. However, both sections are designed to be consulted independently of each other.
A guide to the CD-ROM may be found within section 1 and its contents are listed below.

The volume is accompanied by a CD-Rom, 'The Eagle In The Landscape', which contains the digital archive report for the key Cotswold Water Park sites. These web-based digital archives have been developed to enable readers to have access to more data than would be possible in a traditional publication.

A full version of this CD is available at the Archaeology Data Service website **http://ads.ahds.ac.uk** and Oxford Archaeology's website **thehumanjourney.net**.

A full version of this book available as a pdf is also available at **thehumanjourney.net**

Instructions for running the CD:

1. Insert the CD-Rom in your CD Drive
2. If Autoplay is enabled then the CD will start.

Otherwise double-click on the CD-Rom Drive letter in My Computer or select Autoplay from the right click pop-up menu.

System requirements:

The website is designed to run on a minimum screen resolution of 800 by 600 pixels using a suitable web browser

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Chapter 1 The Cotswold Water Park Project

by Alex Smith

INTRODUCTION

The Cotswold Water Park Project is a landscape study centred on parts of the Upper Thames Valley in the southern and eastern hinterland of the Roman town of Cirencester (Fig. 1.1). Over the past 50 years, much of this area has been subject to gravel extraction in order to cater for the boom in the construction industry. The resultant flooded gravel quarries saw the creation of the Cotswold Water Park, an area of nature reserves, country parks and recreational zones spreading over 40 square miles (Fig. 1.2, Pl. 1.1). The large-scale quarrying along these gravel terraces has led to numerous extensive archaeological investigations which have highlighted dense areas of settlement, ranging from early Neolithic to the post-medieval period.

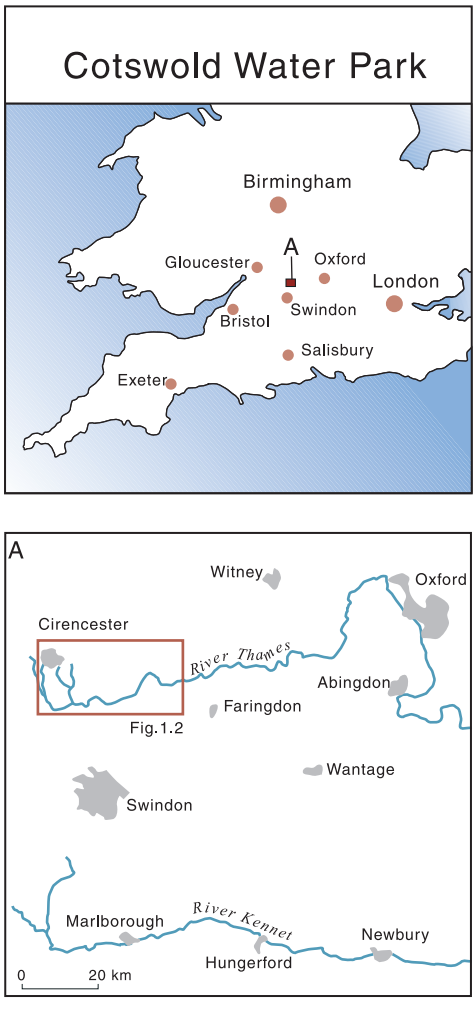


Fig. 1.1 Location of project area

The current project has incorporated a number of key Iron Age and Roman archaeological sites within this region (Fig. 1.2), of which the most extensive is that of Claydon Pike near Lechlade excavated during the late 1970s and early 1980s (see below). Two other sites, Neigh Bridge, Somerford Keynes and Whelford Bowmoor, were also excavated in the 1980s, while the smallest site at Stubbs Farm, Kempsford was investigated between 1991 and 1995. The overall aim of the project has been to examine the socio-political and economic development of the region from the middle Iron Age to the end of the Roman period, with a particular emphasis on social processes and settlement development and hierarchy.

PROJECT BACKGROUND

Most of the key sites within the current study were the subject of archaeological investigation in the late 1970s and 1980s as part of a co-ordinated programme of research carried out by Oxford Archaeology (OA, formerly Oxford Archaeological Unit, OAU) in the Gloucestershire Upper Thames Valley (see Preface). Aerial surveys in the 1970s revealed as cropmarks a continuous zone of prehistoric and Roman settlement positioned on the low-lying gravel terraces from Lechlade to Cirencester (the Cotswold Water Park; see Chapter 2 for more information on aerial photographs). As these were fast disappearing into the expanding gravel quarries, OA proposed to undertake large-scale investigations within a part of this landscape – mainly within a block of land between Fairford and Lechlade – and extensive areas of complex archaeology were revealed and comprehensively excavated. The project was not just a series of rescue excavations but a co-ordinated programme of intensive aerial photography combined with targeted evaluation, open area excavation and salvage operations. The primary aim of this work was to identify any sub-regions and site types within the area of investigation, and then pursue environmental, structural and inter-site relational objectives (see below).

The most extensive and archaeologically significant of the key project sites is that at Claydon Pike, which was thoroughly investigated in a series of excavations under the direction of Simon Palmer and David Miles from 1979 to 1983. The investigations examined an area in total of around 40 ha, with archaeological activity ranging from the middle Iron Age to post Roman period. Trackways visible on aerial photographs linked Claydon Pike to another

Plate 1.1 The Cotswold Water Park today

extensive Iron Age and Romano-British site – excavated under Simon Palmer and Gill Hey in the mid to late 1980s – at Thornhill Farm, less than 1 km further west (Jennings *et al.* 2004). Its material culture and developmental trajectory are quite different to that of Claydon Pike, and so has provided the ideal opportunity for examining the relationships between different landscape components.

On a much reduced scale, but still of great significance in terms of understanding landscape development, are the excavations of the nearby Romano-British sites at Whelford Bowmoor, investigated prior to gravel extraction between 1983 and 1985, and Kempsford, Stubbs Farm, a developer-funded site investigated in the early to mid 1990s. The most westerly of the key Cotswold Water Park sites, lying *c* 18 km to the west of Claydon Pike, is the Iron Age and Roman site at Neigh Bridge, Somerford Keynes, which was subject to a salvage excavation by the OAU between 1986 and 1988, and produced a range of important finds. Finally, a number of fieldwalking and metal detecting surveys were conducted in a private capacity by Mike Maillard in the Lechlade-Fairford area during the period of the 1980s excavations. These produced Roman material, which in the case of Leaze Farm was of considerable quantity, and serve to highlight the density of Roman activity in the region. The results of excavations at another site within the CWP, Multi-Agg quarry, Kempsford may be found on section 8 of the CD ROM.

Original aims of the Claydon Pike Landscape Research Project

The Cotswold Water Park excavations and surveys were seen as part of a wider landscape project from the outset (see Preface). The investigations were focused upon the large area excavations at Claydon Pike and Thornhill Farm, but also included smaller sites like Neigh Bridge, Somerford Keynes and Whelford Bowmoor, along with a number of survey sites. It was proposed to investigate the use of the gravel terraces from prehistoric to Anglo-Saxon times, with special emphasis on Roman and native interaction and the concept of Romanisation, which was – and indeed still is – a major component of the Romano-British research agenda.

There were two initial questions that the excavations sought to answer:

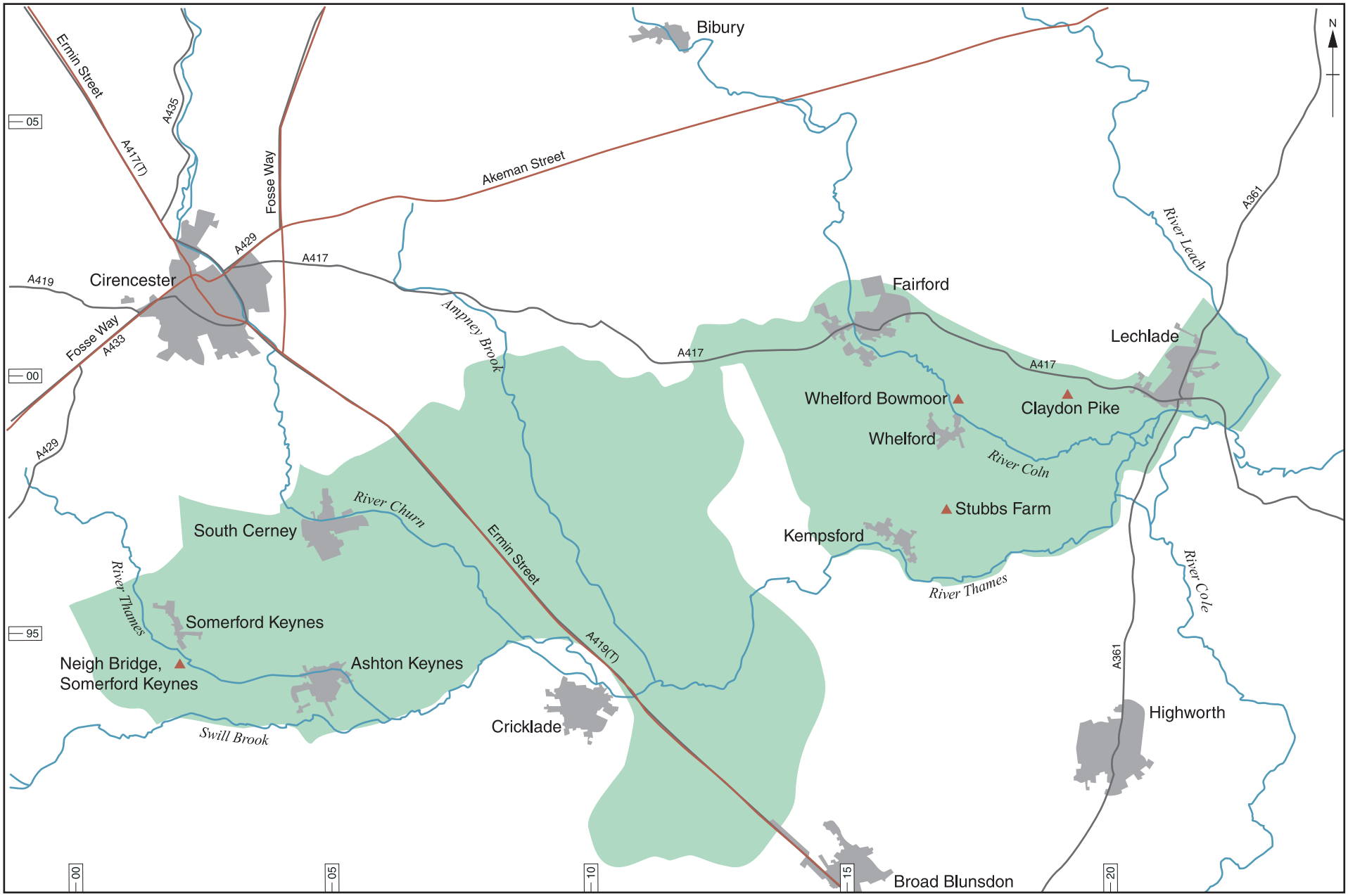
What was the nature of intra-regional patterns?

Specifically, it was hoped to compare and contrast the settlement character of the Cotswolds (the 'villa landscape') with that of the Upper Thames Valley in the Roman period.

How far can different types of site be recognised?

At the time, very little work had been carried out on the Cirencester hinterland, and so the investigations hoped to be able shed light on settlement characteristics in this region.

Facing page: Fig. 1.2 Location of the key project sites in relation to the Cotswold Water Park


Bibury
Ermin Street
A435
A417(T)
Fosse Way
Akeman Street
A429
A417
Cirencester
A419
Fosse Way
A433
A429
Ampney Brook
River Leach
A361
Fairford
Lechlade
A417
Whelford Bowmoor
Claydon Pike
Whelford
River Coln
Stubbs Farm
Kempsford
River Thames
River Churn
South Cerney
Ermin Street
River Thames
Somerford Keynes
Neigh Bridge,
Somerford Keynes
Ashton Keynes
A419(T)
Swill Brook
Cricklade
River Cole
A361
Highworth
Broad Blunsdon
N
05
00
95
00
05
10
15
20
Area of Cotswold Water Park
Roman roads
Key Sites
1 Km
0
5 Km

From these questions, a series of specific excavation objectives were set:

To assess the environmental evidence with a view to understanding the history of land exploitation and adaptation within this marginal geographical area (ie low-lying gravel terrace prone to flooding).

To elucidate the structural history of the individual sites, in order to shed light upon internal economic, social and religious development and intensity of activity.

To examine the inter-site relationships and therefore gain an understanding of social and economic development on a regional basis. Particular attention was paid to late Iron Age and early Roman development patterns, especially at Claydon Pike and Thornhill Farm, where crop marks had previously shown what looked to be 'Roman' and 'native' settlements in close proximity.

The post-excavation process

The post-excavation programmes of Claydon Pike, Somerford Keynes and Whelford Bowmoor followed on from the fieldwork and continued up until the late 1980s and early 1990s. During this phase of post-excavation work, substantial progress was made particularly in stratigraphic phasing and on the analysis of finds assemblages and environmental data for Claydon Pike. Matrices were produced and a phasing scheme for the site was developed. Digital archives for contexts and finds data were created and specialist reports were produced. Interim reports were also published for Claydon Pike (Miles and Palmer 1983; 1984; 1990).

Little substantive work was undertaken on the stratigraphic data or finds for Somerford Keynes, but the site at Whelford Bowmoor was phased and a draft publication text produced, including site description and finds reports. A draft report was also written in the late 1990s for Stubbs Farm, Kempsford, while the finds from the survey sites were catalogued and a brief report made in the 1980s.

With the exception of Stubbs Farm, most of the post-excavation work for the Cotswold water Park sites was carried out in the 1980s, and an assessment of this data indicated that many significant revisions were needed. Therefore, all of the original finds and stratigraphic reports have been fully revised and updated, and much additional work has been carried out, leading to the publication of four complete site reports. The original emphasis on landscape interpretation has been maintained, so that the sites are viewed as components within their local and regional context. Thornhill Farm has been the subject of a separate post-excavation programme that has now been completed (Jennings *et al.* 2004), although the wider landscape aspects of this site still form a prominent part of the current volume.

Revised research aims and objectives

The following are the revised research aims and objectives for the current publication, based upon an assessment of the archive and also the need to address contemporary research agendas in British Iron Age and Roman studies.

Aim 1 Settlement landscapes and people: the landscape as social expression

Settlement development and building forms: what light do the Cotswold Water Park sites throw on later Iron Age and Romano-British settlement development?

Power: What light can study of the late Iron Age and Romano-British artefact assemblages from the Cotswold Water Park sites throw on our understanding of social structure and power within settlements and between settlements?

Resources and their control: can we observe regional settlement hierarchies that can be related to the control and exploitation of resources?

Religion: how does the evidence from the Cotswold Water Park sites throw light on religion and beliefs in the later Iron Age and Romano-British periods?

Identity: how does the data from the Cotswold Water Park sites provide direct evidence for how people's identities were expressed?

Aim 2 Regionality: Dobunni: the Cotswolds and the Thames Valley; Atrebates: Berkshire Downs; Catuvellauni: Oxfordshire and Hertfordshire.

What light do the Cotswold Water Park sites throw on the question of the regional variations in the material culture and agricultural practice of Iron Age and Roman Britain?

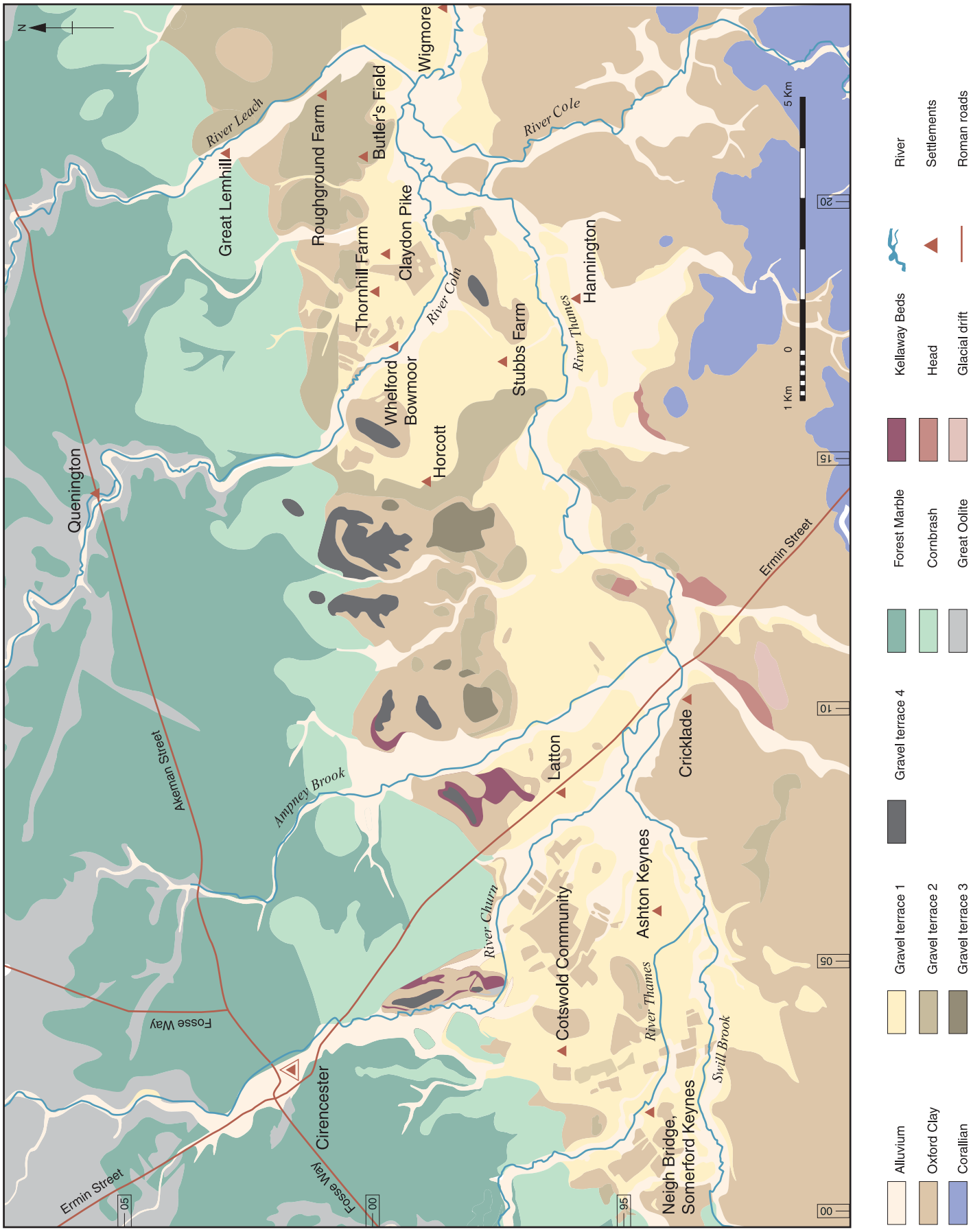
Aim 3 Chronologies, and agencies and processes of change, including the dynamics of Romanisation

How far can the Cotswold Water Park sites throw light on the processes of change – settlement development, agricultural intensification and increasing craft specialisation during the middle and late Iron Age?

What evidence is provided by the Cotswold Water Park sites for the transition from Iron Age to Roman and for the role of the Roman military?

How does the data from the Cotswold Water Park sites contribute to our understanding of local, regional and provincial patterns of development in the 2nd and 3rd centuries AD?

Facing page: Fig. 1.3 Sites in relation to the geology of the Cotswold Water Park



What evidence is there for the changes in occupation and material culture in the late and sub-Roman period?

LOCATION AND GEOLOGY

Most of the key Cotswold Water Park Project sites lie within the triangular area between the modern settlements of Lechlade, Fairford and Kempsford, and centre on the confluence of the rivers Coln, Leach and Thames (Fig. 1.2). The main group lay in a west to east line from Whelford Bowmoor, by the River Coln in Kempsford Parish, via Thornhill Farm and Longdoles Field, Claydon Pike in Fairford Parish to Warrens Field, Claydon Pike in Lechlade Parish. These sites all lay within a block defined by the River Coln to the west and south, and the River Leach to the east. The Stubbs Farm, Kempsford site lies about 2 km south of Whelford Bowmoor, south-west of the River Coln and about 1 km north of the Thames. The 'Survey' sites were mainly concentrated to the east in Lechlade Parish, to south-east of the Leach and north of the Thames. Other survey sites lay between the Coln and Leach and one lay to the south of Thames in Buscot Parish, Oxfordshire. In addition to this main concentration of sites was Neigh Bridge, Somerford Keynes, which lies about 17 km WSW of Claydon Pike. It was located adjacent to the Thames, 6 km due south of Cirencester and just south of the village of Somerford Keynes.

Geologically, all of these sites lay on the First Gravel Terrace of the River Thames, with Whelford Bowmoor being sited upon the immediate floodplain of the river Coln (Fig. 1.3). To the south, past the main low-lying areas of alluvium on the Thames floodplain lie areas of Oxford clay. The ground then rises significantly towards the sands and clays of the Corallian Ridge, which also includes significant outcrops of Coral Rag. To the north of the sites lie higher gravel terraces, then in some cases further areas of Oxford clay. Bands of Cornbrash, Forest Marble and Great Oolite limestone then mark the rise into the Cotswolds.

More specific details of the location, geology and topography of the sites can be found in Parts 1 and 2.

ARCHAEOLOGICAL BACKGROUND

The general archaeological background of this part of the Upper Thames Valley has already been explored in a number of individual sites reports (eg Boyle *et al.* 1998; Mudd *et al.* 1999; Jennings *et al.* 2004) and wider landscape studies (eg Young 1986; Fulford and Nichols 1992; Miles 1997). Furthermore, Part 3 of this volume draws together data from many different sources to present a detailed account of this region from the middle Iron Age to the early post-Roman period. Therefore only a brief summary account of the archaeology of the region is presented here.

Mesolithic, Neolithic and Bronze Age

The earliest period of occupation in this part of the Upper Thames region comprises scatters of Mesolithic flint (9th to 5th millennium BC), which is mainly concentrated along the length of the Corallian Ridge (Case 1986). Early Neolithic settlement (early to mid 4th millennium BC) also appears to have been largely concentrated on the higher calcareous bedrocks of the Cotswolds, Corallian Ridge and Berkshire Downs (Holgate 1988, 150), while middle Neolithic activity (mid 4th to late 3rd millennium BC), although still rare, has been found on a number of lower gravel terrace sites such as Cotswold Community (OA 2003) and Horcott Pit (Lamdin-Whymark *et al.* in prep; Pine and Preston 2004). Just to the north of Lechlade lies a hengiform monument and a cursus monument, while further features of a similar nature are located about 1 km to the south-east of the town (Barclay *et al.* 2003). This all suggests that this area was a major focus for ritual activity during the Neolithic period.

Evidence for later Neolithic and early Bronze Age settlement (3rd to 2nd millennium BC) is slightly more widespread, with an increasing number of excavations on the lower gravel terraces uncovering features of these dates. Late Neolithic settlement evidence in the form of pit clusters has been located at a number of Second Gravel Terrace sites in the Lechlade area, including the Loders (Darvill *et al.* 1986), Roughground Farm (Allen *et al.* 1993, 9-15), Butler's Field (Boyle *et al.* 1998) and Gassons Road in Lechlade itself (King 1998, 269-71). Late Neolithic and early Bronze Age activity on the First Gravel Terrace have been located further west at Horcott Pit and Cotswold Community, while just to the north-west of the latter site at Shorncote Quarry lay three late Neolithic/early Bronze Age ring ditches and discrete burials (Barclay and Glass 1995). Part of an extensive late Bronze Age settlement was also excavated at this site (Hearne and Adam 1999), with further Bronze Age roundhouses being uncovered at Cotswold Community to the south (OA 2003). Nevertheless, despite these recent excavations, Bronze Age settlement on the gravel terraces of the Upper Thames Valley remains relatively rare.

Iron Age

Iron Age activity in the Upper Thames Valley is far more widespread, with increasing evidence for large-scale landscape divisions in the late Bronze Age/early Iron Age (1000-600 BC). Features of this period have been found in many excavations in and around Lechlade, including large linear ditched boundaries at Roughground Farm, Butler's Field, Gassons Road and Allcourt Farm (OAU 2001). Most of these sites have also produced associated pits or pit alignments, roundhouses and other postholes. Part of a Late Bronze Age/early Iron Age settlement was revealed at Horcott Pit (Lamdin-Whymark *et al.* in prep), while a substantial early Iron Age settlement was excavated at Cotswold Community,

comprising 13 circular and 22 rectangular post-built structures with associated pits and waterholes (OA 2003).

Middle Iron Age settlement (*c* 400-100 BC) is more concentrated upon much of the Upper Thames river gravels, with known sites to the west at Cotswold Community, Shorncote Quarry, Latton Lands, and Cleveland Farm near Ashton Keynes (Coe *et al.* 1991). Further east, middle Iron settlements have been excavated at Horcott (Pine and Preston 2004), Thornhill Farm, and within Lechlade itself (CAT 1996; OA 2001). Further down the Thames Valley in Oxfordshire is a particular concentration of middle Iron Age settlement, including the temporary encampment of transhumant pastoralists at Farmoor (Lambrick and Robinson 1979), a number of nucleated mixed farming settlements at Abingdon (Allen 1991; 1997) and the enclosed specialist pastoral settlements at Watkins Farm (Allen 1990) and Mingies Ditch (Allen & Robinson 1993).

There is evidence for relatively widespread settlement disruption during the later part of the late Iron Age (*c* 100 BC–AD 43), with some of the sites listed above being abandoned and others shifting in location and form. At Thornhill Farm there was a radical change in the early 1st century AD from the dispersed deposits and ephemeral occupation of the earlier period to an organised system of enclosures, seemingly associated with specialist pastoral activity. Such increase in site specialism, along with other developments such as changes in house types and the abandonment of storage pits, was characteristic of the region during the late Iron Age (Allen 2000, 21). Other nearby later Iron Age settlements appear at Roughground Farm and Totterdown Lane, Horcott (Pine and Preston 2004), while further west were settlements at Ashton Keynes and Shorncote Quarry. These settlements appear to have been part of an organised agricultural landscape, with the higher terraces being used for arable and the floodplain and part of the First Terrace being primary open pasture (Robinson 1992a, 56).

The changes occurring during the later Iron Age may have been at least partly associated with wider socio-political changes, in particular the increasing control exerted over the landscape by the native elite. The emergence of sites such as the extensive dyke complex at Bagendon, north of Cirencester, can probably also be seen in this light although the status and function of this site in late Iron Age society is still little understood (Clifford 1961a; Darvill 1987, 166-68; see Chapter 16).

Roman

Roman settlement was densely spread along the Upper Thames Valley, with estimations of one site per kilometre (Miles 1989). Throughout this period there were a number of quite widespread changes in the settlement pattern, some of which may have been related to changes in landscape control. After the conquest there was little noticeable difference in settlement form or location, with sites like Thornhill Farm and Roughground Farm continuing as before. However, the establishment of a cavalry fort at Leaholm near Bagendon in *c* AD 50, and in particular a town at Cirencester (*Corinium Dobunnorum*) in AD 65-70, must have had a growing impact on the surrounding region. The town of Cirencester came to eventually dominate the Roman archaeology of the region, probably becoming the provincial capital in the 4th century (Holbrook 1994). In the early 2nd century AD, there is evidence for widespread settlement disruption across the region, with many sites either being abandoned, such as at Thornhill Farm, or spatially transformed, as at Roughground Farm and Totterdown Lane, Horcott. This must have been the result of large-scale landscape reorganisation, which included the apparent introduction of a system of defined trackways linking settlements along the gravel terraces and beyond (see Chapter 16).

Although nearly all of the settlements in the region would have served in a agricultural capacity in some way, there was a variety of different site types operating a number of different economic regimes. Recognisable villas were generally quite scarce on the lower gravel terraces, with Roughground Farm and Hannington (Goddard 1890) providing some of the few known examples. Most settlement structures appear to have been of a more modest nature, although not all were necessarily of low status, as sites such as Cotswold Community have produced an extensive collection of finds, including imported material. Aside from Cirencester, there were no major urban centres in this vicinity, although a small town existed at Cricklade along side Ermin Street (Haslam 2003) and another lay further to the east at Asthall (Booth 1997) along Akeman Street towards Alchester. The nearest major pottery industries to the area lay in north Wiltshire to the south and the Oxford potteries to the east, although an important regional ceramic tile production centre is known at Minety, about 4 km south of Somerford Keynes (McWhirr and Viner 1978, 368).

Further settlement and economic changes occurred in the later Roman period, although this generally seems to have been a period of great prosperity in at least part of the region, with a marked increase in villa building and expansion, seen most vividly to the north and west of Cirencester in the Cotswolds. Nevertheless, even in the Thames Valley itself there is some evidence for increasingly centralised control of the land, probably from a smaller number of rural villa estates.

Saxon

Nearly all of the evidence for Anglo-Saxon occupation in the region comes from cemeteries, with very few settlements from this period being located. One

of the wealthiest cemeteries was excavated at Butler's Field just north of Lechlade, dating from between the mid/later 5th century to the late 7th century. The settlement associated with these burials appears to lie in an arc to the north-west of the current town, with possible sunken featured buildings (SFBs) being located in cropmarks, and 6th- to 8th-century pottery being recovered (Boyle *et al.* 1998, 5). A group of six SFBs, a four-post structure and associated pits and ditches were revealed in excavations behind Sherbourne House just to the south of the cemetery (Bateman *et al.* 2003), while Anglo-Saxon pottery has been found in another nearby excavation at the Loders (Darvill *et al.* 1986). Another Anglo-Saxon cemetery was found in the 1850s at Fairford to the west, probably dating from the mid 5th to 6th century. Further to the west at Cotswold Community, a number of Saxon post-built structures, waterholes and fencelines have been revealed in recent excavations, which will increase our understanding of this period in the region.

There is little evidence for continuity of settlement from the late Roman to the Anglo-Saxon period, although it is generally thought that many estates would have continued largely unaltered (Heighway 1987, 13). An episode of stone robbing probably occurred at the Roughground Farm villa at some point in the 5th or 6th century by Saxon settlers associated within the nearby Butler's Field site, but there is nothing to suggest continuity of occupation here. At Cirencester, there is some evidence for Saxon occupation in the 6th century, but it does not appear to have regained any important status until the medieval period. There have been suggestions that the Roman settlement at Cricklade became a high-status middle Saxon settlement with special royal connections, although the evidence of a small number of middle Saxon pottery sherds is probably insufficient for this hypothesis to stand (Haslam 2003). The establishment of the walled town can be dated to the 9th century, perhaps designed to act as a defence of Wessex against Viking armies stationed during these years in both Cirencester and Fulham (Haslam 2003).

Medieval

In general, the later medieval settlement pattern in the Upper Thames Valley was not so much different from that of today, with many of the towns and villages on the gravel terraces originating at this time. The earliest documentary reference to Fairford is dated to AD 850, when two hides of land were transferred to the Abbess of the Church of Gloucester. At Lechlade, the earliest reference comes from 1066, when the 15-hide manor of Lechlade was probably held by Siward Barn, a great nephew of Edward the Confessor (VCH VII 1981, 111). During the early 13th century, both towns were granted markets, though neither developed at great pace, probably due to their close proximity. Nevertheless, Lechlade grew in importance because of its position at the head of the navigable section of the Thames, which ensured a significant amount of water-borne trade and traffic (Finberg 1975, 73). The Manor of Fairford was certainly flourishing by the 15th century, when it was held by the Earls of Warwick. Further to the west, Cirencester entered a great period of prosperity in the 13th and 14th centuries, when it became one of the largest wool markets in England.

SITE SUMMARIES

Claydon Pike, Fairford

Excavations on the First Gravel Terrace at Claydon Pike between 1979 and 1983 revealed two areas of settlement, ranging from the middle Iron Age to the medieval period. Middle Iron Age activity at the Warrens Field site (Lechlade Parish) was recorded over three gravel islands, and probably represents the settlement of one or two families, that shifted eastwards over time. A maximum of four roundhouse structures were in use on an island at any one time, and the structures contained varying quantities of occupation refuse in their surrounding drip gullies and associated enclosure ditches. The inhabitants were pastoralists with a subsistence led mixed animal economy.

In the early 1st century AD a nucleated settlement was established about 120 m to the south at Longdoles Field (Fairford Parish), characterised by a series of large and intensively recut enclosures, gullies, pits and substantial boundary ditches. Within the site was identified a number of activity areas associated with domestic habitation, small-scale metalworking, and stock management. It appears to have operated a largely subsistence economy associated with cattle ranching, and in this respect was very similar to the nearby site at Thornhill Farm (Jennings *et al*. 2004). However, there were noticeable differences between these sites, with Claydon Pike having an increased emphasis upon the settlement boundary, along with larger numbers of imported goods associated with eating and to a lesser extent drinking.

The early 2nd century saw dramatic changes, with the enclosures, gullies and ditches of the earlier phase being replaced by two large rectangular enclosures, a substantial aisled barn and an aisled house with a tiled roof and painted plaster interior. This was probably the residence of an extended family group, and there is evidence to suggest that they utilised elements of Roman style dress as well as new eating/drinking habits. The economic basis of the site incorporated the management of hay-meadows, probably on a commercial basis to sustain the needs of growing local population centres such as Cirencester. By the mid 2nd century AD the settlement expanded onto adjacent gravel platforms which seem to accommodate the lower status estate workers, as well as providing

small stock enclosures and industrial areas. What appears to have been a possible religious precinct was also established at the heart of the settlement, overlooking a central open space. At some point during the early 4th century AD, there appears to have been deliberate and widespread clearing of the site with much domestic and structural material being deposited within pits and ditches. This was undoubtedly connected with the establishment of a modest masonry footed villa on the site comprising two separate structures, the southern of which incorporated a hypocaust room. The villa was substantially modified during the 4th century, and had two successive enclosures built around it, probably signalling a shift in emphasis towards greater perceived security needs.

A small inhumation cemetery lay 100 m to the west of the villa and a well built masonry footed shrine was constructed to the east. The surrounding gravel terrace and floodplain were no longer used for haymaking but instead had reverted to grassland used for grazing animals. It is possible however that some arable production may have occurred on certain gravel islands within the villa estate. Other economic activities may have included bee keeping and fishing, while salting and/or curing of meat and fish could also have occurred. The final abandonment of the villa at Claydon Pike is unclear, but there is some evidence to indicate activity of some kind until the start of the 5th century.

A small group of inhumation burials cut through the villa building, three of which were radiocarbon dated to the middle-late Saxon period. Further intermittent activity took place on site in the medieval period.

Neigh Bridge, Somerford Keynes

A series of salvage excavations between 1986 and 1988 at Neigh Bridge, Somerford Keynes revealed part of a late Iron Age and Roman settlement. The earliest features comprised a series of curvilinear enclosures dating from the early/mid 1st century AD to the early 2nd century AD, although middle Iron Age occupation is hinted at in the vicinity. This may have been part of a farmstead, although a late Iron Age/early Roman religious focus is also suggested by an unusually large number of coins and brooches. A system of trackways and ditched enclosures and a large aisled building replaced the earlier features in the early 2nd century AD. The building was associated with a large quantity and variety of tile, and there are some indications that it may have been at least in part a tile depot, associated with wider changes in landscape organisation during this period. Sculptural fragments of the Capitoline triad point to an official religious presence. No features can be securely dated much beyond the end of the 2nd century AD, although a substantial number of late 3rd and 4th-century coins and small finds suggests late Roman activity of some kind. An official or military presence is hinted at during this late phase.

Whelford Bowmoor

Three archaeological investigations were undertaken at Whelford Bowmoor in 1983, 1985 and 1988. The earliest features revealed during excavations comprised a regular system of sub-rectangular enclosures, dating to the early/mid 2nd century AD. The enclosures were probably used for livestock management. Another group of smaller enclosures lay further to the west, which were probably a later development, but still possibly used in some aspect of livestock management. It seems likely that many of these enclosure ditches went out of use by the latter part of the 2nd century AD, and it was during this period that there was the only convincing evidence for domestic activity within the site, in the form of a rubble building platform and associated 'midden' deposits, dating from the later 2nd to early/mid 3rd century AD. The finds assemblage on the whole suggests that the later phase of the site was of higher status, with relatively high quantities of imported fine and specialist wares in addition to finger rings, bracelets and evidence for hobnail shoes.

The site lies upon the immediate floodplain of the River Coln, and there is some reason to believe that incidences of flooding were slowly increasing throughout the 2nd and 3rd centuries AD. In response to this, there is a possibility that the site became occupied only on a seasonal basis, and if such was the case, then the quantities of fine ceramics associated with eating and drinking, together with the much higher number of animal bones from the later phase, may be explained in terms of seasonal feasting associated with the re-occupation of the site. The general absence of later 3rd- or 4th-century AD material from the site suggests that settlement and structurally defined agricultural activity may have shifted from the area entirely, towards drier locations further up the gravel terrace, which were less prone to flooding and waterlogging.

Stubbs Farm, Kempsford

Archaeological evaluation and excavation took place at Stubbs Farm from 1991 to 1995, specifically targeting a multi-ditched circular and rectangular enclosure known from cropmark evidence (Boyle *et al.* 1998, 5, pl 1.2; Leech 1977, 17). The two enclosures would seem to relate to separate phases of activity, with the circular feature having a very tentative Iron Age/early Roman date. The scarcity of finds associated with the use of the feature suggests a non-domestic function, possibly the corralling of animals. The rectangular enclosure clearly belongs to a later phase of activity, in the 2nd and 3rd centuries AD. The overall character of this phase is indicative of a low status rural farmstead

operating a largely pastoral economic regime amidst the grasslands of the lower gravel terrace and floodplain. Despite the paucity of what may be termed high status material culture, the rectangular enclosure itself represents a considerable investment of labour. The site clearly relates to a wider system of field boundaries, trackways and settlements in the local area, with the rectangular enclosure being linked with the 2nd-century settlement just to the west at the Multi-Agg Quarry site (see Digital section 8; Booth and Stansbie forthcoming). Both the Stubbs Farm and Multi-Agg settlements appear to have gone out of use by the second half of the 3rd century, with the latter probably lasting slightly longer.

STRUCTURE OF THE REPORT

Printed volume

The printed report is structured into three major parts. The first section presents the results of excavations at Claydon Pike, Fairford, by far the most extensive of the Cotswold Water Park sites included in this volume. The sheer quantity of data from this site alone ensures that no attempt is made to include all detail recovered, but more comprehensive accounts may be found within the digital volume (see below). The archaeological description, finds and environmental data have been described on a phase by phase basis (Chapters 2 to 7), with specific discussions at the end of each chapter. Chapter 8 presents an overall summary account of the settlement, together with analysis of its relationship to other sites within the local landscape.

Part 2 of the report presents the excavation results of the smaller Cotswold Water Park sites, comprising Somerford Keynes (Chapter 9), Whelford Bowmoor (Chapter 10), Stubbs Farm (Chapter 11) and the survey sites (Chapter 12). As with Part 1, the overall quantity of data has meant that it is not possible to include all information in depth, but again there is a higher level of detail within the digital report.

The final part of the printed report comprises an overall landscape study of the Gloucestershire Upper Thames Valley from the middle Iron Age to the early post-Roman period. The section incorporates overviews of the pottery, small finds, animal bone and environmental evidence for this region.

Digital volume

The CD accompanying this volume ('The Eagle in the Landscape') is intended to provide more detailed information on the stratigraphy, finds and environmental evidence for all of the key Cotswold Water Park sites. Digital sections 2 to 4 contain archive reports for Claydon Pike, along with full context and finds tables for this site. The remaining sections (5 to 8) contain the archive reports and supporting material for the remaining Cotswold Water Park sites. Digital section 8 also contains the full excavation report for another site lying within the Cotswold Water Park, at the Multi-Agg Quarry, Kempsford.

LOCATION OF THE ARCHIVES

All of the original records for each site, including the finds and material generated during post-excavation analysis, have been deposited at the Corinium Museum, Cirencester. A copy of the paper archive is also held on microfilm by the National Monuments Record, RCHM(E), Swindon. In addition, a digital record of the site plans is held at Oxford Archaeology, Janus House, Osney Mead, Oxford.

Part 1
Excavations at Claydon Pike

Chapter 2
Excavations at Claydon Pike: an Introduction

by David Miles, Simon Palmer and Alex Smith

INTRODUCTION

Claydon Pike was excavated between 1979 and 1983, as part of a landscape based research programme that was originally laid down in the mid 1970s in response to increased gravel extraction in the region (see Preface and Chapter 1). This area of the Upper Thames Valley was chosen for archaeological investigation because of the presence of major complexes of cropmarks which revealed whole settlements, field systems and trackways, thought to be of Iron Age and Roman date (Fig. 2.1; see below). Claydon Pike was the major site to be excavated within the project, although its relationship with the nearby settlement at Thornhill Farm, lying *c* 800 m to the west, was realised as being of crucial importance at an early stage. The excavations were funded by the Historic Buildings and Monuments Commission (HBMC(E) with further assistance from the Amey Roadstone Corporation (ARC), now Hanson, while much of the labour force was provided by the Manpower Services Commission and soldiers from the Light Infantry Depot at Shrewsbury.

The investigations at Claydon Pike, which covered some 40 ha, revealed two zones of settlement (Fig. 2.1). To the north in Warrens Field (Fig. 2.2), a middle Iron Age settlement spread across three gravel islands, while *c* 100 m further south in Longdoles Field (Fig. 2.3) was a settlement which was established in the early 1st century AD and seemingly occupied continually until the end of the Roman period. Within this sequence there were three very distinct phases of occupation which were linked to changes in economy and social structure. Altogether, the settlement at Claydon Pike has proven to be of fundamental importance in understanding the character and development of Iron Age and Roman settlement in this part of the Upper Thames Valley.

SITE LOCATION

The site is situated between Lechlade (2.5 km) and Fairford (3.5 km) in Gloucestershire, with the two areas of settlement lying either side of the parish boundary (Fig. 2.1; NGR SU 190996). It is near to the confluence of the rivers Coln and Thames and is now part of the eastern Cotswold Water Park.

GEOLOGY, TOPOGRAPHY AND LAND USE

Both the Warrens Field and Longdoles Field sites occupied the First Gravel Terrace of the Upper Thames Valley, and lay approximately 1 km north of the River Coln floodplain, at an average height of *c* 74-5 m OD (Fig. 1.3). The main settlements were situated upon well drained raised gravel islands which were surrounded by relict water courses and marshy areas. To the south of the site, inliers of Oxford Clay and river gravels give way to the alluvium of the valley floor before rising up to the sand and limestones of the Corallian ridge in the direction of Swindon. To the north, the gravel terraces rise to meet the clay and cornbrash of the Cotswold dip slope and oolitic limestone uplands.

Documentary evidence indicates that the area was mainly pastoral in the medieval and post-medieval periods. Two farms were established close by in the 17th century but ploughing only began on the Roman-British settlement in the late 1950s and ceased in 1979.

AERIAL PHOTOGRAPHIC SURVEYS

The investigations of Claydon Pike and Thornhill Farm were initiated thanks to the detailed information provided by aerial photography accumulated intermittently over some twenty years between 1957 and 1977 by Cambridge University's Committee for Aerial Photography and the Royal Commission on Historical Monuments (England) (HBMC(E)).

A detailed account of the history of photography in the area is provided in Miles (1983) and so will only be summarised here. What is clear is that in this area of First Gravel Terrace, fragmented by relict palaeochannels, the most detailed and useful images were produced in the hot dry summers such as 1969, 1975 and 1976 when soil moisture deficit was at its most extreme. The value of intensive aerial survey in such years is self-evident from the images reproduced here (Pls 2.1-2.7).

It seems likely that ongoing gravel extraction in the Cotswold Water Park and the ponding of ground water in the expanding area of lakes also resulted in the lowering of the water table and drier soil. As the archaeological excavations progressed into the Thornhill Farm area cropmarks appeared with increasing clarity – ironically only months before they were consumed by the advancing gravel pits.

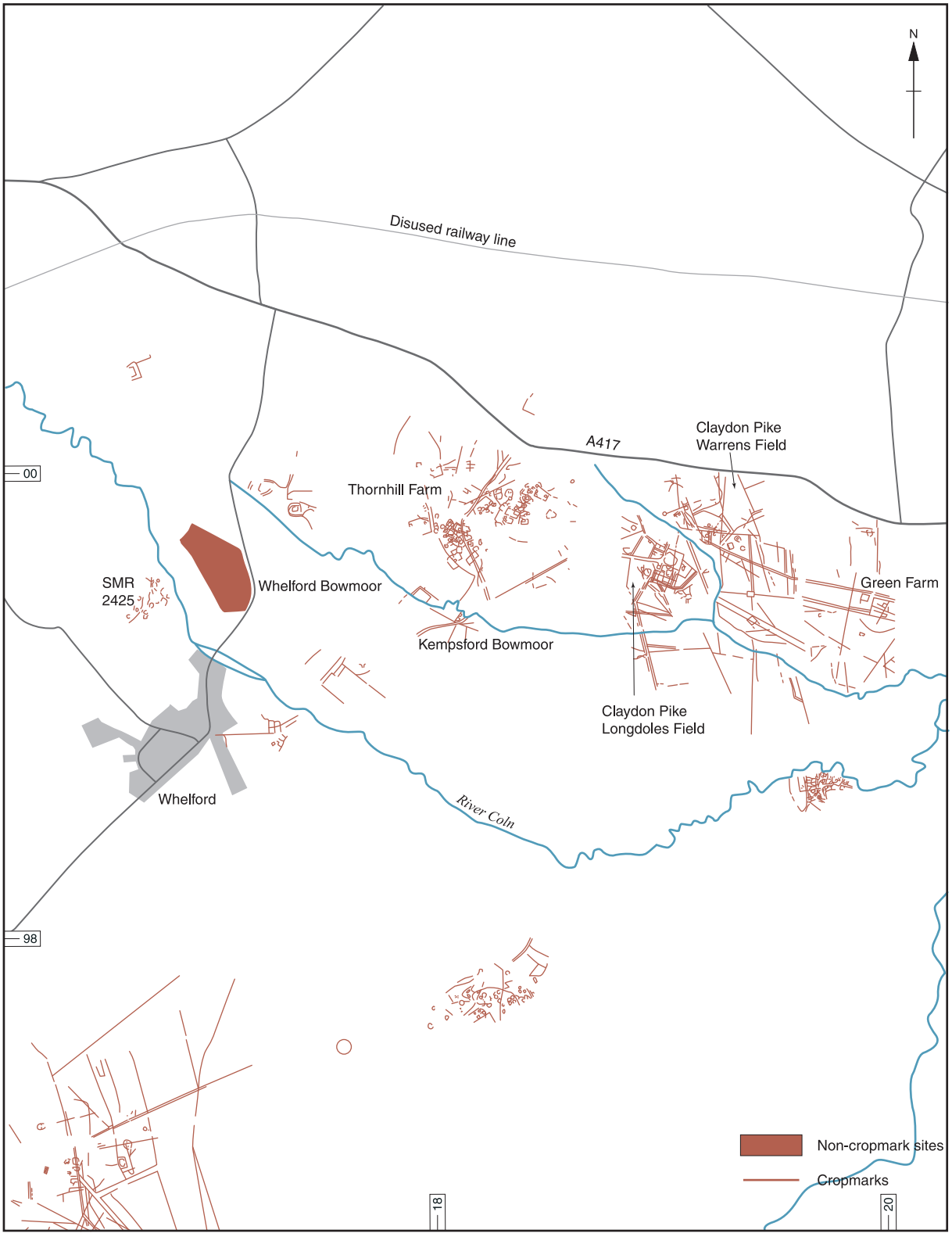
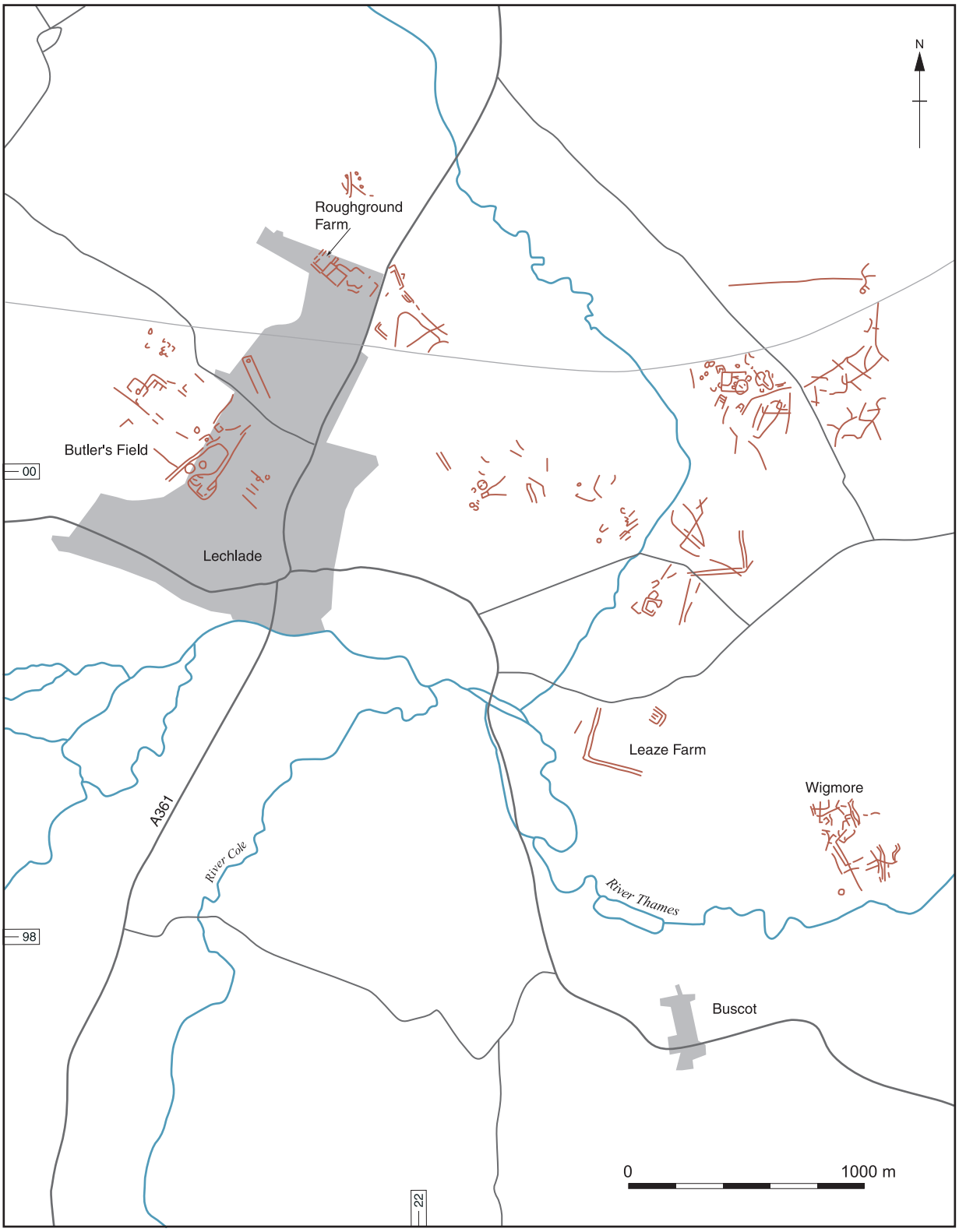


Fig. 2.1 Location of Claydon Pike in relation to local cropmarks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Roughground Farm
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Leaze Farm
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195000/
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Trench 10
Trench 8
Trench 12
Trench 16
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Trench 39
Trench 41
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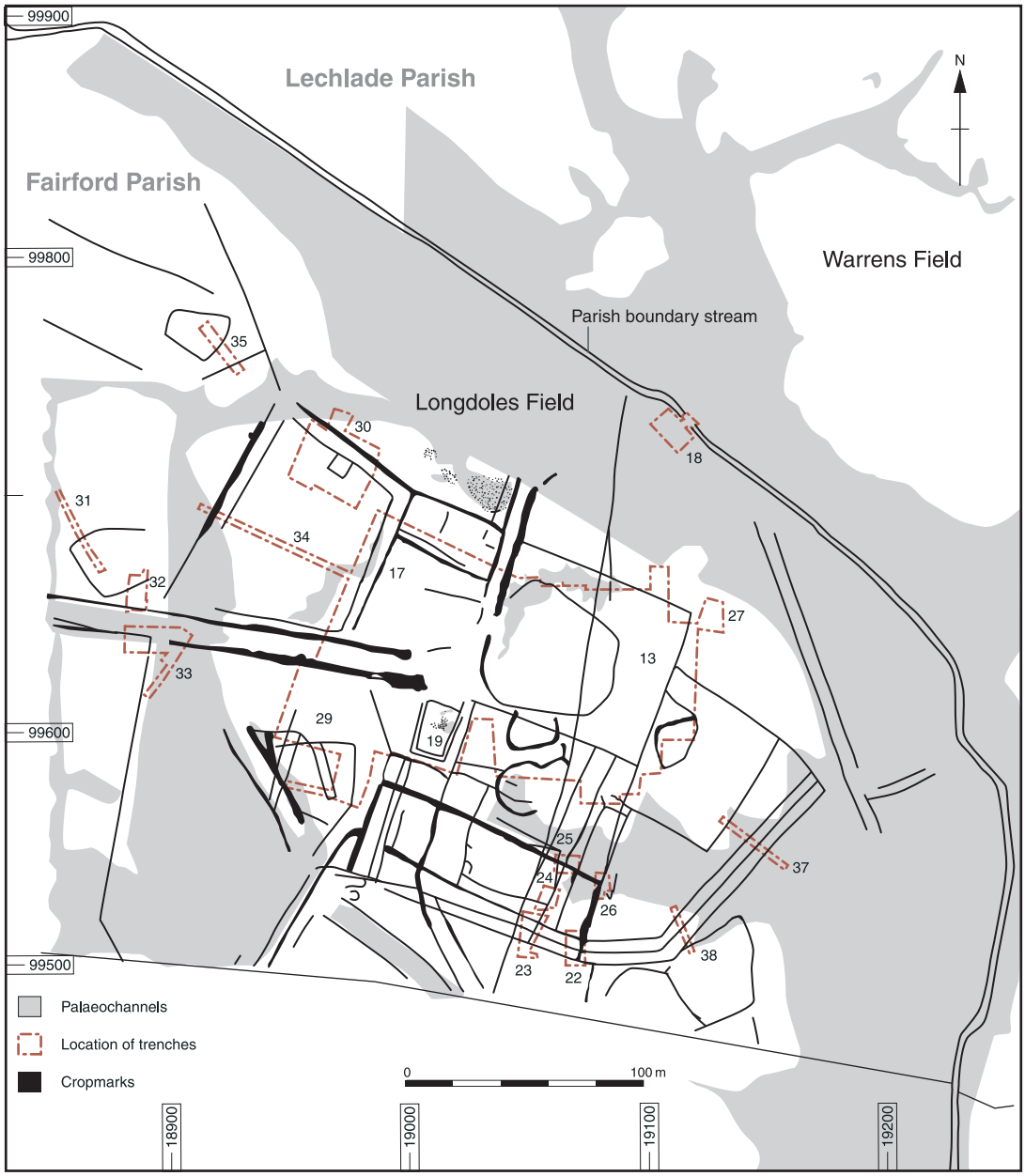


Fig. 2.3 Trench plan of Longdoles Field

Facing page: Fig. 2.2 Trench plan of Warrens Field

Plate 2.1 Aerial photograph looking west showing palaeochannels, gravel islands and cropmarks at Claydon Pike Warrens Field, taken in July 1959 (© Cambridge Collections)

The Claydon Pike/Thornhill Farm cropmarks (centred at SU 191996 and SU 183998) covered an area of approximately 1500 m (E-W) by 1000 m (N-S) straddling the parish boundary of Lechlade and Fairford, with a Romano-British trackway (as confirmed by excavation) running across the Fairford-Kempsford parish boundary to the south.

The area was plotted in detail and published by the Royal Commission on Historical Monuments (1976, 55, 73) and also in Leech 1977, map 4 and fig 5. This mapping was completed without the benefit of the more detailed images provided by aerial surveys undertaken in the exceptionally hot summer of 1976. The excavators were, however, able to take advantage of these spectacular images.

On the basis of cropmark analysis three settlement areas were defined:

1. In the east, in Warrens Field, Lechlade there were a number of oval enclosures occupying dry islands or peninsulas of gravel, first seen clearly in aerial photographs taken in 1957 and 1959 (Pl. 2.1). These were interpreted, correctly, as Iron Age crop circles. Fieldwalking provided virtually no confirmatory dating evidence. For a comparison of the best cropmark image of the hut circles and the excavated plan see Plate 2.6 and Figure 3.1. Three distinct groups of hut circles could be identified from aerial photography. The identification of these influenced the excavation strategy and, as a result of area excavation (Figs 3.2, 3.3, 3.5) approximately twice as many hut circles were revealed. The principal factor which influenced the visibility of hut circles was the size of the surrounding drainage gullies. It was only as a result of excavation and the analysing of the horizontal stratigraphy that the number and sequence of hut circles could be clarified.

A complex network of enclosures was also visible in Warrens Field. In 1978 Colin Bowen of RCHM(E) and the present author visited the site areas with the aerial photographs in order to try to separate out the various field systems which

Plate 2.2 Aerial photograph showing trackways and enclosures at Thornhill Farm, west of Claydon Pike, taken in July 1969 (© Cambridge Collections)

overlapped in the cropmark evidence. It is fair to say we were not very successful. From the earliest (1957) photographs it was possible to identify early-modern boundaries which had subsequently been removed, and appeared as cropmarks on the later photographs. There were other cropmarks which indicated the regular enclosures and field tracks of the early modern enclosure system. This interpretation was confirmed shortly afterwards by the analysis of a 19th-century estate map held at Thornhill Farm. Trench 8 (Fig. 3.3) of the excavation was sited to test this interpretation and confirmed the position on the map of a small copse defined by boundary ditches. Alongside the eastern boundary a wider ditch, visible on the July 1976 photographs (Pl. 2.6), proved to have been dug to bury domestic animals.

Excavation confirmed that a regular Romano-British field system also covered Warrens Field which in part reflected a less clearly defined system of Iron Age enclosures. These often ran alongside the palaeochannels and can be difficult to see on the aerial photographs. With the benefit of the excavation data the Romano-British system is clearly visible on the 1976 aerial photographs and traces of the Iron Age fields are also detectable.

The palaeochannels were not plotted on the RCHM(E) plans yet these are fundamental to the interpretation of the settlements and fields. These clearly influenced the siting of round houses and of drainage ditches. Excavation across these features produced the best organic deposits in which environmental data survived. Structural evidence, for example of the Roman road which cut across Warrens Field, survived best in these silt-filled waterlogged hollows. In other words if linear features visible as cropmarks can be projected into alluvial deposits (where no cropmarks are visible) then this may be the most appropriate place to find the highest quality structural and biological evidence.

2. The central settlement in Longdoles Field Fairford Parish consisted of a dense concentration of rectangular enclosures divided by a wide central street and others which branched off it (Pl. 2.5).

Plate 2.3 Aerial photograph of Claydon Pike Longdoles Field and Warrens Field, taken in July 1969 (© Cambridge Collections)

Plate 2.4 Aerial photograph of Claydon Pike and land to the east, taken in July 1969 (© Cambridge Collections)

Plate 2.5 Aerial photograph showing features in Claydon Pike Longdoles Field, taken in July 1975 (© Crown copyright)

Plate 2.6 Aerial photograph of Claydon Pike Longdoles Field and Warrens Field, taken in July 1976 (© Crown copyright)

A system of triple drainage ditches seemed to define the settlement on the east and south side, and the cropmarks suggested a regularly laid out Romano-British settlement. Fieldwalking confirmed this interpretation as the enclosures survived as low platforms and the streets as slight hollows. Fieldwalking produced large quantities of Roman pottery and building material from the surface. Unlike Warrens Field it seems that Longdoles Field had not been frequently or deeply ploughed up to 1979 (according to the farmer the land was only intermittently ploughed during the previous twenty years).

The essential layout of the regular Romano-British settlement (see Fig. 5.1 for the excavated site) is visible on the 1969 and 1976 aerial photographs (Pls 2.3 and 2.6). The aisled buildings and later stone-based buildings were not detectable on the aerial photographs, though the oval enclosure of the 4th century villa was (compare the 1969 and 1976 aerial photographs with Fig. 6.1).

The topography of gravel islands and palaeochannels clearly influenced the layout of the settlement, the main Roman road and the Romano-British fields in Warrens Field, north and north-east of the main settlement. The Romano-British circular shrine about 40 m east of the villa enclosure (Trench 27; Fig. 2.3) lay within the palaeochannel and was, like the Roman road, masked by silt deposits. The shrine was located by systematic metal-detecting, which located the coin deposits (see Chapter 6). In contrast the late Roman cemetery to the west of the main settlement was found as a result of persistent examination of the aerial photographs. Although the cropmarks had been accurately plotted it soon became apparent that the plot was no substitute for the continuous observation of the photographs themselves. Towards the end of the excavation programme no cemetery had been found. In search of one we placed an exploratory machine-dug trench across the small square enclosure visible as a cropmark just under 90 m north-west of the villa enclosure (Trench 30; Fig 2.3) and this proved to be a small cemetery site (see Chapter 6).

The cropmark evidence in Longdoles Field suggested some phasing of settlement activity, though principally indicated a coherent plan. It was only with the benefit of excavation evidence that it was realised that some of the oval and apparently natural marks in the centre of the site represented a phase of late Iron Age/early Roman settlement enclosures similar to those visible to the west at Thornhill Farm. In the central area of Longdoles Field these early settlement features were partly masked by the surviving stratigraphy of the later Roman settlement (see Fig. 4.1).

3. The western settlement of irregular cell-like enclosures at Thornhill Farm, apparently linked to the 'regular' Longdoles Field settlement by a trackway or road system (Pl. 2.2). On the basis of cropmark morphology the date of this settlement was uncertain though clearly it was more 'native' than Roman in character. The palaeochannel system continued into this area and appeared to influence the settlement layout. This area had been subject to more intensive arable farming than in Longdoles Field and fieldwalking provided no convincing dating evidence.

   In June 1990 (Pl. 2.7) aerial photographs revealed better defined cropmarks than in any previous year, possibly as a result of a lower water-table caused by gravel extraction. The relationships of the cellular enclosure groups to each other and to the major linear trackway or road were not obvious from the aerial photographs. Clearly some enclosures and the road intercut each other, but equally the road also appeared to act as a central artery to the settlement. Excavation revealed a complex series of phases with the road representing a major second century reorganisation of the landscape following the abandonment of the native settlement (see Jennings *et al.* 2004, 15-19).

On the basis of the aerial photographic evidence the Claydon Pike/Thornhill Farm complex was selected for large-scale excavation. The site offered three distinct settlement areas of different character – clusters of Iron Age hut circles, dense native cellular groups of enclosures and a rectilinear 'Romanised' layout with associated field systems. These were likely to be in part contemporary and in part sequential. The boundaries of the settlements and fields were clearly influenced by the topography of marshes and palaeochannels, which offered the possibility of biological preservation. These channels and the trackways which crossed the entire area appeared to link the settlements.

As a result of cropmark analysis, supplemented by fieldwalking, geographical survey and phosphate analysis, a strategy of selective trenching and open-area excavation was developed. Subsequently the entire area was stripped of topsoil before gravel extraction took place. In retrospect this careful excavation based upon aerial photography proved highly productive and allowed resources to be focussed on the most valuable areas, and on specific features and intersections of cropmarks which helped to untangle the whole. For this observer the main lesson to be learnt was that no matter how long one scans these aerial images there is always new information and insights to be gained.

The National Mapping programme, undertaken by English Heritage staff based at Swindon has remapped the Thames Valley in recent years and Figure 2.1 represents the most up-to-date mapping

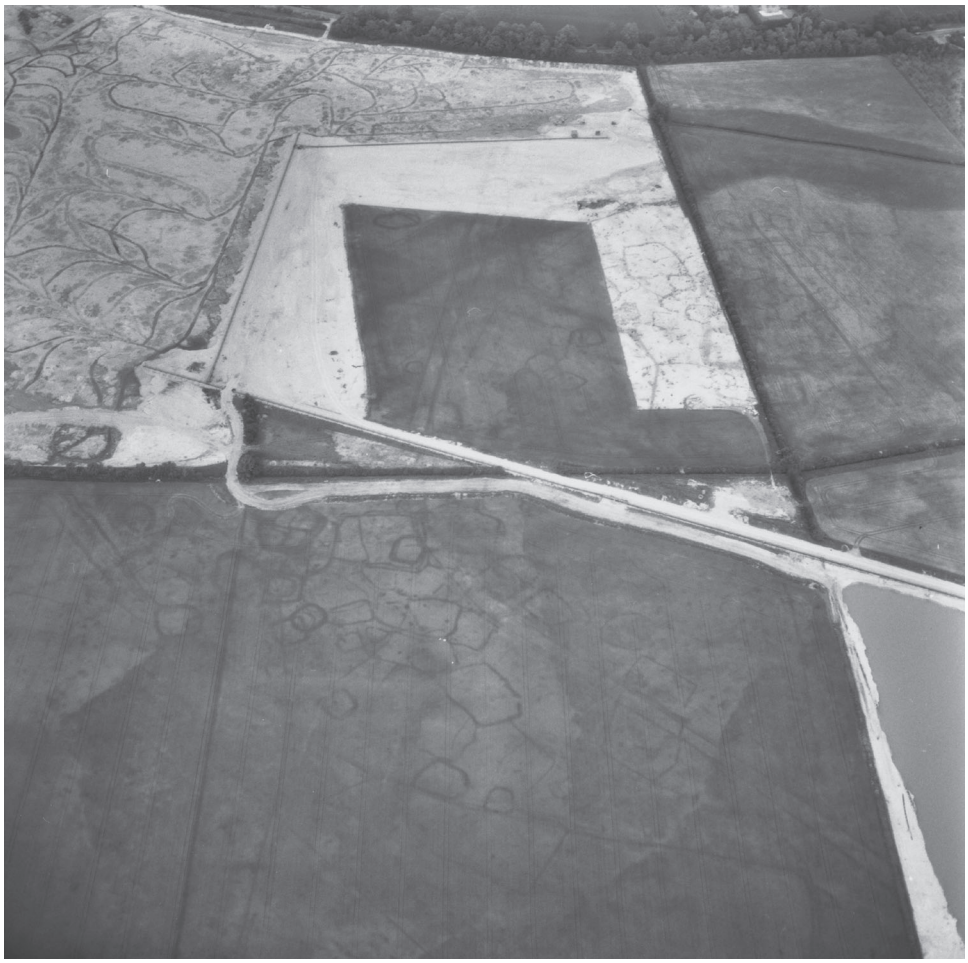


Plate 2.7 Aerial photograph of Thornhill Farm, taken in June 1990 (© Crown copyright)

of the area, much of which now consists of restored lakes following gravel extraction between the 1950s and 1990s.

LOCAL ARCHAEOLOGY

The Thornhill Farm settlement was excavated by OAU subsequent to Claydon Pike, and it was revealed as an open pastoral site dating from the middle Iron Age until the early 2nd century AD, with many distinct sub-phases (Jennings *et al.* 2004). Later in the Roman period, a series of trackways and field boundaries ran across the site, with one of the trackways leading south-west through a small Roman settlement at Kempsford Bowmoor, part of which is revealed by cropmarks (OAU 1989a). About 1 km further west lay the 2nd- to 3rd-century settlement at Whelford Bowmoor with a further series of cropmarks extending over 2 hectares on the opposite western bank of the River Coln (see Chapter 10). Lying just over 600 m to the east of the main Claydon Pike settlement in Longdoles Field was a further area of Roman activity at Green Farm revealed by cropmarks (SMR 3191) and briefly investigated prior to gravel extraction in the mid 1970s (Fig. 2.1; see Chapter 12). On the Second Gravel Terrace 1 km to the east of this site was an extensive series of cropmarks at Butler's Field (Boyle *et al.* 1998) and Roughground Farm (Allen *et al.* 1993) to the east and north of Lechlade, both of which were subject to detailed excavation. At Butler's Field, aside from the main early Anglo-Saxon cemetery, there is substantial evidence for late Bronze Age/early Iron Age activity, while Roman trackways clearly led to an enclosure revealed by cropmarks to the south of the excavated area. To the north-east at Roughground Farm, further early Iron Age activity was uncovered, but the main occupation of the site commenced *c* mid 1st century AD with a series of stock enclosures, pits and domestic material. This was replaced in the early 2nd century by a villa building, and occupation of the villa continued until the latter half of the 4th century. Another villa lies 2 km further north at Great Lemhill, just to the west of the River Leach (SMR 311). Various excavations in Lechlade itself have revealed features dating to the early and middle Iron Ages in addition to Roman trackways and field systems which probably relate to the Roughground Farm villa (eg Little London, OA 2001; Sherbourne

House, CAT 1996). A possible small domestic focus was located during construction work in the south-west of the town (SMR 3170), which revealed ditches, Romano-British pottery and notable concentrations of fired clay daub. Cropmarks are particularly intensive to the east of Lechlade, although most are undated. One exception is the series of cropmarks at Wigmore just to the north of the River Thames, which would seem to be of Iron Age and Roman date (Fig. 2.1; see Chapter 12).

EXCAVATION METHODOLOGY

The aim of the overall research project in the late 1970s was to examine the whole area of land use at Claydon Pike with the minimum of bias and the maximum range of inter-disciplinary techniques, incorporating aerial photography, phosphate analysis, targeted excavation and extensive environmental sampling. Data was recovered so that results were comparable not only across the site, but also with other sites in the region and beyond. Prior to excavation detailed examination and plotting of aerial photographs was carried out (see above), followed by large-scale contour survey, examination of surface scatters of artefacts, phosphate analysis and geophysical survey. Selective trenching was carried out in 1979 before the commencement of larger scale work in order to examine questions such as the extent of waterlogging, the survival of structures and the chronological range of the cropmark complexes. The two main areas of excavation at Claydon Pike were centred upon the middle Iron Age site at Warrens Field and the late Iron Age-Roman site at Longdoles Field (Fig. 2.1; Pl. 2.8).

A variety of excavation tactics were used in the course of the project, including small-scale selective excavation of particular features and intersections of cropmark complexes and larger scale excavation of selected activity areas. In both of these techniques random sampling procedures were carried out in order to minimise excavation but enable the distribution of material (bones, pottery etc.) to be studied over the whole area. Random trenching was also carried out in order to minimise any bias that may have occurred as the result of the targeted excavation techniques, and topsoil stripping and salvage excavation took place within areas not covered by other methods. Coarse water sieving was carried out on site as a control on artefact recovery rates, with finer sieving done at a later date. Most artefacts were plotted in relation to a site grid of 5 m squares tied into the national grid. It should be noted that the height above Ordnance Datum (OD) was not routinely recorded on site and therefore many of the section drawings reproduced here do not have this information on them.

The location of the main excavation trenches and salvage areas in Warrens Field and Longdoles Field is shown in Figures 2.2 and 2.3.

POST-EXCAVATION METHODOLOGY

The post-excavation programme of Claydon Pike followed on from the fieldwork and continued up until the end of the 1980s, funded by HBMC(E) now (English Heritage). Substantial progress was made, particularly in stratigraphic phasing and on the analysis of finds assemblages and environmental data. Matrices were produced and a phasing scheme for the site was developed, with large

Plate 2.8 Excavations at Claydon Pike

numbers of detailed plans and sections prepared for publication. Digital archives were created, specialist reports were produced, and interim reports were published (Miles and Palmer 1983; Miles and Palmer 1990).

However, financial constraints ensured that the final publication was never completed, and in 2000 a project design was put forward to English Heritage for the current landscape study of the Upper Thames Valley, which would incorporate Claydon Pike (see Chapter 1). A comprehensive assessment of the existing data revealed the necessity for extensive updating and revising of the stratigraphic, environmental and finds reports. In particular, the existing phasing system for the Longdoles Field site was problematic in that it was not explicitly tied to all areas and structures, which led to difficulties in trying to create an overall site narrative. The main reason was the differential quality of stratigraphy within different parts of the site, with much of it being very shallow and truncated, but with large numbers of inter-cutting features (Fig. 2.4). This is a problem that faces many excavated sites on the Upper Thames gravel terraces, including the nearby Thornhill Farm (Jennings *et al.* 2004). Nevertheless, the stratigraphy of the area with most intense activity (Trench 13) was reasonably intact and well recorded, resulting in a well-defined major sequence of occupation. The absolute dating of this sequence was more difficult in that much of it was initially established on the basis of pottery spot dates which were very broad, primarily because of problems of residuality and/or intrusiveness. In order to counter this, many of the pottery groups from key stratigraphic contexts across the site were extracted and re-analysed together with other datable material in order to provide a more accurate chronological measure of the phase boundaries. This methodology significantly altered many of the primary phase dates, and established a detailed chronological framework for the whole site (see phasing summary below). Certain pottery assemblages from other major features across the site that were not securely tied into the stratigraphic sequence were also examined at this time, in order to tie them in with the main phasing scheme. Where there was no reliable finds or stratigraphic data, features were either assigned to a phase on the basis of spatial patterning, or left as unphased. It has been through a combination of spatial patterning, stratigraphic relationships and finds dating, that a phasing sequence has been produced across the whole site with a reasonably high level of confidence.

All of the original finds and environmental reports have been fully updated and revised to take into account the new phasing information. The small finds have been re-analysed by Hilary Cool, and this had led to certain previous interpretions of the site (ie military origins for Phase 3) being discarded and new theories presented (see Cool, Chapters 4, 5 and 8).

SUMMARY OF MAIN PHASING

Phase 1 (middle Iron Age)

The earliest activity at Claydon Pike was discovered in Warrens Field, approximately 120 m to the north-east of Longdoles Field. It comprised a series of round house gullies and enclosures, plus ditches and pits, dating to the middle Iron Age. The environmental evidence suggests a largely pastoral agricultural regime was practised at the site. The settlement features were located on three gravel islands separated by tributary palaeochannels. Ceramic analysis has indicated that the settlement shifted from west to east during this period, with Island 3 representing the earliest occupation, and Island 1 the latest.

Phase 2 (c early 1st century AD to early 2nd century AD)

During the early 1st century AD, a new area of occupation was established at the Longdoles Field site, approximately 120 m south-west of the middle Iron Age settlement. Virtually all activity of this phase was located within Trench 13, and comprised a nucleated area of enclosures, gullies and pits partly defined towards the end of the phase by a substantial boundary ditch along the western side. The finds indicated domestic occupation and industrial activity, while the environmental evidence suggests the primary economic basis of the settlement was cattle grazing upon the floodplain.

Phase 3 (c early 2nd century to early 4th century AD)

The early 2nd century saw a radical re-organisation of the settlement pattern at the Longdoles Field site, possibly linked to it becoming an agricultural estate associated at least in part with the cultivation of hay meadows. Distinct zones of activity belonging to this phase were observed within the main excavation trenches (13, 19, 17, 29), with a number of north-south and east-west trackways running between them. Two aisled buildings were constructed within the main eastern compound, and a large area of open space existed in the centre of the complex, at least until the later 3rd century AD. Within this phase were many structural developments.

Phase 4 (c early to late 4th century AD)

At some point during the early 4th century, a modest masonry footed villa and associated building were constructed, which seemed to form the centre of a small estate probably operating a mixed agricultural economy. It appears that the primary domestic focus at this time was confined to the area of Trench 13, although a small cemetery was sited *c* 100 m to the west (Trench 30) and a circular shrine *c* 70 m to the east (Trench 27).

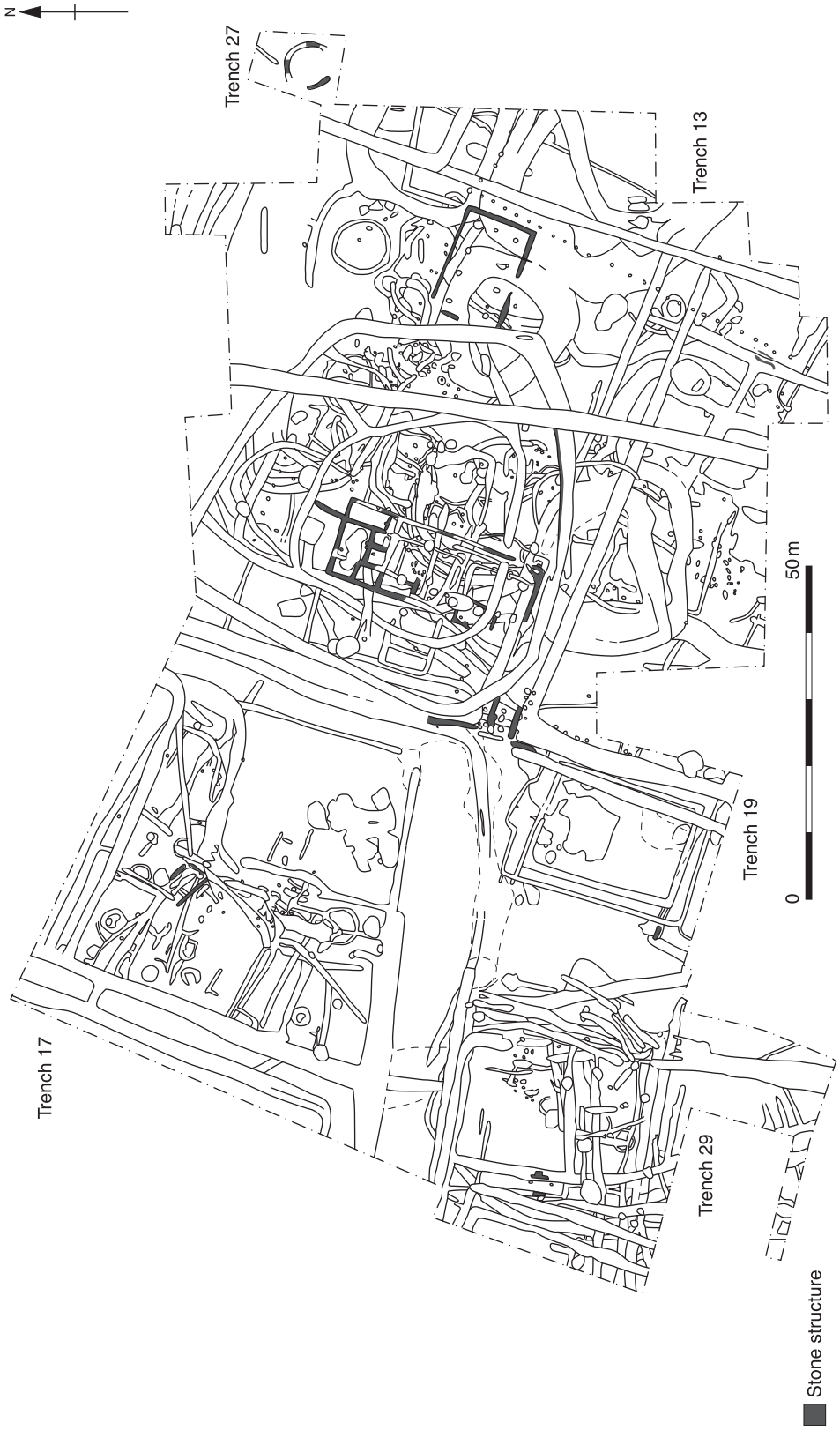


Fig. 2.4 Composite plan of main excavation trenches in Longdoles Field

Phase 5 (mid Saxon and medieval)

A small group of east-west burials cut through the late Roman villa, and three of them were radio-carbon dated to the mid-late Saxon period (8th-9th century; see Chapter 7). No associated settlement was located. Further very low key activity occurred in the medieval period (11th-15th centuries), when the surrounding gravel terraces and floodplain largely comprised hay meadow.

Chapter 3 The Middle Iron Age Settlement at Warrens Field (Phase 1)

by David Miles, Simon Palmer and Grace Perpetua Jones

INTRODUCTION

The earliest activity at Claydon Pike was discovered in Warrens Field, approximately 120 m to the north-east of Longdoles Field (Fig. 3.1). It comprised a series of round house gullies and enclosures, plus ditches and pits, dating to the middle Iron Age. These features were located on three gravel islands separated by tributary palaeochannels, and a network of Roman and post-medieval ditches traversed the area (Fig. 2.2). Ceramic analysis has indicated that the settlement shifted from west to east during the middle Iron Age, with Island 3 representing the earliest occupation, and Island 1 the latest. The chronological development of features within each island could not be fully discerned due to a lack of stratigraphic relationships, however a number of suggestions have been outlined in the discussion based on the pottery and stratigraphy present.

THE ARCHAEOLOGICAL SEQUENCE

Island 3 (Fig. 3.2)

Island 3 represented the most westerly limit of occupation, encompassing excavation Trenches 14

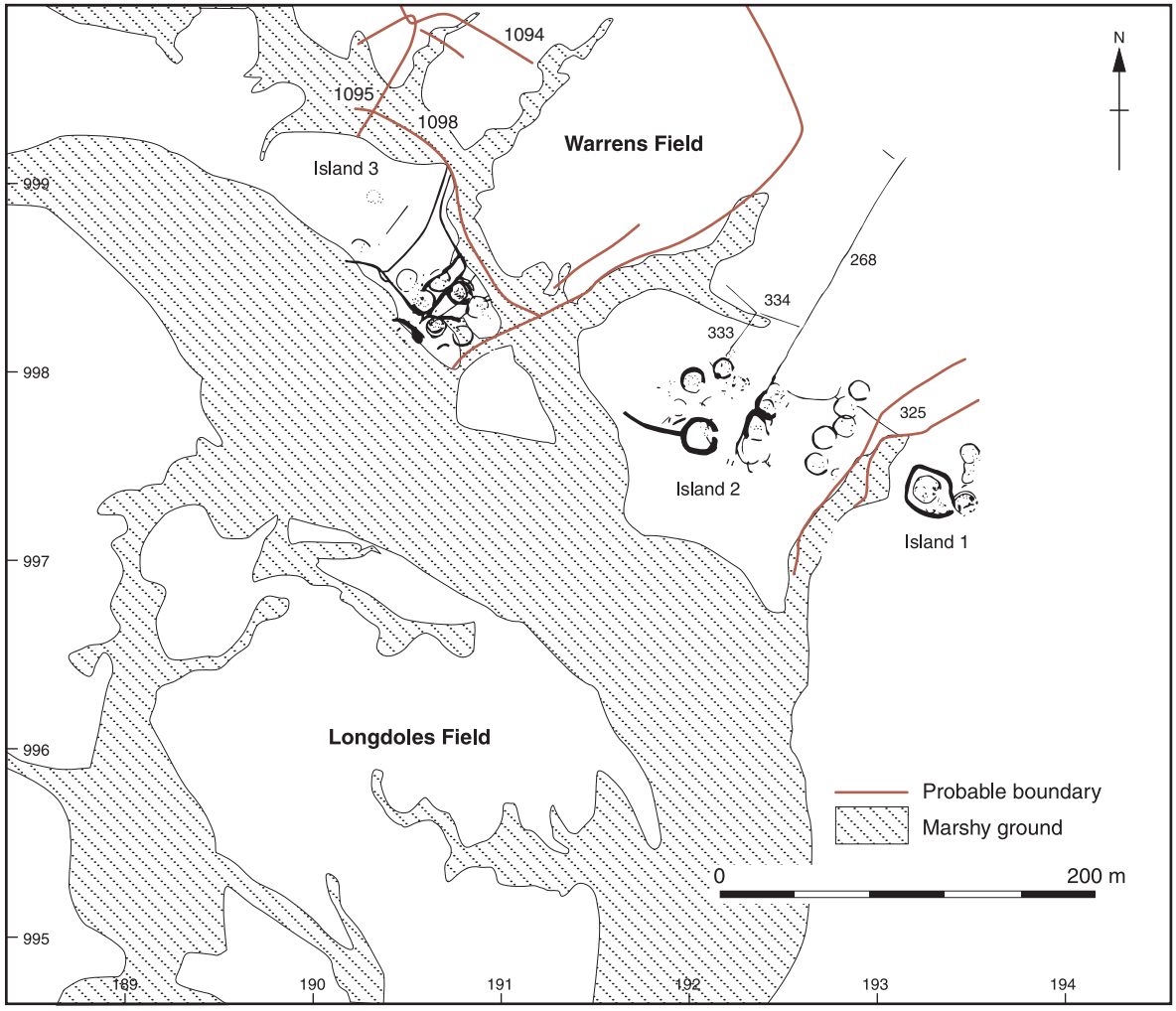


Fig. 3.1 Middle Iron Age settlement in Warrens Field

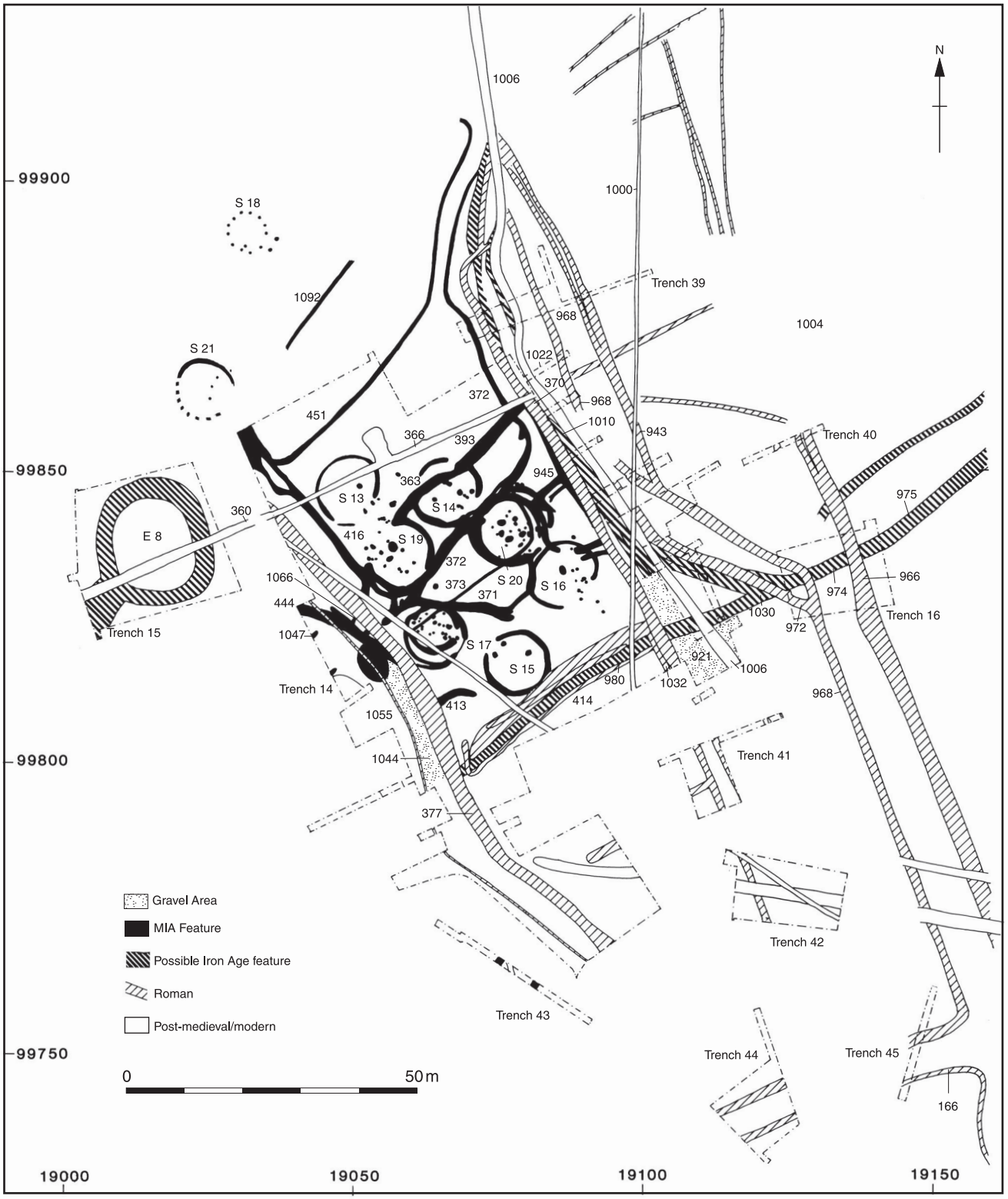


Fig. 3.2 Warrens Field Island 3

and 15. Seven middle Iron Age roundhouse structures were revealed in Trench 14, as well as a number of linear boundaries (hereafter abbreviated to the prefix LB) dating to the Iron Age, Roman and post-medieval periods. One further penannular gully was suggested by a short length of curving gully (context 413) located in the south-western area of Trench 14, truncated by Roman ditch 377. Trench 15, located to the west of Trench 14 in a lower lying area, contained an enclosure ditch (E 8) which probably dated to the late Iron Age/early Roman period. Salvage work was also carried out to the north of Trench 14, revealing two further structures (S 18 and S 21).

Trench 14 (SU 19070 93830)

Structure 13

Structure 13 was situated on the north-west side of the occupation area, defined by a penannular gully with an internal diameter of 10.5 m (Fig. 3.2). A south-east facing entrance was indicated by two postholes, 2 m apart, plus a short stretch of gully on the southern side. It faced into the north-west orientated entrance of Structure 19, perhaps fortuitously. The entrance posts were double in form, with shallower sockets to the outside. The gully appeared to have been recut on one occasion; no occupation material was recovered from the feature. A clay-lined pit containing burnt stone was located on the north-east side of the enclosure and was the only remaining internal feature.

Structure 14

Structure 14 was located to the south-east of S 13 (Fig. 3.2), defined by three arcs of gully together enclosing an area 10 m diameter with gaps to the north-east, south-east and north-west, none greater than 4 m. The gully arcs contained reasonable quantities of occupation debris (819 g of pottery and 117 animal bone fragments). A south-east facing entranceway was indicated by two paired postholes with a shallow socket to the front of the entrance, 2 m apart. Internally, two intercutting clay-lined pits were just off centre, a third clay-lined pit lay less than a metre from the entrance postholes. Two more pits were located within the enclosure area, with no indication of clay linings. The structure was truncated by LB 363.

Structure 15

On the southern edge of the settlement area lay Structure 15, defined by a penannular gully 10 m in diameter (Fig. 3.2). A gap of 3 m created a north-west facing entranceway, flanked by two postholes. These posts were 2 m apart and double in form, with a shallow socket to the front. The unusual orientation of S 15 suggests it may have been associated with S 17 situated only 4 m to the north-west, the entrance of which looks out onto it. A narrow shallow slot was located within the gully, forming an arc on the north, east and south sides, *c* 8 m in diameter.

A solitary pit was excavated within the structure on its north-east side. It had vertical sides and a flat bottom, contrasting with the more shallow clay-lined pits seen in many of the structures. Occupation debris from this structure was sparse, comprising 0.5 kg of pottery and 49 animal bone fragments. It had been truncated by Roman boundary ditch 414.

Structure 16

Situated towards the east edge of the island was Structure 16 (Fig. 3.2). It was formed by a gully which created an oval-shaped enclosure, 11.5 m x 9 m. Within the enclosed area two sets of paved postholes were adjacent to the south-east facing entrance gap, 2 m apart. Other internal features consisted of a cluster of small post/stakeholes on the east side of the area, and a central oval pit. Very little occupation debris was recovered from the structure. Two postholes located in the north of the structure are spatially more likely to be associated with the later enclosure of Structure 20. It was truncated by the Structure 20 enclosures.

Structure 17

Structure 17 was situated on the south-western edge of the island, and indicated two specific builds of structure (Fig. 3.2). It is unknown whether the two structures followed in quick succession, or if a period of time lapsed between the phases of build. The earliest phase was formed by two gully arcs enclosing an area of 7.25 m diameter, with gaps to the north-west and south-east. Set back from the south-east gap were two entrance postholes, 2 m apart, both double in form. A series of smaller postholes clustered around the entrance posts.

The second phase of penannular gully created a larger internal diameter *c* 10 m, with one break to the south-east, located further south than the previous phase. Two double postholes with shallow sockets were associated with the entrance. Connecting the two gully terminals was a narrow slot or groove, which may indicate some kind of blocking of the entranceway, either on a temporary or permanent basis. A scatter of small postholes and pits was seen within the area of the two gullies, including two clay pits. The internal features might belong to either phase.

Domestic debris from the structure gullies comprised 1.8 kg of pottery, 291 animal bone fragments, a briquetage fragment and three pieces of fired clay, one possibly from a loomweight. A single pottery sherd was recovered from the internal features. Both phases of gully were cut by the south-western enclosure of Structure 20, and one of the clay pits had been truncated by linear gully 373. Spatially Structure 17 may have been paired with Structure 15.

Structure 19

Structure 19 was situated on the west side of Trench 14 (Fig. 3.2). It was defined by two gully arcs with an internal diameter of *c* 10.5 m. Gaps were present to

the north-west and south-east, however two internal postholes indicated that the structure was orientated to the south-east, the sections showing the double character noted elsewhere. A scatter of pits, postholes and stakeholes were also recorded within the structure, including a clay-lined pit which contained small fragments of burnt limestone. Finds were recovered from the gullies only, and comprised 809 g of pottery and 32 animal bone fragments.

The northern terminal of the structure gully abutted LB 363, and the break in the boundary appeared to relate to the presence of the structure, suggesting contemporaneity. Structure 19 was one of the latest Phase 1 features on the island.

Structure 20

Structure 20 was situated in the central nucleus of occupation (Fig. 3.2; Pl. 3.1). Three phases of penannular gullies were identified, with associated enclosures to the north-east and south-west connected to the second phase. Each structural phase had a south-east facing entrance. The three phases of penannular gully were separate on the north and east, but to the west and south they intercut.

The earliest phase gully enclosed an area *c* 11.5 m in diameter; its entrance was the most easterly of the three phases. A pair of postholes was set back *c* 2 m from the entrance, 2 m apart. The second phase of the gully enclosed an internal area of *c* 10.5 m diameter. A pair of stone-packed postholes was set back *c* 2.5 m from the entrance and may have functioned as entrance posts during this or the final phase of the gully. The third and latest phase of penannular gully formed an area of internal diameter *c* 10 m. There is no evidence that the latest phase defined a separate structure, its entrance area coincided closely with that of the middle phase.

The interior of S 20 contained a series of small stakeholes and postholes, plus a clay-lined pit which contained large quantities of burnt limestone. A number of the postholes appeared to form a square shape with sides of 4 m, and may indicate part of a support framework for the roof. Fairly central to the house site were four large post pits, filled with stone and gravel packing. A 3 m square structure may have been formed by the posts. The posts may have created internal supports; alternatively they may represent a free standing structure, not contemporary with S 20.

Enclosures associated with Structure 20

The eastern terminal of the middle phase of penannular gully curved out to the south-east and demarcated the entrance to the north-eastern enclosure. Two small postholes flanked the entrance, perhaps forming a gate. The eastern boundary was not located by sections through the marshy area, however the size of the enclosure is estimated to be 11 m x 11 m in size.

The south-western enclosure utilised the first phase of NE-SW orientated linear boundary 372 for its northern side. The 4 m entrance gap to the enclosure had a small gully cut across it, possibly designed to block the entranceway at some point. The enclosure measured 14 m x 7 m, and contained a sterile pit and two stakeholes.

Once the enclosure ditches and middle phase of penannular gully had been backfilled, the house site was cut through by the redefinition of linear boundary 372. Structure 20 truncated S 16 and S 17, and its latest phase truncated LB 373.

Plate 3.1 Structure 20 Island 3

The enclosure ditches and penannular gullies contained large quantities of finds. A total of 605 animal bone fragments and 15 kg of pottery were recorded, plus two fitting fragments of a saddle quern rubber and a small amount of fired clay including two briquetage fragments. Few finds were recovered from the north-eastern enclosure.

Trench 14 – Linear boundaries

Trench 14 was bordered by Roman ditches to the east, west and south, and by a post-medieval boundary to the north (Fig. 3.2). Four middle Iron Age linear boundaries traversed the island, LB 451, LB 372, LB 363 and LB 373.

At least six cuts were recognised in the southern boundary ditch 414. A fragment from a possible saddle quern or rubber, plus 33 g of middle Iron Age pottery indicated that the boundary may have originated during the Iron Age. The alluvial top fill of the latest cut indicated contemporaneity with the Roman field system traversing the islands.

One of the Late Glacial channels that dissected the Warrens Field area was located at the western edge of Island 3. A layer of organic *Chara* marl had accumulated in this channel (see Robinson Digital section 4.4), overlaid by a peaty deposit which contained a small quantity of middle Iron Age pottery. Above this was a layer of black loam, and bone from this layer produced a radiocarbon date of 220 BC (2170+80 HAR-5411). A further sequence of layers had built up in the channel, finally sealed by a gravel bank 466. This gravel bank may have been associated with NW–SE orientated ditch 444, which contained 577 g of middle Iron Age pottery and a small quantity of animal bone. It truncated a NE–SW ditch, the possible western extension of LB 372. Ditch 444 was in turn overlaid by Roman gravel bank 1044 and parallel gully 1055.

Linear boundaries 372 and 451 were located in the north of Trench 14. The spatial relationship between the features suggest that they functioned together, creating an enclosed area *c* 30 m x 20 m. Both turned to follow the eastern boundary of the island and crossed the marshy area, forming a trackway into the enclosed area from the north-east.

Linear boundary 372 had two distinct phases, the earliest was marked by a break of *c* 8 m. On the east and west sides the boundary turned and followed the edges of the island, an alignment mirrored by the Roman ditches. During the later phase the ditch followed closely the line of the earlier phase on the north-east side, but to the south-west it continued straight into the lower area to the west of the island. Ditch 372 contained 396 g of middle Iron Age pottery and 104 animal bone fragments, plus small quantities of iron, wood and fired clay.

Linear boundary 363 ran parallel to 372 *c* 10 m to the north, and at least two phases were identified. A break in the boundary coincided with the location of Structure 19 suggesting a relationship between the two features. The ditch then continued westwards and terminated in the marshy area at the western limit of the island. It cut through Structure 14 and truncated LB 372. The boundary produced 367 g of middle Iron Age pottery and 227 animal bone fragments.

A shallow narrow gully (LB 373) was seen near the centre of the trench. A length of *c* 6.75 m ran approximately north-south, the southern end then turned towards the south-west for over 25 m. The gully cut through a clay-lined pit in the interior of Structure 17, but was truncated by the final phase of penannular gully in S 20.

Trench 15 (SU 19015 99835)

Enclosure 8

A probable late Iron Age/early Roman enclosure (Phase 2), E 8, was located to the west of Trench 14, within the lower lying area adjacent to the modern stream (Fig. 3.2).

Salvage, north of Trench 14

Structures 18 and 21

Situated 30 m north of Trench 14 a circular ring of posts was observed during the stripping of the site, forming S 18 (Fig. 3.2). One definite posthole was recorded in the interior. Two additional but larger postholes lay on the south-eastern side, *c* 1.5 m away outside of the post-ring. This structure may have functioned either as a post-ring building with projecting porch, or as a post-ring aisle within an outer stake wall. As a stake-walled house with internal aisles, a structure 10.5 m diameter would have been formed, which is a significantly larger floor area than the rest of the structures at Claydon Pike.

Structure 21 was located approximately 20 m to the south-west of S 18, its penannular gully surviving clearly only on the northern side (Fig. 3.2). The estimated diameter of the gully was 10 m, comparable to the house enclosures, and it appeared to face south-east. Lack of surviving detail makes it difficult to interpret this with certainty as a house site.

A series of other linear features were recorded during the commercial stripping of the topsoil. Of possible middle Iron Age date were three irregular ditches with associated gullies, which extended both north and west out of the observed area. These were contexts 1094, 1095 and more certainly 1098, 50 to 100 m north of S 18 (Fig. 3.1).

Island 2 (Fig. 3.3)

The second gravel island was located approximately 100 m to the south-east of Island 3, with

Fig. 3.3
Warrens Field Island 2

Plate 3.2 View looking south-east over Island 2, with S 10 in foreground

two main excavation trenches, 8 and 12 (Pl. 3.2). Trench 8 contained evidence for two enclosures. Three roundhouse structures were identified in Trench 12 and a rectangular structure. Three enclosures and a number of linear ditches were also discovered. To the south of Trench 12 a number of ditches and curving gullies were identified during salvage operations, as well as a four-post structure. To the east of Trench 12 five penannular gullies and a number of linear boundaries were also seen.

Trench 8 (SU 19200 99750)

Enclosure 4/Structure 11

Enclosure 4 was formed by a penannular ditch, *c* 15 m internal diameter with a 2 m entrance to the east (Fig. 3.3). Three phases of ditch cut showed from the excavated sections, the latest had been backfilled or levelled out with gravel. This latest cut terminated 4 m south of the original terminal and would therefore have formed a wider entrance of *c* 6 m, during the latest phase. Domestic debris from the fills comprised 1 kg of middle Iron Age pottery, 141 animal bones fragments, a probable part of a saddle quern rubber (Fig. 3.9, no. 2) and 8 pieces of fired clay including a loomweight.

Internal features included several postholes and a clay-lined pit located on the northern side of the enclosure. A sub-rectangular pit in the centre of the enclosure had been truncated by a large post-medieval feature. A further pit was seen towards the entrance area, together with a 5.5 m length of gully, truncated by the enclosure ditch. The gully contained 331 g of middle Iron Age pottery, 2 pieces of fired clay including an oven fragment, and burnt limestone, the fill became cleaner towards the ditch.

The north-east of the enclosure ditch had been cut through by a gully arc containing 693 g of middle Iron Age pottery, 38 animal bone fragments and 3 pieces of fired clay, including an oven fragment. Running west from Enclosure 4 were ditches 180 and 192. These continued *c* 40 m beyond Trench 8 before they were lost in the marshy divide of Islands 2 and 3. Earlier cut 192 was clearly cut by Enclosure 4, however the gravel backfill of Enclosure 4 extended 5 m along 180, indicating that they were infilled together. Enclosure 4 was truncated by Enclosure 3 to the south.

It is suggested that Enclosure 4 was associated with a building, Structure 11. Gullies or posts that may have been associated with such a structure appear to have been removed by later activity. The clay pit finds parallels in its position for the other more definite house sites at Claydon Pike. The gully that leads to the southern part of the enclosure ditch, if contemporary, may be a drain starting within the structure, the change in fill marking its emergence outside.

Enclosure 3

Enclosure 3 was formed by circular ditch 153, creating an internal diameter of *c* 16 m (Fig. 3.3). A 3 m gap on the north-east side formed an entrance. The relative sparsity of occupation debris, and an interior devoid of archaeological features suggests the area was not utilised for domestic occupation. The fills did not show any sign of deliberate infilling and had fully silted prior to any alluvial deposition. The enclosure clearly cut Enclosure 4 and would appear to belong to the Phase 2 occupation at Claydon Pike.

Trench 12 (SU 19220 99785)

Structure 10

Situated *c* 20 m north of Enclosure 4 was Structure 10, defined by at least four cuts of penannular gully (Fig. 3.3). The internal diameter varied from 10 m to 11.75 m, with a south-east facing entrance gap of *c* 4 m. One of the middle cuts took on ditch-like proportions, but this was seen only on the north and west sides. Set back just over a metre from the entrance were two large stone-packed double postholes, both posts of the northern posthole appear to have been replaced. The gully contained an abundance of domestic debris, including *c* 4 kg of middle Iron Age pottery, 156 animal bone fragments, 6 pieces of fired clay and 2 briquetage fragments. A single intrusive Phase 2 pottery rim was also recovered from the gully.

Nine postholes were located within the gully, three of which appeared to be double in form. These posts probably represent structural or support posts. Two appeared to be aligned with the entrance posts. A shallow clay-lined pit lay on the central north side, containing quantities of burnt limestone, part of a May Hill sandstone saddle quern (Fig. 3.9, no.1) and 551 g of middle Iron Age pottery.

Structure 9

Just over 5 m to the north-east of Structure 10 lay Structure 9 (Fig. 3.3). It was formed by a penannular gully with an internal diameter of *c* 9 m, smaller in comparison to the other house sites. At least three gully cuts were represented, all terminating to give an entrance of between 2-2.5 m on the south-east side. They contained 1.6 kg of middle Iron Age pottery, 59 animal bone fragments and five pieces of fired clay including an oven fragment and briquetage. Set back *c* 2 m from the entrance gap were two postholes, both stone packed and oval in shape, and appearing to have a smaller post set on the outside of each, forming a double post setting.

Within the area of the gully, several postholes lay on the north side, but did not form a coherent pattern. In the central north-west of the internal area lay two pits, one being clay-lined. Immediately west a third pit was seen, but all three had been truncated by a post-medieval pipe trench. Extending 2.5 m from the north-west side of the penannular gully was a shallow gully, cut by the outer penannular gully, but possibly respecting the inner and earlier cuts. A rectangular structure, S 23, cut across the northern part of the structure.

Rectangular Structure S 23

Structure 23 consisted of a trapezoidal arrangement of seven postholes (Fig. 3.3). They contrasted sharply with the other postholes on the site since they had been packed with a limestone that originated from the Cornbrash Formation rather than the Forest Marble that was usually seen. The structure cut across the northern part of Structure 9. No finds were recovered from the postholes, and they cannot therefore be dated with any certainty.

Structure 7

Positioned a few metres south-east of Structure 9 lay Structure 7 (Fig.3.3). Although this was lacking a penannular gully, the presence and arrangement of its features supported its interpretation as a structure.

Replacing the penannular gully were two foreshortened gullies, located 3.5 m apart and positioned as if they formed the terminals of a penannular gully with its entrance on the south-east. Set back *c* 2 m from these gullies were two sets of postholes *c* 2 m apart. A sparse amount of occupation debris was recovered from one of the gullies.

Two clay-lined pits lay on the north-eastern side of this structure. One contained part of a quartzitic sandstone cobble that was probably used as a saddle quern rubber, the other contained 67 g of middle Iron Age pottery, two pieces of fired clay, including a possible tuyère fragment. Four unrelated postholes were also seen in the interior of the structure.

Miscellaneous features in the south of Trench 12

To the north of E 4 and south of S 10 lay a set of curving gullies not obviously defining structures, and truncated by post-medieval boundaries (Fig. 3.3). Gully 198 formed a penannular enclosure *c* 8 m in diameter with a large 7 m break in the west and a narrower gap to the east. A central V-shaped slot was recognised in gully 198. The feature contained 114 g of middle Iron Age pottery.

West of gully 198 two intercutting gullies, contexts 199 and 200, had surviving lengths of 8 m and 5 m respectively. A short length of ditch, context 196, ran NE-SW for 8 m to the south of these gullies.

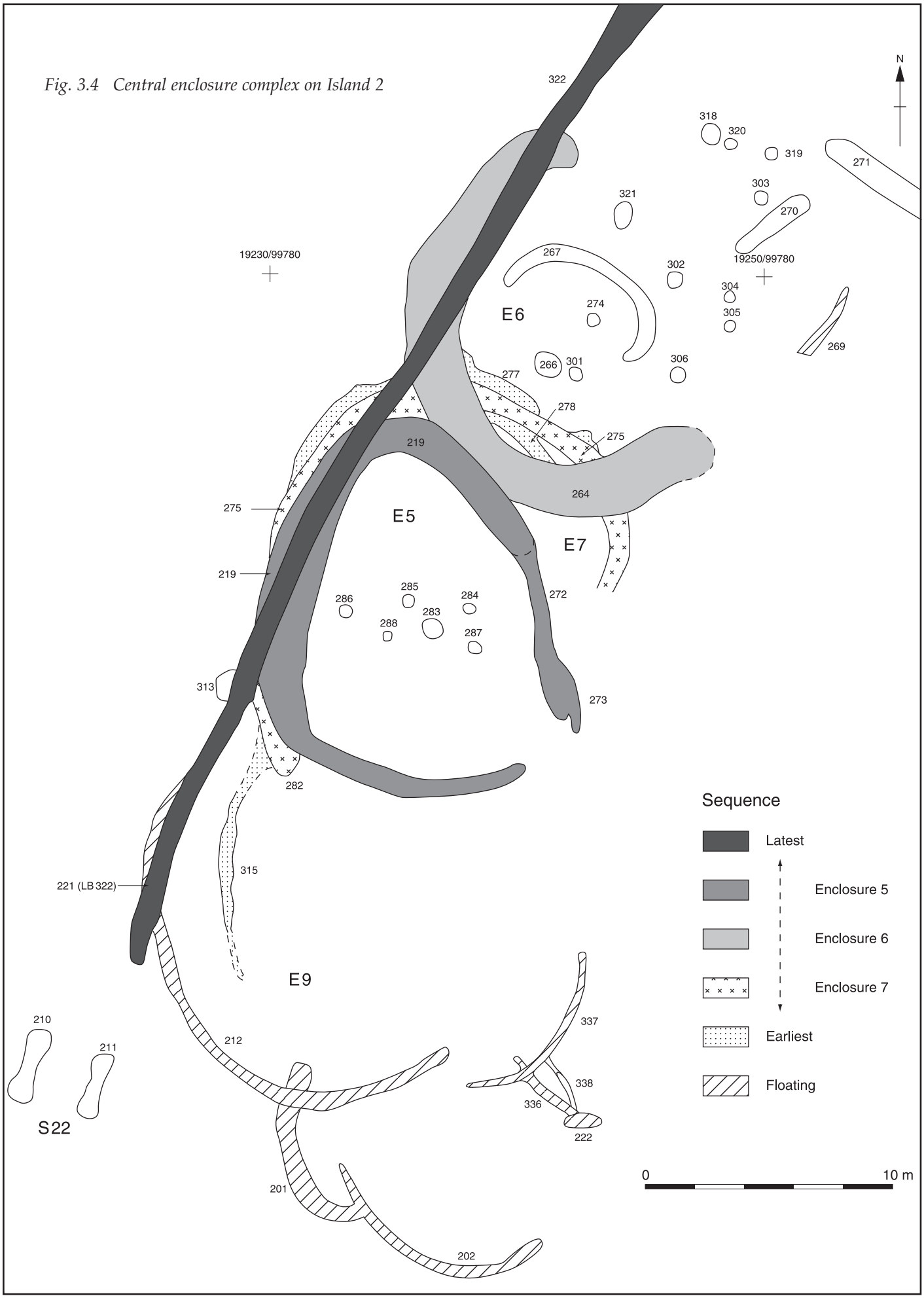
Central enclosure complex (Fig. 3.4)

A sequence of linears and ditched enclosures extended from the eastern part of Trench 12 south into the salvage area. The latest stratigraphic feature was linear boundary ditch 322 running NE-SW for *c* 75 m on the western edge of the enclosures. It appeared to be the latest cut of gully 268 in the north, and gully 221 in the south. Within this area gullies 277, 278 and 315 were the earliest features. They were truncated by E 7, which was in turn truncated by E 6 and then E 5, the latest of the enclosures. Each phase was bordered to the west by LB 322 and truncated by it.

Enclosure 7

Enclosure 7 was the earliest stratigraphically, and was approximately concentric with Enclosure 5, although slightly less angular. It delimited a rectangular area *c* 15 m x 12 m with the south and south-east sides open. The finds comprised 880 g of middle Iron Age pottery and 41 animal bone fragments. The internal features include five postholes and a clay-lined pit, which may have been contemporary with either Structure 5 or 7.

Fig. 3.4 Central enclosure complex on Island 2



Enclosure 6

Enclosure 6 was formed by an angular semicircular ditch located to the north of E 5. This enclosed an area of *c* 11 m diameter with the north-east side left open. The south-east terminal shelved into a *c* 1 m deep sump and contained large quantities of occupation debris, comprising 3.8 kg of middle Iron Age pottery, 2 pieces of fired clay and 105 animal bone fragments. At least one recut was apparent on the west side of the enclosure, showing signs of backfilling with gravel. A whole series of features lay within the area of this enclosure, including short lengths of gully, three clay-lined pits and eight postholes. None of the postholes appeared to function as entrance posts.

Enclosure 5

Enclosure 5 was the latest enclosure, formed by a ditch which created an almost triangular area, *c* 12 m x 9 m. An entrance of 8 m had been left on the eastern side, which had then been foreshortened by a stretch of gully to 2.5 m wide. The ditch produced 382 g of middle Iron Age pottery and 67 animal bone fragments. Internally there were five postholes and a clay-lined pit. Again, none of the postholes appeared to conform with the pattern of entrance posts found within the more recognisable structures. The internal features are also within the area enclosed by the earlier Enclosure 7, and could be contemporary with either structure.

Salvage area south of Trench 12

The central enclosure complex in Trench 12 continued south and was observed and recorded during commercial stripping of the site. A further enclosure was identified, E 9, truncated by the earlier phase of LB 322. The enclosure was *c* 12 m in diameter, and open on the north and east sides. Curving gully 315 appeared concentric with E 9, however the southern extent was not traced. Another gully arc (337) was noted lying on the same arc and may conceivably have been associated with context 315.

Central enclosure complex: summary

In comparison to the more definite house sites at Claydon Pike no structure can be readily identified in this area. This is despite the incidence of postholes, clay-lined pits and gully arcs. The stratigraphy of the area indicates three or four enclosure phases of shifting development plus the linear boundary phase. It is unclear if E 9 formed a phase on its own or was associated with another enclosure. A maximum of two enclosures would have been in use at any one time. The succeeding phases all shift to fresh ground, the overlap of areas being marginal. Throughout the period of use in this area the settlement appears to have been constrained in the west, and the axis of the enclosures remained static. The space between this edge and the nearest feature to the west (S 7) is *c* 7 m (Fig. 3.3). It is therefore conceivable that a path or small track led through the island here. To the east the situation is similar, with a gap of *c* 20 m before the next block of house sites. It could be postulated that this was a yard area, perhaps associated with these enclosures, or the paddocks to the north.

Four-post structure 22

Structure 22 was formed by two pairs of postholes joined by a slack V-shaped gully, located 3 m south of the terminal of LB 322 (Fig. 3.4). The posts were packed with gravel and limestone, and appeared to form a structure *c* 2.75 m along the WNW-ESE axis, and 2.25 m on the NNE-SSW axis (post centre to post centre). Three small sherds of middle Iron Age pottery and a single iron nail were recorded from the structure.

Salvage area east of Trench 12 (SU 19280 99765) (Fig. 3.3)

Five further penannular gullies and a series of linear boundaries were recorded during the commercial stripping of the site east of Trench 12.

Structures 4, 5, 6, 8 and 12

Situated at the northern end of a line of penannular gullies lay Structure 4. It had an internal diameter of 9.5 m with a gap of *c* 2.5 m on the south-east side. The interior was devoid of features and only 85 g of middle Iron Age pottery was recovered from the gully.

Structure 5 was situated to the south of Structure 4, defined by a horseshoe-shaped arc open to the north-east. The internal diameter of the structure was 11 m and it encompassed three postholes, two of which appeared to form entrance postholes, creating an atypically north-east orientation for the structure. Twenty-two animal bone fragments and 900 g of middle Iron Age pottery were recovered from the gully, a large proportion of which originated in the southern terminal. A NW-SE orientated ditch (325) ran from the entrance posts of S 5, before terminating in the marshy divide of Islands 1 and 2. Gully 271 ran east from Trench 12, and was connected to S 5 by a short length of gully. No differences were recognised within these fills and hence the features were likely to have been contemporary.

Structure 6 was located to the south of Structure 5. Their penannular gullies overlapped, however the relationship between the two features could not be ascertained. The S 6 gully enclosed an internal area diameter 10.5 m with a gap of 4.5 m to the east. A single piece of fired clay, and a nearly complete expanded rim jar (Fig. 3.7, no. 8) was recovered from the northern terminal. Two postholes were set back from the entrance gap. On the north side of the enclosure was clay-lined pit. Structure 6 also impinged on Structure 8 to the south-west.

Structure 8 continued the line of penannular gullies to the south-west. It enclosed an area of 11.5 m internal diameter, with an opening to the south-east of *c* 4 m. Adjacent to this opening were six

postholes, clustered inside the northern part of the entrance. Little occupation debris was salvaged from this structure, comprising only three sherds of middle Iron Age pottery.

Structure 12 lay 3 m south of Structure 8. It had an internal diameter of 10.5 m and a break of 7 m to the east. This entrance gap was partially filled by a short length of gully which created gaps of 2.5 m and 3.5 m into the enclosure. Set back *c* 2 m from the latter gap were two entrance posts. Two further postholes were recorded in the southern side of the enclosure. The gully contained 798 g of middle Iron Age pottery, a fragment of fired clay, a single retouched flint flake, and a very small quantity of animal bone.

Just *c* 2 m south-east of Structure 12 lay a horse-shoe-shaped arc of gully (204), the maximum distance between the two termini was 5 m. It was steep-sided with a flat bottom, burnt limestone was present in the fill and it may have originally contained timbers. Two postholes (206) and a pit (215) were located to the south of the gully. The pit contained layers of burnt stone and signs of *in situ* burning. It may have functioned as an oven or hearth pit.

Linear boundaries

The central enclosure group formed the main axis of a system of small plots or paddocks on Island 2. One plot was seen to extend northwards from trench 12 (Fig. 3.1), defined by contexts 333, 334 and 268 (the northerly continuation of LB 322), 30 x 25 m in size. Another slightly larger plot was located to the east, defined by contexts 268 and 271. Ditch 180, attached to Enclosure 4, and gully 325 running from Structure 5 into the marshy divide between Islands 1 and 2, may also have created boundaries.

Island 1 (Fig. 3.5)

Gravel Island 1 represented the most easterly activity in the Warrens Field site. Excavation here focused on Trench 6, but also included three further trenches to the south (Trenches 2, 9 and 10: Fig. 2.2). Trench 6 contained one enclosure ditch and three structures, plus several gullies, postholes and scoops. A single enclosure ditch was situated in Trench 2, probably contemporary with the Phase 2 activity at the Longdoles Field site. A double-ditched enclosure was seen in Trench 9, believed to be post-medieval in date. Trench 10 was located at

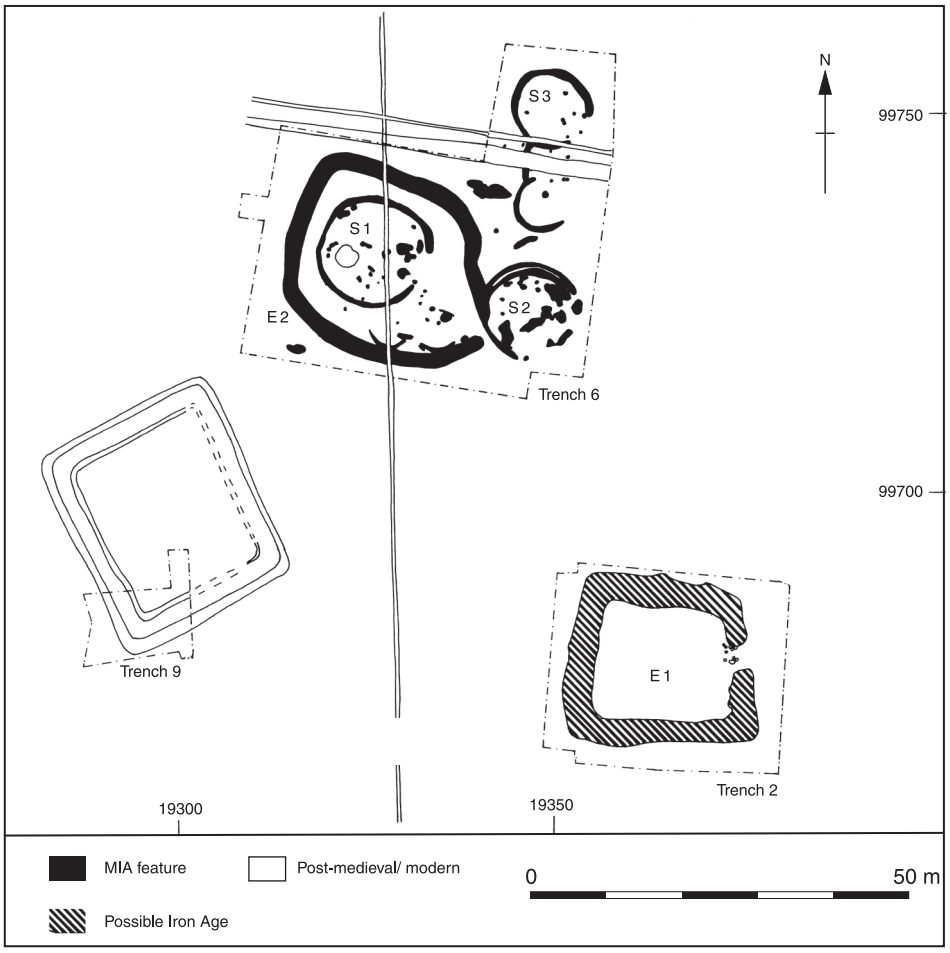


Fig. 3.5 Warrens Field Island 1

the western edge of Island 1, where the Roman trackway crosses the low area dividing Islands 1 and 2 (Fig. 3.3).

Trench 6 (SU 19335 99730)

Enclosure 2 and Structure 1 (Fig. 3.6, Pls 3.3 and 3.4)

Enclosure 2 was formed by ditch 8, creating a sub-rectangular enclosure measuring 22 m x 20 m with an internal area of *c* 440 m². An entrance of 2 m lay on the south-eastern side. Excavation showed the ditch to be 1.75-2.25 m wide and 0.7-0.9 m deep. No evidence for recutting was recognised. A number of features including Structure 1 lay within the enclosure. Ditch 8 is reasonably concentric to S 1 except on the south-east side where it swells out.

Occupation debris was recovered from the enclosure ditch, including 220 animal bone fragments, the majority of which were not identifiable, 5 pieces of fired clay, and 7 fragments of Droitwich briquetage. An iron knife and two flint flakes were also recovered from the ditch. A total of 3.5 kg of middle Iron Age pottery was identified, however the fabrics indicated a slightly later focus than the ceramics recovered from the enclosed structure. The sherds

Plate 3.3 Enclosure 2 and Structure 1 from Island 1

Plate 3.4 Iron Age roundhouse (S 1) reconstruction

are small and abraded, and were mostly recovered from the upper fill, suggesting some tertiary infilling from nearby later Structure 2.

Penannular gully context 21 (Structure 1) lay within Enclosure 2 (Fig. 3.6). An artist's reconstruction is shown in Plate 3.4. It had an unusually large internal diameter of 13 m and a 4.5 m wide entrance on the east side. The gully was 0.5-0.6 m wide on average, and 0.3-0.46 m deep. Traces of posts were noticed in several sections of the gully, and a possible slot, 0.15-0.25 m wide and 0.14-0.19 m deep, was visible on the outer side of the gully. Small limestone fragments were noted throughout the fill, particularly in the terminals. Debris recovered from the gully included 3.7 kg of pottery, 82 animal bone fragments, 9 pieces of fired clay, 6 briquetage fragments, a piece of iron and a flint flake.

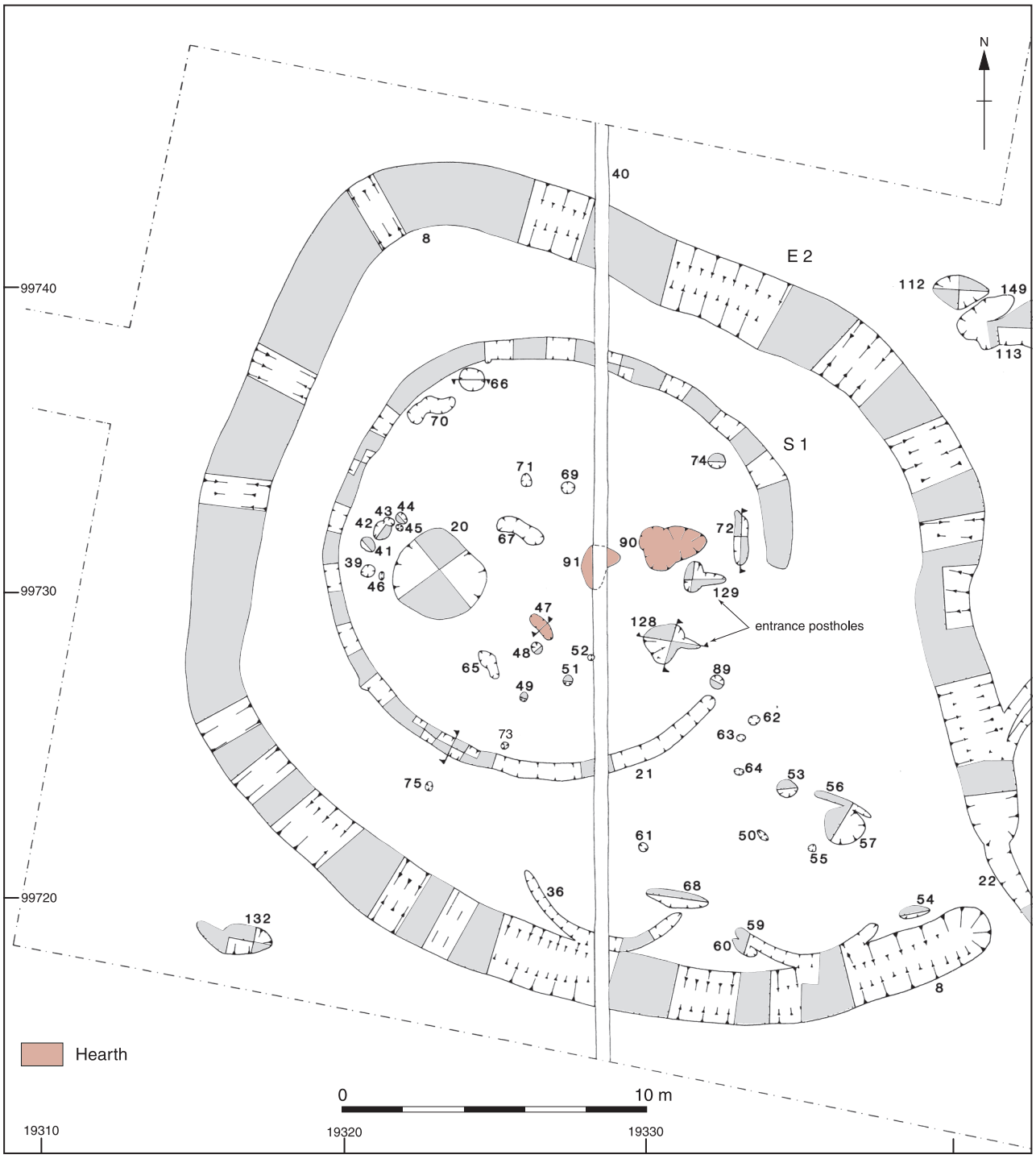


Fig. 3.6 Structure 1 and Enclosure 2 on Island 1

Two postholes, 128 and 129, were set back *c* 2.5 m from the terminals of the penannular gully (measured from the posthole centres; Fig. 3.6). The postholes were up to 1.4 m wide and 0.4 m deep. Projecting towards the entrance from the postholes were two shallow V-shaped grooves, inclined towards the posts, 0.6 m to 1 m long and 0.1 m to 0.3 m wide. Ten sherds (89 g) of middle Iron Age pottery were recovered from posthole 128. A single posthole (89) was located at the southern terminus of gully 21, *c* 0.4 m diameter and 0.14 m deep. Burnt limestone was noted in its fill.

Within the area of gully 21 lay a series of postholes and pits, none necessary structurally related to the building. Several of these in fact would have lain between the outer wall of the structure and the penannular gully (the wall position conjectured from the posts 128 and 129). They include two postholes (50 and 74), a clay-lined pit (context 66) and a possible pit or short stretch of gully (72). Small quantities of domestic debris were recorded in features 66 and 72. Three possible hearths or fire pits were identified within the area defined by gully 21: features 47, 90 and 91. Feature 90 was irregular in shape, measuring 2.28 m by 1.7 m, and 0.36 m deep, heavily burnt clay on the north and south side may suggest the feature was an oven. Feature 47 was smaller, measuring 1 m x 0.4 m and 0.36 m deep. This was more regular and was intensely burnt down one side. Feature 91 was mostly destroyed by a modern pipe trench (40). The remaining feature was 1.4 m long and depth 0.42 m. Contemporaneity of the structure and the hearths cannot be shown, and for feature 90 must be doubted as it would seem to cross the conjectured wall line. No finds were recovered from the hearths.

A dozen postholes located predominantly on the west and south sides were excavated but did not create a coherent pattern, contexts 39, 41-6, 48, 49, 51-2 and 65 (Fig. 3.6). They ranged in diameter from 0.23-0.6 m, and 0.05-0.17 m deep. One further posthole was seen towards the north-east, context 69, which measured 0.4 x 0.33 m. Three irregular features (67, 70, 71) and one natural hollow (20) were also present within the structure area. A single sherd of pottery was present in feature 20.

Other features within E 2 (Fig. 3.6)

On the southern edge of ditch 8, adjacent to the enclosure entrance, were two arcs of gully, contexts 36 and 59. They may have been contemporary with the ditch, however the stratigraphic relationship was uncertain. Both were approximately 6 m long, 0.25 m wide and 0.19 m deep, and contained small quantities of middle Iron Age pottery and briquetage. A series of postholes, 50, 53, 55, 61-4, lay to the north of gullies 36 and 59 and south of the entrance to S 1, posthole 75 was seen to the west. Three shallow scoops or possible pits 54, 57 and 60, plus a short gully arc (context 56), also lay in this area but no clear signs of purpose was found. Context 68 is a natural feature. No finds were recovered from these features.

Structure 2 (Fig. 3.5)

Structure 2 was located to the east of Enclosure 2, and cut through its northern terminal. It was formed by two semicircular gullies with a circular diameter of up to 12 m, the south and east sides being completely open. Two possible gullies located on the eastern side may have restricted the entrance area. Both phases of semicircular gully contained domestic debris, totalling 953 g of middle Iron Age pottery, 5 pieces of fired clay (including an oven fragment), 5 fragments of briquetage, 120 animal bone fragments and an unidentified piece of iron. The inner gully cut had been partially sealed by a spread of limestone rubble. The associated soil layer contained 212 g of pottery, approximately 50% of which are sandy wares, indicating the latest middle Iron Age activity on the island. The spread appears to indicate some form of surface or levelling which survived best in the tops of features. Within the area of the gullies lay three clay-lined pits (103, 109, 120), and a circular arrangement of ten postholes which would have formed a structure just under 7 m in diameter. Small quantities of pottery were recovered from five of the postholes, a fired clay loomweight and iron fragment were also recorded in one posthole. One of the clay-lined pits was located on the post line, suggesting that it was not contemporary with the structure.

A number of other pits and postholes were located outside of the structural posts, and clustered in the east. Very small quantities of debris were recovered from the features, with the exception of a single pit which contained part of a disarticulated cattle skeleton, represented predominately by foot bones.

Structure 3 (Fig. 3.5)

Structure 3 was located 5 m north of S 2 and consisted of three connecting gullies, contexts 80, 83 and 97, truncated by the post-medieval field system. Gully 97 was interrupted on the south-east side by a 4 m gap and had an internal diameter of 9 m. Two postholes, set back *c* 2 m from the entrance, may be interpreted as entrance posts, although they were relatively slight. A scatter of postholes of no regular pattern was also enclosed within the area of the gully. Part of a loomweight was recorded from the feature, together with 4 fragments of briquetage, a piece of fired clay, 537 g of middle Iron Age pottery and 44 animal bone fragments. Connecting gully 83 contained 129 animal bone fragments and 29 g of pottery.

Semicircular arc 80 was smaller in diameter, 6.5 m, and was open to the north and east sides. A spread of postholes lay north-east of the gully and a shallow pit lay just within. Evidence of burning was seen in the pit, including charcoal and burnt limestone. Finds from the gully amounted to one piece of fired clay, three animal bone fragments, plus 338 g of abraded middle Iron Age pottery.

Trench 2 (SU 19365 99675) (Fig. 3.5)

Enclosure 1

Situated in the south-east of Island 1, ditch 6 formed a rectangular enclosure with an internal area of *c* 260 m² (Fig. 3.5). An entrance causeway 3 m wide lay on the east side, marked by a series of postholes. No features were recorded in the interior. Few finds were recovered from the enclosure suggesting that it was not primarily utilised for occupation. Small quantities of pottery recovered from the ditch suggest a later Iron Age/early Roman date for the feature, placing it in Phase 2 (see Chapter 4, Fig. 4.1).

THE FINDS

Iron Age Pottery (Figs 3.7-8) *by Grace Perpetua Jones*

A total of 4981 sherds of pottery, weighing 57627 g, was recovered from the middle Iron Age settlement at Warrens Field, Claydon Pike. The average sherd weight is 11.6 g which is fairly typical for pottery of this date in the Upper Thames Valley. The condition may be described as average to poor, with some of the pottery being quite abraded. The coarse calcareous fabrics were particularly prone to splitting horizontally and smaller sherds often lost one or both surfaces. Over-zealous cleaning has destroyed some of the surface treatments, and may have affected evidence for use such as sooting and burnt residues. Full details of the recording methodology may be found in Digital section 3.1.

Fabrics

Thirty-three individual fabrics were recorded from the middle Iron Age assemblage at Claydon Pike. These have been grouped according to principal inclusions (Table 3.1), to offer a clear impression of the character of the assemblage. Fabric group 3 has been omitted from the analysis as it represents a single Phase 2 (late Iron Age/early Roman) vessel recovered from Structure 10.

Just over 91% of the assemblage was made from clays with abundant fossiliferous limestone inclusions (group 1), which may have been obtained from the immediately local Oxford Clay (within 1-2 km of the site), or the deposits of Cornbrash or Forest Marble located approximately 3-5 km to the north. Geological descriptions of the local geology suggest that the calcareous inclusions occurred naturally in the clay (after Sumbler 1996; Sumbler *et al.* 2000). The Oxford Clay may also have been the source of the sandy group 7 fabrics; Kellways Clay deposits and the Ferruginous Sands (located at 6 km and 11 km distant respectively) offered alternatives. Pockets of sandy clays were also located in the gravels. The Kellaways Clay may have provided the raw materials for fabric group 4.

Oolitic limestone recorded in fabric groups 2 and 5 probably originated from the gravel, however Athelstan Oolite and the Coral Rag offered alternatives, located up to 9 km away. The dominant fabric in group 7 (AI3) contained glauconite grains, indicating a Greensand origin. The presence of glauconite has also been suggested in fabric groups 6 and 8. The nearest Greensand source was 14 km distant. The inclusions in the group 10 fabrics indicate a source approximately 65 km away (see Morris, below).

Using Arnold's (1985) model of resource procurement, local wares may be defined as those available within 7 km of the site. As such, the majority of fabrics used at Claydon Pike indicate local resource procurement, and therefore local production. Fabrics originating from the Greensand are non-local, as are the Malvernian fabrics. The latter were part of a regional distribution network, and are often found on sites where Droitwich briquetage is present.

The local clays appear to have contained enough natural inclusions for use, and required little added

Table 3.1: Summary of the middle Iron Age fabrics present at Claydon Pike

Group no.	*Principal inclusions*	*% of total weight of assemblage*
1	Abundant (40%) fossiliferous detritus (limestone and shell), including fragments of bryozoa indicating a Jurassic source	91.2
2	Very common (30%) to abundant oolitic limestone and shell	0.6
4	Quartz, fossiliferous limestone and shell in varying amounts	1.5
5	Very common oolitic limestone and shell, sparse (3-7%) to moderate (10-15%) quartz	2.3
6	Common (20-25%) to very common limestone and shell, rare (1-2%) to sparse quartz, occasional possible glauconite or limonite grains	0.4
7	Common to very common quartz and iron oxides/pellets. Glauconite grains were noted in the dominant fabric	3.4
8	Common quartz, rare to moderate possible glauconite, can have sparse calcareous inclusions	0.5
9	Moderate quartz and sparse grog	0.01
10	Malvernian fabrics: Group A and Group B1 (Peacock 1968)	0.1

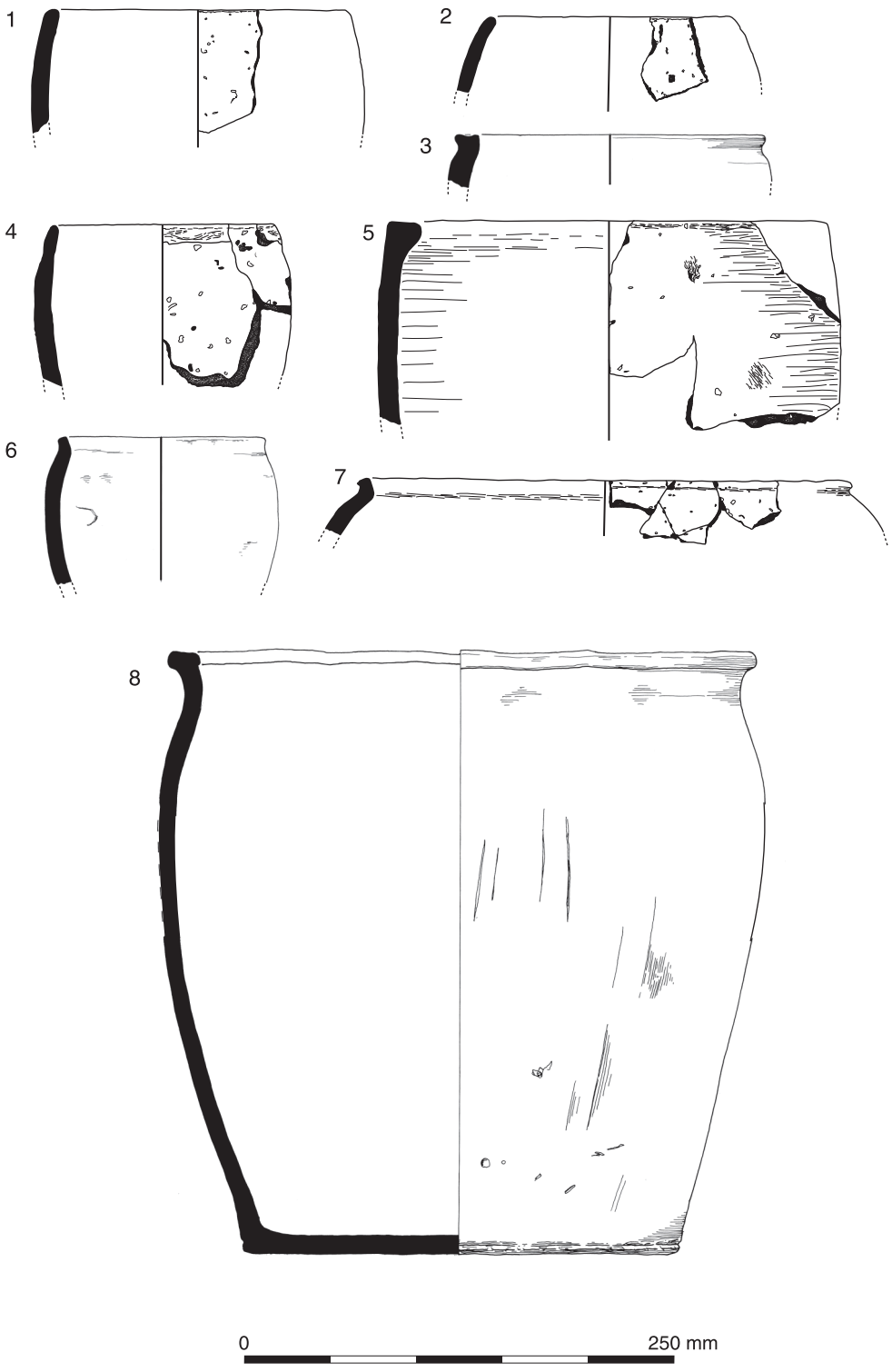


Fig. 3.7 Iron Age pottery from Warrens Field (1-8)

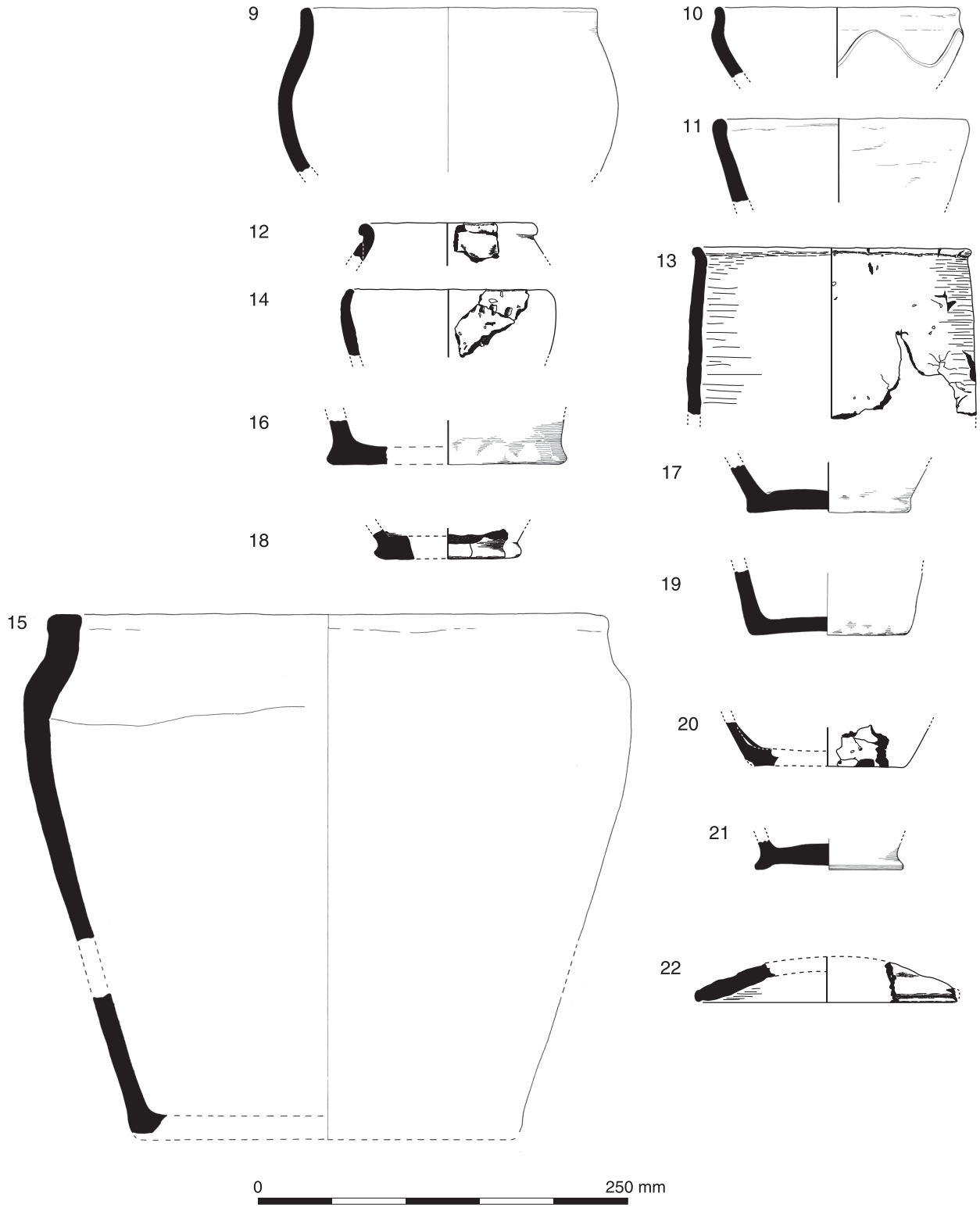


Fig. 3.8 Iron Age pottery from Warrens Field (9-22)

temper. The vessels recovered from the middle Iron Age occupation at Claydon Pike were all handmade. Coiling was clearly evidenced on a number of vessels, in these cases the coil join often provided a weak point on the vessel prone to breakage. No investment in equipment was identified at the site, or specific areas associated with potting. It is therefore proposed that the manufacturing of vessels was carried out on a part-time domestic basis, at the level of household production (after Peacock 1982). A lack of drying facilities and kilns suggest that production was very much affected by seasonality, and would have to be scheduled to avoid conflicting with subsistence activities (Arnold 1985). The weather would also have affected the gathering of raw materials.

Vessel form

A total of 127 middle Iron Age vessels were identified. These were placed in 13 form groups on the basis of rim form and predicted profile (Table 3.2). Group 14 was allocated to a single intrusive Phase 2 vessel and has not been included here. A further category (group 15) was added for vessels displaying finger-tipped decoration. Bases are mostly plain with flat bottoms and obliquely splayed walls, five forms were identified (B1-B5). One possible lid was also identified.

The assemblage at Claydon Pike is dominated by barrel-shaped vessels, probably jars, (form groups 1 and 3) with plain or slightly shaped rims, which account for 30% of the total number of recognised vessels. Forms with expanded or thickened rims (groups 6, 7 and 8) represent 20% of the vessels. Some 15.6% have shaped necks and internal bevels, and are mostly globular in profile (group 4), whilst 11% were recorded as bowl forms (groups 9 and 10), and 8.6% as ovoid jars (group 2). A further 4.7% are globular vessels with rolled or beaded rims (group 11), and 3.1% were straight-sided vessels (group 12). A single high shouldered jar (group 13) was also recorded. Vessels demonstrating finger tip or nail decoration (group 15) account for 5.5% of the assemblage.

Catalogue of illustrated forms (Figs 3.7-8)

Details of the illustrated vessels are presented below. All vessels are fabric group 1, with the exception of no. 21 (fabric group 6).

1. FS 082. Form Group 1. Flattened undifferentiated rim, barrel-shaped vessel, probable jar. Upper exterior sooting. Context 264/D/1
2. FS 015. Form Group 2. Plain rounded undifferentiated rim, convex ovoid profile closed form, jar. 375/B/1
3. FS 228. Form Group 6. Channel-topped rim, expanded externally, slightly constricted neck. Vessel profile is probably barrel-shaped and a closed form. 396/A/1
4. FS 012. Form Group 3. Rounded rim, shaping causes slight neck constriction, finger indentations still present. Barrel-shaped jar. 375/A/1
5. FS 037. Form Group 7. Flat-topped rim, internally expanded, almost straight-sided profile. Slightly smoothed exterior and interior surface. 371/A/2
6. FS 234. Form Group 5. Squared, angled rim, internally beveled, barrel-shaped profile, wide mouthed jar. Smoothed exterior surface, minor sooting on exterior. 365/F/2
7. FS 163. Form Group 4. Squared, angled rim, internally beveled, globular profile. 97/S/1
8. FS 301. Form Group 8. Flat-topped rim, expanded externally and internally constricted neck area, slightly rounded profile, wide mouthed jar. Exterior has a slurry finish. 216/A/1
9. FS 085. Form Group 9. Flattened, slightly everted rim, globular bowl. Smoothed exterior. 264/A/2
10. FS 235. Form Group 9. Shaped, rounded rim, vessel wall slopes inwards quite sharply. Bowl, with tooled curvilinear decoration. 278/B/1

Table 3.2: Middle Iron Age forms present at Claydon Pike

Form group	*Description (Ashville, Abingdon equivalents shown in brackets)*	*Number of vessels*
1	Barrel-shaped vessels with in-curving un-differentiated rims (B3)	13
2	Plain un-differentiated in-curving rims, ovoid jars	11
3	Barrel-shaped vessels with slightly shaped rims/constricted necks (B3)	25
4	Short, squared, upright or slightly everted rims on vessels with internal bevel and globular profile (D0)	15
5	Everted rims, internally bevelled, from vessels with barrel-shaped profiles	5
6	Vessels with rims expanded on the exterior (A2)	11
7	Vessels with rims expanded on the interior (A1)	10
8	Vessels with rims expanded on the interior and exterior (A3)	5
9	Bowls with differentiated rims (D0)	9
10	Bowl forms with un-differentiated rims	5
11	Necked globular vessels with rolled / beaded rims, jar forms	6
12	Slack/straight sided vessels	4
13	High shouldered jars	1
15	Rims decorated with fingertip or fingernail impressions	7

11. FS 182. Form Group 10. Slightly flattened undifferentiated rim, gently thickened on the interior, bowl. Smoothed exterior surface. 8/B/1
12. FS 147. Form Group 11. Jar with slightly everted beaded rim. Vessel profile may be globular, profile too short to be certain. Minor sooting on exterior. 22/V/1
13. FS 122. Form Group 12. Slightly flattened rim, exterior is rolled to form a very irregular bead, minor internal bevel. Vessel walls are quite straight-sided, jar form. Very well smoothed exterior, sooting present on exterior. 425/F/3
14. FS 089. Form Group 15. Rounded rim, slightly incurving, wall slopes gently downwards, wide mouthed, possible jar. Decorated with a band of fingertip impressions on upper vessel exterior. 268/C/1
15. FS 125. Form Group 13. Flattened rim with rounded edges, slightly thickened on exterior and interior. Constricted neck, sharp high shoulder, walls slope inwards, wide mouthed jar. A band of sooting is seen in the shoulder area. 425/G
16. FS 057. Form Group B1. Obliquely splayed base, clear finger impressions around lower wall, possibly part of the construction process, may also have been seen as slightly decorative. Abraded interior. 218/A/1
17. FS 220. Form Group B1. Base with obliquely splayed wall, slightly pinched around wall / base join causing a very minor protruding foot. Smoothed exterior. 207
18. FS 103. Form Group B2. Base with slightly splayed foot. 275/H/1
19. FS 214. Form Group B3. Plain base, slightly domed centre. Wall angle indicates straight or barrel-shaped vessel. Slightly smoothed exterior, burnt residue on interior wall. 155/A/5
20. FS 156. Form Group B4. Plain base, probably from a globular vessel. Pitted interior. 59/C/1
21. FS 236. Form Group B5. Footring base with pronounced foot. 198/2
22. FS 070. Lid. Domed lid, upper exterior shaped towards the edge, slight recess runs around edge of interior. Burnt residue on interior, smoothed exterior. 264/F/1

Regional parallels for the fabrics and forms

The coarse Jurassic fossiliferous limestone fabric that dominates the assemblage is fairly ubiquitous and characteristic of locally produced pottery in the Upper Thames Valley during the early and middle Iron Age. It is closely paralleled at Thornhill Farm (Timby 2004), located less than 1 km from the site and as such shared the same resource base. At Ashville, Abingdon (DeRoche 1978) and Farmoor (Lambrick 1979) calcareous fabrics dominate the first phase of occupation, dated 550–300 BC. However during the second phase at both sites, enduring for most of the last three centuries BC, a shift in focus to more sandy wares is evident. This change from calcareous to sandy fabrics is repeated on other sites in the region, such as Gravelly Guy (Duncan *et al*. 2004), and appears to be chronologically significant. Pottery assemblages from sites occupied in the later part of the middle Iron Age, such as Watkins Farm (Allen 1990) occupied *c* 250-50 BC, are predominantly composed of sandy wares. The proportions of calcareous and sandy fabrics at Claydon Pike tend to be seen on other sites throughout the region that are dated to the earlier part of the middle Iron Age.

A progression in the forms repertoire is also seen during this period. The early Iron Age assemblage from Gravelly Guy, and early period pottery from Ashville and Farmoor, are dominated by angular forms, expanded rim vessels and those exhibiting fingertip decoration. During the later phases at these sites the vessel profiles become more rounded, and eventually globular. Barrel-shaped vessels are also popular. Beaded and everted rims appear, and the smoothing and burnishing of vessel surfaces becomes commonplace. The earlier forms are still present in the later periods, but in decreasing quantities.

The Claydon Pike assemblage does contain early Iron Age elements such as the expanded rims (form groups 6, 7 and 8), vessels decorated with fingertip impressions (group 15) and the high shouldered jar in group 13. However the general dearth of angular vessels suggests a date for the assemblage not earlier than the middle Iron Age. The barrel-shaped vessels are characteristic of the middle Iron Age in the Upper Thames Valley. The presence of more globular vessels, in particular bowls, plus the occasional beaded rim, indicates the assemblage may represent occupation spanning the entire middle Iron Age period. No late Iron Age indicators were identified.

Shifting settlement and social patterns: the evidence from changing fabrics

In the Upper Thames Valley the use of sandy fabrics increases, and calcareous fabrics decreases, over time during the Iron Age. This trend was applied to the Claydon Pike assemblage, and the proportion of different fabric groups present on each island was assessed to see if the islands were occupied simultaneously, or if they represented a shifting settlement pattern. The proportions of the different fabric groups by percentage of total weight per island are presented in Table 3.3. The largest assemblage comes from Island 2 (25 kg), followed by Island 3 (21.8 kg) and finally Island 1 (10.7 kg).

Using a model of increasing sand to decreasing calcareous inclusions over time, it can be shown that Island 3 is the earliest in date and Island 1 the latest. This conclusion is also supported by evidence from the Droitwich briquetage, reported on below. On Island 3 there is a clear dominance of group 1 fabrics, accounting for 99% of the assemblage. Only three other fabrics are present, and these in minute quantities. All fabric groups are represented on Island 2. The calcareous group 1 accounts for 87% of the total weight, the only other significant fabrics are group 5, oolitic limestone and quartz (5.3%) and the increasing sandy fabrics of group 7, now accounting for 3.5%. Island 1 shows a shift again with a slight

Table 3.3: Percentages of total weight per fabric group for each of the gravel islands

	Fabric Group	*Island 1 %*	*Island 2 %*	*Island 3 %*
1	Fossil limestone and shell	85	87.0	99.0
2	Oolitic limestone and shell	0.8	0.8	0.3
3	Non fossil shell	-	0.3	-
4	Quartz and calcareous	1.9	2.3	0.2
5	Oolitic limestone and quartz	0.1	5.3	-
6	Calcareous and quartz	0.9	0.5	-
7	Quartz and iron	9.0	3.5	0.5
8	Quartz, possibly glauconitic	2.2	0.2	-
9	Quartz and grog	-	0.0	-
10	Malvernian	0.1	0.1	-

decrease in calcareous group 1 to 85%, and an increase in sandy group 7 to 9%. Other fabrics with more than 1% include the possible glauconitic sand group 8, and quartz and calcareous group 4.

Analysis of the presence of different form groups across the islands indicated that Island 3 was dominated by barrel-shaped vessels, with groups 1 and 3 accounting for 47.4% of the total number of vessels on the island. Expanded rim vessels (groups 6, 7 and 8) account for 15.8%, and those decorated with fingertip decoration (group 15) represent 10.5%. Vessels with shaped necks and internal bevels are the only other fairly commonly seen form, with groups 4 and 5 totalling 7.9%. On Island 2 vessels with expanded rims become the most common forms, representing 29.3% of the total number of vessels identified on the island. This is followed by barrel-shaped vessels, 20.7%; vessels with shaped necks and internal bevels, 15.5%; bowl forms, 12.1%, and ovoid jars, 8.6%. On Island 1 barrel-shaped vessels and internally bevelled vessels are equally dominant, each accounting for 25%. They are followed by bowls, 15.6%; ovoid jars, 12.5%; expanded rim vessels, 9.4% and globular vessels with rolled/beaded rims, 9.4%.

If the chronological variations suggested by the fabrics are accepted, then it may be argued that barrel-shaped vessels, expanded rim vessels and those decorated with fingertip impressions decrease in number with time. Ovoid jars, internally bevelled vessels, bowls, globular vessels with rolled/beaded rims and straight-sided vessels increase with time. This pattern is borne out at other sites in the region. The eastwards shifting pattern seen with the fabrics is also present in the forms, with the earlier expanded rim vessels present in their lowest quantities on Island 1, and no examples of fingertip decoration seen from this island.

Fabric variation was minimal within the features of Island 3, as the calcareous fabrics accounted for 99% of the assemblage weight. A greater variation in fabric was seen on Island 2, where the latest features appeared to be Structures 7, 9, Structure 11/ Enclosure 4 and linear boundary 322. The earliest features include Structures 5, 6 and 12. Structure 2 on Island 1 appeared to be the latest middle Iron Age feature at the Warrens Field site. It truncated Enclosure 2 which also appeared to be late in the sequence. Curiously the pottery recovered from Structure 1, enclosed by E 2, appeared to be much earlier in date. However, the mean sherd weight from E 2 was 6.4 g, much lower than the average assemblage weight of 11.6 g. A large proportion of the pottery came from the upper fill, and may therefore represent some tertiary infilling from nearby later Structure 2, or material redeposited from elsewhere on the site. Enclosure 2 and Structure 1 were therefore probably the earliest features on Island 1, later replaced by Structure 3, and finally by Structure 2.

A decrease in calcareous fabrics and increase in the use of sandy fabrics indicates that the middle Iron Age settlement at Claydon Pike shifted eastwards over time. Occupation of the Warrens Field site therefore initially focused on gravel Island 3, and then moved eastwards to Island 2, finally moving eastwards again to Island 1.

Vessel use

The correlation between form and fabric was analysed to ascertain if specific fabrics were being selected for certain vessel types. Little variation was shown in the fabrics of each form group, perhaps not surprising in an assemblage dominated by coarse calcareous fabrics. However, 25 % of barrel- to globular-shaped vessels with shaped necks and internal bevels (groups 4 and 5), were constructed from a sandy paste. Of the 14 bowls in the assemblage (form groups 9 and 10) two were found in a sandy fabric. Sandy fabrics are chronologically associated with more rounded and globular forms during the middle Iron Age period in the Upper Thames Valley. Other sites in the region have recorded some correlation between fabric and form, particularly fine and sandy fabrics with globular forms. The Watkins Farm sandy fabrics 'were clearly deliberately chosen when making bowls' (Allen 1990, 39).

The surface treatments applied to the Claydon Pike vessels include smoothing, wiping and burnishing. Haematite coating and tool trimming, seen at other sites in the region, were not recognised. The most popular treatment was external smoothing, a common middle Iron Age surface treatment, occasionally also noted on the upper interior of vessels. Smoothing was seen on 26.2% of the assemblage by weight, although this translates to only 12.8% of the total number of sherds. External wiping was found on 0.3% of the sherds, and just under 2% were burnished. Smoothing and burnishing may have helped reduce permeability but may also have been purely aesthetic.

Smoothing is present in most fabric groups, the highest percentages were seen on the mixed quartz

and calcareous fabrics, within the calcareous groups higher proportions were noted on the finer fabrics. Wiping was exclusively seen in the group 1 fabrics. Wiping may have been preferred to smoothing in some cases as the calcareous fabrics were so coarse, containing sharp inclusions that might be more safely smoothed with organic matter or such like rather than the potter's hands. Burnishing is seen almost exclusively in the sandy fabrics and is a characteristic treatment of the Malvernian fabrics. A correlation between burnishing and sandy fabrics is seen throughout the region, usually associated with globular vessels. Few examples of decoration were recorded, other than the group 15 fingertip decoration.

The interior of a number of vessels appeared to have an almost waxy, dark greyish brown coating. It is not certain if this represents a reaction between the contents of the vessel and the calcareous inclusions in the paste, or perhaps some form of sealant. Work by Schiffer (1972, cited in Skibo 1992, 156) has shown that vessels 'without an impermeable surface treatment have a much lower heating effectiveness and may be unable to boil water'.

A number of observations concerning the actual use of vessels can be made from the presence or absence of sooting, burnt residues, pitting or abrasion. Group 5 vessels, forms with shaped necks, internally beveled rims and barrel-shaped profiles, all had soot on their outer walls, or internal burnt residues, and therefore indicate their use in cooking or heating. Their more globular-shaped counterparts, group 4, indicate this use in a third of cases. The plain barrel-shaped vessels (group 1) are often used for cooking, with evidence on 53% of vessels, those with more shaped rims (group 3) had only slightly less evidence, with sooting or residue adhering to 44% of the vessels. The ovoid jars (group 2) were also sometimes used for this purpose.

The expanded rim vessels were seldom used for cooking: groups 6 (externally expanded) and 8 (internally and externally expanded) were never used for this purpose, 20% of internally expanded vessels (group 7) did have evidence for cooking. The bowls were rarely used for cooking, in group 9 the only example (accounting for 11%) is the bowl with curvilinear decoration (Fig.3.8, 10), 20% of bowl group 10 are sooted. Within the remaining classes of rolled/beaded rims (group 11) and straight sided vessels (group 12) this form of evidence is seldom seen. The single vessel in group 13 showed sooting around the shoulder area.

Interestingly, of the 38 vessel bases recovered from Claydon Pike, there were no deposits of external soot. This may indicate the vessels were placed in the fire during the cooking process, rather than suspended over it when carbon deposits would accumulate on the exposed base (Hally 1983). The rims of many vessels are plain and incurving with little neck definition, and therefore may not be suited to suspension over a fire.

Internal abrasion, caused by repeated stirring and scraping, was clearly shown on one vessel in form group 4 and on eight vessel bases. The worst damage caused by scraping and stirring would have occurred towards the base of the vessel, where food is most likely to stick. Pitting, often seen in vessels composed of calcareous fabrics that were used to hold acidic contents, was seen in three vessels identified by rim form, and three vessel bases. Vessels used for cooking and serving tend to be over represented in the archaeological record, as they break more frequently than other vessels that are not subjected to thermal and mechanical shock, such as storage vessels (Orton *et al.* 1999).

A wide range of vessel sizes were used at Claydon Pike, from quite small pots, 100 mm diameter, to much larger vessels, maximum diameter 380 mm (Fig. 3.8, no. 15). Vessel wall thickness is variable, most commonly ranging from 7-11 mm, although thicker walled examples were also seen. The wall thickness appeared to be associated with the overall vessel size, with thicker walls seen on larger vessels, undoubtedly partly because of the wall strength required to support large vessels during the drying process. A certain amount of control over this problem is shown by three of the expanded rim vessels with diameters 260-280 mm, and a wall thickness of 7-9 mm. It may also be that the expanded rim vessels were not designed to undergo mechanical shock, and therefore thick walls may have been less important.

Observations of use evidence have shown that within the different form groups the small to medium vessels (100-200 mm diameter) are quite often associated with sooting and burnt residues. Larger vessels within the same groups did not show this form of evidence. Sooting was seen on two large vessels in group 7 (260 mm) and group 13 (380 mm), however in each of these groups smaller vessels were not present. This suggests that vessel forms were made in a number of sizes, and a single vessel form might be used for more than one purpose, and this is influenced by the size of the vessel. The expanded rim vessels were rarely made in the smaller sizes and were seldom used for cooking. The bowl forms (groups 9 and 10) are mostly 140-180 mm diameter and may have been utilised as serving vessels.

Estimation of vessel capacity has indicated that a small low vessel (130 mm diameter) would have been able to hold one litre, a medium tall vessel (160 mm diameter) nearly four litres, and the very large 380 mm diameter vessel approximately 30 litres when full. The two largest vessels found at Claydon Pike were 360 mm and 380 mm in diameter. Both showed evidence for use in cooking or heating processes, the former contained a small amount of burnt residue, and the latter (Fig. 3.8, no.15) had a ring of soot around the shoulder. Such large vessels suggest the preparation and therefore consumption of food on a communal scale.

Discussion and conclusions

'Pottery was part of the subsistence strategy for obtaining and distributing food and a primary contribution to the process of staying alive in later prehistory' (Morris 2002, 54).

The fabrics and forms present in the Claydon Pike assemblage readily find parallels at other sites in the Upper Thames Valley during the middle Iron Age. The proportions of calcareous to sandy fabrics present on each gravel island suggest that the settlement shifted eastwards during this period. Pottery manufacture was carried out at the household level, utilising local resources.

The increasing use of sandy fabrics is concomitant with a change in the form repertoire to include more rounded and globular forms. The sandier clays may have been easier to work and produce the new forms, or perhaps easier to fire. They would have been easier to smooth and burnish, surface treatments that are also associated with the new forms and fabric. This change may be the result of changes in cooking or eating practices. External surfaces treatments may have had purely aesthetic values, particularly on vessel forms such as bowls that were suitable for use as serving vessels at shared meals. Although only 2 out of the 14 bowls from Claydon Pike were constructed from a sandy fabric, 12 have been smoothed or burnished, and indicated a far higher degree of surface treatment than any other vessel form. The fact that so many were calcareous vessels is in itself interesting, as although the bowls were not being produced in sandy wares, an attempt was being made to achieve quite fine finishes on these vessels.

The simultaneous use of local sandy and non-local glauconitic sandy fabrics may be tied to the social role of pottery at this time. The glauconitic pots may have been technically superior in some way, or the pots represent 'the maintenance of exchange networks' within regional communities (Morris 1997, 38). The same is true of the presence of Malvernian wares, imported from approximately 65 km.

The majority of vessel forms identified at Claydon Pike are quite open in terms of access to the contents, and are mostly quite squat and therefore suited to boiling (Rice 1987). The presence of external sooting and burnt residues on many of the vessels supports this conclusion. Vessels with internal bevels such as groups 4 and 5 may have been designed to be used with a lid or another method of sealing the vessel. The internal bevel would help prevent evaporation during boiling. The larger, thicker walled vessels in the assemblage may have been intended as storage vessels. The open and fairly shallow forms of groups 9 and 10 appear well suited to a use as serving vessels.

Vessels appear to have been manufactured in a range of sizes for different purposes. Those with a diameter of 200 mm or less appear to have been most often selected for cooking or heating purposes. Expanded rim vessels were seldom used for this purpose and tended to be present only in larger sizes. Two very large pots used for cooking activities point to communal sharing of food, and may have been used in feasting celebrations 'for displaying wealth and sharing to reinforce or renegotiate relationships' (Morris 2002, 55). The importation of Malvernian wares and vessels made from a glauconitic fabric may be further evidence of the importance of maintaining social networks.

The non-local Iron Age pottery and Droitwich salt containers *by Elaine Morris*

The non-local pottery and fired clay identified at Claydon Pike included 18 g with Malvernian rock inclusions (Group A) and 4 g with Palaeozoic limestone inclusions (Group B1) (after Peacock 1968; Morris 1983). A total of 351 g of Droitwich salt container material (Morris 1983; 1985) was also identified. The very low quantity of these artefacts suggests that Fairford may be at the southeastern edge of their respective distributions. Fairford is 60 and 65 km from the two pottery sources and 70 km from Droitwich.

Groups A and B1 Iron Age pottery

Detailed form and fabric descriptions of this material have already been presented elsewhere (Peacock 1968). The source for the inclusions in the Group A fabric pottery is located in the vicinity of the Malvern Hills in Worcestershire west of the river Severn. Early work on the inclusions in the Group B1 Paleozoic limestone fabric could not determine which of several was the likely source for this limestone (Peacock 1968, 421-2). Subsequent quantitative work on the distribution of the Group B1 pottery has favoured the Woolhope Hills in Herefordshire as the most appropriate source for these inclusions (Morris 1983, 116-22). At least one vessel of each fabric type was identified in the Claydon Pike collection from Island 2. This area is believed to date slightly later than Island 3 where, interestingly, Groups A and B1 pottery were not found. This information supports the interpretation that Groups A and B1 pottery were first produced during the 5th-4th century BC for a localised distribution, or core area, and that a wider distribution developed from the 3rd-1st centuries BC through an exchange network which eventually incorporated the Upper Thames Valley (Morris 1983, 112-6).

Droitwich salt containers

This material has been described in detail and illustrated elsewhere (Morris 1985). Two general fabric types, a sandy type (FT1) and an organic-tempered type (FT2) have been defined. The former includes a specific sub-variety (FT1a) which contains clay pellets and is often found in collections from earlier Iron Age sites such as Crickley Hill, Shenberrow

and Chastleton. All of the material was made from Keuper Marl clays found in the immediate Droitwich area and used to produce oxidized, vase-shaped porous containers. These in turn were used to dry and transport salt from the brine salt springs at Droitwich to hillfort and non-hillfort sites in the region. The FT1a sherds were found on Island 3 where FT1 sherds predominate in the salt container collection (61% by weight). On Islands 1 and 2, however, FT2 sherds are much more common (57% and 87% respectively). The observed difference in proportion between FT1 and FT2 on the islands is a pattern of technological change also found at the production source where in the earlier phase, FT1 was slightly more common but completely overshadowed by FT2 in the later phase.

Conclusion

Claydon Pike appears to represent the maximum distribution of this material in an exchange system. The similarly limited distribution of the very distinctive Groups A and B1 pottery in this area favours the interpretation that the salt and pottery represent commodities in a restricted exchange network.

Small finds *by Hilary Cool*

The material associated with Phase 1 is negligible, as is to be expected, and the metal small finds can cast little light on the nature of the occupation. Only five items were found stratified and no items belonging to this period were identified typologically. Of the stratified items, two are structural iron finds (24 and 3966), the latter being an iron nail and the possibility that this was intrusive is strong. The other items consisted of featureless fragments of copper alloy (20) and iron (296) and a possible iron blade fragment (21).

In addition to the small number of metal small finds, there were also a total of ten fired clay objects (not including briquetage, see Morris above). These comprised five loomweights, a possible tuyère and four fragments of hearth or oven material.

Worked Stone (Fig. 3.9) *by Fiona Roe*

The worked stone from Warrens Field, Claydon Pike amounts to 12 pieces, representing one slingstone, three rubbers, two saddle querns, one rotary quern and five other fragments. They are summarised in Table 3.4. The emphasis is very much on querns or quern materials. The only exception was a possible slingstone from LB 997, which may date to the late Iron Age/early Roman phase of activity (Phase 2). Saddle querns appear to have been the main type in use, and there were at least two of these (recovered from clay-lined pit 223 in S 10 and ditch 998), with further fragments of traditional quern material. One saddle quern is apparently a reused piece from a larger quern. Its small size suggests that it may have been intended for a child, to use for grinding corn in order to practice an essential skill, and also no doubt to help out with the daily tasks (Fig. 3.9, no.1). There are also fragments from three rubbers for use with saddle querns (E 4 ditch 155, clay-pit 234 in S 7 and the intercutting S 20 gullies), one part of a hog-backed example, a typical Iron Age variety of rubber (Fig. 3.9, no. 2). Of note are two pieces from rotary querns. One of these (Fig. 3.9, no. 3) was probably once part of a somewhat thick upper stone, of which the surviving depth is now 105 mm. It is a well made example, not particularly large, with a diameter of approximately 300 mm, and a rim that was carefully pecked into shape. The second piece of rotary quern (Fig. 3.9, no. 4) is part of a lower stone which is also fairly thick, with a present depth of 85 mm. The diameter is about 330 mm.

The stone used for the Warrens Field querns was nearly all imported to the site (Table 3.4). The local resources at Claydon Pike were limited to pebbles of hard quartzitic sandstone or quartzite from the gravels of the area, which were used for just one small rubber from S 7, and also for the possible

Table 3.4: Middle Iron Age worked stone

Object	*SF*	*Stone*	*Context*
Rubber	154	May Hill sandstone	Island 3, S 20 gullies (cxt 401)
Rotary quern	176	Upper ORS	Island 3, Gully 413 (SW area of Trench 14)
Quern fragment	276	May Hill sandstone	Island 3, LB 414
Quern fragment	294	Upper ORS	Island 3, Layer 1046, underlying Roman gravel bank 1044
Saddle quern	291	Upper ORS	Island 3, Ditch 998, east of Trench 14
Slingstone	292	Quartzite	Island 3, LB 997
Rubber	28	May Hill sandstone	Island 2, E 4 ditch (cxt 155)
Rubber	57	Quartzitic sandstone	Island 2, Clay-lined pit 234, S7
Saddle quern	56	May Hill sandstone	Island 2, Clay-lined pit 223, S10
Rotary quern	71	Upper ORS	Island 1, Cobble layer 111, overlying S 2 gully
Quern fragments	25	Culham greensand	Island 1, Gully 104, abutting layer 111, S2
Quern fragments	5643	Culham greensand	U/S find from Warrens Field

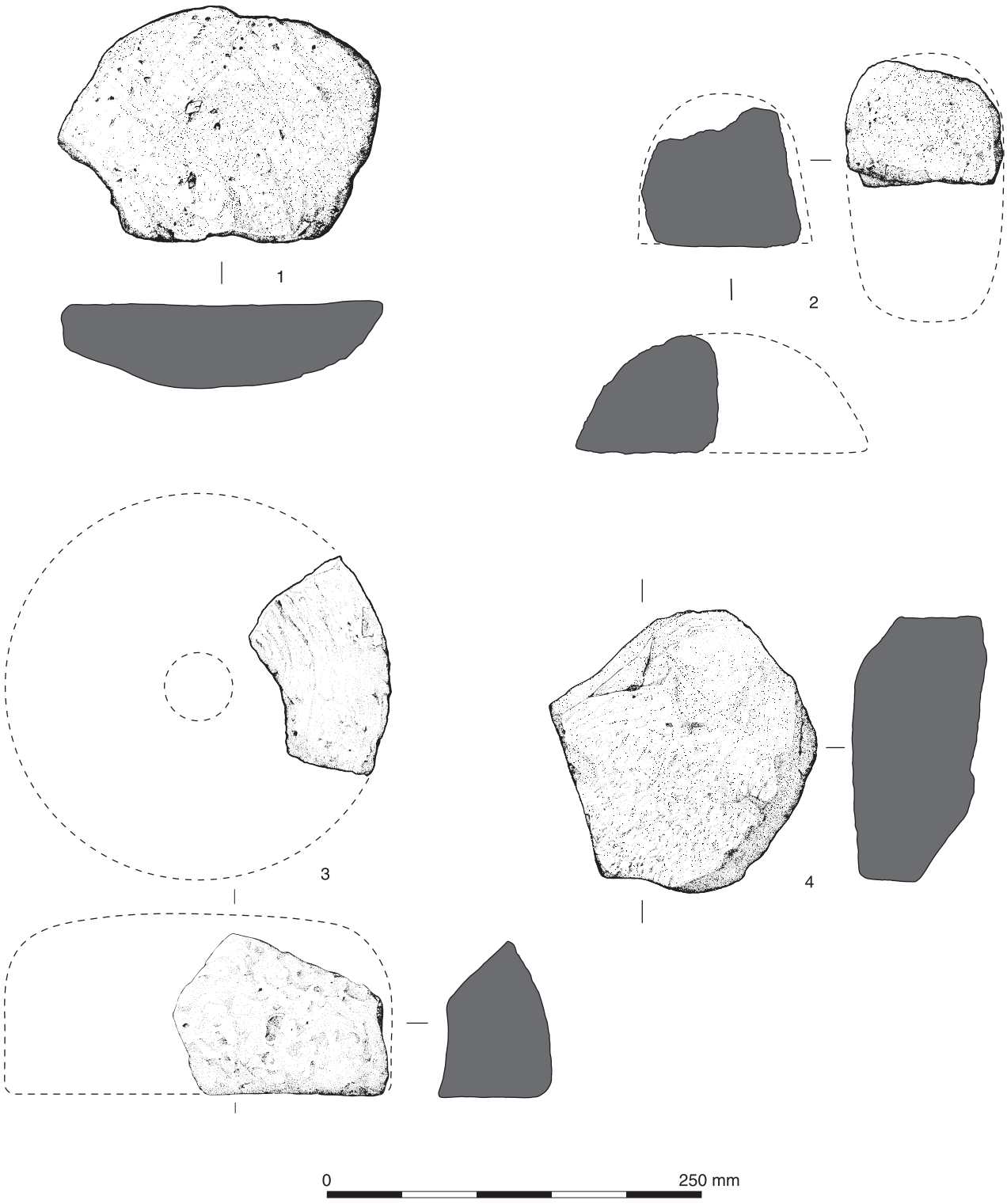


Fig. 3.9 Worked stone objects from Warrens Field

slingstone. The Jurassic limestone lies in a band to the north of the site, with Oxford Clay to the south, so that it would have been necessary to bring in serviceable grinding stone from beyond these two areas. Nearly all the quernstone came from the same direction, either from the Silurian sandstone of May Hill 51.5 km (32 miles) to the north-west, or from the Upper Old Red Sand stone of the Forest of Dean, some 64.4 km (40 miles) away. Two possible querns, represented now only by fragments (25 and 5643), were made from Lower Greensand with a source around Culham in Oxfordshire, and so these came from the opposite direction, from some 37 km (23 miles) down the River Thames. This greensand was very much a saddle quern material. The May Hill sandstone was also a traditional saddle quern material, and finds of this amount to one saddle quern (Fig. 3.9, no. 4) two rubbers (Fig. 3.9, no.2 and 154) and a worked fragment (276). By contrast, the Upper Old Red Sandstone was more widely used for rotary querns, although saddle querns are not unknown and one occurred at the Warrens Field site (291). There are also two pieces of rotary quern made from Old Red Sandstone, representing part of an upper stone (Fig. 3.9, no. 3) and part of a lower stone (Fig. 3.9, no.1). Another fragment of Old Red Sandstone (294) could not be further identified as to type.

The contexts in which the middle Iron Age quern fragments were found are varied, and all suggest deposition of the most casual kind (Table 3.4). The most common occurrence is in ditches, with two finds from house gullies, and two others from clay-lined pits. Saddle quern fragments came from all three islands, and so appear to have been in use throughout the life of the settlement. One rotary quern fragment (176) is from Island 3, while the other (71) is from Island 1. Island 3 is considered to be the earliest of the three (see Jones above), so it would seem that the new technology for grinding corn with rotary querns was known quite early on at the Warrens Field settlement. However the change-over to rotary querns appears to have been gradual, with saddle querns continuing in use for some time. Thus Lower Greensand from Culham, which had long been used for saddle querns, was found in a house gully on Island 1. The old ways persisted, whether from unwillingness to change the habits of thousands of years, or from lack of opportunity.

The worked stone from Warrens Field, Claydon Pike can be compared with finds from other sites in the locality. The middle Iron Age assemblage from the nearby site at Horcott Pit, Fairford includes saddle querns made from both May Hill sandstone and Old Red Sandstone from the Forest of Dean (Lamdin-Whymark *et al*. in prep). The same two materials were also found in use for querns at the middle Iron Age site at Preston, Gloucestershire (Roe 1999a, 416). Finds of querns made from May Hill sandstone are common generally in the area, and are known from Thornhill Farm (Shaffrey 2004) and further sites in Oxfordshire such as Hatford Quarry (Booth and Simmonds 2004) and Bampton (Ashmolean Museum). The Upper Old Red Sandstone has on the whole been less frequently recorded, but a fragment found at Gassons Road, Lechlade is from a late Bronze or early Iron Age context (Roe 1998). The small rotary quern found unstratified at Sherborne House, Lechlade may, if not Saxon in date, belong to the Iron Age occupation there (Roe 2003 (a)), and so join the growing numbers of Old Red Sandstone querns found in later prehistoric contexts either along or south of the Thames. The fragments of Culham greensand are the only examples of this stone known to date from Gloucestershire; most finds are from Thames gravels sites, and have been recorded mainly from Oxfordshire (Roe, in prep).

Catalogue of selected worked stone objects
(Fig. 3.9)

1. 223 SF 56 *Saddle quern.* Fragment made from boulder, possibly reused part of larger quern, grinding surface worn smooth, especially round edge, central part slightly hollowed; 216 x 178 mm, Th 54 mm. 2.5 kg. May Hill sandstone
2. 155 SF 28 *Rubber*. Fragment with a flat surface which has been worn smooth, probably part of a hog-backed rubber for a saddle quern; now 104 x 77 mm, Th 90 mm, 935 g. May Hill sandstone
3. 413 SF 176 *Rotary quern*. Fragment from rotary quern, probably upper stone, grinding surface worn into rings, pecked into shape round rim; Dia *c* 300 mm, max Th now 105 mm, 1.390 kg. Upper Old Red Sandstone, sandstone
4. 111 SF 71 *Rotary quern*. Fragment lower stone rotary quern, slightly convex grinding surface prepared by pecking, roughly pecked round edge, underside not modified; 181 x 169 x 85 mm, 3.8 kg. Upper Old Red Sandstone, pebbly sandstone

THE ENVIRONMENT

Animal bone *by Naomi Sykes*

A total of 3,787 fragments of bone were retrieved from the three gravel islands (1-3) at Warrens Field, Claydon Pike (Table 3.5). Despite the sizeable quantity of material, poor preservation means that only 778 specimens (21%) are identifiable. Sample sizes for each of the gravel islands are therefore small, limiting the amount of information available.

As is the case for most Middle Iron Age sites in southern Britain, the assemblage consists almost exclusively of domesticates (cattle, caprines, pig, horse and dog), with just one wild animal species (a buzzard/kite) being represented. Relative frequencies of the main domesticates vary depending on quantification technique: NISP (number of individual species present) counts suggest cattle to be the dominant taxon, whereas caprines are more numerous according to the MNI (minimum number of individuals) data. Regardless of quantification method, horse are the third best represented taxon

Table 3.5: Composition of animal bone assemblage by gravel island

	Gravel Island			Total
	1	*2*	*3*	*NISP (MNI)*
Cattle	71 (3)	99 (1)	160 (5)	330 (7)
Caprines	29 (1)	78 (5)	172 (11)	279 (15)
Horse	27 (1)	33 (1)	61 (3)	121 (5)
Pig	7 (1)	6 (1)	21 (1)	34 (3)
Dog	3	4	6	13
Buzzard/kite	0	0	1	1
Indet	820	765	1424	3009
Grand Total	957	985	1845	3787
No Identifiable	137	220	421	778
% Identifiable	14	22	23	21

and pig are present only in low numbers. Whilst factors of poor preservation may have skewed the fragment counts in favour of cattle, the NISP-based taxa ratios – cattle 43%, sheep/goat 37%, horse 16% and pig 4% – are typical for Iron Age sites along the Upper Thames Valley: both Grant (1984a) and Hambleton (1999) have noted that assemblages from this region generally contain higher frequencies of cattle bones than are found on sites in Wessex.

Sample sizes are just sufficient to consider inter-area differences in taxa ratios. The NISP data for each gravel island show similar overall patterns but there is some variation, especially when the MNI results are considered. Most notable is the change in the ratio of cattle to caprines – cattle are much better represented on Island 1 than they are on either Island 2 or 3 (Table 3.5). Without clear dating evidence this variation is difficult to explain, however, it seems possible that the inter-area differences represent temporal changes in economy: if Island 3 was the earliest settlement and that on Gravel Island 1 was the latest, the shift from a sheep/goat-dominated to a cattle-dominated economy would fit national trends (Grant 1989; King 1991). Inter-area comparisons of taxa representation are often complicated when the various assemblages derive from different context types (Table 3.6). In this case, however, each gravel island demonstrated the same range of features; structural contexts, enclosure ditches and linear boundaries being the most common. Maltby (1985a) and Wilson (1996) have demonstrated that, due to variation in bone preservation, butchery and disposal practices, different feature types are often characterised by particular bone groups. The Warrens Field assemblage supports these findings. Contexts associated with the roundhouses contain a much higher percentage (43%) of sheep/goat remains than the enclosure ditches (26%) or linear boundaries (37%), suggesting that, compared to other taxa, caprines were more regularly processed within the houses. By contrast, cattle carcasses were probably processed towards the edge of the each enclosure, with the butchery waste being tipped directly into the ditch – hence the higher percentage (49%) of well-preserved cattle remains from these feature types. Assemblages from the linear boundaries show the poorest preservation with the highest percentage of loose teeth, perhaps indicating that the material was redeposited.

A cattle 'head and hoof' burial was recovered from pit 58 (S 2). It is tempting to classify this as a ritual deposit, especially since comparable examples have been recovered from other middle Iron Age sites (for example Maltby 1985b; Grant 1991; Wilson 1999; Hill 1996). In the absence of any associated finds, the true significance of the deposit is difficult to ascertain, although the superior preservation suggests that the remains were treated differently from everyday waste.

Skeletal representation seems to have been dictated by factors of preservation rather than human activities, since only elements with a high structural density are abundant (Table 3.7). Poor preservation has also rendered fusion-based cull-patterns worthless, as juvenile bones are less likely to have survived than those of adult animals. The robusticity of teeth, however, means that the kill-off patterns constructed from dental data provide a better reflection of herd and flock structure. Dental ageing for cattle show that the vast majority (64.5%) of animals died between 6-30 months, with a particularly heavy mortality at 26-30 months. Few animals lived past this point and none survived into old age. A similar lack of very mature animals is demonstrated by the caprine data: 30% of animals

Table 3.6: Number of fragments by feature type

	Cattle	*Caprines*	*Horse*	*Pig*	*Dog*	*Buzzard/ Kite*	*Indet*	*Total%*	*Identifiable%*	*Loose Teeth*
Structures	161	167	40	18	2	1	1675	2064	19	46
% NISP	41	43	10	5	0.6	0.4				
Linear boundaries	38	38	16	6	4	0	425	527	19	44
% NISP	37	37	16	6	4	0				
Enclosures	83	44	30	7	4	0	482	650	26	26
% NISP	49	26	18	4	2	0				

Table 3.7: Skeletal Representation for the main domesticates in terms of NISP and MNI

	Cattle		*Caprines*		*Horse*		*Pig*	
	NISP	*MNI*	*NISP*	*MNI*	*NISP*	*MNI*	*NISP*	*MNI*
Mandible	74	10	49	19	5	5	7	4
Scapula	15		2	1			4	
Humerus	15	3	7		4		6	
Radius	13	2	29	3	5	4		
Ulna	4		2		6		1	
Metacarpal	6	1	3		5	5	1	
Pelvis	8	1	2		3	3		
Femur	8		9	1	1			
Tibia	18	2	48	1	5	2	2	
Astragalus	5		1		3			
Calcaneum	3		1		2			
Metatarsal	27	2	16		6	3		
Phalanx I	4	4	1	1	3	2		

were dead by 6-12 months with less than 10% surviving past 3-4 years. These cull-patterns are typical of assemblages from the Upper Thames Valley. They indicate a mixed economy, with cattle and caprines being raised primarily for their meat but also for secondary products. Absence of foetal and neonatal animals is common for Iron Age sites and may reflect a transhumance strategy, whereby lambing and calving took place at a time of year when animals were grazing away from the settlement (Hambleton 1999). Horse husbandry may have followed a slightly different trend. Traditionally it has been argued that Iron Age horses were not bred in captivity but that feral animals were periodically rounded up and the best individuals retained as riding animals (Harcourt 1979). The find of at least one sub-adult horse may challenge this view, suggesting that horse husbandry was taking place on sites along the Thames Valley. Horse meat does not appear to have been eaten on a regular basis as the equid remains are not processed in the same way as the cattle bones. Several of the horse bones are complete, allowing wither height estimates to be made: on the basis of eight metapodia shoulder heights ranged from between 1.17-1.23 metres.

Charred plant macrofossils *by Vanessa Straker, Martin Jones and Ann Perry*

The middle Iron Age site was excavated in 1979-81 and the charred plant macrofossils result from an extensive sieving programme designed by Martin Jones and Ann Perry to extract material from the non-waterlogged deposits. Perry and Jones carried out the identifications, the samples were checked and a report written in 1984 (Jones *et al*.1984). This has been revised for the current publication. The full report can be found in Digital section 4.5.

The plant macrofossils from the Warrens Field settlement at Claydon Pike were recovered mainly from gullies and some ditches and clay-lined pits excavated in Trenches 6 (Island 1), 8 and 12 (Island 2) and 14 (Island 3). The assemblages are very small and are dominated by weed seeds and chaff rather than cereal grain. Plant macrofossil concentrations (number of items per litre of soil) are shown in Table 3.8. They are low, with a mean of 1.5 for gullies and 1.3 for ditches. As in all phases, pits have a slightly higher density with a mean of 3.8 for the middle Iron Age, which is still very low. These sorts of figures are difficult to interpret but relate to the nature of the activities taking place in the vicinity. They can also show the patchy nature of deposition in linear features as demonstrated by gully context 21A with over 6 items per litre compared with 0.6 for context 21C.

The assemblages tend to be dominated by crop processing waste (chaff and weed seeds). The information from grain and chaff shows that of the crops, wheat was more commonly present in contexts than barley. The wheat chaff allows identification of hulled wheats suggesting that spelt wheat predominated, though a single rachis internode of free threshing wheat, probably hexaploid *Triticum aestivum* sl. (bread wheat) was also identified. This is the only example of free threshing wheat rachis node from a middle Iron Age context in the south of England (Campbell and Straker 2003). It is likely that emmer wheat and bread wheat were minor components of the wheat crop. The barley was not well preserved, rarely allowing distinction of the (more likely) hulled from naked form, but the absence of twisted grains suggests that the 2-row form with 2 as opposed to 3 grains maturing at each rachis node predominated.

Most of the charred weed seeds are associated with arable land or grassland, though some will live in a more varied range of habitats. Numbers of weed seeds are generally low though a fairly wide range of taxa was identified. Members of the Caryophyllaceae (eg *Stellaria media* agg., chickweed)

were among the most numerous and are associated with arable or disturbed conditions. Spike rush (*Eleocharis* spp.), was also common; this plant is associated with soils experiencing at least spring waterlogging (Walters 1949) and pond margins. Scentless mayweed (*Tripleurospermum maritimum*) is an arable weed, but prefers lighter, drier cultivated soils and was found more commonly at Ashville (Jones 1978). Sheep's sorrel (*Rumex acetosella* agg.) has a competitive advantage over many other species in acid soil conditions but also grows on the largely calcareous gravels of the Thames Valley today (M Robinson, pers. comm.).

Cleavers (*Galium aparine*) was quite common at Claydon Pike, as it also was at Ashville, and is regarded as a weed of winter-sown cereals. Taxa associated with open grassy habitats are numerous and include clover (*Trifolium* sp.), vetches (*Vicia/Lathyrus*), eyebright or bartsia (*Euphrasia/Odontites*) as well as several different grass taxa.

Crop processing and harvesting: recent and new models for interpretation

Since the excavations at Claydon Pike in the late 1970s and early 1980s, there has been much discussion on the use of charred plant macrofossil assemblages to try to identify the sorts of post-harvest crop processing activities that have taken place in the past and establish the existence of specialist farming settlements of an arable or pastoral nature.

The first model to be put forward was by Hillman (1981; 1984), and a further model also based on ethnographic evidence but using the characteristics of weed seeds, was published by G. Jones (1984). In 1985, M. Jones published a model for the interaction of Iron Age communities in this part of the Thames valley based on the composition of archaeobotanical assemblages. He suggested that sites dominated by fine chaff and weed seeds (presumed to be derived from final cleaning of partially cleaned spikelets), rather than large quantities of grain, could represent 'consumer' economies of predominantly pastoral groups. He suggested that the middle Iron Age assemblage from Claydon Pike was an example of this, as was Smith's Field. Both sites were located at the junction of the river floodplain and first gravel terraces. Subsequently the settlement at Mingies Ditch was also interpreted as a 'consumer' site (Jones 1993). Settlements such as Ashville and Mount Farm, located on the second (higher) terrace more suitable for arable cultivation, were grain rich and could be viewed as 'producer' settlements.

Van der Veen (1991; 1992) pointed out that the approaches of Hillman and M. Jones were in conflict and went some way to try to resolve the differences. She concluded that the 'producer and consumer' model was rather too simplistic and suggested at least four types of settlement. These were those engaging in subsistence production, production for a surplus, small consumer sites and large urban complexes. Van der Veen suggested that there would be a continuum between these types of site. Van der Veen's surplus production, typified by large, grain-rich assemblages, would look similar to assemblages thought to represent a producer settlement using M. Jones's interpretation (van der Veen 1991, fig 27.2 and 355, 357). Assemblages from small consumer sites however, could look very like production on a small scale.

A recent paper by Stevens (2003) summarises the discussion in some detail and the reader is referred to it for further information. Stevens reworked some of M. Jones original data from Ashville, Mount Farm, Mingies Ditch and the middle Iron Age samples from Claydon Pike. He also used data from Gravelly Guy (Moffett 1989; 2004) and Yarnton. He used a different approach to inter-

Table 3.8: Phase 1 taxon presence in x samples (no. of items)

		No. of samples	*74*
Crops			
Triticum cf *dicoccum* Schübl.	emmer type	Grain	1 (2)
Triticum cf *dicoccum*	cf emmer wheat	Glume bases	1 (1)
Triticum cf *spelta* L.	spelt type	Grain	1 (1)
Triticum spelta L.	spelt wheat	Glume bases	11 (15)
Triticum sp.	Wheat	Grain	25 (88)
Triticum sp.	Wheat	Sprouted grain	1 (2)
Triticum sp.	hulled wheat	Glume bases	43 (200)
Triticum sp.	hulled wheat	Brittle rachis internode fragments	4 (8)
Triticum sp.	free threshing wheat	Tough rachis internodes	1 (1)
Triticum sp.	Wheat	Awn fragment	1 (1)
Triticum/Hordeum sp.	wheat/barley	Grain	1 (1)
Hordeum sp.	Barley	Straight grain	4 (6)
Hordeum sp.	Barley	Indeterminate grain	10 (13)
Hordeum sp.	Barley	Internodes	5 (5)
cf *Avena* sp.	cf oats	Grain	2 (2)

Table 3.8: Phase 1 taxon presence (continued)

		No. of samples	*74*
Avena sp.	Oats	Grain	4 (7)
Avena sp.	Oats	Awn fragments	5 (5)
Cereal sp.	cereal indet.	Grain	32 (79)
Cereal sp.	cereal indet.	rachis fragments	1 (1)
Cereal sp.	cereal indet.	culm nodes	1 (1)
Wild species		habitat range	
Ranunculus acris/repens/bulbosus	Buttercups	G	1 (1)
Cruciferae	mustard family	V	2 (2)
Brassica/ Sinapis sp.	mustard, cabbage etc	D Da	2 (4)
Caryophyllaceae	campion family		11 (15)
Stellaria media agg.	Stitchwort	D Da	17 (27)
Cerastium sp.	Chickweed	D Da	3 (17)_
Silene sp.	Campion	V	2 (2)
cf. *Arenaria* sp.	cf. Sandwort	Da, bare ground	1 (1)
Chenopodiaceae	Goosefoot family		1 (1)
Atriplex sp.	Orache		1 (1)
cf. *Lathyrus* sp.	vetch, tare	Da M G S W	1 (1)
Medicago cf *lupulina* L.	cf black medick	G	3 (3)
Trifolium sp.	Clover	V	1 (1)
Trifolium cf. *pratense* L.	red clover	G	2 (3)
Roseaceae	rose family		1 (2)
Potentilla/Fragaria sp.	tormentil /strawberry		2 (2)
Potentilla sp.	Tormentil	V	0
Polygonum sp.	Bistort	V	10 (10)
Polygonum aviculare agg.	Knotgrass	D, Da	1 (2)
Fallopia convolvulus (A.) Löve	black bindweed	Da	4 (5)
Rumex sp.	sorrel, dock	Da G M S W	4 (5)
Rumex acetosella agg.	sheep's sorrel	Da G	6 (6)
Urtica urens L.	small nettle	D Da	1 (1)
Urtica dioica L.	stinging nettle	D, V	1 (1)
Veronica sp.	speedwell sp.	V	1 (1)
Euphrasia sp./*Odontites verna*	eyebright, red bartsia	Da G	9 (15)
Labiatae	mint family		5 (5)
Plantago lanceolata L.	ribwort plantain	Da G	4 (4)
Sherardia arvensis L.	field madder	D Da	3 (3)
Galium cf. *aparine* L.	Cleavers	Da V	10 (14)
Compositae	daisy family		2 (3)
cf. Filago minima (Sm.) Pers.	cf. slender cudweed	Da H	1 (1)
Tripleurospermum maritimum (L.) Koch	scentless mayweed	Da	2 (2)
Artemisia sp.	Mugwort	D Da	1 (1)
Cyperaceae	sedge family	A M G	1 (1)
Eleocharis sp.	spike rush	A M G	2 (3)
Eleocharis palustris/uniglumis	spike-rush	A M G	11 (15)
Carex sp.	Sedge	V (mainly wet)	6 (7)
Gramineae	grass family		32 (53)
Gramineae culm node	grass family		3 (4)
Gramineae rachis fragments	grass family		2 (3)
Festuca sp.	Fescue	G V	17 (23)
Festuca gigantea/ pratensis	Fescue	G V	2 (3)
cf. *Lolium perenne* L.	cf. perennial rye grass	G V	2 (2)
cf. *Poa* sp.	cf poa	G	1 (1)
Poa sp.	Poa	G	2 (3)
Bromus S. *Eubromus*	brome, chess	Da G	6 (15)
Bromus cf. *rigidus/sterilis*		Da G	1 (1)
Agrostis tenuis Sibth.			2 (2)

preting charred assemblages and also suggested that social organisation, including the availability of post-harvest and pre-storage labour, could have played a part in different storage practices, which in turn affect the composition of the charred assemblages. Stevens used two different methods to analyse the data from the sites. One of these (the percentage of large weed seeds from all classified seeds plotted against the percentage of weed seeds to grain, Stevens, 2003, fig 6) produced clear variations between the sites included in his study. The interpretation he proposed was that waste from a number of crop processing stages, including processing of spikelets, was present at Claydon Pike, with a similar situation for Abingdon, Yarnton, Gravelly Guy and Mingies Ditch. Stevens comments that different storage practices could also produce the observed pattern. In contrast, the assemblages from Ashville, Mount Farm and Danebury, were dominated by grain as opposed to weeds and of the weeds, large seeds in preference to small and intermediate-sized ones. This fitted the expected pattern from his model for waste produced from the processing of semi-cleaned spikelets.

The method of analysis described above has been applied to the data from each of the subsequent phases at Claydon Pike, and is presented in Digital section 4.5.

Invertebrate remains *by Mark Robinson*

The flots that had been taken from the middle Iron Age contexts for carbonised plant materials were also scanned for molluscs (Table 3.9). Although the molluscan assemblages from samples 153/CC/5 (Phase 1 / 2, Island 2) and 371/D/3 (Phase 1, Island 3) suggest that the deeper Iron Age ditches held water, waterlogged organic material did not survive in them, a result of 18th- and 19th-century drainage. The absence of waterlogged deposits from the middle Iron Age features limited the environmental evidence for this period.

Slum aquatic molluscs, particularly *Aplexa hypnorum*, *Lymnaea truncatula* and *L. peregra*, predominated in samples 371/D/3 and 153/CC/5. There was also an open-country faunal element including such dry-ground species as *Pupilla muscorum*, which probably reflects conditions on the islands during the middle Iron Age.

It is difficult to use the molluscan evidence to ascertain whether the islands were experiencing flooding during the middle Iron Age. Many of the flots from the samples taken for carbonised plant remains contained flowing water aquatic molluscs such as *Valvata piscinalis* and *Bithynia tentaculata*. However, they were normally encrusted with tufa and fragments of tufa were also present in the samples. These shells had almost certainly been derived from bands containing tufa fragments within the gravels themselves, which in turn had probably been reworked from even earlier (Pleistocene) sediments. The only flowing water mollusc from samples 153/CC/5 and 371/D/3 was a single specimen of *Valvata cristata* which could have been derived from the gravel. Therefore not all the shells extracted from the flots were contemporaneous with the archaeological deposits. Many of the samples also contained shells of *Candidula gigaxii* and *Cernuella virgata*, both of which are regarded as medieval introductions (Evans 1972, 179). Post-depositional contamination was also confirmed by the presence of modern seeds in most of the flots. Fortunately contamination was not found to be a major problem for the carbonsied plant remains as there was not any post-Iron Age occupation at the Warrens Field site which would have resulted in intrusive carbonised remains.

The flot from sample 416 was taken from the earlier phase of middle Iron Age linear boundary 472, located at the edge of Island 3. It contained many specimens of *Carychium* sp., *Lymnaea truncatula*, *Anisus leucostoma*, *Vallonia pulchella* and *Trichia hispida* gp., along with rather fewer specimens of *Valvata cristata*, *V. piscinalis* and *Bithynia tentaculata*. These shells are not encrusted with tufa and are in better condition than the encrusted shells. This assemblage of terrestrial, amphibious and flowing water molluscs was very similar to the molluscan assemblages from the late Saxon/early medieval alluvium at Claydon Pike. Sample 416 would appear to indicate the limit of Iron Age flooding. However, it is possible that this sample

Table 3.9 Mollusca from the middle Iron Age settlement at Warrens Field

Middle Iron Age Mollusca	*Minimum No. of individuals in sample*	
Context/sample	*371*	*153*
Valvata cristata (Müll.)	1	-
Carychium sp.	2	7
Aplexa hypnorum (L.)	-	32
Lymnaea truncatula (Müll.)	81	10
L. peregra (Müll.)	48	69
Lymnaea sp.	7	17
Succinea or *Oxyloma* sp.	2	2
Cochlicopa sp.	4	3
Vertigo antivertigo (Drap.)	-	1
V. pygmaea (Drap.)	3	1
Pupilla muscorum (L.)	4	9
Vallonia pulchella (Müll.)	1	2
V. pygmaea (Drap.)	1	2
Vallonia sp.	8	18
Limax or *Deroceras* sp.	1	3
Helicella itala (L.)	-	3
Trichia hispida agg.	5	20
Arianta or *Cepaea* sp.	1	1
Pisidium sp.	-	1
Total	170	209

had been contaminated with the later alluvium. Alluvial sediments were not noted in any of the Iron Age features.

Phase 2 features at Warrens Field

A waterlogged sample was taken from isolated enclosure ditch 6 (E 1). The sample contained a single seed whose plant may represent dry calcareous grassland growing on the unoccupied gravel islands. This enclosure seems to have experienced wetter conditions than the Trench 13 enclosures in Longdoles Field during Phase 2.

Context 962 represents an unphased waterhole or sump between Islands 2 and 3. It contained many seeds of the plants of wet pasture. This floodplain waterhole appeared to be removed from areas of disturbance on the site.

DISCUSSION *by Grace Perpetua Jones*

The middle Iron Age settlement at Warrens Field was concentrated on three gravel islands on the first terrace of the River Thames, at the confluence of the Thames and the Coln (Fig. 3.1). Analysis of the pottery recovered from the site indicated that occupation may have spanned the whole of the middle Iron Age, although there appeared to be a focus towards the earlier part of the period. The pottery furthermore suggested temporal variation across the islands, with Island 3 the first to be occupied, and Island 1 the last. This pattern is also borne out in the Droitwich briquetage and animal bone data. Different phases of activity were also evident within each gravel island, as a number of the structures and enclosures were clearly intercutting. Unfortunately it has not been possible to recreate the sequence in which these structures were built, used and demolished, however a number of observations may be made on the basis of the stratigraphic relationships and ceramic fabrics.

Settlement organisation and development

Island 3 (Figs 3.1, 3.10)

Stratigraphically the maximum number of house sites in use at any one time on Island 3 would have been three or four, although in reality perhaps only one or two were standing at any given time. The island was probably therefore inhabited by one or two families or an extended family. For the most part new structures were built on fresh ground, possibly to leave the original building intact whilst the new structure was constructed, as was suggested at Mingies Ditch (Allen and Robinson, 1993, 89). Two structures on Island 3, S 17 and S 20, each had at least two structural phases and it is unknown whether the different phases of build on a single site were sequential, or if a period of time lapsed between them. The pottery from Island 3 did not clarify the phasing as 99% had been made from a single fabric group, containing coarse Jurassic limestone and shell inclusions.

Structures 15 and 17 may have been the first houses to be constructed (Phase 1a). The entrances to the two buildings face into one another suggesting they were paired. Structure 17 at least then appears to have been demolished and cut through by linear boundary 373 (Phase 1b), although the stratigraphic relationship between the two features is uncertain. Structures 14 and 16 may belong to either of these phases, as may linear boundaries (hereafter LB) 451 and 472, which enclosed the northern part of the island. An entrance to this enclosure was created by a gap in LB 372. Linear boundary 373 may have formed a funnelled, restricted access into the enclosed area created by LB 451 and 372 or demarcated a boundary associated with one of the structures.

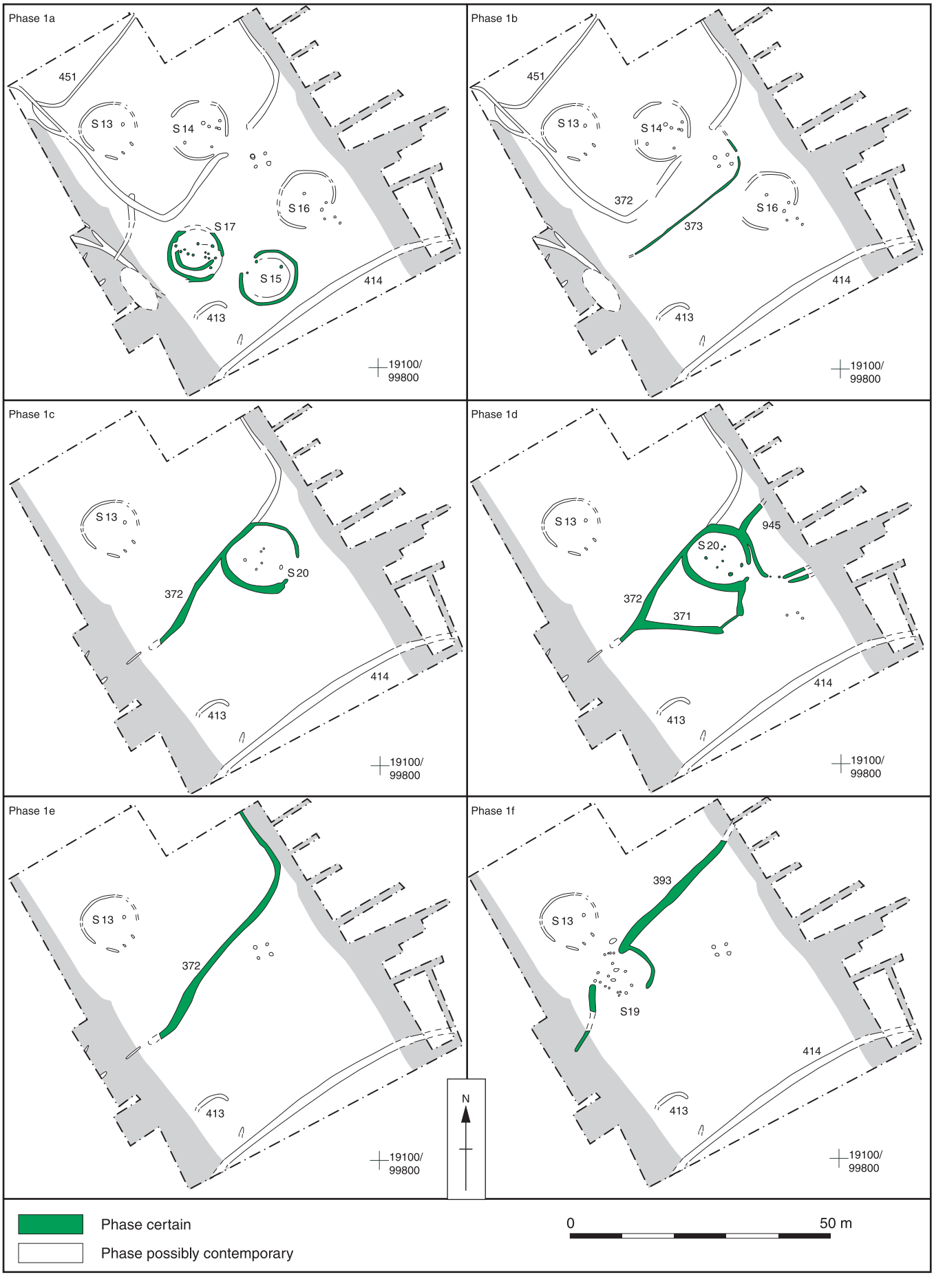
The settlement then undergoes quite a major change with the construction of Structure 20, blocking the break in LB 372 (Phase 1c). During the second phase of S 20 two enclosures were attached to the drip gully (Phase 1d), the south western enclosure utilising LB 372 for its north side. Once demolished, the site of Structure 20 and its enclosures is cut through by the redefinition of LB 372 (Phase 1e). The northern part of the island no longer appears to be enclosed, and LB 372 runs into the marshy area to the west of Island 3 rather than following the island's boundaries. Spatially and stratigraphically the only other features which may be contemporary with the recutting of the boundary are Structure 13, and the four-post feature identified within Structure 20. Both features may be associated with any of the phases on Island 3.

During the final phase of activity on the island Structure 19 was constructed and the linear boundary that traversed the island shifted approximately 10 m northward as LB 363 (Phase 1f). A break in the penannular gully to the north-west may have allowed access to both parts of the island divided by the boundary. Two structures were located in the salvage area to the north, however their relationship with the other features is unknown.

Island 2 (Figs 3.1, 3.3)

The settlement focus then appears to have shifted approximately 100 m to the south-east, to gravel Island 2. The organisation of the settlement on this island is again difficult to determine. With the exception of the central enclosure complex the features are mostly stratigraphically isolated, or in the case of the line of five penannular gullies revealed during stripping, stratigraphically indeterminate. Fortunately a wider range of pottery fabrics have been recorded from this island, allowing some estimation of the sequence of construction and abandonment.

The settlement focus initially appears to be with the eastern area of the island. Pottery from


Phase 1a
451
S 13
S 14
S 16
S 17
S 15
414
413
19100/
99800
Phase 1b
451
S 13
S 14
372
373
S 16
414
413
19100/
99800
Phase 1c
S 13
372
S 20
414
413
19100/
99800
Phase 1d
S 13
945
S 20
372
371
414
413
19100/
99800
Phase 1e
S 13
372
413
19100/
99800
N
Phase 1f
393
S 13
S 19
414
413
19100/
99800
Phase certain
Phase possibly contemporary
0
50 m

Structures 5, 6 and 8 all indicated an early focus. Insufficient quantities of pottery were recovered from Structures 4 and 12 for any estimation of their phase. A maximum of three of these structures could have been in use at any one time. A series of four enclosures ran parallel to the structures, bound to the west by a NE–SW boundary, LB 322. A number of the enclosures were clearly intercutting and a maximum of two may have been in use at any one time. Enclosure 9 appeared to be the earliest, succeeded by E 6, then E 7 and finally E 5. The succeeding phases of the structures and the enclosures all shift to fresh ground with only marginal areas of overlap. The pottery recovered from the enclosures indicate they may have remained in use throughout most of the occupation of Island 2, and the ditch that bound them to the west was redefined after they had been backfilled.

The structures west of the linear boundary are later than those to the east and are probably contemporary with the final recut of LB 322. Enclosure 4 had been recut on three occasions and appeared to contain a structure (S 11). It was contemporary with an east-west ditch that extended west from the enclosure; both features appeared to have been levelled out with gravel. No stratigraphic relationships were present between Structures 7, 9 and 10 to the north, however the pottery suggests Structure 9 was the latest. It appeared to be contemporary with a plot of land defined to the north (see Enclosures and linear boundaries below), and had been cut through by undated rectangular Structure 23.

Island 1 (Figs 3.1, 3.5)

The settlement then appears to have shifted 40 m to the south-east onto gravel Island 1. Here a large enclosure (E 2) was constructed around Structure 1 (see Pls 3.3-4), and two other structures were built. The pottery fabrics appeared to indicate that the debris recovered from Structure 1 was earlier in date than that recovered from the surrounding enclosure ditch. The pottery from Enclosure 2 was small and abraded, and mostly recovered from the uppermost fill, suggesting tertiary infilling comprising sherds that had been redeposited from elsewhere on the site, and therefore not representative of the enclosure's period of use. Alternatively Structure 1 may initially have been unenclosed, and the area around the building enclosed at a later date.

It has not been possible to ascertain if Structure 3 was contemporary with Structure 1 and Enclosure 2, or represented a later building. Structure 2 was the latest feature on the island, and the final building to be constructed during the middle Iron Age at the Warrens Field site.

Domestic structures (Fig. 3.11)

The Iron Age ground surface had been destroyed by ploughing and post-medieval drainage activity. As a result little remained of the actual house structures at Warrens Field; the identification of these houses rests on the presence of the penannular gullies that would have surrounded them, a pair of entrance postholes and often a clay-lined pit. Such features are seen on many sites in the region and characterise Iron Age roundhouses. Structure 7 (Island 2) was unique in having two foreshortened gullies positioned as if they formed the terminals of a south-east orientated gully. At Claydon Pike the penannular gully is unlikely to represent the foundation trench for the house, but instead would have been used to drain the structure, and probably also to collect the eaves drip. At least 23 houses were identified, two of which represent rebuilding on the same site (Fig. 3.11).

The walls of the structures were for the most part archaeologically invisible, although building foundations on the gravels need not have been substantial, and experimental archaeology by Peter Reynolds has 'emphasised that the foundations of Iron Age roundhouses need not penetrate the subsoil' (Allen *et al.* 1984). Mass walls of cob or turf would leave little or no trace in the archaeological record (Allen and Robinson 1993, 94; see Chapter 15 for a wider discussion). Very small quantities of structural clay demonstrating wattle impressions were recovered from a clay-lined pit within Structure 2, and it is possible that part of the unidentified bulk of fired clay from Claydon Pike may also have been structural.

Postholes were present in many of the structures, although for the most part these did not did indicate the structural walls. The only example of post-ring construction from Claydon Pike was that of Structure 18, located in the salvage area to the north of the main settlement nucleus on Island 3. Here 12 postholes formed a circle *c* 7 m diameter, with two additional but larger postholes located 1.5 m away, forming a south-east orientated entrance. These projecting postholes may indicate that the structure had a porch, however it is more likely that an outer wall was attached of which no trace remains. In this case the posts recorded would have acted as support posts and created an aisle, with an outer wall attached to the projecting posts (Allen *et al.* 1984, 91). This would increase the floor to approximately 10 m diameter, significantly larger than the other Claydon Pike structures. This form of construction was categorised as 'building type 1' at Gravelly Guy, and of the seven examples recognised at the site, four are early Iron Age in date (Lambrick and Allen 2004).

Possible wall lines were also recognised in Structures 2 and 10. In S 10 a group of seven postholes

Facing page: Fig. 3.10 Structural sequence on Island 3

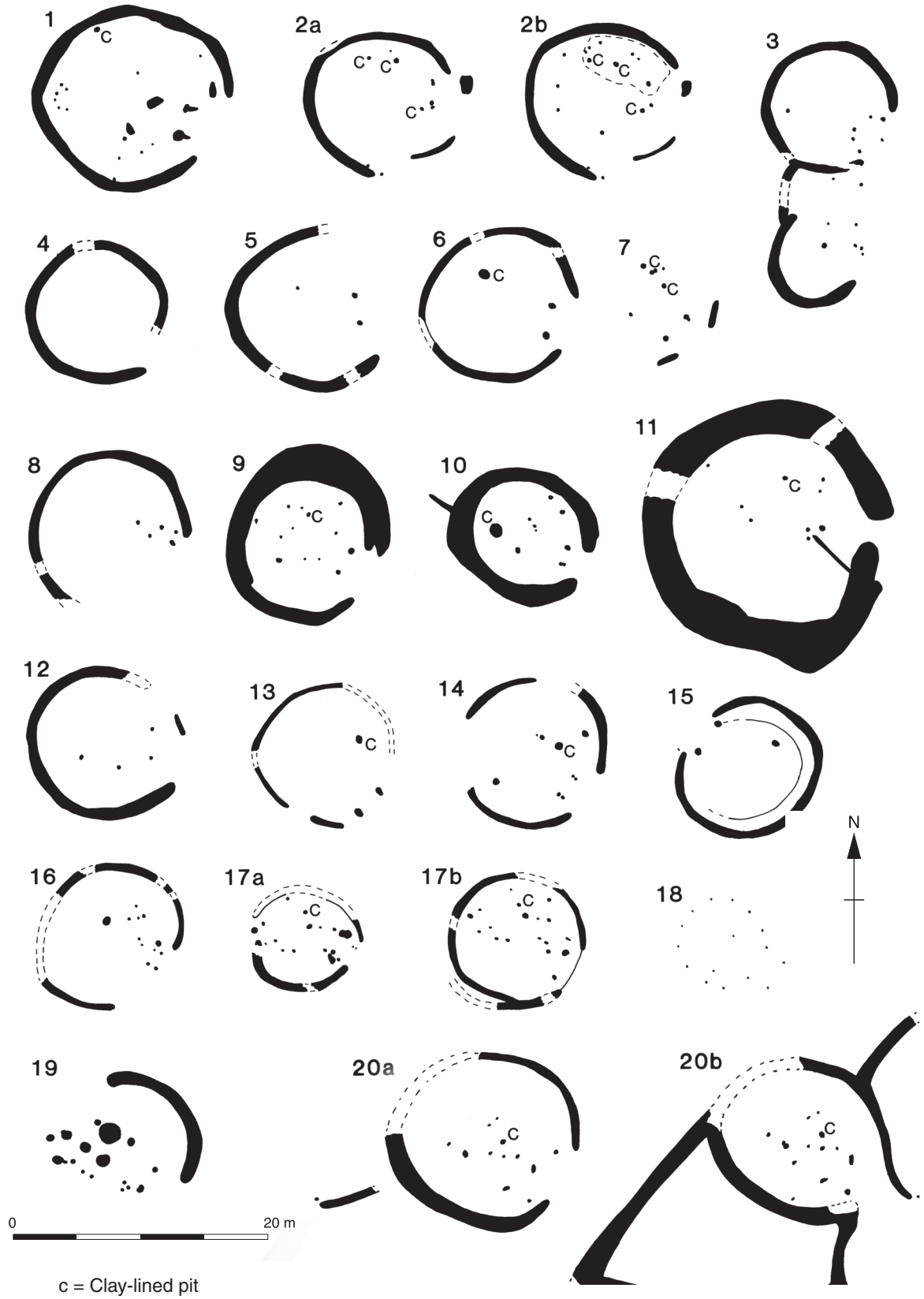


Fig. 3.11 Domestic structures from Warrens Field

formed an oval shape 6.5 m x 5 m, located 2 m behind the entrance posts. Although the posts would not have been substantial enough to take the weight of the roof, they may have acted in conjunction with a cob or turf mass wall which was connected to the entrance posts. The posts may then have acted as support posts or formed internal revetting. Oval structures are relatively rare in the Upper Thames Valley however one has been identified at Mingies Ditch (House 1). Here the structure was identified by posts bounding a visible darkened floor area. It would have been rounded at the front and back but with quite straight sides, 7 x 5.5 m internally (Allen and Robinson 1993, 95). Ten postholes within the Structure 2 gullies may have formed a circular structure 7 m in diameter, although curiously there are no obvious candidates for entrance posts. The centre of the structure thus formed would have been located to the north of the centre point of the surrounding gullies.

Structure 15, located on Island 3, exhibited the only example of a ring-groove. This slot ran concentric to the penannular gully on its inside. It survived only in the areas covered by a layer of Roman ploughsoil which afforded good preservation of the northern and eastern parts of the structure. This slot may indicate the base of a stake wall similar to House 5 at Mingies Ditch. It defined an area just over 8 m in diameter, similar to the sizes of stake-walled houses excavated at Danebury (Allen *et al.* 1984, 93). It is possible that many of the other houses at Warrens Field, Claydon Pike were also constructed in this way, however the evidence has not been preserved. Alternatively the slot may have held internal revetment for a mass wall, although the distance between the slot and the penannular gully is just under one metre and may have been a little narrow, as Lambrick and Robinson (1979) indicate that a mass wall would be at least 0.6–0.9 m wide at its base.

No examples of trench-built houses were identified, although traces of posts were noticed within a slot on the outer side of the penannular gully of Structure 1. If timbers had been set into the gully it would seem unlikely that they formed part of the actual structure as they would have been over 2 m from the entrance posts. As such their function is unknown. Central posts have been recognised in a number of domestic structures within the region such as Mingies Ditch and Gravelly Guy, however no examples were recorded at Claydon Pike. Evidence from Gravelly Guy suggests that the central post is seen more commonly in the early Iron Age rather than the middle Iron Age, and was commensurate with an increase in floor space (Lambrick and Allen 2004).

The internal diameter of the structure gullies was most commonly 10-10.5 m which is fairly typical of roundhouse gullies in the Upper Thames Valley. Structure 1 was the largest at Claydon Pike, 12.5 m diameter. At nearby Thornhill Farm middle Iron Age structure 207 was a comparable 13 m in diameter. Most had a single entrance gap, S 19 and the first phase of S 17 had two opposing gaps, and S 14 had three gaps. These may have formed extra access points to the structure, possibly back doors as was noted for House 3 at Mingies Ditch (Allen and Robinson 1993, 116). A comparison for S 19 may also be drawn from Building E at Gravelly Guy which is aligned with a division within the settlement (Lambrick and Allen 2004).

Where measurable the distance between the gully terminals was mostly between 1.8 m and 4.5 m. The gap was sometimes much larger, and in Structures 12 and 13 had been partly filled by a short stretch of gully, presumably designed to restrict the entrance. A narrow groove or slot connects the penannular gully terminals of the second phase of S 17, and may have served to block the entranceway, either on a temporary or permanent basis. Structures 2 and 5 were completely open on one side.

The entranceways were defined by a pair of postholes, located 2 m apart (from post centre to post centre), usually set back up to 3 m from the terminals of the penannular gully, and up to 0.5 m into the gravel. On better preserved sites in the Upper Thames Valley the entrance posts are usually the deepest of the structural postholes (Allen and Robinson 1993, 95), and this may explain their widespread survival at Claydon Pike. The entrance posts nearly all demonstrated a characteristic double profile with shallow sockets to the outside. A shallower post therefore probably flanked the outer gully side of the posts. Burnt stone was present in many of the postholes, but was ubiquitous across the site. Structures 2 and 11 were unique in not possessing the distinctive entrance posts.

The location of the entrance postholes indicated that most of the structures were orientated towards the south-east. The exceptions to this were S 15, orientated to the north-west; S 5, open to the north-east; and S 6 and S 12 which face eastwards. The middle Iron Age houses at Thornhill Farm also face in an easterly direction (Jennings *et al.* 2004). In both multi-phase house sites S 17 and S 20 on Island 3, the earliest entranceways are located further towards the east than the later phases. Lambrick and Robinson (1979, 69) suggest that many Iron Age houses face in a direction between the east and the south as this is the position that offers most shelter from the prevailing wind. Hingley and Miles (1984, 63) further suggested that this orientation may have maximised daylight for activities carried out within the structure. More recently authors such as Oswald (1997) have related the east to south-east orientation of so many Iron Age structures to 'symbolic or ritual considerations' (Oswald 1997, 87).

Clay-lined pits were recorded in many of the roundhouses with the exception of the eastern structures on Island 2, although this is probably a result of the nature of salvage excavation in this area rather than a genuine absence. This class of feature was similarly positioned in almost all of the struc-

tures, immediately north-west, north, north-east or east of the centre of the structures. Burnt limestone was commonly found in the clay-lined pits, however finds of domestic refuse were rare, usually amounting to only a small number of pottery sherds or animal bones. Pits in S 7 and S 10 were unique in that both contained saddle quern material (Fig. 3.9, no. 1). Their function is unclear, Allen *et al.* (1984, 94) have suggested they may have been used in cooking or acted as water containers. The presence of saddle quern material in two of the pits may be significant and relate to the function of the features or indicate purposeful discard of the querns. Clay-lined pits are relatively rare in the region, however parallels have been identified at Gravelly Guy (Lambrick and Allen 2004). Very little evidence remained of actual hearths, with the exception of three located in Structure 1. Context 90 was the largest and in part crossed the conjectured wall line. It had heavily burnt clay on the north and south sides and may represent an oven. Context 47 was intensely burnt down one side.

Pits that were not clay-lined were present in many of the structures, however their function is unknown. Pits in S 2 and S 15 sharply contrasted with the profile of the clay-lined pits and had steep, almost vertical sides and a flat base. They did not contain domestic refuse, and it would seem unlikely that they were used for storage due to the height of the water table. One pit in S 2 was unique as it contained part of a disarticulated cattle skeleton, represented predominantly by foot bones. The course of the projected wall line suggests that the pit was located immediately outside the structure, however this cannot be confirmed.

In Structures 1, 9, 16, 17 and 19 small groups of postholes appeared to cluster behind the entrance posts, sometimes forming short lines of two or three posts. Similar arrangements of postholes have been seen within houses at Mingies Ditch, and have there been identified as some form of internal partition or feature (Allen and Robinson 1993, 43).

Floor surfaces and occupation layers had not survived at Claydon Pike, although a spread of limestone rubble within the area defined by the Structure 2 gullies may have formed a cobbled floor contemporary with the second phase of gully. This lack of floor surfaces, and the general poor preservation of features within the structures has limited the evidence for the activities carried out within them. Hingley (1990b) proposed that within a roundhouse structure there was a distinction 'between a central 'public' space and a peripheral 'private' space'. Oswald (1997, 93) drew on ethnographic examples of the use of space in circular houses and found it often to be structured, acting on factors such as gender concerns. Fitzpatrick (1997, 77) stated that distinctions of light/dark and right/left appear to occur in early Iron Age houses in the Wessex region. The only suggestion of the use of space at Claydon Pike is the presence and positioning of the clay-lined pits which for the most part occur within a defined range, usually somewhere on an arc just north of centre (see above). This may indicate that the interior of the Claydon Pike houses were ordered according to certain principals of space, and the pits would fall into Hingley's central public space (1990b).

Four-post structures

To the south-west of the enclosure group on Island 2 a four-post structure (S 22) was created by two pairs of postholes joined by a slack V-shaped gully (Fig. 3.3). Four large post pits located within Structure 20 may also form an independent four-post structure, however this could not be confirmed (Fig. 3.2). Four-post structures are not widely seen in the Upper Thames Valley during the Iron Age, however significant numbers have been identified at Shorncote (Brossler *et al.* 2002), Yarnton (Hey and Timby forthcoming) and Gravelly Guy (Lambrick and Allen 2004). Examples have also been excavated at some of the lower lying first terrace and flood-plain sites such as Mingies Ditch (Allen and Robinson 1993). The function of such structures is unknown, however some form of above ground storage would be advantageous on the lower lying sites (see discussion, Chapter 15). A small number of the four-post structures identified at Gravelly Guy were set within buildings, and like the S 20 example from Claydon Pike, are not aligned with the axis of the building. It was suggested that this may be coincidental, but that similar instances had also been recorded within the region (Lambrick and Allen 2004). At Groundwell Farm a four-post structure was identified within House 2 and was set diagonally to the entrance of the building. It has here been identified as a support structure for the roundhouse (Gingell 1982, 41-4).

Enclosures and linear boundaries

The middle Iron Age settlement at Claydon Pike was open, although linear boundaries divided the landscape and provided drainage. On Island 3, LB 372 and LB 451 created an enclosed area *c* 28 m x 37 m (1000 m^2; Fig. 3.2). From the north-east area the two ditches turn to run parallel to each other and may have created a dry track onto the island.

Ditched enclosures were also attached to the second phase of penannular gully defining Structure 20 (Fig. 3.10). They enclosed an area of 14 m x 7 m to the north-east of the structure, and an estimated area of 11 m x 11 m to the south-west. Where the structure gully joined the enclosure ditches it became steeper and deeper, possibly to create a sump. The enclosure ditches were far more substantial than the house gullies, and this may indicate that they were designed to be animal-proof (see Chapter 15). They may have been reinforced by some form of above ground boundary such as a hedge. The entrance to the south-western enclosure had been blocked at some point by a gully, however

whether this represented a temporary or permanent block is unknown, it may have been designed to stop animals wandering in during a period of disuse. Two small postholes in the entranceway of the north-eastern enclosure suggest a gate structure to control access to the enclosed area.

The enclosed areas created by LB 372 and 451, and the enclosures attached to Structure 20, represent at least two of the phases of activity on Island 3, each associated with at least one domestic structure. They were probably used in stock management strategies, possibly for herding cattle, milking or winter corralling. Quantities of domestic finds were recorded in the south-western enclosure ditch, the largest quantity being recovered from the terminus adjacent to the structure entrance. This may represent cleaning out of debris from the structure itself, however there are also indications of more specific patterns of rubbish disposal (see Patterns of discard below).

The Island 3 enclosed areas appear to be related to a pastoral function, however the function of the enclosures on Island 2 is less clear as most contain domestic debris and a number of internal features, and as such share similarities with the domestic structures. There is also no reason why they may not have been used for a number of purposes.

The central area of Island 2 was occupied by four enclosures, bounded to the west by a NE-SW orientated boundary ditch (Fig. 3.4). A 20 m gap between the enclosures and the structures to the east may well indicate a yard area (Fig. 3.3). The linear boundary ditch appeared to provide the main axis of a series of small plots that were integrated into the settlement plan (Fig. 3.1). The plot to the east of the boundary is physically linked to Structure 5, and spatially appears to be associated with Enclosure 6, the most northerly of the enclosure group, which may have controlled access to it. The second plot ran to the west of the linear boundary, stopping immediately short of Structure 9 (Fig. 3.3). These plots or paddocks may have been used to control grazing and their integration into the settlement plan indicates a considerable degree of spatial organisation by the inhabitants of Warrens Field.

The south-eastern terminal of the Enclosure 6 ditch formed a metre deep sump containing large quantities of occupation debris including a nearly complete large ceramic vessel. The animal bone assemblage suggested a dominance of cattle processing in this enclosure. Internal features comprised short stretches of gully, three clay-lined pits and eight postholes. A domestic function for the enclosure cannot therefore be ruled out, as there are a number of parallels with the more definite house structures.

Enclosure 6 was interleaved between the two phases of enclosure to the immediate south, E 5 and E 7 (Fig. 3.4). Domestic refuse was again recovered from each, and internal features recorded. The interpretation of Enclosure 4 is also problematic for similar reasons (Fig. 3.3). The ditch is penannular in form, contained reasonable quantities of occupation debris and enclosed several postholes and a clay-lined pit. It is suggested that in this case the ditch may have surrounded a structure (S 11) whose entrance posts were removed by post-medieval truncation in this area, however this could not be confirmed. An east-west orientated ditch ran west from Enclosure 4 for *c* 40 m into the marshy area, and may have been used as a division in the landscape, or for drainage.

Enclosure 2, located on Island 1, was the largest enclosure at the Warrens Field site (Fig. 3.5). It enclosed Structure 1, but swelled out on the south-eastern side, presumably to encompass activity around the entranceway to the structure. The enclosure ditch contained a large quantity of occupation debris, which appeared to be redeposited from elsewhere on the site during this phase.

Economy and material culture

Economy and environment

The environmental evidence for the conditions at Claydon Pike during the middle Iron Age is limited. Eighteenth- and 19th-century drainage ditches had greatly affected the site, and resulted in a complete lack of waterlogged deposits from this phase. A sample from one of the enclosure ditches associated with Structure 20 suggested an open-country faunal element, and indicated that the deeper ditches did hold water, a factor also recognised at Thornhill Farm during this period (Jennings *et al.* 2004). A sample taken from linear boundary 372 at the point where it borders the western side of Island 3 appears to indicate the limit of flooding during this period, and suggests that the drainage ditches were effective in keeping the island dry (Fig. 3.2).

The charred plant assemblages are very small and plant macrofossil concentrations low. There is no evidence that the inhabitants of the site were producing cereals, as the assemblages are dominated by crop processing waste rather than actual grain. They consist predominantly of spelt wheat, with emmer and bread wheat forming minor components of the bread crop, quite typical for middle Iron Age sites in the region (see Chapters 14 and 15). Barley was also present, but poorly preserved. The majority of the charred grains are associated with arable land or grassland, although some live in more varied habitats. The most numerous weed seeds were associated with arable or disturbed conditions. Cleavers, regarded as a weed of winter sown cereals was present, and grassland taxa were also numerous. The waterlogged macroscopic plant remains at Thornhill Farm also indicate grassland and dung-enriched disturbed soil, and therefore a pastoral interpretation may be suggested for both sites.

The animal bone offers a more detailed picture of the economy, in spite of its poor preservation and

the low identification rate (22 %). The assemblage consists almost exclusively of domesticates, cattle, sheep/goat, horse, pig and dog, with only one wild species represented, a buzzard or kite. This range of taxa is seen across sites in Southern Britain during the Iron Age (see Ingrem, Chapter 14). At Claydon Pike there appears to be a focus on cattle husbandry, although sheep/goat were also an important part of the economy.

The cull patterns suggest cattle and caprines were kept primarily for their meat, but also secondary products such as dairy and wool (see Sykes above). Pig was present in low numbers, and would have been kept purely for meat. No foetal or neonatal animals were identified, a factor common to many Iron Age sites. This may be a result of poor preservation conditions, or may indicate 'a transhumance strategy, whereby lambing and calving took place at a time of year when animals were grazing away from the settlement' (see Sykes above). Similarly no remains were identified of animals that had reached old age.

Horse is the third best represented taxon and is mostly represented by mature animals. Horses were probably managed predominately as draught animals and there is no evidence they were used for meat, although this possibility cannot be ruled out. At least one sub-adult specimen was recovered suggesting the possibility horses were raised on the site. Juvenile horse remains have been recovered in small numbers from a number of other sites in the Upper Thames Valley (see Chapter 14).

Material remains

The pottery recovered from the middle Iron Age settlement at Warrens Field, Claydon Pike was handmade and characteristic of pottery from sites in the Upper Thames Valley at this time (see Chapter 15). The vast majority of the vessels had been constructed from a fabric paste containing coarse calcareous inclusions which were naturally occurring in the clay. This paste would have been available locally in the Oxford Clay, Cornbrash and Forest Marble deposits, located between 1–4 km from the settlement (Fig. 1.3). No investment in equipment was identified at the site, or specific areas associated with potting. It is proposed that this activity was carried out on a part-time domestic basis at the level of household production (after Peacock 1982). Ethnographic studies indicate that at the household level pottery is made and organised by women (Skibo 1995, 83; Woodward and Hill 2002, 83). An apparent lack of drying facilities and kilns may suggest that production was affected by seasonality. Furthermore, the ground would be that much harder in winter which would make digging for clay more difficult. Early spring and late autumn are thought to be optimal times when vegetation would be unlikely to obscure deposits (DeRoche 1997, 21). Pottery making would also be scheduled to avoid conflict with subsistence activities (Arnold 1985), particularly those associated with the pastoral base of the site.

During the later phase of the settlement a sandy paste begins to be used for the manufacture of vessels, a chronological trend identified throughout the region (see Jones above). Sandy clays were again available locally, although grains of glauconite in some of the fabrics indicate a Greensand source for a number of vessels. The nearest Greensand source is 14 km away and it is more likely that finished vessels were being brought in from the source area, rather than the raw materials being transported. Why a shift to sandy fabrics from calcareous fabrics occurred on such a wide regional basis is unknown. It may have been that the sandy fabrics were easier to work, or the change may have been triggered by stylistic and aesthetic reasons. The change in fabric tends to equate to changing forms throughout the region, and an increase in globular vessels and bowl forms. These vessels may have been used as serving vessels or eating bowls at social occasions and indicate the elaboration of subsistence traditions.

Pottery in Malvernian fabrics (Group A and B1) were present on the site in very small quantities, and were part of a regional distribution network. They are often seen on sites with fragments of Droitwich briquetage salt containers, a small quantity of which was recovered from the Warrens Field site. Peacock (1968) identified the source of the Group A fabric as the Malvern Hills area of Worcestershire, work by Morris (1983) has suggested a source in the Woolhope Hills, Hertfordshire for the B1 fabric. Both sources are 60-65 km from Claydon Pike. The pottery was initially produced and locally distributed in the 5th-4th centuries BC, the distribution area widening in the 3rd-1st centuries BC (see Morris above). At Claydon Pike the Malvernian pottery was not recorded on the earliest focus of settlement, Island 3, but is present on both Islands 1 and 2. The briquetage is evidence that salt was being brought to the site and was recorded from each island (see Chapter 15). Salt container material has also been identified at Mingies Ditch and Watkins Farm, but not at Ashville, Mount Farm or Farmoor. At Thornhill Farm only two pieces of briquetage were identified, plus three sherds of Palaeozoic limestone-tempered pottery, and two very small sherds of Malvernian rock-tempered ware. This would suggest that both sites were at the edge of the distribution network. Curiously at Thornhill Farm 166 very fragmentary sherds of coarse Malvernian rock-tempered pottery were recovered, which may indicate links with an earlier facet of the industry (Timby 2004).

The worked stone from the site is predominantly querns or quern material. Saddle querns were most commonly used and at least two were recovered, plus fragments from three rubbers. A fragment of rotary quern was also discovered. The querns were recovered from all three islands, although curiously the rotary quern was recovered from context 413 on Island 3, a stretch of curving gully truncated by

Roman field boundary 377 on the west of the island. Its function is unknown, but may have formed part of a structure of which little has survived. It is presumed to be contemporary with the settlement on Island 3 (Fig. 3.9, no. 3), although no pottery was recovered from its fill. If this is the case it represents an early use of this technology, although saddle querns continued in use on Island 1 (see Roe above). Five saddle querns were identified at nearby Thornhill Farm, although they were recovered from un-dated or early Roman contexts. The saddle quern materials include Greensand, quartz sandstone and a variety of Old Red Sandstone and are therefore comparable to the Claydon Pike materials (Shaffrey 2004).

Fragments from five fired clay triangular loomweights were recovered from across the site, and suggests that weaving was carried out at Claydon Pike. They came from Structure 17 on Island 3, Enclosure 4 on Island 2 and Structures 2 and 3 on Island 1. However there was no evidence for other crafts such as leather-working or weaving.

Patterns of discard

Many of the penannular gullies that surrounded structures in the Upper Thames Valley contained quantities of occupation debris (see Chapter 15). Claydon Pike is no exception and finds were recovered from all structures with the exception of S 13 on Island 3 (Fig. 3.2). This may indicate that the building was not used for domestic activities and instead may have been used for storage or to pen animals. Its location within the enclosed area created by linear boundaries 372 and 451 may be significant, however the building was stratigraphically isolated and may have been used at any stage in the life of the settlement on Island 3. The quantity of finds in the other structure gullies varies, with some of the largest quantities of pottery and animal bone being recovered from Enclosure 2 on Island 1 (Fig. 3.5) and Enclosure 6 on Island 2 (Fig. 3.3). By far the largest assemblage was recovered from the south-western enclosure attached to Structure 20 which contained 14.5 kg of pottery and 477 animal bone fragments (Fig. 3.2).

During excavation it was noted that the occupation debris tended to be concentrated in the gully and ditch terminals, a phenomenon seen on many other sites in the region including Thornhill Farm (see Chapter 15). Hill's study of discard patterns in the Wessex region has concluded that 'all human activities are symbolically structured, drawing on and reproducing cultural norms and structures' (Hill 1995, 95-6) and this included refuse strategies. On the sites he analysed, pit and ditch deposits were laid down according to rules of order, and the terminal deposits were structured. Unfortunately this level of analysis has not been possible at Claydon Pike as the animal bone has been recorded at the feature level only. However it has been possible to make some overall observations about the distribution of pottery.

Ten features had apparent concentrations of pottery in the ditch terminals. Within the structure gullies this concentration was seen to the left of the door (looking out from the structure) in Structures 6, 15, 17 and 20, and on the right-hand side of Structures 1 and 10. Within Enclosures 4 and 6 this concentration was located in the eastern ditch terminals. The debris from the south-western enclosure of S 20 was concentrated at the terminal of 371 (where it meets LB 372), and in the sump located at the junction of ditch 425 and structure gully 369.

The largest and most complete ceramic vessels recovered from the Warrens Field site were all located in the gully or ditch terminals. The largest vessel (Fig. 3.8, no.15), with a diameter of 380 mm and height of 360 mm, was recovered from the terminus of S 20 enclosure ditch 425 on Island 3, at the point where it meets the structure gully (Fig. 3.2). The next largest was 36 cm diameter and located in the eastern terminal of the Enclosure 6 ditch on Island 2 (Fig. 3.3). Both vessels showed evidence of use in cooking or heating processes. Such large vessels, the former with a capacity of 30 litres when full, suggest the preparation of food for a communal meal. Both vessels exhibited above average preservation, the mean sherd weight (MSW) recorded from the terminal of ditch 425 was 35.4 g (the greatest of any feature from Warrens Field), and 22.2 g from the terminal of Enclosure 6. These are significantly above average for the site (overall MSW 11.6 g), and suggest the sherds may have been curated and deposited with some care, although it should also be recognised that large vessels are prone to breaking into larger pieces than smaller vessels. A large quantity of animal bone was also recovered from ditch 425, totalling 281 fragments, although only 22% were identifiable. Identification rates from Enclosure 6 were rather better with 54% of the 105 fragments classified as indeterminate. This enclosure showed a dominance of cattle bones. A nearly complete vessel was also recovered from the eastern terminal of Structure 6. It was 340 mm in diameter and 350 mm high, with a capacity of approximately 24 litres. This vessel was again represented by very large sherds, with a MSW of 32.3 g.

For the most part the remaining structures and enclosures on Islands 3 and 2 have mean sherd weights that represent the site average, the exception being Enclosure 4 which was slightly higher (Fig. 3.3). A completely different situation was recorded from Island 1 where the mean sherd weight of all features is consistently lower than the site average. This is reflected in the animal bone as the identification rates on Island 1 are lower than those of Islands 3 and 2. This would suggest a different treatment of waste, perhaps collected in one area and used in the later infilling of features. At any rate it seems to be redeposited. However, a nearly complete vessel was recovered from very close to the southern terminal of the Structure 1 gully. The vessel had a diameter of 280 mm and

height of 300 mm, the capacity was 15 litres. Unlike the other nearly complete large vessels recovered, this example was in poor condition, with a mean sherd weight of 8.6 g. During excavation it was recorded that the vessel appeared to have been deposited upside down, and the base had broken inwards. Stone was noted around and below it.

Placed animal bone deposits

A pit within Structure 2 on Island 1 (Fig. 3.5) and a ditch on the eastern side of Trench 14 on Island 3 (Fig. 3.2) contained structured deposits of cattle and horse respectively. The phasing of the ditch is uncertain and it may belong to the late Iron Age use of the area. Both deposits consisted predominantly of foot bones with some evidence for the presence of head elements. The presence of such specific body parts suggests disarticulation of the skeleton must have occurred. Although anatomical representation is indicative of primary butchery waste, the superior condition of the bones suggests they were treated differently to waste from day-to-day practices. Hill (1995, 28) has suggested that unusual deposits of well-preserved bone at a number of Wessex sites including Old Down Farm and Winnall Down may be evidence of a feast.

Chapter 4
Late Iron Age and Early Roman Activity at Longdoles Field (Phase 2)

by David Miles, Simon Palmer, Alex Smith and Grace Perpetua Jones

INTRODUCTION

During the early 1st century AD, a new area of occupation was established in Longdoles Field, approximately 120 m south-west of the middle Iron Age settlement (Fig. 4.1). Virtually all activity of this phase was located within the eastern part of the main excavated area (Trench 13; Fig. 4.2), although trial trenching and salvage work further to the south revealed linear boundaries and enclosures which may well have been of the same date.

A nucleated area (*c* 2400 m^2) comprising a series of enclosures lay at the heart of the settlement, partly defined towards the end of the phase by a substantial boundary ditch (2502) along the western side. The interior of the nucleated area comprised a complex series of gullies, pits, small enclosures and boundaries. No clear evidence for buildings was recovered. Pottery, small finds and ironworking debris indicate occupation and industrial activity, while the environmental evidence suggests that enclosures were used for the herding of domestic animals that were grazed on the floodplain and islands of gravel terrace. Outside Trench 13, the only major excavated feature which may belong to Phase 2 was ditch 2930 to the west, which ran across the top of Trench 19 and into Trench 29 (Fig. 4.1). Additionally, faint traces of shallow linear gullies in Trench 19 were on the same axis as Phase 2 features in the south of Trench 13, which suggests some limited spread of activity from this area. To the south of the main settlement were a series of linear ditches showing as cropmarks, which appear to relate to the Phase 2 site, while to the north, in Warrens Field, were three enclosures that may also belong to this phase, although their chronology is far from certain.

The phase seems to have ended quite abruptly during the early 2nd century AD, with the imposition of the large rectangular enclosures and aisled buildings of Phase 3 at the Longdoles Field site (see Chapter 5).

THE ARCHAEOLOGICAL SEQUENCE

(Figs 4.2 and 4.3)

The stratigraphic and spatial relationships of Phase 2 features in Trench 13 indicated four sub-phases, dated on the basis of the pottery (Fig. 4.3). Occupation appears to have lasted for approximately one century from *c* AD 25 to 125. Chronological divisions within this period are problematic and pottery from many features was sparse, and so the dating is therefore tentative.

Full stratigraphic descriptions of the features from this phase of Claydon Pike can be found in Digital section 2.3.

Phase 2a (Fig. 4.3a)

The earliest features in Trench 13 were generally quite insubstantial, comprising a sub-enclosure (SE 1) and a number of circular and linear gullies. Activity in this phase appears to have been concentrated in the north and east of the trench, and the predominant pottery from the features suggests a date from *c* AD 25 to100.

Sub-enclosures

Sub-enclosure 1 was positioned on the north side of Trench 13 and formed a three-sided enclosure open to the east. The long axis measured 15 m north-south, with the two east-west arms being 8 m in length. The northern terminal had been truncated by Phase 4 feature E 22 and could not be definitely traced. The enclosure ditch was relatively broad with gently sloping sides, *c* 1.6 m wide and *c* 0.6 m deep. Finds were sparse, comprising pottery and a few iron nails. Over 130 animal bone fragments were also recovered, with horse being the most numerous of the identifiable species. Stratigraphically the enclosure was cut by north-south linear ditch 2602, and the east-west section of ditch 2502.

Linear boundaries

The earliest feature in the southern part of Trench 13 was ditch 644 (1 m wide, 0.6 m deep), which formed an arc with a 22.5 m diameter, open to the west and south. Two cuts were apparent in the ditch, with the later being much more substantial. Finds were few and included pottery, daub and intrusive window glass. In the eastern part of the trench, there appears to have been a rectangular plot formed by three gullies. The longest (592) was aligned in a straight line on a NE-SW axis for *c* 37 m along the eastern

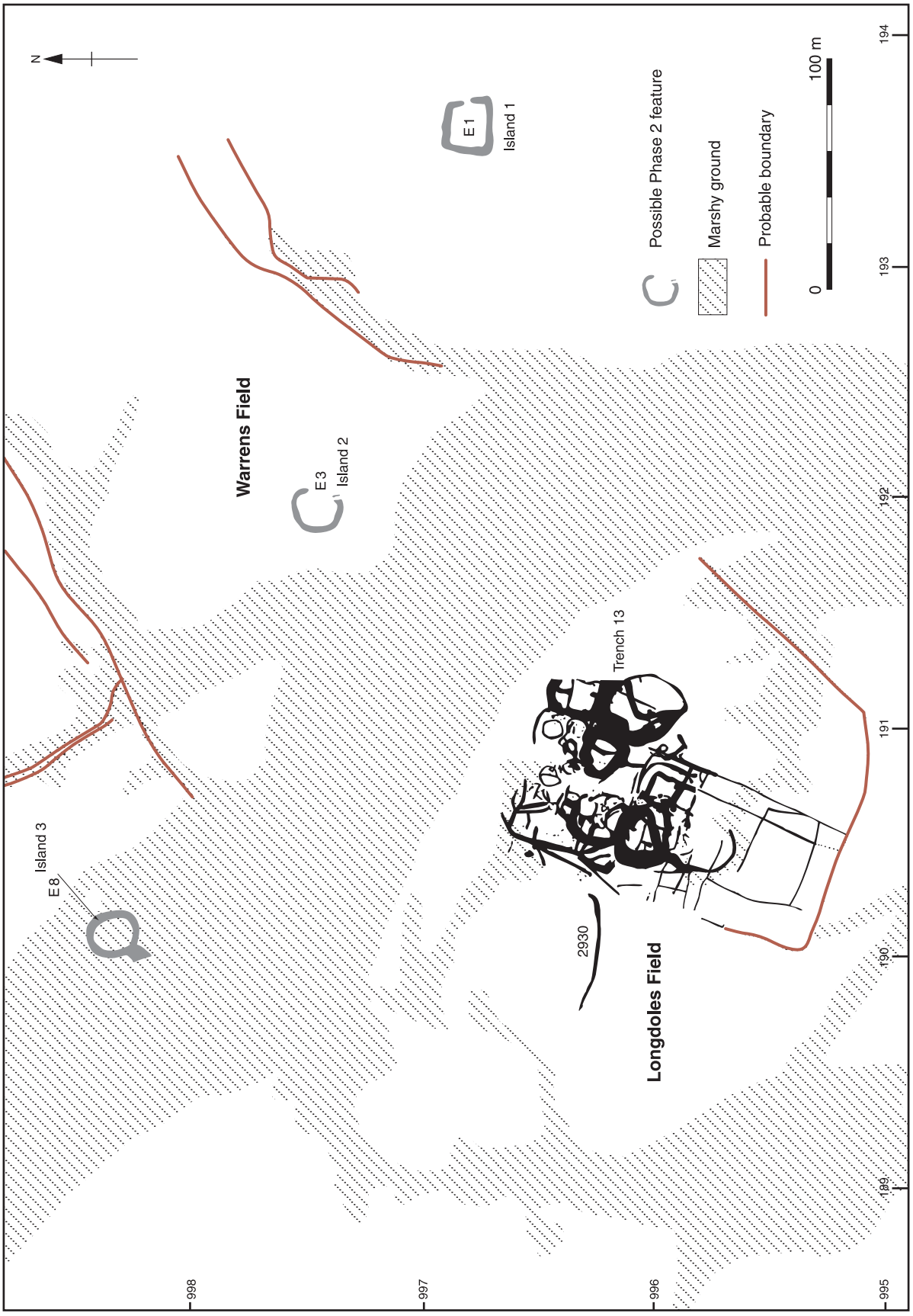


Fig. 4.1 Late Iron Age - early Roman settlement in Longdoles Field

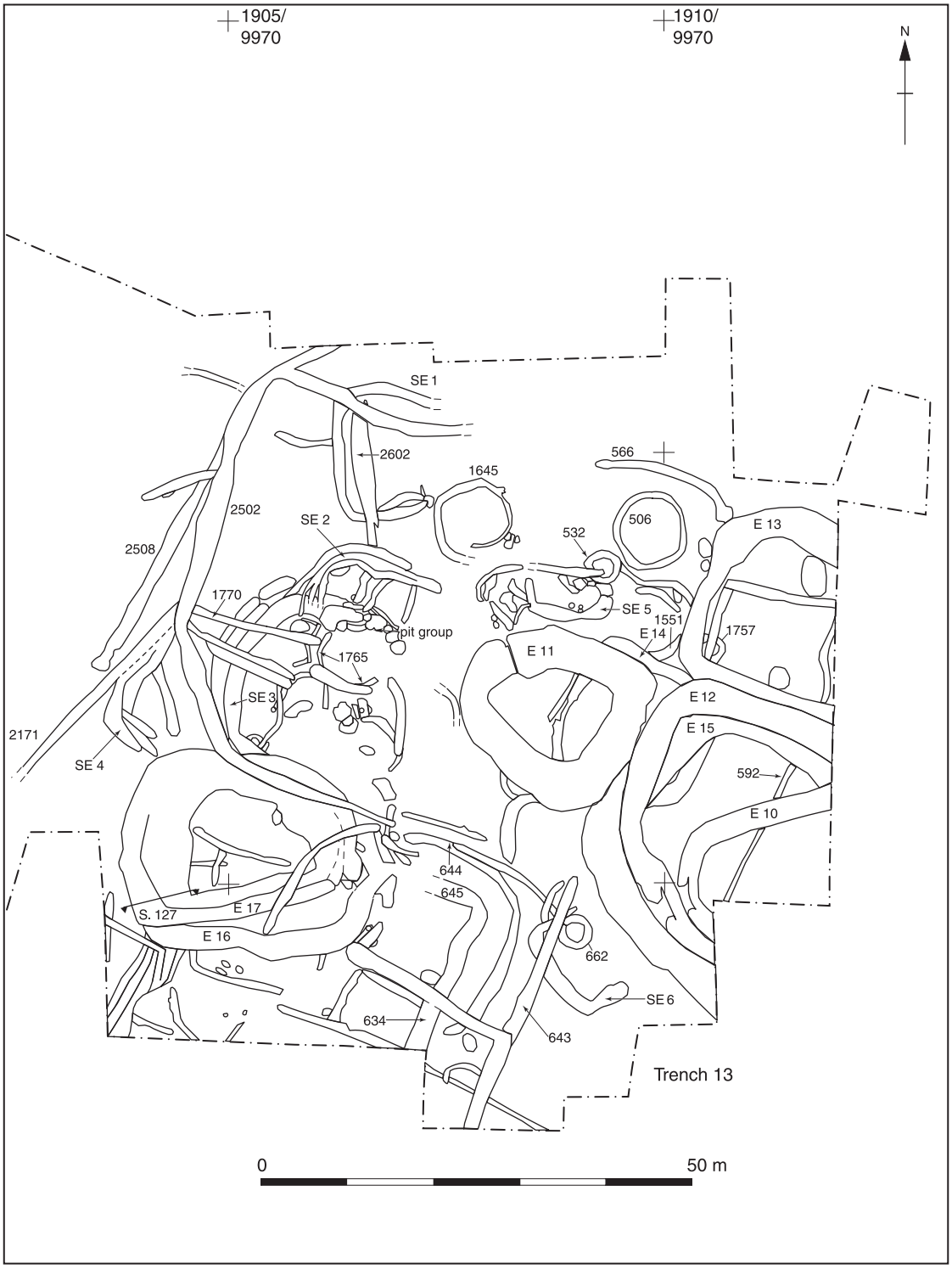
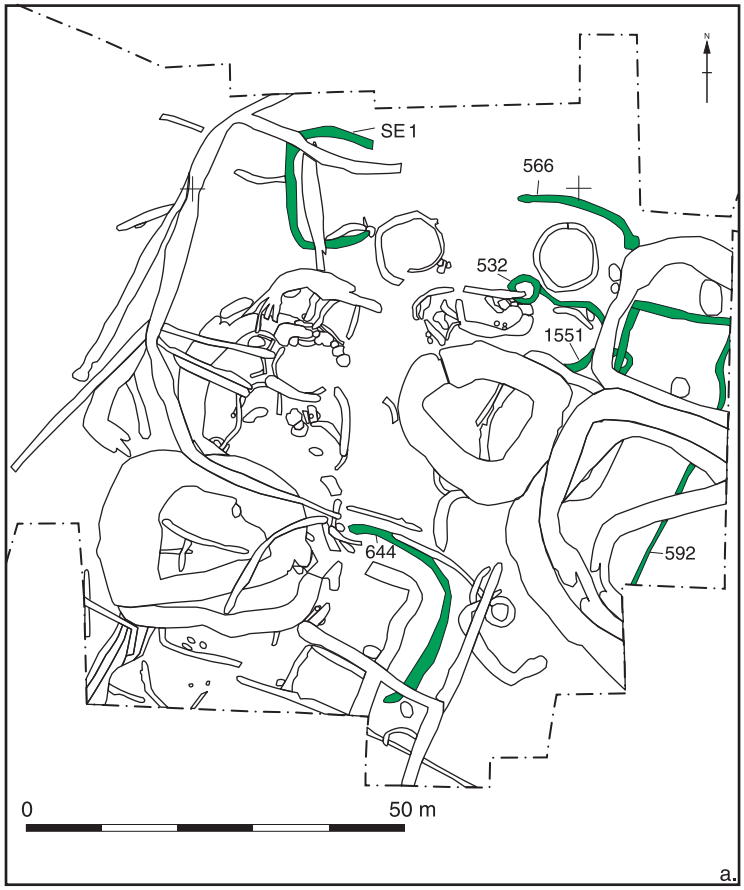
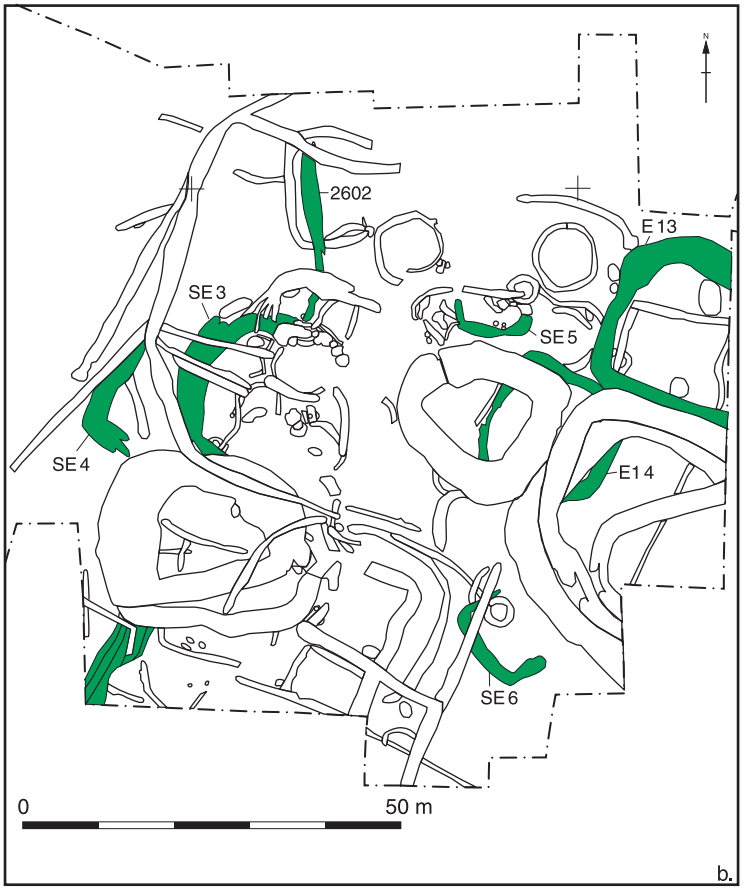


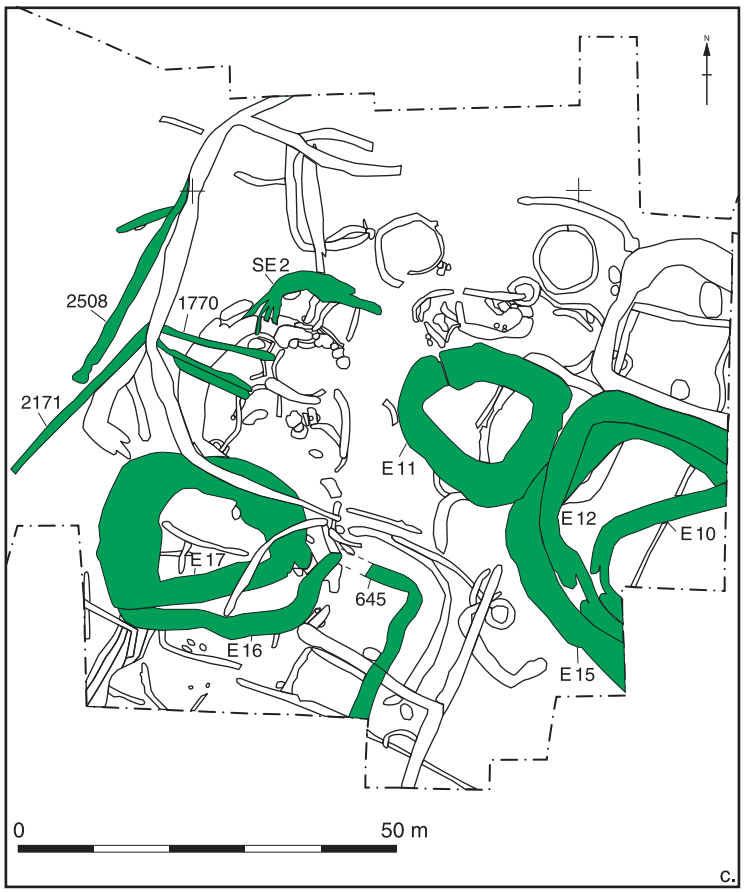
Fig. 4.2 Plan of Phase 2 site



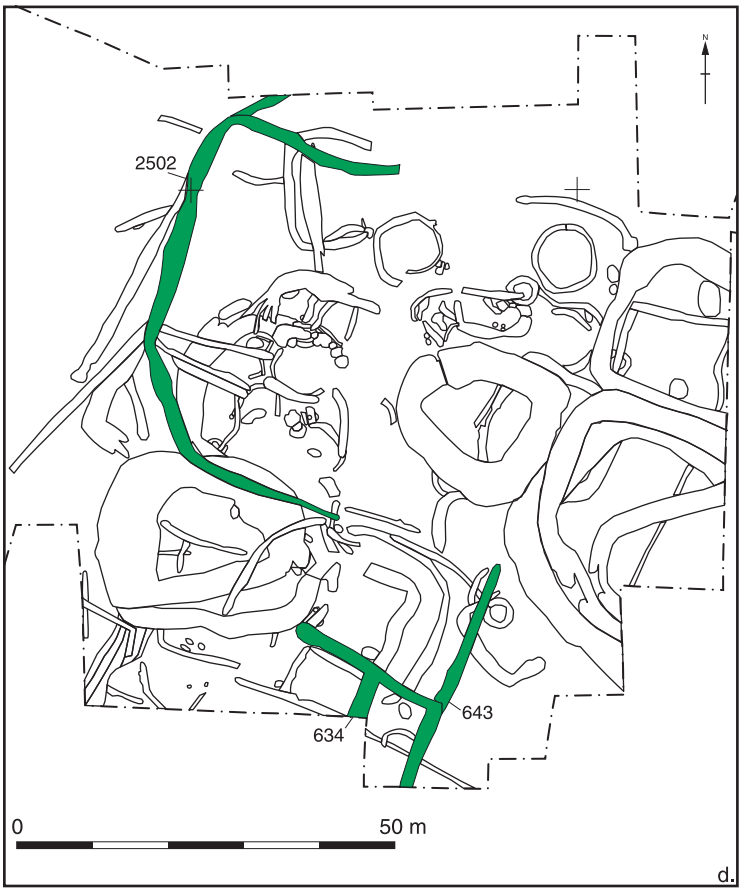
Phase 2a



Phase 2b



Phase 2c



Phase 2d

edge of Trench 13. It was 0.4 m wide and 0.2 m deep. No finds were recovered from any of the gullies other than a very small amount of pottery. To the north lay ditch 566, *c* 17 m in length and approximately 1 m wide. It appeared to be truncated by E 13. It may have enclosed a number of small pits and complete circular gully 506 to the south, although these could not be assigned to any specific sub-phase (see General Phase 2 features below; Fig. 4.2).

Circular gullies and gully arcs

Lying 10 m south of ditch 566 was small circular gully 532, 3.8 m diameter, varying from 0.5-0.9 m wide and 0.5 m deep. Small amounts of pottery and animal bone (including donkey) came from the gully fill. This would seem to be a stack ring similar to feature 662 to the south, and possibly 1757 to the east (Fig. 4.2; see circular gullies below). Possibly truncated by this feature to the east was an 8 m length of gully arc that continued into penannular gully 1551 (0.6-0.8 m wide, *c* 0.25 m deep), which defined an area *c* 8 m in diameter. The southern part of 1551 was truncated by Enclosures 11 and 14 and overlain by Aisled Building 3 (see Chapter 5), the western part was truncated by Enclosure 13 of Phase 2b.

Phase 2b (Fig. 4.3b)

This sub-phase was dominated by sub-enclosures, although a move to more substantial enclosures is indicated by the presence of E 13 and E 14 during this period. Few major linear boundaries were seen. The pottery from these features is generally mid to late 1st century AD in date.

Enclosures

Two enclosures (E 13 and E 14) lay in the eastern half of the excavated area, E 13 extending eastwards beyond the trench limits. Both enclosures were sub-rectangular in plan and *c* 16 m across internally, although E 13 appears to have been recut more times giving the ditches a wider profile. The depth of the enclosure ditches ranged from 0.5 to 0.9 m. An entrance (2.5 m wide) was found on the west side of E 14. No internal features could be related to either of the enclosures. Stratigraphically, they were the earliest of this feature type in the trench, and could well have been directly contemporary. Finds, although by no means abundant, were scattered consistently through the ditches of E 13, and included pottery, smithing slag and several iron nails. A small quantity of animal bone was also recovered. Only one small find was recovered from E 14, a piece of copper alloy wire, while other finds comprised pottery (1.1 kg) and animal bone (137 fragments).

Sub-enclosures

Four sub-enclosures could be assigned by sub-Phase 2b, on the basis of stratigraphy and ceramic dating. Sub-enclosure 3 (SE 3) lay in the western part of the trench, sealed beneath the masonry buildings of the Roman phases. The principal cut ran approximately south-north for 18 m before continuing 8 m to the east. It was a relatively large ditch, *c* 1.4 m wide and up to 1 m deep, and had a number of recuts. SE 3 was cut in Phase 2c by SE 2 and by a number of east-west linear boundaries, which were in turn cut by Phase 2d boundary ditch 2502. A series of pits also cut the northern terminals. The southern extent of the sub-enclosure could not be traced. SE 3 appears to define an area of activity to the east, although it is difficult to relate these pits, postholes and gullies to any particular sub-phase on a stratigraphic or ceramic basis, so no direct association can be demonstrated. Small finds from the sub-enclosure are few in number, and include fired clay, an iron nail, lead fragment and copper alloy brooch pin. Very small quantities of pottery and animal bone were recovered.

To the west of SE 3 and on the south-western edge of Trench 13 lay SE 4, represented by a number of separate ditch cuts. The sub-enclosure consisted of a 15 m NW-SE arm and a short 5 m east-west arm on the south side. The north side was truncated by Phase 2d enclosure ditch 2502 and later Phase 3 ditches. It is unclear whether it turned east. The largest cut of the sub-enclosure measured 1.4 m wide and 0.9 m deep. Like SE 3 it appeared to define an area to the east, but in contrast did not seem to be associated with any complexity of features. Finds are sparse apart from quantities of 1st-century pottery, an iron nail and fired clay fragments. A small amount of animal bone was recovered.

On the north-east side of Trench 13 was a small three-sided sub-enclosure (SE 5), just north of E 11. It measured 8 m east-west and had short north-south arms of 3 m. Two basic cuts were apparent, and in general the ditch was 0.8 m wide and 0.4 m deep. Stratigraphically SE 5 post-dated a sequence of gullies, including circular gully 532, but appeared to be interleaved with a series of pits. Quantities of smithing slag came from the fills of the sub-enclosure ditch and the pits. Spatially nearly all of the pits appear to be within the area defined by SE 5. It is reasonable to suggest that the sub-enclosure was associated with iron-working activity. Apart from small quantities of pottery other finds were sparse.

The final sub-enclosure of Phase 2b was SE 6, in the south east of Trench 13. It was three sided and formed by a single ditch cut. The long axis was aligned NW-SE and measured 11 m, with two shorter arms running for 6 m. The ditch itself was flat bottomed with gently sloping sides *c* 1.2 m in width and 0.6 m deep. Stratigraphically it was cut

Facing page: Fig. 4.3 Phase 2 sub-phases (a-d)

by the Phase 2d boundary 643 but cut a number of smaller boundaries to the west. It was overlaid at one point by a spread of burnt limestone (context 658), but this did not appear associated with any *in situ* burning. Circular gully, 662, lay adjacent to the north arm, but with no relationship. Apart from small quantities of pottery finds were minimal.

Linear boundaries

Situated on the north side of Trench 13 and running north-south was ditch 2602. It ran southwards for 18 m from the northern axis of boundary ditch 2502. Two cuts were apparent, the latest being 1 m wide by 0.6 m deep. Stratigraphically, the ditch was cut by Phase 2d ditch 2502 to the north and Phase 2c SE 2 in the south, and cut Phase 2a SE 1. Finds were extremely sparse.

In the south-western corner of the trench several linear ditches were seen running NE-SW, with cropmarks indicating that they continued to the south-west of Trench 13. Due to the intercutting nature of the features it was difficult to define their extents in plan. Finds from the ditches were quite scarce but included fired clay, iron nails, animal bone (mostly cattle) and pottery.

Phase 2c (Figs 4.3c and 4.4)

Phase 2c saw a move to much more substantial circular enclosures in the east and south-west of Trench 13, and a number of linear boundaries in the south and west. Pottery from this phase was similar to that of Phase 2b, with a slight preponderance of Flavian era material (*c* AD 70-96).

Enclosures

A total of six major enclosures were assigned to this sub-phase, although only a maximum of three of these could have been directly contemporary. In the south-east corner of the trench were a succession of three large enclosures (E 15, E 12 and E 10), all of which extended out of the excavated area.

Enclosure 15 was the earliest stratigraphically of this sub-phase, being cut by E 11 and E 12 (consequently also by E 10), but cutting Phase 2b enclosure E 14. The enclosure had an internal area *c* 25 m across, and had no evidence for an entrance, although this may have been obscured by E 12. Small finds included iron nails, a spindlewhorl and fired clay including oven plate fragments and daub. A small amount of pottery and animal bone was retrieved. Lying on a very similar alignment to E 15, and probably a later cut of this feature, was Enclosure 12, which measured *c* 22 m across internally. One phase of an entrance was located on the south-west side forming a causeway *c* 2.5 m wide. A multitude of cuts were in evidence, at least ten in some sections, but the homogeneity of the fills prevented a stratigraphic sequence from being built up. No deliberate infilling of ditch cuts was located although the occasional gravel band and darker fill suggest some interference with normal silting processes. Finds were extremely sparse with no apparent concentrations; small finds included vessel glass fragments and fired clay. A small amount of animal bone was also recovered. Enclosure 10 lay the furthest eastwards, and was stratigraphically the latest. It had at least four major cuts, the deepest and probably the earliest being *c* 0.9 m deep and 1.75 m wide. The truncated Roman ground surface of Phase 3 did not extend over the ditch and there is no evidence of infilling or consolidation. A narrow entrance of *c* 2.5 m is represented in an earlier phase on the west side but no trace of a late one was located. No features were recovered from the interior apart from two shallow scoops adjacent to the entrance. Almost 2 kg of pottery and 170 animal bone fragments were recovered from this feature.

Situated just east of the central area of Trench 13 lay E 11, forming a roughly circular enclosure, with maximum dimensions 10-14 m across internally. It barely intersected with E 12 to the east, but E 11 was thought to be later, although still within Phase 2c. A possible entrance relating to a later phase of use of E 11 was suggested by a terminus on the north-west

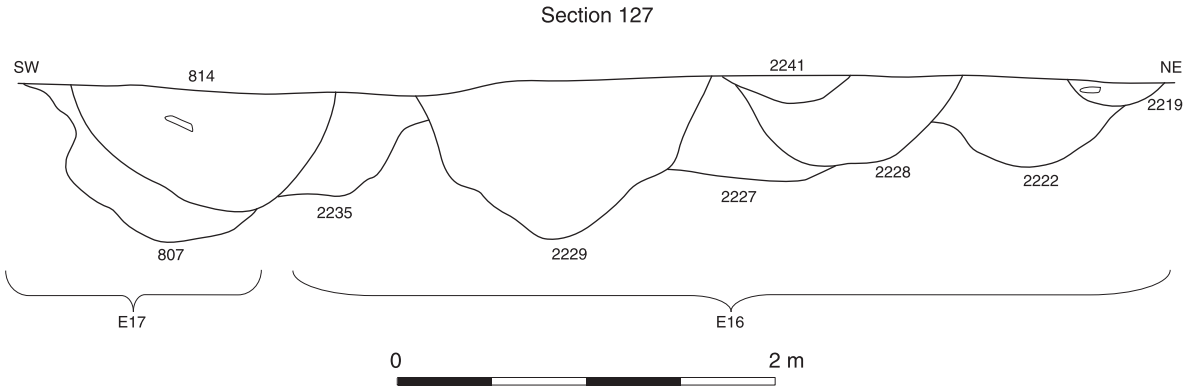


Fig. 4.4 Section 127 through enclosure ditches E 16 and E 17

side. At least five cuts showed from sections, the deepest and one of the earliest measured 1.1 m deep and *c* 1.6 m wide. Fills were of homogeneous orange brown sandy loam apart from that in a late cut (732) which underlay Aisled Building 3. This was much darker and contained relatively large amounts of limestone rubble, particularly in the uppermost layer, suggesting deliberate infilling. It also contained the highest concentrations of small finds from the ditch, including iron nails, fired clay, a copper alloy coin (dated AD 81–96), perforated copper alloy sheet, fire fractured flint and smithing slag. Small finds from the rest of the enclosure were limited to iron nails, fired clay fragments and a bone bobbin. A reasonable quantity of pottery (3.4 kg) and animal bone (311 fragments) were also recovered.

In the south-western side of Trench 13 were two substantial enclosures (E 16 and E 17), approximately concentric, and no doubt representing different phases of the same feature (see section, Fig. 4.4). E16 was the earliest, and its southern arm appears to have continued east for 12 m, before turning south as linear boundary 645. Internally it measured approximately 15 x 17 m. Two major cuts could be traced on the south-east and west sides, with maximum dimensions 3 m wide and 1.2 m deep (Fig. 4.4). The cuts of the northern side could not be separated from those of E 17. A possible entrance lay on the eastern side. E 17 was probably a recutting of E 16, although the southern side was foreshortened, ensuing that dimensions were smaller, internally *c* 20 x 12 m. The enclosure had substantially more ditch recuts than E 16, at least five showing in some sections and a typical deep cut size being 1.8 x 0.9 m deep. Debris and infilling in the top of the ditches of both enclosures indicate that some of the uppermost layers were open well into Phase 3. The northern side of the enclosure was overlain by the trackway ditch on the southern side of the Phase 3a enclosure. This trackway had successive layers of cobbling (2000, 2003) where it passed over these ditches (see Phase 3a).

There were no features within the surviving interior that are likely to be contemporary with the enclosures. Finds from the enclosure did suggest the proximity of domestic occupation, although these were most prolific from the upper levels, and may actually relate to the start of Phase 3. The small finds included a relatively large number of fired clay fragments including a loomweight and oven fragment, iron nails, sheet lead fragments, a lead weight, industrial slag, two copper alloy brooches, a bone pin, several glass fragments including vessel and window glass, and a whetstone. Large quantities of pottery (17.3 kg) and animal bone (1748 fragments), mainly cattle and sheep, were also found, nearly all within the upper layers. A total of four waterlogged samples were taken from the bottom of E16/17 enclosure ditch which indicated that it held stagnant water, while one sample (1528/A/3) also contained imported plant material (see Robinson below).

Sub-enclosures

The single possible sub-enclosure from this phase, SE 2, was located to the south of Phase 2a feature SE 1, and was made up of three principal ditch cuts. The east-west arm measured *c* 14 m and the NE-SW arm *c* 8 m. If treated as an arc the radius would be 7.5 m. The ditch cuts were relatively consistent in size, *c* 1.2 m wide and 0.4-0.5 m deep. Stratigraphically SE 2 cut Phase 2b SE 3 and was cut by Phase 4 E 21. The tops of the ditch cuts had been consolidated with limestone cobbling (1582) during the Roman phases. As with SE 3, it appears to define a concentration of pits, gullies and postholes to the south and east. There is a marked contrast in the density of Phase 2 features to the north and west, where they were quite scarce. Few finds were recovered.

Linear boundaries

Situated on the south side of Trench 13, and possibly associated with E 16 was ditch 645. It ran east from E 16, appearing to curve to the east from one of the southern cuts. It was truncated by post medieval ditch 500, but then seemed to continue east for 7 m before turning south for 19 m in similar fashion to Phase 2d boundary 634. Ditch 645 was cut by 634 but they ran down the same line towards the southern site triple-ditched boundary. Two main cuts were identified: a deep cut 1.4 m wide and 0.9 m deep and a shallow later cut 0.8 m wide and 0.4 m deep. Finds were very sparse.

Along the western side of Trench 13 were a series of substantial linear ditches which seem to define the western edge of the raised settlement. Ditch 2508 ran NE-SW for at least 25 m until it was lost running north, cut by Phase 2d ditch 2502. Its southern terminal was located approximately 7 m to the north-west of E 17. It was relatively broad (1 m), but flat bottomed and shallow (*c* 0.3 m). Few finds were recovered. Running to the east of ditch 2508, and on a similar alignment to it, was ditch 2171. It was traceable for at least 22 m before being cut away by the Phase 3 pit 2526 to the north, and boundary ditch 2162 to the south. Ditch 2171 ran west of but impinged on SE 4, although no relationship was retrievable. Two cuts were apparent; the earlier cut appearing to terminate alongside 2170 (SE 4). Dimensions were *c* 1.7 m across and *c* 0.5 m deep. Very few finds were recovered.

Three parallel ditches were seen running east to west from boundary ditch 2502 on the western side of the settlement nucleus. Ditch 1770 (*c* 0.8 m wide, 0.4 m deep) ran for 15 m, terminating just before circular gully 1765, while 3 m further south were two further ditch cuts. Stratigraphically they post-dated SE 3 and a series of gullies at their eastern end. Although cut by boundary 2502 they appear to respect its line. Finds were sparse.

Phase 2d (Fig. 4.3d)

Phase 2d was dominated by the enclosure of part of the western side by substantial boundary ditch 2502 to the west, and smaller ditches 634 and 643 to the south. The pottery from these features was predominantly late 1st to early 2nd century AD in date.

Enclosure Ditch 2502

Ditch 2502 defined the western limit of the nucleated area seen in Trench 13. It was formed of a north-south axis measuring 45 m, and two parallel east to west arms, the northern arm being 22 m in length, and the southern arm 24 m. On the northern, western and southern sides it defined the highest point of Trench 13. The southern side also coincided with the Phase 3a boundary (ditch 547). At least two main cuts of the ditch were revealed, the earliest continuing north out of the trench. The terminal of the northern east-west orientated arm was lost, cut away by post-medieval boundary ditch 500. The southern terminal was located just west of 500 and was cut by the terminal of Phase 3 ditch 547. On average the cut dimensions were 1.4 m wide and 1 m deep. Ditch 2502 was one of the latest features which could be assigned to Phase 2, cutting E 17 to the south and SE 3 and SE 4 to the west, and SE 1 to the north. It was overlain by Phase 3a Aisled Building 1, and there appeared to be no significant consolidation over the top of the ditch associated with the building.

Many of the finds were recovered from the topmost layers and thus are not securely related to the use of the ditch. These included quantities of fired clay (including oven fragments), personal items such as a copper alloy finger ring and brooch, an iron goad, vessel glass and some general debris such as nails. Pottery (11.13 kg) and animal bone (549 fragments) were present in reasonable quantity. The pottery was predominantly early second century in date (Fig. 4.5).

Ditches 643 and 634

Ditches 634 and 643 formed two phases of a linear ditched boundary running southwards from the excavation area. The earliest was represented by a 10 m east-west length of ditch (634) which turned south on the line of Phase 2c ditch 645. This early phase was represented by two large cuts 1.8 m across and 0.7 m deep. The later phase (1.2 m across, 0.4 m deep), continued east for a further 10 m before turning south on the line of ditch 643. An earlier cut of 643 continued north for 20 m, terminating just south of E 15. This was 1.4 m wide and 0.7 m deep. Both the cuts of 634 and 643 continued south to the triple ditched boundary, but their line is obscured by post-medieval boundary 500. Both phases of this boundary would appear to post-date E 16, and cut ditch 645. Finds included quantities of pottery (3.9 kg), animal bone (332 fragments), and pieces of fired clay and iron (Fig. 4.7, no.15).

General Phase 2 features (Fig. 4.2)

Throughout Trench 13 there were many features that could not be assigned to a particular sub-phase of Phase 2.

Linear boundaries, gullies and gully arcs

A number of linear boundaries could be seen throughout the trench, particularly around the southern periphery of the nucleated area, to the south and east of E 16 and E 17. There were also two concentrations of short or semi-circular arcs of gullies within the nucleated area. One was defined by SE 2 and SE 3 in the western part of the trench, and the other was located immediately north of E 11 and west of E 13. The more westerly complex included semi-circular, penannular arc 1765, the south-eastern terminal of which was believed to continue to curve round and enclose an area of 8 m diameter, open to the north-east. The pit group, which contained reasonable quantities of animal bone and pottery (see below), seemed to respect the northern extent of this feature, and may well have been associated. It is possible that the feature could have represented a domestic structure of some kind, although this interpretation is far from certain. Finds from gully 1765 included a mid 1st-century brooch (Fig. 4.6, no.1) and a small quantity of animal bone and pottery.

The north-eastern concentration of short gullies and curving gully arcs lay just north of E 11 and west of E 13. The gullies and pits of this area contained a sizeable amount of fired clay, including oven fragments, along with the highest concentrations of smithing slag on site (see pits below).

Circular gullies

Lying within the nucleated area or on its edge were positioned a series of circular gullies. These seemed to conform to two standard sizes: a small enclosure *c* 4 m in diameter and a larger enclosure *c* 8 m in diameter. The smaller gullies 532, 662 and possibly 1757 possessed gullies between 0.5 to 0.7 m wide and 0.2 to 0.5 m deep. Fills were very clean and not usually recut. Internally there were no associated features. These features may have functioned as 'stack rings' for the provision of animal fodder, and there are parallels in Trench 17 as well as at Somerford Keynes and Thornhill Farm (Jennings *et al.* 2004). The larger gullied enclosures, 506 and 1645 were positioned on the north side of the nucleated area, *c* 10 m apart. They were 8 m and 9 m in diameter respectively, but the gullies themselves were similar in dimensions to those of the above mentioned. Finds were similarly sparse but several nails, fired clay and a whetstone were found within gully 506. Gully 1645 contained the largest single concentration of charred plant remains within Phase 2 features, with grain predominating (see Straker *et al.* below).

Gully 506 was complete; there was some uncertainty over gully 1645, as it had been truncated by

the post-medieval boundary ditch 500. The southern edge became shallow and west of ditch 500 it was lost. The function of these features is uncertain, although penannular gully arc 1765 (see above) was of similar dimensions, and this may well have belonged to a domestic structure of some kind, especially given the concentration of charred grain in circular gully 1645.

Pits

There were many pits within Trench 13 that on the basis of pottery or stratigraphy, have been assigned to Phase 2. One concentration of pits datable to this phase was seen south of SE 2 and east of SE 3, an area that was also noted for the concentration of short gully segments and gully arcs (see above). A smaller concentration was seen in the area of SE 5. A further thin scattering of pits were spread sparsely across the rest of Trench 13.

The pit concentration on the western side of the trench lay along the eastern arm of SE 3, and may be spatially related to penannular gully arc 1765 (see general Phase 2 features above). The pits were predominantly circular in plan, although of varying size, the most common being 1.6 m in diameter. The quantities of pottery and animal bone recovered from those relative to that from the large enclosures to the east suggest that they were utilised at least secondarily for dumping domestic refuse. In general those pits to the south of 1765 contained much higher quantities of animal bone and pottery than those to the north.

The pits in the north-east corner of the nucleated area were located west of penannular gully 1551 and did not impinge on its area. The contents of pits contrasted with those of the westerly concentration, with less pottery and animal bone debris, but with reasonable amounts of smithing slag, ash and fired clay. The indications are that this area was utilised for light industrial purposes in contrast to the more domestic style occupation evidenced by the gullies and pits within the area adjacent to SE 3.

Enclosures from Warrens Field (Fig. 4.1)

Three enclosures to the north in Warrens Field appear to be late in the stratigraphic sequence and may well relate to Phase 2 activity in Longdoles Field. Enclosure 8 was situated to the west of the main area of middle Iron Age activity in Island 3, and was oval in plan with no apparent entrance causeway. The internal measurements were *c* 16 m x 14 m, the width of the ditch was an average of 3 m, the depth 0.9 m. Surviving to the west on the outside of the ditch was a low gravel bank. The dating of the enclosure is uncertain, but it is clear that it remained an earthwork for quite some time. Early Roman pottery and post-medieval material were recovered from the top fill.

Enclosure 3 was located in Trench 8, in Island 2, and clearly cut middle Iron Age Enclosure 4 to the north. It had an internal diameter of *c* 16 m, with a 3 m entrance gap on the north-east side. Sections through the ditch indicated at least three major cuts with a maximum width was 2 m, and a depth of 0.9 m. Three sherds (34 g) of middle Iron Age pottery were recovered from the ditch, plus small quantities of horse and cattle bone. One bone from the lower layers produced a radiocarbon date of AD 310 (1640+70 HAR 5409), although this date probably reflects contamination by Roman and post-medieval disturbance.

Situated in the south-east of Warrens Field (Island 1), ditch 6 formed a rectangular enclosure (E 1) *c* 25 m x 22 m externally, with an internal area of *c* 260 m^2. An entrance causeway 3 m wide lay on the east side. Excavation showed two major cuttings of the ditch, with the later larger cut having a width of between 2 m and 3 m and a depth of 1 m. The interior contained no archaeological features but the entrance was marked by a series of possibly paved postholes. Few finds were recovered from the enclosure ditch suggesting that it was not primarily utilised for occupation. The ditch contained middle Iron Age and Roman pottery, suggesting a late Iron Age / early Roman date, and it obviously survived as a hollow until quite recent times (in contrast to the middle Iron Age features) given the amounts of post-medieval debris in the top layer of silt.

THE FINDS

The finds from the late Iron Age/early Roman settlement included large quantities of pottery (*c* 100 kg), as well as a range of small finds, including brooches, coins, vessel glass and iron nails. There is clear evidence for differential distribution patterns in certain find types, which suggests functional zoning within the site.

Full reports and catalogues on all the finds from this phase of Claydon Pike can be found in Digital section 3.

Pottery (Fig. 4.5) *by Paul Booth*

The recorded pottery assemblage reflects the archaeological situation in that nearly all of the late Iron Age or 'native' ceramics were restricted to Trench 13. Here there were marked concentrations of material belonging to a regional late Iron Age/early Roman tradition, exemplified by the E ware group ('Belgic' type wares), and most particularly E80 (grog-tempered fabrics), which was found almost exclusively in Trench 13 (Table 4.1). The same is true of many of the early calcareous fabrics such as C15, C22, C24, C32 and perhaps R77 (though this last fabric is not so clearly confined in date to the 1st century), which appear predominantly or only in Trench 13. The principal occurrence of these fabrics, as would be expected, was in contexts of Phase 2, but they are encountered in later phases. In the case of fabrics such as E80, C22, C24 and perhaps C15, such occurrences must be

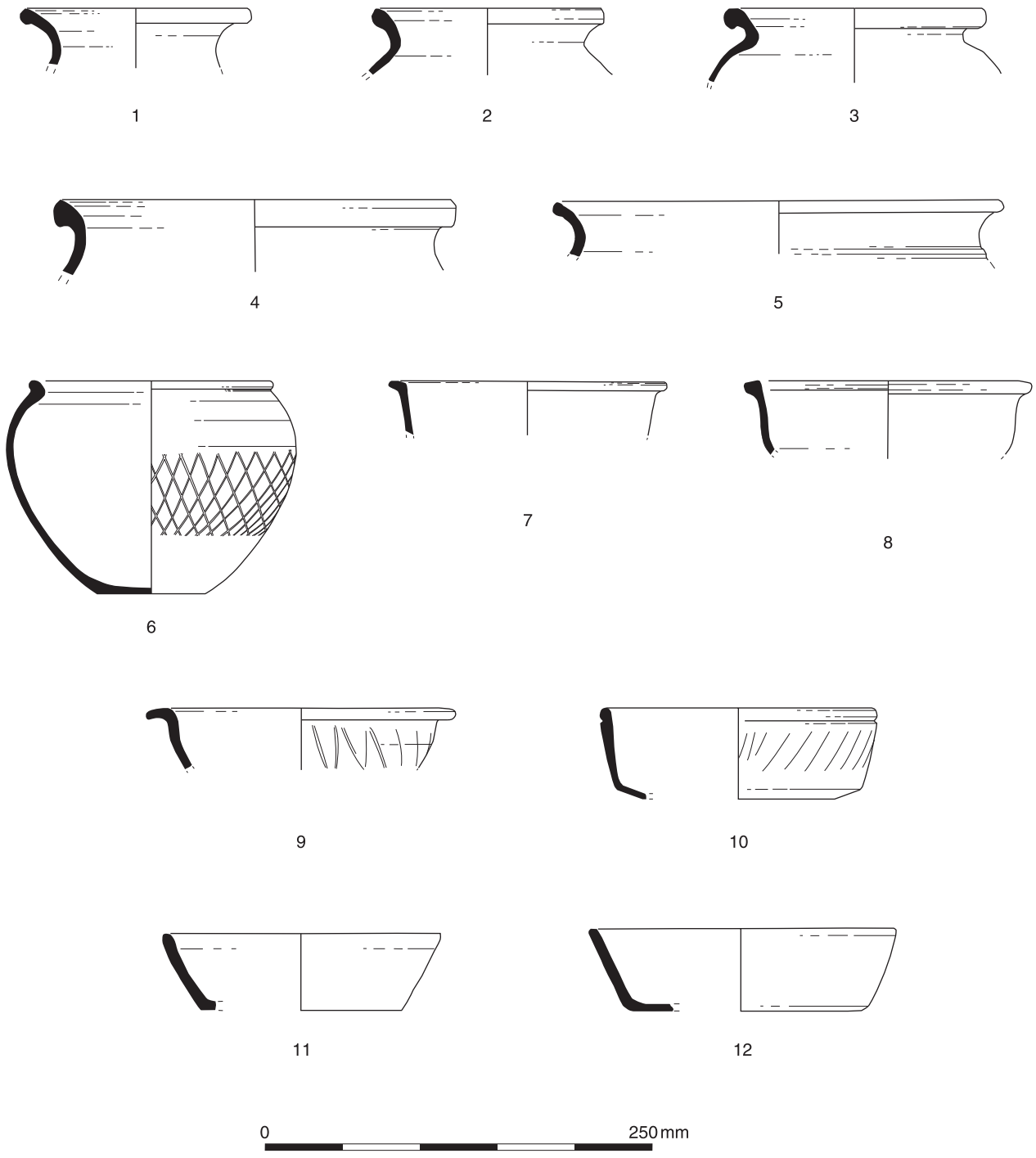


Fig. 4.5 Group 1 pottery from Phase 2d Ditch 2092

residual because none of these fabrics is likely to have remained in use after the late 1st century AD at the latest. E and C ware groups together accounted for 40% of the Phase 2 sherd total but only just over 5% of the material from Phase 3. In effect, as the pottery indicates, activity of Phase 2 was confined to the area of Trench 13.

Of the *c* 100 kg of pottery from Phase 2 contexts, just over 63 kg was fully recorded as a representative sample (Table 4.1). A wide range of fabrics is encountered in this assemblage, reflecting the duration of this phase into the early 2nd century. By this time a substantial component of the assemblage was formed by locally produced 'Romanised' oxidised and reduced coarse wares. A further significant element in the assemblage was black-burnished ware or black-burnished type ware. The occurrence of this material was at a level above what would be expected given that the very end of Phase 2 coincides with the time at which the widespread distribution of Dorset BB1 commences (ie *c* AD 120). In terms of vessel form, jars are by far the most prolific (81%); with quantities being significantly higher than in Phase 3 or 4 (Table 4.2). Bowls the next best represented (10.6%), while other forms are represented by very few examples.

It is clear that intrusive material is present in this phase. This is most obviously demonstrated by the presence of fabrics such as Oxford colour-coated ware (F51) which, while not in production before *c* AD 240, accounted for 1.1% of the sherds in Phase 2. Fine ware fabrics F52, F53 and F63, all of later date, were also present, albeit in small quantities. The intrusive material was generally from the tops of features (particularly ditches) reasonably assigned to Phase 2, but the fact that these uppermost fills were often not distinguished in excavation makes it impossible for them to be separated off from the other fills certainly of Phase 2 date. This factor almost certainly accounts for the presence of other 'late' fabrics and forms noted in this phase assemblage, amongst which some of the black-burnished ware should probably be placed. The problem is that the extent of the phenomenon cannot be quantified with confidence. In the specific case of black-burnished ware it is clear that some of this material was reaching sites such as Cirencester as early as the end of the 1st century AD (Rigby 1982b, 168), though a 'local' black-burnished ware (Cirencester fabric 5) was consistently more common there at that time. The latter, however, was used mainly for imitations of Gallo-Belgic wares (eg Cooper 1998, 327) and is specifically equated with the present fabric R34, so should not be what is in question here. The black-burnished ware fabric group, however it is interpreted, comprised a substantial 13.6% of sherds in Phase 2.

The problem raised by the identification of intrusive material in Phase 2 is exacerbated in relation to material which could have been contemporary in this phase, but might nevertheless have been intrusive from Phase 3 contexts. It is assumed here, however, that amphorae and early mortarium fabrics consistent with the date range of Phase 2 were genuinely present on the site at that time. Some Dressel 20 forms which could be dated from roughly the middle of the 1st century are present in Trench 13, although not stratified in contemporary contexts. Mortarium fabrics such as M11 and M12, both of which can date from the middle of the 1st century, were also present. It is notable that sherds of imported mortarium fabrics (M11, M12, M14-M16) are with a single exception confined to Trench 13 (though not, of course, all in Phase 2 contexts). This is consistent either with their arrival on the site in Phase 2 when activity was confined to this area, and/or with their association with the relatively high status focus established here in Phase 3. More reassuring is the fact that in Phase 2 contexts South Gaulish samian was twice as common as Central Gaulish material, though again some of the latter (and a single sherd of East Gaulish samian) was presumably intrusive. It is notable, however, that

Table 4.1 Summary quantification of major fabrics from fully recorded groups in Phase 2 (sherd count)

Major fabric group	*sherd no.*	*% of Phase 2*
Samian (S)	69	1.4
Fine wares (F)	71	1.4
Amphorae (A)	45	0.9
Mortaria (M)	18	0.4
White Firing Wares (W)*	177	3.6
White slipped wares (Q)*	50	1
Early 'Belgic type' wares (E)	1151	23.2
Oxidised 'coarse' wares (O)	514	10.3
Reduced coarse wares (R)	1364	27.4
Black-burnished wares (B)	678	13.6
Calcareous tempered wares (C)	833	16.8
Total	4970	100

* except mortaria

Table 4.2: Major vessel types in Phase 2 (RE)

	Rim equivalents (RE)	*% of Phase 2*
Flagons (B)	0.44	1
Jars (C)	36.29	82
Beakers (E)	0.04	0.1
Cups (F)	0.75	1.7
Tankards (G)	0.93	2.1
Bowls (H)	4.67	10.6
Dishes (J)	0.62	1.4
Mortaria (K)	0.09	0.2
Lids (L)	0.09	0.2
Unknown (Z)	0.31	0.7
Total	44.26	100

very little if any of the samian is necessarily pre-Flavian in date (see samian report for details, Digital section 3.2). Two other imported fine wares – namely Lezoux and Lyons (fabrics F41 and F42) were confined to Trench 13. Both these fabrics are present in minute quantities in the earliest phase. Apart from the diverse but numerically scarce range of genuine imports there are occasional copies of imported forms in local fabrics, such as a single example of a Hofheim type flagon in a white ware of unknown but presumably British provenance. Overall, however, Gallo-Belgic wares are conspicuous by their absence.

In the original phasing of the site a distinction was made between a late Iron Age phase and the earliest Roman phase, with activity in both confined to Trench 13 and the cut-off point between the two falling in the Flavian period. The issue of military ceramics formed part of this interpretative framework and was potentially linked to the introduction of Romanised building forms. With the redating of the end of Phase 2 to the early 2nd century the interpretation of aspects of the ceramic assemblage which might have military associations becomes even more difficult. Some such components have been mentioned above and include (regardless of the phase of deposition of the material) early Dressel 20 forms, some imported mortaria (for example with parallels at military sites such as Kingsholm) and Lyons ware. Local coarse wares such as Savernake ware are of course found in both military and civilian contexts, but one coarse ware form, the so-called 'honey jar' (classified here as a narrow mouthed jar, CC v), does have close military associations. Five certain examples of this form were recorded, all from Trench 13 (two from Phase 2 contexts and the rest from Phase 3). All were in oxidised or white-slipped fabrics. Good parallels from Cirencester and Kingsholm are definitely military in context and pre-Flavian on the basis of association with samian ware and other early types (Rigby 1982a, 184-5; Hurst 1985, 67-8; see Booth, Chapter 13) and there is no particular reason to doubt that this is the date of the Claydon Pike examples. In contrast with this indication, however, is the more or less complete dearth of pre-Flavian samian at Claydon Pike. Conventionally this would suggest that any sort of military presence here before that date was very unlikely. The potential ceramic indicators of a military presence are therefore contradictory in their chronological emphasis, with limited indicators consistent with such a presence in the pre-Flavian period, but lacking the expected contemporary samian ware and with no structural correlates. Thereafter, fabric and form types with demonstrable military associations cannot be distinguished from the remainder of the assemblage.

There is no meaningful indication of the chronological development of the pottery assemblage through Phase 2, partly because of contamination issues and partly because the assemblages from individual sub phases (defined on stratigraphic criteria) were insufficiently large to produce reliable data (figures in Digital section 3.2).

The ceramic assemblage does suggest that activity may have spread into other trenches during the later part of Phase 2. In Trench 29, for example, there are indications perhaps of low level activity (compared with Trench 13) with fewer fabric and form types represented. Fabric E39, which can be dated to the latter half of the 1st century, is well represented on Trench 29 – it appears to have a later date range than that of most of the other E wares – and an early beginning to activity in this area is also suggested by a relatively high proportion of South Gaulish samian, although the overall quantities are modest.

Figure 4.5 presents a selected group of Phase 2 pottery from Trench 13 context 2092, a cut of ditch 2502. A full catalogue of illustrated sherds can be found in Digital section 3.2.

Catalogue of illustrated pottery (Fig. 4.5)

1. O42, CC. 2092/2
2. R95, CD. 2092/A/2
3. R95, CD. 2092/2
4. R35, CD. 2092/1
5. O42, CD. 2092/1
6. B11, CH. 2092/1
7. R34, H. 2092/1
8. R34, HB. 2092/1
9. B11, I, with faint traces of acute angle lattice decoration. 2092/1
10. B11, JA, with faint traces of acute angle lattice decoration. 2092/A/2
11. W24, JA. 2092/A/2
12. R35, JA, with small hole drilled in base. 2092/1

Coins *by Cathy King*

Only nine coins came from Phase 2 contexts in the Longdoles Field, Claydon Pike, and seven of these must be intrusive. The remaining two comprise an As/dupondius of Domitian (AD 81-96) and a Republican denarius (152 BC), both from E 11. Out of the assemblage as a whole there were seven coins dating to the 1st century AD, with a further 19 that have a general 1st/2nd century date. Whilst certainly not as high as Somerford Keynes, this is a reasonable assemblage for a settlement of this period. Two silver Dobunnic coins were also recovered, but both were unstratified.

Metal and glass small finds (Figs 4.6-7)
by Hilary Cool

A total of 107 identifiable small finds came from Phase 2 contexts, with a further 25 from Phase 2/3 (Table 4.3). However, as with much of the material from Claydon Pike, some of these were obviously intrusive, while other items dating to this period were residual in the later phase contexts (see Digital section 3.4). Aside from building materials, it was

Table 4.3: Small finds from Phase 2 and Phase 2/3 according to functional category

Function	*Phase 2*	*Phase 2/3*	*Total*
Personal	12	4	16
Textile	1	-	1
Household	-	1	1
Writing	1	-	1
Building	72	14	86
Tools	-	1	1
Fasteners	5	1	6
Agriculture	1	-	1
Miscellaneous	15	4	19
Total	107	25	132

Table 4.4: Distribution of closely dateable finds (1st–mid 2nd century AD) across the trenches

Date range	*27*	*29*	*13*	*17*	*19*	*Total*
0-50	-	1	7	-	-	8
0-100	-	-	5	1	1	7
50-100	1	-	2	1	-	4
50-150	-	5	19	5	-	29
Total	1	6	33	7	1	48

personal items that formed the largest single finds category (12) from Phase 2, with brooches accounting for 58% of the objects. Personal ornaments can be a very good indicator of how people present themselves to the world. Those which typologically belong to Phase 2 suggest quite a conservative rural society. The brooches are on the whole typical of what is to be expected in a native population in this region as many are local forms. There are occasional examples of brooches from more distant sources such as the Kragenfibel (1045) and the Birdlip brooch (1279) but these are in a distinct minority. Following the Conquest the community was happy to adopt certain new types but only where those types filled pre-existing needs. Thus Hod Hill brooches were adopted but the women did not adopt new hairstyles nor did the community apparently embrace new styles of footwear. Other Phase 2 personal items comprised two finger rings, two beads and a hair pin.

On the whole the material culture that can be associated with this phase of activity is relatively modest. Apart from personal ornaments the only functional categories represented are fasteners, textile working, writing and agriculture. It is possible that the population were using more objects than the figures suggest as it should not be forgotten that 15% of the objects considered in this report were unstratified. There is nothing in that material, however, that considered from a typological point of view must belong to this phase of activity. As is to be expected Trench 13 has the largest number of 1st- century items but the figures for Trench 17 were also quite significant (Table 4.4). They suggest activity here prior to the Phase 3 reorganisation of the landscape.

As with the other finds, there are problems in exploring the use of vessel glass at Claydon Pike using the phased contexts because quite a high proportion of the more closely dateable material appears to be either intrusive or residual. The most common 1st century form in the assemblage is the blue/green pillar moulded bowl, of which eight fragments were recovered, none stratified earlier than Phase 3. Two examples of the typical glass cup of the mid 1st century (the Hofheim cup) were present in Trench 13, while an unguent bottle fragment from a Phase 3 context may also belong to this period.

The common Flavian range of vessels consisting of globular and conical jugs, collared jars and tubular rimmed bowls is represented by three examples, all probably of the forms that went out of use in the first quarter of the 2nd century. A number of blue/green square and cylindrical bottles came from the site, which become common in the later 1st century AD. The cylindrical form went out of use during the early 2nd century so was probably in use during Phase 2, while the square form continued in use until the 3rd century AD so could belong to either Phase 2 or 3.

Figures 4.6-7 present a selected group of small finds either from Phase 2 contexts or else dating to this period. A full illustrated catalogue can be found in Digital section 3.4.

Catalogue of selected small finds: Phase 2
Brooches (Fig. 4.6)

1. *1765 SF 1045 Kragenfibel.* Copper alloy. In general known from the mid 1st century BC but most are found in contexts of the end of the 1st century BC and into the 1st century AD. This example is unusual because it appears to be hinged and this is only encountered rarely (Hattatt 1987, 31), Feugère (1985), 245 type 10. Length 63 mm, width spring cover 11 mm. Trench 13, Phase 2
2. *U/S SF 193 Colchester.* Copper alloy. Hattatt (1989), 24. Early to mid C1. Length 78 mm, spring width 23 mm. Trench 13
3. *687 SF 635 Strip bow.* Copper alloy. Hattatt (1985), 68. Early to mid C1. Length 53 mm, width of hinge 14 mm. Trench 13, Phase 3
4. *U/S SF 1279 Birdlip.* Copper alloy. Hattatt (1989, 20) and Mackreth (1998, 131). Early to mid C1. Length 61 mm. Trench 17
5. *U/S SF 646 Aesica.* Copper alloy. Hattatt (1987, 54). Mid C1. Length 39 mm, width of spring cover 19 mm. Trench 13
6. *U/S SF 1430 Colchester Derivative.* Copper alloy. Hattatt (1987, 88-92). Mid C1 into C2. Present length 35.5 mm, width spring cover 16.5 mm
7. *1200 SF 674 Light Polden Hill.* Copper alloy. This is a

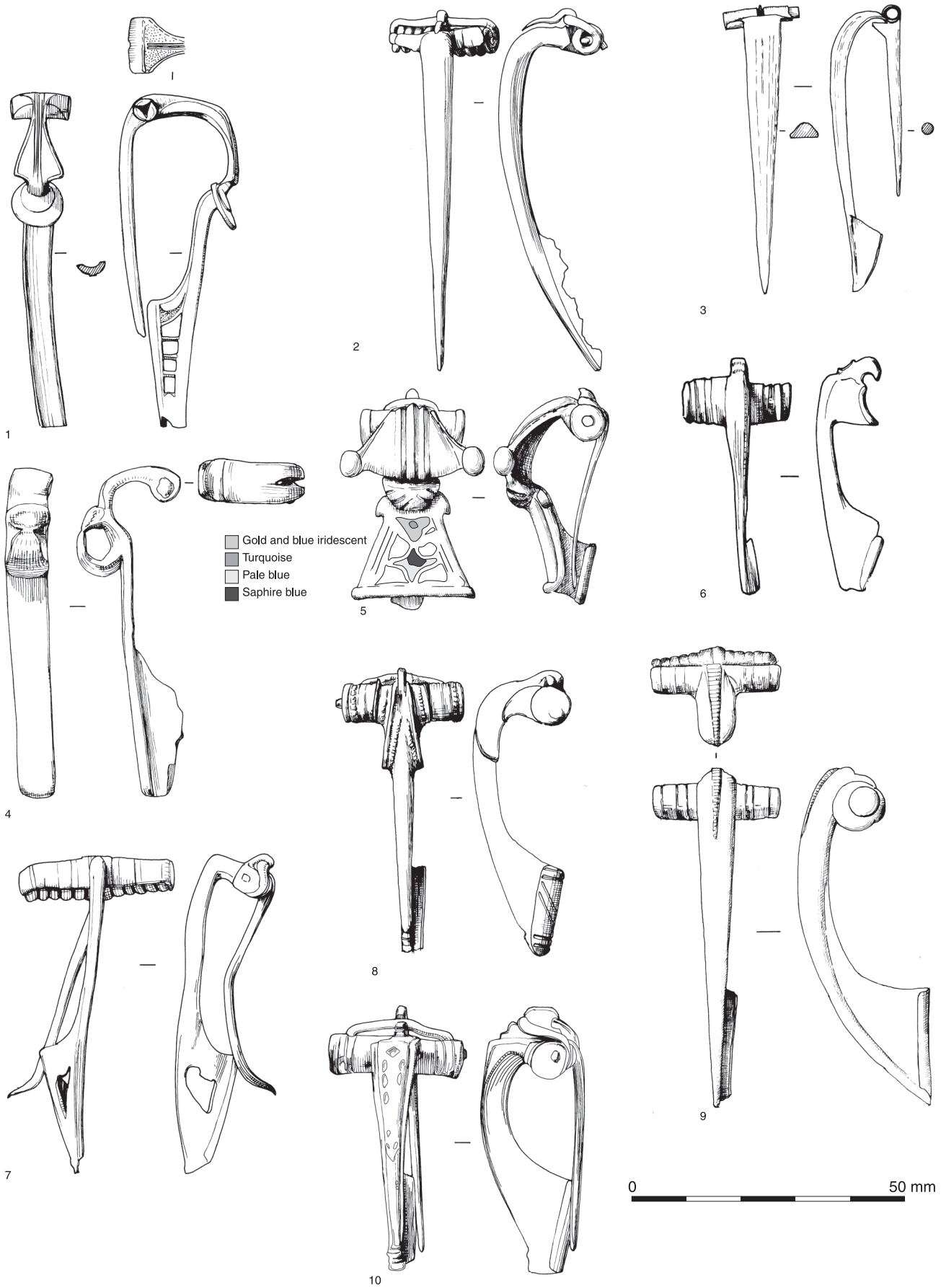


Fig. 4.6 Phase 2 brooches

mid 1st-century form with a distribution stretching from South Wales through the middle Severn Valley to Wiltshire. Length 59 mm, wing width 29 mm. Trench 17

8. *871 SF 733 Polden Hill.* Copper alloy. A lower Severn Valley type, see Hattatt (1987, 102). Later C1 – mid C2. Length 52.5 mm width spring cover 22 mm. Trench 13
9. *832 SF 755 Polden Hill.* Copper alloy. Hattatt (1987, 96). Second half C1. Length 62 mm, width wings 24 mm. Trench 13, Phase 2
10. *573 SF 183 Polden Hill.* Copper alloy. Mid C1 – into C2. Length 48 mm, width wing 25 mm. Trench 13, Phase 2

Other Phase 2 small finds (Fig. 4.7)

11. *U/S SF 103 Bangle.* Glass. 'D'-sectioned. Translucent deep blue with four translucent blue and opaque white right-hand twist cables – two placed centrally and one on each side. C1. Section 11 x 7 mm, Length 27 mm. Trench 13
12. *1627 SF 855 Bead.* Glass. 'D'-sectioned annular. Translucent deep blue. Outer surface decorated with bands formed from one strand of translucent deep blue and one strand of opaque white cable twisted together and marvered into surface. Diameter 33 mm, Thickness *c* 19 mm, Perforation diameter 12mm. C1 BC– early C2. Trench 13, Phase 2

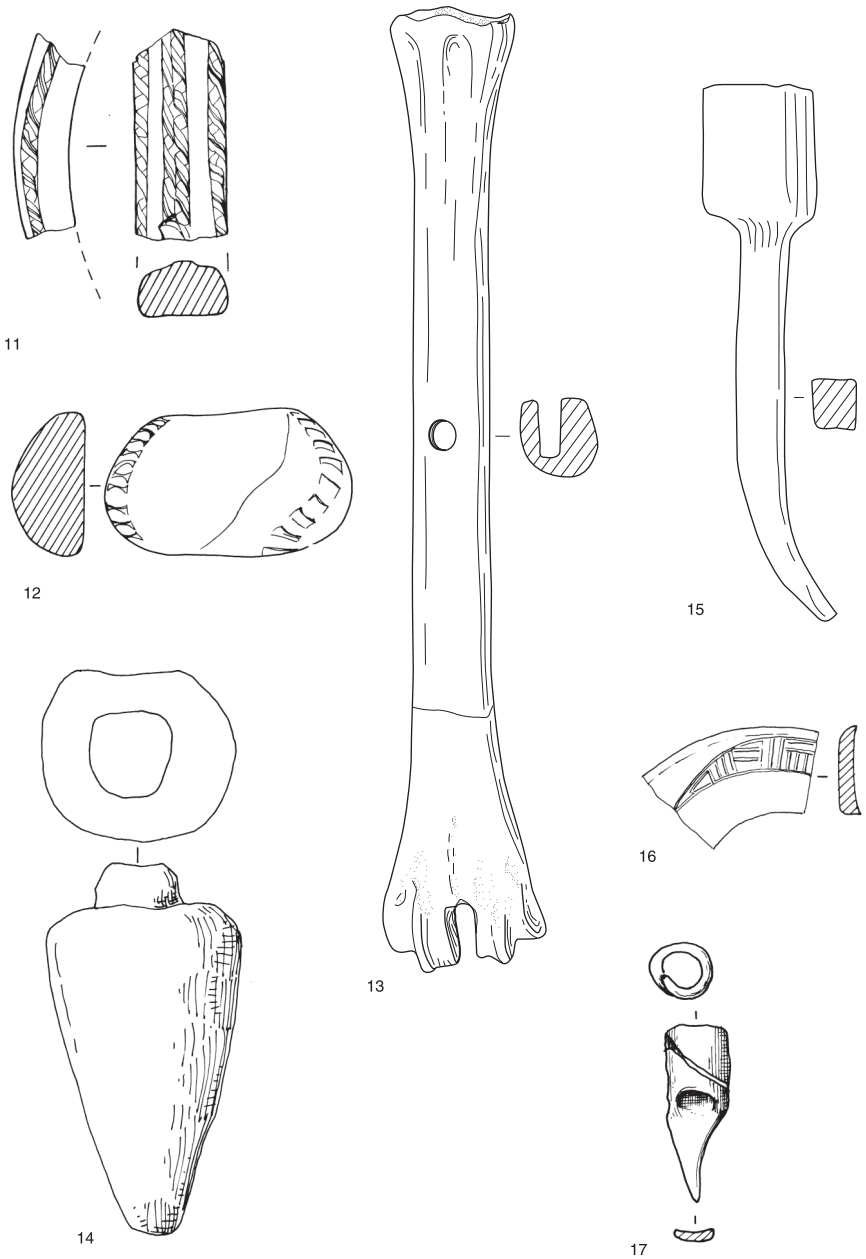


Fig. 4.7 Other Phase 2 small finds

13. *859 SF 846 Bobbin.* Bone. Ovicaprid tibia or metapodal? Centrally perforated. In two joining fragments. Probably a textile tool, see Greep (1998, 283). Late Iron Age/early Roman. Length 125 mm. Trench 13, Phase 2
14. *809 SF 5498 Plumb bob.* Iron. Trench 13, Phase 2
15. *643 SF 401 Retaining pin.* Iron. Square-sectioned shank with slightly bent end; square expanded block. Length 76 mm. Trench 13, Phase 2
16. *U/S SF 2775 Belt fitting.* Copper alloy. Edge of cast circular disc, with bevelled edge; upper face retains part of scroll end infilled with basket work matting. The decoration on this fragment is very similar to that on Celtic mirrors (see for example Fox (1958, 95, fig 60)) but the original diameter indicates it cannot have come from such an item. This decorative pattern is very rare on post-conquest metalwork and so a late pre-Roman Iron Age date would be appropriate. Late C1 BC/early C1 AD. Dimensions 23 x 12 mm, thickness 2.5 mm, original diameter *c* 60 mm. Trench 13.
17. *2092 SF 5323 Goad.* Iron. Trench 13, Phase 2

Worked stone *by Fiona Roe*

The only objects of worked stone from Phase 2 contexts are two whetstones, a single spindlewhorl, and an unshaped slab of Oxford clay with some evidence for wear on one flat side, possibly used as a smoother. One of the whetstones is made of Kentish Rag, which is likely to have come from around Maidstone, while the other is a fine-grained, red, slightly micaceous sandstone from the Forest of Dean. It is in the form of a regular rectangular block worn along the sides. No quernstones were found associated with this phase, although some of the unstratified examples could well belong to this period. Another Kentish rag whetstone came from Phase 2/3 contexts.

Fired clay *by Alex Smith*

A total of 124 fragments of fired clay were recovered from Phase 2 contexts in Trench 13, although 98 of these are featureless fragments. The remainder comprise 15 oven fragments and an oven plate, 6 pieces of daub, 2 crucible fragments, a piece of briquetage and a possible loomweight. There appears to have been a slight concentration of oven fragments in the area of SE 5 to the north-east of the site (Fig. 4.2), where there is also the greatest concentration of iron slag. This seems to have been the industrial focus for the site (see discussion below and Fig. 4.8). The daub fragments could well have come from domestic structures and many of the undiagnostic and unstratified pieces of fired clay could also have come from buildings that have otherwise gone unrecognised (see Discussion below).

THE ENVIRONMENT

Full environmental reports from this phase of Claydon Pike can be found in Digital section 4.

Animal bone *by Naomi Sykes*

All of the Phase 2 animal bone remains were recovered from Trench 13 of the Longdoles Field site at Claydon Pike (Table 4.5). Preservation is better than for the middle Iron Age material – of the 6455 specimens recovered, 34% (2200 fragments) are identifiable to taxon. Most of the remains came from domestic mammals (cattle, caprines, pigs, equids, dogs and cat), with domestic birds making up 1% of the identifiable material. Although a small range of wild species was identified, most of the animals (field vole, frog, blackbird and raven) probably represent commensals. It is possible that the weasel, quail and pigeon were deliberately hunted or trapped by the inhabitants but the two red deer specimens, both being antler, need not represent the exploitation of the living animal, since they could have been collected when shed. It is noteworthy that a donkey specimen – a metacarpal from context 532 – was amongst the identified remains. This species is not native to Britain and is believed to have been imported whilst Britain was under Roman occupation (Luff 1982). Donkey remains have been recorded on a small number of Romano-British sites (Ewart 1911; Noddle 1979; Hamshaw-Thomas 1993; Bendrey 1999) but the specimen from the Longdoles Field site is the earliest example recorded to date.

Nearly all (99.7%) of the remains derived from ditches, gullies or pits (Table 4.5). Some inter-feature variation in taxa ratios is apparent, with caprines being better represented in pits and gullies (42%) than in the ditches (30%), the latter deposits being dominated by cattle remains (45%). These patterns are consistent with the findings of Maltby (1985a) and Wilson (1999). They argued that, due to inter-taxa variation in carcass processing and bone preservation, larger animals are better represented at the settlement peripheries, whereas the remains of smaller animals are more numerous in central zones of activity. Despite these inter-feature differences, each context demonstrates broadly similar patterns. Aggregated results show that cattle (47%) are the dominant taxon followed by sheep/goat (36%), horse (9%) and then pig (8%). Again, these ratios conform to regional trends, supporting the idea that the Upper Thames Valley was suited to cattle husbandry. The slight rise in cattle frequency also fits the national evidence for a mid to late Iron Age increase in the representation of this taxon (Hambleton 1999).

Rise in cattle frequency was accompanied by a considerable drop in the average age of cattle slaughter. Dentition-based cull-patterns show that over 50% of the herd were killed before 15-26 months of age, a situation suggestive of meat and leather production. Under such a regime it would be expected that most of the slaughtered young individuals were surplus bullocks, an idea supported by the sexing information, which indicates a dearth of adult males and a preponderance (90%) of females. Sheep/goat cull-patterns

Table 4.5 Quantification of species in Phase 2 by feature type

	Ditch		*Gully*		*Pit*		*All contexts*	
	n	%	*n*	%	*n*	%	*N*	%
Cattle	705	44.93	157	43.13	101	39.45	965	43.86
Sheep	469	29.89	151	41.48	103	40.23	727	33.05
Pig	126	8.03	30	8.24	12	4.69	173	7.86
Horse	142	9.05	17	4.67	27	10.55	186	8.45
Dog	9	0.57	4	1.10	0	0.00	13	0.59
Domestic fowl	6	0.38	0	0.00	2	0.78	8	0.36
Other bird*	13	0.83	3	0.82	11	4.30	27	1.23
Donkey	0	0.00	1	0.27	0	0.00	1	0.05
Cat	1	0.06	0	0.00	0	0.00	1	0.05
Frog	94	3.02	0	0.00	0	0.00	94	4.27
Field vole	2	0.13	0	0.00	0	0.00	2	0.09
Weasel	0	0.00	1	0.27	0	0.00	1	0.05
Red deer	2	0.13	0	0.00	0	0.00	2	0.09
Total	1569	100.00	364	100.00	256	100.00	2200	100.00
Indet.	3115		712		420		4255	
Total	4684		1076		676		6455	

* Includes duck, blackbird, pigeon, goose and raven

indicate a move towards the maintenance of older animals. Few individuals (8%) were slaughtered by 6-12 months and a greater percentage (32%) surviving beyond 3-4 years of age, indicating management for secondary products, such as wool and manure. Insufficient ageing data were available to allow consideration of pig mortality profiles but it is clear that most individuals were slaughtered before 21-27 months, unsurprising considering the animals status as a meat animal. Pigs were the only Phase 2 domesticate to be represented by foetal specimens, indicating that this animal at least was being raised on site. Ageing evidence for the equids suggests a situation opposite to that for pigs, with no animals under the age of 3-5 years being represented. It must be assumed that their main role was as transport since there is no indication that their flesh made an important contribution to the diet. As in the Phase 1 assemblage, horse remains were not processed to the same extent as those of the other domesticates, with only two specimens showed skinning marks. Because many of the horse bones were complete it was possible to estimate withers height: eight specimens produced a shoulder height range of 1.23 m-1.57 m and an average height of 1.32 m. A 100 mm increase in average height suggests that some stock improvement had occurred since Phase 1. Again this contradicts Harcourt's (1979) theory that individuals were selected from feral herds. Metrical data were also available for Phase 2 cattle and caprines. Their size is comparable to animals from other contemporary sites in the region, with cattle having an average wither height of 1.09 m and sheep/goat 0.58 m.

Charred plant remains *by Vanessa Straker, Martin Jones and Ann Perry*

A total of 40 samples were analysed from 10 circular gullies, 17 ditches, 3 pits and 1 layer which comprised what was thought to be a nucleated settlement, though no directly structural remains were identified from it (Table 4.6). This may be reflected in the very small assemblages and low concentration of macrofossils, with only the assemblage from gully 1645a of more than 50 items. Cultivated plants include emmer (*Triticum dicoccum*), spelt (*Triticum spelta*) and breadwheat (*Triticum aestivum* sl) and the wild species are all from open and disturbed habitats. They include field madder (*Sherardia arvensis*), sheep's sorrel (*Rumex acetosella* agg.), and brome (*Bromus*, probably *B. mollis* or *secalinus*), clover (*Trifolium* sp.), and self heal (*Prunella vulgaris*). However, the range of wild plants is smaller than in both the middle Iron Age and later in the Roman period. The impression, with the exception of gully 1645 where grain predominates, is of occasional discarding of waste from the later stages of crop processing where small chaff such as glume bases and weed seeds predominate.

Waterlogged plant remains *by Mark Robinson*

Four waterlogged samples were investigated from the bottoms of early 1st- to early 2nd-century AD enclosure ditches (E 16/17) at Longdoles Field, Claydon Pike (samples 577/A, 577/N/4, 1528/A/3, 1704/C15). Other samples came from a ditch just to the south of these enclosures (sample

Table 4.6: Phase 2 charred plant taxon presence by phase

		Phases	*2 (Gen)*	*2A*	*2B*	*2C*	*2D*
		No. of samples	*17*	*2*	*4*	*13*	*4*
Crops							
Triticum cf *dicoccum* Schübl.	emmer type	Grain	1 (2)	0	0	1 (1)	1 (1)
Triticum dicoccum	emmer wheat	glume bases	0	0	0	2 (2)	1 (1)
Triticum dicoccum	emmer wheat	Spikelet forks	0	0	0	1 (1)	0
Triticum cf *spelta* L.	spelt type	Grain	2 (4)	0	2 (3)	0	1 (2)
Triticum spelta L.	spelt wheat	glume bases	5 (10)	0	0	2 (3)	0
Triticum cf *dicoccum/spelta*	emmer/spelt	Spikelet forks	0	0	0	1 (1)	0
Triticum cf. *aestivum*	bread wheat type	Grain	3 (4)	0	0	1 (1)	0
Triticum sp.	wheat	Grain	6 (45)	2 (1)	1 (1)	6 (9)	3 (5)
Triticum sp.	wheat	Sprouted grain	0	0	0	0	2 (7)
Triticum sp.	hulled wheat	glume bases	6 (22)	1 (1)	3 (5)	3 (11)	0
Triticum sp.	hulled wheat	Spikelet forks	1 (1)	0	0	0	0
Triticum sp.	free threshing wheat	tough rachis internodes	0	0	0	1 (1)	0
Triticum/Hordeum sp.	wheat/barley	Grain	1 (1)	0	0	2 (2)	0
Hordeum sp.	barley	Straight grain	5 (9)	0	2 (2)	2 (2)	0
Hordeum sp.	barley	Twisted grain	2 (4)	0	0	0	3 (3
Hordeum sp.	barley	Indeterminate grain	9 (49)	1 (1)	3 (6)	6 (11)	3 (5)
Hordeum sp.	barley	hulled grain	0		0	2 (2)	0
Hordeum sp.	barley	Internodes	0	0	0	2 (10)	0
cf *Avena* sp.	cf oats	Grain	0	0	1 (1)	0	0
Avena sp.	oats	Grain	2 (2)	0	0	0	1 (1)
Avena sp.	oats	awn fragments	1 (1)	0	0	0	0
Avena/Bromus sp.	oats/brome	Grain	0	0	1 (2)	0	0
Cereal sp.	cereal indet.	Grain	2 (16)	1 (1)	2 (2)	1 (1)	0
Cereal sp.	cereal indet.	rachis fragments	1 (1)	0	0	2 (2)	0
Wild species		Habitat range					
Raphanus raphanistrum L.	wild radish, charlock	Da	0	0	0	1 (0)	0
Caryophyllaceae	campion family		1 (1)	0	0	0	0
Chenopodiaceae/ Caryophyllaceae			0	0	1 (1)	0	0
Chenopodiaceae	goosefoot family		0	0	0	1 (2)	0
Chenopodium sp.	goosefoot	V	1 (1)	0	0	0	0
Chenopodium rubrum L.	red goosefoot	D Da					
Leguminosae	clover, pea family	V	1 (1)	0	0	2 (3)	0
Vicia/Lathyrus sp.	vetch, tare	Da M G S W	0	0	0	3 (3)	0
Lathyrus/ Pisum	vetch, pea	Da, G C	2 (7)	0	0	0	0
Medicago cf *lupulina* L.	cf black medick	G	0	0	1 (1)	0	0
Trifolium sp.	clover	V	1 (2)	1 (2)	0	1 (2)	0
Trifolium cf. *pratense* L.	red clover	G	1 (1)	0	0	0	0
Fallopia convolvulus (A.) Löve	black bindweed	Da	1 (1)	0	0	0	0
Rumex sp.	sorrel, dock	Da G M S W	3 (3)	0	1 (1)	2 (2)	1 (1)
Rumex acetosella agg.	sheep's sorrel	Da G	4 (4)	0	0	0	0
Euphrasia sp./*Odontites verna*	eyebright, red bartsia	Da G	2 (2)	0	1 (2)	0	1 (1)
Lycopus europaeus L.	gypsywort	V (wet)	0	0	1 (3)	0	0
Prunella vulgaris L.	self heal	G	0	0	0	1(1)	0
Plantago major L.	great plantain	Da G	1 (1)	0	0	0	0
Plantago lanceolata L.	ribwort plantain	Da G	1 (1)	0	0	0	0
Sherardia arvensis L.	field madder	D Da	3 (3)	1 (1)	0	1 (1)	0
Galium sp.	bedstraw	Da M G S W	3 (5)	0	0	0	0
Galium cf. *aparine* L.	cleavers	Da V	2 (6)	0	0	1 (2)	0
Cyperaceae	sedge family	A M G	2 (2)	0	0	2 (2)	0
Eleocharis sp.	spike rush	A M G	0	0	0	0	0
Eleocharis palustris/uniglumis	spike-rush	A M G	1 (1)	0	2 (2)	1 (1)	0
Carex sp.	sedge	V (mainly wet)	3 (5)	0	1 (1)	1 (1)	0
Carex spp.	sedges	V (mainly wet)	0	0	1 (1)	0	0
Gramineae	grass family		2 (2)	1(1)	1 (1)	3 (10)	1 (1)
Gramineae culm node	grass family		1 (1)	0	0	0	0
cf. *Poa* sp.	cf poa	G					
Poa sp.	poa	G	1 (1)	0	0	1 (2)	0
Bromus S. *Eubromus*	brome, chess	Da G	2 (2)	0	0	3 (9)	0

2490), an isolated enclosure (sample 6) and a waterhole or sump on the floodplain in the Warrens Field site (sample 962/A), which may have been early Roman in date. The features all seem to have held stagnant water which supported various water plants such as *Ranunculus* S. *Batrachium* sp., *Nasturtium officinale*, *Apium nodiflorum* and *Lemna* sp., small water beetles particularly *Helophorus* cf. *brevipalpis* and *Ochthebius minimus*, and slum aquatic molluscs. The waterlogged plant and invertebrate remains which had their origins beyond the limits of these features mostly seem to have entered the deposits via various natural agencies although Sample 1528/A/3 also contained imported plant material. The enclosures were sufficiently small that there was a strong element within the assemblages reflecting conditions beyond the immediate environs of these features as well as that reflecting more local conditions.

The 1st/early 2nd-century AD enclosures at Claydon Pike had much in common with Iron Age settlements on the Thames floodplain and will be compared with them. The enclosures were used for the herding of domestic animals that were grazed on the floodplain and islands of gravel terrace. The increasing wetness of the floodplain was probably exacerbated by the trampling of the stock impeding the drainage of the soil even on the areas of gravel terrace. Similar conditions, of ill-drained pastureland with rush tussocks and disturbed areas with nutrient-rich mud supporting *Chenopodium rubrum*, *Rumex maritimus* etc also existed around Iron Age enclosures elsewhere on the Thames floodplain at Port Meadow and Farmoor Enclosure 3 (Lambrick and Robinson 1988, 65-71) as well as nearby at Thornhill Farm (Robinson 2004). The evidence from the dung beetles does not indicate which species of domestic animal were grazed at Claydon Pike. However, wet conditions on the site and the presence of the snail *Lymnaea truncatula*, which is the intermediate host of the sheep liver fluke, would suggest that it is more likely that cattle or horses were the main stock rather than sheep. This is corroborated by the generally high proportion of cattle remains within the faunal assemblage (see Sykes above).

The Coleoptera provide little evidence of the presence of human settlement or buildings on the site. However, the 'intensity' of human occupation on other Iron Age sites that have been investigated in the Upper Thames Valley was insufficient to be reflected by the beetle evidence. There was no evidence that the enclosures experienced flooding during the late Iron Age or early Roman period. The islands would therefore have been suitable for permanent habitation. In this way Claydon Pike is more similar to Port Meadow, where the Iron Age settlements were also on top of gravel islands on the floodplain, rather than Farmoor, where the settlements were on the floodplain and experienced flooding. However, the frequent realignments shown by the enclosure ditches and the absence of any more permanent boundaries in the form of hedges suggest that the life of each phase of an enclosure was short.

A very small quantity of waterlogged spelt wheat chaff was identified from the 1st-century AD deposits, but the carbonised plant remains provide better evidence for the use of cereals on the site. It is possible that they had been imported from elsewhere. Bracken was brought to the site, perhaps for use as bedding. While it is by no means certain what the bracken was used for, the importation of bracken seems to have been a normal activity on Iron Age sites in the Upper Thames Valley (eg Robinson 1981, 261). Unlike the subsequent Roman phases of the site, there was no evidence for horticultural crops from these samples. This too seems usual for Iron Age sites in the region. However, various wild plants were present which could have been used as green vegetables, for example water cress (*Nasturtium officinale*).

DISCUSSION *by Alex Smith*

The establishment of a settlement in the Longdoles Field site at Claydon Pike in the early 1st century AD was part of a regional pattern of expansion that has been widely observed in the region (see Chapter 16; Lambrick 1992; Henig and Booth 2000). At sites such as Gravelly Guy (Lambrick and Allen 2004), Old Shifford Farm (Hey 1995) and Thornhill Farm (Jennings *et al.* 2004) settlements were either established or re-established during this period, sometimes succeeding earlier settlements. In the case of Claydon Pike, as at Thornhill Farm, there may well have been a chronological gap between the abandonment of the middle Iron Age site and establishment of the later Iron Age settlement, although this may in part be because of the difficulties in ceramic dating (see Chapter 3).

Interpretation of the Phase 2 settlement at Claydon Pike is fraught with difficulties, primarily because of the lack of many coherent stratigraphic sequences, together with an unquantifiable contamination of finds from later phases. Nevertheless, the quantity and quality of data is sufficient to be able to allow some detailed analysis of settlement form, development and function, especially when viewed alongside the contemporary pastoral site at nearby Thornhill Farm.

Settlement organisation and development

The earliest phase of activity at the Longdoles Field site has been divided into four sub-phases, ranging approximately from the early 1st century AD to the early 2nd century AD (Fig. 4.3), although nowhere is there a complete and coherent structural sequence. Most activity during this phase was confined to Trench 13, which was the highest gravel island in the area, and therefore the most suitable for permanent habitation. The earliest features on the site (Phase 2a), as defined both stratigraphically

and by ceramic dating, are mainly confined to the northern and north-eastern areas, and comprise a number of circular and linear gullies. Fired clay from these features does suggest the presence of structures, although these cannot be discerned archaeologically (see 'Domestic zone' below). It is likely that around the middle of the 1st century AD (Phase 2b), the settlement expanded to cover most of Trench 13, probably along with further areas immediately to the east and south, which are shown as cropmarks (Fig. 4.1). It is in this sub-phase that there is a move to substantial enclosures and sub-enclosures that bear striking similarities to those at Thornhill Farm, which are of a similar date. Both the Thornhill Farm and Claydon Pike enclosures were intensively redefined, which suggests that they were spatially limited to areas of higher ground which were more free draining and not prone to flooding. The life of each phase of enclosure was seemingly quite short, and as there appear to have been no more permanent boundaries (eg hedges), it was probably not an ideal site, despite the lack of flooding. The Claydon Pike enclosures were generally confined to the eastern part of the trench, although during the following sub-phase (2c) they did spread further west (E11, E16 and E17). It would seem that only a maximum of three enclosures would have been in existence at any one time.

The western limits of the settlement appear to have been originally defined by a number of sub-enclosures (SE 2, SE 3 and SE 4), which were all recut many times (Fig. 4.2). In the latter part of this phase (2c and 2d; Fig. 4.3), there were also a series of long linear boundaries running along the length of this western side, including substantial ditch 2502, which was stratigraphically the latest feature of this phase. It ran along the edge of the lower lying area between the main trenches, on a very similar alignment to the Phase 3 boundaries, thereby providing one of the few structural indications of continuity. Also belonging to the later stages of Phase 2 were a number of substantial ditches (643, 634) running southwards, possibly towards part of the triple ditched boundary, lying *c* 70 m distant (Figs 4.1 and 4.3). Although the dating of these features is far from secure, they may represent a trackway leading from the south into the heart of the late Iron Age/early Roman settlement.

Activity areas within the settlement (Fig. 4.8)

The identification of specific activity areas is made difficult by the stratigraphic and taphonomic problems already mentioned (see above). Additionally, there are many complicating factors concerned with how artefacts and ecofacts ended up in the archaeological record, in particular the differentiation between primary (discarded at its location of use) and secondary (material removed from location of use) refuse (Schiffer 1972). The general paucity and condition of finds from this phase of Claydon Pike ensure that this differentiation is not always that evident. Nevertheless, it does appear that – aside from metalworking debris – most find types exhibited little evidence for specific spatial patterning that might suggest 'structured deposition' (Hill 1995), and it therefore seems that they were probably deposited close to their place of use. In general, the overall distribution of archaeological features and finds strongly suggests that there were a number of activity areas which relate to different aspects of life within the settlement. In particular, these are concerned with domestic, industrial and agrarian activities.

Domestic focus

The definition of domestic zones is dependent upon identifying specific groups of finds or 'tool kits', along with – if possible – supporting structural features. Unfortunately, the Phase 2 settlement at Claydon Pike has very little evidence for actual domestic structures, although this is a fairly typical situation for this period within the Upper Thames Valley, presumably associated with a change in construction techniques (Henig and Booth 2000, 82; Allen 1990, 81). Meadows (2001, 58) has recently reiterated how this lack of evidence for actual buildings has had a direct effect upon the way 'households' in the region can be defined in the archaeological record. It is important that in the absence of the houses themselves, all other evidence of habitation is taken into account, especially the deposition of material culture within features within and around the settlement. The primary 'tool kit' for domestic activity would seem to be pottery, animal bone and items of personal adornment (see 'material culture' below), and as a group these do show some distinctive distribution patterns within the Phase 2 settlement at Claydon Pike. Whilst pottery and animal bone were recovered from most features on site, there were greater concentrations in central and southern areas, suggesting that throughout most of this phase, domestic activity was apparent in these areas (see Fig. 4.8). There is slight evidence for differentiation between the two find types, with 35% of animal bone coming from pits and gullies, as opposed to just 13% of pottery, most of which was found in ditches. This may in part be due to the apparent redeposition of some material within certain features at the end of the phase (see below), although it is possible that certain organic waste was disposed of differently.

Of particular significance with regard to finds distribution was a group of pits and gullies within the central part of the trench, which contained comparatively large quantities of animal bone and pottery, especially to the south of curving gully 1765 (Fig. 4.2). This gully, along with an arc of pits just to the north, defined an open circular area, and provides the best evidence for a domestic structure within this phase. A rare late Iron Age brooch (Fig. 4.6, no. 1) and a small quantity of pottery and animal bone were recovered from this feature, but in general it seems to have been kept clear of refuse,

with the majority of such material seemingly being deposited immediately to the south. The small amount of fired clay daub from this phase is enough to suggest the presence of buildings, but cannot be specifically associated with this feature. Two other ring gully features (506 and 1645) of similar dimensions (*c* 8-9 m dia) were located to the north (Fig. 4.2), and it is possible that these also represent structures of some kind, although they do not have such a high concentration of domestic debris in the vicinity.

Two of the larger groups of domestic material within Phase 2 derive from E16/17 and the long western boundary ditch 2502 (Fig. 4.2). This not only includes substantial quantities of pottery and to a lesser extent animal bone, but also many of the 'domestic' small finds from this phase (vessel glass and personal items). It is uncertain if this represents a genuine pattern of primary discard, especially as most came from spreads in the upper layers, and probably represents material that was redeposited just prior to the structural developments of Phase 3, or even Phase 3 material itself. This lack of primary association seems even more likely when it is considered that most of the other large enclosures and western boundary ditches contained very little domestic refuse, and these features are not thought to be directly connected with occupation.

The evidence points to the main area of occupation at the site lying within the central western part

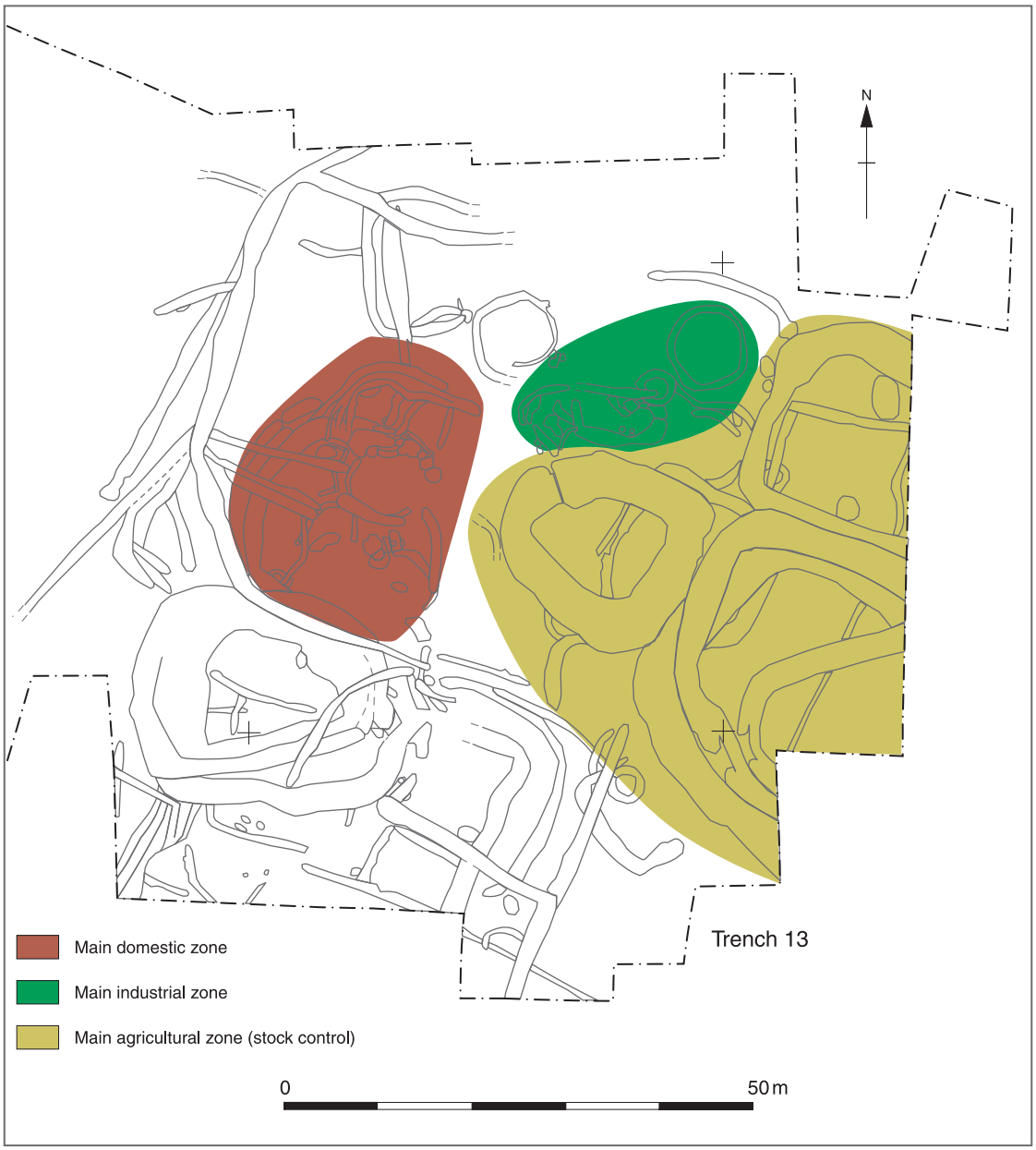


Fig. 4.8 Main functional zones within Phase 2 site

of Trench 13 (Fig. 4.8). Further domestic zones may well have existed further north, perhaps associated with the earliest occupation on site, and possibly also further south, where there were more pits and gullies. Unfortunately, a more detailed distribution analysis is very difficult due to the overall small number of stratified objects and the apparently high level of residuality.

Industrial focus

A far clearer picture emerges for the distribution of industrial debris within the settlement. This material comprises iron smithing slag and fired clay oven fragments, and is concentrated within a group of pits and gullies in the north-eastern part of the site, bounded to the south by Sub-enclosure 5 (Fig. 4.8). One of the larger ring gullies (506) was located just to the north of these features and may represent an associated structure (Fig. 4.2). None of these features can be readily assigned to any specific sub-phase within Phase 2, and the material is not of sufficient quantity to suggest that metalworking activity was occurring on anything more than a very low scale, as would be expected for a farmstead of this type. Nevertheless, it is clear that this activity was deliberately segregated from the main domestic focus, and was towards the periphery of the settlement. This situation was mirrored at the late Iron Age-early Roman settlement at Gravelly Guy (Lambrick and Allen 2004).

Agrarian focus

The most visually dominant features of the Phase 2 settlement comprised the large intensively redefined sub-rectangular enclosures, most of which were located to the east of what is presumed to have been the main occupation area (Fig. 4.8). As at Thornhill Farm, most of these appeared to be non-domestic in function and can probably be interpreted as seasonal pens used in stock management (see Economy and material culture below). The much larger quantities of domestic debris from some of these enclosures (E 16 and E 17) are unlikely to represent *in situ* primary refuse deposits (see above), and it is likely that these were also stock enclosures. In addition to the large enclosures, there were two or three small circular enclosures termed 'stack rings', which were also located in the eastern half of the site. These are a well known feature from Thornhill Farm, and are interpreted as fodder stands for the provision of animals.

Overall, as illustrated on Figure 4.8, the pattern of finds distribution together with the spatial organisation of features at the site suggests that the primary area of domestic habitation during Phase 2 lay in the central western part of Trench 13, defined by a series of gullies and pits. It was bordered on its western side by a series of linear boundary ditches, while to the east lay a cleared space and then a number of substantial enclosures, probably connected with the corralling of animals at certain times of the year. A further area of specialised metalworking was observed to the north-east on the periphery of the settlement.

Economy and material culture

The quantity and quality of environmental data from the late Iron Age-early Roman phase at Claydon Pike provides a fairly good insight into the nature of the economy practised there. Furthermore, the evidence from material culture is able to give some illumination on matters of social expression, status and identity, at this crucial and transitional period.

The gravel terrace and floodplain comprised largely open grassland, used for animal grazing (see Chapter 14 for environmental overview of the region). It appears that the increasing wetness of this landscape was made worse by the trampling of animals, which ensured poor drainage and probably much localised flooding. This is similar to situations on other sites on or near the floodplain (eg Port Meadow and Farmoor Enclosure 3; Lambrick and Robinson 1988, 65-71), and suggests that the grassland was not well managed at this time. Even the gravel islands seem to have had drainage problems, although they would have provided more suitable areas for permanent habitation, and there is no reason to suspect occupation at Claydon Pike was of a transhumant nature. The charred plant and waterlogged remains both indicated a low residential population on the site, probably consisting of one or two family groups. There is no evidence for crop growing in the vicinity, although some processing of emmer, spelt and breadwheat certainly occurred, suggesting that this material was brought into the site from further afield. Whether this was from areas under control of the residents of Claydon Pike, or else represents trade with other settlements, is not known. Unlike later phases, there is no evidence for the growing of horticultural crops on the site, which is typical of Iron Age sites in the region (see Robinson, Chapter 14).

The main economic basis of the settlement would appear to be pastoral in nature, much the same as other floodplain and 1st terrace sites in the Upper Thames Valley (see Chapters 14 and 16). The large enclosures would probably have been used for the corralling of animals that grazed on other gravel islands and the floodplain, probably at specific times of the year. Analysis of the animal bone remains has indicated that all main domesticates were present, although cattle were dominant suggesting that they formed the main economic basis of the settlement, much the same as at Thornhill Farm (see Plate 4.1 for an artist's impression of this pastoral regime). The kill-off age was quite low and 90% were female, suggesting that meat production was of primary importance. It seems that these animals were reared, butchered and consumed on site, pointing to a largely subsis-

Plate 4.1 Reconstruction of late Iron Age/early Roman pastoral activity in the Claydon Pike/Thornhill Farm area

tence economy. However, the range of imported crops and other goods does indicate the presence of wider networks of exchange, indeed far more so than at neighbouring Thornhill Farm. The presence of donkey within the animal bone assemblage – assuming it is not intrusive – may be another reflection of such exchange networks, as these animals were only introduced after the Roman conquest, and may well have been regarded as 'exotic goods'. The small numbers of horses on site were probably used for transport, although no doubt some breeding did occur in order to maintain the population. There appears to have been no noticeable break in the economic structure of the settlement during this phase, suggesting that the Roman conquest had little impact in this regard, as was the case at most other sites in the region (see Chapter 16).

Social structure and identity

Any attempt to use the archaeological record to facilitate our understanding of past social structure is always fraught with difficulties. Nevertheless, there have been many studies in recent times that have successfully used aspects of settlement organisation and material culture to such an effect (eg Jundi and Hill 1998; Hingley 1990a-b; Meadows 2001; Greene 2002). These studies have used a variety of indicators in their attempts to discern social meaning from the archaeological record, and these essentially equate to the following:

The physical structure and spatial organisation of the site

Aspects of the material culture relating to eating and drinking

Aspects of the material culture relating to personal appearance and identity

All of these can be very useful indicators of social status, both on an intra-site (internal differentiation between social groups) and inter-site (relations between different settlements) basis, although as their meaning and social value is never likely to be universal, any interpretation must be firmly rooted within the local context. It is when a combination of evidence is available that we are best able to study past social structure, and despite the many problems of stratigraphy and residuality already discussed, the Phase 2 settlement at Claydon Pike has sufficient indicators to be broadly defined in terms of its social status within a regional context. Further more, it appears that there may have been a genuine increase in the social status of the inhabitants during this phase, especially when compared to their nearest neighbours at Thornhill Farm.

Certain indications of social structure rely upon an understanding of the physical organisation of the site, and in this case the concept of the boundary is a key element. In Hingley's (1990a) study of the boundaries surrounding Iron Age and Romano-British settlements, he suggested that in addition to any perceived defensive value, they may also have acted as symbols of social exclusion and status,

especially in times of social stress between neighbouring communities. At Claydon Pike, there is a genuine development towards enclosing what appears to have been the primary domestic focus (see Fig. 4.8), and this seems to have become more pronounced in the later 1st century to the early 2nd century AD (Phase 2c/d; Fig. 4.3). This must certainly have been a period of social upheaval and stress in the region (see Chapter 16), and it is possible that the increased emphasis on enclosure at Claydon Pike may have been a measure of its increasing status, perhaps also indicating greater competition between neighbouring social groups. In this respect, there are certainly many differences with nearby Thornhill Farm, where the main domestic focus of this phase appears to have remained unenclosed. Indeed, it may be significant that the most pronounced physical boundary at Claydon Pike faced towards its western neighbour.

There are further indications that Claydon Pike was developing to higher social levels than many of its contemporary sites on the floodplain and lower terraces of the Upper Thames Valley, despite the fact that many appeared to share a similar pastoral economy. Karen Meadows (2001) has examined the social contexts of a number of sites in the region in terms of the consumption of food and drink, and in this respect Claydon Pike appears quite anomalous compared with other non-villa sites. Although most of the pottery comprises typical local grog-tempered wares, there is a comparatively large assemblage of Dressel 20 amphora and imported mortaria which indicates an increasing move towards Roman style food consumption. Furthermore, the percentage of ceramic finewares and glass vessels, although small, far surpasses that of Thornhill Farm. The original suggestion that this ceramic assemblage was associated with a 1st century AD military presence has been largely discounted (see Booth above), and instead it is more likely to further indicate an increasing differentiation in status of the inhabitants at Claydon Pike. This is not however to suggest that the presence of finewares and imported goods represents a conscious social strategy to adopt Roman ways, but rather that they may have become part of the package of symbolic referents within local society, by which the status of individuals or communities could be maintained or increased. As Greene (2002, 247) has recently proposed, it is likely that imported goods formed part of a chain of ceremonial gift giving which cemented the bonds of a hierarchical society.

In slight contrast to the ceramic assemblage, the limited quantity of small finds suggests quite a conservative rural society within the settlement, with nothing for example to indicate new styles of hair or dress. Personal items did form one of the larger groups of material, and mostly comprised brooches, which is directly comparable to Thornhill Farm. During the late Iron Age brooches became increasingly common, and even though this continued into the early Roman period, it can be seen as an essentially 'non-Romanised' phenomenon (Jundi and Hill 1998, 134).

Chapter 5
The 2nd to 3rd Century AD Roman Complex (Phase 3)

by David Miles, Simon Palmer, Alex Smith and Grace Perpetua Jones

INTRODUCTION

The early 2nd century saw a radical re-organisation of the settlement pattern at Claydon Pike, possibly linked to it becoming the centre of an agricultural estate associated at least in part with the cultivation of hay meadows. The original suggestion that these changes were a result of direct, if small scale, Roman military intervention no longer seems to be valid (Miles and Palmer 1990, 22-3), and instead it appears to have been part of much wider changes in the landscape (see Cool below and Chapters 8 and 16).

Distinct zones of activity belonging to this phase were observed within the main excavation trenches (13, 19, 17, 29), with a number of trackways running between them and leading to a large area of central space, which remained clear until at least the later 3rd century AD (Fig. 5.1). The complex was constantly being remodelled until the late 3rd/early 4th century AD (Figs 5.2-5.3), when all remaining parts seem to have been dismantled and levelled prior to the establishment of a modest villa estate (see Chapter 6).

The Phase 2 enclosures and gullies in Trench 13 were replaced by an arrangement of large rectilinear ditched enclosures, aisled buildings, fencelines and a cobbled trackway leading from an entrance gateway (Fig. 5.4). Large quantities of finds were recovered from Phase 3 contexts in this area, suggesting that it remained the primary focus of occupation at the site. Immediately to the west in Trench 19 was a double ditched rectangular enclosure (E 18/19; Fig. 5.13). Aside from an area of cobbling, no contemporary internal features could be discerned, although the compacted gravel subsurface would have ensured that if any structures had been present, they would have required negligible or no foundations, and would therefore leave no presence in the archaeological record. Column parts and other structural stone in the vicinity do hint at a structure of some architectural merit in the area, and it remains a distinct possibility that this was the site of a religious focus, aligned upon the central cleared area (see discussion below).

Further to the west on the other side of a north-south trackway, Trench 29 contained a succession of ditched boundaries, along with a stone footed building (B 5) and another possible structure at the north end (Fig. 5.14). The quantities of domestic debris suggest some occupation, although slight. The presence in several features of iron slag may indicate some blacksmithing, although the quantity of such material is small compared to Trench 17 to the north.

Trench 17 was physically characterised by a series of intercutting, sub-rectangular enclosures and associated features such as stack rings, pits, gullies and a small rectangular building with masonry foundations (Fig. 5.18). These were bounded by an arrangement of regular linear ditches running north-south and east-west which formed large rectilinear enclosures. The character of occupation differs markedly from Trench 13, and on the basis of general finds distribution, it would seem to have been utilised primarily for low status domestic occupation, light industry (primarily iron working), and agricultural activity (livestock pens). With the exception of Building 6, any structures are likely to have been non-masonry.

A series of enclosure boundaries and trackways were located in cropmarks and salvage areas surrounding the main excavation trenches, and appear to have been part of the Phase 3 complex (Fig. 5.1). The northern trackway led across the marshy area towards another road and a series of Roman field systems in the Warrens Field site. The western trackway ran towards Thornhill Farm, *c* 600 m distant, and was probably the same as the track located at that site running south-west through the small 2nd-century settlement at Kempsford Bowmoor (OAU 1989; Fig. 2.1).

Phase 3 activity continued for around 200 years until the early 4th century, and within this period there were four main structural sub-phases (a to d), probably marking a shift in site character (Figs 5.2 and 5.3). The sub-phases for the whole site are presented in relation to those of Trench 13, where the stratigraphic sequences and dating evidence were most clear (see Chapter 2, Post-excavation methodology).

THE ARCHAEOLOGICAL SEQUENCE

The following is a summary account of the archaeological sequence of the major trenches in Longdoles Field, according to the sub-phases of Phase 3 (Figs. 5.2 and 5.3). Full stratigraphic descriptions can be found in Digital section 2.2.

Fig. 5.1 The Roman settlement complex

Fig. 5.2 Phase 3 sub-phases 3a and 3b

Fig. 5.3 Phase 3 sub-phases 3c and 3d

Trench 13 – the settlement focus (Fig. 5.4)

Phase 3a (c 125-150 AD) (Fig. 5.2)

Phase 3a saw the enclosure of two areas of land, separated by a cobbled trackway, and the construction of two aisled buildings (B 1 and B 3) in the northern zone. A gateway structure (B 4) stood at the entrance to the trackway in the west and seems to have marked the main area of access into the enclosure complex (although see discussion below). Most of the northern enclosure (4340 m^2) was revealed within Trench 13. It was bounded by trackway lanes to the west and the south, while to the north the ground gradually dropped away into marshy terrain. An entrance to the northern enclosure was located midway along the central east-west trackway. Only a small part of the southern enclosure was found within Trench 13, but its full extent, as revealed by cropmarks, was 6000 m^2. No features were definitely associated with this area during this sub-phase.

Northern enclosure

The western boundary of the northern enclosure was formed by ditch 2198. This consisted of at least two cuts, but possibly up to four, giving it a broad appearance up to 3 m wide, and with a variable depth of 0.6 m to 0.8 m. The sequence of the recutting was uncertain, but it would appear that the boundary gradually shifted westwards. Just north of the gateway, the boundary turned east becoming ditch 2156, which was traced for *c* 22 m, before being truncated by Phase 4 boundary ditch 501. Midway along this stretch the ditch had a broad profile 1.6 m wide and 0.65 m deep. The fill was similar to that in 2198, a very clean orange-brown sandy loam, and had large amounts of limestone

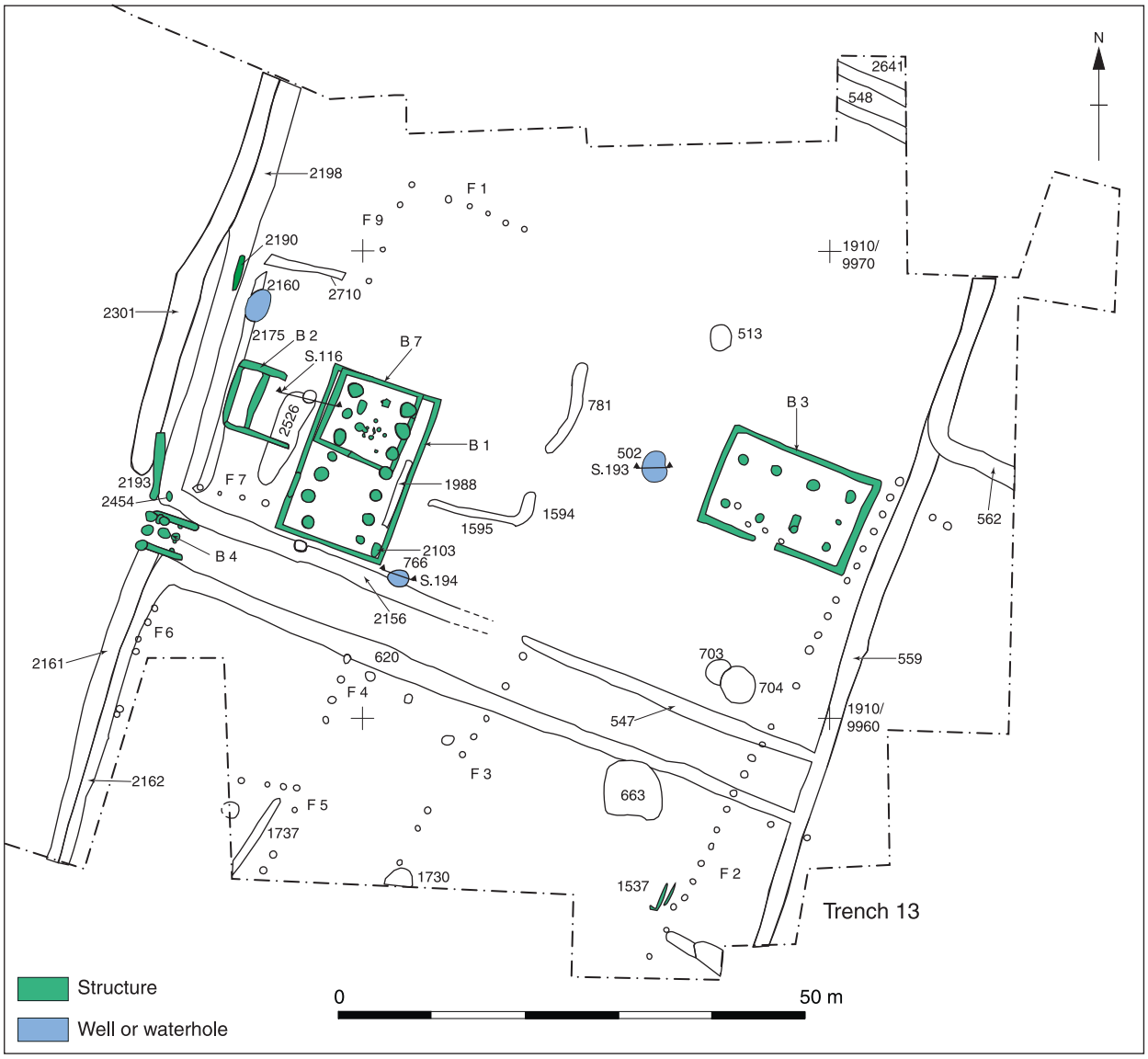


Fig. 5.4 Trench 13 Phase 3 composite plan

rubble in its lower and middle fills just south of Aisled Building 1. Ditch 2156 presumably terminated at some point below 501, leaving an entrance way to the enclosed area of up to 7 m, before restarting as ditch 547. Ditch 547 continued on the same alignment as 2156 for 34 m. This was 1.2 m wide and 0.6 m deep and had only a single cut. The eastern side of the enclosure was formed by ditch 559, which was *c* 1.8 m wide and *c* 0.9 m deep. During Phase 3a, this ditch did not form a continuous boundary with the southern enclosure, but instead the eastern end of the trackway remained open and may have formed another entrance into this part of the complex (see discussion below). Only a small section of the northern boundary ditch (548) was revealed in Trench 13, although aerial photographs revealed that it ran from ditch 559 to join the western boundary just north of the trench. A parallel but slightly smaller ditch 2641 ran to the north (2-3 m distant), and at the western end turned south into – and was cut by – ditch 548, *c* 5 m short of the western boundary.

Finds from the northern enclosure ditches varied in quantity and character, possibly reflecting activities within the immediate vicinities. The southern ditches (2156, 547) contained far greater quantities of pottery (*c* 17.5 kg), as well as a number of other finds such as an iron billet, vessel glass fragments and a bone pin. Much less pottery came from ditch 559 (1.27 kg), although it produced significantly more animal bone (740 fragments). Very few finds were recovered from the northern boundaries, implying that they were removed from the main areas of domestic activity, although admittedly only small sections of these ditches were excavated.

Southern enclosure

The southern enclosure within Trench 13 comprised ditches 2162, 620 and the southern continuation of 559. At least three cuts were visible in 2162, with the latest measuring *c* 1.2 m across and *c* 0.5 m deep. The cuts tended to merge the further south they went. The northern end of the ditch had been cobbled over and was cut by postholes probably associated with a later phase of the entrance to the enclosures in Trench 13. Ditch 620, defining the southern side of the lane dividing the enclosures, ran off east from 2162, and was undoubtedly contemporary with at least the latest cut of that feature. This ditch was 1.2 m width and 0.6 m depth, with two cuts visible at the western end. The eastern side of the enclosure was formed by ditch 559, which ran southwards as a cropmark until it met the southern triple boundary (Fig. 5.1). Trenches were dug in this area to ascertain the relationship between the various boundaries, and it is suggested that part of the southern section of ditch 559 had been recut on a number of occasions, possibly even surviving into Phase 4.

As with the northern enclosure, finds from the ditches were variable, with ditch 620 producing large quantities of pottery (19.4 kg; Fig. 5.24, nos 2, 5-6), and other finds (iron nails, ceramic tile, an iron stylus (Fig. 5.29, no.43) and a number of copper alloy personal items (Fig. 5.26, no.12)), similar to the parallel trackway ditches *c* 5 m to the north. Large quantities (1000 fragments) of animal bone were also recovered from this feature. Very few finds came from ditch 2162, but they did include a millstone grit quernstone and *c* 1 kg of pottery.

Gateway structure (B 4) and east-west trackway (Figs 5.2 and 5.5, Pl. 5.1)

The two enclosures were separated by a trackway, 5-6 m wide. It was clearly cobbled at least in part, as several phases of cobbling survived in the subsidence of the Phase 2 enclosure ditches E 16 and E 17. A layer of occupation debris between the cobbled surfaces contained over 2.5 kg of pottery and 143 animal bone fragments. The large quantities of pottery from the trackway ditches (2156, 547, 620; see above) indicated that they were filled in by the middle of the 2nd century, although the trackway appeared to continue in use (see Phase 3b).

At the western end of the trackway two parallel footings (2331, 2332) of small random limestone rubble formed part of a gateway structure into the complex (Fig. 5.5; Pl. 5.1). These were 3 m apart, *c* 0.6 m wide and appear to have been 4.5 m long. The footings were shallow and insubstantial, but still could have supported a structure of some magnitude, as the underlying gravel would have provided a firm base. One metre from the eastern end of the footings, positioned on the inside of each wall were two small stone packed postholes 2466, 2465. A further posthole, 2478, lay midway between these two. These were all of a similar size, 0.3 m wide and between 0.2 m to 0.3 m deep, and there was 1.5 m from post centre to post centre. These smaller postholes would have been the basis for the actual gate. The footings and gate posts would have formed the first phase of the gateway, seen in Phase 3a.

During the course of its existence the gateway underwent many modifications, although none of these can be attributed to any specific sub-phase. The western end of 2331 had been robbed to leave a 2.5 m length of footing, while the robbing of 2332 left over 3 m of footing. Whether this was due to the whims of the stone robbers or whether it represented a later structural phase of the gateway is unclear. The southern robber trench was cut by a large stone packed posthole, 2314. This appeared to be matched by posthole 2313 located 3 m from the western end of wall 2331. Three other stone-packed well preserved postholes ran east-west (2329, 2330, 2333), and this post arrangement appears to represent a second major phase of the gateway. The robber trench for wall 2331 had itself been cut by two further postholes 2327 and 2328, which could relate to a later phase of the gateway. A late 3rd-century coin was recovered from 2327, which suggests that the gateway was no longer functioning by Phase 3d.

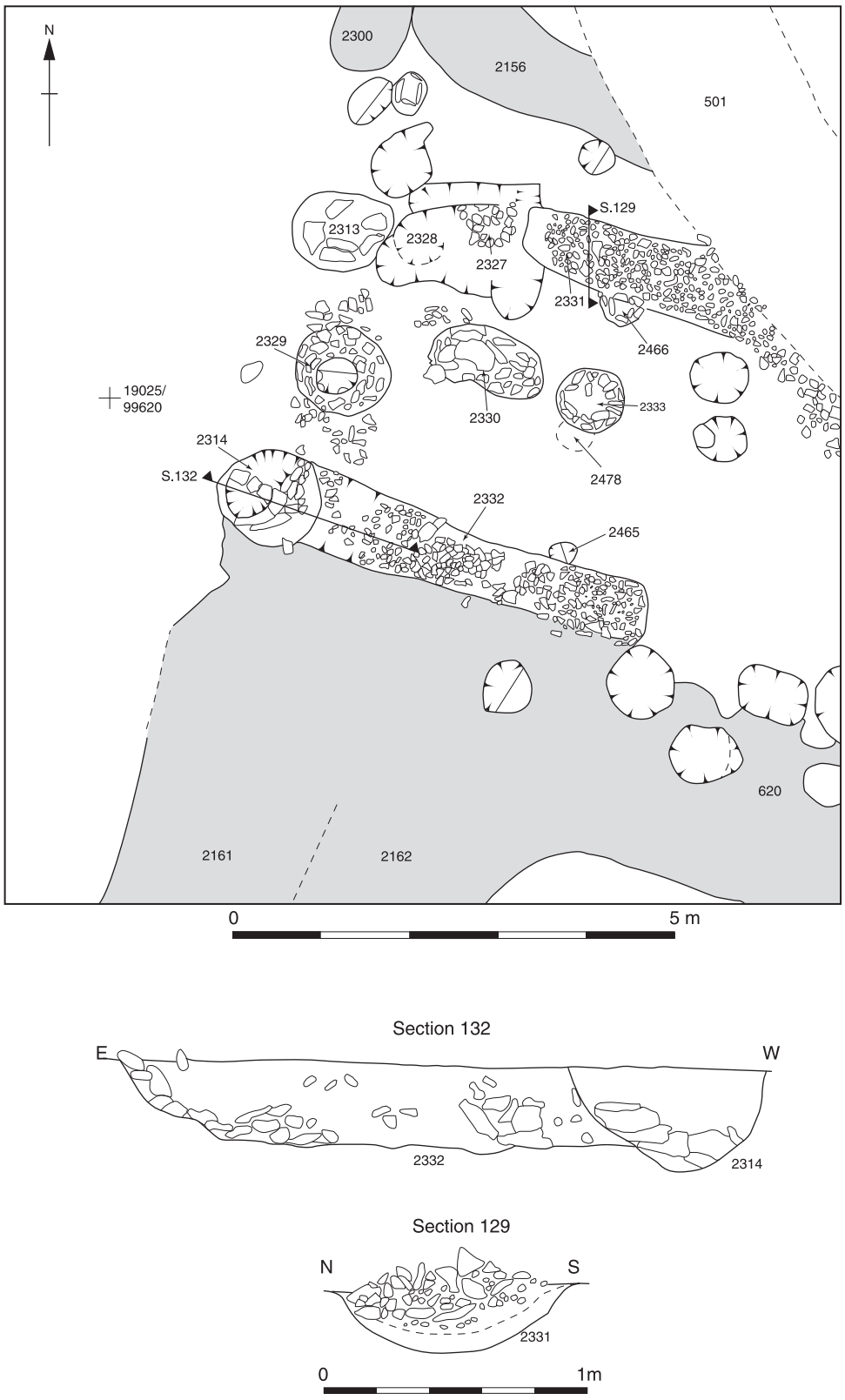


Fig. 5.5 Trench 13 gateway

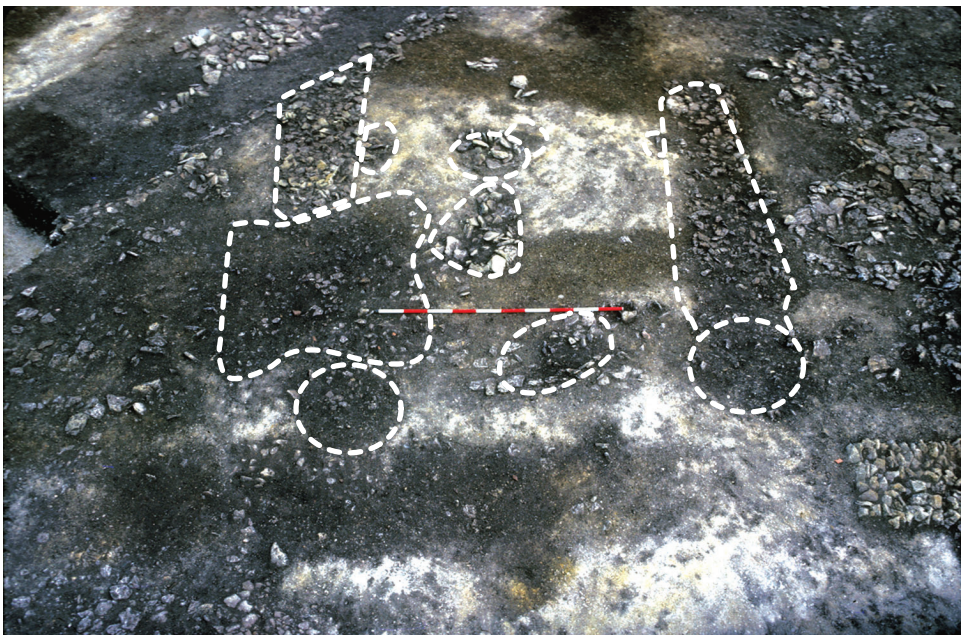


Plate 5.1 Trench 13 gateway structure

Aisled Building 1 (B 1; Fig. 5.6, Pl. 5.2)

Aisled Building 1 (B 1) was situated in the south-west corner of the Trench 13 enclosure (Fig. 5.4). It was constructed during Phase 3a, and continued in use until the end of Phase 3c, towards the end of the 3rd century AD. Orientated on a NE-SW axis, it measured (conjectured) 18.5 m x 11.5 m (Fig. 5.6), and was formed by two rows of 7 paired post-pits (Fig. 5.6), with the aisle post lines being 6 m apart (post centre to post centre) and 15 m long. The building was cut directly by at least two other buildings, and this truncation had removed the floor levels. A fragment of mortared stone random rubble foundation (2518) on the south-western side had been preserved by the later floor of the hypocaust in Building 8. The foundation measured 2.8 m x 0.5 m and lay from 2 – 2.5 m from the centre of the nearest postline. It probably represented the western external wall of the building. There was no surviving evidence for the north and south walls, although these are assumed to have been a half bay width from the end posts as in B 3. The southern wall would thus have lain less than 1 m from boundary ditch 547.

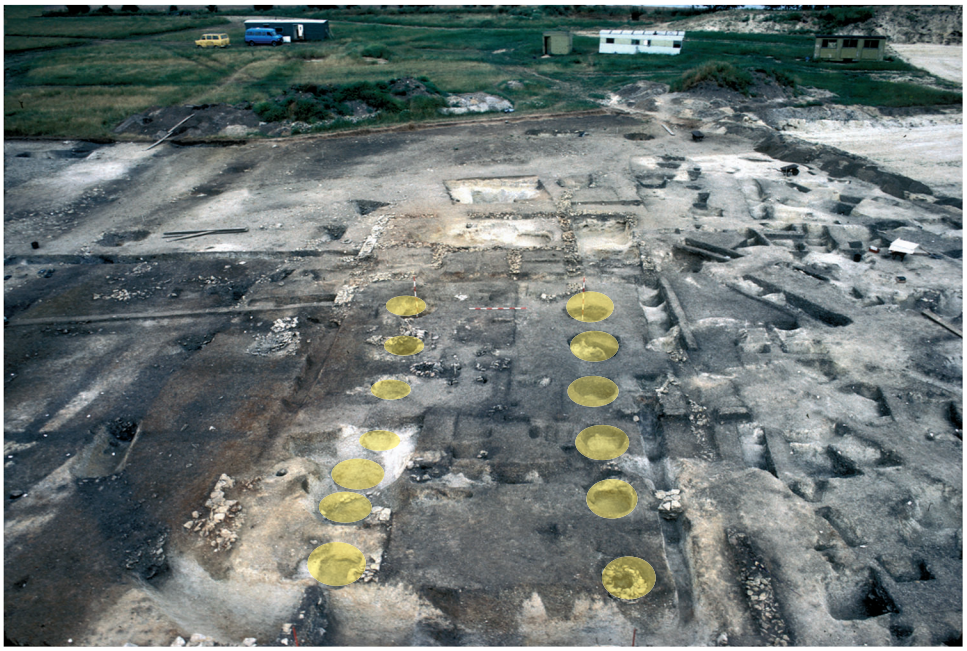


Plate 5.2 Trench 13 Aisled Building 1

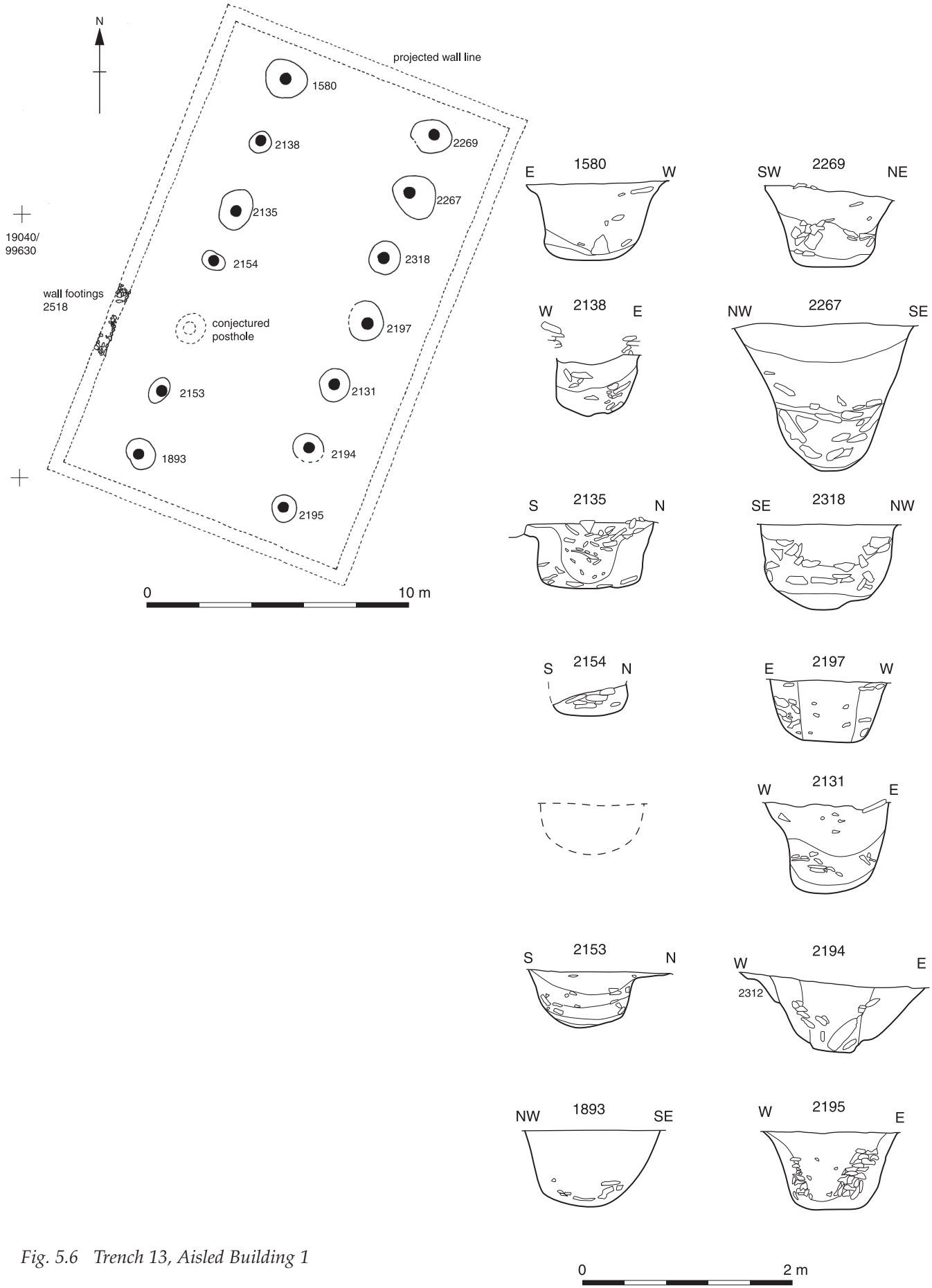


Fig. 5.6 Trench 13, Aisled Building 1

The pottery (4.2 kg) recovered from B 1 was mostly dated after the mid 3rd century, although 2nd-century ceramics were also present. Many of the posts appear to have been dug out upon abandonment of the building, and the later pottery was largely derived from the post pits. The material had undoubtedly become incorporated into these features at the time of the destruction of the building, and it therefore suggests a demolition date of mid to late 3rd century AD. Fired clay, ceramic tile, iron nails and mortar/plaster fragments were most commonly recovered from the postholes. A copper alloy coin was also recovered from posthole 2267, dated to 259-68 AD. Painted wall plaster was recovered from nearby Phase 3 b/c well 766 most likely derived from the demolition of B 1. A domestic function for the building is suggested by the pottery and animal bones (see Discussion below).

Aisled Building 3 (B 3) (Fig. 5.7, Pl. 5.3)

Situated on the eastern side of Trench 13, just over 1 m from enclosure boundary ditch 559, was a second aisled building (Fig. 5.4). The walls (557, 556, 688) were stone founded with a mixed and unfaced small random rubble limestone footing of variable width (up to 0.75 m; Fig. 5.7). The overall dimensions of the building were 17 m x 11 m. Survival of the footings was good except on the north side where they overlay natural gravel, and on part of the west side where they were cut through by Phase 4 enclosure E 22. Where the building overlay the Phase 2 enclosure ditches of E 11, rubble consolidation was seen. A gap of 1.8 m centrally placed on the southern side marked the entrance. The walls had been partially robbed on the southern and eastern sides of the building, and a mid 4th-century coin was recovered from the top of the robber trench fill. Four sets of stone-packed post pits (677, 676, 538, 678, 691, 685, 690 and 684) formed the aisled interior of three bays with a half bay at either end. A single posthole (683) along the eastern end axis was thought by the excavators not to have been an aisle post, and its dimensions were not recorded. However, there are examples of aisled buildings with end posts (eg Somerford Keynes, see Chapter 9), and given its precise alignment this must remain a possibility.

The bays were 4 m wide, with the aisles 1.75 m in width and the nave 6.25 m across. The aisle posts were all of similar dimensions ranging from 0.6 m to 0.8 m in diameter and 0.6 m to 0.7 m in depth. Limestone rubble packing was present in all and relatively undisturbed except in 690. Post-pipes range from 0.15 m to 0.20 m in diameter. The small amount of pottery recovered was mostly mid 3rd century in date, and a late 3rd-century coin was recovered from the top of post pit 678. As with B 1 this is probably material that had become incorporated into the features during the demolition of the building. A probable floor make-up of dark grey loam (522) was found throughout the interior, and most of the finds from the building came from this layer. A partially articulated sheep skeleton (699, not shown on Fig. 5.7) was found under this layer in the central part of the building, but may not be at all related to the structure. Probable interior division 689 consisted of a 1.6 m length of concentrated limestone rubble *c* 0.8 m wide. It ran north from posthole 690 into the interior of the barn (Fig. 5.7). It sealed the packing of posthole 690 but could have abutted the post itself. Just 1 m east of aisle post 691, on the southern aisle axis was pit 686. This contained a Savernake storage jar, the rim of which would have stood proud of the Roman ground level.

Outside B 3 a patch of cobbling 616 abutted wall 556 on the east side, running at a slight angle to the building axis (Fig. 5.7). It was seen to overlie eastern boundary ditch 559, but was cut by Phase 3c Fenceline 2. The cobbling in this area was not contemporary with the construction of the building and is most likely to fall into Phase 3 b.

It is difficult to date the destruction of B 3. It had certainly gone out of use by the end of Phase 4 as enclosure ditch 501 (E 22) cut through the western end. It seems likely that the building could have continued in use into the early 4th century (Phase 3b or 4a), probably in a slightly dilapidated state. The two coins recovered (contexts 678 and 736) were not from totally reliable contexts, although the coin from robber trench 736 (dated AD 330-46) suggests that the building was demolished by the mid 4th century, if not much earlier. The Savernake jar in pit 686 indicates use of the building in the 2nd century. The majority of the 2.2 kg of pottery recovered from layer 522 was rather a mixed assemblage, mostly dating to after AD 250, and suggesting that the building was in use at least until the end of the 3rd century.

Layer 522 also contained quite a large number of finds. These were mostly iron objects: 28+ nails, a rod, awl, ring, plate or bar and a tool collar, but also included smithing slag, vessel glass, a spindlewhorl, a copper alloy vine leaf (probably from a lamp; Fig. 5.28, no.31) and pin and fired clay, including daub. The rubble of wall 688 contained a silver finger ring and an iron hobnail plate. Few finds were recovered from the postholes, and these included a copper alloy bell (Fig. 5.32, no. 63), fired clay and a small amount of vessel glass. Only a very small quantity of animal bone was recovered from this building, and none from the general floor make-up layer (522). This contrasts sharply with Aisled Building 1 and suggests a non-domestic function for this building (see discussion below).

Internal enclosure boundaries and other features (Fig. 5.4)

Ditch 2175 was located 2 m to the east of ditch 2198 and ran parallel to it for 25 m. This ditch was a maximum of 1.2 m wide and 0.4 m deep. At the

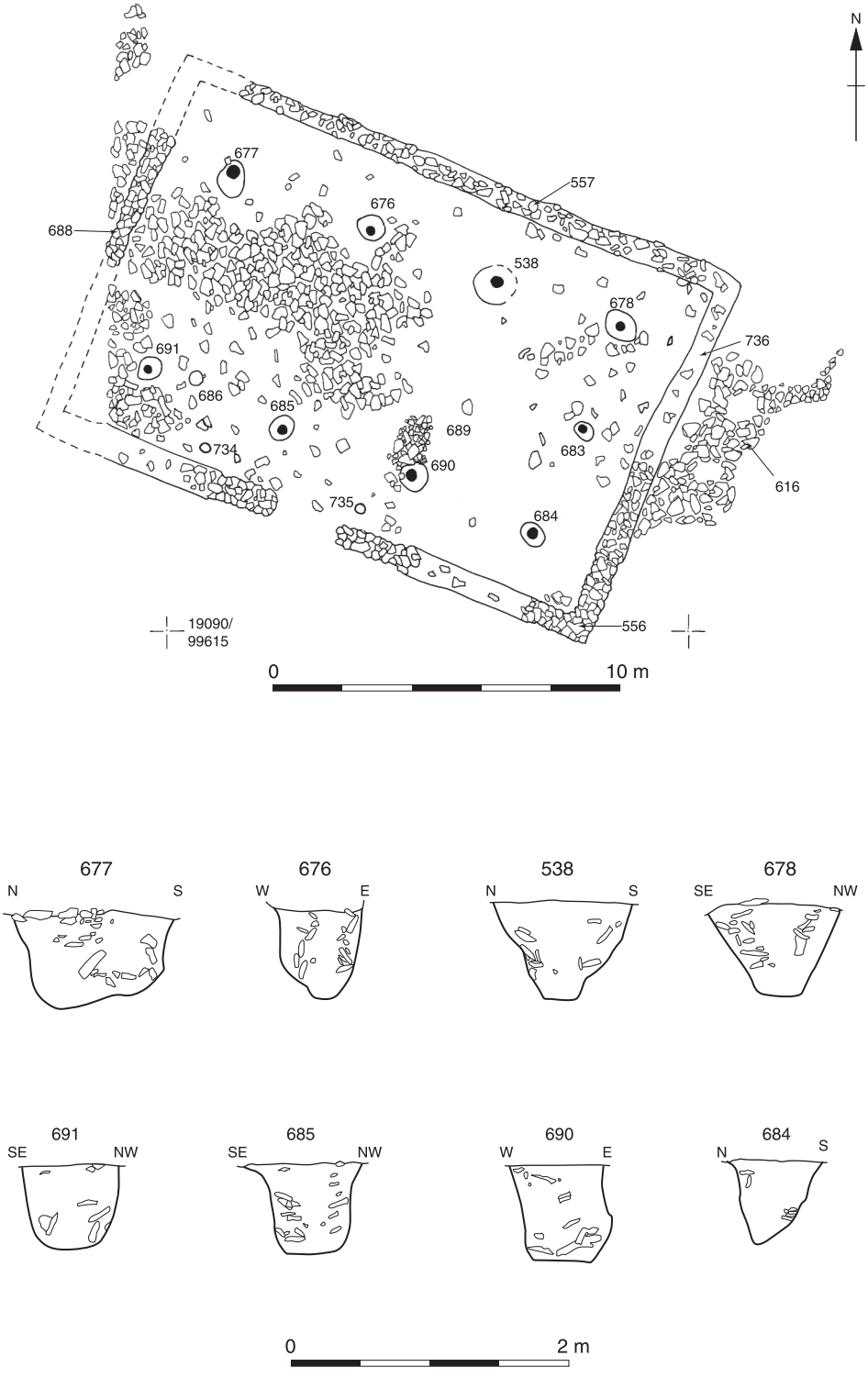


Fig. 5.7 Trench 13 Aisled Building (B 3)

Plate 5.3 Trench 13 Aisled Building 3

southern end it turned south-west towards the curve of 2198 and 2156, and was cut by Phase 4 ditch 501. Ditch 2175 was overlaid by the beam slot of Building 2 (B 2), and the pottery recovered from 2175 appears to have been contaminated by the material from this building. The ditch contained a quern of Niedermendig lava.

Situated between B 1 and ditch 2175 and overlain by B 2 was a large, fairly shallow feature, 2526 (section shown on Fig. 5.8). This measured *c* 10.5 m north to south and was 2.5 m wide, steep sided and flat bottomed with a depth of *c* 0.50 m. The north-east corner swelled out and encompassed a deeper circular pit 2517. Evidence from the fill of these two features suggests that they were infilled and therefore open together. Pit 2517 and the northern part of 2526 had been overlain by mortared limestone foundation 2503. A more regularly laid patch of unmortared stone, 2512, measuring 1 m x 0.8 m, lay adjacent to the north. The lowest fill of 2526 was of a very clayey texture, unlike the bottom of any other feature of this depth. It suggested the remains of a deliberate clay lining, perhaps to contain liquid. Pit 2517 perhaps operated as a sump in this connection. The large amount of pottery (12.8 kg) from these features suggests a mid 2nd-century date, and included 15 fragments of amphora (Dr 20 and Cam 186a). A total of 235 animal bone fragments were recovered, and there was also a concentration of oyster shells. The exact function of these features is uncertain, although the material deposited within them suggests Roman style culinary activity in the vicinity.

Phase 3b (c mid-late 2nd century AD) (Figs 5.2 and 5.4)

During Phase 3b the trackway ditches (2156, 547, 620) dividing northern and southern enclosures were infilled to create one large enclosure, albeit with many internal divisions. The western boundary was seen to continue shifting progressively westwards, with a fenceline (F 6) constructed immediately east of the southern part of the boundary, and a stone wall (2190) adjacent to the northern part. A second fenceline (F 4) was positioned 21 m east of the first. The eastern boundary was recut as a continuous ditch (559). Although the trackway ditches were infilled, a layer of cobbling was laid down, suggesting that the area may still have functioned as a thoroughfare. The gateway structure continued in use, possibly with some modifications, as did both of the aisled buildings. A two-roomed structure (B 2) was erected on the western side of B 1, lying perpendicular to it. On the eastern side of B 1 three ditches (1595, 1594, 781) created an internal boundary, possibly associated with control of access to the building. A well (766) is also seen in use at the south-eastern corner of B 1 (Figs 5.4 and 5.10).

The outer enclosure

During this phase the northern section of the western boundary was recut as 2301. It was represented by at least three cuts ranging from 0.4 m to 0.7 m deep and *c* 1 m wide, and ran through the centre of the hollow separating Trench 17 and Trench 13. Its fill was characteristically siltier than that of its predecessor 2198 but with no surviving waterlogged material. To the east of 2301, wall 2190

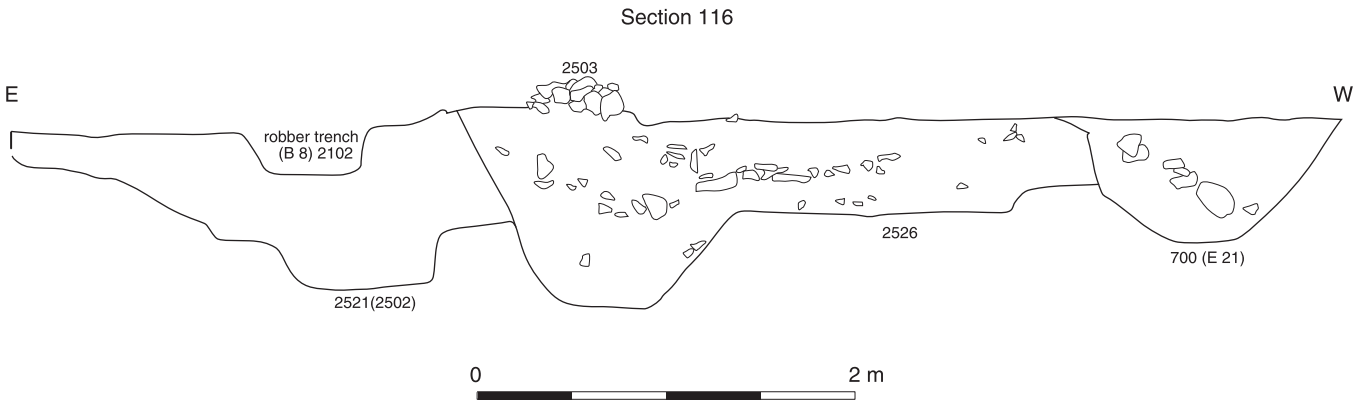


Fig. 5.8 Section 116 across pit 2526 and B 1

appears to have been constructed during this phase, comprising a *c* 5 m length of laid stone work overlying ditch 2198 (Fig. 5.4). Lying *c* 20 m to the south of this was a large amount of stone rubble (2454; Fig. 5.4) over ditch 2198 just north of the gateway, and this may have been part of the southern section of the same wall, designed to give greater privacy and security to the inner compound of the western aisled building (projected wall line shown on Fig. 5.2). South of the gateway, ditch 2301 continued on the same alignment as ditch 2161. This was a recut of Phase 3a ditch 2162, and of similar dimensions. Two basic cuts were discernible, on average 1 m wide and 0.5 m deep. The eastern boundary (559) was recut during Phase 3b to form a solid boundary, and at some point towards the end of this phase or the beginning of the next, the ditch was overlain by a layer of limestone rubble (616), which was in turn cut through by Fenceline 2 in Phase 3c.

Comparatively little pottery was recovered from either the northern (*c* 2.2 kg) or southern (3.4 kg) sections of the western boundary. The assemblages were both rather mixed, with that from 2301 dating from the 2nd century to the mid–late 3rd, indicating continued use into Phase 3c. That from 2162 was mostly confined to the 2nd half of the 2nd century AD, suggesting that it may not have been open as long. Finds from both ditches included a bone pin, iron nails, slag fragments, a piece of lead sheet, a copper alloy pin, building stone, ceramic tile and window glass fragments. A total of 544 animal bone fragments were recovered from the various ditch cuts.

Building 2 (B 2) (Fig. 5.9, Pl. 5.4)

On the west side of Trench 13 running at right angles from B 1 lay a two celled structure (B 2; Fig. 5.9). This was formed by four slots 2509, 2510, 2513 and 2514, all shallow and flat bottomed measuring *c* 0.2 m deep and 0.6 m wide. The width of the slots suggests that they may in fact have held masonry foundations which had been subsequently robbed in entirety, although the nature of the superstructure remains uncertain. The structure appeared to form a rectangular extension to B 1 (see Fig. 5.4), and was divided into two rooms by 2510. Overall the structure measured 9.5 m x 7.5 m and the individual rooms were *c* 6 m x 6.5 m and 6 m x 2 m. No slot existed on the east side against B 1. Slot 2509 ran within 0.5 m of the conjectured wall of the aisled building while slot 2513 was lost *c* 2 m from it. Stratigraphically B 2 overlay Phase 3a features 2526 and 2175, and was itself cut by Phase 4 ditch 700 (E 21; see Chapter 6). The pottery assemblage recovered from the slots was quite substantial (11.8 kg) and mixed. On the whole it was rather late and included a large percentage of black-burnished ware, including 2nd- and mid to late 3rd-century forms. The sherds were much larger than those seen in B 1 and B 3, indicating that they may have been in use around the time of the demolition of the building. Finds from B 2 included a number of iron nails (20+) together with a split pin, shoe cleat, brooch, vessel glass, whetstone and a bone pin. Slot 2513 contained a copper alloy coin dated to AD 364-78. Over 300 animal bone fragments were recovered from the feature, in the most part comprising the main domesticates (see Sykes below and Discussion) but also including red deer antler. The destruction date of B 2 may have been contemporary with the destruction of B 1.

Internal ditched boundaries (Fig. 5.4)

To the east of Aisled Building 1 was an arrangement of ditches (1594, 1595, 781) bounding two sides of an area 18 m by 10 m, open to the north. A 3 m wide entrance lay on the east side. The northern terminal of ditch 781 was not totally clear as it was truncated by Phase 4 ditch 780, and so the feature could have extended further north. Between the terminals of 781 and 1594 a concentrated rubble area spread north-eastwards (not shown on plan). A deliberately laid area forming a

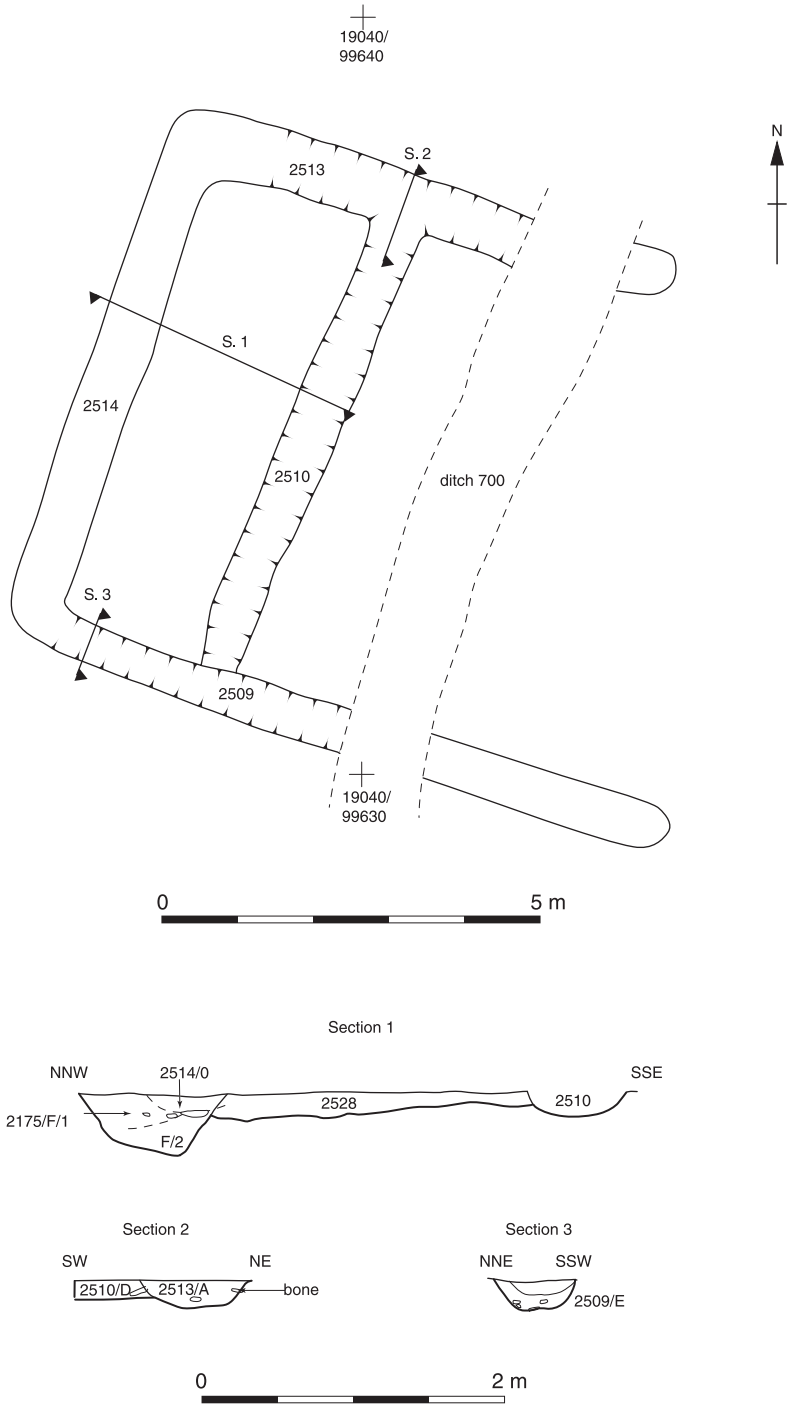


Fig. 5.9 Trench 13 Building 2

Plate 5.4 Trench 13 Building 2

block 0.6 m² adjacent to the terminal of 781 may form part of a gateway placement. The pottery assemblage from the three ditches was quite substantial (2.73 kg) and quite mixed, dating from the 2nd century to the second half of the 3rd century. A fragment of wall plaster may indicate that 1595 was open at the time of the destruction of B 1. Finds include fired clay fragments, iron nails and 300 animal bone fragments, including a reasonable quantity of domestic fowl. It is reasonable to assume that these ditches may have defined an internal area of domestic activity associated with B 1, possibly along with fencelines F 1 and F 9.

Fencelines (Fig. 5.2 and 5.4)

Two linear arrangements of posts (F 4 and F 6) could be assigned to this sub-phase, both in the southern part of the main enclosure. F 4 was aligned approximately NE-SW, cutting the southern edge of trackway ditch 620, although respecting its line, implying that the area was still functioning as a thoroughfare. The postholes were *c* 2.4 m apart and had distinctive oval plans with evidence for stone packing. This fenceline has been placed in Phase 3b on the basis of its relationships with ditch 620 and F 6, which was parallel. Dating evidence is inconclusive with small amounts of 1st-century pottery (20 g) from one posthole and a late 4th-century coin from the top of another. F 6 lay *c* 22 m west of F 4, bordering the rectangular enclosure seen in Trench 19. This consisted of four aligned posts, probably with two more after a break of 6 m. The fenceline respected the line of western boundary 2161, and ran parallel to it, cutting the eastern edge of Phase 3a ditch 2162. All posts were well packed with limestone.

Pits, wells and waterholes (Fig. 5.4)

An irregular shaped feature (663) was seen in the south-east of Trench 13, comprising at least one pit. It was approximately 6 m in diameter and 0.5 m deep. This feature cut Phase 3a trackway ditch 620 and was sealed by a layer of hard standing, 647. Chronologically 663 could be seen to belong to this phase as it contained exclusively mid to late 2nd-century pottery. Finds were few and consisted of a small number of iron nails, fired clay and a copper alloy pin. However, the size and composition of the pottery (2.1 kg) and animal bone (103 fragments) assemblages suggests that the feature was used for dumping domestic material. Another pit probably belonging to Phase 3b was 2160 lying just to the east of the western boundary and truncating Phase 3a internal boundary 2175. The feature was *c* 2.4 m wide and 1.3 m deep and probably functioned as a waterhole. Deposits from the lowest waterlogged layers included just over 1 kg of pottery loosely dated to the 2nd century and 54 animal bone fragments. Environmental samples revealed evidence for a particular abundance of trees and shrubs in the vicinity (see Robinson below).

Well 766 was situated adjacent to the south-eastern corner of B 1 (Fig. 5.10, Pl. 5.5). It was a maximum of 1.8 m in diameter at the top, narrowing to 1.4 m at the base with a maximum depth of 1.26 m. The dry stone wall lining continued to the base. The infill comprised layers of dark grey sandy loam, mixed clay and gravel, along with a layer of charcoal and a small amount of rubble. The large pottery assemblage (*c* 3 kg) dated mostly from the mid to late 3rd century, with all of the later Oxford colour-coated ware coming from the top

two layers. Finds included a number of iron nails, fired clay fragments, an iron padlock hasp (Fig. 5.31, no. 59), two bone pins and wall plaster fragments distributed throughout the fills. This was assumed to have been derived from the destruction of B 1 (see above). Most of the plaster came from the lower fills of the well, with nearly all of the nails coming from layers above this. It is possible that this represents successive stages of building destruction, and that the well was infilled with this destruction debris over a relatively short period of time. Over 650 animal bone fragments came from the well, exhibiting a large range in species. It is suggested (see Sykes, below) that this assemblage represents primary domestic refuse, perhaps the remains of a single high-status meal. No stratigraphic relationships were recorded, but the well appeared to cut ditch 2156 and the pottery and plaster recovered indicate that it was infilled during Phase 3c and/or Phase 3d. The well was therefore most likely in use during Phases 3b and 3c.

Phase 3c (early to late 3rd century AD) (Figs 5.3-4)

During Phase 3c the western boundary of the main enclosure appeared to continue in use, although its southern extent is unclear. A short stretch of wall (2193) appeared to succeed the Phase 3b wall, but it could not be traced further north (Fig 5.4). The gateway, B 4 (Fig. 5.5; see above), seems to have remained in use. The eastern boundary ditch (559) was infilled and cobbled, and replaced by a 60 m fenceline (F 2), slightly obliquely to the line of the earlier ditch. To the north of the fenceline ditch 562 could be seen, associated with a large paddock to the east of Trench 13, defined by cropmarks (Fig. 5.1). Approximately 27 m to the west of F 2 was a shorter parallel fenceline (F 3). Thirteen metres further west there were two lines of postholes at near right angles to form Fenceline 5. All three buildings continued in use, as did the associated internal boundary ditches.

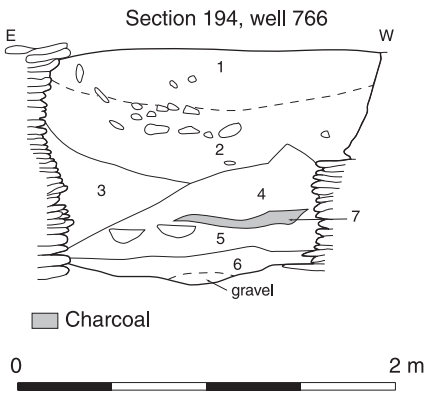


Fig. 5.10 Section 194 through well 766

Plate 5.5 Trench 13 well 766

The outer enclosure

During Phase 3c the western boundary (2301, 2161) continued in use, while north of the gateway a small stretch of wall (2193) and its robber trench was seen (Fig. 5.4). Wall 2193 was on a broad footing *c* 1 m wide, of small unmortared random rubble. This extended north *c* 10 m from the gateway, although there is no evidence that it continued further. The relationship between the wall and the gateway structure is not certain, although on spatial grounds they are likely to be contemporary. Most of the eastern boundary ditch (559) was replaced by a fenceline (F 2). Just to the north of this fenceline was ditch 562, aligned south upon the line of 559 and then turned south-east, defining a large enclosure (*c* 60 m x 50 m) located mostly as a cropmark. Ditch 562 was *c* 2-2.5 m wide and *c* 0.9 m deep. On the whole the pottery from 562 (2.3 kg) was late 3rd-century in date, and could be slightly later. Small finds consisted of several iron nails, an iron spearhead, plus vessel and window glass fragments. Over 300 animal bone fragments were recovered.

Fencelines

Extending from just south of the intersection of ditches 559 and 562, a series of postholes (F 2) spaced *c* 2 m apart and aligned south-west, was traced for at least 60 m, before exiting Trench 13. This fenceline, approximately parallel to the western edge of B 3, appears to have been related to it. The postholes ranged from *c* 0.3 m to *c* 0.8 m in diameter and from *c* 0.15 m to 0.35 m deep. The majority had pitched limestone packing, much of

which was undisturbed. This fenceline stopped 5 m short of the 559-562 intersection (Fig. 5.4). Two further postholes were recorded, aligned south-east, 7 m from the first post and formed an entranceway *c* 5-6 m wide to the eastern enclosure. Finds from the fenceline were minimal, and included a Millstone Grit quern fragment, iron nails and a small amount of pottery indicating a late 2nd- to 3rd-century date. The postholes cut through both trackway ditches 547, 620 and through cobbled area 616 which overlay ditch 559. A possible 4 m gap in the fenceline lay to the north of the east-west trackway, and could have represented another entrance into the enclosure.

Lying *c* 27-28 m west of and running parallel to F 2 lay Fenceline 3 (F 3). It consisted of at least eight postholes stretching for *c* 26 m. Intervals between the postholes varied from 2 m to 4 m. The fence was aligned northwards up to the line of ditch 547, cutting across the east-west trackway. The southerly extent of the fenceline was not traced beyond the main Trench 13 boundary. The sparse dating evidence from the postholes suggests a 3rd-century date and given its parallel alignment it is likely to have been contemporary with F 2.

Located approximately parallel to F 3 and *c* 13 m further west, a line of four-postholes (F 5) was traced for a distance of *c* 10 m. The fenceline then appeared to change direction and head west for 6 m. No further postholes were observed in the salvage area to the west. The postholes were generally irregularly spaced. Stratigraphically F 5 could be seen to truncate Phase 2 features but no relationships were recorded with later features. This fenceline has therefore been placed in Phase 3c on the basis of its spatial relationship with F 2 and F 3.

Phase 3d (late 3rd to early 4th century AD
(Figs 5.3-4)

The end of Phase 3 (3d) saw a re-ordering of the enclosed area, although the nature of these changes is not clearly understood (Fig. 5.3). The western boundary was infilled, and wall 2193 was robbed. Either during Phase 3d or Phase 4a, the southern part of western boundary ditch 2301 was covered by a layer of cobbling that extended into Trench 19, north of the rectangular enclosure (see Trench 19 below and Chapter 6). Buildings 1 and 2 were demolished, and internal boundaries 781, 1594 and 1595 went out of use. These features were replaced by a single small square building, B 7 (Fig. 5.11; see below). Three oven/hearth features were discovered in the interior of this building, suggesting a domestic function (Pl. 5.6). Aisled Building B 3 did continue in use, although the extent of this use is not known. Lying just to the west of B 3 was well 502 which may have belonged to both Phase 3d and 4a/b. F 2 may have continued into this phase, given the spatial relationship with B 3, and therefore F 3 may also have still have been standing. The majority of the pottery from ditch 562 was late 3rd-century in date, although later material was recovered suggesting that the enclosure to the east of Trench 13 may have continued in use into this phase.

Building 7 (B 7) (Fig. 5.11; Pl. 5.6)

A small square structure, 8 x 8 m internally, was erected on the site of B 1 (Fig. 5.4). It lay at the northern end, sealing with its east wall four of the aisle postholes from the earlier building. Only two small fragments of wall or footings survived, in the east (2107) and north (2139). Both these fragments were coursed and regularly faced unlike the walls of B 1 and the later villa (B 8) which succeeded B 7 (see Chapter 6). Wall 2139 was sealed by layer 1949, interpreted as a levelling or dump layer beneath the floors of B 8, while eastern wall 2107 had been reused in B 8. Aside from where 2107 overlay an earlier posthole, the walls were not deeply founded. Robber trench 1977, robbing wall 2139 was barely 0.1 m deep, and 2106, robbing wall 2107, was 0.14 m at its maximum. Robber trench 2106 was seen to continue south from wall 2107 for *c* 4 m. It was later overlain by Phase 4 layer 1929 (B 8) and Phase 5 wall 1999. Robber trench 1977 was traced for 5 m from the north-east corner of the building, before it was cut by robber trench 1947 of B 8. It could not be located west of 1947. It should be noted, however, that the survival of the stratigraphy in this area was poor. A small hearth 1948 overlay the robber trench 1977 but was itself sealed by 1949, a floor make-up layer in B 8. The position of hearth 1948 is thus stratigraphically between B 7 and B 8, and may represent activity during the demolition of B 7 and

Plate 5.6 Trench 13 oven 2113

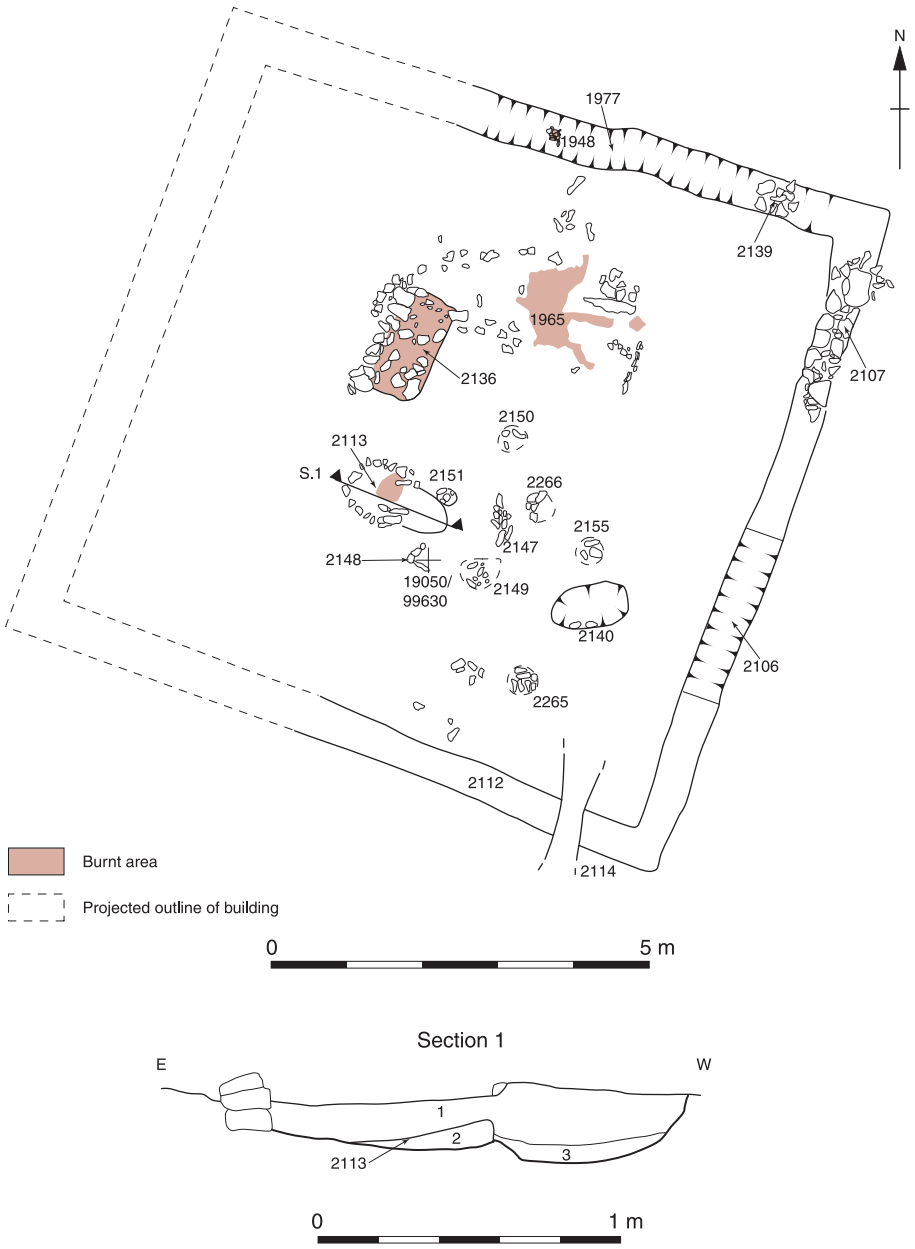


Fig. 5.11 Trench 13 Building 7

construction of B 8. The south and west sides of the building were far more difficult to discern. The line of the southern wall was highlighted by possible robber trench 2112 although the western section had been removed by the medieval well, 696. Given the truncated extents of robber trenches 1977 and 2112 and the poor preservation of features, the western extent of the structure has to be conjectured. It appears likely that it was on the line of the western wall of B 8, 1556.

Internally layer 2152 (not shown on plan), a black sandy loam, appeared to be a contemporary horizon, although not showing any signs of compaction to be expected from a floor surface. Few finds were associated with it, only 78 g of pottery, an iron nail and a copper alloy coin dated AD 250-400. A series of hearths, ovens, postholes and pits were defined at this level and would appear to be associated with B 7. To the north of 2152, layer 2111 (not shown on plan) could be seen, which was also a black sandy loam, overlaid by 1920 (B 7 destruction layer) and abutting robber trench 1977. It is likely that this layer was contemporary with 2152. It contained 4th-century pottery (0.82 kg), a fired clay fragment, several iron nails, a whetstone, iron bolt and iron spearhead. Most of the 81 animal bone fragments associated with B 7 came from this layer.

Three ovens or hearths within the interior seem stratigraphically contemporary, although may not have been features of the building when it was first constructed. Feature 2136 was poorly preserved, however some stone facing survived on the south and east walls. The pottery from the hearth indicated a late 3rd-century date. Hearth 1965 was situated in the north-eastern part of B 7. It was defined by two perpendicular lines of burnt and pitched stone forming an area 1 m x 0.8 m. An area of burnt clay ran west for *c* 0.7 m from within the feature. Hearth 1965 was seen to overlie layer 2111, and was overlaid by destruction layer 1920 which sealed interior layer 2152. The remaining oven, feature 2113, was positioned south of 2136, orientated NW-SE (see section on Fig. 5.11 and Pl. 5.6). The oven was circular in plan, and constructed of up to four courses of limestone, with pitched slabs on the eastern side leading to a stokehole. The fill was a black sandy loam containing charcoal, and a small quantity of charred plant grain (wheat, barley and flax). The secondary fill covered both the oven and the stokehole. The oven was well preserved and had been set deeper than the other features within B 7. It could well have been a simple type of bowl-shaped corn-drier, as defined by Morris (1979, 182), although the quantity of grain is very slight. It was overlain by layer 1929. Finds consisted of fired clay fragments including daub, and a mortar/plaster fragment. A concentration of postholes was located to the immediate east of hearth 2113 (Fig. 5.11). These were all of a similar size *c* 0.4 m diameter and 0.3 m deep with limestone packing. Postholes 2147, 2148, 2149 and 2151 formed a 1 m^2 four-post structure around the stokehole to 2113. An oval pit (2140), *c* 1 m x 0.50 m and 0.22 m deep, lay adjacent to these postholes, and had a greyish black fill of sandy loam with charcoal. Four other postholes (2150, 2266, 2155, 2265) lay within the eastern half of B 7, but formed no recognisable structure.

B 7 appears to have been erected soon after the demolition of B 1, in the later 3rd century AD, and it was partially dismantled and incorporated into the Phase 4 villa during the early 4th century (see Chapter 6). There were few finds to indicate the building's function, but it was well constructed, and the presence of wall plaster (if it did indeed relate to this building) suggests a domestic dwelling of some kind. The presence of hearths and a possible corn-drying oven associated with grain and chaff suggests that at least at some point crop processing took place within the building (see discussion below).

Boundary 1988 and oven 2103 (Fig. 5.4)

Post-dating B 1, but aligned on the same axis as the eastern aisle post line, lay gully 1988. Its northern terminal lay just north of the south-east corner of B 7. It was traced south for *c* 7 m where its southern extent was truncated by Phase 4 ditch 700 (E 21). The gully was narrow but comparatively deep measuring 0.55 m wide and 0.5 m deep. It contained a rubble fill with late 3rd- to 4th-century pottery (4.5 kg). A causeway of laid and coursed limestone slabs and gravelly mortar (2126) had been constructed across the gully, approximately 1 m in length. Stratigraphically it predates B 8 boundary wall 1587, and would therefore seem to be contemporary with B 7, perhaps re-marking a boundary originally defined by B 1. Gully 1988 was overlain by Phase 4 layer 1929. Aside from the pottery, finds from the gully comprised iron nails, a whetstone, mortar and plaster (probably from B 1), fired clay and a bone bobbin. A total of 188 animal bone fragments were also recovered, including domestic fowl and hare. Just to the south of, and cut by, ditch 700 was oven 2103. It comprised up to three stone wall courses, although it was partially robbed. It was filled with charcoal, burnt stone and 0.48 kg of pottery, ranging from 2nd- to 4th-century in date. Large quantities of glume bases of spelt wheat were also recovered, and the oven probably represented part of a centralised cereal-processing facility for the settlement. It was clearly later than B 1, and spatially is more likely to belong to Phase 3d or possibly 4a.

Well 502 (Figs 5.4 and 5.12, Pl. 5.7)

A well was sited 8 m west of Aisled Building 3, between the two late Roman enclosure ditches E 21 and E 22. The opening was *c* 1.2 m diameter and depth was 3.6 m, with a dry stone lining reaching to the bottom of clean gravel (Fig. 5.12). This was much deeper than any other well on site. It had been infilled with gravelly loam and some limestone rubble. Its construction date cannot be suggested with any certainty but it appears likely to have been in use during the later 3rd century and part of the 4th century, and therefore spans both Phase 3d and 4a/b. It is unlikely to have continued in use after the construction of enclosure ditch 780 which would have effectively isolated it from the main domestic buildings. Poorly preserved organic material was recovered, along with 3.5 kg of pottery, a bone pin, shale bracelet (Fig. 5.34, no. 10) and what may have been a copper alloy razor.

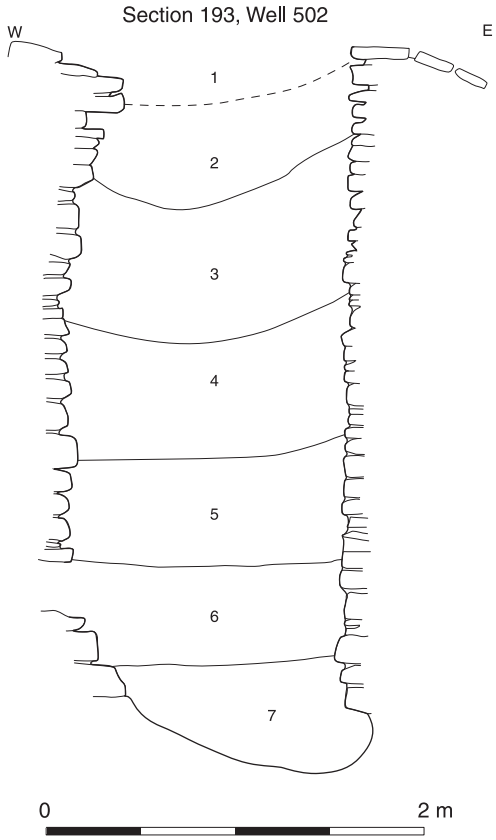


Fig. 5.12 Section 193 through well 502

Phase 3 features un-assignable to sub-phases (Fig. 5.4)

There were a variety of features in Trench 13 that clearly belonged to Phase 3 on a ceramic and/or stratigraphic basis, but could not be assigned to a specific sub-phase.

Fencelines

Three further fencelines were thought to belong to Phase 3 (F 1, F 9 and F 7). F 1 and F 9 may form two sides of an enclosed area, 11 m (F 9) by 13 m (F 1). All the postholes were stone packed, and dimensions varied between 0.3-0.5 m diameter, and 0.18-0.38 m depth. Stratigraphically the fencelines post-date Phase 2 features, cutting into the tops of ditch 2602, and were cut by Phase 4 ditch 765 (E 21). Another fenceline (F 7) was traced NW-SE for 7 m from the southern terminus of Phase 3a ditch 2175, which it appeared to cut. This was parallel to gully 2710 (see below) *c* 26 m to the north. It comprised four postholes (2177-2180) set between 2 m and 2.5 m apart, all stone packed. They varied in diameter from 0.4-0.6 m, and were 0.14-0.2 m deep. It is possible that these fencelines all relate to the reorganisation of the settlement in Trench 13 during Phase 3b, helping to partially enclose the western aisled building.

Ditches and gullies

Gully 2710 was traced for 8 m perpendicular to Phase 3a ditch 2175. The western terminus of this gully was unclear, but was thought to lie just short of 2175. In the east it was truncated by Phase 4 ditch 700 (E 21). The gully was *c* 0.8 m wide, and the pottery (0.86 kg) indicated a date in the second half

Plate 5.7 Trench 13 well 502

of the 3rd century. It would not therefore seem to be contemporary with 2175. In the south-western corner of Trench 13 gully 1737 was seen running NE-SW, overlying a series of Phase 2 gullies. It contained fired clay fragments, several iron nails, a melted lead fragment, copper alloy ligula and copper alloy coin dated AD 335-41. In addition there were 1.76 kg of pottery and almost 200 animal bone fragments.

Pits

A number of pits were revealed across Trench 13, which belonged to Phase 3. A NW-SE line of roughly circular pits was seen between F 4 and F 3, just south of trackway ditch 620, although it is not known if there was any relationship between them. A small amount of 2nd and 3rd-century pottery was recovered from them. Immediately north of ditch 547 and west of F 2 two intercutting pits were excavated (703, 704). Pit 703 was circular, *c* 2 m diameter and *c* 0.4 m deep, and contained pottery (1.8 kg) broadly dating from the mid 1st to 3rd centuries and a quantity (90 fragments) of animal bone. The feature was cut by adjacent pit 704, approximately 3.5 x 4 m, and 0.4 – 0.5 m deep. Finds from this pit included fired clay fragments, coal, animal bone (73 fragments) and pottery (0.58 kg) dating from the mid 2nd to 3rd centuries. To the north-east of Trench 13 oval pit 513 was seen, *c* 3 m in length. This contained 2nd- to 3rd-century pottery, an iron nail and fragments of daub. It was cut by Phase 4 ditch 501 (Fig. 6.4). At the southern limit of the excavations was feature 1730, which had been badly truncated and is difficult to classify. The cropmarks did not indicate if it extended south of the trench. However, it was quite substantial in size, 3 m wide and *c* 0.8 m deep. It contained a number of finds including fired clay fragments, several iron nails, smithing slag, vessel glass, a spindlewhorl and lead weight, as well as 2 kg of pottery dated mid 1st to mid 3rd century. A total of 147 animal bone fragments was also recovered.

Corn-driers

In the south-eastern part of the site was a probable corn-drying oven (1537) overlying Phase 2 ditch 643 (Fig. 5.4; Pl. 5.8). It comprised two parallel lengths of limestone 'walls' set 0.55 m apart for 1.5 m, along a NE-SW alignment. The western wall turned at right angles at the southern end for a further 0.4 m, while the corresponding side appears to have been robbed. Only a single course of stonework survived and so the 'flue' of the structure was only a maximum of 0.1 m in depth. Structurally, it appears to be a corn-drier of traditional T-shaped design (Morris 1979, 10) with the stokehole at the northern end showing traces of burning. There is no dating evidence for the structure, but T-shaped corn-driers generally appear from the 2nd to 4th century AD, with the vast majority belonging to the later period. It could therefore belong to Phase 3 or 4.

A further possible L-shaped corn-drier (1364) was recorded in the salvage area about 20 m north of Trench 13 (not shown on plan) but not fully excavated. It would have lain outside of the main rectangular enclosure, and again could belong to either Phase 3 or Phase 4.

Plate 5.8 Trench 13 corn-drier

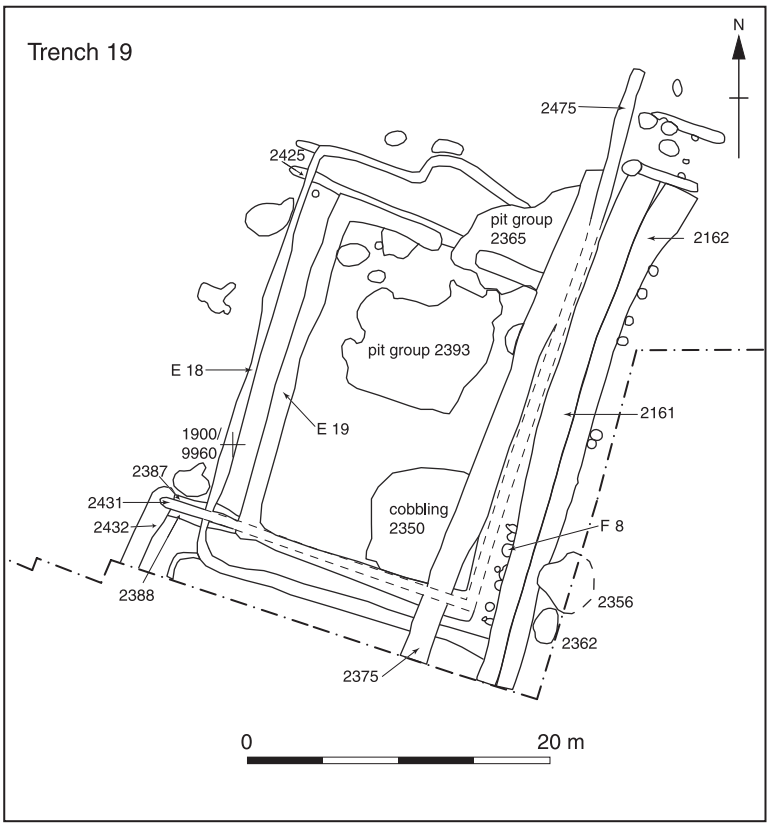


Fig. 5.13 Trench 19 composite plan

Trench 19 – The rectangular enclosures (Fig. 5.13, Pl. 5.9)

Phase 3a: Pre-enclosure features (c early 2nd century AD)

Activity in Trench 19 during Phase 3a was seemingly quite limited, and is archaeologically defined as those few features which are stratigraphically earlier than the double-ditched rectangular enclosure (Fig. 5.2). These comprise a pair of gullies (2387, 2388) aligned WNW-ESE on the south-west corner which were cut by ditch 2432 and truncated by both the outer enclosure gully (E 18), and by the corner of the inner gully (E 19; Fig. 5.13). Significantly, they lay exactly on the same alignment as the later enclosure gullies, and may well relate to the north-south Phase 3a boundary ditch 2162. Gully 2425, orientated WNW-ESE along the northern side of the enclosure probably belongs to Phase 3a on spatial grounds, as it lay on the same alignment as gullies 2387/8 and the later enclosure.

Phase 3b/c: The enclosures (mid 2nd–later 3rd century AD)

Although activity began in Phase 3a, the first significant period of expansion in this area came during the middle of the 2nd century AD (Phase 3b), with the establishment of a substantial double-ditched rectangular enclosure (Fig. 5.2). This was probably an extension of the radical reorganisation that occurred in Trench 13 during Phase 3a, and resulted in an enclosure facing north onto a large cleared central zone, with the aisled buildings to the north-east. The spatial relationship between the two enclosure boundaries suggests that they were contemporary features, at least up until about the mid 3rd century AD, although E 19 seems to have stayed open for longer (see below). There were no *in situ* indications of any internal structures within the enclosure, and the finds reveal little of the nature of any activity there (see discussion below). It seems likely that most of the area was kept clear, although the quantity of structural stone found, including column parts, indicates the likelihood of some kind of edifice. Most of the pottery from the enclosures was mixed with material from later pits and redeposited spreads, dating to the later 3rd/early 4th century (Phase 3d).

Enclosure E 18

The smaller outer gully, E 18, seemed to be attached to the side of ditch 2161 to the east, and was thus a continuous feature (Fig. 5.13). It defined an area *c* 31 x 21 m with the only irregularity being on the north side where a segment of the gully projected forward *c* 2 m. The gully was *c* 0.4 m wide and 0.3 m deep with evidence of a single cut. The fill was a very

Plate 5.9 Trench 19 rectangular enclosures

clean clay loam with little gravel. The finds, which comprised mostly iron nails and pottery (*c* 3.5 kg), were predominantly from its surfaces. The northern side had been cut by pit group 2365 (see below) and then partially sealed by cobbling during the later 3rd/early 4th century (along with part of E 19). Most of the finds recovered were associated with this or just prior to it. A total of 257 animal bone fragments were also recovered, most from the western side.

Enclosure E 19

The inner enclosure ditch, E 19, is likely to have been contemporary with E 18, although a later recut veered south, thereby removing the element of concentricity and suggesting that the inner gully may have been open for longer (see Phase 3c plan, Fig. 5.3). The inner enclosure was *c* 23 x 16 m, with a 3 m entrance causeway situated centrally on the northern side, aligned with the projecting segment of the outer enclosure. The dimensions of the inner ditch were variable ranging from 0.6 to 1.2 m wide and 0.4 to 0.6 m deep. Two clear cuts were defined on the north-west and southern sides. The recutting of the ditch on the southern side seemed to be associated with changing activity within the enclosure (Phase 3c?). The earliest cut on this southern side was sealed by an area of cobbling 2350 (7 x 5 m) in the south-east corner. This cobbling seemed to respect the edge of the late recut, and hence was presumably contemporary with it. The north-eastern part of the rectangular enclosure was particularly badly truncated by ploughing, with the result that features were generally very shallow, cuts were often difficult to distinguish, and finds from different features were inevitably quite mixed. A section of the inner enclosure appears to have been cut by pit group 2365, but was then subsequently recut, probably at the same time as other parts of the enclosure. Most of the pottery from E 19 was of mid-late 3rd-century date. In total 519 animal bone fragments were recovered from the different sections of E 19.

The north-south boundaries (2161, 2162, F 8)

A sequence of ditches divided the area of the rectangular enclosure from the enclosures in Trench 13 (Fig. 5.13). The earliest, 2162, was probably part of the boundary system that marked the major Phase 3a reorganisation seen within Trench 13. Ditch 2161, running parallel to 2162, was similar in proportions to it, and belonged to Phase 3b. It was this ditch which probably formed the eastern boundary of the Trench 19 double enclosure. A short fenceline, F 8, could be traced for *c* 7 m along the west side of ditch 2161 at the south-east corner of the rectangular enclosure. The postholes were irregularly spaced and some were seen to cut the edge of one cut of ditch 2161. The juxtaposition of ditch 2161, F 8 and enclosure ditch 2376 (E 19) might suggest that all three may not have been contemporary but it is conceivable that the enclosure was separated from Trench 13 features by a fence and ditch arrangement.

Phase 3 c/d: the pits (late 3rd-early 4th century AD)

At some point in the late 3rd/early 4th century, two groups of pits were dug through the north-eastern and central parts of Trench 19, cutting though the earlier enclosure boundaries (Fig. 5.13). The north-eastern pit group (2365) appears to have been earlier (Phase 3c? see Fig. 5.3), and the inner enclo-

sure (E 19) was subsequently recut. By the time that pit group 2393 was dug (Phase 3d or 4a; see Fig. 5.3), it is likely that the enclosure was no longer in use.

Pit group 2365

In the north-east of Trench 13, lay a group of pits that had been heavily truncated by ploughing, and in some areas were just seen as an irregular spread of dark soil and rubble. Individual cuts were difficult to distinguish and cut sizes and profiles were also variable. The pit group was cut by Phase 4 ditch 2375 and a recut of E 19. Dating is problematic. Large quantities of finds came from the interface of the topsoil and pit fills, and they showed a similar mix to that of the adjacent pit group to the south. This included almost 13 kg of pottery, much of which was 3rd-century in date, but quantities of 4th-century material were also present. Much of the earlier pottery was in an eroded state and of small sherd size, indicating perhaps that this was residual material. The high percentage of Rhenish wares compared to that from the whole site suggests that it derived from a single source, and it may have been part of a general spread of material deposited across much of the northern part of the site (Phase 3d?), that only survived in the tops of the gully and pit hollows. Other finds included 124 animal bone fragments, over 10 kg of ceramic tile, late Roman vessel and window glass, iron nails, two coins (AD 268-70 and AD 320-78), a copper alloy bracelet, bone pins and an iron sickle.

Pit group 2393

Pit group 2393 formed a sub-rectangular area in the central part of Trench 19, showing clearly as a cropmark. It consisted of a series of pit cuts, often difficult to distinguish stratigraphically due to similarity of fills, which contained limestone rubble, domestic debris and general building debris. Some of the pits were also quite rich in charred plant remains – probably the dumped waste from processed crops which had been burnt on a domestic hearth (see Straker *et al.* below). The cuts themselves varied from being regular and rectangular to irregular and sub-circular. Dimensions were variable: between 1 to 3 m across and 0.2 to 0.5 m deep. The group was in part sealed by alluvium (2355), indicating that the pits survived as pronounced hollows for some considerable time. Chronologically, there is little to distinguish between the finds from pit groups 2393 and 2365, although the only stratigraphic relationship recorded suggests that the central group was later. The fact that more of the material seemed to derive from the main fill of these pits, as opposed to the upper surface, also suggests that these were later features, associated directly with the dumping of material. This probably occurred in Phase 3d or 4a. The finds from these pits included over 21 kg of pottery, almost 6 kg of ceramic tile, late Roman vessel and window glass, smithing slag, mortar and plaster, bone pins, iron nails, a copper alloy bracelet and four coins, mostly 4th century. A total of 1012 animal bone fragments was recovered from these pits, most (77.7%) of which were unidentifiable. Of the identifiable species, cattle (9.7%) and sheep (10%) were most numerous.

In addition to the wealth of material within the enclosure pits, there were two areas of redeposited rubble (2356, 2362) over ditch 2162 to the south-east, which also probably belong to the Phase 3d/4a. Significantly, these included three separate column parts (Fig. 6.21, nos 3-4, 6), which must have come from a structure of some architectural merit, possibly located within the actual enclosure (see discussion below). Further column parts (Fig. 6.21, no.2) found in similarly dated pits in Trench 17 to the north may have come from the same structure.

Trench 29 – The south-western enclosures
(Fig. 5.14)

The archaeological sequence within Trench 29 is particularly problematic in that the relationships between the mass of inter-cutting features were often quite obscure. Phasing has therefore relied as much upon ceramic dating and spatial analysis as stratigraphic relationships. Although many features could not be assigned to a specific sub-phase, it is believed that all activity within this Trench is confined to Phase 3.

Phase 3a? (c early 2nd century AD?)

The earliest Phase 3 activity in Trench 29 is represented by an east-west ditch (2847) along the southern boundary (Fig. 5.2). The feature was fairly insubstantial (0.18 m deep, 0.7 m across), and was cut by part of Enclosure 20 (E 20). A number of other gullies were also cut by E 20, but these formed no coherent pattern. Dating evidence from these features was slight, but on the whole suggestive of the early 2nd century AD.

Phase 3a – Enclosure 20 (early–mid 2nd century AD)

Sub-phase 3a was represented by a sub-rectangular enclosure (E 20) centred on the excavation trench, covering an area *c* 30 m east-west and 33 m north-south (see Fig. 5.2). Its southern edge cut the earlier boundary 2847 while the northern limit projected *c* 3 m into the line of the main east-west Roman road. The east limit, which defined the edge of the north-south road, was formed by a relatively substantial ditch (0.9 m wide and 0.6 m deep) and showed traces of recutting. The western part of the enclosure was also quite substantial (up to 1.2 m wide, 0.5 m deep) but there was no obvious recutting. A single terminal was located in the north-west side (not shown on plan) possibly representing an entrance. Large segments of the enclosure were truncated by later features on the north and east sides and thus any possible evidence for causeways here was lost. Stratigraphically the enclosure

predates the formulation of main east-west road, and dating evidence from the pottery principally derives from the upper fill. Its use/infill date is early to mid 2nd century and thus it could be seen as broadly contemporary with the initial redevelopment of Trench 13. The use of the enclosure cannot be ascertained with any certainty, as associated finds were limited. Aside from a small quantity of fired clay and iron nails, the only finds were a fragment of vessel glass and a single whetstone. Just over 100 animal bone fragments were recovered from the enclosure sections. The *c* 2.5 kg of pottery included four fragments of 2nd-century samian and 15 pieces of Dressel 20 amphora. The resolution of the pottery dates is not fine enough to allow association with any of the internal features, and the overall quantities of debris within the ditch are generally not large enough to indicate with certainty that domestic activity was occurring within.

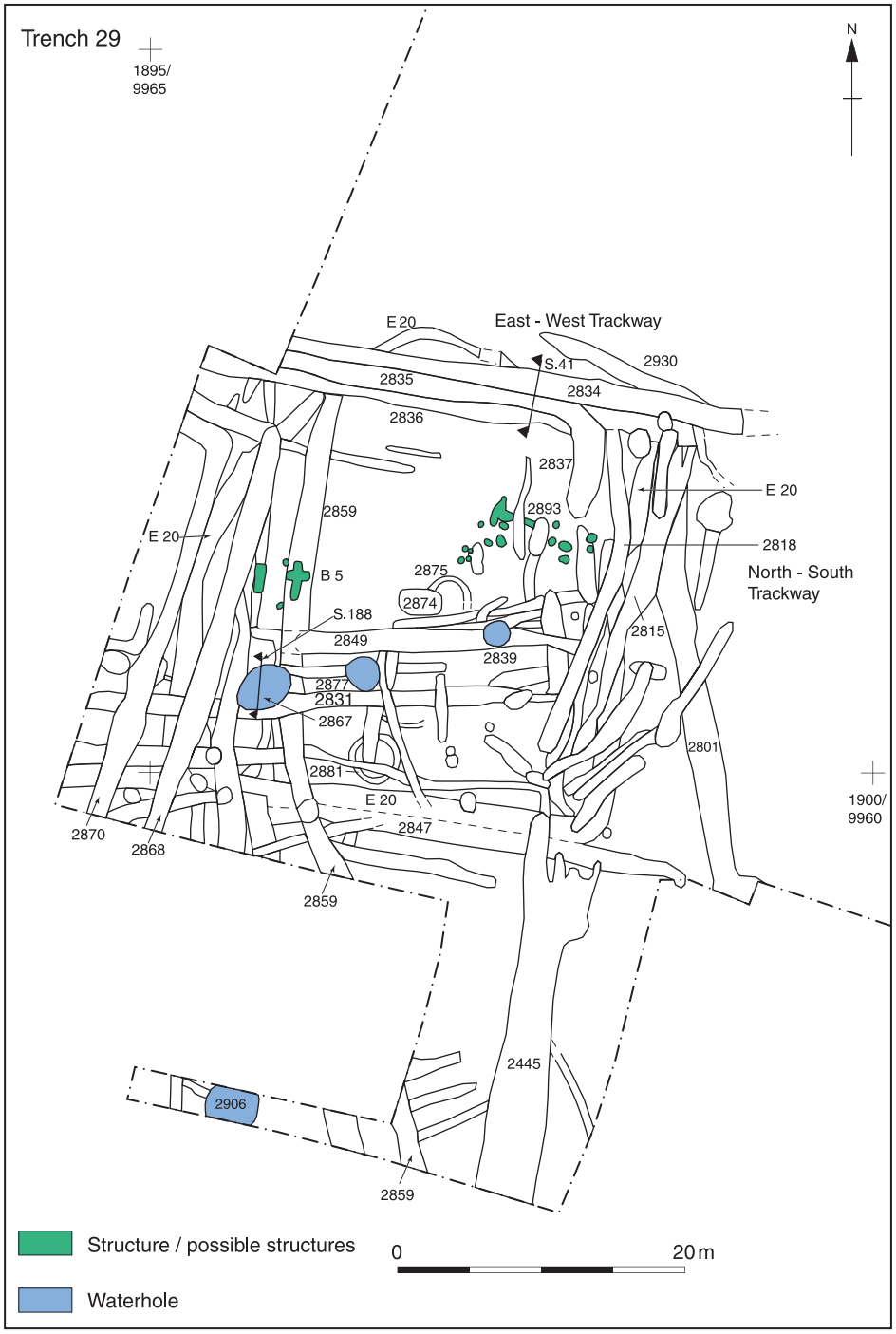


Fig. 5.14 Trench 29 composite plan

Phase 3a/b (c 2nd century AD)

Phase 3a/b saw a more regular demarcation of the area, with linear boundary ditches defining the north, east and west sides of a rectilinear enclosure (*c* 25 m across east-west; see Fig. 5.2). The northern ditch (2836) appears to have been the earliest of a sequence of east-west trackway ditches (see section 41, Fig. 5.15), the position of which changed very little throughout the remaining phases (Fig. 5.14). It was *c* 0.3 m in depth and at least 1 m across, its northern edge being cut by a later trackway ditch. Orientated in a southerly direction from this trackway boundary were two further ditches, 2859 and 2801, which may be contemporary. Ditch 2859 ran north to south where it curved south-east, and while its extent further south is unclear from aerial photographs, it does not seem to have crossed the line of the north-south road. It cut through sections of E 20, and became shallow towards the intersection with trackway ditch 2836, appearing to be contemporary with it. It was fairly broad and shallow (1.4 x 0.4 m) and was overlain by the eastern side of B 5 (see below). Approximately parallel to 2859 on the east side of the trench was a substantial ditch 2801 (*c* 2.3 m wide, 0.54 m deep), which cut diagonally across the line of the north-south road. It is not certain that this ditch was contemporary with 2836, although it does seem to follow the same alignment as the western ditch 2859.

The overall spatial arrangement of features in this sub-phase suggests that the line of the east-west trackway was well established by this time, while the same may not be true of the north-south trackway. The sub-phase is not well dated, but it can be placed within the 2nd century AD. A series of inter-cutting internal boundaries probably also belong to this general phase, although some of these are seen to cut through ditch 2859, while others are demonstrably cut by it (see below). Very few finds came from these features, but these included small quantities of pottery and fired clay.

Phase 3b/c (c later 2nd–3rd century AD)

This composite phase includes a sequence of features, which define a set of coherent boundaries to the west and east of the platform, while to the north they are also associated with the east-west road (see Fig. 5.3). As with the previous phase, a rectangular area is demarcated, but on a slightly different alignment, and with the possible appearance of a double-ditched boundary similar to that in Trench 17. An area *c* 24 m east to west was defined. On the west side were two major ditches: 2868 and 2870. The inner ditch, 2868, comprised two cuts, the earlier of which turned west 3 m short of the east-west road, and was subsequently cut by 2870. The later cut ran parallel to 2870 (between 2 and 3 m apart) but terminated at the point where the earlier cut curved west. Both 2870 and 2868 were of similar proportions (*c* 1 to 2 m wide and 0.4-0.5 m deep), and it is suggested that the ditches were contemporary and formed a double boundary, probably defining an enclosure further to the west outside the area of the trench. Aside from a few sherds of pottery (0.47 kg), there were no recorded finds from these ditches. The eastern side of Trench 29 was defined by a series of three separate ditches which all converged and became part of the east-west road ditches. The latest ditch 2837 is a foreshortened version of its earlier centre parts, extending only 5 m south of the road before terminating. It showed signs of recutting and was relatively deep (0.8 m and *c* 1.7 m wide). The other two boundaries 2818 and 2815 were less regular in line than those to the west, and ran south for 24 m before terminating. Ditch 2815 was shallow (*c* 0.3 m deep) with recuts showing to the north. Boundary 2818 was slightly more substantial (*c* 1.2 m wide, 0.4 m deep), although it became shallower to the north. There were rubble spreads across the northern extent of these ditches.

Ditch 2445 was orientated north-south and extended out of the trench. The various cuts of this feature terminated several metres short of 2818 and 2815 and some may have been associated with these boundaries. The cuts, five at least, varied in dimensions, (0.5-0.8 m wide and *c* 0.5-1 m deep), and the hollow caused by these features had been levelled out with rubble and domestic debris dating to the early 4th century (layer 2444). Ceramic material from the ditch cuts (*c* 3.2 kg) was mostly 2nd- and 3rd-century in date. Aside from

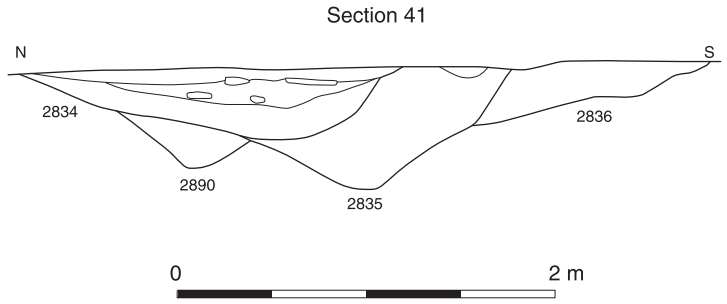


Fig. 5.15 Section 41 through east-west roadside ditches in Trench 29

the apparent re-deposited material in Phase 3d/4, this sub-phase produced the largest quantity of pottery (*c* 17 kg) suggesting that activity was at its most intense during this period, although it was still much less than in Trenches 13 and 17. The quantity of finds, which included three late 3rd-century coins, two stone mortars (Fig. 5.34, nos 16-17), and other industrial and domestic debris, corroborates this. Activity in this sub-phase seems to have ceased around the mid to late 3rd century (unlike the 'rectangular layout' of Trench 17 which probably extended into the later 3rd/early 4th century). There is a notable lack of Oxford colour-coated ware from the infilling of these ditches. The start date is more difficult to pinpoint but would presumably be around the latter part of the 2nd century at the earliest. The end of this sub-phase also marks the end of any real domestic or 'light industrial' activity in this part of the site (see discussion below). It is likely that Building 5 and at least two of the wells (2906, 2867) were contemporary with this phase (see below).

Phase 3d to Phase 4 (late 3rd–4th century AD)

The final phase of activity in Trench 29 is confined largely to the south-east corner (see Fig. 5.3). A series of short lengths of gully orientated NE-SW at a slight angle to the earlier boundaries. They varied from 7-10 m in length and were variable in profile from narrow and deep cuts (0.7 m wide, 0.7 m deep) to broad and shallow (0.3 m deep, *c* 0.9 m wide). Many of the gullies showed some signs of recutting, and relationships between them were not always clear. Almost 5 kg of pottery was dumped within these gullies, along with 225 animal bone fragments, vessel glass, iron nails, iron shears, a copper alloy brooch (2nd century) and a bone pin. South of these gullies, the linear boundary mentioned above (2445) may still have been in existence but only showing as a hollow. Its upper layer (2444) contained large amounts of pottery (*c* 15 kg) and 60% of the finds from the entire phase in this trench, including vessel glass, a quernstone, a brooch and pin, 2 4th-century coins and 124 animal bone fragments. This material appears to have been dumped here, along with quantities of building stone rubble, probably from another part of the trench or from further afield. Although this material is mixed, it does generally date to the later 3rd and early 4th century, a similar date range to that of the material derived from the gullies to the north. The dumping of domestic and structural material during this phase is paralleled on both Trench 17 and 19, and must relate to the radical phase of reorganisation across the whole site. Another feature probably of this phase was ditch 2834, the latest recut of the east-west trackway ditch, which was *c* 1.8 m wide and 0.35 m deep.

Trench 29 internal features (Fig. 5.14)

There were many features within Trench 29 that could not be accurately assigned to specific sub-phases, though all would seem to fall within Phase 3.

Internal boundaries

A sequence of ditches and gullies were situated in the central and southerly part of Trench 29, although the relationships between them were not always clear. Their general alignment suggested contemporaneity with eastern ditch 2801 of Phase 3a/b, although many cut through ditch 2859 of that same sub-phase. Two substantial ditches, 2831 and 2849, orientated east-west, both appeared to cut ditch 2859 to the west. Ditch 2831 (1.5 m wide, 0.4 m deep) was cut by a number of north-south gullies and was traced westwards out of the trench. Ditch 2849 further north (1.2 m wide, 0.4 m deep) was stratigraphically later, cutting through all features with the exception of waterhole 2839 and possibly ditch 2818 to the east, although no certain relationships were recorded in this area. The western terminal of this feature is unclear. The pottery from these features (1.6 kg) suggests a 2nd-century date, and it is likely that they were broadly contemporary with the Phase 3a/b features, probably defining internal boundaries. Aside from the relatively small amounts of pottery, other finds consisted for the most part of fired clay and iron nails. A fragment of 2nd-century vessel glass and a dress pin hint at occupation, while a small amount of smithing slag suggests minor industrial activity.

Building 5 (B 5) (Figs 5.14, 5.16 and Pl. 5.10)

Situated on the west side of the trench and overlying Phase 3a/b ditch 2859, was a square structure, *c* 2.5 m^2 internally, probably of two phases. The first phase was formed by two short lengths of parallel wall, 2895 and 2887, defining the east and west sides. Wall 2895 survived only as disturbed footings and was of a small random rubble nature. Quantities of rubble in the upper layers of adjacent ditch 2868 suggest that the ditch may have been only partially infilled when the structure was demolished. Wall 2887, cutting ditch 2859, was deeply founded and was of coursed construction. Overlying the central section of this wall foundation were burnt flat limestone slabs (2885), which projected eastwards for 0.5 m (Pl. 5.10). They were covered by a layer of burnt material, and were connected to a probable stoke-hole on the western side of the wall (2886). It is suggested that this was part of an oven structure, probably inserted into the wall at a later date, although no evidence for its superstructure has survived. This second phase of B 5 may be related to the two postholes (2900, 2901) on the northern and southern sides, sited off-centre towards wall 2887 and opposing each other (Fig. 5.16). These lined up with two limestone slabs that could have

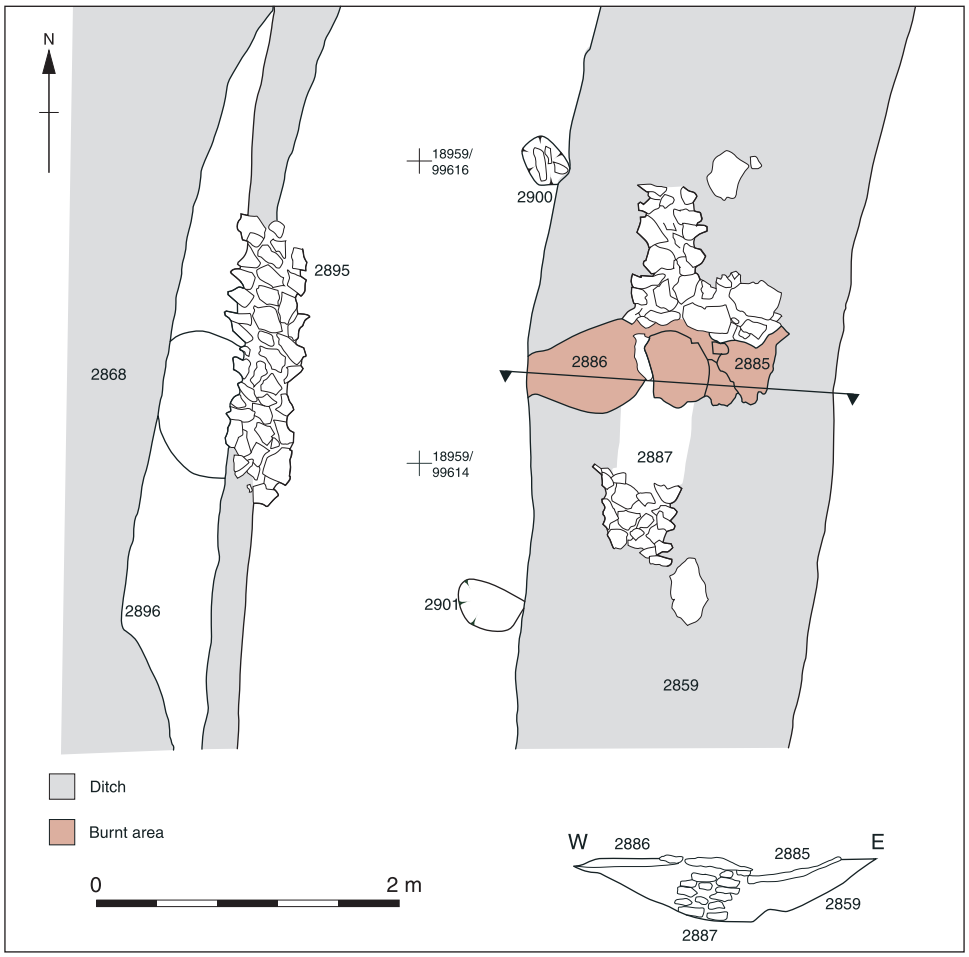


Fig. 5.16 Trench 29 Building 5

Plate 5.10 Trench 29 Building 5

formed post pads *c* 1 m to the east, and thus a rectangular, possibly open sided building (3 m x 1 m), would have been created around the oven. No further features appeared to be associated with the structure. Dating is based on its stratigraphic position, post-dating ditch 2859 (giving therefore a construction date some time in the later 2nd/early 3rd century) and appearing indirectly contemporary with the Phase 3b/c boundary ditch 2868 (perhaps in use up to the mid 3rd century?).

Other structural evidence

Apart from Building 5 on the west side of the trench, a further area in the north-east corner suggested the presence of a structure or structures (Fig. 5.14). The evidence took two forms: a concentration of postholes and an L-shaped slot (2893) with associated coursed stonework. It is not clear if these represent associated activity or two distinct phases of activity. The postholes are roughly confined to an area 7 m by 4 m although they themselves do not define a rectangular area. Many are stone packed. It is difficult to make logical structural sense out of their pattern, and the relationship with the possible timber slot 2893 is not certain. This slot was shallow but relatively wide (0.2 m deep, 0.6 m wide) with a nearly flat base. It was L-shaped in plan, measuring 3.5 m east to west before turning south for 1.5 m, with a line of coursed stonework lying inside the angle. The nature of the stonework suggests that it may have been part of an internal feature. It is impossible to date these features with any precision.

Stack rings

Two of these small diameter circular gullies were recorded from Trench 29 (2881 and 2875; Fig. 5.14). They were 3 m across with gully dimensions of 0.6 m wide and 0.2 m deep. Sides were gently sloping. The southern half of 2875 was lost, partially cut away by pit 2874 and partially due to it shallowing out. They could not be dated precisely, but would appear to be early in the stratigraphic sequence.

Waterholes

Four small waterholes (2867, 2877, 2839 and 2906) were sited within the area of Trench 29, with depths ranging from 1.02 to 1.15 m (Fig. 5.14). Three in the central area were stratigraphically late, cutting Phase 3a/b boundaries. The fourth (2906) lay further south, beyond the main area of Trench 29. Steps existed down into the waterholes in two cases (2839, 2906), both on the east side. It should be noted, however, that only the west sides of the other two (2867, 2877) were excavated. A similar feature with probable steps on the east side was located in Trench 17 to the north (1318), and contained part of an infant skeleton (see below). It is likely that all of the waterholes belonged to the same sub-phase (3 b/c), although they may not have all been directly contemporary. Waterholes 2867 (Fig. 5.17, Pl. 5.11) and 2906 contrasted with the others in having a fairly large deposit of alluvial material as the upper layers, suggesting that they remained as substantial hollows into the post-Roman period. Aside from small quantities of pottery and animal bone, finds were few, although a cone of *Pinus Pinea* was recovered from a lower deposit of dark grey organic material in waterhole 2906 (see Phase 3 Environment).

Plate 5.11 Trench 29 waterhole 2867

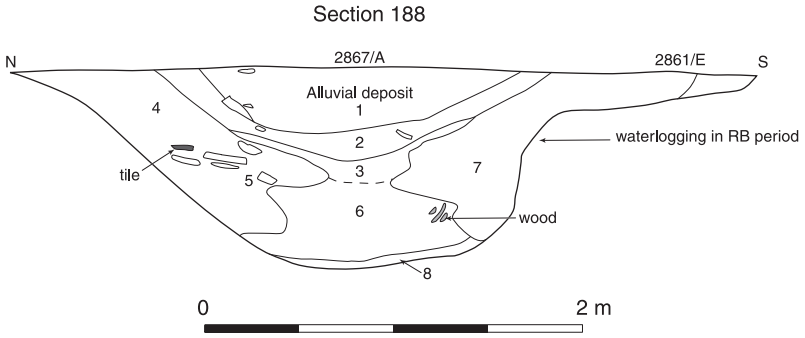


Fig. 5.17 Section 188 through waterhole 2867 in Trench 29

Pits

A total of 19 pits were excavated in Trench 29 (Fig. 5.14). They seemed to concentrate around the boundaries of the area and often cut earlier boundary ditches, particularly on the south-west and north-east corners. The pits to the south-west were similar in form, being *c* 1 m in diameter and from 0.7 to 0.9 m deep. As with the waterholes, they were the latest features in the area, most probably belonging to Phase 3b/c. Their fills indicated that they were probably not used for the disposal of domestic refuse, and they appear to have been deliberately infilled rather than left to silt up naturally. The majority of the pits were approximately circular in shape and ranged in size from shallow scoops (*c* 0.15 m depth) to the more substantial pits in the south-west corner of the trench mentioned above. Pit 2874, in the central part of the trench, contrasted with the rest of the pits in being sub-rectangular in plan (2.4 x 1.5 m, 0.5 m deep), with steep sides and a flat bottom. It had been deliberately infilled: the soil was charcoal blackened and contained pottery (0.74 kg), stone, animal bone and daub fragments. Most of the remaining pits contained very few finds.

Trench 17 – the western settlement area (Fig. 5.18; Pl. 5.12)

Phase 3b (early/mid 2nd–?late 2nd/early 3rd century AD)

Activity commenced in Trench 17 in about the mid 2nd century AD, probably after the radical re-organisation that took place within Trench 13 to the east (see Fig. 5.2). A series of major north-south and east-west linear boundaries were laid out, defining zones of domestic, agricultural and light industrial activity in the western and northern parts of the trench. The south-west corner of this area was given over to a series of enclosures, while another larger enclosure to the north contained a series of stack-rings and a waterhole, possibly for the provision of animals. The primary domestic foci appear to have been to the east of the south-west enclosure group and north-east of the central enclosure, although no definite structures of Phase 3b date have been located, and many of these features could belong to Phase 3c/d. Over 70 % of all smithing slag from Phase 3 contexts came from Trench 17, with particular concentrations in ditches 1409 and 1335, implying light industrial activity in these areas.

Major linear boundaries

Although it is uncertain whether they formed the earliest components of the site, a series of linear ditched boundaries (1247, 1340, 669, 1401, 1409) enclosed much of the area to the north and west, and virtually all archaeologically detected activity was confined to certain zones within this space (Fig. 5.18). Ditches 748 and 707 appear to have been later additions along the southern and eastern sides, and have been tentatively assigned to Phase 3c/d (see

Plate 5.12 Trench 17 – view from east-west trackway looking north

below). If this was the case, then much of the central area of the site would have been left open during the 2nd and early 3rd century AD.

Ditch 1247 lay in the south-western part of the site, lying along the same east-west alignment as 748, and partially truncated by ditch 1255. The ditch was 1.5 m wide and contained a very small amount of pottery and animal bone. It is likely that this feature was contemporary with ditch 1340 aligned SSW-NNE and traced for over 50 m before continuing out of the trench. This was *c* 1 m across, 0.3 m in depth, and was cut by ditch 667. The northern boundary of the area was defined by WNW-ESE ditch 669, which may originally have joined up with ditch 1340, although it was cut by 667 at this point, thereby obscuring earlier relationships. The ditch was traced for 27 m before turning slightly to the south and being cut by ditch 1201, which was presumably its successor. Only 0.1 kg of pottery came from this feature, along with a single mid 4th-century coin from an upper fill.

A series of ditches (1401-1404) defined part of the north-south trackway to the north-east, until cut by the later ditch 1201. They were all quite shallow with a maximum depth of 0.4 m. Ditch 1401 appears to have turned westwards after 10 m to continue for *c* 22 m as 1409, and form the northern internal boundary of the central open area. Ditch 1409 contained large volumes (over 6 kg) of pottery, in addition to a significant quantity of smithing slag suggesting the presence of light industrial activity in the vicinity. Other finds from this ditch include a stone cosmetic palette (Fig. 5.33, no. 7), spindle-whorl, fired clay and 145 animal bone fragments. Subsequent recuts of 1401 (1402) and 1409 (1408) probably represent a later phase of the same boundary line (see below). Ditch 1408 contained part of a lower rotary quern (Fig. 5.33, no. 2).

Fig. 5.18 Trench 17 composite plan

Enclosures

In the south-western corner of Trench 17, was a successive series of apparent ditched enclosures, probably utilising the southern (1247/1255) and western (1340/667) boundaries of the area (Fig. 5.18). The finds from these features included over 5 kg of pottery, 250 animal bone fragments, fired clay daub, a copper alloy belt fitting, and a part of the head and the limb bones of an infant. To the north of the south-western enclosure group, was an east-west ditch (1286), which curved round northwards and probably turned into ditch 1335. Ditch 1335 was more substantial, being *c* 1 m wide and 0.6 m deep. The ditch formed a sub-rectangular enclosure (*c* 12 x 16 m) with an east-west ditch (1320) of similar character to the north. There may have been an entrance in the north-east corner of this enclosure, opposite the main entrance to the central open area. A small amount of pottery (*c* 1.8 kg) was recovered from all these ditches except 1335 where it was present in much greater quantity (5.6 kg). This ditch also contained many nails, daub fragments, smithing slag, animal bones and a fragment of vessel glass. The interior of the enclosure contained a number of circular gullies (see below).

Other internal linear boundaries

There were many other linear boundaries within the western and northern parts of Trench 17, although most formed no spatially coherent pattern (Fig. 5.18). Ditch 670 was aligned eastwards from 668 (relationship uncertain), was cut by 667, and continued into the north-western interior for *c* 9 m. It is unusual in that it was one of the very few features that continued beyond the main exterior enclosure ditches. The finds include a small pottery assemblage (0.62 kg), quantities of fired clay, smithing slag, iron rings and links and 74 animal bone fragments.

Orientated SW-NE for *c* 15 m across the centre of Trench 17 was a substantial ditch, 1294 (up to 1.2 m wide and 0.6 m deep). It cut part of the south-west enclosure group and was in turn cut by B 6. The ditch produced a large quantity of pottery (*c* 9 kg), along with fragments of coal, smithing slag, fired clay, 85 animal bone fragments and a few domestic finds including a whetstone and a glass bottle fragment. To the south of 1294 was north-south ditch 1269, which comprised a series of cuts up to *c* 1.3 m wide and 0.5 m deep, and was stratigraphically later than most of the other features in the area (see Pl. 5.12). The ditch contained over 10 kg of pottery, along with a reasonable quantity of other finds including iron nails, iron chisels, a bone bobbin, a copper alloy pin, vessel glass, fired clay, smithing slag, a flint marble (Fig. 34, no. 18), and a quantity of coal. Over 200 animal bone fragments were also recovered. This suggests domestic and light industrial activities within this area.

In the north-eastern part of the site, mostly enclosed within the major boundaries were three linear ditches (1420, 1414 and 1367), all on different alignments. The earliest stratigraphically was 1420 (*c* 1 m across and 0.38 m deep), cut by a shallow ditch/gully (1414) which curved from west to north and was up to 0.8 m wide and 0.3 m deep. This was cut by ditch 1367 (up to 1 m wide and 0.5 m deep) which was aligned SW-NE and traced for 20 m, and contained large amounts of pottery (9.8 kg) and finds throughout its length, including fired clay, smithing slag, and a few iron objects (a key, knife and nails).

Circular gullies and gully arcs

Throughout Trench 17, there were a number of circular gullies and gully arcs of varying dimensions (Fig. 5.18). The largest (1208) lying between the south-west enclosure group and the internal north-south boundary (1206) was just 5.6 m in diameter, and would therefore seem too small to have been a roundhouse gully. It is shown in the foreground of Plate 5.12. A slightly bigger circular gully at Thornhill Farm (*c* 6-7 m dia) was interpreted as a storage building or temporary night shelter (Jennings *et al.*, 2004, 150). Approximately 11 m to the west lying within the south-west enclosure group lay another much smaller circular gully, 1308 (*c* 3 m dia), while further to the north lay three more similar features. None of these features produced any finds other than a very small amount of pottery and their dimensions suggest they could well be stack rings, used to store fodder for animals. Most of the gully arcs were confined to the interior of the western enclosure (1286 1335, 1320, 1314), and produced few finds.

Pits

A total of 81 pits, or probable pits, were recorded from Trench 17, with 25 of these forming a coherent group within the rectangular central open area (see Phase 3c/d below). The remainder were found throughout the area of gullies and enclosures to the north and west, although there are apparent concentrations to the north of circular gully 1208 and around the area of B 6. The majority of pit fills outside of the central area have no recorded finds other than occasional small quantities of pottery and animal bone, in contrast to most of the ditch fills. The major exceptions are two large pits (1246, 1202) south of circular gully 1208, which would seem to have been used – at least secondarily – for the disposal of domestic and light industrial refuse (Fig. 5.18). Pit 1202 contained waterlogged material, and could well have functioned as a waterhole. In total over 8.5 kg of pottery, along with vessel glass, coal fragments, a padlock bolt (Fig. 5.31, no. 58), animal bone and smithing slag were recovered from these features.

Phase 3c/d (early/mid 3rd to early 4th century AD)

At some point in mid to late 3rd century AD, there appear to have been significant alterations to the spatial organisation. The open area to the south-east

was probably enclosed at this time, and a rectangular building was constructed in the central northern part of the site, later rebuilt with stone foundations (see Fig. 5.3). Sections of probable masonry walls were built to the south, possibly connected to a hearth structure. By the later 3rd/early 4th century (Phase 3d), it seems that activity had greatly declined in this area, and a series of pits were probably dug in the previously cleared enclosure at this point, possibly for gravel extraction (see Fig. 5.3). They were subsequently infilled, some of them with structural masonry from another part of the site.

External boundaries

Ditch 1255 was essentially a recut of southern boundary 1247 and was traced westwards for over 35 m; it continued under the baulk (Fig. 5.18). It was the northern ditch of the main east-west trackway (*c* 3 m wide, 0.5 m deep), which was traced on aerial photographs continuing westwards away from the site. Ditch 667 aligned approximately north-south was recorded for 52 m at the western side of the main activity area in Trench 17. It was a substantial ditch measuring *c* 2.2 m wide, 0.6 m deep, which cut boundary 1340 on the same alignment. Ditch 1201 was aligned at right angles to ditch 667 across the northern length of the trench for *c* 45 m before turning northwards to follow the line of the main north-south trackway. The ditch was *c* 1.5 m wide and 0.4 m deep, and cut the earlier northern boundary 669. Substantial quantities of pottery were recovered from some of these ditches, especially 1201 which produced over 21 kg. Most of this pottery dated from the 2nd to 4th centuries, and it is likely that the ditches were still open into Phase 4. A large number of primarily structural and domestic finds were also recovered.

Western enclosure boundaries

About 4 m to the west of, and parallel to, 667 was ditch 668 (Fig. 5.18). It was cut by ditch 1312 which was parallel to it for its entire length and must represent its successor. It was difficult to distinguish between the two cuts, and the overall dimensions were 2.6 m wide and 0.45 m deep. A small quantity of finds was recovered, although the recorded pottery assemblage (*c* 1.7 kg) did include a substantial percentage (18 %) of Dressel 20 amphora. Other finds included a copper alloy bracelet and pin, two coins (1st-2nd century and 4th century) and 550 animal bone fragments. These ditches may have defined a north-south trackway lying between the large open enclosure (paddock?) to the west and the domestic, agricultural and light industrial zone within Trench 17.

South-eastern enclosure

The south-eastern part of the trench was enclosed (*c* 23 x 26 m) with the addition of ditches 748 and 707 (Fig. 5.18). These features were of similar character and dimensions (*c* 1 m width, 0.3 – 0.7 m depth), and not only enclosed the central area but also acted as side ditches for the main roads leading into the site. Defining part of the western boundary of the interior open space was a *c* 10 m long shallow ditch/gully, 1206, (*c* 0.8 m wide, 0.25 m deep) running north from the junction of 748 and 1255. Its northern terminus was cut by ditch 1253, which continued on a similar alignment to further enclose the open space area. Pottery from these enclosure ditches suggested they were in use from the mid to late 3rd century.

Waterholes (Figs 5.18, 5.21)

Lying 2 m east of ditch 667 was large oval waterhole 1318 (measuring 3.2 x 2.4 m across, 1.2 m deep), which contained part of an infant burial, a variety of 2nd-late 3rd/early 4th-century pottery (2.2 kg), a 2nd century AD cockerel brooch (Fig. 5.25, no. 9), a stone counter (Fig. 5.34, no. 19), and 136 animal bones. Two further waterholes (1342, 1344) were located further south. Feature 1342 was *c* 2.5 m across and 1.1 m deep and cut Phase 3/4 ditch 667 (see section 32, Fig. 5.21), while just to the north, 1344 (2 m across, 1.2 m deep) also cut ditch 667. Both 1318 and 1342 had steps leading down from the eastern side, similar to features in Trench 29. One of the rubble pieces used as a step in 1318 was a column base which must have been derived from another part of the site, as with the column parts found within one of inter-cutting pits (see below). It seems likely that this waterhole was excavated during Phase 3d, much the same as the inter-cutting pits (see below). Pit 1202, lying *c* 20 m east of 1340, may also have been a waterhole (see above).

Rectangular building B 6 (Figs 5.19, and 5.20)

Lying in the central northern part of the site, on a NW-SE alignment, was a two-phase rectangular building, measuring *c* 6.5 x 4.5 m. The first phase comprised three lengths of a timber slot building (1379, 1458, 1305) open on the north-west side (Fig. 5.19). Stratigraphically, the building is among the latest features in this part of the site, with only pit 1398 and the second phase of the rectangular building lying above it. Pit 1398 contained a large assemblage of charred plant remains, mainly comprising wheat grain although also with a range of wild plants suggesting animal fodder or hay as the sources (see Straker *et al.* below).

The second phase of B 6 is indicated by narrow compact linear rubble spreads (1376-8; Fig. 5.20) lying over the earlier slots, suggesting that the structure was rebuilt with pitched stone foundations. On the south-eastern side (1376) was an area of large limestone slabs, possibly marking a threshold into the building, although there is no indication of a wall of any kind on the corresponding north-west side, suggesting that the entrance was located here. Finds associated with the timber slot building comprised over 3.7 kg of late 3rd/early 4th-century pottery, fired clay, slag, an iron reaping hook (Fig. 5.31, no. 63), 71 animal bone fragments and part of a shale bracelet (Fig. 5.34, no.

14). No finds could be related to the second building phase, although mixed pottery of 2nd- to early 4th-century date was found in upper spreads around the structure. It is unlikely that the second phase building was in use beyond the early 4th century. The structure was used for domestic purposes, with light industrial activity in the area.

'Walls' 1366, 1385 (Fig. 5.20)

An extensive spread of rubble was found in the area around B 6, and while most of it may have derived from this building, there were at least two sections of probable walling to the south (1366, 1385). However, whilst these features may well have been the remains of walls, it is also possible they represent the truncated remains of a localised rubble spread, that had sunk into the ditches beneath. Unfortunately there is no dating evidence from any of these 'structures' but they are all amongst the latest features stratigraphically, and probably belong to Phase 3c/d, contemporary with B 6.

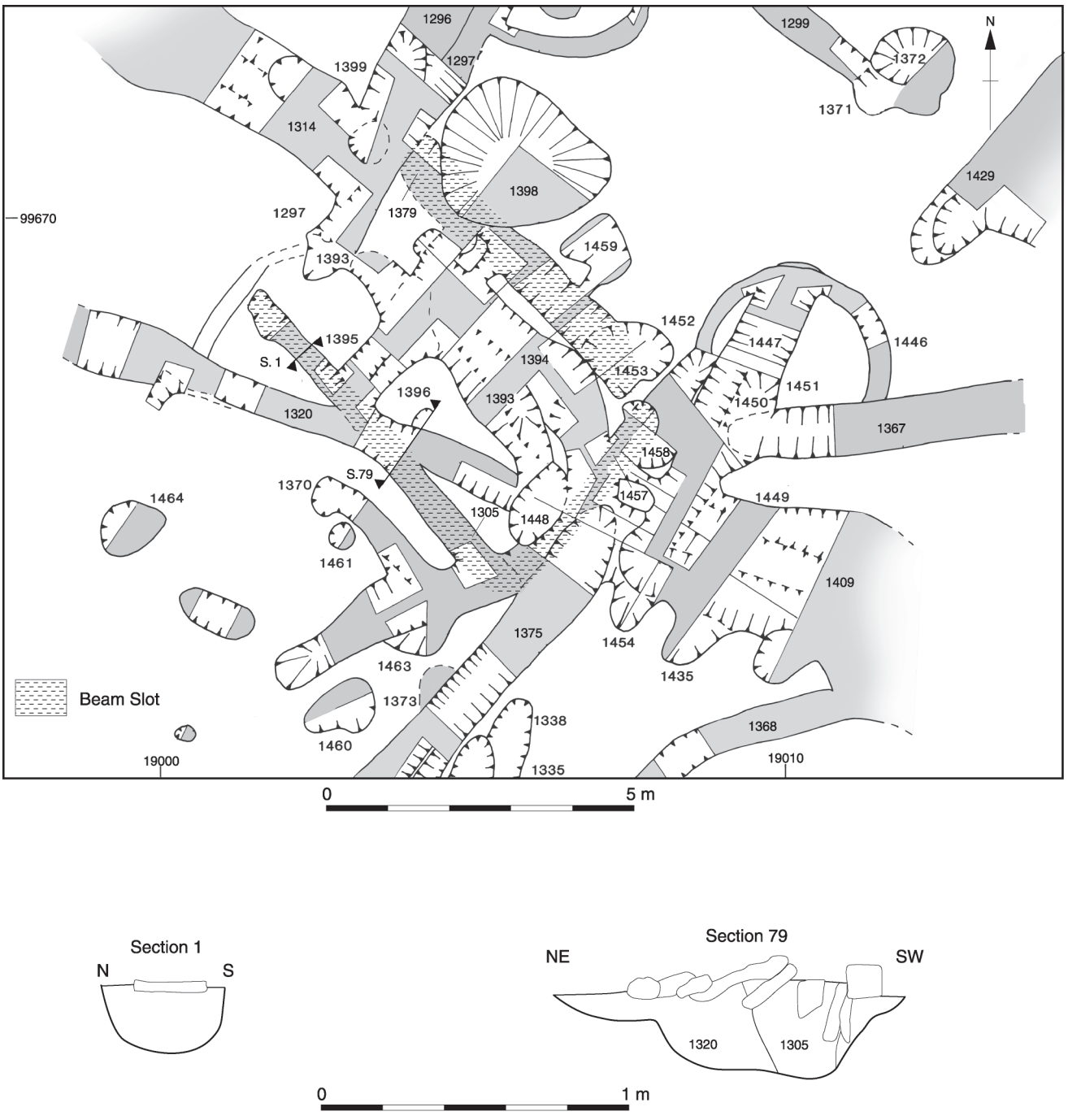


Fig. 5.19 Trench 17 Building 6

Oven/hearth (Fig. 5.20)

In the centre of Trench 17, north of 1269 and south of B 6, lay an oven structure (1355). A line of four postholes (1346, 1352-4) lay along its southern side, possibly representing a surrounding structure, although it is possible that they are later features. The only finds to come from any of these features were a small quantity of fired clay from the oven itself, presumably part of its superstructure.

South-eastern pit grouping

Situated in the south-eastern part of Trench 17, in the lower half of the internal cleared enclosure, was a group of 25 inter-cutting pits covering an area approximately 12 x 14 m (Fig. 5.18). Over a third of the 10 kg of pottery came from a single pit (1249) to the north of the main group, and this appears to be primarily later 3rd/early 4th century in date. Many other finds came from the remaining pits, including two column parts (see Fig. 6.21, no. 2 and Pl. 5.13) and other masonry building fragments, iron nails, fired clay, lead sheets, a copper alloy bracelet, two bone pins and a small quantity of smithing slag. Almost 1000 animal bone fragments were also recovered from these pits, most (70%) of which were unidentifiable; 73% (190) of the identifiable bone fragments were of cattle. The evidence from pottery and a single coin (AD 267-80) suggests that these features were dug in Phase 3d or possibly 4a, during a period of obvious transformation within the site. It is likely that most of the material was deposited here from another part of the site at a time when the cleared enclosure went out of use.

Archaeological features from the settlement periphery

The northern road (Fig. 5.22, Pl. 5.14)

Part of a WSW-ENE aligned Roman road was revealed in Trench 18, lying *c* 60 m north of the main excavation area (Fig. 2.3). It was clearly a continuation of the main north-south road found between Trenches 13 and 17 to the south, which connected that area to further Roman roads and field systems in the north, over the area of the middle Iron Age settlement on the Warrens Field site. Cutting through the Roman road in Trench 18 was a series of post-Roman ditches, along with the parish boundary stream, which was probably diverted along this route in the medieval period. The two parallel lengths of Roman roadside ditch (705, 751) were about 4.5 m apart and about 1.5 m wide. They were recut several times and had traces of banks on their outside edges. The only finds to be recovered were an iron rod from 751, a fragment of wood from 705, and less than 200 g of pottery from the trench as a whole. A total of 31 animal bone fragments were also recovered from ditch 705.

The southern boundaries

Several machine-dug trenches were excavated south and south-east of the main settlement to elucidate the stratigraphy of this complex cropmark area (Fig. 2.3). Emphasis was placed upon linear boundaries and their relationship to the triple-ditched boundary that appeared to mark the southern limit of the site. Dating this boundary is difficult, and the sequence and association of the three ditches is far from clear.

Plate 5.13 Trench 17 column base within south-eastern pit group

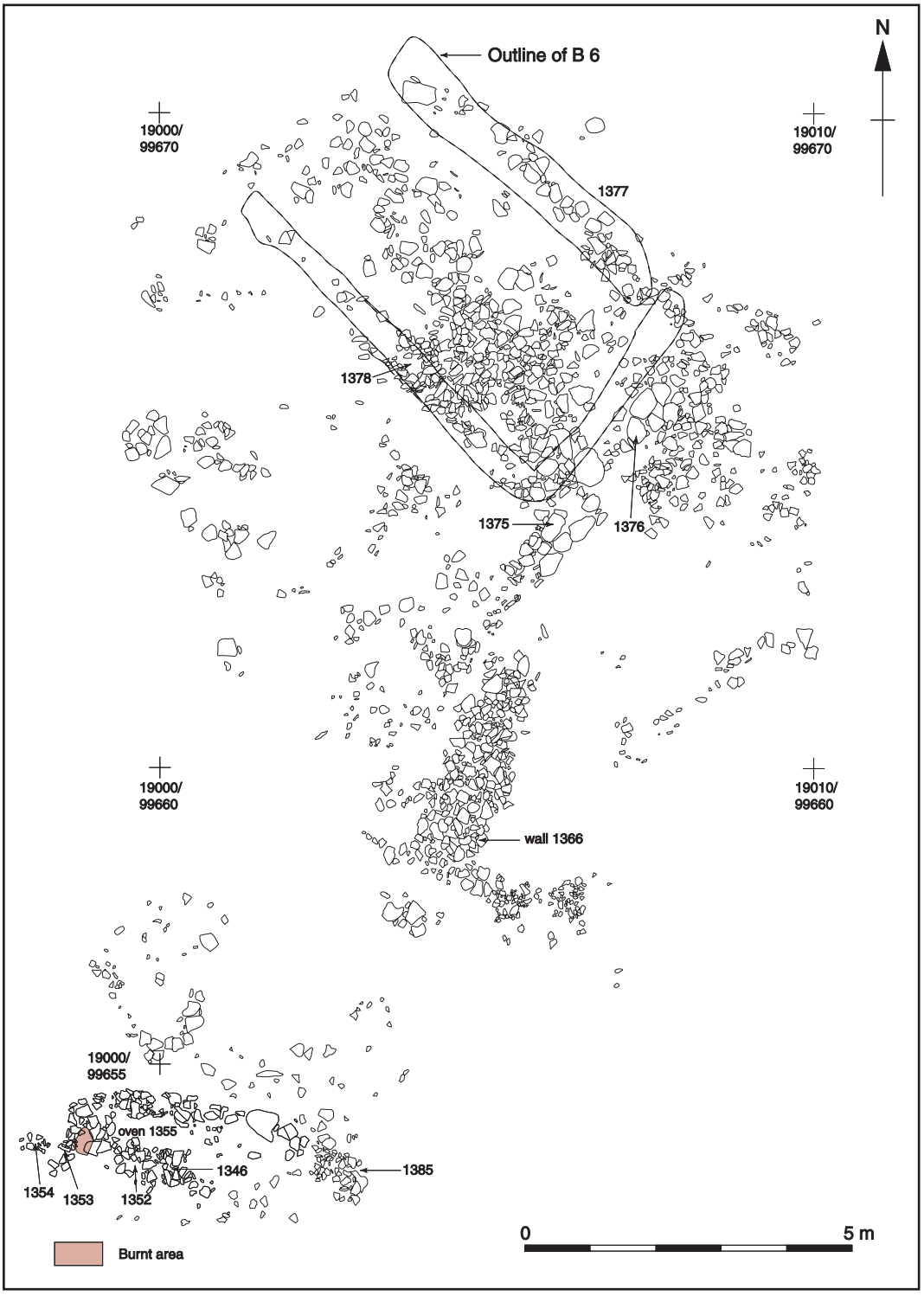


Fig. 5.20 Plan of stone features in central Trench 17

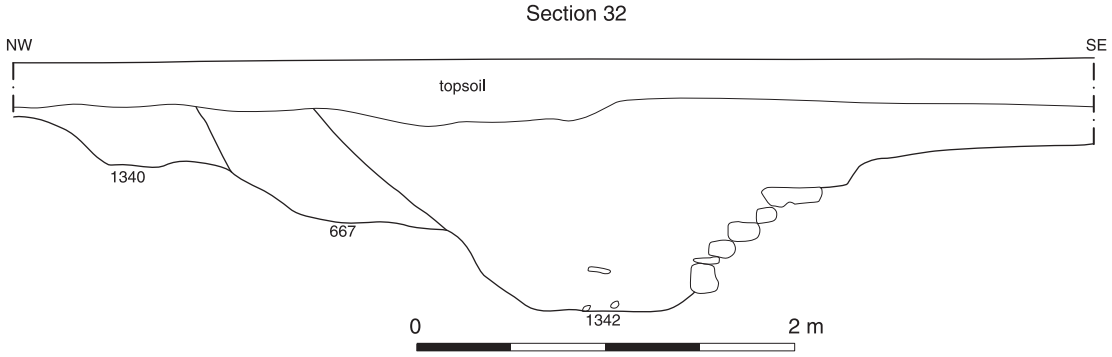
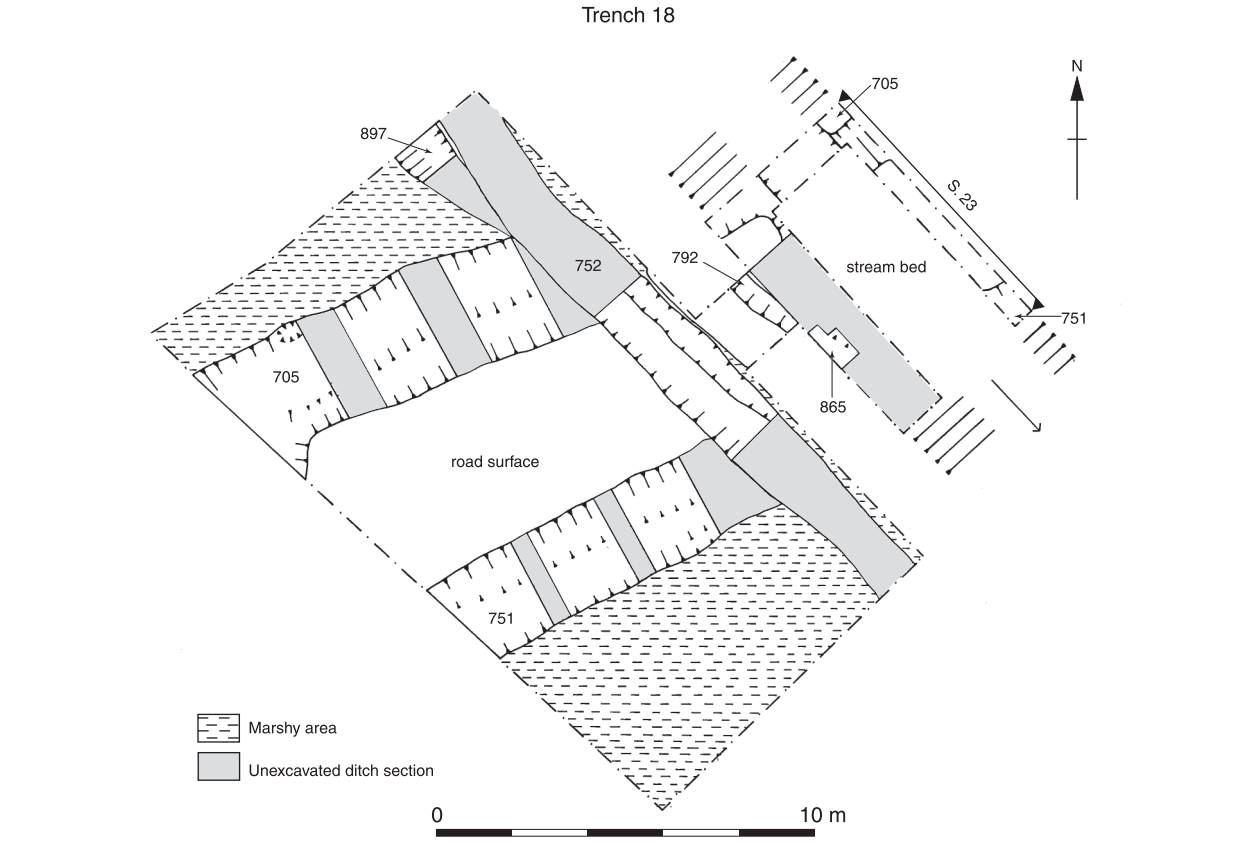


Fig. 5.21 Section 32 through waterhole 1342 and ditches 667 and 1340



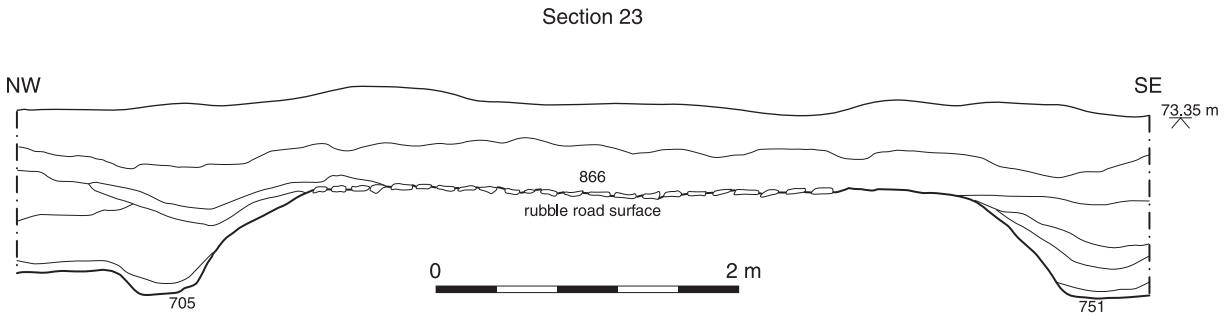


Fig. 5.22 Trench 18 plan: the northern road

Plate 5.14 The northern road

Nevertheless it does seem that the overall sequence ran possibly from the end of Phase 2 up until Phase 4. The absence of any deep deposits of alluvium suggests that most of the ditches had been infilled prior to the end of the Roman period, with the possible exception of ditch 517, within which alluvium was found in Trench 38. The western limit of these boundaries is the road running southwards from between Trench 19 and Trench 13. The boundaries were traced for 125 m east-west before turning north-east for about another 100 m and disappearing into the marshy area on the north-east side of the site. Other enclosures were revealed in Trench 38 on the south-eastern corner of the site, which are likely to belong to Phase 3 and/or Phase 4.

The western periphery

Five trenches were machine excavated to the west of the main settlement, revealing parts of the main east-west roadway ditches and outer enclosures known previously from cropmarks (Fig. 2.3). Very few finds came from these features as is to be expected for an area far removed from the settlement core, although the small amount of pottery recovered is 2nd- and 3rd-century in date. A soil sample from an outlying field ditch in Trench 31 indicated a wet low-lying environment with periodic flooding, along with extensive evidence for the cultivation of hay meadows (see Robinson below).

Roman field systems in Warrens Field

To the north of the main settlement, in Warrens Field, was an extensive series of ditched boundaries and trackways which made up the Roman field systems (Fig. 5.1). Most of the ditches were recorded during salvage work and details of fill and stratigraphic relationships are often lacking. Four fields are clearly formed within the observed area and a fifth can be postulated with some certainty from the cropmarks. Trackways were noted entering the site from the south-east, following the edges of Islands 1 and 2, and turning towards the north-west. A further trackway was seen heading towards the Longdoles Field site.

Absolute dating is problematic due to the small amounts of material recovered from this type of context. However, the main field system would appear to have been established during Phase 3, and may be associated with the trackways. Later 4th-century material was recovered from ditch context 377, indicating that at least some of the field systems were in use during Phase 4. Despite several phases being represented, the field system appears to have retained its integrity throughout the Roman period, presumably dictated by the topographic restraints of the marshy areas.

THE FINDS

Large quantities of finds were recovered from Phase 3 contexts, with a variety of form and function far surpassing that of Phase 2. These were particularly prolific in Trench 13, which formed the main domestic core of the complex. As with other phases, there are still significant taphonomic problems, although with the possible exception of the pottery the general character of the finds assemblage is distinctive enough to make assumptions about the nature of the site. Full finds reports can be found in Digital section 3.

Pottery (Figs 5.23-4) *by Paul Booth*

Despite the pottery assemblage of Phase 3 totaling over 373 kg (with *c* 43 % fully recorded), its character is not particularly distinct (Tables 5.1 and 5.2). This is because, in consequence of its overall time span, it contains a wide variety of ceramic components which in different circumstances might have been used to mark developmental stages in the chronological sequence. For example the appearance of the Oxford colour-coated ware (F51) and related Oxford fabrics around the middle of the 3rd century AD falls well within the phase rather than indicating the beginning of a new phase, so the presence of such material cannot be used as a clear marker of a significant stage in the development of the site. As with Phase 2, and for the same reasons, close correlation of the detailed stratigraphic sequence and the ceramic evidence (best developed in Trench 13) did not produce a clear picture of the evolution of the assemblage through this phase (despite the overall size of the Phase 3 assemblage) and the detailed evidence is not presented here. Impressions of this evolution can be based upon some aspects of the material itself, however, though without the benefit of closely supporting stratigraphic data.

Figure 5.23 shows the distribution of major fabric groups from Phase 3 contexts within the main

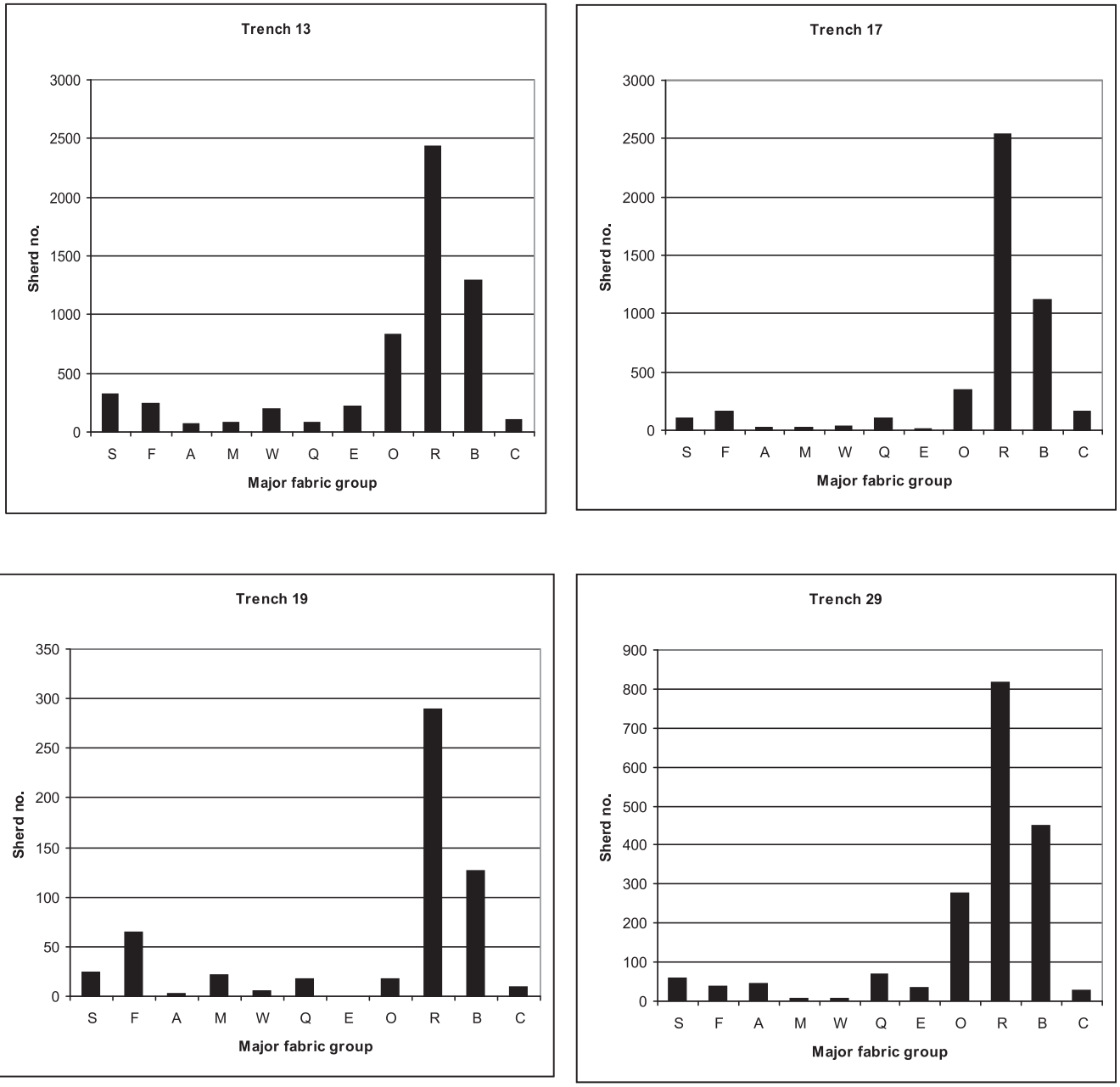


Fig. 5.23 Quantity of major pottery fabric groups in Phase 3, according to trench

Table 5.1: Quantity of major fabric groups in Phase 3

Major fabric group	*Sherd no.*	*% of Phase 3*
Samian (S)	519	4
Fine wares (F)	511	3.94
Amphorae (A)	298	2.3
Mortaria (M)	132	1.02
White firing wares (W)*	245	1.89
White-slipped wares (Q)*	265	2.04
Early 'Belgic type' wares (E)	263	2
Oxidised 'coarse' wares (O)	1481	11.41
Reduced coarse wares (R)	6025	46.4
Black-burnished wares (B)	2960	22.8
Calcareous-tempered wares (C)	285	2.2
Total	12984	100

* except mortaria

Table 5.2: Major vessel types in Phase 3 (RE)

	Rim equivalents (RE)	*% of Phase 3*
Amphorae (A)	1.63	1
Flagons (B)	3.42	2.1
Jars (C)	110.28	67.7
Beakers (E)	3.58	2.2
Cups (F)	4.56	2.8
Tankards (G)	3.91	2.4
Bowls (H)	17.27	10.6
Bowls/dishes (I)	0.16	0.1
Dishes (J)	7.33	4.5
Mortaria (K)	4.4	2.7
Lids (L)	1.95	1.2
Unknown (Z)	4.4	2.7
Total	162.89	100

excavation trenches. The Trench 13 assemblage shows the greatest diversity in form and fabric types, reflecting among other factors the larger area involved as well as the greater complexity and range of archaeological activity. The principal coarse ware fabrics whose use was already established in Phase 2 (if not intrusive there) became significantly better established. These include oxidised and reduced wares of North Wiltshire origin (O31 and R35) and both Dorset and imitation black-burnished wares (B11 and B30). Savernake ware (R95), however, was also best represented in this phase, and clearly remained a significant component of the assemblage throughout the 2nd century. Oxfordshire products including colour-coated ware (with forms such as C45 and C51) show a small but significant increase on the anomalous levels present in Phase 2.

This general pattern of fabric proportions is seen more clearly in the Trench 17 assemblage, not affected by the problem of residual material. The assemblage was more obviously dominated by reduced coarse wares (particularly North Wiltshire products) and black-burnished wares. While not as common as in Trench 13, Savernake ware (R95) still formed a significant component of the reduced wares. Most of the various fine and specialist wares were thinly represented, Oxford colour-coated ware being the most important individual fabric in this group. The majority of the other fine and specialist wares were of types that are unlikely to be found in the region before the Antonine period, such as Nene Valley and Mancetter/Hartshill mortaria (the latter, fabric M23, strictly not present until the general Phase 3/4) and only present in small quantities at Claydon Pike. More local wares such as the white slipped fabric M32/Q22, which is dated mainly mid 2nd to mid 3rd century AD (Rigby 1982b, microfiche 1, D03-D05), were also present. Ceramically, the only noticeable distinction between the Phase 3 and 3/4 assemblages in this trench relates to the relative proportions of reduced (particularly North Wiltshire) coarse wares and black-burnished wares, the former dropping from *c* 54% of the Phase 3 assemblage to *c* 44% of the Phase 3/4 group, with a corresponding increase in the latter. Since there is no meaningful increase in the level of other 'late Roman' ceramic markers, it is entirely possible that this change took place within the later part of Phase 3 (ie late 3rd-early 4th century) rather than later. This would be consistent for example with the low level occurrence in the Phase 3/4 group of brown colour-coated fabrics F61 and F62 whose suggested date of manufacture begins towards the end of the 3rd century (Rigby 1982b, microfiche 1, D09).

Elsewhere the Phase 3 assemblages follow a broadly similar pattern, except that there was notable variation in fine ware representation between Trenches 19 and 29. The Trench 19 Phase 3 assemblage was quite small but nevertheless contained most of the range of fabrics seen later in this area. Generally these suggest, together with the negative indicators of very low levels of South Gaulish samian ware and 'native' wares (E wares are completely absent in this phase group, for example), that significant activity may not have begun much before the middle of the 2nd century. The broad date range of Phase 3 makes it very difficult to establish meaningful distinctions between this assemblage and those assigned to Phase 4 or to a less certain composite Phase 3/4 in this area of the site.

The Trench 19 Phase 3 assemblage is notable for a relatively high proportion of fine wares (almost 11% of sherds in this phase group) – levels maintained in Phases 3/4 and 4. For example 85% of the Rhenish ware (fabric F44) from the site (consisting mainly of fragments of folded beakers) is recorded from this area, along with two thirds of the albeit small amount of Colchester colour-coated ware and relatively large quantities of local and Oxford

colour-coated wares. These contributed to an overall very high representation of fine and specialist wares in this trench/phase group (23.6% of sherds).

While the only vessel that may provide direct support for the interpretation of this area as a ritual focus is part of what appears to be a tazza in a possible Severn Valley ware fabric (O43 – cf Cirencester 106; Rigby 1982b, microfiche 1, D09), the high representation of fine wares might also be significant, suggesting a preponderance of drinking vessels, which can be shown elsewhere in the region to be associated with special deposits, as for example in a late 2nd-century group at Alchester (Booth *et al.* 2001, 377-8). Unfortunately, however, the Trench 19 material is fragmented and the quantification of beakers by EVEs in this area/phase group is not at all remarkable – nevertheless the high incidence and variety of fine ware sherds is suggestive of an unusual pattern.

The Trench 29 Phase 3 assemblage, in contrast, is marked by a remarkably low incidence of fine wares (only 1.6% of sherds), though other elements raised the overall fine and specialist ware total to 12.2%. Oxidised coarse wares are particularly well represented at this time, amounting to 16.4% of sherds, a figure only approached in Trench 13 (13.9%). Otherwise the assemblage appears unremarkable.

Figure 5.24 presents a selected group of Phase 3 pottery from Trench 13 trackway ditches 547 and 620. A full catalogue of illustrated sherds can be found in Digital section 3.2.

Illustrated catalogue (Fig. 5.24)

1. E83, CD. 547/F/1.
2. R95, CD. 620/L.
3. R35?, CD, slight sooting. 547/D/1.
4. R95, CD. 547/B/1.
5. R35, ?CD. 620/K.
6. B11, CK. 620/N.

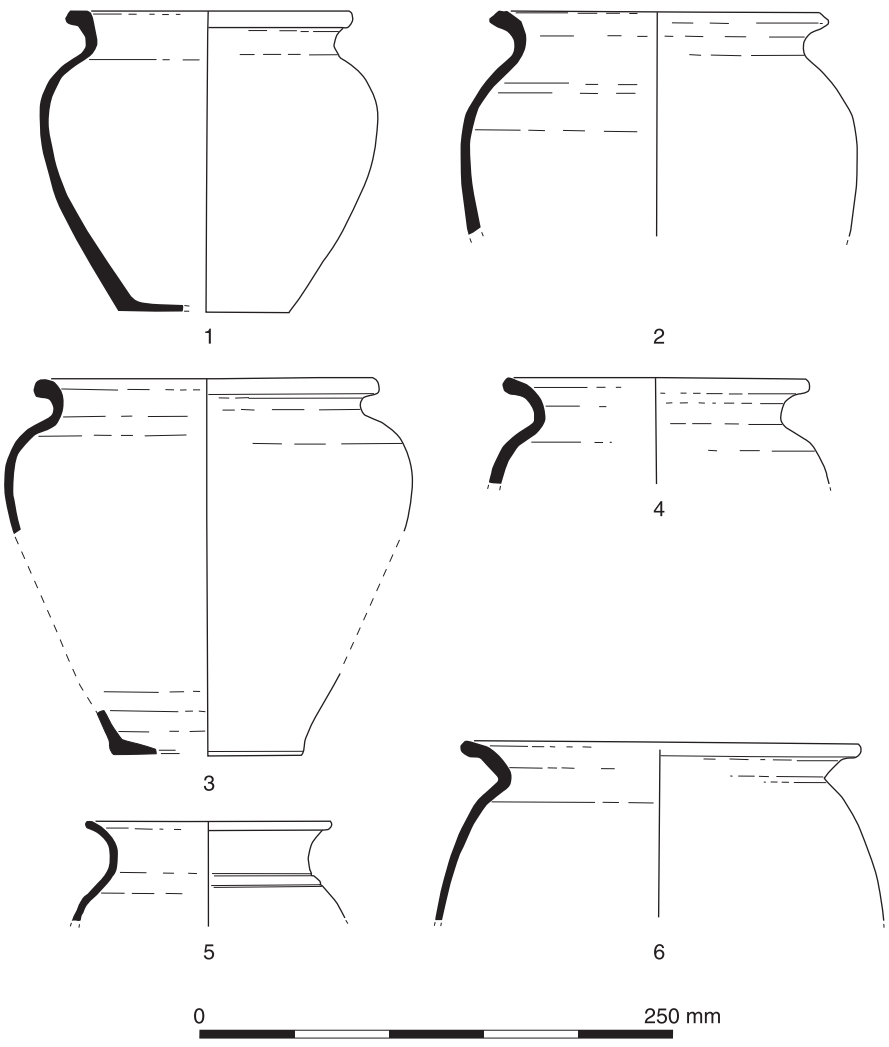


Fig. 5.24 Pottery from Phase 3a Ditch 547/620

Coins *by Cathy King*

Just 28 coins were found in definite Phase 3 contexts, and 17 of these were intrusive. When the coin assemblage is taken as a whole, 46 coins (6.3%) were minted before AD 260 by contrast with the 97 coins (34.9%) from Somerford Keynes. Additionally, apart from one denarius from the Roman Republic (see Chapter 4), all of the silver recovered belongs in the years after AD 192. There are eight 'silver' coins from the years AD 193-260, five of which were either plated or the bronze core of a plated piece. Most of these coins were unstratified. Although the proportion of early bronze coins at 4.9% is much lower than that from Somerford Keynes (26.6%), there is a reasonable scatter from the first and second centuries, the majority of which comes from the main settlement site. However, if the site became an official Roman depot or military estate in the 2nd century, there is little if anything in the coin loss pattern that reflects this status. By far the largest concentration of coinage dates to the later 3rd and 4th centuries (Phase 3d and 4), within the periods of peak coin loss established by Reece and others for Britain as a whole (Reece 1991; 1992). Across the site there were 44 3rd-century imitations which represent 29% of the total of the 3rd-century pieces; 95% of them are copies of coins minted in the years AD 260 and AD 284.

Metal and glass small finds (Figs 5.25-5.33)
by Hilary Cool

It is clear from the finds that it was not just the landscape that underwent radical alteration at Claydon Pike in Phase 3. There are major changes in the finds record as well. As can be seen from Table 5.3, a very wide range of activities appear in this phase and even in the categories present in Phase 2 (personal items, fasteners and textile production) there are new departures. The personal ornaments (Table 5.4) suggest women started wearing their hair in different styles and as a whole the population started wearing Romanised shoes. Building techniques also changed, with glazed windows, timber clad structures and doors which were designed to be closed. Inside the buildings the furnishings changed, with for example at least one exotic copper alloy oil lamp (Fig. 5.28, no.31). New ways of preparing drink are suggested by the handle fragments 1690 and 2076 (Fig. 5.28, nos 32-3), while the iron cleavers may indicate changes in butchery practise (Fig. 5.30, nos 52-3).

The finds are telling us of very deep-seated lifestyle changes. It is almost as if the population adopted the Roman cultural package wholesale. The question needs to be asked whether this was affecting the same population who had lived on the site in Phase 2 or was this the result of new people with different customs moving in. Would a woman who had spent her girlhood on the site have lived to see her grand-daughter adopting new fashions, or would she have looked on from the side-lines whilst 'foreigners' lived there in alien buildings with outlandish lifestyles?

In as far as can be seen, if the Phase 3 population was new, it was certainly not 'foreign', as the metal hairpins and the brooches they were using are still local forms. If the re-organisation was 'official' then it has left no trace in the finds record. There is, for example, no Hadrianic military equipment. Instead there is a noticeable presence of later Antonine/Severan equipment. Quite what the status of this is, though, is open to question as

Table 5.3: Small finds from Phase 3 and Phase 3/4 according to functional category

Function	*3*	*3/4*	*Total*
Personal	100	30	130
Toilet	5	1	6
Textile	4	1	5
Household	5	2	7
Recreation	2	-	2
Weighing	-	1	1
Writing	1	1	2
Transport	4	-	4
Building	677	201	878
Tools	17	7	24
Bone working	2	-	2
Metal working	2	1	3
Fasteners	32	9	41
Agriculture	4	1	5
Military	4	1	5
Religion	1	-	1
Miscellaneous	119	59	178
Total	979	315	1294

Table 5.4: Personal ornaments and clothes accessories from Phase 3 and Phase 3/4

Simple Name	*3*	*3/4*	*Total*
Brooch	18	3	21
Bracelet	13	8	21
Finger ring	2	-	2
Necklace	-	1	1
Bead	12	2	14
Pendant	-	1	1
Hair pin	8	3	11
Ear-ring	1	-	1
Belt fittings	-	-	0
Dress pin	-	-	0
Shoe cleat	18**	4	22
Hobnail	28	8	36
Total	100	30	130

** Entry includes 2 items whose identifications are not secure

similar material was found as Somerford Keynes. As discussed in Chapter 9, this might just be part of a pattern of dispersed deployment where soldiers were involved in policing duty and not be indicative of official involvement or ownership of the Claydon Pike estate. Against the hypothesis of continuity of the population the finger ring 1080 may be considered. It is likely that this was an heirloom by the time it was lost, but it seems unlikely that the 1st-century inhabitants at Claydon Pike would have observed the sumptuary laws as the original owner must have. There are also more hints of luxury in the assemblage in Phase 3 than is suggested by the Phase 2 finds. The copper alloy lamp, the ivory die (Fig. 5.28, no. 39), the use of metal rather than bone hairpins all hint at a degree of affluence (Fig. 5.27, nos 21-23).

In Table 5.5 the types of objects stratified in Phase 3 contexts are summarised. As can be seen the widest range of functional categories is seen in Trench 13. It has a more domestic flavour than the assemblage in Trench 17. In the tools category, for example, most of the material from Trench 13 consists of knives and blade fragments whereas in Trench 17 the category is dominated by carpentry tools. Trench 17 also has agricultural implements (including a reaping hook and a probable scythe) whereas the category is missing in Trench 13. This together with the smithing activity suggests this was much more a service area than a domestic one.

Figures 5.25-33 present a selected group of finds either from Phase 3 contexts or else dating to this period. A full illustrated catalogue can be found in Digital section 3.4.

Table 5.5: Distribution of material from Phase 3 contexts (excluding building material and miscellaneous items)

Function	*Trench*			
	13	*17*	*19*	*29*
Personal	30	63	3	4
Fasteners	12	15	3	1
Tools	10	6	1	-
Household	2	3	-	-
Metal working	1	1	-	-
Toilet	4	1	-	-
Transport	3	1	-	-
Bone working	1	-	-	1
Military	4	-	-	-
Recreation	2	-	-	-
Religion	1	-	-	-
Textile	4	-	-	-
Writing	1	-	-	-
Agriculture	-	4	-	-
Total	75	94	7	6

Illustrated catalogue: Brooches associated with Phase 3 (Fig. 5.25)

1. *504 SF 334 Polden Hill.* Copper alloy. A lower Severn Valley type see Hattatt (1987, 102), later C1 – mid C2. Length 61 mm, wing width 29 mm. Trench 13.
2. *2441 SF 2200 Polden Hill.* Copper alloy. Hattatt (1987, 96). Later C1. Length 40 mm, width spring cover 19 mm. Trench 29.
3. *501 SF 1113 T-shape.* Copper alloy. A lower Severn type, see Hattatt (1987, 102). C2. Length 45 mm, width of hinge cover 16 mm. Trench 13, Phase 4.
4. *U/S SF 2639 T-shape.* Copper alloy. Possibly a variant of Hull 122. A lower Severn type, see Hattatt (1987, 109) no. 918. C2. Length 49 mm, present hinge cover width 29 mm.
5. *687 SF 878 Trumpet.* Copper alloy. The Chester variant (Hattatt 1985, 109). Later C1-C2. Length 39 mm, width head 10 mm. Trench 13, Phase 3.
6. *2803 SF 2969 Double-ended brooch.* Copper alloy. Zoomorphic terminals at either end with punched fur and ring and dot eyes. C 2. Length 49 mm, width 28 mm. Trench 29, Phase 3/4.
7. *667 SF 722 Plate-headed trumpet variant.* Copper alloy. Possibly related to Hull 138/40 (see Hattatt 1987, 110 no. 921). Length 89 mm, width of spring cover 29 mm. Trench 17, Phase 3/4.
8. *U/S SF 1253 Openwork disc brooch.* Copper alloy. A rare British form – see especially Hattatt 1985, 146 no. 538. C2. Diameter 28 mm. Trench 28.
9. *1318 SF 2577 Cockerel brooch*. Copper alloy. Crummy 1983, 15 nos. 75-6; Hattatt 1985, 175 no. 620. C2. Length 28 mm, width 13 mm maximum diameter 21 mm. Trench 17, Phase 3/4.
10. *U/S SF 2549 Knee brooch*. Copper alloy. Now bent out of shape. See Hattatt 1987, 263 – a British variant. Later C2 – C3. Length now 26 mm, original length *c* 30-35 mm, width spring cover 10.5 mm.

Personal ornamentation associated with Phase 3 (Fig. 5.26)

11. *1200 SF 673 Bracelet.* Copper alloy. Complete. C4. Present diameter (open) 62 mm, section 5 x 1.5 mm. Trench 17.
12. *620 SF 598 Bracelet.* Copper alloy. Multiple unit. C4. Present length 43 mm, section 4 x 1 mm. Trench 13, Phase 3.
13. 1253 SF 3114 Bracelet bead. Jet. C4. 1 corner chipped. Length 14 mm, width 7 mm., maximum thickness 6.5 mm. Trench 17, Phase 3.
14. *U/S SF 1072 Finger ring.* Diameter 20 x 20.5 mm; hoop section 3 x 1 mm. Trench 19.
15. *559 SF 1080 Finger ring.* Blue/green glass intaglio in remains of iron ring. The glass gem is oval with a flat upper face 10 x 8 x 2 mm. Its device is an eagle with wings displayed, standing on a thunderbolt (Fulmen). Below is a globe. Trench 13, Phase 3.
16. *1200 SF 732. Bead.* Glass. Flattened ovoid bead perforated transversely. Translucent deep green (appearing opaque) with thin opaque red streaks. Diameter 11 x 9 mm, thickness 3 mm, perforation diameter 2 mm. Trench 17.
17. *1200 SF 2494. Bead.* Glass. 'D'-sectioned annular. Translucent blue/green. Diameter 17 x 16 mm, thickness 5-6 mm, perforation diameter 8.5 mm. Trench 17.
18. *U/S SF 299. Pendant?* Lead. Rectangular-sectioned

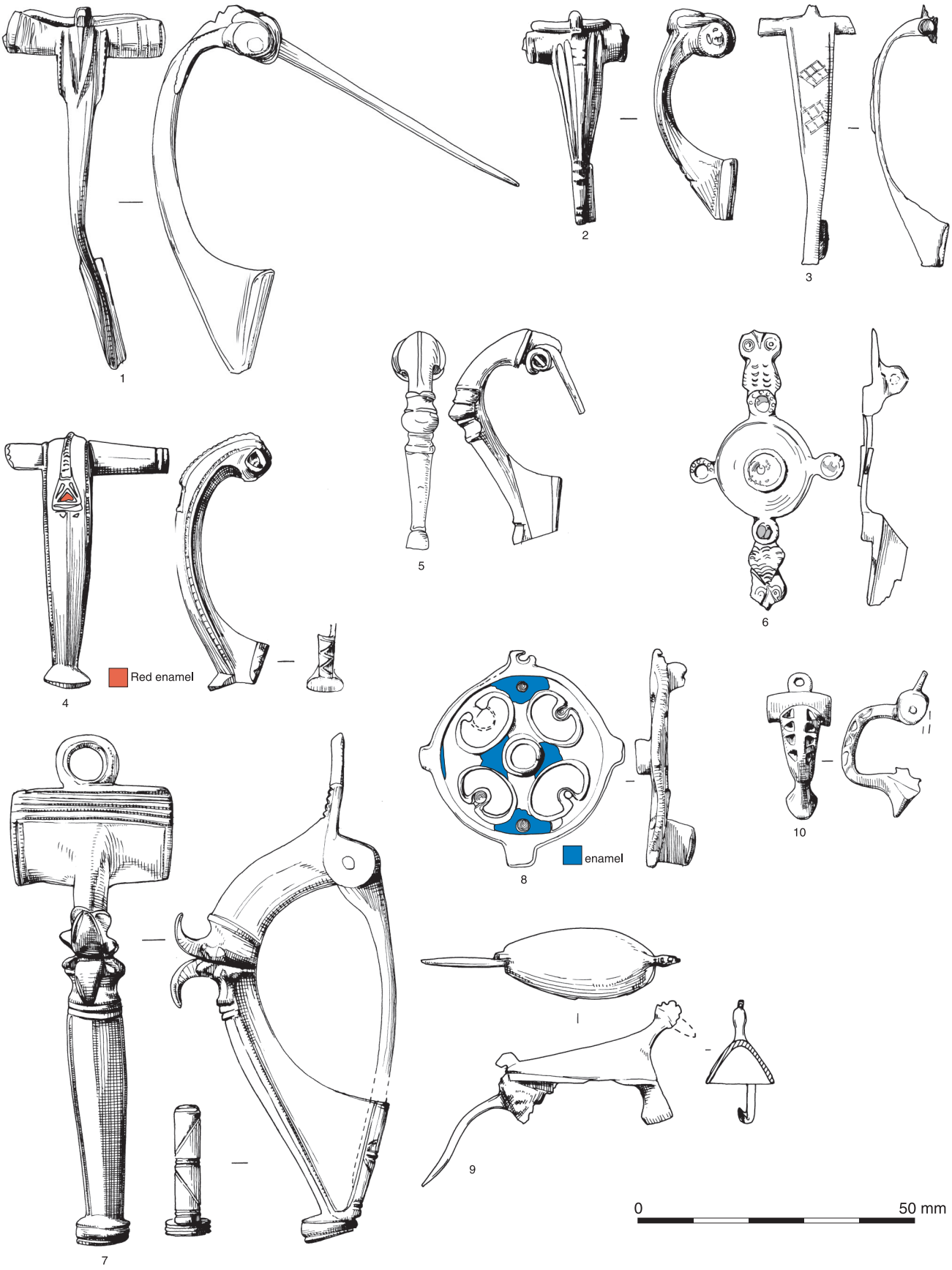


Fig. 5.25 Brooches associated with Phase 3

tapering rectangular block with perforation at narrower end, worn through at top. Length 12.5 mm, maximum section 8 x 5 mm. Trench 17.

19. *2409 SF 2338. Bead*. Shale. 10 mm diameter. Perforation diameter 1.5 mm. Trench 19, Phase 3.
20. *1219 SF 747. Necklace fastener.* Copper alloy. Triangular flat perforated plate with notched edges and long wire hook; perforation has worn through and plate has been bent to form a hook through which a wire loops twice; forms a double loop at other end, with loose end then tightly wrapped around the first length to form rigid bar before looping through bent plate of necklace fastener. C4. Complete length 35 mm. Trench 17, Phase 3/4.

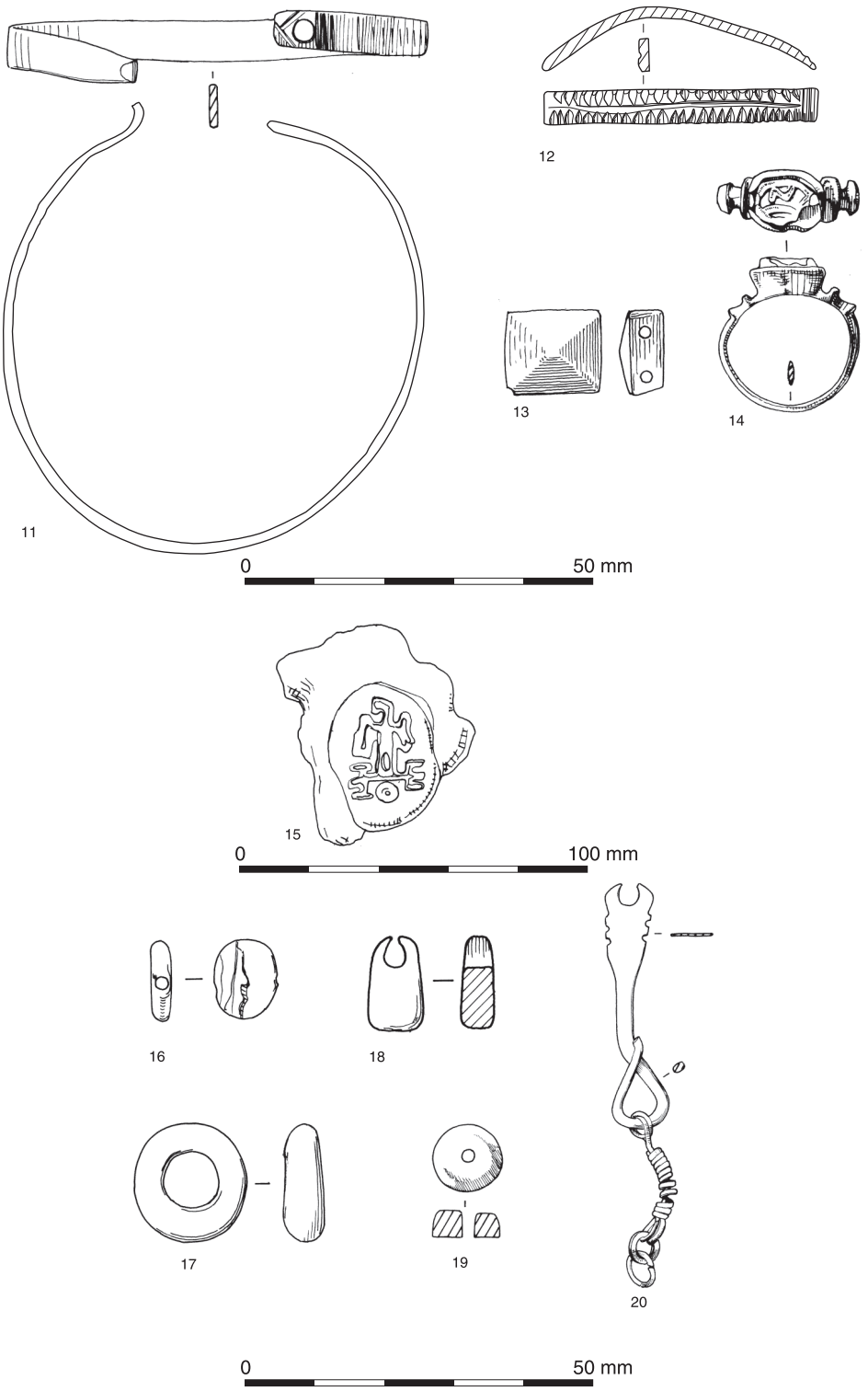


Fig. 5.26 Personal ornamentation associated with Phase 3

Personal ornamentation, toilet and textile objects associated with Phase 3 (Fig. 5.27)

21. *687 SF 851. Hairpin.* Copper alloy. Tall hemispherical head with close-set vertical grooving; sharp hour glass moulding below. Length 111 mm, head diameter 2.5 mm, shank diameter 3 mm. Trench 13, Phase 3.
22. *505 SF 185. Hairpin.* Copper alloy. Hemispherical knob head, sides vertically grooved, upper part plain. The cross-hatched shank is unusual. C1-C2. Length 100 mm, head diameter 3.5 mm, shank 2.5 mm. Trench 13.
23. *2430 SF 2967. Hairpin.* Copper alloy. Cylindrical cross-hatched cylinder with shallow conical terminal. Present length 49 mm, head section 6 mm, shank section 2.5 mm. Trench 19.
24. *2620 SF 2874. Hair pin.* Bone. Conical knob head of same diameter as top of shank, diagonally cross-hatched; now in two fragments. Present length 59 mm, diameter of head 4 mm. Trench 13, Phase 3.
25. *1200 SF 2540. Earring.* Copper alloy. Rectangular-section, narrowest to ear, penannular with one bevelled end. Traces of transverse grooves on hoop. Trench 17.
26. *687 SF 555. Toilet set.* Copper alloy. All tools have transverse perforated terminals with pronounced channel separating loop from tool on each face. Trench 13, Phase 3.

    Nail cleaner. Length 44 mm, maximum section 5 mm.

    Tweezers. Length 46 mm, width at jaws 6 mm.

    Cosmetic spoon. Length 44 mm, maximum section 4.5 mm.
27. *U/S SF 2654. Rasp.* Copper alloy. From a toilet set. Broken disc terminal. Present length 45 mm, rasp section 3.5 x 2.5 mm.

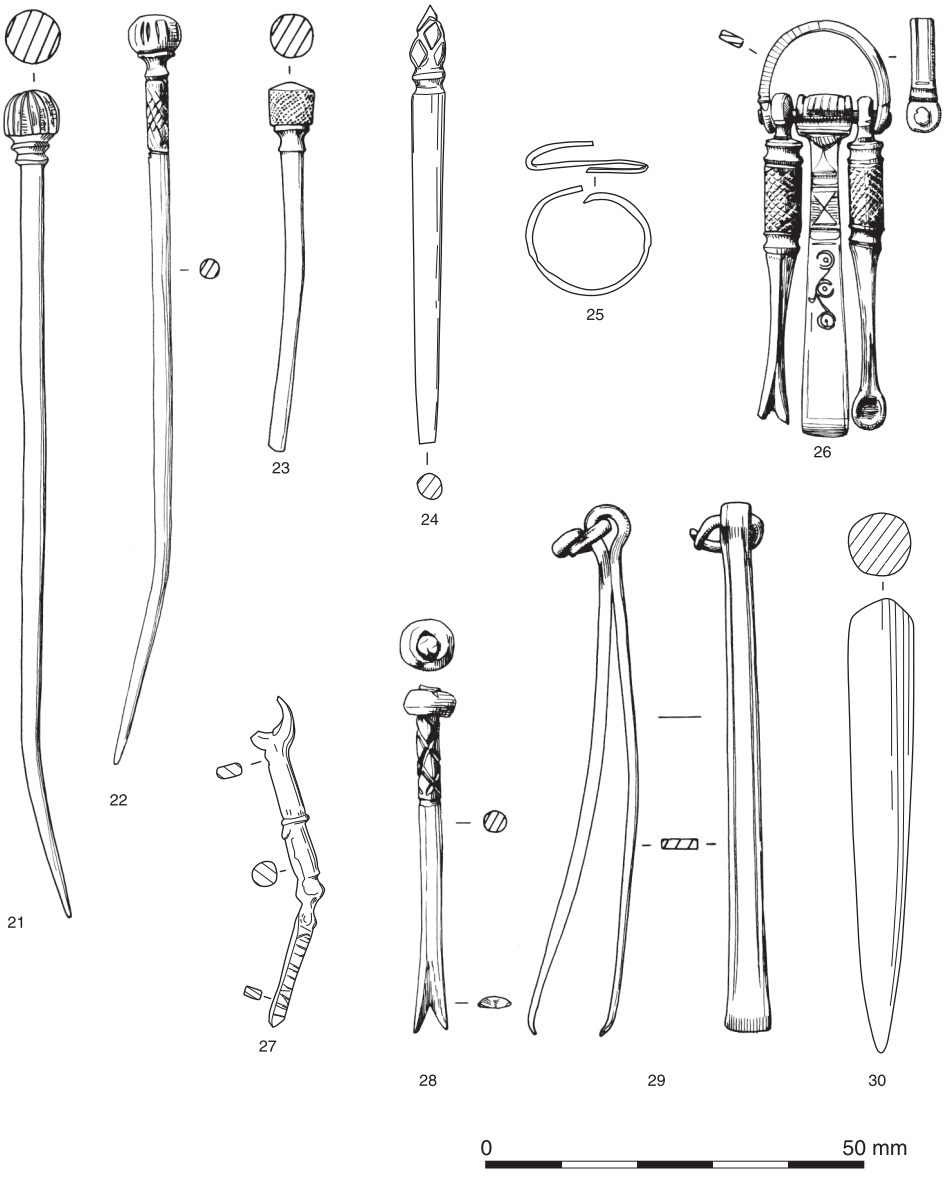


Fig. 5.27 Personal ornamentation, toilet and textile objects associated with Phase 3

28. *504 SF 158. Nail cleaner.* Copper alloy. Oval-sectioned shank with circular knob bone head. Length 46 mm, section 3.5 x 3 mm. Trench 13.
29. *U/S SF 1610. Tweezers*. Copper alloy. Rectangular-sectioned strip bent in two with closed loop. Length 71 mm, section 4 x 1 mm. Trench 13.
30. *504 SF 159. Pin beater?* Bone. Circular-sectioned rod; one end broken, other tapering to point retaining glossy surface. Present length 60 mm, maximum section 9.5 mm. Trench 13.

Household and recreation objects associated with Phase 3 (Fig. 5.28)

31. *522 SF 360. Vine leaf.* Copper alloy. Cast with separately sweated on knobs at terminals, two now extant. Convex-curved; front marked with veins. Probably the reflector from the back of a metal oil lamp. Length 68 mm., thickness 1.5 mm. Trench 13, Phase 3.
32. *2317 SF 1690. Jug handle fragment*. Copper alloy. Oval-sectioned handle with projecting thumb rest; both ends broken. This is the handle from a sheet metal jug (Eggers Form 128) used to heat water (Koster 1997, 33 no. 10). This does not join with find 2076, but could come from the same handle. Present length 67 mm. Trench 13.
33. *2349 SF 2076. Jug handle fragment.* Lower part of cast oval-sectioned handle with part of attachment plate. Possibly from same handle as SF 1690. Present length 45 mm, handle section 8 x 6 mm. Trench 13.
34. *U/S SF 33. Bowl rim fragment.* Copper alloy. Slightly incurved rim, internally thickened; body twisted out of shape. Small circular perforation near rim; exterior has traces of white metal coating; interior has polishing marks near rim. Present height *c* 45 mm.
35. *U/S SF 3013. Escutcheon.* Copper alloy. Broken, triangular, straight-sided escutcheon with broken circular attachment loop. Probably from a small bucket (cf den Boesterd 1956, 47 nos. 154-5). Present length 49 mm, maximum section 18 x 2 mm.
36. *2101 SF 2542. Spoon.* Bone. Circular bowl; broken circular-sectioned shank in two joining fragments. Present length 65 mm, diameter of bowl 22 mm, shank section 3.5 mm. Trench 13, Phase 2/3.
37. *1234 SF 911. Counter*. Glass. Plano-convex appearing black. Base smoothed. Two large hollows from bubbles at edge. Diameter 13 mm, thickness 5.5 mm. Trench 13.
38. *504 SF 198. Counter.* Bone. Disc with bevelled edge; obverse decorated with three concentric grooves around central dot. Diameter 17 mm, thickness 3 mm. Trench 13.
39. *687 SF 434. Die.* Ivory. Faces marked by spots formed of double ring-and-dot. Dimensions 17 x 15 x 14 mm. Trench 13, Phase 3.
40. *2005 SF 1411. Pointed oval counter.* Bone. Flat faces decorated by 5 and 6 ring-and-dots, sometimes with double ring-and-dots; two sides have 3 and 4 double ring-and-dots. Dimensions 33 x 16 mm, thickness 7 mm. Trench 13, Phase 3.

Weighing, writing and transport objects associated with Phase 3 (Fig. 5.29)

41. *U/S SF 620. Steelyard weight.* Lead. Biconical with iron suspension loop. Length (total) 60 mm, diameter 37 mm. Trench 13.
42. *632 SF 377. Stylus.* Copper alloy. Copper alloy styli are not common but there is a distinct possibility that simply decorated ones such as this may be a local type (cf Wilcote, where two have been recovered from 2nd-century contexts; Hands 1993, 38 no. 16; 1998, 58 nos. 57). Length 118 mm, scraper section 6 x 1mm, shank section 2 mm. Trench 13.
43. *620 SF 1040. Stylus.* Iron. Length 125 mm. Trench 13, Phase 3.
44. *U/S SF 108. Stylus.* Iron. Length 140 mm.
45. *504 SF 337. Linch pin*. Iron. Length 142 mm. Trench 13.
46. *687 SF 789. Strap loop.* Copper alloy. Rectangular plate with rectangular loop behind, 4 petalled flower with petals reserved and central orange cell; traces of enamel in border now decayed green. Dimensions 27 x 21 mm, depth 9 mm. Trench 13, Phase 3.

Tools and pottery repairs associated with Phase 3 (Fig. 5.30)

47. *1265 SF 2178. Punch.* Iron. Rod with square-sectioned tip. Length 85 mm. Trench 17, Phase 3.
48. *504 SF 320. Awl?* Bone. Oval sectioned shank with flat head tapering to point. Length 85 mm, maximum section 7 x 5 mm. Trench 13.
49. *2198 SF 1761. Knife.* Iron. Straight blade edge curved up to tip. Present length 140 mm. Trench 13, Phase 3.
50. *503 SF 128. Knife.* Iron. Parallel back and blade edge with back sharply angled down to tip; stepped shoulders; tapering tang. Length 113 mm. Trench 13.
51. *759 SF 593. Knife.* Iron. Blade with concave back and edge curved up to point; tanged curved down. Length 160 mm. Trench 13.
52. *2335 SF 1868. Cleaver.* Iron. Triangular blade with straight back in line with open socket. Present length 270 mm. Trench 13, Phase 3/4.
53. *687 SF 435. Cleaver.* Iron. Open socketed handle; straight back in same line as handle; curved blade. Length 150 mm. Trench 13, Phase 3.
54. *U/S SF 1605. Clasp Knife.* Copper alloy handle of dog chasing hare with part of iron blade retained in slot and therefore closed when deposited. Length of handle 70 mm. Trench 13.
55. *U/S SF 2386. Clamp.* Lead. One D-sectioned bar and one wider plate connected by two shanks. Retaining fragment of reduced pottery. Length 49 mm, width (bar) 9 mm, thickness 13 mm.
56. *U/S SF 778. Plug.* Lead. Circular with H-shaped profile retaining fragment of oxidised pottery ('sandy storage jar'). Diameter 41 x 38 mm, thickness 20 mm. Trench 17.

Security, fasteners and agricultural objects associated with Phase 3 (Fig. 5.31)

57. *1454 SF 2960. Latch lifter.* Iron. Retaining loose ring terminal and curved blade. Length 245 mm. Trench 17, Phase 3.
58. *1202 SF 754. Padlock bolt.* Iron. Rectangular bung-shaped stop; two spines; barbs missing. Present length 70 mm. Trench 17, Phase 3.
59. *766 SF 627. Padlock hasp*. Iron. L-shaped bar with ring at end of shorter arm and central expansion on other arm. A padlock of Manning (1985) Type 2. Length *c* 115 mm. Trench 13, Phase 3.

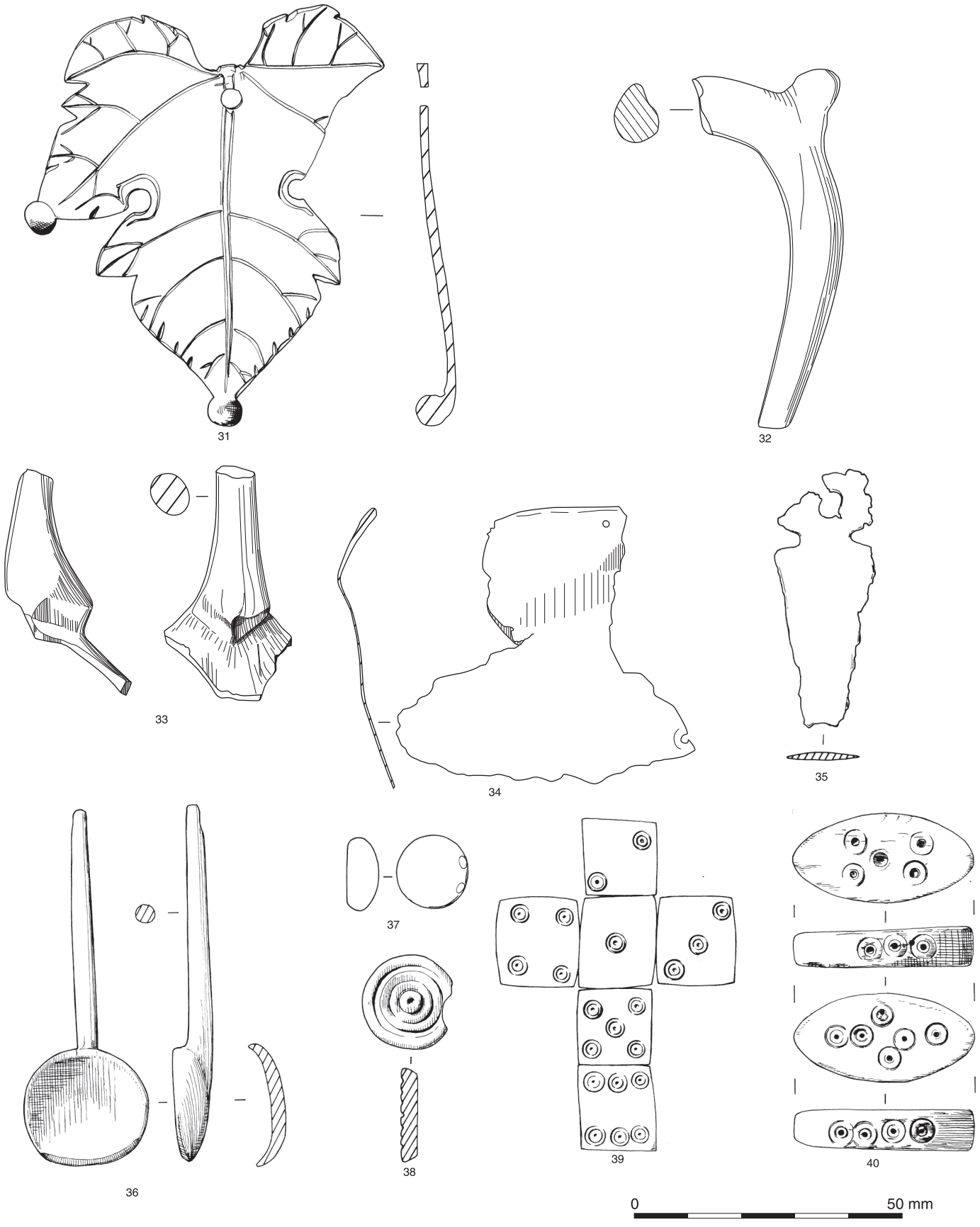


Fig. 5.28 Household and recreation objects associated with Phase 3

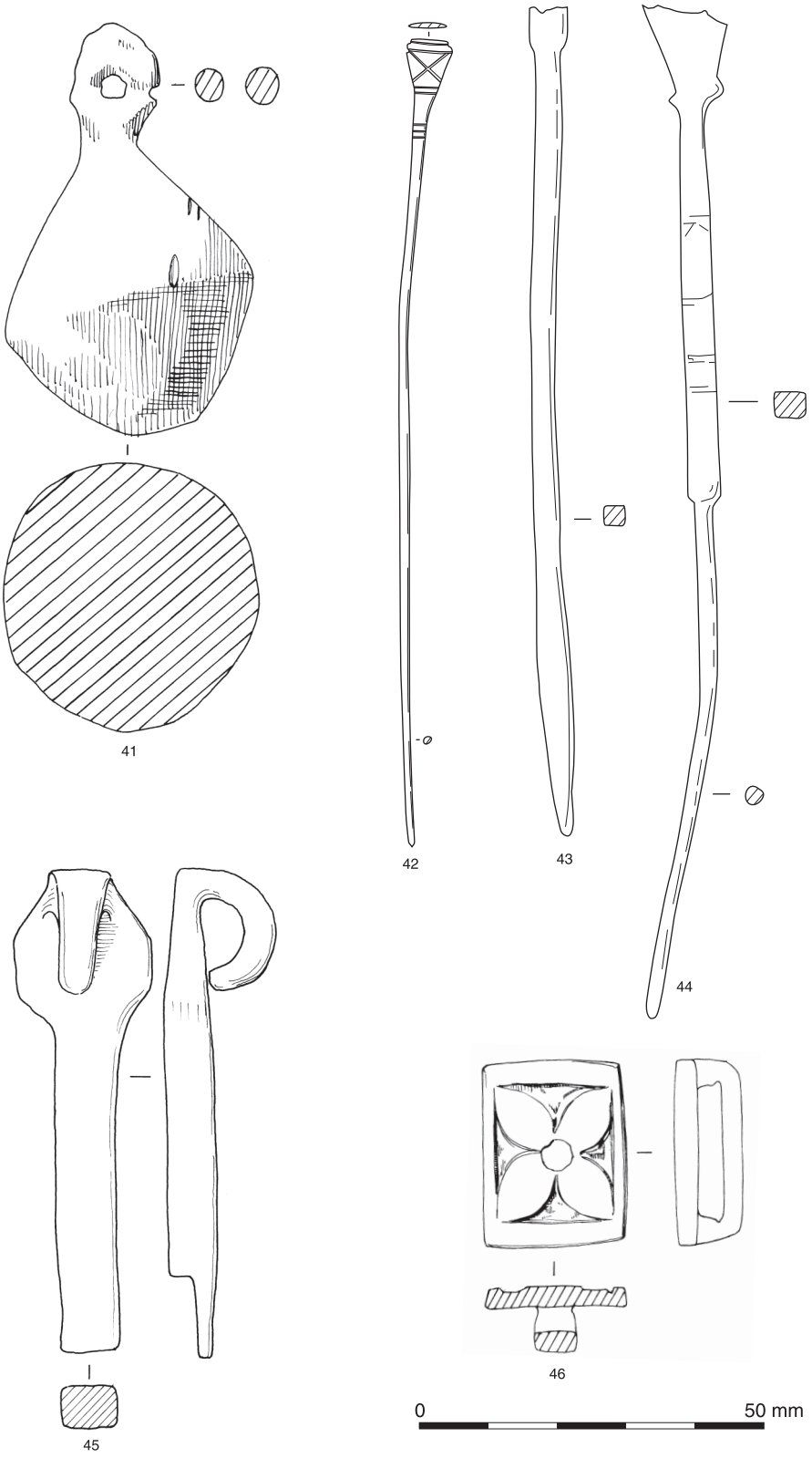


Fig. 5.29 Weighing, writing and transport objects associated with Phase 3

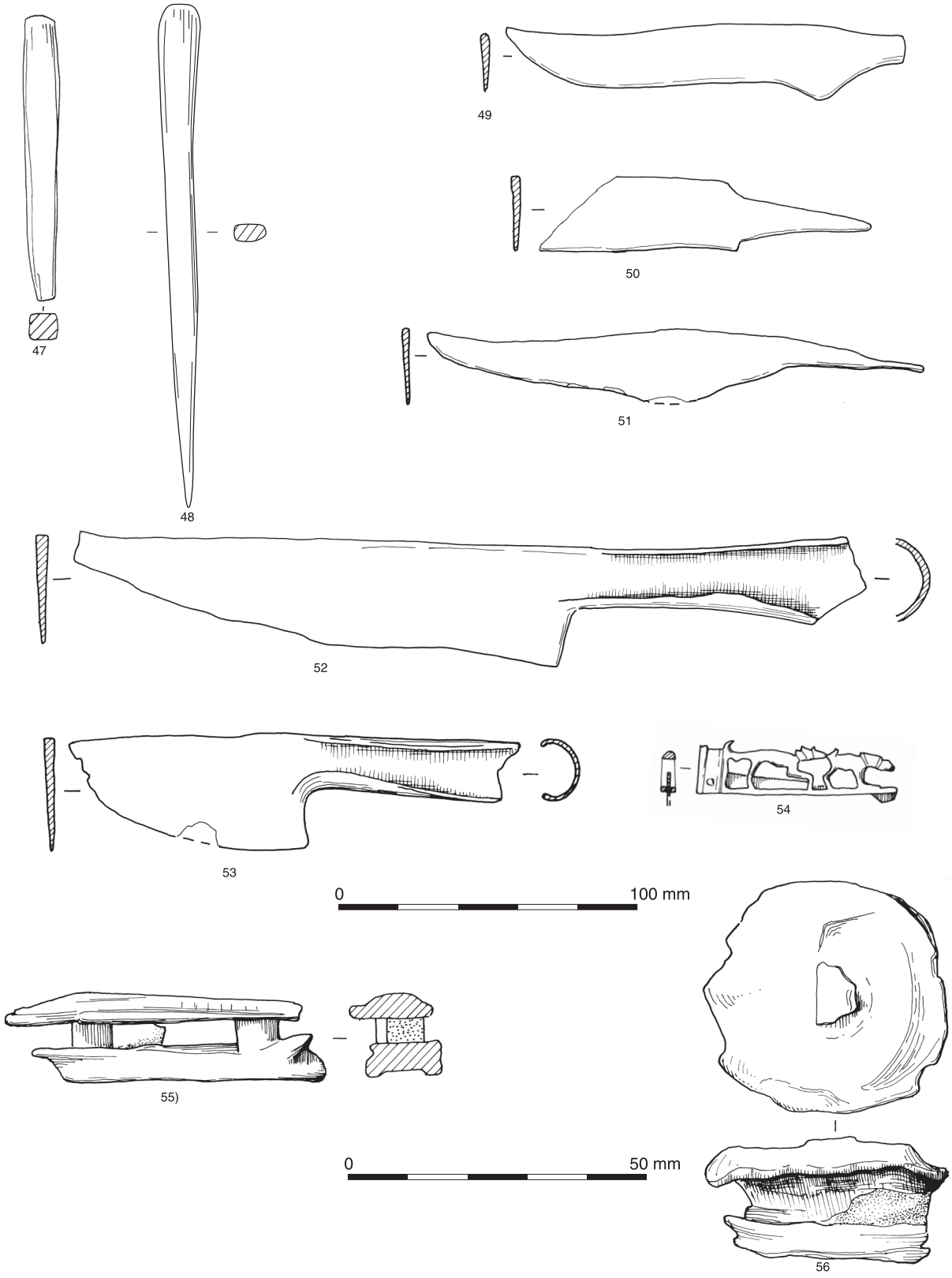


Fig. 5.30 Tools and pottery repairs associated with Phase 3

60. *687 SF 854. Padlock key.* Iron. Handle with loop terminal, ward plate present with single central perforation (See Manning 1985, 96). Length 143 mm. Trench 13, Phase 3.
61. *793 SF 661. Lion-headed stud head.* Copper alloy. Hollow, stepped stud head with effect of two rings with central flat-fronted oval. In use during the Flavian period (Borrill 1981, 315). Diameter 15 mm. Trench 13, Phase 4.
62. *1200 SF 693. Ferrule*. Iron. Socket with elongated point. Length 70 mm. Trench 17.
63. *1305 SF 2489. Reaping hook.* Iron. Only socket visible on X-ray. Trench 17, Phase 3.

Military and religious objects associated with Phase 3 (Fig. 5.32)

64. *U/S SF 5493. Baldrick fitting.* Copper alloy. Heart-shaped openwork with broken transverse loop and triangular terminal, all elements very shallowly D-sectioned with flat back. Later C2-C3. Length 64 mm, width 49 mm, thickness 2 mm.
65. *693 SF 912. Vulva mount.* Copper alloy. Elongate hexagonal plate with oval hollow-backed boss; two studs with integral washers on the back. This type of mount is common in military assemblages of the later 2nd to 3rd centuries (Oldenstein 1977, 139; for other

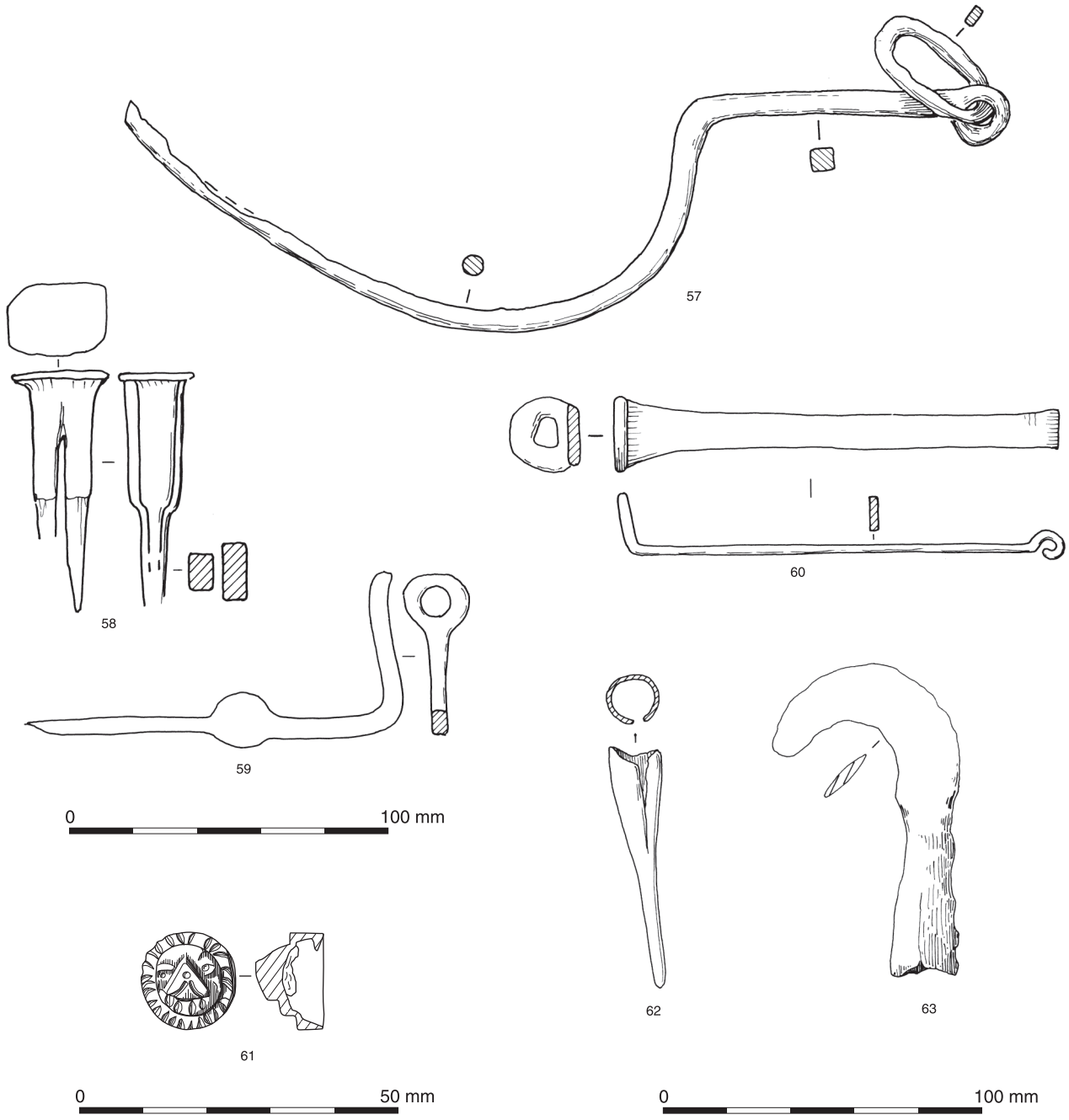


Fig. 5.31 Security, fasteners and agricultural objects associated with Phase 3

references see Cool 1990a, 81, fig. 70 no. 27). Later C2-C3. Length 37 mm, width 22 mm. Trench 13, Phase 4.

66. *1913 SF 1506. Strap end.* Copper alloy. Broken circular loop with groove above slightly waisted circular-sectioned bar, expanding out to greatest width marked by 2 grooves. Similar to example from Saalburg (Oldenstein 1977, 144, 249 no. 297). C2-C3. Length 40 mm, max diameter 7 mm. Trench 13, Phase 4.
67. *U/S 2699. Barrel bead.* Copper alloy. Octagonal-sectioned cylinder tapering to both ends. A type found predominantly on military sites (Mould 1991, 194 no. 694, fig. 97) but occasionally on apparently civilian ones (Lloyd-Morgan 2001, 230 no. 48, fig. 6.5). C2-C3. Length 45 mm, maximum section 16 x 14 mm.
68. *U/S SF 1674.* Caterpillar mount. Copper alloy. D-sectioned bar with hemispherical terminals. These are a common find on mid 2nd to 3rd century military sites (see for example Mould 2002, 136 no. 6; Allason-Jones and Miket 1984, 237 nos 3.877-8). L C2-C3. Length 28 mm, section 6.5 x 4 mm. Trench 13.
69. *538 SF 107. Bell.* Copper alloy. Bell. Rectangular-sectioned cone with diamond-shaped perforated loop and small knob at each corner. Iron loop and clapper internally. Length 49 mm, max diameter 34 x 31 mm. Trench 13, Phase 3.

Worked Stone (Figs 5.33-4) *by Fiona Roe*

A total of 38 objects of worked stone came from Phase 3 contexts, with a further 16 from Phase 3/4 (Table 5.6).

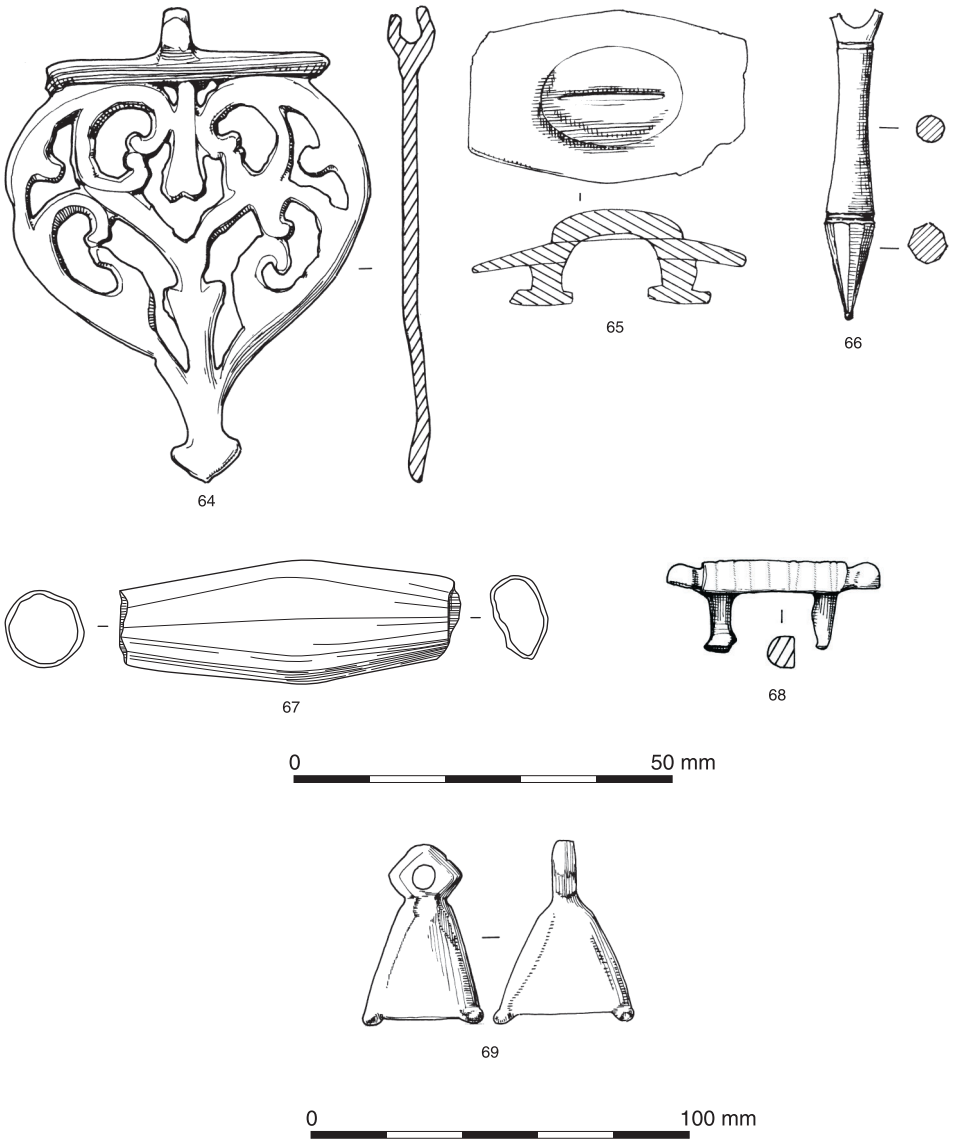


Fig. 5.32 Military and religious objects associated with Phase 3

Quern/millstones

It can be seen from Table 5.6 that Upper Old Red Sandstone from the Forest of Dean/Wye Valley area was particularly important as quern and millstone material. There are also numerous whetstones made from Lower Old Red Sandstone, described below, so there could have been strong links with the Forest of Dean. The Upper Old Red Sandstone comprises two interbedded varieties of stone, sandstone and conglomerate (Welch and Trotter 1961, 49), and both were widely utilised. The quartz conglomerate contains pebbles which are mainly of white vein quartz, and these give the stone a distinctive appearance (eg Fig. 5.33, no. 1). The rotary querns and millstones were manufactured by pecking into shape, and neat pecking round the rim is characteristic of the examples from the Longdoles Field site at Claydon Pike. The grinding surfaces of rotary querns were also prepared by pecking, although they often later became worn into concentric rings (Fig. 5.33, no. 2). At least three of the pieces that were found in Phase 3 contexts can be identified as millstones (half of all millstones identified from the site), on the basis of an estimated diameter of up to *c* 750 mm (eg Fig. 5.33, nos 3-4), or a slot for a rynd fitting (SFs 2927 and 2575). A nearby stream could have supported a watermill. The Upper Old Red Sandstone is likely to have been in use throughout the later Iron Age and Roman period.

The Old Red Sandstone querns and millstones were transported to Claydon Pike some 64.4 km (40 miles) from the Forest of Dean, but they are in no way unusual, since they are found on all other Roman sites in the area (Saunders 1998). They have also been recorded, for instance, at the neighbouring sites of Thornhill Farm (Shaffrey 2004) and Roughground Farm (Allen *et al.* 1993, 160 and Ashmolean Museum). Old Red Sandstone objects have been found at a number of nearby Roman towns including Cirencester (Corinium Museum; Cotswold Archaeology, in prep) and Wanborough (Buckley 2001 and Swindon Museum). Upper Old Red Sandstone, mainly in the form of rotary querns, has also been widely recovered from Roman sites in Oxfordshire (Roe in prep). Millstones made from Upper Old Red Sandstone are known from other sites, and can be impressive, as is demonstrated by a pair of complete upper stones with grooved grinding surfaces from Woolaston, Gloucestershire (Scott Garrett 1938, pl IIB; Watts 2002, 58 and fig 21).

It is surprising however how much Millstone Grit was also brought to Claydon Pike, coming from the Pennines around Sheffield, some 188 km (117 miles) north from the site. Only one rotary quern made from Millstone Grit has been identified (SF 3009), although from an unstratified context, and it appears that it was being utilised primarily as a millstone material. The finds from the Longdoles Field site have not survived in good condition, and although in total six pieces could be identified as coming from millstones, another seven are of uncertain type. In four cases traces of pitting could be seen, this being the typical method for finishing off querns or millstones made from this variety of stone.

Table 5.6: Worked stone from Phase 3 and Phase 3/4 contexts

	Imported stone									*Cotswolds*			*Local*		
Identification	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*Total*
Rotary quern	6														6
Quern or millstone	1	4	1												6
Millstone	2	1													3
Quern?										1					1
Whetstone				10	2	2	2					3			19
Whetstone/point sharpener					4										4
Spindlewhorl									3			1			4
Weight													1		1
Marble?														1	1
Palette								1							1
Counter?														1	1
Bracelet									4						4
Bead									1						1
Bowl/mortar											2				2
Total	9	5	1	10	6	2	2	1	8	1	2	4	1	2	54

Key

1. Upper Old Red Sandstone 2. Millstone Grit 3. Niedermendig lava 4. Kentish Rag 5. Lower Old Red Sandstone 6. Red Sandstone Cotswold Limestone 7. Pennant Sandstone 8. Purbeck Marble 9. Kimmeridge Shale 10. Jurrassic Sanstone 11. Coarse-grained limestone 12. Fine-grained limestone 13. Quartzite 14. Flint

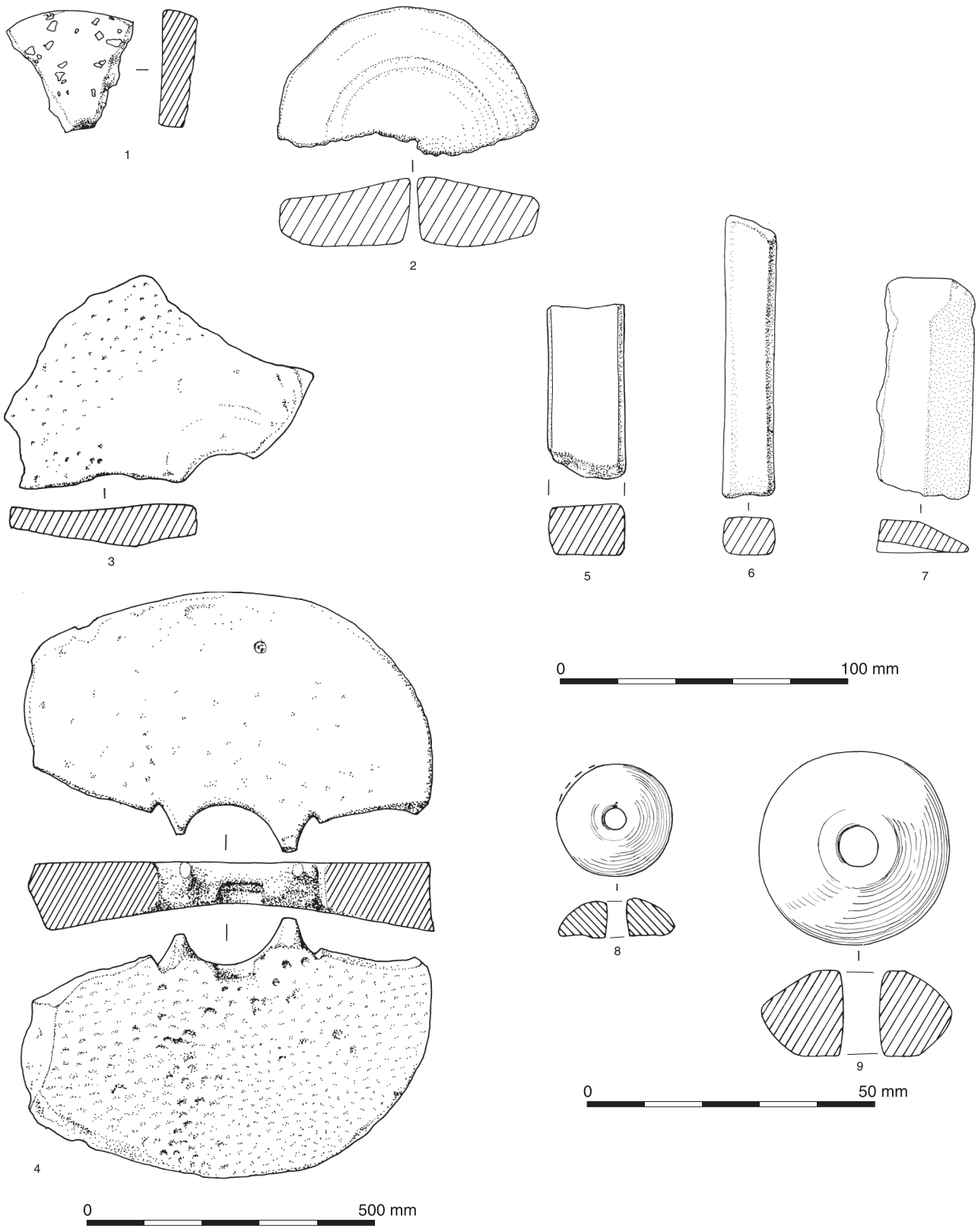


Fig. 5.33 Worked stone (querns, whetstones, palette, spindlewhorls)

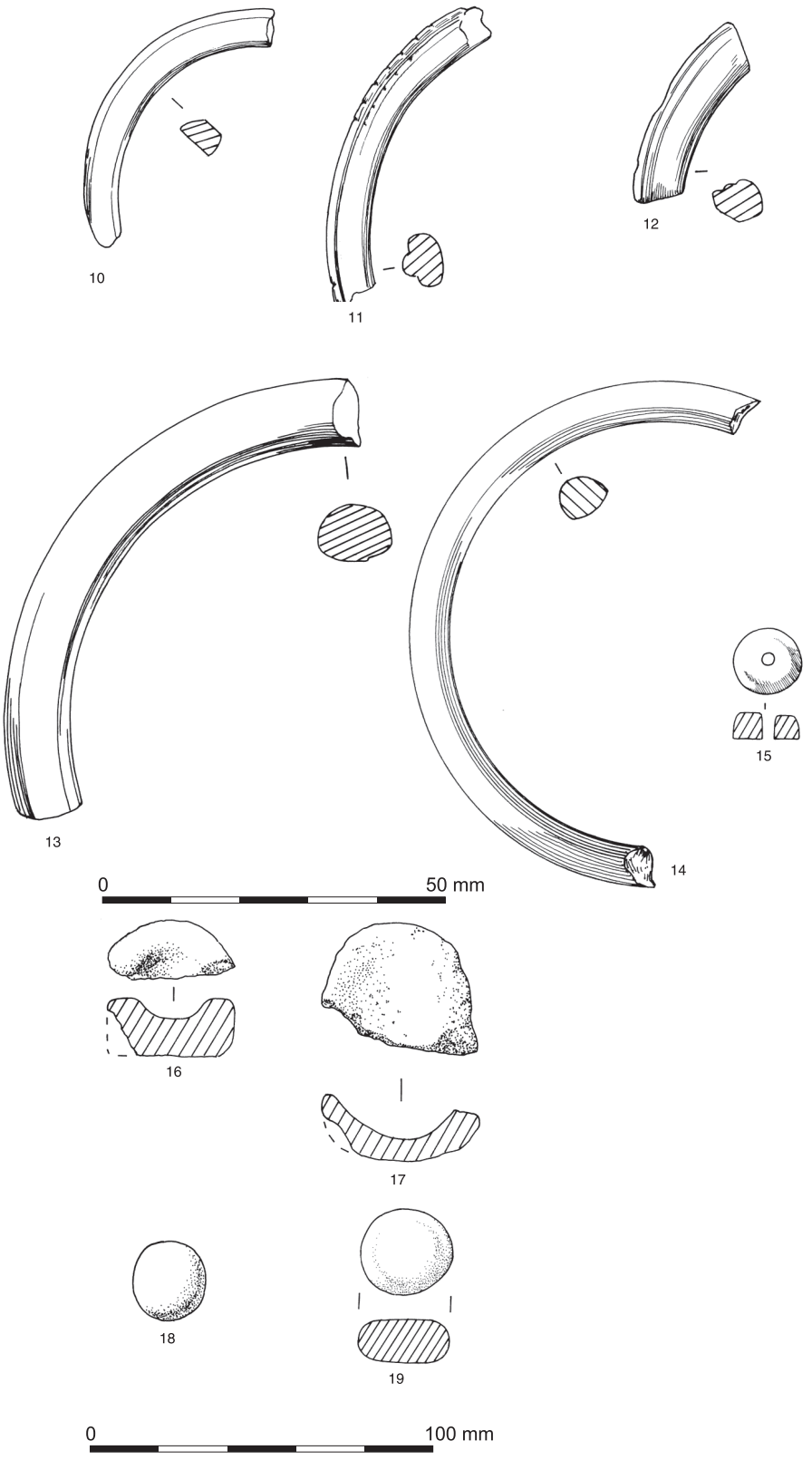


Fig. 5.34 Worked stone (other objects)

Evidence from other local sites supports the theory that Millstone Grit was brought into Gloucestershire mainly as a millstone material. A large example of one of these millstones can be seen at the Chedworth Roman villa (Watts 2002, 62 and pl 9). Pieces of another large millstone were found at Frocester Court (Price 2000, 195 and Gloucester Museum), and part of a further one came from Cricklade Street in Cirencester (Barber and Walker 1996, 9 and Corinium Museum). In addition there is a probable millstone fragment from Somerford Keynes (Chapter 9) and fragments of Millstone Grit were found at Roughground Farm (Allen *et al.* 1993, 160 and Ashmolean Museum). These millstones would have been valuable pieces of equipment, and one found at Wanborough, which was one metre in diameter, had been repaired with lead (Buckley 2001, 160 and fig 62, 16). It is clear that although Millstone Grit is found in smaller quantities than Upper Old Red Sandstone on Gloucestershire sites, the trade from the Pennines must have been an important part of the Roman economy.

Niedermendig lava does not survive well on gravel sites, and all the pieces found at the Longdoles Field site are small fragments. There is some evidence from other Gloucestershire sites to show that it was used both for rotary querns and for millstones. A complete lower stone from a lava millstone was found at the Wortley Roman villa (Taylor and Bagnall 1989, 43 and fig 14, 121). Some lava rotary querns are known from local Roman sites, as for example from Stepstairs Lane, Cirencester (Cotswold Archaeology, in prep), and from Wanborough (Buckley 2001, 156), but it is more usual for unidentifiable, weathered fragments to be found, as at the Longdoles Field site. However, the number of Roman sites in Gloucestershire where lava has occurred (some 16 at the time of writing) suggests that it may have been quite widely used.

There is only one Phase 3 quern – and one other – made from Jurassic sandstone or limestone from the Cotswolds, and these may have served as a stand-by if supplies of imported quernstone failed to arrive when needed.

Whetstones

The large numbers of whetstones from Phase 3 are unusual (Table 5.6), and are probably even under-represented given that there are a further 16 unstratified examples. These seem to hint at a rural economy in which they may have been needed for sharpening tools such as sickles or scythes, and such objects were indeed recovered from the site (see Cool above). Thus the whetstones fit with the suggestion that haymaking was an activity particularly characteristic of this site during Phase 3. Two distinctive varieties of whetstone were found at the Longdoles Field site. Firstly, there are whetstones of rod type, and these are all made from light-coloured sandy limestones (eg Fig. 5.33, nos 5-6). The second variety consists of whetstones of slab type, and these were all made from sandstones. The whetstones of the rod variety are mainly made from Kentish Rag, which is likely to have come from around Maidstone (Fig. 5.33, nos 5-6), but three are made from fine-grained, sandy limestone from the Cotswolds. Most of these whetstones are now well worn to a characteristic cigar shape (Fig. 5.33, no. 6). Three of the Kentish Rag ones retain traces of grooves from the initial shaping of stone (Fig. 5.33, no. 5), but this is not a particularly uncommon feature.

The whetstones of the slab variety are mainly made from purple-brown Lower Old Red Sandstone tilestone from the Forest of Dean (Welch and Trotter 1961, 33). These tend to be unevenly shaped, relatively thin, re-used fragments, although at least one have been worn into a pyramidal shape (SF 371). Two more whetstones appear on macroscopic examination to be Pennant sandstone (SFs 2979, 2747), another tilestone, and this may also have been obtained in the Forest of Dean, although the Bristol coalfield is another possible source. A few others were made from red sandstone of less certain origin which may however also have come from the Forest of Dean. Four other whetstones/point sharpeners were made from light coloured quartz sandstone likely to be Jurassic sandstone with a more local source. The flat whetstones of Old Red Sandstone tilestone were used in a different way from the Kentish Rag ones, with wear on the main, flat surface, rather than longitudinally up and down the sides. The broken edges have usually been left unmodified. These whetstones could have been used for more heavy duty honing than the Kentish Rag ones.

In addition, a number of the Old Red Sandstone ones were also used as point sharpeners. The Lower Old Red Sandstone was in use during both Phases 3 and 4, but half of the finds are unstratified, so that the full picture is not clear. A curious fact is that although the Old Red Sandstone whetstones appear to be made from re-used roofing tile, there are no definite examples of such roofing material from the Longdoles Field site, where all the stone roofing tiles were made from Jurassic limestone (see below). Further whetstones made from Old Red Sandstone tilestone were found at the nearby sites of Roughground Farm (Allen *et al.* 1993, 161 and Ashmolean Museum) and Thornhill Farm (Shaffrey 2004), where again no roofing tiles made from Old Red Sandstone were recorded. However these roofing tiles from the Forest of Dean were being transported to other sites in Gloucestershire, since they were widely used in Roman Gloucester and other sites in that particular area such as Hucclecote (Roe 2003b, 51). It could be that broken pieces of tilestone from the source area were not wasted, but were instead traded out, along with querns and millstones, to sites such as Claydon Pike where they could be put to good use as whetstones. Other Roman sites in the region, as for example Kingscote,

have some whetstones made from Coal Measures Sandstone, which may have been transported southwards from the Pennines in conjunction with the millstones of Millstone Grit (Gutierrez and Roe 1998b, 178). No doubt the Old Red Sandstone whetstones, coming from a nearer source, were less costly, and for this reason might have been preferred at Claydon Pike. Whetstones made from Pennant sandstone appear to be less common in the area, but were noted from Barnsley Park (Corinium Museum), and one was found at Asthall (Roe 1997, 101). These too could be fragments of roofing tile which were put to further use.

As was seen with the querns and millstones of imported stone, the materials used for whetstones in the Longdoles Field site at Claydon Pike have not occurred in isolation, but are part of a wider picture. The Kentish Rag whetstones, in particular, appear to have been very widely distributed and there is a comparable collection of 14 Kentish Rag whetstones from Barnsley Park (Peacock 1971b, 153), while another ten examples were found at Kingscote, (Gutierrez and Roe 1998b, 178). Elsewhere in Gloucestershire and Oxfordshire they have frequently been recorded but in smaller numbers, as for instance at Asthall (Roe 1997, 100). Whetstones made from Lower Old Red Sandstone have been found in smaller quantities. Nevertheless, apart from their presence at the adjacent sites of Roughground Farm and Thornhill Farm, they have occurred at Barnsley Park (Corinium Museum) and Asthall (Roe 1997, 100), two further sites where the stone roofing tiles were made from Jurassic limestone (Williams 1971, 101; Booth 1997, 102). There are also examples from Somerford Keynes (Chapter 9).

Other worked stone objects

There are further objects of imported stone from the Longdoles Field site at Claydon Pike which again demonstrate how certain lithic materials were being widely distributed during the Roman period (Table 5.6). Purbeck Marble from Dorset was one such variety of stone, being used especially for mortars and other vessels, but also on occasion for palettes. The fragment from the Longdoles Field site (Fig. 5.33, no. 7) appears to be the first palette of this material to be recognized from Gloucestershire, where other known examples were made from imported Mediterranean marbles, as was the case for instance at Kingscote (Gutierrez and Roe 1998a, 167). However a quantity of Purbeck Marble was recovered from Roman Cirencester (Corinium Museum), and so the palette, or a piece of stone from which to make it, could have been acquired from the market there. Kimmeridge shale was also brought from Dorset, and there are fragments from eight small objects in Phase 3 contexts and three unstratified. These amount to three spindlewhorls (Fig. 5.33, nos 8-9), six small bracelets, four of which are plain (Fig. 5.34, nos 10, 13-14) and two decorated (Fig. 5.34, nos 11-12), together with a ring and a small bead (Fig. 5.34, no. 15). This collection is typical of what has been found on other Gloucestershire sites, as for instance at Barnsley Park (Corinium Museum), Frocester (Price 2000, 185) and Kingscote (Timby 1998, 220).

Cotswold stone lends itself well to the manufacture of stone vessels, and two were found at the Longdoles Field site in Phase 3/4 contexts. These were informally made mortars, one (Fig. 5.34, no. 16) apparently made from a reused piece of building stone from the Corinium quarries, the other (Fig. 5.34, no. 17) probably made from a limestone cobble which could have been found in the local gravels. Comparable limestone mortars were found at Somerford Keynes (Chapter 9), and another came from Thornhill Farm (Shaffrey 2004). One spindlewhorl is made from a fine-grained limestone, which again is similar to stone used for roofing tiles, with a probable source in the Great Oolite.

The few objects made of stone from the immediate locality demonstrate the limited local resources. Small flint pebbles which probably came from the river gravels were used for a possible marble and a possible counter (Fig. 5.34, nos 18-19). A quartzite pebble, also probably from the gravels, was used for a small weight of Iron Age type (SF 2572).

A selection of worked stone objects relating to Phase 3 occupation is presented in Figure 5.34, a full worked stone catalogue can be found in Digital Section 3.8b

Illustrated catalogue: Worked stone (querns, whetstones, palette, spindlewhorls) (Fig. 5.33-4)

1. SF 2981 Segment of rotary quern, probably upper stone, weathered, traces of rings on grinding surface, pecked rim; diam *c* 400 mm, thickness at rim 50.5 mm, 1.710 kg. Upper Old Red Sandstone quartz conglomerate. Trench 29.
2. 1408 SF 2926 About half lower stone rotary quern, fully pierced, rim pecked to shape, underside unmodified; diam *c* 350 mm, thickness at rim 59 mm, thickness in centre 85 mm, 7.800 kg. Upper Old Red Sandstone, quartz conglomerate. Trench 17, Phase 3.
3. 2441 SF 3062 Weathered fragment from millstone, part of central hole; diam at least 730 mm, diam of hole *c* 110 mm, thickness at rim *c* 48 mm, thickness at centre 83 mm, 10.9 kg. Upper Old Red Sandstone quartz conglomerate. Trench 29.
4. 2840 SF 2984 Fragment upper stone of small millstone. Upper Old Red Sand stone quartz conglomerate. Trench 29.
5. 1716 SF 1030 Fragment whetstone, traces of two grooves from initial shaping into rod, rectangular cross-section, slightly worn; 60 x 26 x 17 mm, 40 g. Kentish Rag. Trench 13, Phase 3.
6. 2509 SF2141 Whetstone, worn to a slender rod; 97 x 17 x 13 mm, 40 g. Kentish Rag. Trench 13, Phase 3.
7. 1409 SF 2838 Corner fragment from palette, two chamfered edges; 74.5 x 32 x 10 mm, 35 g Purbeck Marble. Trench 17, Phase 3.

8. 687 SF 423 Spindlewhorl, plano-convex. Kimmeridge Shale. Trench 13, Phase 3.
9. SF 603 Complete spindlewhorl, biconical. Kimmeridge Shale. Trench 13, Phase 3.

Worked stone (other objects) (Fig. 5.34)

10. 502 SF 76 Fragment bracelet. Kimmeridge Shale. Trench 13, Phase 3/4.
11. 687 SF 660 Fragment bracelet, decorated. Kimmeridge Shale. Trench 13, Phase 3.
12. 1200 SF 946 Fragment bracelet, decorated. Kimmeridge Shale. Trench 17.
13. 2397 SF 1812 Fragment bracelet. Kimmeridge Shale. D-sectioned hoop with turning marks internally. Diam 100 mm; *c* 28% circumference extant; section 10.5 x 9 mm. Trench 19, Phase 3.
14. 1379 SF 2996 Fragment bracelet. Kimmeridge Shale. D-sectioned hoop with turning marks internally. Diam 73 mm; *c* 53% circumference extant; section 6 x 5.5 mm. Trench 17, Phase 3.
15. 2409 SF 2338 Small bead. Kimmeridge Shale. Trench 19, Phase 3.
16. 2447 SF 2573 Fragment of mortar, weathered and burnt; diam *c* 210 mm, max thickness 70 mm, 640 g. Jurassic limestone, shelly and oolitic. Trench 29, Phase 3.
17. 2448 SF 2574 Part of crudely made mortar, hollowed area in unshaped cobble; 190 x 141 mm, max thickness 57 mm, 1.650 kg. Coarse-grained, shelly Jurassic limestone, possibly a cobble from the gravels. Trench 29, Phase 3.
18. 1269 SF 2336 Small spherical pebble, unworked, but possibly could have been used as a marble; diam 22.5 mm, 15 g. Flint. Trench 17, Phase 3.
19. 1318 SF 2864 Small, polished pebble, could have been used as counter; diam. 2.6 mm, thickness 12 mm, 7 g. Flint (with blackened surface). Trench 17, Phase 3/4.

Metalworking *by Peter Northover and Chris Salter*

Of the *c* 32 kg of slag-like material recovered from the site, over 66% came from Phase 3 contexts, and while this is not a huge quantity, it does indicate that some level of industrial activity did take place within the settlement, as would perhaps be appropriate for an extensive agricultural complex. Furthermore around 88% of this material came from contexts in Trench 17 implying that this was very much a localised activity, restricted to the margins of the main settlement area. There are a number of different processes that can generate slag-like material some of which may not be associated with metalworking. The most common types of non-metallurgical slag-like materials are fuel ash slags (FAS) and furnace lining material (FLM) which could have been produced by any operation that was capable of producing temperatures of 1200ºC and above. Normally such temperatures were only produced in manufacture of pottery or metal artefacts but occasionally a large well ventilated fire could reach this sort of temperature range. There is no evidence for pottery production on site, and the quantity of true slags, which are the vitreous waste product of a metallurgical process, indicates that iron working did take place. The commonest slags on archaeological sites are those derived from iron working processes such as smelting or smithing, and at Claydon Pike it seems that all of the material was derived from smithing. Such iron smithing was probably carried out on a relatively minor scale, possibly for the creation and repair of agricultural tools and structural fittings for the estate. It is possible that some bronze working occurred on site during this phase, but it is unlikely that copper alloy metallurgy was ever more than a minor and episodic component of the local metal economy.

Building Materials

Ceramic building material *by Leigh Allen*

Of the 434 kg of ceramic tile from the site, just over 100 kg (23%) came from Phase 3 contexts, with a further 48 kg deriving from Phase 3/4 (Table 5.7). Of the Phase 3 assemblage, 57 kg appeared either plain or unidentifiable, and over 26 kg was definitely roofing material (tegulae and imbrices). One interesting find was a fragment recognised as a skylight hood. In order to give more light inside some houses, circular holes were made in *tegulae*, which were then partially covered by semi-circular clay hoods. Twelve fabrics were identified amongst the tile assemblage (see Digital section 3.9), with two major sources indicated – Minety (McWhirr 1971) and Wanborough

Table 5.7: Distribution of tile types across main excavation trenches in Phase 3 (weight and % from site)

Tile type	*Trench 13*		*Trench 17*		*Trench 19*		*Trench 29*		*Total*	
	Wgt (g)	*%*	*Wgt (g)*	*%*	*Wgt (g)*	*%*	*Wgt (g)*	*%*	*Wgt (g)*	*%*
Box tiles	3200	78.43	575	14.09	270	6.62	35	0.86	4080	4.08
Imbrices	11100	85.45	870	6.70	580	4.46	440	3.39	12990	12.98
Tegulae	11885	89.66	235	1.77	925	6.98	210	1.58	13255	13.24
Large tiles and bricks	7385	63.55	200	1.72	3,095	26.64	940	8.09	11620	11.60
Plain tile	31695	75.68	3120	7.45	4600	10.98	2465	5.89	41880	41.83
Unidentified	14083	86.46	685	4.21	970	5.96	550	3.38	16288	16.27
Total	79348	79.26	5685	5.68	10440	10.43	4640	4.63	100113	100

(Anderson *et al.* 2001). The kilns at Minety went out of use in the 3rd century, but it is not possible to determine if this led to a shift in reliance to the competing source at Warnborough. A very small proportion of the fabric comes from a known kiln site at Fairford; its use seems to have been restricted to the production of flat plain tiles only.

Almost 80% of the material was from Trench 13 with a particular concentration in the area of Aisled Building 1, and presumably deriving from this structure. The quantities recovered are still very small compared to the total needed for such a tiled roof, although it is likely that there was much reuse of material, both within the Phase 4 villa, and probably to areas away from the site. It is also quite likely that much of the ceramic material could have been lost in the unexcavated parts of the site such as baulks and the topsoil. About 4 kg of box tile was recovered from Phase 3 contexts, nearly all from Trench 13, but this is perhaps more likely to be intrusive material deriving from the Phase 4 hypocaust building (B 9).

Mortar and plaster *by Graham Morgan*

A total of 95 samples of mortar and plaster were taken from the site, and 30% of this came from Phase 3 contexts. These included the only sample of fine painted wall plaster (Group 1; see Digital section 3.10) which came from well 766. Two samples of a coarser painted plaster (Group 2) were also recovered from this well and all material is assumed to have come from Aisled Building 1. Further samples of this group came from a posthole of B 1 and the robber trench of B 7. The colours on the plaster were red, green and yellow.

The overall evidence from the tile and the mortar and plaster indicates that Aisled Building 1 at least was a structure of some architectural merit, with a tiled roof and painted plaster on the walls. This appears to be in contrast with Aisled Building 3 which it is suggested may have had a thatched roof and an altogether more 'rustic' appearance. The column parts found within Phase 3/4 pits in Trench 17 and 19 probably derived from a structure belonging to Phase 3 (see Phase 3 discussion).

Building stone *by Fiona Roe*

Fourteen pieces of building stone came from Phase 3 contexts, with a further eight from Phase 3/4. The objects comprise roofing tile fragments, architectural pieces and samples of building stone. The roofing tiles are made from fissile varieties of the Great Oolite, which were probably obtained from around Coln St Aldwyns, Gloucestershire (Richardson 1933, 106). The limestone used for columns and other shaped pieces of masonry probably came from the Roman quarries at Corinium (McWhirr *et al.* 1982, 35). As most of the building stone came from Phase 3/4 and especially Phase 4 contexts, they have been discussed more fully in Chapter 6, although it is probable that some of the columns belonged to structures in use during Phase 3 (see discussion below).

Fired clay *by Alex Smith*

A total of 217 fragments of fired clay were recovered from Phase 3 contexts, with just over half deriving from Trench 13, and most of the remainder coming from Trenches 17 and 29. About 82% comprised unidentifiable fragments, with daub (9.7%) forming the largest of the functionally discernible object categories, followed by oven fragments (6.9%). The only other fired clay objects were three spindle-whorls, two of which came from Trench 17.

THE ENVIRONMENT

Full environmental reports from this phase of Claydon Pike can be found in Digital section 4.

Animal bone *by Naomi Sykes*

Distribution of the Phase 3 animal bones is more complex than Phase 2, with remains coming from five separate trenches (Table 5.8). Of the 11,818 specimens recovered, most (59%) derived from Trench 13, with 24% coming from Trench 17, 10% from Trench 29, 7% from Trench 19 and 0.1% from Trench 18. The assemblages from Trench 13 and 17 are the best preserved, showing the highest percentage of identifiable fragments (31% and 34%) and the lowest frequency of loose teeth (17% and 18%). In all cases cattle and caprines are the dominant taxa, with pig and horse being represented in lower numbers. Dog bones are present in all trenches, except 18, whereas cat bones were present only in Trench 13. The assemblage from Trench 13 shows the widest range of taxa: wild mammals (red deer, roe deer, hare, badger, fox, field vole, mole and rodent), birds (duck, coot, grey heron, dunlin, snipe, blackbird, song thrush and crow) and fish (eel) are all represented. Wild animals are less abundant in the other trenches but red deer were identified in the Trench 17 assemblage and roe deer in that from Trench 19. By comparison with the earlier periods, this increase in game representation is clear evidence for the uptake of hunting, fowling and fishing. Domestic birds are also present in higher frequencies than in either Phase 1 or 2, accounting for 3% of the identifiable remains from Trench 13. It is possible that this widening of the resource base resulted from a post-conquest change in dietary preferences, especially since hunting and the consumption of domestic birds are thought to have been traits of the Roman lifestyle (King 1991).

The 'Romanisation' process also appears to have impacted upon the wider animal economy. For instance, there is a slight increase in the average age of caprine slaughter: whereas 66% of Phase 2 individuals survived past 1-2 years, this figure rises

Table 5.8: Composition of the Phase 3 animal bone assemblage by trench, according to the NISP (MNI given in parentheses)

Trench	*13*	*17*	*18*	*19*	*29*	*Total*
Cattle	941 (8)	320 (7)	3 (1)	56 (1)	197 (2)	1517
Sheep/goat	682 (12)	474* (13)	1 (1)	48 (1)	135 (7)	1340
Pig	168 (4)	36 (2)	1 (1)	9 (1)	12 (1)	226
Horse	79	45	4	4	15	147
Dog	13*	21*		4	10	48
Cat	3					3
Red deer	1 + 9a	3				13
Roe deer	2			1 + 1a		4
Hare	9					9
Badger	2					2
Field vole	1					1
Mole	1					1
Rodent	2					2
Frog	27					27
Fish	4					4
Domestic fowl	51*	5		1		57
Goose	10	1				11
Domestic duck	6					6
Duck	6					6
Coot	1					1
Grey heron	1	1				2
Dunlin	1					1
Snipe	1					1
Blackbird	1					1
Song thrush	1					1
Carrion crow	3					3
Crow	1					1
Barn owl		1				1
Unidentifiable mammal	4755	1955	22	717	780	8229
Unidentifiable bird	140	11			2	153
Total NISP	6922	2873	31	841	1151	11818

* = figures include skeletons that have been counted as '1'

a = antler

to 75% in Phase 3, indicating an increased reliance on secondary products, most probably wool and manure. Inter-period shifts are even more dramatic for cattle. Ageing and sexing data demonstrate a move away from the Phase 2 situation, with animals, in particular male animals, being kept to considerably older ages: the percentage of cattle slaughtered by 15-26 months dropped from 50% to 35%, with the percentage of males rising from 10% to 64% of the adult herd. According to Maltby (1994; 1998) assemblages from Roman towns tend to be dominated by prime-aged females. He argues that this inter-site variation reflects the provisioning system, whereby oxen and bulls were retained on the rural sites whilst cows were deliberately selected to be sent for slaughter within the towns. The inter-phase variation noted at the Longdoles Field site may, therefore, indicate a post-conquest increase in commercialisation, with the development of urban markets and a standardisation of rural-urban provisioning. Cattle were probably, sent to towns on-the-hoof, since the body part patterns show little evidence for the export of pre-butchered joints of meat. The data do, however, demonstrate a slight over-representation of scapulae, suggesting that shoulders of beef may have been brought onto the site. Caprines and pig skeletal representation appears to be influenced more by factors of preservation than human activity.

Cattle, caprines and horses all increased in size between Phase 2 and 3. Average wither heights rose by 110 mm (from 1.09-120 m) for cattle, 10 mm (0.58-0.59 m) for sheep/goat and 170 mm (1.32-1.49 m) for horse. It is uncertain whether these increases resulted from the importation of continental stock or through the selective breeding of native animals, however, the fact that neonatal and foetal cattle and caprine remains were recovered from the Phase 3 assemblage would suggest that by this period animals were being bred on site.

Viewed in conjunction, these shifts in animal age, sex and size hint at a significant change in the animal economy, and it seems possible that they reflect the widespread agricultural intensification that occurred during the Romano-British period. Population expansion following the Conquest increased the demand for food, causing greater areas of land to be taken into arable production (Dark 2000, 82). Need for strong plough animals could have dictated the decision to retain male cattle on rural sites and may have encouraged selective breeding for, or the importation of, larger individuals. To improve the fertility of the river gravel soils, sheep/goat manure, which is higher in nutrients than the dung of cattle, may have become an important resource, perhaps explaining why caprines were maintained to older ages in this period. The taxa ratio data for the Trench 13 assemblage (cattle 50%, caprines 37%, horse 9% and pig 4%) also supports the idea of a shift in agricultural economy, with cattle frequencies increasing at the expense of pig: the need for plough animals leading to a rise in cattle, whilst pig frequencies declined as their woodland pasture was turned over to farmland. Species representation data for the other trenches do not display identical patterns, for example, the Trench 17 assemblage shows a much higher frequency of sheep/goat, however, since the Trench 13 assemblage is by far the largest, it is probably the most representative.

Inter-trench variation can, most probably, be linked to disparity in both the sample sizes and contexts from which the assemblages derive, although some genuine differences are apparent. For instance, Trench 17 contained three sheep and one dog burial, whereas articulated remains were largely absent from all the other trenches. The context from which the burials were recovered (pits, a ditch and a gully) suggest that no feature type was viewed as having a particular functional significance. Indeed, the data from all trenches show few clear patterns that can be linked to systems of rubbish disposal or specialised activities. Perhaps the best evidence for spatial patterning is provided by the bird and pig bone distributions from Trench 13: it was noted that areas where these remains are found in high density appear to correlate with zones of domestic activity. For example, whereas bird remains account for 31%, and pig 30% of the material from Building 1 (Phase 3) these taxa are less well represented, or totally absent, in most of the linear boundary contexts. Most of the bone material across Trench 13 appears to be homogenous but the assemblage from well 766 is set apart from other contexts by the sheer diversity of the animals contained within it: five of the site's nine hare bones, one of the two roe deer specimens, all of site's fish bones plus the remains of domestic fowl, coot and dunlin are presented in this feature. The frequency of pigs is also higher than in most other contexts. It can only be assumed that this assemblage represents primary domestic refuse, perhaps the remains of a single high-status meal.

Charred plant remains *by Vanessa Straker, Martin Jones and Ann Perry*

In this phase the settlement was reorganised with large rectilinear ditched enclosures, two aisled buildings, fencelines and a cobbled trackway. Fifty samples were analysed from 3 gullies, 15 ditches, 5 pits, 4 wells, 2 layers and 4 ovens, distributed over the sub phases as shown in Table 5.9.

The range of farming and domestic activities taking place at the settlement throughout the early 2nd to early 4th centuries was probably varied and is reflected by the heterogenous distribution of grain, chaff and weeds in the samples and the much greater concentration of plant macrofossils than in earlier phases. The 50 samples from Phase 3 compare with 40 from Phase 2 and 19 from Phase 4, with more samples in Phase 3 from a range of features other than ditches. Some individual features (eg oven 2103, see below) are very rich, but the mean macrofossil concentration is also greater. The figure for Phase 3 pits, for example, at 117.5 items /litre is noticeably greater than for Phases 2 and 4 (1.7 and 10.2 respectively).

The range of crops is similar to earlier phases, with the significant presence of spelt, with emmer and smaller amounts of breadwheat being typical of Roman assemblages. There may be an exception at Barton Court Farm (M K Jones 1984) but some of the material there may have been wrongly assigned (Campbell and Straker 2003). However, free threshing cereals are likely to be under represented in the charred macrofossil record in relation to hulled wheats as they do not require exposure to heat to facilitate dehusking and can be removed at an early stage of crop processing (Hillman, 1984).

There are also very rare occurrences of beans (*Vicia faba* var *minor*) and flax (*Linum usitatissumum*) found in Phase 3 contexts at Claydon Pike. Neither of these crops is as likely to become accidentally charred as the hulled wheats, which benefit from heat to render the chaff brittle and facilitate dehusking. Flax is known to have been an important crop in the Thames Valley and it grows well rotated with other crops on wet ground. Its seeds have been found at Barton Court Farm and Farmoor (M K Jones 1984; Lambrick and Robinson 1979). Although only one carbonised seed was found at Claydon Pike, from an oven (Phase 3b 2113/3), it is more plentiful in the waterlogged assemblage (see Robinson below). It is a useful crop for as well as providing bast fibres for textiles, its seeds are oil rich and can be used for the oil or as cattle feed. The single example of a Celtic bean was found in ditch sample 547/E from Phase 3a. It is very likely that pulses were a much more important component of the diet than it would appear from the archaeological record alone and may have been an important source of plant protein. Beans, peas and other legumes are nitrogen fixing and if grown as part of a rotation, help to maintain soil fertility. Roman peas were identified from the Warwickshire gravel site at Tiddington (Moffett 1986).

Table 5.9: Phases 3 and 3/4 charred plant taxon presence in x samples (no. of items)

		Phases	*3*	*3A*	*3B*	*3A/B*	*3B/C*	*3C/D*	*3D*	*3/4*
		No. of samples	*17*	*11*	*3*	*6*	*5*	*5*	*3*	*15*
Crops										
Triticum cf *dicoccum* Schübl.	emmer type	grain	3 (6)	2 (8)	1 (2)	0	1 (1)	0	1 (2)	5 (12)
Triticum cf *dicoccum*	cf emmer wheat	glume bases	2 (2)	0	0	0	0	0	0	0
Triticum dicoccum	emmer wheat	glume bases	2 (43_	2 (2)	0	0	1 (1)			3 (10)
Triticum dicoccum	emmer wheat	spikelet forks	1 (1)	0	0	0	0	0	0	1 (6)
Triticum cf *spelta* L.	spelt type	grain	8 (390)	3 (87)	1 (3)	2 (2)	2 (6)	0	0	2 (15)
Triticum spelta L.	spelt wheat	glume bases	6 (459)	0	2 (4)	1 (1)	2 (4)	1 (1)	1 (2)	6 (72)
Triticum cf *dicoccum/spelta*	emmer/spelt	spikelet forks	1 91)	0	0	0	0	0	0	2 (4)
Triticum cf. *aestivum*	bread wheat type	grain	2 (4)	3 (2)	1 (2)	0	0	0	0	5 (27)
Triticum sp.	wheat	grain	12 (178)	4 (75)	3 (68)	3 (3)	4 (20)	4 (8)	1 (1)	12 (182)
Triticum sp.	wheat	sprouted grain	1 (11)	0	0	0	0	0	0	0
Triticum sp.	hulled wheat	glume bases	14 (1576)	6 (31)	3 (26)	1 (18)	4 (44)	3 (13)	0	10 (394)
Triticum sp.	hulled wheat	spikelet forks	3 (3)		0	0	1 (1)	0	0	0
Triticum sp.	hulled wheat	spikelet fork bases	0	3 (6)	0	0	0	1 (1)	0	3 (4)
Triticum sp.	wheat	internode fragments	1 (1)	0	0	0	0	0	0	2 (9)
Triticum sp.	hulled wheat	brittle rachis internode fragments	1 (1)	0	0	0	1 (3)	0	0	1 (2)
Triticum sp.	free threshing wheat	tough rachis internodes	2 (3)	0	0	0	0	0	0	0
Triticum/Secale sp.	wheat/rye	grain	0	0	0	0	0	0	0	2 (3)
Triticum/Hordeum sp.	wheat/barley	grain	7 (147)	2 (1)	1 (22)	0	0	0	2 (6)	3 (32)
Hordeum sp.	barley	straight grain	3 (56)	1 (10)	2 (7)	0	2 (3)	1 (1)	0	4 (10)
Hordeum sp.	barley	twisted grain	3 (23)	0	1 (1)	0	0	0	0	0
Hordeum sp.	barley	indeterminate grain	10 (294)	9 (41)	2 (49)	1 (2)	3 (6)	3 (10)	2 (5)	8 (66)
Hordeum sp.	barley	hulled straight grain	2 (2)	0	0	0	0	0	0	1 (1)
Hordeum sp.	barley	hulled twisted grain	0	0	1 (1)	0	0	0	0	0
Hordeum sp.	barley	hulled grain	1 (2)	1 (1)	0	0	0	0	0	0
Hordeum sp.	barley	internodes	3 (88)	0	0	0	1 (5)	0	0	0
Avena sp.	oats	grain	3 (34)	1 (2)	1 (3)	0	0	0	0	3 (5)
Avena sp.	oats	awn fragments	2 (11)	1 (1)	0	0	1 (3)	0	0	1 (1)
Avena/Bromus sp.	oats/brome	grain	1 (3)	2 (4)	0	0	0	0	0	1 (1)
Cereal sp.	cereal indet.	grain	5 (30)	5 (31)	1 (5)	4 (5)	3 (13)	0	1 (1)	4(10)
Cereal sp.	cereal indet.	rachis fragments	2 (3)	1 (1)	1 (1)	0	0	1 (1)	0	2 (2)
Cereal sp.	cereal indet.	culm nodes	0	0	0	0	0	0	0	1 (1)
Linum usitatissimum L.	flax	seed	0	0	0	0	0	0	1 (1)	

Table 5.9: Phases 3 and 3/4 charred plant taxon presence (continued)

		Phases	*3*	*3A*	*3B*	*3A/B*	*3B/C*	*3C/D*	*3D*	*3/4*
		No. of samples	*17*	*11*	*3*	*6*	*5*	*5*	*3*	*15*
Wild species		**habitat range**								
Ranunculus acris/repens/bulbosus	buttercups	G	2 (2)	0	0	0	1 (1)	0	0	3 (3)
Ranunculus cf. *flammula* L.	cf lesser spearwort	V (wet)	0	0	0	0	0	0	0	1 (1)
Montia sp.	blinks	Da M G W	0	0	0	0	0	0	0	1 (1)
Cruciferae	mustard family	V	2 (2)	0	0	0	0	0	0	0
Raphanus raphanistrum L.	wild radish, charlock	Da	0	0	0	0	0	0	0	1 (1)
Brassica sp.	mustard, cabbage etc	D Da		1 (1)	0	0	0	0	0	0
Brassica/Sinapis sp.	mustard, cabbage etc	D Da	1 (1)	0	0	0	1 (1)	0	0	0
Sinapis cf. *arvensis*	wild mustard	D Da	1 (1)	0	0	0	0	0	0	0
Caryophyllaceae	campion family		0	0	0	0	0	0	0	1 (1)
Stellaria media agg.	stitchwort	D Da	1 (1)	0	0	0	0	0	0	1 (9)
Cerastium sp.	chickweed	D Da	0	0	0	0	1 (2)	0	0	0
Silene sp.	campion	V	1 (4)	0	0	0	0	0	0	0
Agrostemma githago L.	corn cockle	Da	0	0	0	0	0	0	0	1 (1)
Chenopodiaceae	goosefoot family		0	0	1 (1)	0	0	0	0	2 (2)
Atriplex sp.	orache		0	0	1 (4)	0	0	0	0	0
Chenopodium sp.	goosefoot	V	2 (6)	0	3 (3)	1 (1)	0	0	0	2 (4)
Chenopodium rubrum L.	red goosefoot	D Da	0	1 (1)	0	0	0	0	0	0
Linum catharticum L.	purging flax	G	1 (1)	0	0	0	0	0	0	0
Leguminosae	clover, pea family	V	1 (1)	2 (2)	2 (1)	0	0	0	0	2 (2)
Vicia/Lathyrus sp.	vetch, tare	Da M G S W	3 (5)	1 (1)	0	0	1 (1)	0	0	1 (3)
Lathyrus/Pisum	vetch, pea	Da, G C	0	1 (1)	0	0	0	0	0	0
Vicia faba var minor	celtic bean	C	0	1 (1)	0	0	0	0	0	0
Medicago cf *lupulina* L.	cf black medick	G	0	1 (1)	0	0	0	0	0	1 (2)
Trifolium sp.	clover	V	3 (145)	2 (5)	2 (27)	0	2 (8)	0	0	4 (14)
Trifolium cf. *pratense* L.	red clover	G	0	0	0	0	0	0	0	5 (22)
Potentilla sp.	tormentil	V	0	0	0	0	1 (1)	0	0	3 (5)
Umbelliferae	parsley family	V	1 (3)	0	0	0	0	0	0	0
Pimpinella/ Sium	burnet-saxifrage / water-parsnip		1 (3)	0	0	0	0	0	0	0
Aegopodium podagraria L.	ground-elder	D da G V	1 (1)	0	0	0	0	0	0	0
Apium cf. *nodiflorum* (L.) Lag.	fool's watercress	M	1 (1)	0	0	0	0	0	0	0
Polygonum sp.	bistort	V	1 (1)	0	0	0	0	0	0	0
Fallopia convolvulus (A.) Löve	black bindweed	Da	0	1 (1)	0	0	0	0	0	2 (2)
Rumex sp.	sorrel, dock	Da G M S W	4 (52)	0	2 (9)	0	1 (3)	1 (3)	0	5 (5)
Rumex acetosella agg.	sheep's sorrel	Da G	2 (21)	4 (5)	0	0	0	0	0	7 (21)

Table 5.9: Phases 3 and 3/4 charred plant taxon presence (continued)

		Phases	*3*	*3A*	*3B*	*3A/B*	*3B/C*	*3C/D*	*3D*	*3/4*
		No. of samples	*17*	*11*	*3*	*6*	*5*	*5*	*3*	*15*
Urtica dioica L.	stinging nettle	D, V	2 (2)	0	0	0	0	0	0	0
Euphrasia sp./*Odontites verna*	eyebright, red bartsia	Da G	3 (33)	1 (1)	2 (9)	0	1 (1)	1 (1)		5 (19)
Rhinanthus sp.	yellow rattle	G	0	0	0	0	0	0	0	1 (1)
cf. *Satureja hortensis*	savory	C	1 (1)	0	0	0	0	0	0	0
Prunella vulgaris L.	self heal	G	0	0	0	0	0	1 (1)	0	3 (10)
Plantago sp.	plantain	Da G	1 (1)	0	0	0	0	0	0	0
Plantago major L.	great plantain	Da G	2 (2)	1 (2)	0	0	0	0	0	1 (1)
Plantago media L.	hoary plantain	G	1 (2)	0	1 (1)	0	1 (3)	0	0	1 (1)
Plantago lanceolata L.	ribwort plantain	Da G	2 (4)	2 (2)	0	0	1 (2)	0	0	2 (23)
Sherardia arvensis L.	field madder	D Da	1 (1)	1 (1)	1 (1)	2 (2)	0	0	0	3 (3)
Galium sp.	bedstraw	Da M G S W	5 (6)	1 (1)	1 (1)	0	0	0	0	1 (1)
Galium cf. *aparine* L.	cleavers	Da V	3 (3)	2 (3)	0	0	1 (1)	0	0	2 (4)
Valerianella dentata (L.) Poll.	lamb's lettuce	Da	1 (1)	0	0	0	0	0		1 (1)
Compositae	daisy family		0	0	1 (2)	0	0	0	0	0
Cirsium cf. *arvense* (L.) Scop.	creeping thistle	D Da	1 (1)	0	0	0	0	0	0	0
Cirsium/Carduus sp.	thistle	V	1 (3)	0	0	0	0	0	0	0
Anthemis cotula L.	stinking chamomile	Da esp base rich	1 (121)	0	0	0	0	0	0	2 (22)
Lapsana communis L.	nipplewort	Da	0	1 (1)	0	0	0	0		0
Tripleurospermum maritimum (L.) Koch	scentless mayweed	Da	0	0	1 (1)	0	1 (1)	0	0	1 (1)
Artemisia sp.	mugwort	D Da	1 (1)	0	0	0	1 (1)	0	0	0
Chrysanthemum leucanthemum L.	ox-eye daisy	D, Da G	0	0	0	0	0	0	0	1 (2)
Cyperaceae	sedge family	A M G	2 (5)	1 (1)	0	0	0	0	0	5 (15)
Eleocharis sp.	spike rush	A M G	1 (2)	0	0	0	0	0	0	0
Eleocharis palustris/uniglumis	spike-rush	A M G	3 (9)	3 (3)	1 (1)	0	0	0	0	4 (17)
Eleocharis quinqueflora (F.X.Hartm) Schwartz	few-flowered spike-rush	A M G	0	0	0	0	0	0	0	1 (1)
Carex sp.	sedge	V (mainly wet)	1 (2)	2 (2)	1 (1)	0	1 (2)	1 (1)	0	4 (6)
Carex spp.	sedges	V (mainly wet)	3 (18)	1 (1)	0	0	0	0	0	2 (36)
Gramineae	grass family		7 (38)	6 (21)	1 (1)	1 (1)	1 (7)	1 (2)	0	6 (15)
Gramineae culm node	grass family		1 (1)	0	1 (1)	0	0	0	0	3 (19)
Arrhenatherum bulbosum bulbil	onion couch	D Da G	1 (1)	0	0	0	0	0		0
Poa sp.	poa	G	0	0	1 (1)	0	0	0		0
Bromus S. *Eubromus*	brome, chess	Da G	3 (3)	0	1 (1)	0	1 (7)	0		1 (2)
Avena fatua/ludoviciana	oats	floret bases	1 (1)	0	0	0	0	0	0	0

The only oat floret base from the site came from a Phase 3 context and is identifiable to a *fatua* or *ludoviciana* wild form. It is likely that the oats are simply a minor weed component which, like the large-seeded *Bromus* (brome), are difficult to separate from the grain during winnowing and sieving in post-harvest crop processing. This means they often become accidentally charred with the prime product. It has been pointed out that the large seeded grasses may well have been intentionally used as a famine food, but Jones (1988, 90) notes that sometime after the Iron Age, wild grasses become much less numerous in charred macrofossil assemblages.

The range of arable weeds is most diverse in Phase 3, and certain taxa appearing for the first time during this period have been associated with the transition from shallow ard cultivation to deep ploughing (Jones 1988). Stinking chamomile (*Anthemis cotula*), a cornfield weed typical of heavy soils, makes its first appearance in Phase 3 and another introduction, corn cockle (*Agrostemma githago*) is first seen in Phase 3d/4a. More widely in Britain, these two species together with *Centaurea cyanus/nigra*, become visible in the late Roman period at a time when metal items associated with heavier ploughs appear in the archaeological record (Jones 1988).

A single seed of ground elder (*Aegopodium podograria*) was found in pit 1398 in Phase 3. Although now regarded as a pernicious garden weed, this species is long thought to have been a Roman introduction and can be used as a pot herb (Clapham *et al.* 1987, 283; Godwin, 1975, 225). The Claydon Pike example appears to be the sole archaeological record for the period.

Clovers (*Trifolium* spp.), black medick (*Medicago* cf. *lupulina*), buttercups (*Ranunculus acris/repens or bulbosus*) and yellow rattle (*Rhinanthus* sp.) increase from Phase 3 onwards. All of these taxa (and others) are recorded by Mark Robinson in the waterlogged assemblages (see below). From his waterlogged data, he infers that grassland was managed and included the production of sedge hay. The plants of damp soils such as the sedges may have formed part of a burnt grassland assemblage, although the wide range of taxa that survives in the waterlogged assemblages is not reflected by the charred plant remains. However, the percentage presence analysis does show a wider range of weed species in Phase 3 than in earlier and later phases. The integration of the different strands of evidence in the waterlogged assemblages led Robinson (see below) to the conclusion that large quantities of arable products must have been brought to the site, as they did not appear to have been grown locally. Certainly the evidence for the use of arable crops is much better in Phase 3 than in the preceding periods or the 4th-century villa complex. As large areas were excavated, the increase in evidence for Phase 3 should be a reasonable reflection of the activities taking place rather than being biased through sampling of features closer to the main areas of activity in one phase compared with another.

The charred plant remains were recovered from features all across the site during Phase 3. Oven 2103 in Trench 13 was very rich in chaff, notably emmer and spelt glume bases and spikelet forks which comprised over 80% of the large assemblage. These are the remnants of the oven fuel which was probably also disposed of in ditches, pits etc. Many of the other features from Phase 3 were also chaff-rich and some could have originated from oven cleanings, rather than the direct burning of crop cleanings. However, as well as chaff, the oven assemblage also contained small weed seeds including over 100 seeds of stinking chamomile (*Anthemis cotula*) and occasional ribwort plantain (*Plantago lanceolata*) and sedges (*Carex* spp.). This is most likely to represent processing waste from a late stage in cleaning to free the grain from the spikelets and remove weed seeds. The damp ground plants could be from damp field margins or burnt animal fodder, but also from the heart of the arable fields, which often suffered from poor drainage in the Iron Age and Roman periods (Jones 1988).

Another large assemblage from pit 1398 was composed mainly of wheat grain, probably spelt, as suggested by the chaff, with some indeterminate wheat and barley grain and chaff. Among the accompanying list of taxa is a wide range of wild plants, and a relatively high number of clover seeds, perhaps indicative of animal fodder or hay as a source.

Charred plant remains from Phase 3/4

Fifteen samples came from contexts that were either late Phase 3 or early Phase 4 (*c* early 4th century AD; Table 5.9). Macrofossil concentrations vary, ranging from 0.6 for ditch 1201 to 50.3 items per litre for pit 2385. Composition is also variable with over 80% chaff in ditches 667 and pit 1250, 55% in a section of ditch 1201 and over 70% weeds in pit 1219 which suggests that a range of different crop processing activities was probably taking place and/or that crop processing waste is mixed with burnt plant debris from other sources, such as animal fodder and roofing or flooring material. A greater percentage presence of chaff was evident than for other phases, but unusually, these samples are from ditches and pits rather than hearths or ovens where chaff is often found having been used as tinder.

The fill of pit 2385 (Trench 19) was rich in plant macrofossils. Wheat and barley grain was mixed with hulled wheat (mainly spelt where identification was possible) glume bases and spikelet forks, but there were also small numbers of a range of weeds of arable land and grassland such as corn cockle, knotgrass, black bindweed, stinking chamomile and buttercups, clover and tormentil. There were also some sedges and spike-rushes characteristic of damp ground. This is a good example of a rubbish pit where waste from

processing crops to release grain for consumption was dumped probably after being burnt on a domestic hearth.

Waterlogged plant and invertebrate remains *by Mark Robinson*

Seven waterlogged samples were investigated from waterholes or wells assigned to the Phase 3 settlement in Longdoles Field site, and two further samples came from ditches beyond the main settlement. The waterholes, pits and wells all seem to have held water which supported low populations of small water-beetles such as *Helophorus* sp., *Ochthebius minimus* and *Hydraena testacea*. Three of these features seem from the seed evidence to have had aquatic plants growing in them. Waterhole 2160 (Trench 13) seems to have had *Callitriche* sp. growing in it. The aquatic flora of waterhole 2867 (Trench 29) included *Ranunculus* S. *Batrachium* sp., *Callitriche* sp. and *Veronica* S. *Beccabunga* sp., while *Lemna* sp. covered the surface of the water in waterhole 2906 (Trench 29). Remains of the weevil *Tanysphyrus lemnae*, which only feeds on *Lemna* spp., confirms the presence of that plant in waterhole 2906 and adds it to the species from waterhole 2160.

The interpretation of the waterlogged plant and invertebrate remains from the Phase 3 waterholes, pits and wells is a more complex problem than for the Phase 2 deposits. Human transport had probably been a factor in the introduction of waterlogged biological remains in all these features. Three of the samples, Samples 766/2, 1202/15 and 1318/C/3, had a major component of hay and, in the case of Sample 766/2, straw as well. With this imported plant material probably came some of the insects. Interpretation is also difficult because the area of the settlement was so large that some of the remains, particularly the seeds, which tend to have a small radius of origin when they have not experienced human transport, are giving little information on environmental conditions beyond the limits of the settlement. It was possible to see the environment of the 1st-century AD enclosures as a part of the more general landscape without these problems.

The two ditch samples from west of the main settlement (1487, 2495) contained a rather higher proportion of remains from plants and invertebrates which lived in them than did the waterlogged deposits inside the settlement. All the plant and invertebrate remains seem to have entered these deposits through natural agencies.

Overall, it is difficult to arrive at a conclusion as to the main purpose of the Phase 3 settlement at Claydon Pike. One of the major activities at the site would seem to have been the management of hay meadows on the floodplain and gravel terrace and the collection of the hay at the settlement. There is possible evidence for Roman hay meadows elsewhere in the Upper Thames Valley but not as firm as that from Claydon Pike. The insect evidence from Appleford, Oxon (Robinson 1980), hinted at the presence of meadowland although this was not supported by the botanical evidence. It is now realised that Sample 1060/2 from an early Roman well at Farmoor, Oxon (Robinson 1979) included a hay meadow assemblage. It contained seeds of *Rhinanthus* sp., *Leucanthemum vulgare* and *Centaurea* cf. *nigra* and *Vicia* or *Lathyrus* pod fragments. There was a large beetle assemblage as summarised below:

Species Group 2	Pasture / Dung	1.5%
Species Group 3	?Meadowland	14.2%
Species Group 8	Lathridiidae	30.3%
Total number of Terrestrial Coleoptera		393

The high value for Species Group 3 and the low value for Species Group 2 might suggest that meadowland surrounded the well at Farmoor. However, the very high value for Species Group 8 suggests that it was old hay that entered the deposit and it is possible that the meadowland weevils of Species Group 3 had been transported to the site in hay. Claydon Pike thus provides the first good evidence for the presence of meadowland on the floodplain and first terrace of the Upper Thames during the Roman period.

The entomological evidence is consistent with the storage of some hay at the site. However, those groups of insects which might be expected to flourish in old haystack bottoms etc., such as the Lathridiidae, although very much more abundant than during Phase 2 at Claydon Pike were not as abundant as at the Roman sites of Farmoor and Barton Court Farm on the Thames gravels (Robinson 1981, 280-81).

Neither the archaeological nor entomological evidence suggests large scale storage of grain at the site. However, cereals were certainly brought to the site, and the carbonised plant remains provide plenty of evidence for activities concerning cereals. It is possible that threshing waste was mixed with the hay for fodder and it is even possible that it was brought to the site for this purpose.

While it is by no means certain that the management of hay meadow and the collection of fodder was the main activity at the site, there is little environmental evidence for much else. There does not seem to have been a great concentration of domestic animals at the settlement, although the evidence from the dung beetles suggests that they were by no means absent. There was evidence that some of the hay had been cut from what was normally pastureland and the aftermath of the hay meadows was probably grazed. If hay meadows are not grazed following mowing, various tall coarse umbellifers such as *Heracleum sphondylium* become established and they were not evident either from the samples containing cut hay or the sample from the field ditch in the hay meadow. Either sheep or wool had been brought to the site because a puparium of *Melophagus ovinus*, the sheep ked, was found in Sample 1202/15. This wingless fly is a

bloodsucking ectoparasite of sheep which does not survive for more than a few days if removed from its host (Edwards *et al.* 1939, 123-4). However, there was no evidence for any large-scale activity involving sheep.

The 'intensity' of human occupation of the site as reflected by the beetle assemblages was greater than in Phase 2 and there was evidence for timber buildings. There was no evidence for flooding of the main excavation area during Phase 3. Indeed the settlement would have been well situated as a dry place for a rick-yard to which hay was brought from the floodplain. In botanical terms the site appears fully 'Romanised'. The familiar range of horticultural crops was present, perhaps grown on the site, and box hedges seem to have been present. The weed seeds included some species regarded as Roman introductions.

There was little evidence from the waterlogged remains that the main excavation areas were put to different uses during Phase 3, although deposits of hay were only found from Trenches 13 and 17.

DISCUSSION *by Alex Smith*

The early 2nd century AD saw quite dramatic changes in the form, economy and material culture of the settlement at Claydon Pike. Such transition is however certainly not an isolated phenomenon, as landscape reorganisation seems to have been widespread across much of the Upper Thames Valley at this time (discussed in Chapter 16). The changes at Claydon Pike provide quite a clear stratigraphic break with the earlier settlement, although some elements of continuity do exist, and there appears to be little or no chronological gap between the two phases. The development of the site within Phase 3 is slightly less clear, especially outside Trench 13, and although a general structural sequence can be discerned, this cannot readily be related to shifts in the site economy. Nevertheless, the overall economy, environment and material culture of this phase is clearly definable, which not only helps to place the site within the regional settlement hierarchy, but also provides illumination on matters such as social expression and identity.

Settlement organisation and development

In the early 2nd century AD the circular enclosures and boundaries of Phase 2 were replaced by two major rectilinear enclosures, the northern of which encompassed two substantial aisled buildings. An artist's reconstruction of this aisled building complex is shown in Plate 5.15, with B 1 and well 766 to the right and the main gateway (B 4). At this stage, occupation appears to have remained more or less limited to Trench 13 in the east, which was generally better drained and more suitable for habitation. The only major contemporary feature outside this area was an irregular enclosure in Trench 29, which may well have had an agricultural capacity (see Activity areas below). The new settlement shows evidence for careful organisation, and it is likely that the enclosures, structures, and major trackways were built at the same time, as part of a co-ordinated plan of re-development. The only real signs of structural continuity from the previous phase lay in the line of the western enclosure boundary and the position of the main area of domestic occupation. The former may have been more influenced by topographical considerations as it lay at the junction of the higher gravel island and the lower lying area between the main excavation trenches.

The outer gateway complex

The main entrance into the complex lay between the two large enclosures on the western side, and this

Plate 5.15 Reconstruction of aisled building complex

led into a trackway flanked by ditches, the northern of which had an opening into the compound containing the aisled buildings. The eastern end of the trackway was left open during this early phase, and may have acted as a subsidiary access point (see below). Although not a monumental structure, the western outer gateway – with its masonry walls and timber uprights – was clearly designed with some visual impact in mind (see Pl. 5.15). The structure itself probably comprised a 3 m long entranceway flanked by low masonry walls, at the end of which were two timber gates which swung either side of a central post. The width of both gates would have been 1.2 m, which is significantly smaller than most other known gateways of the period, such as at the Roman town at Alchester (1.7 m; Booth *et al.* 2001, 437), the inner courtyard at Gadebridge Park villa (*c* 3.65 m; Neal 1974, 55), and the late Iron Age or early Roman Enclosure at Weekley, Northants (*c* 2 m; Jackson and Dix 1988, 54). Unlike these other sites, the Claydon Pike gateway would have effectively blocked the use of large wheeled transport into the main complex from this direction. This has significant implications with regard to the transport of materials, especially when the complex is believed to have been at least in part a central storage and distribution depot for hay from the surrounding fields (see Site economy below). A possible explanation is that wheeled transport may have accessed the enclosure complex from the east, and a substantial length of linear trackway can be seen as a cropmark running towards this entrance, probably linking it with another settlement, just 0.5 km to the east (SMR 3191). The western gateway may therefore have been limited to foot and possibly horse traffic. It is well known that different points of access within households and settlements were often associated with different levels of status (eg Fairclough 1992, 355), and it is therefore possible that the western gateway at Claydon Pike held a higher social value. This may account for its later refurbishment with three large posts across the front, which would have increased its visual impact while also further impeding physical access into the site from this direction.

The aisled buildings

The most visually dominant features within the Roman complex were the two aisled buildings, positioned at right angles to each other, *c* 30 m apart. Aisled buildings have been found across Roman Britain and have a range of different functions including storage and industrial activity (Hingley 1989, 39). Most of them, however, seem to have been residential in nature, especially when they first became quite widespread in the 2nd century AD (Morris 1979, 61). The aisled buildings at Claydon Pike, despite appearing quite similar in plan, would seem to have had very different physical appearances, relating to their different functions. Building 1 to the west was the slightly larger of the two (212 m^2), with mortared masonry lower wall courses probably supporting a timber frame (for a possible reconstruction see Pl. 5.15). There are few clear indications as to the nature of the superstructure, although mud and stud walls were quite widespread in the early 2nd century (Perring 2002, 92) and are certainly possible here. Fired clay fragments were recovered from many of the postholes and may have been part of the wall structure, while the reasonable number of iron nails suggests external wooden planking, perhaps to aid in weatherproofing. Although no window glass could be directly associated with the structure, fragments were recovered from Phase 3 contexts in Trench 13, and must indicate the presence of some glazed windows in the building. The roof of the building was clearly constructed of ceramic roofing tile, which would have firmly differentiated it from the other aisled building (see below). Perring (2002, 91) has recently illustrated how such changes in house building techniques are often accompanied by a greater level of expenditure on interior decoration. The presence of fine painted wall plaster associated with this structure certainly accords with this, although the extent of such decoration within the interior remains unknown. There are no physical indications of any internal divisions within the building and so it is possible that it remained a large open hall, although the lack of preserved floor surfaces would ensure that any partition walls may not have survived in the archaeological record. Indeed the painted wall plaster does suggest the presence of one or more small rooms, and there is some indication of internal differentiation in function and/or status from the finds distribution (see Activity areas below). Furthermore, it is distinctly possible that there could have been a mezzanine floor, perhaps used for storage purposes. In all, the evidence from its physical appearance, together with the associated finds assemblage (see below), suggests that this building was the home of the owners or at least the custodians of the complex.

The second aisled building (B 3) was slightly smaller (187 m^2) and did not share the more refined attributes of the other structure, such as painted plaster. Timber-framed walls probably lay above the lower masonry wall courses, and large numbers (50+) of iron nails probably relate to exterior planking. A small quantity of fired clay daub may also relate to the walls of the structure, while the roof was probably of thatch, although some roofing tile was found in the vicinity. Unlike B 1, there was a well defined and quite substantial 2 m wide entrance on the central part of the southern side, which would perhaps be more appropriate for an agricultural storage barn rather than a residential unit, as wheeled transport could easily be admitted (see Fig. 5.7 and Pl. 5.3). Furthermore there were only three widely spaced bays in the interior, as opposed to six narrow bays in B 1, and so would seem better suited to maximising storage space and loading/unloading material. Similar wide

entrances have been found in Roman buildings at Alchester (Booth *et al.* 2001, 437), and Wantage (Holbrook and Thomas 1996), both of which are interpreted as storage barns. There is some indication of a partition on part of the eastern side of the Claydon Pike building with a small section of possible wall foundation, but it is likely that most of the interior was fully open. The western side contained an area of hard standing and a Savernake storage jar inserted into the floor, which suggests some differentiation of function. The evidence overall suggests that this building was utilised for storage rather than domestic purposes, although it was still a very substantial structure, and may have expressed the status of the owners of the site (see below).

Expansion and development of the settlement

During the middle years of the 2nd century AD, the settlement expanded westwards onto three further gravel platforms, most of which had not been built upon before. Immediately adjacent to the southern enclosure (in Trench 19) and utilising its western boundary ditch, was a rectangular double ditched enclosure, with no evidence for any contemporary internal features (Fig. 5.13 and Pl. 5.9). It was clearly designed to be an integral part of the settlement complex, fronting onto a large open area in front of the main gateway into the inner compound. Whilst its function is far from certain, a religious explanation does seem most appropriate (see Activity areas below). To the west of this the earlier irregular enclosure in Trench 29 was replaced by a series of ditches which defined the east-west and north-south trackways (Fig. 5.14). These ditches were recut many times over the following *c* 150 years, and probably encompassed an area of low level industrial, agricultural and residential activity. The mid 2nd century saw activity commence in Trench 17 further north, with a variety of functional zones being evident, including domestic, agricultural and light industrial (Fig. 5.18; see below). All of these zones were spaced quite deliberately around the large open area in the heart of settlement, which seems to have been respected until the end of the 3rd century. This implies a strong element of deliberate spatial planning within the site that was maintained for a long period of time.

The expansion of the settlement at this time suggests a significant increase in the scale of operations at site, which must have necessitated an increased workforce, perhaps even including imported slaves. At the same time as this expansion, the spatial organisation of the main compound in Trench 13 was altered, possibly to further segregate and enhance the status of the estate owners or custodians. The internal trackway ditches were filled in, creating what would appear to be one large enclosure, although the trackway was clearly still functioning, and a number of posthole alignments and ditches suggest that the area was still physically demarcated into a number of different functional areas. In particular there was an arrangement of ditches, fencelines and a possible masonry wall around the western aisled building (B 1), which may have physically differentiated an area of higher status occupation from the rest of the compound. An apparent gap in the north-east sector of this boundary may be due to the truncation of ditch 781, while it is also possible that this area was demarcated by box hedges, for which evidence has been found (see Robinson above). The northern limits of this 'inner compound' seem to have been dictated by areas of lower lying marshy ground (Fig. 5.1). A possible gateway was located to the east, while to the west, there may well have been a masonry wall to provide greater privacy and definition from the area of lower status occupation and industrial activity in Trench 17 (Fig. 5.4). Environmental material from waterhole 2160 indicates the presence of ash trees in this area, and it is possible that a line of such trees may have ran along the boundary, thus further increasing privacy and ensuring that the division between the different parts of the settlement was more pronounced. Just inside of southern boundary ditch 2161 ran a fenceline (F 6), which may have acted in a similar way.

The only additional structure to belong to this mid 2nd-century phase of development was Building 2, which appears to have been an extension to the aisled building B 1 (Fig. 5.9). Although entirely robbed out, it is most likely that this two-roomed structure was built in a similar way to the aisled building, with lower masonry wall courses and a timber-framed superstructure. Its function may well be connected with food preparation for the residents of the aisled building (see Activity areas below).

It appears that there were no further major changes to the main compound until the later 3rd century, with the exception of the replacement of the eastern boundary ditch by a substantial fenceline. Another large rectilinear ditched enclosure was dug to the east of this, most of which is known only from aerial photographs (Fig. 5.1). In the western part of the settlement, it appears that pits were dug through the two enclosure ditches in Trench 19 at some stage, with the inner boundary being subsequently redefined. It is uncertain if this represents functional change in this area. A structure incorporating an oven was built within Trench 29 (Fig. 5.16, Pl. 5.10), and probably relates to the period when occupation was at its most intense in this area, from the later 2nd to mid 3rd century AD.

Perhaps the most significant change in terms of spatial layout outside the main compound occurred in the mid to later 3rd century, with the enclosure of much of the previously open space in the centre of the site. Two ditches followed the lines of the main trackway ditches in Trench 17, creating an enclosed space with a 2.5 m opening in the south-eastern corner (Fig. 5.18). This area was still largely devoid of archaeologically traceable activity, while in the

zones of domestic, agricultural and industrial activity further north and west, a stone-footed rectangular building was constructed, which was the first recognisable structure from this area.

Settlement decline?

Towards the end of the 3rd century and start of the 4th century AD, many features were either infilled or dismantled, which suggests that the settlement went into a period of decline. Perhaps the most significant development was the dismantling of the western aisled building, parts of which seem to have been used to infill the adjacent well 766. It was replaced by square Building 7 which lay upon the same alignment (Fig. 5.11). This structure was significantly smaller than its predecessor at 64 m^2, but was well constructed, with coursed and regularly faced masonry footings and seemingly with plastered walls. It is presumed to have served in a domestic capacity, although it may have later reverted to agricultural use, as its interior contained hearths and a possible corn-drying oven (Pl. 5.6). The western boundaries of the main compound appear to have fallen into disuse at this stage, with the ditches being filled in and walls robbed. The gateway also appears to have been dismantled. This may indicate that there was now little differentiation between the different parts of the settlement, and indeed the evidence suggests that activity had greatly declined in the western areas. In Trenches 19, 29 and 17, there is evidence for the dumping of structural and domestic material in pits, waterholes and ditches, suggesting that the site was systematically cleared (eg see Pl. 5.13). Large areas of cobbling may also have been laid down at this stage in the centre of the site, although this could well relate to the construction of the villa in Phase 4.

Overall, the situation at the end of the 3rd century suggests a decline in the residential population of the settlement, presumably relating to changes in site economy. The occupants may have now been limited to a single extended family group, although they did still have the resources to construct a well-built masonry-footed building. These were presumably also the same family group who one or two generations later would initiate the construction of a small villa and hypocaust building in the early 4th century AD.

Activity areas within the settlement (Fig. 5.35)

Through spatial analysis of structural features and the finds assemblages, it has been possible to quite clearly discern different 'activity areas' across the site, which relate to both function and status.

Fig. 5.35 Main functional zones within Phase 3 site

The main compound

Within the main eastern compound it has already been established from structural evidence alone that the western aisled building seems more likely to have been used for relatively high status domestic occupation, while the eastern building appears to have been used for storage (see above). The evidence from finds corroborates this and suggests that there may well have been a broad division between the two halves of this northern enclosure. The western building lay directly over the earlier Phase 2 domestic focus, thereby exhibiting evidence for continuity which may suggest that there was not a complete break in population. No floor surfaces survive from this building, with the only directly associated finds coming from the postholes, and therefore relating to the end of use of the building. Nevertheless, these are not likely to have moved far from the area of use, and there are a number of other features in the immediate vicinity which probably relate to the overall function of this building. Most finds from the building's postholes comprised structural material, but did also include two fragments of vessel glass and a small quantity of pottery including flagons, jars, cups, bowls, dishes and mortaria. The animal bone retrieved was of particular interest in that bird and pig bones formed the largest percentages of the identifiable species, whereas in most other areas of the site they were comparatively rare. Furthermore, most of these bones were concentrated in the northern half of the building (see Sykes, above), and to a lesser extend the same is true of the pottery. This may suggest that this was the primary zone for food consumption, although of course it could represent patterns of secondary discard and would therefore not be directly indicative of primary activity in this location. Immediately outside the building to the west was a large sunken clay-lined feature (2526) and sump, which relates to the earliest part of this phase. It was filled with pottery, animal bone, oyster shells and a small quantity of building material. The character of the pottery assemblage differed significantly from that of the building by including a lower percentage of vessels associated with serving (bowls, dishes, cups, flagons etc), and more that seem to have been connected with food preparation and storage, most notably jars. The assemblage also included mortaria and a reasonable quantity of amphora which probably contained olive oil (Dr 20) and fish sauce (Cam 186a). From this, it is not unreasonable to assume that food preparation took place outside the building. Interestingly the extension to B 1 (B 2) which lay over the clay-lined feature contained a ceramic assemblage of similar character, along with a glass flask and beaker and relatively large numbers of animal bones. It can therefore be argued that this structure may have been built to house the food preparation area.

The overall nature of the area around the western aisled building can be further understood by the abundant environmental material from waterhole 2160, which appears on a ceramic basis to date from the mid 2nd to early 3rd century AD. As mentioned earlier, there is evidence for ash trees and also for a variety of other trees and shrubs in the vicinity, including pear, damson, blackberry, rose and hazel. Celery and coriander were also clearly grown in this area, and it is possible it was some kind of small horticultural plot and garden area, directly associated with the occupants of the aisled building. A well just to the south-east of the building (766) also contained useful environmental samples, in addition to finds and structural material that seem to relate to the demolition of the structure. The waterlogged remains indicated a range of trees and shrubs in the vicinity, and also included substantial quantities of hay and cereals (see Site economy below). The animal bone assemblage was quite distinctive and suggestive of high status feasting (see Sykes, above).

The objects associated with the aisled building (B 3) in the eastern part of the compound indicated a distinct functional divergence from B 1 and the area surrounding it. Unlike B 1, the majority of the finds came from a floor make-up layer (522), but could relate to any period of the building's use, from the early 2nd to late 3rd century AD. With the exception of the single large Savernake storage jar, much smaller quantities of pottery were recovered than in B 1. Generally, only jar forms were encountered, but a small number of Dressel 20 fragments were also retrieved. Virtually no animal bones were recovered from the building, with the exception of a single sheep burial in the centre of the building, close to the southern entrance. Although this lay underneath the floor makeup and cannot be firmly related to this phase, it is possible that it was a foundation deposit. The finds give little clue as to the function of the building, but do include a small number of domestic and personal items, including the copper alloy vine leaf from an oil lamp (Fig. 5.28, no. 31). However, the lack of pottery and extreme paucity of animal bone, suggests that the building was not actually used for habitation. Instead, given the nature of the superstructure (see above), it is likely that it was used in a storage capacity, perhaps in part for hay from the surrounding fields.

The central and south-eastern parts of this northern enclosure were probably used in the main as general working areas, where wheeled transport could have loaded and unloaded material. There is some evidence that at least part of this area was metalled (687), and large amounts of debris was recovered from this surface, including over 75 kg of pottery and most of the vessel glass fragments from the phase. A significant quantity of debris was also recovered from the trackway ditches defining the enclosures, and most is likely to be redeposited material, part of the infill from the mid 2nd century AD. The identifiable animal bone assemblage from these ditches was dominated by cattle and then

sheep bones. Pottery forms were heavily dominated by jars (84%), with 20 amphora sherds and a reasonable number of vessel glass fragments also recovered. The finds included a number of personal and domestic items. The quantity of material from these ditches and the cobbled surface may be significant and could suggest that episodes of food and drink consumption took place in this area, or at least that the remains of such events were deliberately deposited here (see below).

Most of the southern enclosure was not investigated and it is difficult to gauge any specific function for this area. Fencelines divided at least part of the enclosure, but there appear to have been minimal ceramic and faunal remains, which suggest a non-domestic use. The area may have comprised a series of paddocks for livestock.

Lower status residential, agricultural and industrial zones

To the west of the aisled building compound, in Trench 17, was an area which appeared quite different, both in terms of the structural remains (see above) and the finds assemblage (Fig. 5.35). Aside from fragments of fired clay daub, there are no indications of buildings in this area until the mid to late 3rd century, although the quantity of pottery and animal remains suggests reasonably intensive occupation. However, the nature of these assemblages is quite distinct, with, for example, samian ware and amphorae accounting for a much lower percentage of the Trench 17 assemblage than in Trench 13. Of the recorded pottery there is also a notable scarcity of mortaria within the Trench 17 group, although the general pottery forms are quite similar to those in Trench 13. The proportions of fine wares are also quite similar, although virtually all of these are Oxford colour-coated ware relating to the later period, probably contemporary with the stone-founded building. This may indicate a rise in the status of this area during the later 3rd to early 4th century. In general the pottery from Trench 17 suggests predominantly low status occupation, with less in the way of Roman style eating habits than practised by the residents of the aisled building in Trench 13. The general animal bone assemblage from Trench 17 was differentiated by a lack of species diversity compared with Trench 13, along with the presence of sheep and dog burials.

It is clear from the overall finds distribution that industrial activity was concentrated in the north of Trench 17, with 70% of all smithing slag from the site in Phase 3 coming from this area (Fig. 5.27). Together with the preponderance of carpentry tools, whetstones and agricultural implements, it implies this was very much the main service area for the whole site.

It therefore appears that Trench 17 contained both industrial and low status residential areas, probably for the workers at the site. There are also indications that animals were kept in this area, with a series of enclosures, waterholes and stack rings along the western boundary. Within one of these waterholes (1318) were found the waterlogged remains of significant quantities of hay thought to have come from west of the settlement (see below), along with box leaves which probably came from nearby hedges. The beetle assemblage suggests that the well also contained faunal compost, probably derived from animals within the surrounding stock enclosures. In general it appears that this area was far clearer of trees and tall shrubs than the western boundary of Trench 13. Further environmental samples from a possible waterhole in the southern part of the trench (1202) also contained high quantities of hay, but unlike 1318, it also included cereal remains, suggesting that this area may have been used for domestic occupation and/or crop processing. A parasite from this feature suggests that sheep were the most likely animals to have been kept in this area, which is corroborated by the three sheep burials.

Further to the south in Trench 29, the finds evidence indicates much less intensive occupation, with approximately one third of the quantity of animal bone and pottery recovered in Trench 17. The pottery assemblage contains the lowest proportion of fine wares on site, suggesting quite low status activity, although it did have the highest percentage of amphora sherds. The finds assemblage contained a small group of personal and domestic items, along with tools and an unusually large proportion of quernstone fragments. A reasonable quantity of smithing slag was also recovered, along with fired clay, which may have come from ovens and/or domestic structures. The environmental evidence from the three waterholes in this area indicated quite disturbed ground with evidence for some animal grazing, but there was no evidence of the hay or cereal remains seen in Trenches 17 and 13. In all, the evidence suggests that this part of the site was probably a working yard similar in nature to parts of Trench 17 further north, although of a much reduced intensity.

Religious focus

At the time of the excavations, the double enclosure in Trench 19 was interpreted as a religious *temenos* associated with the 'official' reorganisation of the site, primarily on the basis of its form and location at the heart of the settlement (Fig. 5.35). Whilst this religious interpretation is far from certain, the spatial arrangement is reminiscent of known sacred sites (eg Folly Lane, St Albans: Niblett 1999), and its position overlooking a central 'public' space is also paralleled by many religious structures, such as the temple dedicated to Peace, Victory and Mars at Silchester (Boon 1974, 113). The lack of any apparent temple building is not problematic, as the most important components of a sanctuary were the boundary (*temenos*) defining the sacred area (*area sacra*), and the altar where rituals were performed (Smith 2001, 24). Altars have only been found on a

very limited number of sanctuaries in Britain, presumably due to their removal and/or destruction (Smith 2001, 153). Additionally, such structures would rarely have needed any foundations, especially when lying upon hard packed gravel as in Trench 19. It is therefore possible that the small column parts and dressed limestone fragments found in the vicinity could have belonged to such an altar or small shrine structure.

The finds from Trench 19 do not readily suggest a religious function, with the possible exception of the fragment of a tazza vessel, commonly used for burning incense and found in a number of temple sites such as at Verulamium (Wheeler and Wheeler 1936, 114). The high proportion of fine ware vessels from Trench 19 is also paralleled at other Roman religious sites, such as at Higham Ferrers, Northants, where the shrine was also formed by an enclosure with no obvious internal temple structure (OA in prep c). A reasonable quantity of vessel glass fragments from the cobbling layer within the enclosure may also have been connected with the ritual use of the area. The remaining finds mainly comprised a small number of personal and household items, but there is little to suggest occupation in this area.

In all, it does seem that there is enough evidence to suggest the likelihood of a religious focus in this central part of the settlement, although the nature of any cult practised there remains unknown.

Economy and material culture

The character of the environmental and finds assemblages from Phase 3 is quite distinct and shows a clear shift in the economy and social structure of the settlement. It appears that at least part of the economic basis of the site became the management of hay meadows on the surrounding floodplain and gravel terraces, probably within large field systems whose ditches appear to have provided effective drainage. A system of trackways led from these fields to the heart of the main settlement complex (Fig. 5.1), and wheeled vehicles must have transported the hay to this central zone, probably to be stored within parts of Trench 17 and the aisled barn in Trench 13. Haymaking in Britain appears only to have begun in the Roman period, and evidence for this activity has been found on a small number of other contemporary sites in the Upper Thames Valley such as Farmoor (Lambrick and Robinson 1988) and Thornhill Farm (Jennings *et al.* 2004). Its introduction was probably driven by the increased demand for winter animal fodder within the larger population centres such as Cirencester, although many of the records of hay from the early Roman period do come from military contexts (Greig 1988). Yet even if hay from Claydon Pike was destined for some official or military use, there is still no indication that such organisations had direct control of the settlement complex (see below and Chapter 16).

Haymaking is a highly labour-intensive form of land use, which might account for the apparent increase in population at the site, possibly even involving the use of slaves. Yet, the main labour-intensive period in this process is also quite short-term, which suggests that other economic activities must have been in operation during the remaining parts of the year in order to keep the workforce occupied (see below). It is also possible that at peak labour times, hired help was gained from the inhabitants of nearby settlements.

Providing food for the residents seems to have involved the importation of cereal crops such as spelt wheat and barley, which are believed not to have been grown in the immediate vicinity. However, if the two outlying corn-driers belong to this phase, rather than to Phase 4, then they may suggest arable activity at some location on the estate, at least during the latter part of the phase. Processing of these crops was carried out on site, as evidenced by the reasonable assemblage of quernstones. Other imported crops include rare examples of beans and flax, the latter possibly used both for textiles and as animal feed. The single carbonised example of flax came from the 'corn-drier' in B 7, possibly for drying after retting (Morris 1979, 8). Horticultural crops were certainly grown on site, with the presence of celery, dill, coriander and cherry amongst others. The recovery of celery seeds from Mount Farm, Dorchester-on-Thames, suggested the possibility of market gardening for the Roman town (Robinson 1992a, 58; see Chapter 16), although the quantities from Claydon Pike are quite small and any if any commercial enterprise did exist, it is likely to have been very limited.

Unlike the later Iron Age and early Roman settlement, there does not appear to have been any great concentration of animals in the heart of the settlement, although they were certainly present, and would have been important for use in the cycle of haymaking (see Robinson above). The patterns of animal husbandry saw marked changes, with substantial increases in the ages of sheep and especially cattle indicating that they were being used for secondary products such as wool and manure. The probable concentration of sheep in parts of Trench 17 is particularly important in this respect, as sheep manure is known to be very good at improving the fertility of the river gravel soils. Cattle were probably sent 'on the hoof' to market centres such as Cirencester, and may have been part of the developing rural-urban commercial relationship. There is also evidence for pre-butchered joints of meat being imported back into the site. The movement of such animals away from the settlement would result in a very unbalanced faunal assemblage on site, and it is therefore possible that animal husbandry was of far greater economic importance than can be demonstrated. It certainly would have integrated well with the hay making, by ensuring that the animals had a ready supply of winter fodder.

Social structure and identity

As already mentioned in Chapter 4, there are great difficulties in attempting to discern past social structure from the archaeological record. However certain aspects of the spatial and structural organisation of the site, together with material culture relating to consumption and identity, can be used to provide some indication of social relations both on an inter- and intra-site level.

The Phase 3 Roman complex reveals what appear to be clear social distinctions between different parts of the site. The major division is between the eastern compound with its prominent aisled buildings and rich finds assemblages and the western zones with less elaborate dwellings and comparative paucity of what may be termed 'high-status' artefacts. Such social differentiation has been found at a number of other rural settlements such as at one of the compounds at Catsgore in Somerset (Hingley 1989, 80), and presumably represents a physical distinction between the agricultural estate owners or bailiffs and the workers. At Claydon Pike, this distinction seems to have been made more pronounced by a large open area of 'neutral' space between the two zones, which was seemingly kept clear for most of the life of the complex (shown as white on Fig. 5.35). Furthermore, the eastern boundary of the open space was given prominence by the use of ditches, walls and trees, and had a slightly elaborate gateway forming the entry point between the two areas. As mentioned above, it is unlikely that this gateway would have been able to admit wheeled traffic, and so it may have been associated with certain social regulations. It is possible that the people of greatest status and influence on the site consciously transformed the spatial order into mnemonic devices that reinforced their superior position and reasserted a pattern of power relations. Perhaps significantly, at the period when the main aisled building was demolished and the first masonry footed building in Trench 17 was constructed, the physical boundaries and the central cleared space between the eastern and western zones ceased to exit. This may imply that there was no longer any great social divide between the two areas at this time.

It is not only in the boundaries and access points that the social order could be reinforced, but also in the buildings themselves. Perring (2002, 80) has recently pointed out that 'houses provide a more sensitive measure of settlement dynamics than most other forms of archaeological evidence', and so the construction of the aisled house and barn in Trench 13 may be seen as an important indication of social transformation. Both aisled buildings would have been quite imposing structures (see possible reconstruction, Pl. 5.15), and even though B 3 was clearly used for storage, it must have impressed a degree of wealth upon those viewing it. It has been observed that an exaggerated emphasis on the architecture of storage may have been a facet of estates where owners were less regularly resident and therefore less able to define and reinforce their social position through social activity alone (Perring 2002, 55). Whether the owners of the complex at Claydon Pike were often absent remains unknown, although it does seem likely that they did utilise acts of conspicuous consumption in order to maintain and/or further their position within society (see below).

The aisled house itself appears to have been of the simple undeveloped type, probably with just one single room (see above), suggesting that it was the residence of a single extended family group (Hingley 1989, 41). However, examinations of artefact distributions within an aisled house at Wanborough have indicated the likelihood of many complex social rules which were applied within the interior space, including areas reserved for predominantly male and female activities (Hingley 1989, 43). Whilst it is very difficult to define such gender segregation in the archaeological record, some spatial patterns relating to food consumption have been observed within the Claydon Pike building (see above), and may be associated with specific social rules. It is unfortunately impossible to determine whether such rules may relate to any pre-existing social order from the Phase 2 settlement.

In addition to the physical organisation of the site, patterns of food and drink consumption may also highlight aspects of social organisation within the settlement. The finds have suggested changes in butchery practices and new ways of preparing drinks (Cool, this vol), while in terms of the ceramic assemblage there is a drop in the occurrence of jar forms, and an increase in vessels associated with drinking (tankards, cups, beakers) and serving (bowls, platters). Although still slight, there are also increases in amphora and mortaria. As highlighted above, most of the changes concerned with Roman style eating habits occurred in the aisled building compound, and there are particular concentrations around the main domestic building, the central cobbled surface area and the east-west trackway ditches (see above). Meadows (2001, 259) has suggested that such concentration of artefacts may represent public acts of food and especially drink consumption linked with establishing relationships with the outside community. Certainly the systems of power within Roman Britain would have relied upon networks of patronage, and so public displays of consumption amongst a setting of visually dominant architecture would have served to reinforce this social order (Perring 2002, 215).

Further indication of a change in consumption practices that may be linked with social transformation is suggested by the increased presence of wild game and domestic fowl. This provides clear evidence for hunting and fishing, which together with the increased culinary preference for domestic fowl, has been viewed as indicative of a 'Romanised' lifestyle (King 1991). The presence of oyster shells is also suggestive of Roman style eating habits, while also indicating the presence of longer distance trade networks. It is undoubtedly

not a coincidence that the greatest concentration of all these remains lies within the immediate vicinity of the western aisled building in Trench 13, which is assumed to have been the residence of the site owners or custodians.

The range of finds from the Phase 3 settlement has been argued to suggest significant lifestyle changes for the inhabitants there (see Cool, above). Such changes include the adoption of different hairstyles and the wearing of Roman style footwear, while hints of a more luxurious lifestyle are suggested by items such as the ivory die and copper alloy lamp. However, most of the items of personal dress, such as the brooches and hairpins are still local British forms, and do not necessarily suggest that a 'foreign' population had moved into the site. Indeed, the notion that the whole emphasis of settlement change at Claydon Pike was linked to external military occupation (Miles and Palmer 1983, 387-8) cannot be readily justified by the finds assemblage, with the only military equipment belonging to the later Antonine/Severan period (see site discussion, Chapter 8 and wider discussion, Chapter 16).

Chapter 6
The Late Roman Villa Complex (Phase 4)

by David Miles, Simon Palmer, Alex Smith and Grace Perpetua Jones

INTRODUCTION

At some point during the early 4th century, a modest masonry-footed villa and associated building were constructed, which seemed to form the centre of a small estate probably operating a mixed agricultural economy (Fig. 6.1). It appears that the primary domestic focus at this time was confined to the area of Trench 13, although a small cemetery was sited *c* 100 m to the west (Trench 30) and a circular shrine *c* 70 m to the east (Trench 27). It is likely that the main trackways into the site continued in use, and at least part of the field system to the north in Warrens Field seems to belong to the late Roman period (see Chapter 5). The main villa building was later enclosed by two successive ditched enclosures, and the small finds indicated a greater emphasis on security during this phase.

Four structural sub-phases were identified, based mainly upon changes to the villa building, although the chronological horizons of each sub-phase are quite broad (Figs 6.2-6.3). There is no definite Phase 4 activity within Trenches 17 and 29, but the pottery suggests some activity of a very limited nature. The features in these trenches were probably part of an agricultural field system surrounding the late Roman villa, although it is possible some limited industrial activity continued in Trench 17. The western cemetery, although presumed to be late Roman, could not be assigned to any specific sub-phase.

THE ARCHAEOLOGICAL SEQUENCE

The following is a summary account of the archaeological sequence of Phase 4 (Figs 6.2 and 6.3). Full stratigraphic descriptions can be found in Digital section 2.3.

Trench 13 – The late Roman villa (Fig. 6.4)

Phase 4a (early 4th century AD) (Fig. 6.2)

During the early 4th century AD, Building 7 appears to have been at least partially demolished and replaced by a masonry-footed building (B 8), which may well be described as a modest 'cottage style' villa (see Discussion below). A further building to the south (B 9) comprised two rooms, the smaller of which contained a hypocaust. Dating evidence suggests that these two structures were contemporary, and formed part of a small residential complex. It is possible that Aisled Building 3 was still standing at this time, although its condition and function is uncertain.

Building 8: The late Roman 'cottage villa' (Fig. 6.5, Pl. 6.1)

The successor to Building 7 was rectangular with stone foundations, originally measuring 13.5 x 9 m in Phase 4a. It was aligned NNE-SSW, and the entrance is likely to have been situated in the middle of the eastern side, leading into Room 5/6, which was partitioned in a later phase. This entrance room/corridor was flanked by two larger rooms (4 and 7; both *c* 5 x 4.5 m) and led towards a range of three smaller rooms at the rear (1, 2 and 3). The structure partially overlay Building 7, seeming to utilise some of the existing walls in its structure, but extended further north. Footings, where they were best preserved, ranged from between 0.6 to 0.7 m wide and were of a mortared random rubble construction made up of small (0.1 m) pieces of limestone. They were of variable depth, deepest on the west side (719/1556) where they ran along the top of Phase 2 ditch 2502. The north and south sides had the shallowest footings, the former just resting on the gravel surface, and the latter largely untraceable, except for a fragment on the south-west corner (1591).

Extant walling survived only on the western side, apart from a surviving fragment of wall 2107 reused from Building 7. The wall was of coursed and faced limestone blocks with a more random mixed rubble infill. The stone was mortared. All the walls had been robbed down to the old ground surface, but some lengths had been completely removed, including the foundations, notably a large section of one of the internal walls between Rooms 4 and 5/6. The foundations of the eastern wall (880) survived along much of its length.

Post-demolition activity on site (from the late 4th/5th century to well into the medieval period) had further taken its toll on the surviving structure (see Chapter 7). A series of pits in the northern rooms (1 and 7) removed nearly all contemporary and earlier levels. A fragment of wall of a later structure (undated) caused disturbance on the southern side and particularly at the south-eastern corner. A series of burials cut the eastern wall and caused destruction in Room 8.

Surviving demolition debris over and around the building gave indications of its character and

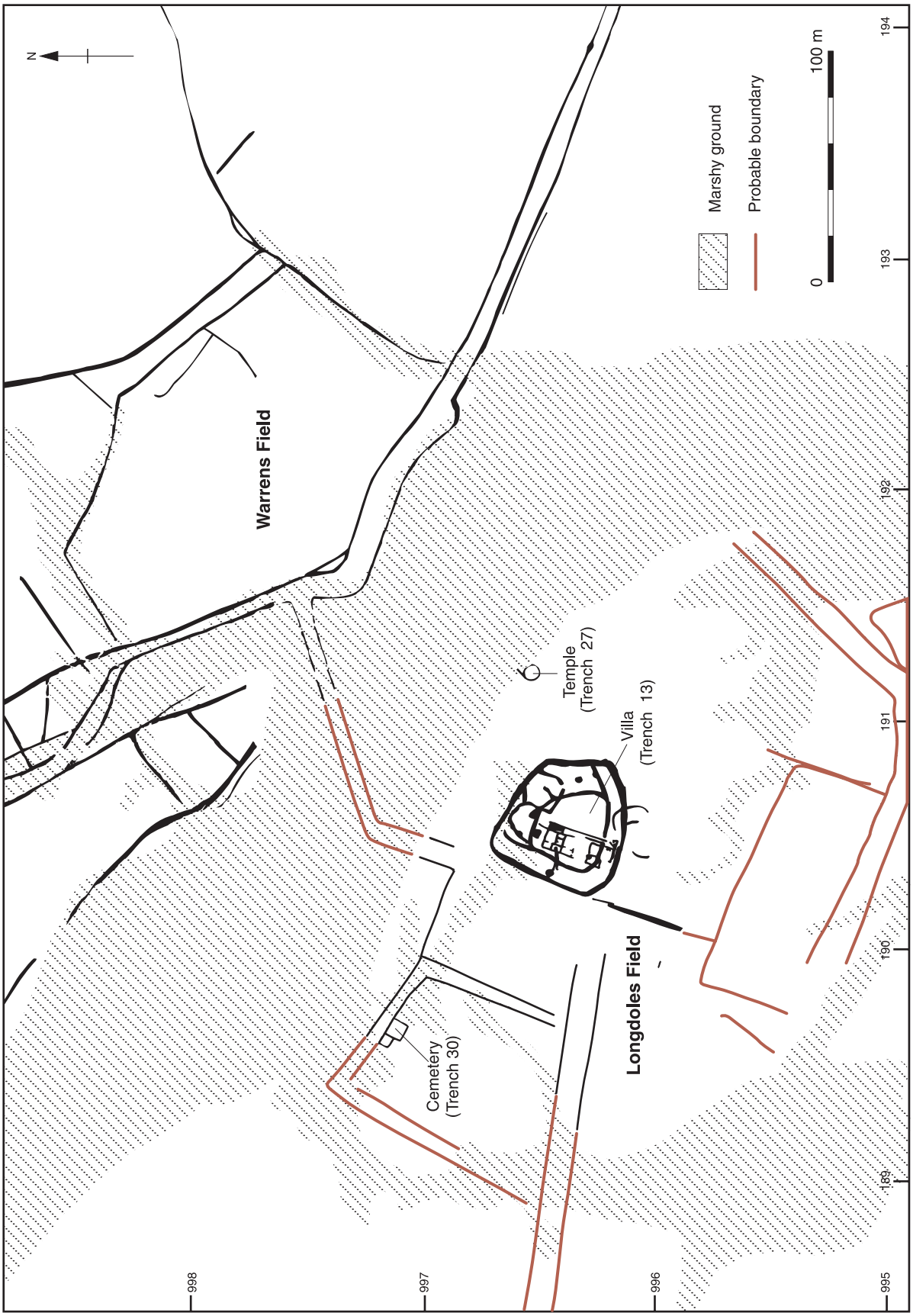


Fig. 6.1 The late Roman villa complex

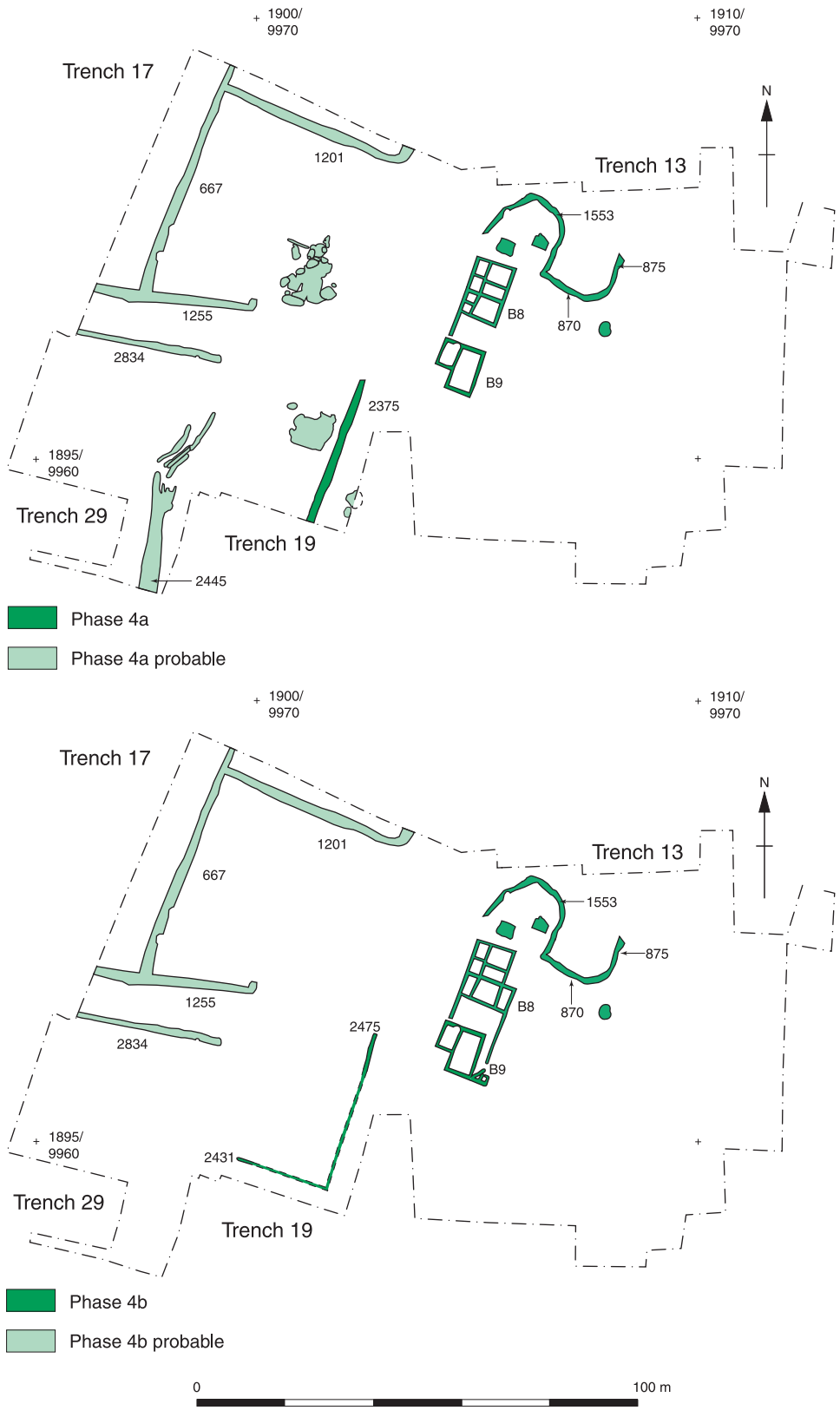


Fig. 6.2 Phase 4 sub-phases a and b

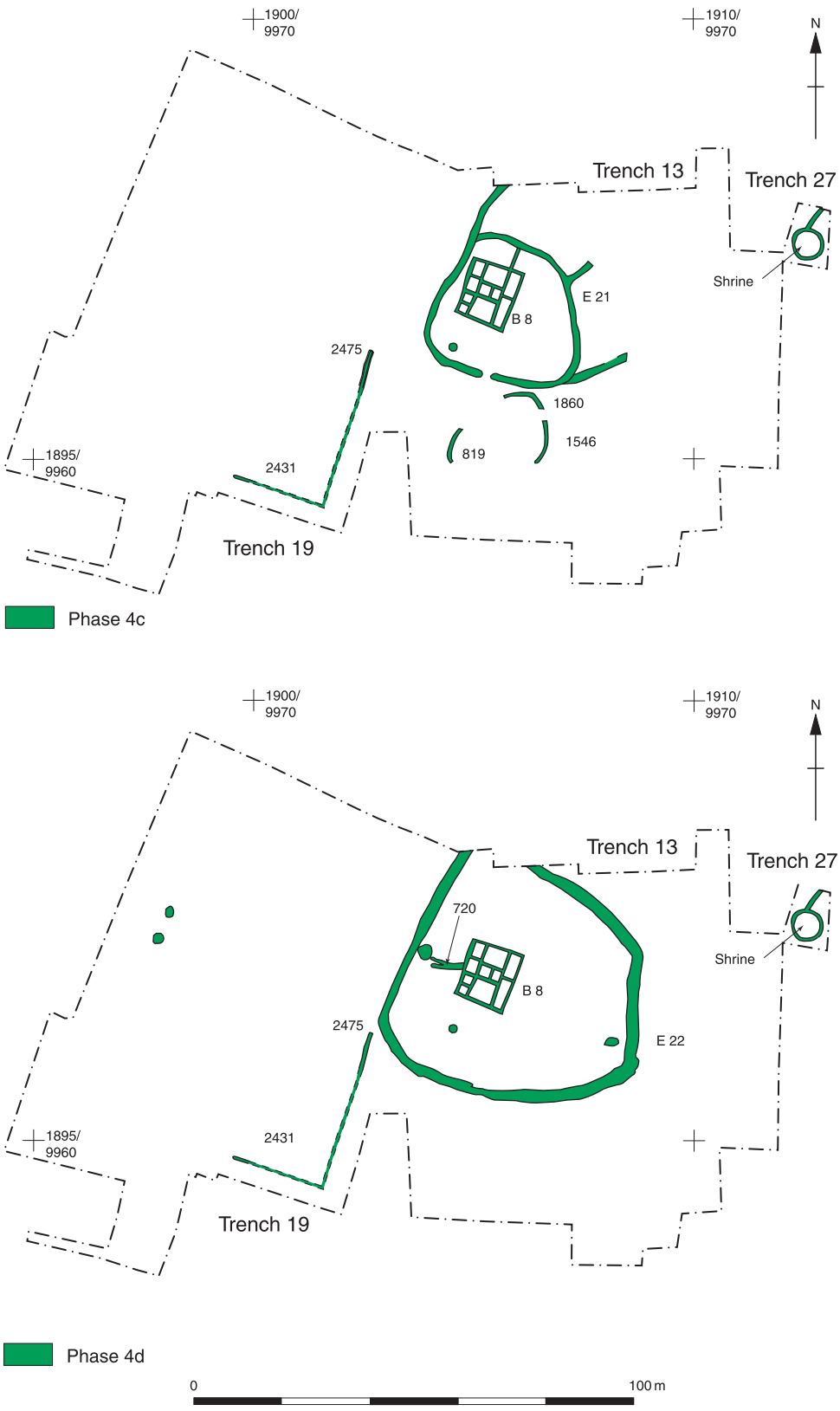


Fig. 6.3 Phase 4 sub-phases c and d

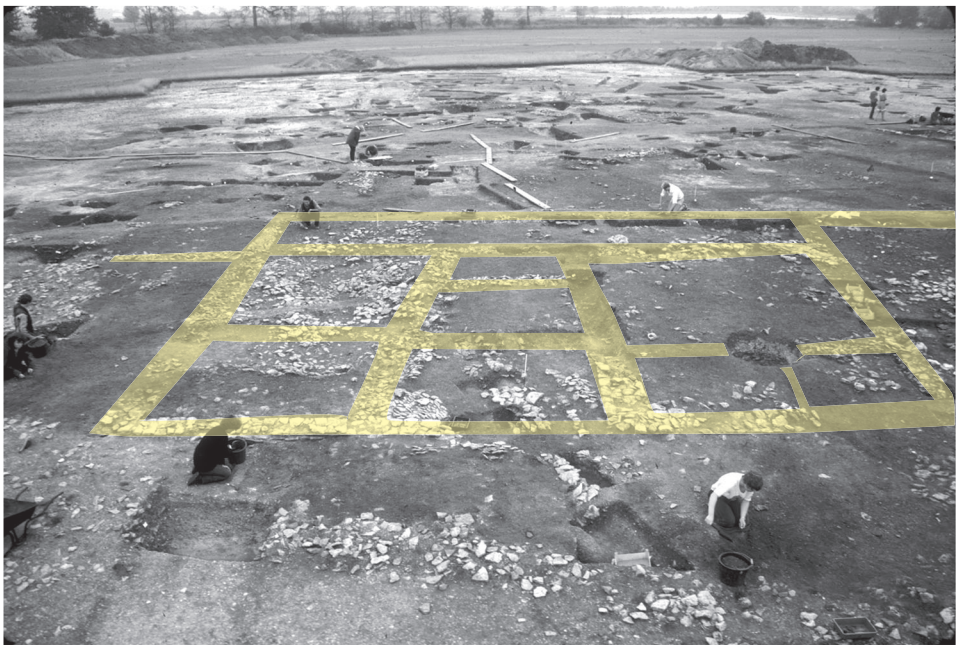


Plate 6.1 Late Roman villa (B 8) looking east

status. Some fragments of wall plaster were recovered, but only covered with a whitewash. Other mortar/plaster was recovered which may have come from flooring. Large amounts of roof tile debris were present (see below) and whilst this cannot definitely be associated with this structure it seems highly likely that is was, probably reused from the earlier aisled building (B 1). Small quantities of stone slates also indicate some roofing – perhaps the late extension on the north-east side – was in stone. Several fragments of late Roman window glass are also likely to derive from this structure. Although layers contemporary with this building were excavated, none could be unequivocally interpreted as floors. They were all of similar character: uncompacted brown sandy loams with little occupation debris, perhaps forming a bedding for either mortar or beaten earth surfaces. The ploughsoil invariably came straight on to these layers with only a small scatter of rubble (693) forming an interface.

In general only small quantities of pottery and animal bone were recovered from the rooms of Building 8, although the disturbed surface of contained two 4th-century coins (AD 335-60) along with a copper alloy finger ring, two bracelets, a copper alloy earring (Fig. 6.16, no.22), late Roman window glass, a number of limestone roofing tiles (Fig. 6.21, no. 1), and an iron knife. A reasonable quantity of pottery (2.33 kg) was also recovered, which included 4th-century Oxford colour-coated and New Forest wares. Over 100 animal bone fragments came from the layers within this room, including pig and domestic fowl. The only other room with any significant finds was Room 3, which contained two quern fragments, a coin dated AD 364-78, possible wall plaster, window glass and part of a late Roman glass vessel. About 1.3 kg of pottery and 35 animal bone fragments were also recovered from this room, most from disturbed layers. Six amphora fragments (Dressel 20) were found amongst the wall rubble scattered between Rooms 1 and 2.

Building 9: The hypocaust building (Fig. 6.5)

Building 9 was situated several metres south of Building 8 on the same alignment. On pottery evidence it belonged to Phase 4a-b (early-mid 4th century), making it contemporary with the 'cottage' villa. It formed an L-shape in plan, dimensions east-west and north-south both being 10 m. Two rooms were formed, Room 1 (5 x 3.4 m) and Room 2 (9 x 5.3 m).

Although of late Roman construction, the building was badly disturbed, with later Roman and medieval features cutting through it (see Chapter 7). Enclosure ditch 700 (E 21) cut east-west through the middle and wells 696 and 697 removed the northern part of Room 1. To the south of ditch 700 preservation was poor. There was no indication of the west wall and the east wall survived only as a slight robber trench. The south wall seems to have been formed by part of the 'inner gate' structure (2348), although stratigraphic relationships here are uncertain due to the disturbed and ephemeral nature of the features. Walls and footings, where they survived (principally to the north), were of similar construction, ranging from 0.5 to 0.7 m wide, with pitched stone foundations, and laid and coursed masonry above. The footings were of a similar character to those of the later additions to Building 8, although not as neatly laid.

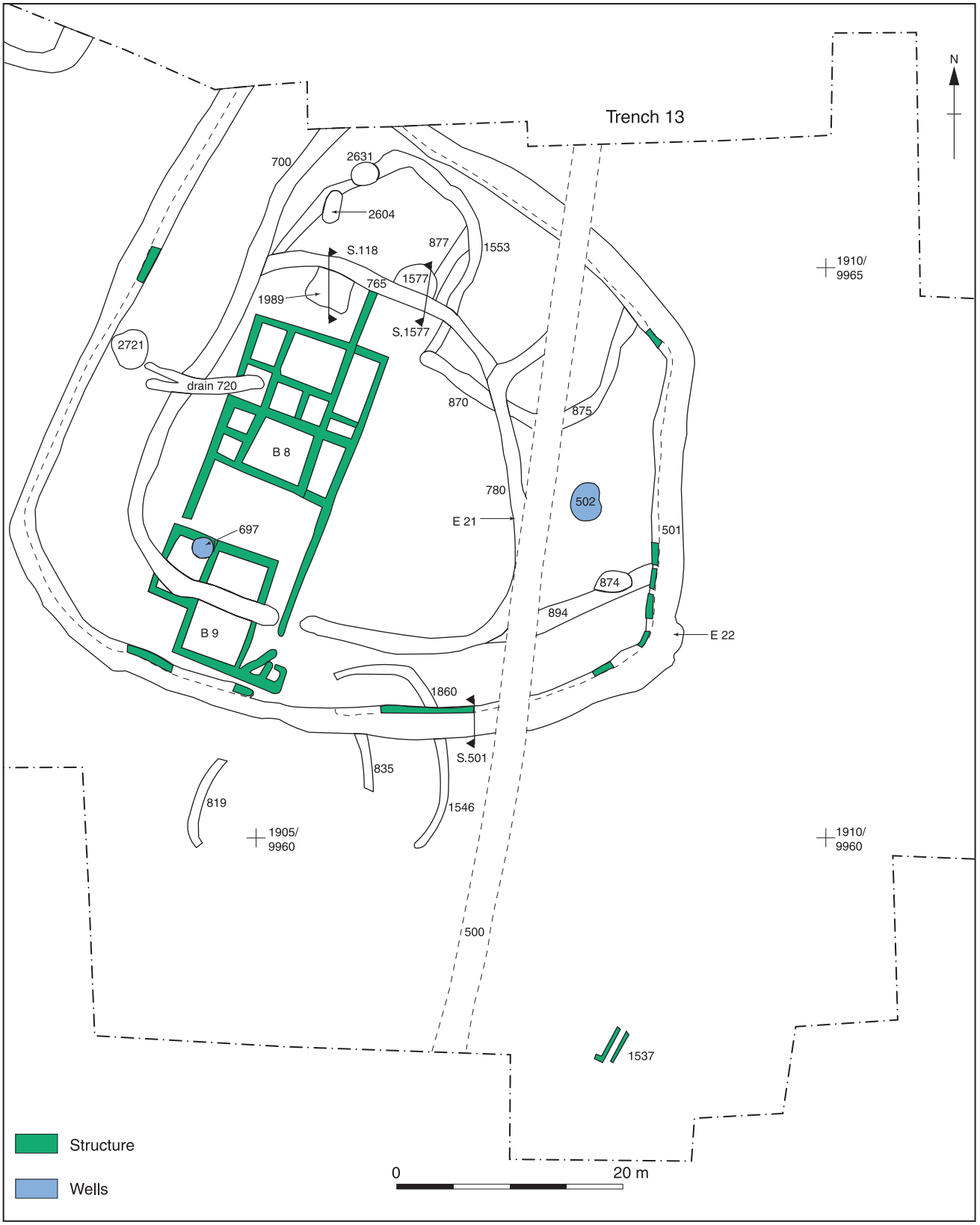


Fig. 6.4 Trench 13 phase 4 composite plan

Debris overlying Building 9 was similar to that of Building 8, with particular concentrations of tile, although quantities of debris from mortar flooring also seemed to concentrate around the building and in the later ditch 700 (E 21).

Stratigraphically this building post-dated Building 7; its robber trench 1578 cut north-south gully 2114 which in turn had cut across the south side of Building 7 (see Fig. 5.11). The building must have been demolished around the mid 4th century to make way for the inner enclosure ditch E 21. It therefore ceased to exist prior to the end of Roman occupation on the site.

Despite the disturbances caused by the wells and ditch 700, floor surfaces in Building 9 were generally in a better state of preservation than in Building 8, with the northern part of Room 2 having the best surviving floor levels on the site. A series of stone hearths and pits were located within this floor surface, along with a stoke hole (2134) adjacent to the line of the western wall (Fig. 6.5). This feature was undoubtedly connected with a hypocaust that seems to have existed in Room 1. This room contained a large quantity of tile, much of which would have derived from the hypocaust, along with a substantial layer of rubble and mortar which was set into the underlying gravel (see Allen and Morgan below). The rubble took on a reddish burnt hue adjacent to the stokehole in Room 2. Most of the tile was of plain type, although a small amount of box flue tile was recovered. However, the largest amount of box flue tile came from ditch 2375 in Trench 19, and probably represents the destruction debris from B 9 which was subsequently dumped there.

Overall, finds from Building 9 were relatively few. No personal items, either toiletry or jewellery, were recovered which might suggest a domestic use, although a single glass bead was recovered from a pit in Room 2 nor were large quantities of pottery stratified within the building. The pot that was recovered ranged in date from the 1st to the 4th centuries, and included small quantities of Oxford colour-coated and black-burnished ware. Two coins stratified in the top of robber trench 1578 suggest a *terminus post quem* for the robbing of the wall at the end of the 4th century. A total of 223 animal bone fragments were recovered from the building, less than one fifth of the assemblage size from Building 8.

Ditches (Figs 6.23 and 6.4)

To the north and east of B 8 were a series of ditches which are assigned to Phase 4 a/b on the basis of stratigraphy or pottery dating. The features would not all have been directly contemporary, and are presented in composite. The most substantial feature was a sub-enclosure ditch (1553) to the north of B 8, 16 x 12 m in size, with a broad shallow U-shaped profile up to *c* 2 m wide and 0.5 m deep. A large slab of architectural masonry (Fig. 6.21, no.7) was recovered from the ditch, along with a quantity of fired clay daub, and over 5 kg of pottery, which included 4th-century Oxford colour-coated and late shell-tempered wares. A total of 280 animal bone fragments were also recovered from the different sections of this feature. The sub-enclosure cut Phase 3/4 ditch 877, and was cut by the terminal of NW-SE ditch 870, which had a broad and flat-bottomed profile *c* 1 m wide and 0.4 m deep. To the east this ditch was cut by ditch 765 (E 21), and then continued as far as post-Roman ditch 500 where it was truncated, and could not be positively traced further east. In plan it lined up well with ditch 875 but they were of clearly contrasting profiles. Over 4.5 kg of pottery from 870 indicated a broad 3rd- or 4th-century date, and two 4th-century coins were also recovered. Other finds included vessel glass, an iron horse fitting, numerous iron nails and 286 animal bone fragments.

Pits (Figs 6.4, 6.6-6.7)

Situated to the north and north-east of B 8 (Fig. 6.4) were two large pits (1577 and 1989) filled with rubble and domestic debris. Pit 1577, was oval in shape, 4 x 2.5 m across and a little over 0.8 m deep (see section, Fig. 6.6). Its southern side was truncated by enclosure ditch 765. A large quantity of finds was retrieved, including 8.2 kg of pottery dating from the late 3rd century onwards, a mid 3rd-century coin, an iron latch-lifter and lever-lock key (Fig. 6.18, nos 32, 34), a copper alloy box mount (Fig. 6.18, no.39), bone pins and vessel glass fragments. Almost 400 animal bone fragments were also recovered from this feature. Most finds came from the upper layers. Further to the west, pit 1989 was far more regular, square in shape, measuring *c* 4 m across and 1.10 m deep, which took it below the Roman water table (see section, Fig. 6.7). The sides were vertical over the lower half but had eroded back at the top. Its similarity to the deeper sunken chamber within B 8 (1969) should be noted (see below). Preserved at the bottom, predating the infill, were the remains of a wicker basket, possibly a fish trap, and another fragment of wood. Environmental samples have suggested that the original purpose of this pit was for the temporary storage of live fish (see Robinson below). It was deliberately infilled with a quantity of limestone rubble, mixed silt and gravel, and the large quantity of finds from the infill probably derived from redeposited midden material. This included building debris, a loomweight, quernstone, bone pins and a massive quantity of animal bone (1617 fragments) of a composition that stood out markedly from most other features on site (see Sykes below). Over 11.5 kg of pottery was recovered, most of which seems to have been deposited towards the middle of the 4th century. The final filling took place in the second half of the 4th century, though perhaps not too far beyond AD 350, and predated the late Roman enclosure ditch 765 (E 21). A coin from the surface was dated AD 393-5. The pit had also been partially overlain by a cobbled surface (1916), from which disturbed fragments of human bone were recovered.

Phase 4b (early to mid 4th century AD) (Fig. 6.2)

Building 8 (Fig. 6.5)

During the early to mid 4th century, probably not long after the original villa building was constructed, an extension was added to the south-east corner, creating a room (8) measuring 2 m by 5 m internally. The interior of this room contained fragments of mortar, probably from a floor, along with over 1.3 kg of pottery, a copper alloy finger ring, a small amount of vessel and window glass and 38 animal bone fragments. No trace survived of the southern wall, but the robber trench of the eastern wall (1579) continued southwards for a further *c* 13 m before stopping 1.4 m from a 'gateway' structure attached to B 9. This would have architecturally unified the two buildings, creating a central 'courtyard' area (*c* 10 x 6.5 m) between them, and it is likely that an entrance was now placed in the southern wall of B 8, facing onto

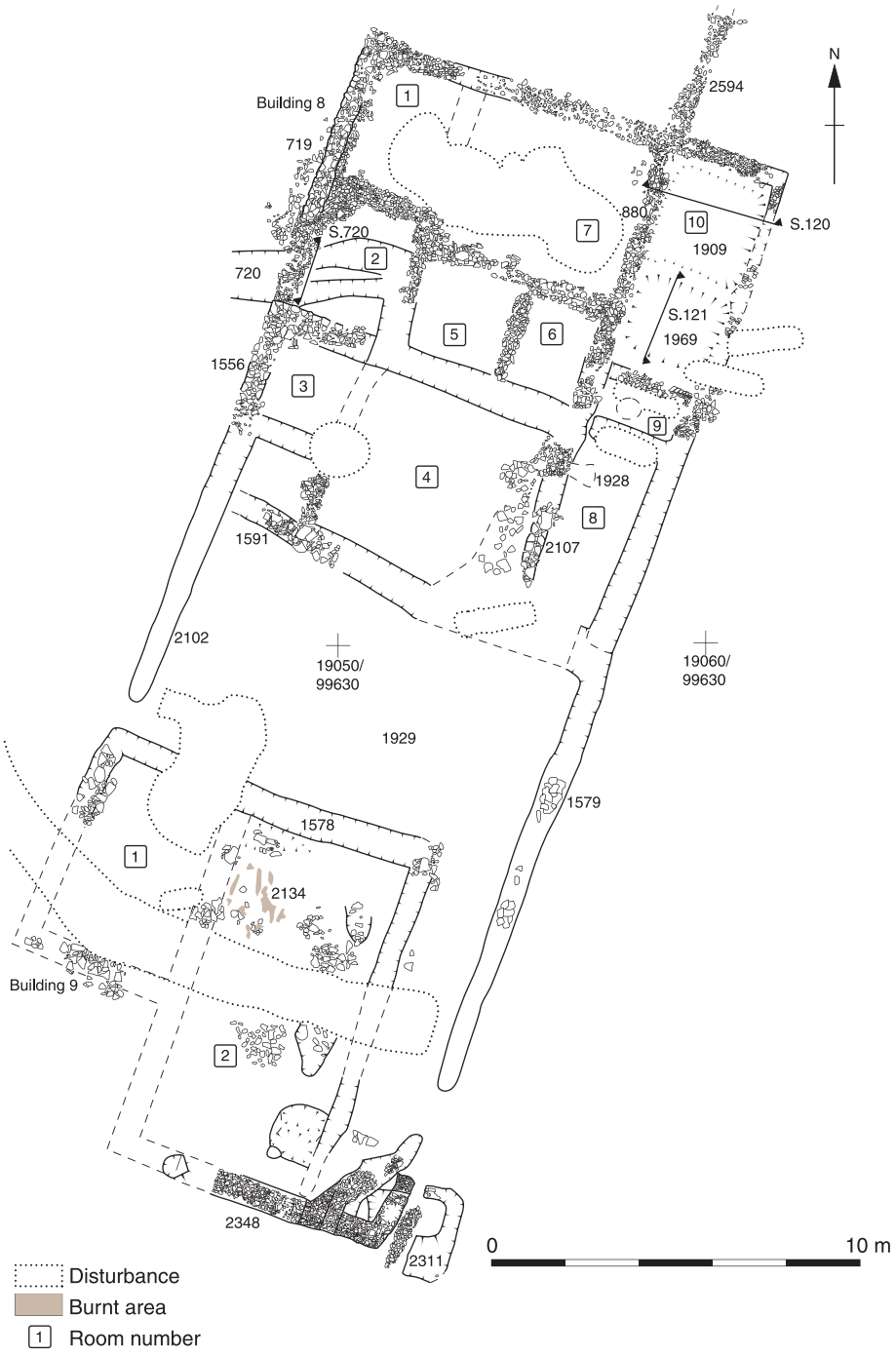


Fig. 6.5 Trench 13 late Roman villa (B 8 and B 9)

this area. The central 'courtyard' was covered by two layers of black soil (1929). Both layers respected the northern, eastern and southern boundaries, while to the west, only the lower layer respected robber trench 2102. This suggests that the western wall of the courtyard was removed prior to the demolition of the southern building (B 9) in Phase 4c. Reasonable amounts (*c* 3 kg) of pottery along with vessel glass and iron nails were recovered from these layers. In contrast to the main building, no animal bones were recovered.

Building 9: 'gateway' structure (Fig. 6.5)

Situated on the southern side of Trench 13, running parallel to but cutting into the top of Phase 3 ditch 547, was an arrangement of walling, of which at least part appears to have formed a structure distinct from the rest of Building 9. It was formed by an east-west wall (2348), 7 m long, of small compact limestone rubble, which turned north for 2 to 3 m at the eastern end. A further arm came off at an angle to join this north-south section at the north end, and a corner of wall was thus formed with a diagonal supporting wall. A further angle of wall (2311) nearly all robbed and apparently not tied in to 2348, enclosed a small area *c* 1.25 m^2 against this eastern angle. The chamber so formed would have provided sufficient space for a person. It is thought that this eastern 'chamber' was not part of the original design. The function and chronology of these features are not clear. It is possible that the western part of 2348 was integral with the original construction of B 9, with the eastern angled extension being a later addition, perhaps contemporary with the construction of the eastern wall leading from B 9, with which it is aligned. Although quite tentative, this interpretation would therefore place the structure in Phase 4b. The effect would have created a probable gated entrance (1.4 m wide) leading through towards the inner courtyard. This entrance structure went out of use during the mid to later 4th century when B 9 was demolished and enclosure E 21 was dug. Finds from the robber trenches included just over 0.9 kg of pottery along with iron nails, vessel and window glass, a bone pin and a copper alloy finger ring.

Phase 4c (mid – late 4th century AD) (Fig. 6.3)

Building 8/9 (Fig. 6.5)

At some point not long after the middle of the 4th century AD, the villa complex underwent drastic alteration, with the southern building (B 9) and eastern boundary wall being demolished, and the remaining building (B 8) being enclosed by a substantial ditch (E 21). Modifications were also made to B 8, comprising the addition of a block to the north-eastern corner, which returned the building to a simple rectangular plan, measuring 14 x 12 m. Wall 2594 abutted the original north-east corner of B 8 and extended north for *c* 10 m, to end at the edge of ditch 700 (E 21), suggesting contemporaneity. The additions to the north-eastern corner of Building 8 resulted in the creation of two new rooms (9, 10) and the re-sizing of Room 8. The northern wall of Room 8 was moved 1 m further north, and a pitched stone wall (1928) was built 2.5 m to the south of this, thus creating Room 9, measuring *c* 2 x 2.5 m. Room 10 in the north-east corner measured 5.5 m by *c* 2.25 m and was taken up by two large sunken chambers, 1909 and 1969

Plate 6.2 Sunken chambers in B 8

(see Pl. 6.2). Chamber 1909 was the most northerly and largest in area, 2.5 m square and 0.8 m deep (see section 120, Fig. 6.8). The north-east and west sides were all near vertical, cutting down on the inside edge of the structural walls. The south side was more uneven with a tongue of gravel extending into the centre of the chamber, perhaps marking the position of steps down. Traces of clay were found on the floor, suggesting a clay lining. The fill suggested a rapid process of infilling, but gave no clear indication of function or duration of use. No evidence for the revetting of the gravel sides was forthcoming. Finds were few and appeared to be mainly building debris. Two coins dated AD 330-5 and AD 350-400 were recovered from the top fill and over 2.5 kg of pottery was found spread throughout the layers, providing a general 4th-century date. Other finds included 1.6 kg of tile, building stone, nails, a bone gaming piece/veneer (Fig. 6.17, no. 24), vessel glass, a whetstone and 145 animal bone fragments. The character of the infill and the lack of any deep later silting over the top may suggest the chamber was infilled prior to the abandonment of the building.

Separated from 1909 by a small gravel causeway was the smaller but deeper chamber 1969 (see section 121, Fig. 6.9). This measured 2.5 x 2 m and was 1.5 m deep, a depth comparable to some of the waterholes elsewhere on site. Like 1909, it was vertical sided and flat bottomed, although there was no indication of steps. The fill contrasted to 1909, in that the lower 0.5 m appeared to have silted during use. It consisted of a series of layers and lenses of clay, silt and gravel but with no organic matter in evidence. Finds included two Roman coins, from the lower part of the infilling, dated to AD 335-41, and AD 345-53. Other finds included large numbers of iron nails throughout the layers, vessel glass and stone roofing slate. The latter came from the upper layer and may have derived from the roof over this extension. Over 5.7 kg of pottery and 232 animal bone fragments were recovered from this feature. The lack of demolition rubble and later silting suggests that 1969 was infilled prior to the building's destruction. The function of the two pits is unclear, although it is possible that they were used for the temporary storage of fish, as has been suggested for similar pit 1989 to the north (see Discussion below).

The inner late Roman enclosure (E 21) (Fig. 6.4)

During the latter part of the 4th century a sub-rectangular enclosure (E 21), 32 m across, enclosed much of the central area in Trench 13, with Building 8 situated in the north-west corner. A small 2 m wide causeway lay on the south side where it cut through Building 9. The enclosure showed signs of having had at least two major phases. The earliest was defined by ditch 765 (0.8 m wide, *c* 0.5 m deep), located on the north side. It is unclear whether this feature continued round the whole circuit as the later phase (700, 780) had removed all traces on the west, east and south sides. This later phase of E 21 comprised two separate sections (Fig. 6.4). The western arm (700) was traced WNW for *c* 15 m before turning NNE for *c* 40 m, and continuing beyond the northern trench edge. The eastern arm (780) formed an S-shape in plan, with the northern terminal being cut by post-medieval ditch 500. The southern terminal lay just short of ditch 700, thus forming the entrance. Ditch profiles and size were all consistently *c* 1.2 m wide and *c* 1 m deep. The enclosure may have been open to the north, unless ditch 765 remained in use at this time.

Plate 6.3 Wells 697 and 696

Ditch 894 (*c* 1.1 m wide, 1 m deep) to the south-east may also have been part of this enclosure arrangement, with two cuts appearing to relate to the two phases of enclosure (Fig. 6.4). It may have been one of a number of ditches which defined two enclosures branching off from E 21 to the north-east. The exact extent of these enclosures remains unknown. Three sections of a possible southern enclosure (1860, 1546, 819) were also revealed, but not physically connected with E 21.

The south and west sides of E 21 were deliberately infilled with limestone rubble, while the

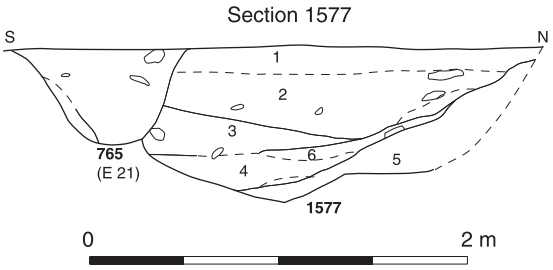


Fig. 6.6 Section through pit 1577

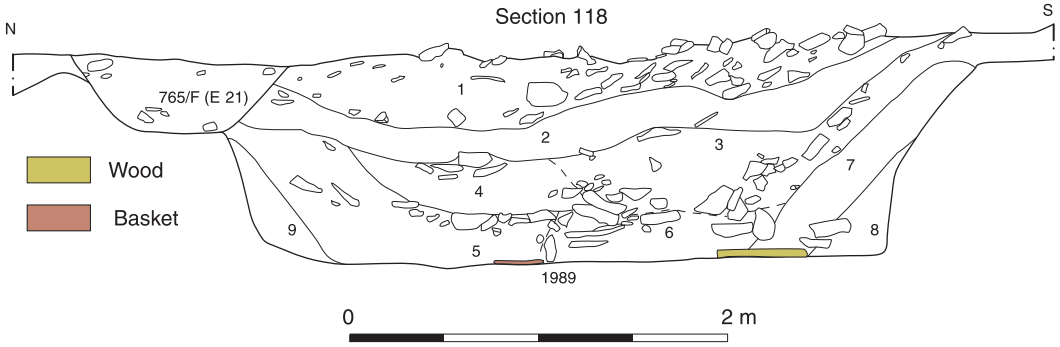


Fig. 6.7 Section 118 through pit 1989

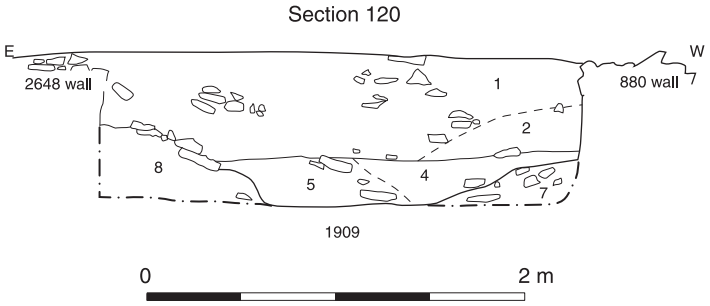


Fig. 6.8 Section 120 through pit 1909

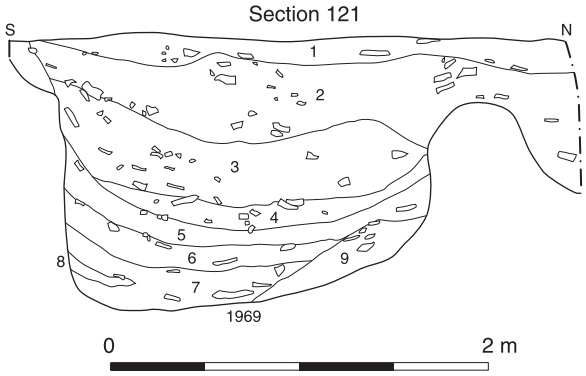


Fig. 6.9 Section 121 through pit 1969

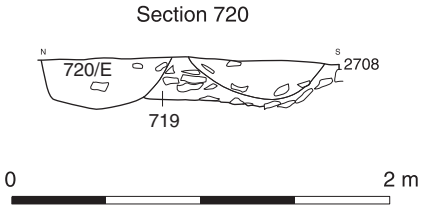


Fig. 6.10 Section through drain 720

eastern side also showed signs of deliberate infill. Over 33 kg of pottery was recovered from E 21 in total, mostly dating from the 4th century, but too mixed to provide a more accurate chronology. Other finds included three coins, dating from the later 3rd to later 4th century, vessel glass, ceramic tile (*c* 23 kg), rotary quern fragments (Fig. 6.20, no. 2), spindlewhorls, a horse fitting (Fig. 6.17, no.26) and a small quantity of personal ornamentation (brooch, pins, etc). A total of 1966 animal bone fragments, largely unidentifiable but including cattle, sheep, a little pig and horse, was also recovered.

Well 697 (Fig. 6.4, Pl. 6.3)

Although well 697 was the latest Roman well on site it was the worst preserved. It cut through the heated floor of Building 9 (Room 1) in the later 4th century, but had been much disturbed by the construction of well 696 during the medieval period (see Pl. 6.3). It was slightly smaller (0.6 m in diameter and 1.7 m deep) than well 502, but of similar stone-lined construction (see Chapter 5). Five coins were recovered from the lower fill with a date range of AD 260-341, all of which would seem to predate its construction. How long it was in use cannot be determined but its position must have been an influencing factor for the siting of the adjacent medieval well 696. Organic material was recovered from the surviving levels including part of a small wooden bowl. Over 2.7 kg of pottery and 245 animal bone fragments were recovered from this feature.

Phase 4d (later 4th century AD) (Fig. 6.3)

Building 8 (Fig. 6.5)

At a stage post-dating the addition of the sunken chambers on the north-eastern corner, a drain (720) was cut through the west wall (719) of B 8 into Room 2 (see section, Fig. 6.10), and an area of hard-standing laid down in the northern part of this room. The drain was orientated west cutting across the top of the later Roman Enclosure ditch E 21. A later cut (2708) ran into the large sump 2721 to the west (Fig. 6.4). It is possible that these drains were partially stone-lined, and were both *c* 0.6 m wide and 0.2-0.3 m deep. Stratigraphically this modifica-

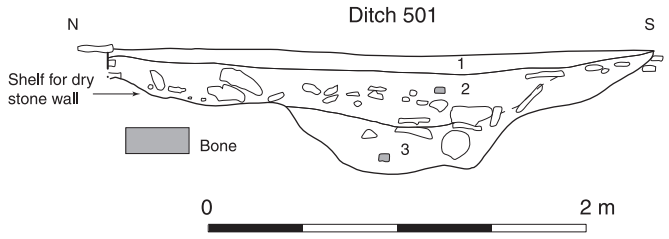


Fig. 6.11 Section through ditch 501 (E 22)

Plate 6.4 Enclosure E 22 looking north

tion is the latest change to Building 8, and may have involved some major rebuilding since the surviving walls either side of this drain are of different widths (see Fig. 6.5). Many finds were recovered from the various cuts of the drain and the sump including over 9 kg of pottery, 3 kg of ceramic tile, 700 animal bone fragments, iron nails, mortar and plaster, stone roofing slates, three 4th-century coins (latest issue AD 388-402), two glass beads (Fig. 6.16, no. 13-14), a quernstone and part of a limestone column (Fig. 6.21, no.5). This material is likely to have derived from the demolition of the building.

The outer late Roman enclosure (E 22) (Figs 6.4 and 6.11, Pl. 6.4)

The latest Roman phase is marked by a large sub-rectangular enclosure ditch E 22 (501), clearly visible on aerial photographs, which was roughly concentric with the inner enclosure E 21, but covered a much wider area (*c* 50 m across). The ditch on average was between 1.5 and 3 m across and 0.6 to 1.2 m deep and the inner edge was marked by a shallow shelf (see section, Fig. 6.11). On parts of the southern and western sides of this shelf a narrow dry stone wall survived up to three courses (see Pl. 6.4). There was an apparent gap in the wall of *c* 5 m on the southern side, on the same line as the entrance to the inner enclosure. The wall was faced only on its outer edge, the inner face being left ragged, and had an approximate width of *c* 0.4 m. The upper fill of ditch 501 was distinctive, being an alluvial deposit up to 0.3 m in depth. Finds from within this layer included sherds of 13th-century pottery and a coin dated 1205-15. Roman finds from the lower levels ranged from a small number of domestic items (bone pin, copper alloy thimble and pendant (Fig. 6.18, no. 41), brooch, querns and vessel glass) to building debris. Just 16 kg of pottery and 5 kg of ceramic tile were recovered from all of the enclosure sections, along with over 2000 animal bone fragments, largely unidentifiable fragments but including sheep, cattle, horse and a little pig.

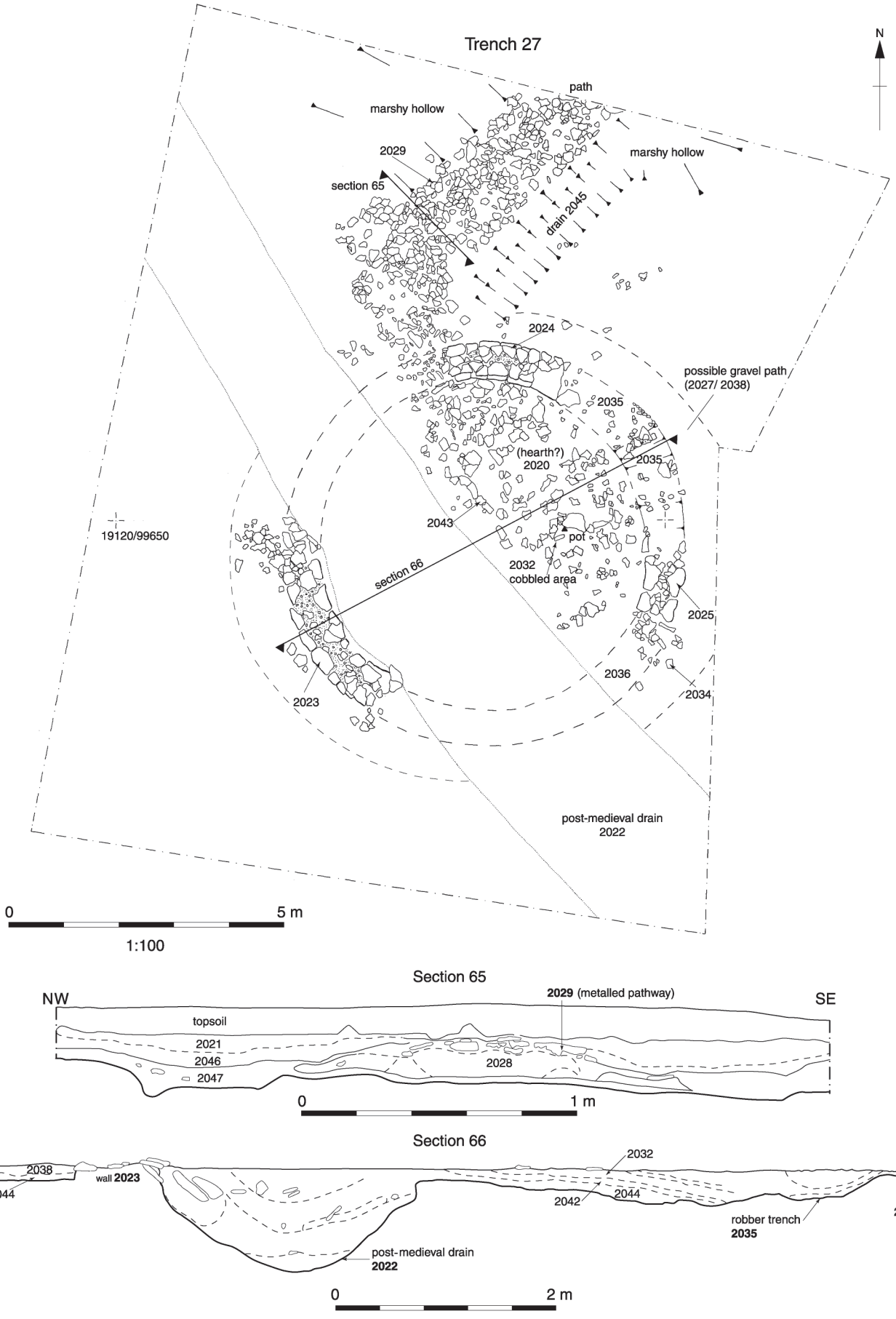
Trench 27 – The late Roman shrine (Fig. 6.12, Pl. 6.5)

A roughly rectangular area (*c* 180 m^2) was excavated just off the north-east corner of Trench 13 (see Fig. 6.3), which exposed a circular masonry building interpreted as a shrine, along with an associated cobbled path (Fig. 6.12). The shrine was sited on an island of silts and clays, which fell away to the north into the palaeochannel. The structure comprised three wall arcs (2023, 2024, 2025) and stretches of robber trenches (2035, 2036) outlining a circular building with an internal diameter of approximately 6 m. The wall foundations were an average of 0.7 m in width where preserved, and were two courses deep, of flat limestone slabs with shaped faces to give smoothly curved inner and outer foundation faces. The core of the foundations was of solidly mortared rubble. The wall footings laid on this foundation were preserved only on wall arc 2024, the northern wall, and a very short section on the east end of wall arc 2023, forming the south wall of the building. These wall footings were 0.55 m wide and also two courses thick, made up of slabs smaller than those used for the foundation, but also with inner and outer wall faces shaped. The core of the wall was again of mortared rubble. The walls and foundations were set into shallow trenches about 0.45 m deep (from modern ground level) and varying from 0.8 to 1 m wide where preserved between wall arcs 2024 and 2025 along the north-east line of the building (section 66, Fig. 6.12). The limestone slabs for the foundations and wall footings are of Cotswold limestone, while all the rest of the stone and cobbles are local material.

A post-medieval field drainage ditch (2022) running from north-west to south-east cut through the south-west half of the building, removing two sections of the wall and destroying almost exactly half of the interior (Fig. 6.12). No positive evidence for an entrance was preserved, though a doorway could have been positioned to the north-west, associated with the cobbled pathway which approached from the north-east. Alternatively, there may have been a gravel pathway leading around the exterior of the building (contexts 2027, 2038) to an area of cobbling (2034) outside of an entrance facing south-east (see Discussion).

The interior of the shrine was stratified beneath two layers of alluvial deposits, the lower of which was found only inside the building. Below these

Plate 6.5 The late Roman shrine looking south-west and with gravel workings in the distance


Trench 27
N
path
marshy hollow
2029
marshy hollow
section 65
drain 2045
2024
possible gravel path
(2027/ 2038)
2035
(hearth?)
2020
2035
19120/99650
2043
pot
2032
cobbled area
section 66
2025
2036
2034
2023
post-medieval drain
2022
0
5 m
1:100
Section 65
NW
2029 (metalled pathway)
SE
topsoil
2021
2046
2047
2028
0
1 m
Section 66
SW
2038
wall 2023
2044
2032
NE
2042
2044
2027
robber trench
2035
post-medieval drain
2022
0
2 m

alluvial levels was an eroded cobbled surface (2032) which was increasingly worn or eroded towards the south-east, perhaps as a result of increased human activity in the area of the possible entranceway (see section 66, Fig. 6.12). Many well stratified coins (27) and animal bones (154 fragments), along with pottery (1.1 kg) were associated with this surface, including a small complete pot which was placed in a hollow between three large cobbles in the eastern half of the building (Pl. 6.6). An isolated layer of burnt material was located over cobbled surface 2032 in the northern part of the interior, and could possibly represent a hearth. To the south-west of this was an L-shaped setting of stones (2043), a single course deep, the function of which is unclear.

The cobbled pathway

The most prominent external feature was a cobbled pathway (2029) curving from south-west to north-east, and intercepting the shrine at a tangent in the north-west quadrant of the building (Fig. 6.12). This pathway was metalled with unshaped flat limestone slabs laid to form an uneven but solid surface about 1.5 m wide (section 65, Fig. 6.12). Flanking this to the east, and contemporary with it was a ditch (2045) approximately 0.6 m wide and 0.6 m deep. As this ditch paralleled the path to the north, its eastern edge (away from the path) became indistinct and was lost in the silts and peats of the palaeochannel. These marsh deposits were also visible to the west of the pathway where there was a rounded terminal of a wider, shallower marshy hollow or pool. Both ditches are presumed to have served to drain the cobbled path surface. The cobbles were packed onto the top of a foundation of gravelly clay (2028; see section 65, Fig. 6.12). This foundation appears to create a raised causeway across the marshy area; it produced no artefacts and could be either a natural finger of clay or a deliberate construction. The cobbled surface produced only a few fragments of pot, 79 animal bone fragments, an iron nail and three mid-late 4th-century coins.

Chronology

The chronology of the shrine is based upon the ceramic and coin assemblages, the last of which was very substantial given the overall size of the excavated area. Just over 3.5 kg of pottery came from the trench, and about 60 % of this was directly associated with the shrine (ie not from topsoil or external features). A substantial amount (20%) of this comprised Oxford colour-coated wares, indicating a probable 4th-century date, contemporary with the late Roman villa/farmstead in Trench 13. Over 33% (248) of all coins from Claydon Pike came from

Plate 6.6 Miniature pot within shrine

Trench 27, and over 90% of these were 4th-century in date. The number of coins from the years 364 to 378 was particularly high (43.5%), suggesting that the main period of activity lay in the later 4th century (although see King below). The majority of coins from the trench were from unstratified contexts, although of the remaining 56, 48% were from the cobbled layer (2032) within the shrine, and a further 35% from the junction between this layer and the brown gravelly clay beneath (2042; see section 66, Fig. 6.12). Two coins, dated AD 364-78, came from the lowest silt layer (2044) thought to predate the shrine, and if this was the case, then the building looks to have been one of the latest Roman structures on the site. However, the coins came from the top of this layer and it is quite possible that they were intrusive. A small number of coins of Arcadius (AD 388-402) were found across the trench, which suggests that activity continued at least until the end of the 4th century and possibly into the early 5th, although no further building phases were noted.

The finds assemblage

The finds assemblage from the area of the circular shrine is unusual within the site for both its size and its character. Perhaps the most striking aspect is the large quantity of coins, many of which were located within and beneath of the cobbled floor surface, with apparent evidence for specific depositional

Facing page: Fig. 6.12 Trench 27 late Roman shrine

'zoning'. Over 170 sherds of pottery were also recovered from these 'floor' contexts, and a complete small pot (Fig. 6.12, Pl. 6.6) was deliberately buried within the cobbles. Aside from coins, other small finds were scarce, but they did include a 1st-century brooch from just under the cobbled surface, and a bone pin from the cobbled path leading from the probable south-east entrance. An iron chisel and joiner's dog also came from the internal cobbled layer, and a small copper alloy votive axe was recovered from the vicinity of the shrine. A number of animal bone fragments (417) were recorded from Trench 27, although only 10% could be identified to species, and their spatial patterning is unknown. No articulated deposits were recorded. The general character and context of this finds assemblage indicates a religious interpretation (see Discussion).

Trench 30 – the late Roman cemetery (Fig. 6.13, Pl. 6.7)

Trench 30 (*c* 924 m^2) lay *c* 100 m north-west of the late Roman villa and revealed part of a small inhumation cemetery and a section of the doubled-ditched 'trackway' boundary (2739, 2740) surrounding the large western enclosure (Fig. 6.1; see Witkin below). A total of ten burials was revealed, eight of which were clearly associated with two successive enclosure ditches (2737, 2738). The remaining two (2743, 2745) were located 20 m to the east of the main group (Fig. 6.13). All of the burials were of adults, and of the six that could be sexed, four were male and two female. Five of the graves in the core area were oriented NW-SE and the earliest of these was arguably 2741, which was surrounded on three or four sides by enclosure ditch 2737 (6.5 x 5 m). Grave 2773 to the immediate west lay within a similar but smaller (*c* 3 x 4 m) enclosure ditch (2783) and was clearly later since it cut the already silted ditch of its neighbour. The common orientation of graves 2766, 2748 and 2765 suggest these to be broadly contemporary. The outlying graves 2743 and 2745 have an apparently similar orientation but the bodies were inhumed SE-NW; this and their distance makes contemporaneity less certain. Three further graves provide a clear second phase in the core area since they were orientated NE-SW and all cut earlier burials. Their close spatial relationship with earlier features is however suggestive of continuity: 2759 reuses enclosure 2738 while 2760 and 2775 to the immediate west, which themselves intercut, both cut 2766. Two of the burials (2776 and 2744) were decapitation burials.

Few finds were recovered from the trench area, and these included a single late 3rd-century coin, along with a very small amount of pottery (0.7 kg), three iron nails, a 4th-century copper alloy bracelet and just over 300 animal bone fragments. More details of the human remains and a discussion of the cemetery are set out by Witkin below.

Late Roman activity in Trench 19 (Figs 6.2-3)

By the end of Phase 3, it appears that the rectangular enclosure had gone out of use, with dumps of redeposited material spread across parts of the site. In Phase 4a/b a north-south ditch (2375) was dug through parts of the earlier enclosure, with two separate cuts on average *c* 1 m wide and *c* 0.5 m deep (Fig. 6.2). Comparatively large quantities of

Plate 6.7 Late Roman cemetery looking south-east

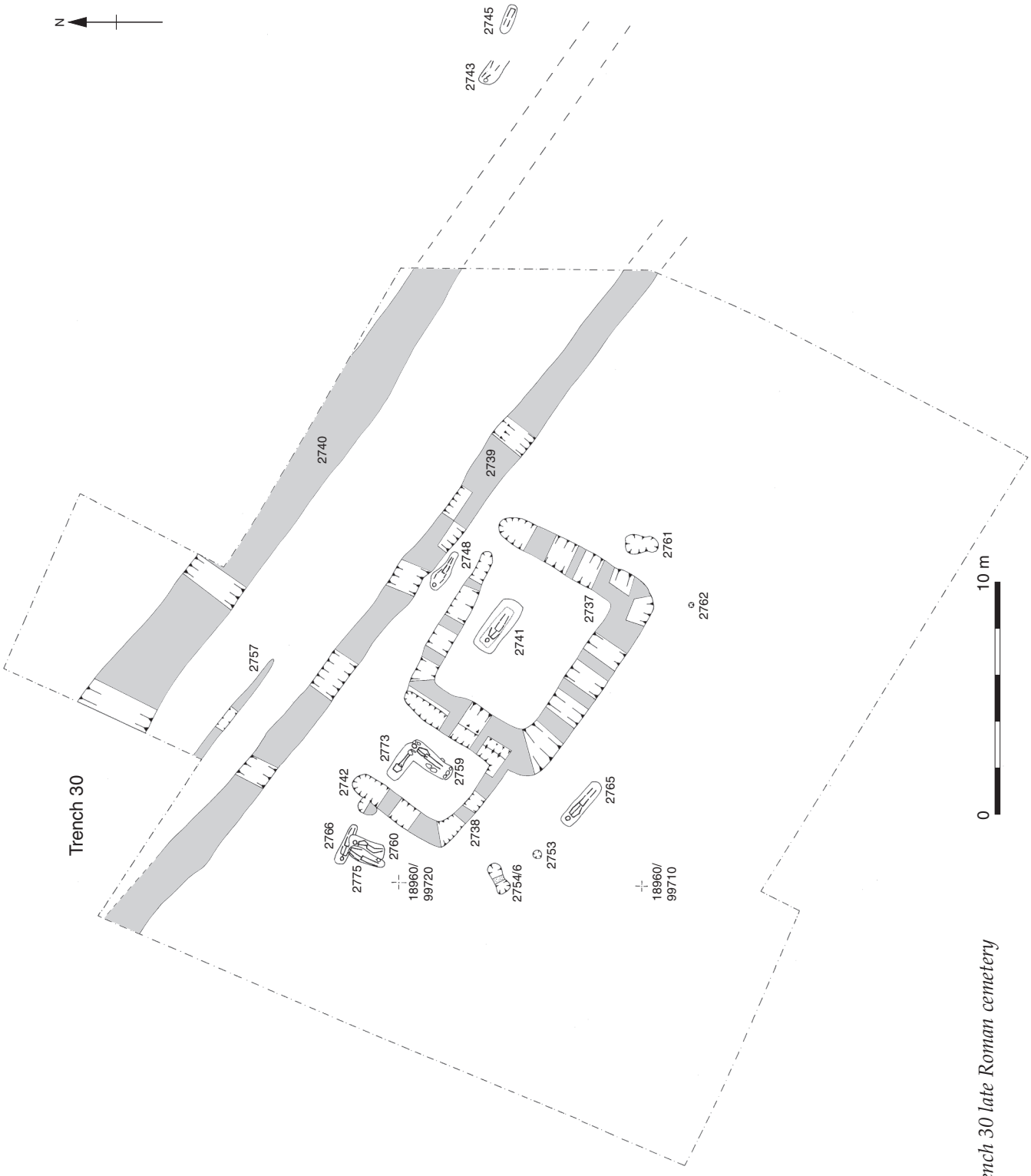


Fig. 6.13 Trench 30 late Roman cemetery

pottery (*c* 20 kg) were recovered from the fills, with a date range indicating activity in the early to mid 4th century (Phase 4a-b). Much of the debris, which included smithing slag, animal bone (1367 fragments), ceramic tile (12 kg), quernstones, vessel glass, stone rubble, a jet bead (Fig. 6.15, no. 8), a bone hairpin (Fig. 6.16, no. 19) and many items of metalwork, was concentrated around the northern terminal. It may in part have come from the destruction of B 9 (see above).

The only feature that can be ascribed to the mid/late 4th century is masonry wall 2475, which formed the latest of the north south boundaries (2162, 2161, 2375) on the eastern side of the enclosure area (Figs 6.2-6.3). The southern extent of the wall in unclear, as actual structural trace of it disappears after *c* 10 metres, although ditch 2375 contained its likely collapse in its upper layers. The wall's construction, where it survived, is reminiscent of the latest Roman extension to Building 8 on Trench 13 (Phase 4b), consisting of a pitched stone foundation with horizontal courses on top. Up to three courses of this pitched foundation survived where it overlay the edge of ditch 2375. It was *c* 0.75 m wide, with a possible length of *c* 35 m. Running perpendicular to wall 2475 in the south-west corner of the enclosure area lay wall 2431. Only a short length of this survived – *c* 6 m – but it was of similar width to 2475, and its eastward continuation would have joined the line of wall 2475 at the point where the rubble infill of ditch 2375 stopped. It seems likely therefore, that the two are contemporary forming a later Roman 'enclosure' (open to the west and north) over the Phase 3 enclosure (Fig. 6.2). It is uncertain for how long this feature was in use, although there does not appear to have been a distinctive late 4th-century pottery assemblage in the trench as a whole, and only 5% of the coins can be dated after AD 350, compared to 21% from Trench 13. This suggests that activity in the area greatly declined after the mid 4th century.

THE FINDS

Large quantities of finds came from Phase 4 contexts, especially considering that the scale of occupation appears to have been much less than the previous settlement, with activity being mostly confined to the villa in Trench 13 and the shrine in Trench 27. Full finds reports from Phase 4 occupation at Claydon Pike can be found in Digital section 3.

Pottery (Fig. 6.14) *by Paul Booth*

A total of just under 212 kg of pottery came from Phase 4 contexts, of which 89 kg (42%) was recorded in detail. A further 133 kg came from Phase 3/4, of which 67 kg (50%) was examined in detail (Tables 6.1 and 6.2). The general Phase 4 assemblage showed a slight but significant increase in fine and specialist ware quantities in comparison with Phase 3 and indeed with the composite Phase 3/4 assemblage. This rise was only slight in Trench 13, and in Trench 19 there was an overall decline in fine and specialist wares, marking a retreat from the high point potentially indicated by abnormal Phase 3 values with a specific functional association. Meanwhile, activity in Trench 17 appears to have ceased by this time. The fine and specialist wares were dominated at this time by Oxford products – colour-coated ware and mortaria in particular. Other components will have included residual material but it is notable that the Trench 27 assemblage, assigned entirely to Phase 4 and thus with no obvious source for residual material, includes 4.5% of samian ware and it is likely that at least some of this material will have been in contemporary use in the 4th century. Equally, in Trench 13 in Phase 4, while the 1st-century 'E' wares were at about one eighth of their Phase 2 level, and thus clearly residual, samian ware was better represented than in Phase 2 and at about two-thirds of the level seen in Phase 3. While some of this material must have been residual it is unlikely that all of it was.

The principal components of the Phase 4 assemblage were still reduced coarse wares and black-burnished ware. The latter generally occurred at a similar level to Phase 3, though an increase from a fairly typical 23.9% of sherds in Phase 3 to 35% in the composite Phase 3/4 group was noted in Trench 17 and is not readily explained. Reduced ware levels also increased slightly from Phase 3 to 4 in Trenches 13 and 29, but declined in Trench 19, a decline corresponding to a sharp rise in the representation of fabric O43 in this trench. This development appears anomalous and is probably not representative of the general trend.

Identification of specific ceramic elements (rather than arguments based on general changes, for example in fabric proportions) which support the mid 4th century and later dating of the latest stages of activity at the site remains slightly problematic. They include Oxford colour-coated ware types such as C70 and C75 (dated after AD 325), C78 (after AD 340) and C13 (?after AD 350, but see Booth *et al.* 1993, 161-3 for a possible earlier date). A wider range of Oxford types with a *terminus post quem* of AD 300 (eg C68, C81 and C83) or only assigned the broad AD 240-400 date bracket, will have included examples dating after *c* AD 350, but these cannot be distinguished on present evidence. An increase in the representation of fabric C11 (late Harrold type shell-tempered ware) was certainly chronologically significant, and characteristic rilled jar and bowl forms were present, particularly in Trench 13.

Two distinct areas not yet mentioned are the circular shrine (Trench 27) and the cemetery (Trench 30). Both were in use for only a limited period and can be relatively closely dated. Only a very small amount of pottery was recovered from both areas. The centre of the circular shrine contained a complete, albeit somewhat lopsided, miniature

Table 6.1: Quantity of major fabric groups in Phase 3/4 and Phase 4

Major fabric group	*Phase 3/4 sherd no.*	*% of Phase 3/4*	*Phase 4 sherd no.*	*% of Phase 4*
Samian (S)	119	2.2	310	3.1
Fine wares (F)	401	7.4	1011	10.1
Amphorae (A)	49	0.9	140	1.4
Mortaria (M)	60	1.1	150	1.5
White Firing Wares (W)*	103	1.9	150	1.5
White slipped wares (Q)*	157	2.9	210	2.1
Early 'Belgic type' wares (E)	54	1	190	1.9
Oxidised 'coarse' wares (O)	282	5.2	881	8.8
Reduced coarse wares (R)	2410	44.5	4294	42.9
Black-burnished wares (B)	1630	30.1	2242	22.4
Calcareous tempered wares (C)	135	2.5	400	4
Unclassified	16	0.3	30	0.3
Total	5415	100	10010	100

* except mortaria

Table 6.2: Major vessel types in Phase 3/4 and Phase 4 (RE)

	Phase 3/4 Rim equivalents (RE)	*% of Phase 3/4*	*Phase 4 Rim equivalents (RE)*	*% of Phase 4*
Amphorae (A)	0.00	0	0.48	0.4
Flagons (B)	0.39	0.7	6.04	5
Jars (C)	37.49	67.5	74.24	61.5
Jars/bowls (D)	0.06	0.1	0.12	0.1
Beakers (E)	2.55	4.6	5.79	4.8
Cups (F)	0.61	1.1	1.93	1.6
Tankards (G)	0.50	0.9	0.97	0.8
Bowls (H)	6.55	11.8	17.26	14.3
Bowls/dishes (I)	0.00	0	0.12	0.1
Dishes (J)	3.78	6.8	5.55	4.6
Mortaria (K)	1.83	3.3	4.22	3.5
Lids (L)	0.61	1.1	2.05	1.7
'Castor box' (MI)	0.17	0.3	0.36	0.3
Unknown (Z)	1.00	1.8	1.57	1.3
Total	55.54	100	120.71	100

colour-coated (fabric F63) beaker – perhaps a product of the North Wiltshire kilns (Pl. 6.6). There are no precise parallels for this vessel from the region as far as is known but similar small bulbous beakers were produced by the Oxford pottery industry and dated to the 4th century (Young 1977, 74, fig 66, C102). It may be significant that at least two of these miniature Oxford vessels from sites in Somerset were found "containing hoards or in association with hoards" (Young 1977, 127), but a funerary association is also indicated at sites in Oxfordshire such as Barrow Hills, Radley (cf Booth 2001, 35). Apart from this vessel the pottery from the area of the shrine (approximately 3.5 kilos in total) consists primarily of equal quantities of reduced coarse wares (almost entirely the North Wiltshire fabric R35) and black-burnished ware. The small size of the assemblage makes qualitative assessment difficult, but the proportions of the ware groups, including the high representation of Oxford colour-coated ware, do not suggest that a large proportion of the assemblage was residual, for example having perhaps been redeposited from elsewhere.

Only stray sherds of pottery came from the area of the late Roman cemetery – there were no vessels associated with the burials.

Figure 6.14 presents a selected group of Phase 4 pottery from Trench 13 pit 1989. A full catalogue of illustrated sherds can be found in Digital section 3.2.

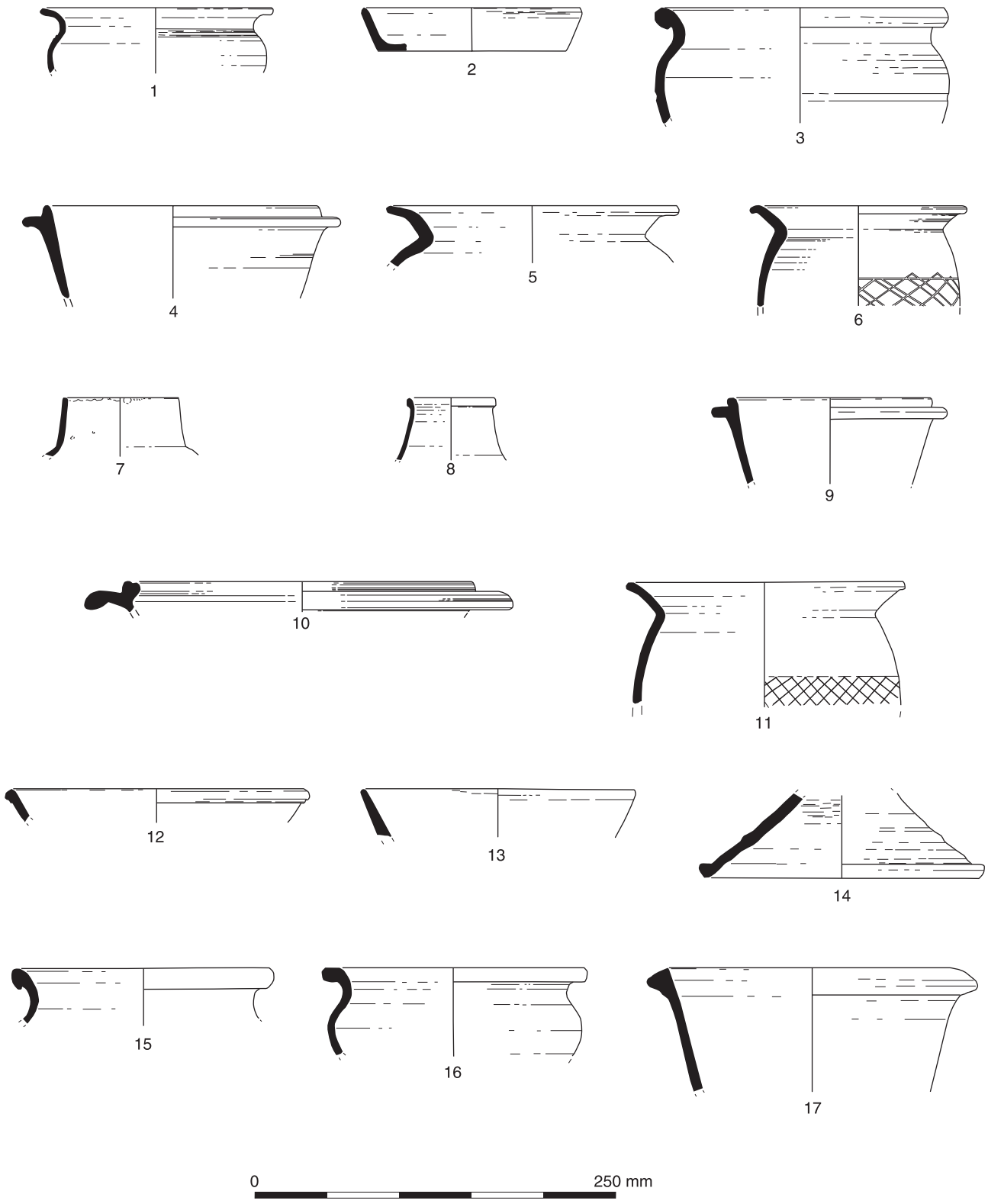


Fig. 6.14 Group 3 pottery from Phase 4a/b Pit 1989

Illustrated catalogue: group 3 pottery from Phase 4a/b pit 1989 (Fig. 6.14)

In stratigraphic sequence:
1. R30, CM (?Young type R38). 1989/A/6
2. B11, JA. 1989/A/6
3. R30, CM (?Young type R38). 1989/A/5
4. B11, JA. 1989/A/5
5. B11, CK. 1989/B/3-4
6. B11, CK. 1989/B/3-4
7. F52, E. 1989/B/3-4
8. F52, E. 1989/B/3-4
9. B11, JA. 19898/B/3-4
10. M22, KD (Young type M22). 1989/A/3
11. B11, CK. 1989/A/2
12. F51, HC (Young type C45). 1989/A/2
13. B11, JA. 1989/A/2
14. R30, L. 1989/A/2
15. C11, CK. 1989/A/1
16. R30, CM (Young type R38). 1989/A/1
17. C11, HB. 1989/A/1

Table 6.3: Late Roman coins from Claydon Pike

Date	*Total no.*	*% from site*
295-317	19	2.6
317-330	21	2.9
330-348	171	23.3
348-360	71	9.7
364-378	157	21.4
378-388	1	0.1
388-402	21	2.9
Illegible 4th century	42	5.7
Total	503	68.8

Coins *by Cathy King*

A total of 104 coins came from definite Phase 4 contexts with a further 32 from Phase 3/4. However, of the total coin assemblage, 68.8% (503 coins) were 4th-century in date, and therefore probably relate to Phase 4 occupation (Table 6.3). The largest single concentration, a total of 248 coins, came from Trench 27 in the area of the circular shrine, although of these only 23% came from stratified contexts (Table 6.4).

As reiterated in Chapter 5, the concentration of the coinage in the later 3rd and 4th centuries was within the periods of peak coin loss established by Reece (1991; 1993) and others for Britain as a whole, and is compatible with the rural nature of the settle-

Table 6.4: Coins from Trench 27 – the late Roman shrine

		Genuine		*Imitations*		*Total*	
		no.	*%*	*no.*	*%*	*no.*	*%*
Roman republic		-	-	-	-	-	-
1st century		1	100	-	-	1	0.4
2nd century		2	100	-	-	2	0.8
1st / 2nd century to 193		4	100	-	-	4	1.6
193-253		-	-	1	100	1	0.4
253-296		6	60	4	40	10	4
	Central empire	3	100	-	-		
	Gallic empire	3	42.8	4	57.1		
	British empire	-	-	-	-		
	Illegible	-	-	-	-		
295-317		3	100	-	-	3	1.2
317-330		3	100	-	-	3	1.2
330-348		43	91.5	4	8.5	47	18.9
	330-335	19	86.4	3	13.6		
	335-341	5	100	-	-		
	341-348	17	94.4	1	5.6		
	Illegible	2	100	-	-		
348-360		1	31.4	24	68.6	35	14.1
	Central empire	8	26.7	22	73.3		
	Mag. and Dec.	2	50	2	50		
	Illegible	1	100	-	-		
364-378		108	100	-	-	108	43.5
378-388		-	-	-	-	-	-
388-402		10	100	-	-	10	4
Illegible 4th century		19	100	-	-	19	7.7
Illegible 3rd / 4th century		5	100	-	-	5	2
Totals		215	86.7	33	13.3	248	99.8

ment and the presence of the villa and the shrine. Although the number of coins found in the shrine datable to AD 260-96 is low (10 coins, 4%) the major periods in the 4th century are better represented: AD 330-48, 18.9% (47 coins); AD 348-60, 14.1% (85 coins); AD 364-78, 43.5% (108 coins), AD 388-402, 4% (10 coins). (Table 6.4) Thus 210 coins (84.6%) out of the total of 248 pieces belong in these years of which 200 (80.6%) were minted between AD 330 and AD 402. The number of coins from the shrine that can be dated to AD 364 to AD 378 is unusually high at 43%. The possible shrine at Lowbury also had an exceptionally high proportion (33.5%) of coins from the years AD 364-78 (Davies 1985, 1-13). By comparison the mausoleum from the Bancroft Villa site (Williams and Zeepvat 1994) had 22.5% of coins from this period which is paralleled by the 25% from the temple at Nettleton (Wedlake 1982). Both totals are significantly lower than that at Claydon Pike.

The possibility that the coins from the shrine contain a dispersed hoard of coins largely composed of pieces minted between AD 364 and AD 378 must be considered since it might explain the abnormally high number of coins from this period. All of the coins datable between AD 364 and AD 378 occurred within a five-metre radius and most were clustered in a corner of the shrine. This evidence seems to support the supposition that the pattern of coin loss within the shrine may have been distorted by the intrusion of a hoard. However, 4th-century temples and villas do tend to have high numbers of coins from the 4th century AD, which can peak in the years AD 364 to 378, and therefore this may argue against the coins in the Claydon Pike shrine being a hoard.

Metal and glass small finds (Figs 6.15-19; Table 6.5)
by Hilary Cool

The later 3rd- and 4th-century material from Claydon Pike is quite widely distributed across the main excavated area, even in areas such as Trench 17 where it is not believed there was any formal Phase 4 occupation. Later 4th- or early 5th-century activity is clearly indicated in Trenches 5, 13 and 19 but it should be noted that it only takes the form of a handful of items of personal ornament (notably glass beads) and so the degree of activity or occupation is unknown, and it might just reflect casual loss.

If the building material is excluded, and if allowance is made for the smaller number of contexts belonging to Phase 4, this final Roman phase can be seen as the most productive in terms of the density of finds. In Phase 3, finds occur within 533 contexts at a ratio of 0.6 finds per context. In Phase 4 there are 206 finds-producing contexts, and a ratio of 1.1 finds per context. Again Trench 13 provides the greatest range of finds categories, and again the character of the occupation is decidedly domestic with the tool category still dominated by knives and blade fragments (see Fig. 6.17, nos 29-31). As would be expected of a late Roman context, bracelets dominate the items of personal ornament (Table 6.6), and are quite unusual in that nearly all of the decorated examples are of a single style (dotted), which might hint at a preferred design by a local workshop (Fig 6.15). The hairpins of late Roman form were all of bone (Fig. 6.16), unlike the earlier metal examples, which may suggest that the women at Claydon Pike during Phase 4 had less resources available to spend on their jewellery.

An interesting feature of the Phase 4 finds assemblage is that the inhabitants appeared to exhibit a much greater concern for security than they had in Phase 3 (Fig. 6.18). This is shown by the much higher number of tumbler and lever locks and padlocks from this phase, whereas the low level security latch-lifter was more a feature of Phase 3. A final item worth mentioning is the single copper

Table 6.5: Distribution of small finds by trench from Phase 4 contexts (excluding building material, miscellaneous items and residual material)

	Trench					
Function	*13*	*19*	*27*	*29*	*30*	*Total*
Personal	31	6	-	2	22	61
Tools	6	1	1	1	-	9
Fasteners	16	3	1	-	-	20
Transport	2	1	-	-	-	3
Household	5	-	-	-	-	5
Textile	1	-	-	-	-	1
Toilet	1	-	-	-	-	1
Weighing	1	-	-	-	-	1
Agriculture	1	-	-	-	-	1
Bone working	1	-	-	-	-	1
Metal working	1	-	-	-	-	1
Total	35	11	2	3	22	73

Table 6.6: Personal ornaments and clothes accessories from Phase 4

Simple Name	*No.*
Brooch	9*
Bracelet	12
Finger ring	1
Necklace	-
Bead	7
Pendant	-
Hair pin	8
Ear-ring	1
Belt fittings	-
Dress pin	-
Shoe cleat	2
Hobnail	26
Total	66

* Entry includes 1 item whose identification is not secure

alloy miniature axe, which came from the area of the circular shrine, and was undoubtedly related to the religious use of this building (Fig, 6.19, no. 44). A similar axe was found at Somerford Keynes (see Digital section 5.3).

The overall assemblage of vessel glass included a substantial quantity of late Roman material, especially drinking vessels. The most common drinking vessels were hemispherical cups and conical beakers with cracked off rims, which were types in use throughout the 4th century. Other 4th-century vessels include jugs, two Frontinus bottles and an example of the rare hexagonal dolphin-handled bottle. For the 4th century the dominance of drinking cups is normal on all types of sites while the good showing of the closed forms in the shape of jugs and bottles seems characteristic of rural sites (Cool and Baxter 1999, 89). The villa thus has the sort of assemblage that is to be expected. The indented truncated conical bowls indicate vessel use in to second half of the 4th century, but there is no evidence of use at the end of the century.

Figures 6.15-19 present a selected group of small finds either from Phase 4 contexts or else dating to this period. A full illustrated catalogue can be found in Digital section 3.4.

Illustrated catalogue: Bracelets associated with Phase 4 (Fig. 6.15)

1. *2430 SF 2861. Cable twist bracelet.* Copper alloy. C4. Diameter 47 x 33 mm, section 3 mm. Trench 19
2. *2851 SF 3037. Torc-twisted bracelet.* Copper alloy. C3-C4. Present length 44 mm, section 3.5 x 1.5 mm. Trench 29, Phase 3
3. *U/S SF 3041. Light Bangle.* Copper alloy. C4. Diameter *c* 62 mm, section 3 x 1.5 mm
4. *1234 SF 889. Light bangle.* Copper alloy. C4. Present diameter 64 mm, section 3 x 1 mm. Trench 13
5. *687 SF 415. Light bangle.* Copper alloy. C4. Diameter 52 mm, section 3 x 1.5 mm. Trench 13, Phase 3
6. *U/S SF 1283. Light bangle.* Copper alloy. C4. Present length 61 mm, section 4 x 1 mm. Trench 27
7. *668 SF 1957. Bracelet.* Copper alloy. See (Swift 2000, 163). In Britain the form has a SW bias. Present length 25 mm, section 13 x 1 mm. Trench 17, Phase 3/4
8. *2407 SF 2131. Bracelet bead.* Jet. Section 22 x 10 mm, length 9.5 mm. Trench 19, Phase 4
9. *2408 SF 1820. Bracelet.* Jet. Band of elongated diamonds carved out on each side. Outer diameter 85 mm, *c* 28% of circumference present; section 15.5 x 6 mm. Trench 19, Phase 3/4

Other ornamentation associated with Phase 4 (Fig. 6.16)

10. *797 SF 654. Finger ring.* Silver. Pronged bezel finger ring. Cool Group XIX (see also Allason-Jones 1989, type 2a). Diameter 21 x 21 mm, section 1.5 mm. Trench 13
11. *U/S SF 2627. Finger ring.* Copper alloy. Obscured by corrosion products. Diameter 23.5 mm., section 3 x 2 mm
12. *U/S SF 2684. Finger ring.* Copper alloy. Diameter 22 mm
13. *720 SF 972. Bead.* Glass. Disc cylindrical. Opaque green. Diameter 5 mm, Length 3.5 mm, Perforation diameter 3 mm. Trench 13, Phase 4
14. *728 SF 553. Bead.* Glass. Very roughly wound ovoid bead. Translucent blue/green. One end broken. Diameter 7.5 mm, Length 10 mm, Perforation diameter 1.5-2 mm. Trench 13, Phase 4
15. *2401 SF 1803. Bead.* Glass. Long rectangular-sectioned cylindrical. Translucent blue/green. Diameter 5 x 4 mm, Length 18 mm, Perforation diameter 2 mm. Trench 19, Phase 3/4
16. *U/S SF 2473. Bead.* Glass. Segmented. Blue/green appearing opaque. 3 segments. Wound and crimped. Diameter 4 x 3.5 mm, Length 8 mm, Perforation diameter 3 x 1.5 mm
17. *2317 SF 1843. Bead.* Jet. Cylindrical with faint transverse ribbing. In two joining fragments. Length 20 mm, section 3.5 m. Trench 13
18. *577 SF 876. Hairpin.* Bone. Biconical knob head with cordon below. Present length 47 mm, head section 6 mm, shank section 3.5 mm. Trench 13, Phase 2
19. *2407 SF 1996. Hairpin.* Bone. Oval-sectioned knob head with conical terminal. Present length 49 mm, head section 7.5 x 5 mm, shank section 4.5 x 4 mm. Trench 19, Phase 4
20. *2616 SF 2584. Hairpin.* Bone. Flat-headed knob head. In two joining pieces. Present length 50 mm, head section 7 mm, shank section 3.5 mm. Trench 13
21. *2800 SF 2965. Hairpin.* Bone. Oval knob head with conical knob terminal and cordon below. Present length 46 mm, head diameter 9 mm, shank section 4 mm. Trench 29, Phase 3/4
22. *1919 SF 1205. Earring.* Copper alloy. Diameter *c* 22 mm, section 3 x 1.5 mm. Trench 13, Phase 4

Household, weighing, transport and tools associated with Phase 4 (Fig. 6.17)

23. *1764 SF 1046. Veneer.* Bone. Asymmetrical diamond-shape; unfinished back. Length 32.5 mm, width 14 mm, thickness 5 mm, Trench 13, Phase 3/4
24. *1909 SF 1191. Veneer.* Bone. Square block with unfinished back; 5 ring-and-dots on front face Dimensions 20.5 x 19 mm, thickness 6 mm. Trench 13. Phase 4
25. *693 SF 462. Plumb bob.* Iron. Length 50 mm. Trench 13, Phase 4
26. *1766 SF 1047. Bridle fitting.* Bar with broken ring at one end. This would be consistent with being part of a snaffle bit, though the bow appears narrow. Present length 41 mm. Trench 13, Phase 4
27. *2441 SF 2084. Cooper's croze.* Iron. Present length 116 mm, handle section 14.5 mm, bar length 45 mm. Trench 29
28. *2833 SF 3293. Cooper's croze.* Iron. Present length 178 mm, handle section 17.5 x 5 mm, width blade 41 mm. Trench 29, Phase 3/4
29. *693 SF 844. Knife.* Iron. Straight back in same line as tang with loop handle; deep blade edge curved up to tip. Deeper blade than normal. Length 115 mm. Trench 13, Phase 4
30. *667 SF 710. Knife.* Iron. Straight back with blade edge and front of back curving to tip; stepped shoulders; slightly angled tang. Length 112 mm. Trench 17, Phase 3/4
31. *2803 SF 2968. Knife.* Iron. Triangular blade with slightly curved back dropping down from tang to broken tip; straight edge and back. Length 143 mm. Trench 29, Phase 3/4

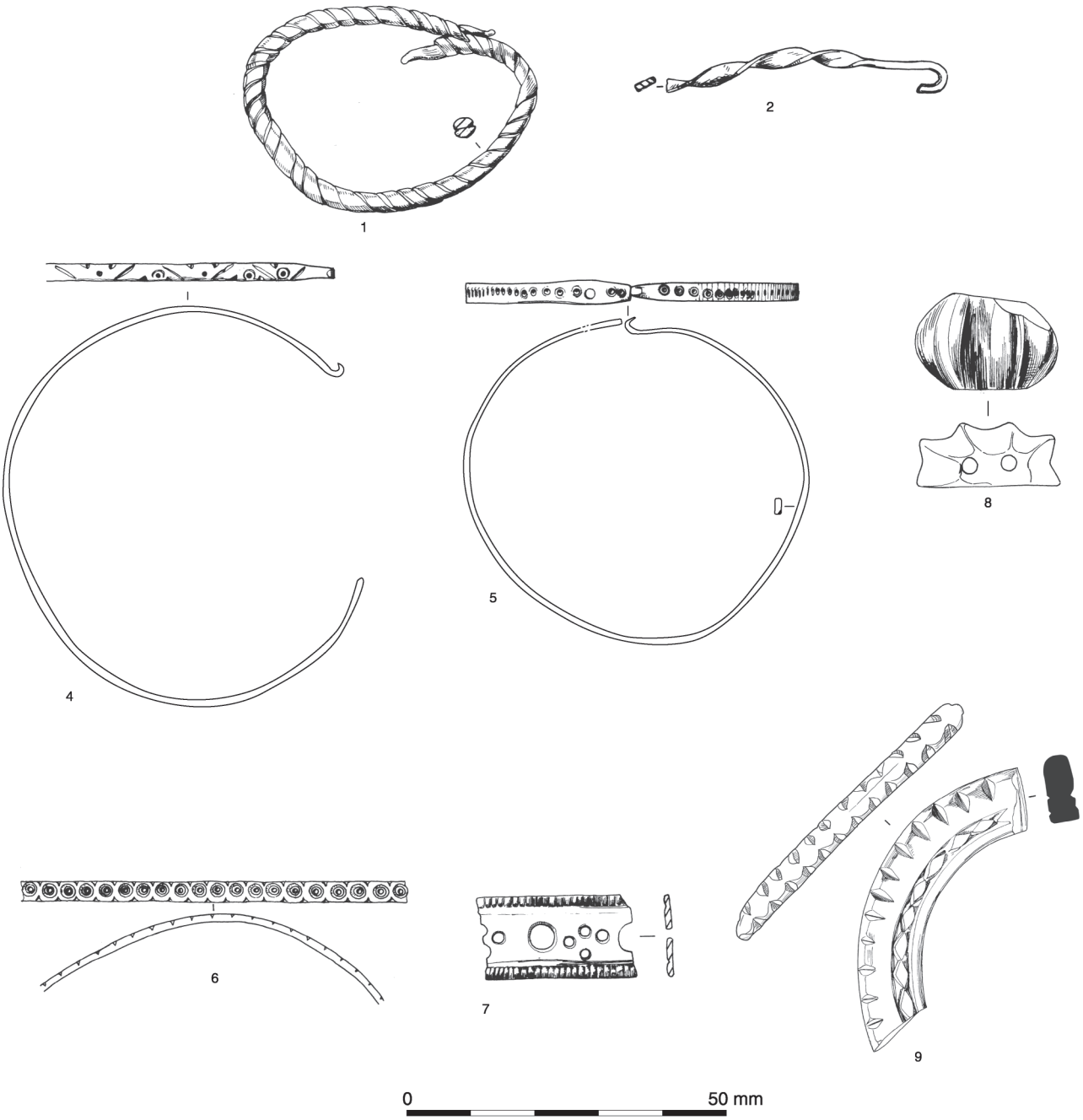


Fig. 6.15 Bracelets associated with Phase 4

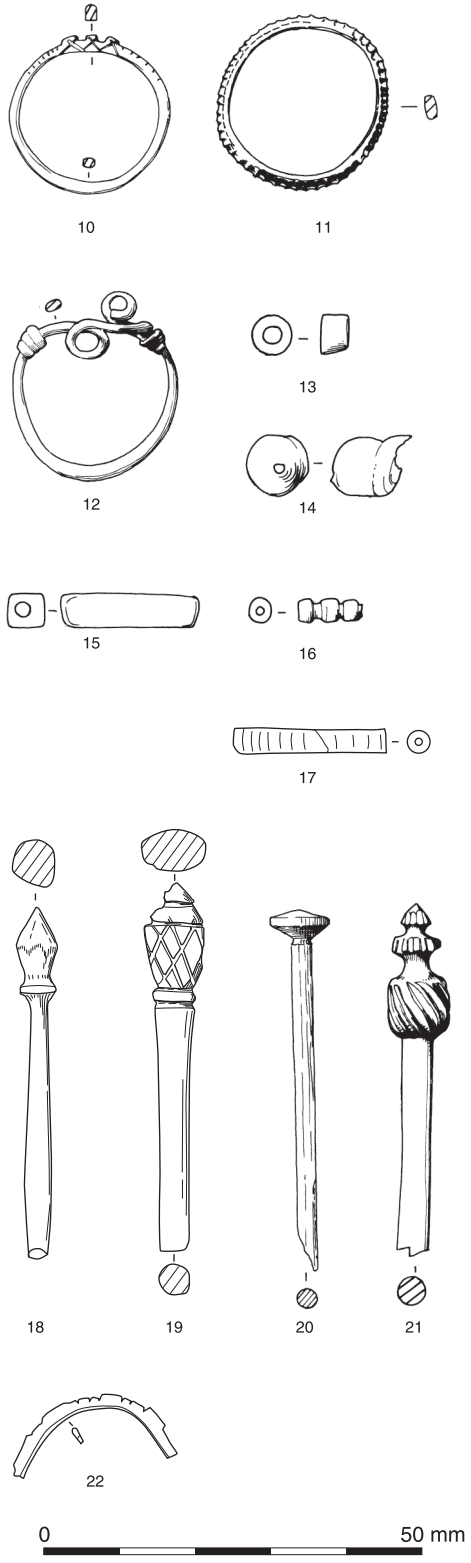


Fig. 6.16 Other ornamentation associated with Phase 4

Security and fittings associated with Phase 4 (Fig. 6.18)

32. *878 SF 1146. Latch-lifter.* Iron. See Manning (1985, 88). Length 331 mm, handle section 16 x 6 mm, lifter section *c* 7 mm. Trench 13, Phase 4
33. *693 SF 827. Slide key.* Iron. This seems to be a hybrid between an L-shaped lift key and a slide key (see Manning 1985, 90-92). Length 105 mm. Trench 13, Phase 4
34. *1577 SF 965. Lever-lock key.* Iron. See Manning (1985, 94). Length 28.5 mm. Trench 13, Phase 4
35. *541 SF 112. L-shaped lift key.* Iron. Length 110 mm. See Manning (1985, 88). Trench 13
36. *504 SF 72. Padlock bolt.* Iron. Length 82 mm. Trench 13
37. *U/S SF 495. Lock bolt.* Copper alloy. Length 36 mm., section 13.5 x 5 mm. Trench 13
38. *2430 SF 2752. L-shaped lift key.* Iron. Manning 1985, 88. Length 176 mm. Trench 19
39. *1577 SF 2796. Mount.* Copper alloy sheet with iron shank and large boss on front obscured by iron corrosion products, consisting of lead alloy judged by X-ray. Possibly a box mount cf examples on a casket used in a mid to late 2nd-century burial at Skeleton Green (Borrill 1981, 305), and composite studs were also used in 4th-century caskets (Crummy 1983, 85, nos 2179-82). Dimensions of plate 68 x 47 mm. Trench 13, Phase 4
40. *693 SF 487. Mount.* Iron. Diameter 36 mm. Trench 13, Phase 4
41. *501 SF 1132. Pendant.* Copper alloy. Diameter of cup 16 x 11 mm, depth 18 mm. Trench 13, Phase 4

Agricultural, military and religious objects associated with Phase 4 (Fig. 6.19)

42. *693 SF 585. Pruning hook.* Iron. Length 350 mm, blade depth 17 mm. Trench 13, Phase 4
43. *687 SF 450. Buckle.* Copper alloy. This would appear to be an example of a Simpson (1976) Group I buckle. Buckles of this sort are rarely found in Britain (see for example Swift 2000, fig 234) though an example was recovered from the Lankhills School cemetery in Winchester (Clarke 1979, 270, fig 34 no 70). Later C4. Length 38 mm, width 17 mm. Trench 13, Phase 3
44. *U/S SF 2814. Miniature axe.* Copper alloy. Upper part of handle square-sectioned, lower circular; one face with grooved decoration. For a discussion of these see Green (1985). Length 32.5 mm, max width 23 mm, handle section 4 mm. Trench 27

Worked stone (Fig. 6.20) *by Fiona Roe*

A total of 18 objects of worked stone came from Phase 4 contexts, not including building stone (Table 6.7). Four definite rotary quern fragments were recovered, three of which were of Upper Old Red Sandstone (ORS) from the Forest of Dean (Fig. 6.20, nos 1-2), the same as most of the Phase 3 examples (see Roe, Chapter 5 for full discussion). All of the three millstones and a quern/millstone were also of Upper ORS. Unlike Phase 3, none of the Phase 4 querns were of Millstone Grit, although a fragments of Niedermendig lava quern/millstone was recovered. The final quern was of Cotswold limestone, which may have

served as a stand-by if supplies of imported quernstone failed to arrive when needed. Only six whetstones/point sharpeners came from Phase 4 contexts, compared to 23 from Phases 3 and 3/4, suggesting that activities such as haymaking were of lesser importance. Four of the six whetstone/sharpeners were of lower ORS from the Forest of Dean (Fig. 6.20, no. 3), probably traded along with the quernstones from this region. The two remaining objects were of Jurassic Sandstone from the Cotswolds.

Other worked stone objects from Phase 4 comprised a well made dish made from a shelly variety of the Great Oolite from the Cotswolds (Fig. 6.20, no. 4), which may have come from around Coln St. Aldwyns in Gloucestershire, along with limestone roofing tiles. Pieces of chalk from two Phase 4 contexts, one of them shaped (SF 3205) are of unknown use, but may have been brought to the site for craftwork.

Illustrated catalogue: Worked stone objects from Phase 4 (Fig. 6.20)

1. 756 SF 592 Segment from rotary quern, upper stone, grinding surface worn smooth round edge, rim pecked into shape, underside uneven; diam *c* 340 mm, max thickness 50 mm, 2.250 kg. Upper Old Red Sandstone quartz conglomerate
2. 700 SF 870 Two fitting segments from rotary quern, lower stone, fully pierced by narrow hole, grinding surface prepared by pecking, coarser pecking on underside and rim; diam *c* 410 mm, max thickness 72 mm, 3.485 kg. Upper Old Red Sandstone quartz conglomerate
3. 693 SF 474 Fragment of roofing tile reused as whetstone and point sharpener with 3 narrow grooves; 95.5 x 57 x 15 mm, 150 g. Lower Old Red Sandstone Brownstones
4. 693 SF 1624 Part of wide, shallow dish with flat rim; diam *c* 360 mm, depth at rim 76.5 mm, 869 g. Jurassic limestone, coarse-grained and shelly

Building materials

Ceramic building materials *by Leigh Allen*

A total of just under 116 kg (27% of total) of ceramic tile came from Phase 4 contexts, 85% of which came from Trench 13, and much of it directly associated with the villa buildings (Table 6.8). Most of the tile fragments (65%) were plain or unidentifiable, with 24% being definite roofing material. The single largest quantity of tile in Phase 4 came from Room 1 of Building 9, within which there is presumed to have been a hypocaust. This material was nearly all plain or unidentifiable and is likely to have derived from the *pilae* of the hypocaust system. A total of 7.6 kg of box tile was recovered from Phase 4 contexts, most of which was obviously redeposited material from the area of Trench 19, with particular concentrations in the top of ditch 2375. This was probably derived from the hypocaust in B 9, which was dismantled when Enclosure 21 was dug, probably in the mid 4th century. The overall quantity of ceramic material does suggest that at least part of the late Roman villa (B 8), and probably the hypocaust building (B 9) had tiled roofs, and most if not all of this tile was probably derived from the earlier Aisled Building (B 1). A total of 25 kg of

Table 6.8: Quantity of tile by type in Phase 4 contexts

Tile type	*Wt (g)*	*% of Phase 4*
Box tiles	7660	6.61
Imbrices	18370	15.84
Large tiles and bricks	5600	4.83
Plain tile	51485	44.40
Tegulae	9250	7.98
Unidentified	23585	20.34
Total	115950	100

Table 6.7: Worked stone from Phase 4 contexts (not including building stone)

	Imported					*Cotswold*			
Identification	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*Total*
Rotary quern	3					1			4
Quern or millstone	1	1							2
Millstone	3								3
Whetstone				2					2
Whetstone/point sharpener				2				1	3
Point sharpener								1	1
Dish							1		1
Fragments					2				2
Total									18

Key:
1. Upper Old Red Sandstone 2. Niedermendig lava 3. Kentish Rag 4. Lower Old Red Sandstone 5. Chalk 6. Cotswold Limestone 7. Shelly Great Oolite Limestone 8. Jurassic Sandstone

stone slate was also recovered from Trench 13 (only complete tiles were retained and recorded), all of which were concentrated in the northern part of B 8, which suggests that the latest extensions of this building may have had a stone slate roof. As only a minimal amount of ceramic roofing tile and no slate was found in Trench 27, the roof of the circular shrine was probably of the conical thatch type well known in such rural contexts.

Mortar and plaster *by Graham Morgan*

A fair amount of mortar and plaster came from Phase 4 contexts, although there was none of the fine painted plaster (Group 1) found in Phase 3 and presumed to have come from the Aisled Building (see Chapter 5). Three samples were recovered of coarse wall plaster, one of which contained white *intonaco*. One of these samples came from the

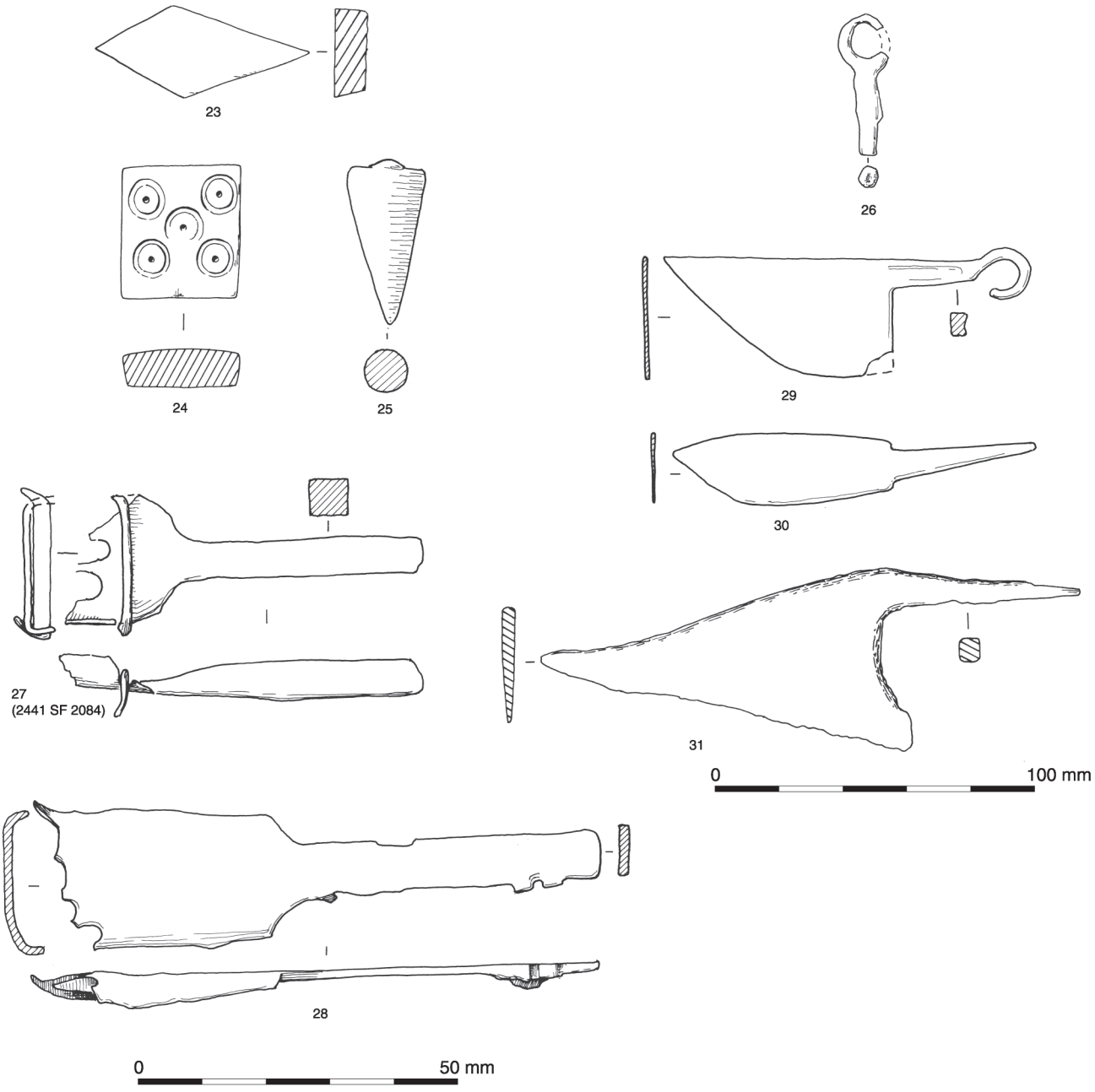


Fig. 6.17 Household, weighing, transport and tools associated with Phase 4

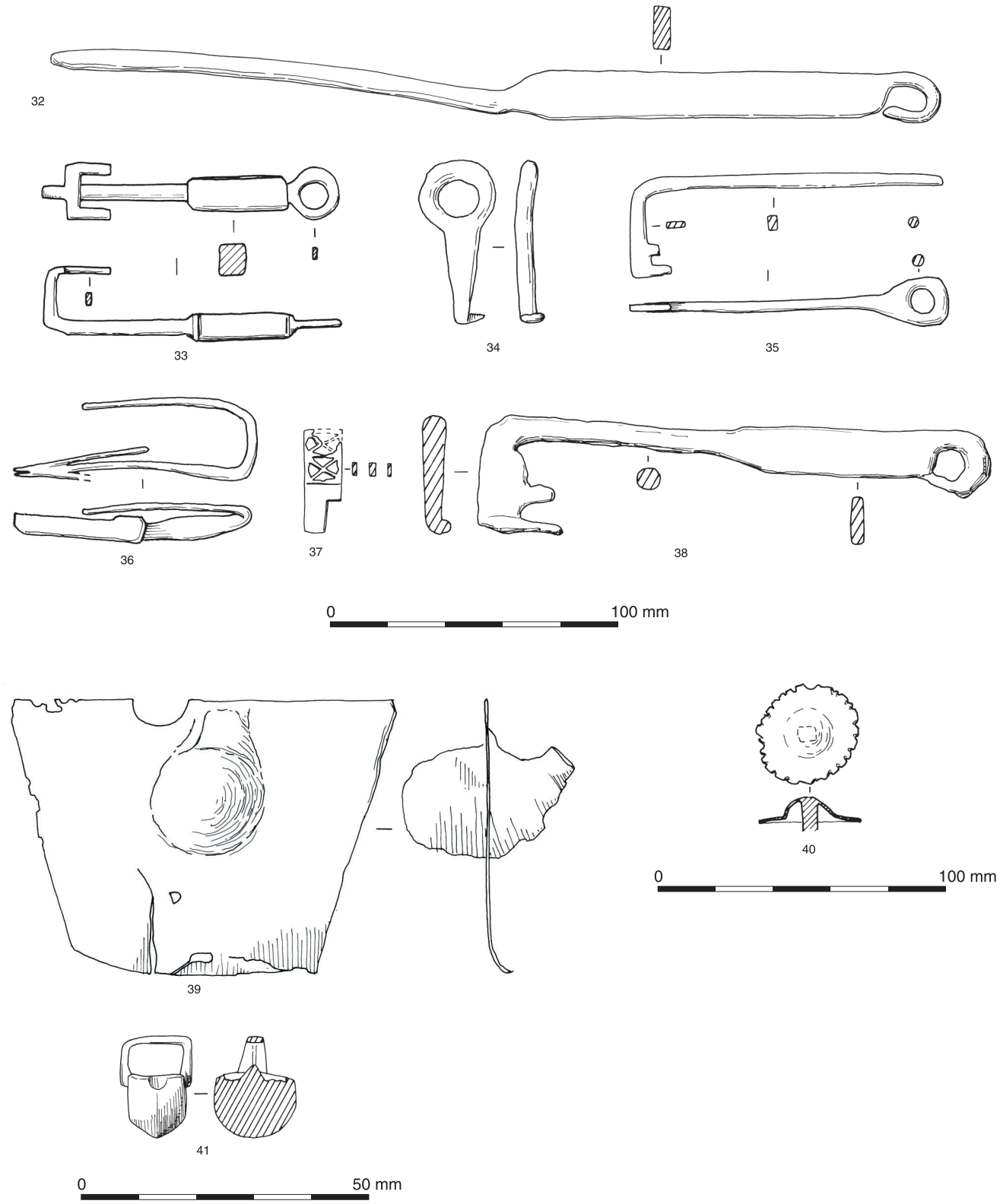


Fig. 6.18 Security and fittings associated with Phase 4

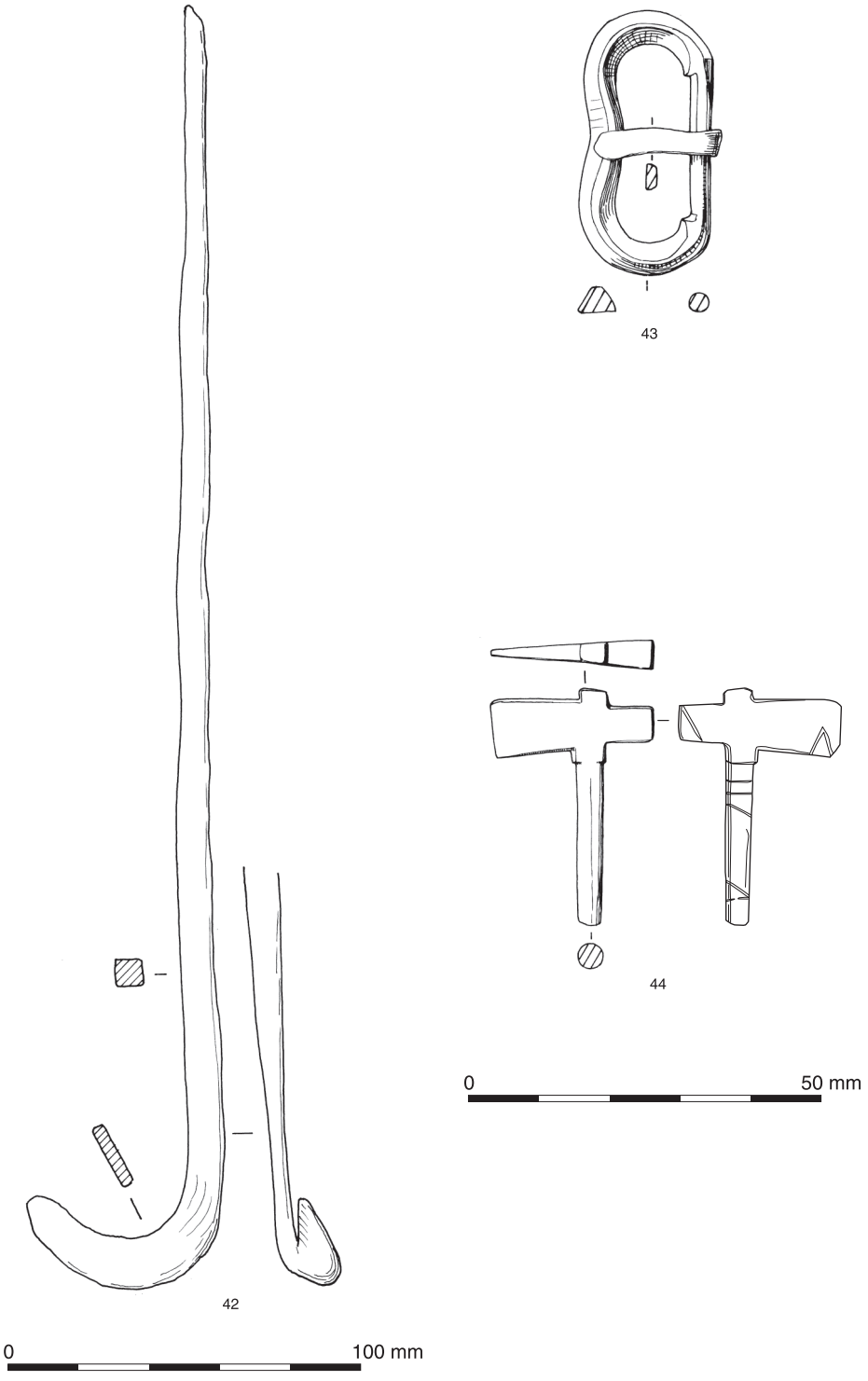


Fig. 6.19 Agricultural, military and religious objects associated with Phase 4

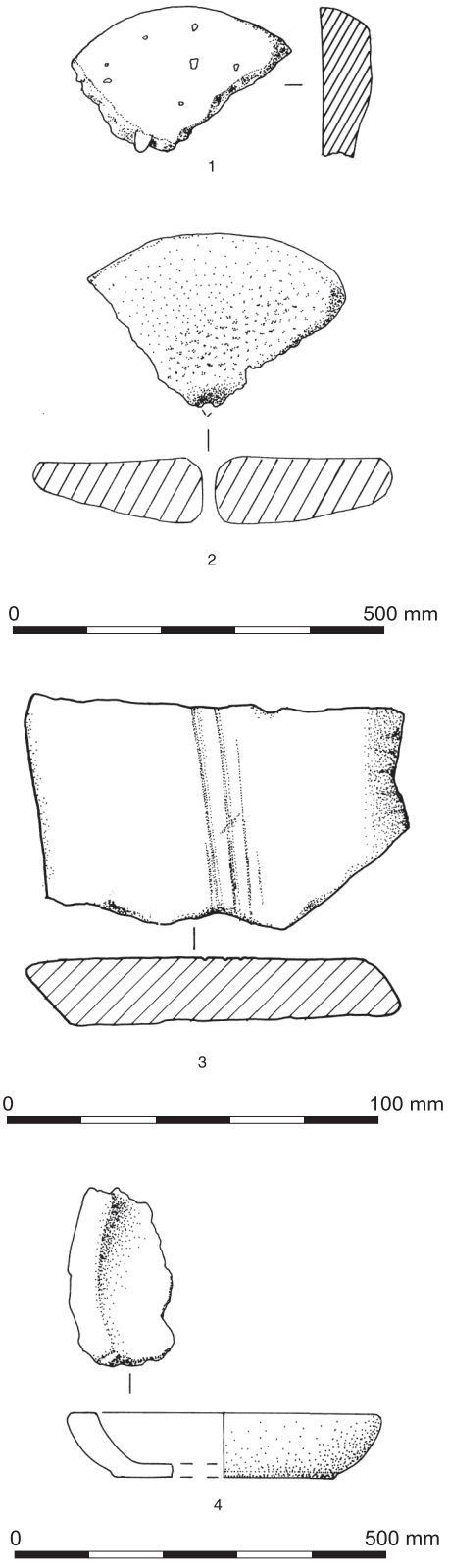


Fig. 6.20 Worked stone objects from Phase 4

hypocaust room in Building 9, along with three samples of *opus signinum.* All of this suggests that Buildings 8 and 9 may have had mortared walls, but that they were of relatively modest appearance. Only a small amount of structural mortar came from the circular shrine.

Building stone (Fig. 6.21) *by Fiona Roe*

Over half of all building stone from the site came from Phase 4 contexts (34 pieces), and this comprised 18 roofing tiles, 8 pieces of architectural stone (including column parts), and 8 samples of building stone. A further eight objects of worked stone came from Phase 3/4 contexts.

Nearly half of the overall quantity of building stone from the site consists of pieces of limestone roofing tile, although there were just a couple of complete examples (eg Fig. 6.21, no. 1). Despite limestone roofing tiles being found in small quantities within Phase 3 contexts (see Chapter 5), by far the greatest concentration was in Phase 4, associated with the late Roman villa. The fragments from earlier contexts may well have been intrusive. Nearly all the fragments that were kept are diagnostic pieces with holes in them, and one of these, found unstratified, still has the iron nail in place (SF 5847). All the stone roofing tiles were made from shelly varieties of the Great Oolite, probably the Forest Marble (Sumbler *et al.* 2000, 68). The shell fragments, lying parallel to one another, would have caused the limestone to divide easily into usable slabs, which however were often relatively thick, so that the roofing tiles were weighty. One not quite complete roofing tile (SF 5831) weighs 3 kg, and another complete hexagonal tile (SF 5842) weighs 2.375 kg. The limestone is variable in character, ranging from a fine-grained variety consisting of many small shell fragments to coarse-grained varieties which may contain large pieces of fossil shell (eg SF 5842). It should have been possible to obtain the full range of tilestone in one quarry. It is not possible to say exactly where this may have been, but such bulky items would not have been transported any further than was necessary. Comparable limestone roofing tiles were quarried in more recent times around Coln St Aldwyns, Gloucestershire (Richardson 1933, 106). Two Roman sites are known here, on either side of the River Coln where it is crossed by Akeman Street (RCHM(E) 1976, 37, 97), and the river could have been used to transport the tilestone towards Claydon Pike. However, the distance involved is not great, amounting to around 7.8 km (4 or 5 miles), so that a journey by country road should have been no great problem.

The architectural stone from the Longdoles Field site at Claydon Pike amounts to parts of four columns (Fig. 6.21, nos 2-4), along with two column bases (Fig. 6.21, nos 5-6). Two of these came from the Phase 3/4 pits with Trench 17, while another three

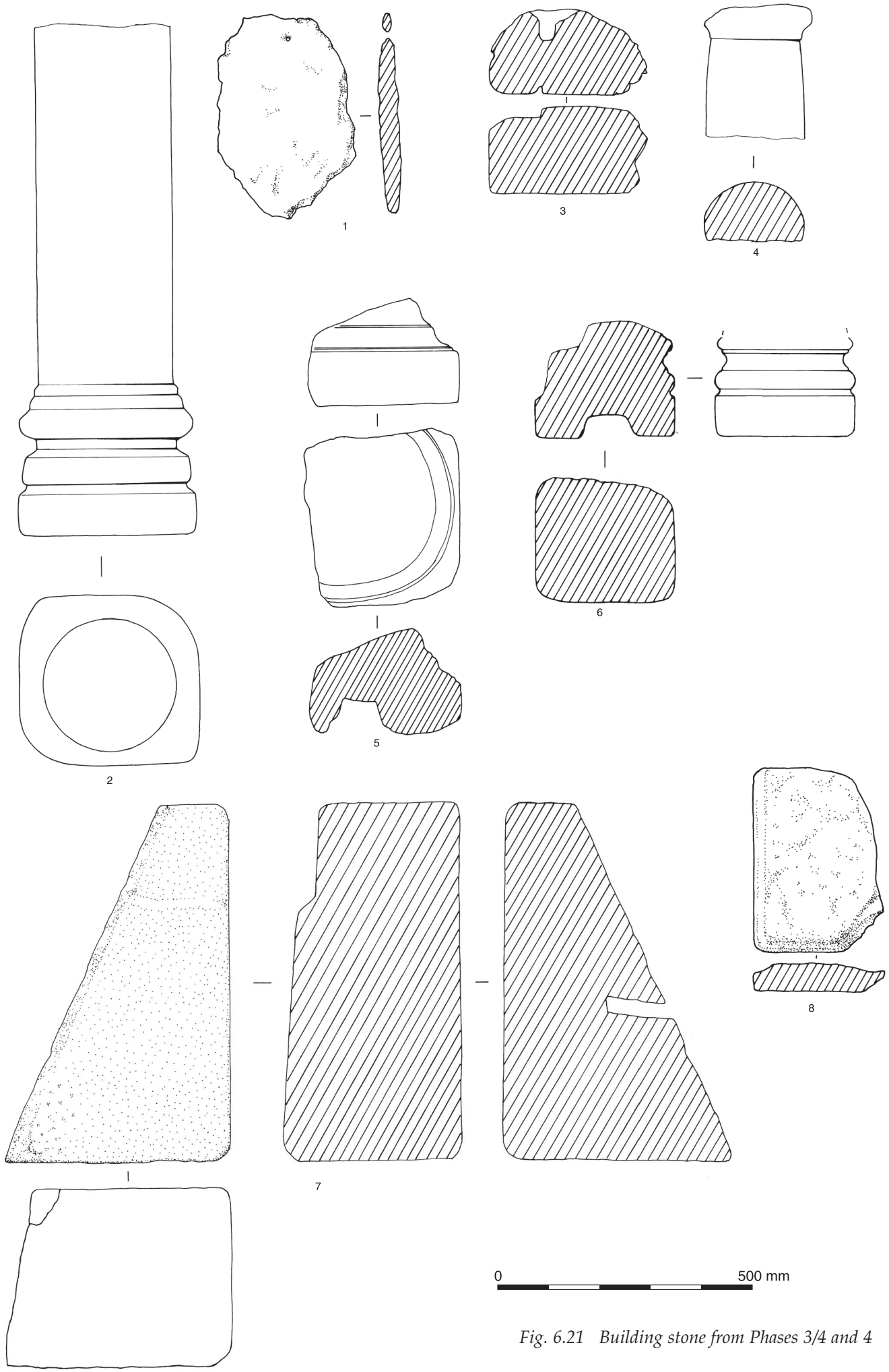


Fig. 6.21 Building stone from Phases 3/4 and 4

came from a Phase 4 rubble layer (2356) in the east of Trench 19. One of the column bases was recovered from the drain to the west of the villa. There are also four pieces of shaped masonry from Phase 3/4 and 4 contexts (Fig. 6.21, nos 7-8), all but one of which came from Trench 13.

A good quality limestone would have been needed for shaping into columns and masonry, and this was available in the Corinium quarries 17.5 km (11 miles) to the west of the site. This limestone has proved difficult to place within the local Jurassic sequence (Richardson 1933, 49), but appears to belong near the top of the White Limestone, or the lower part of the Forest Marble (Sumbler *et al.* 2000, 67). It is both oolitic and shelly, pale coloured when weathered, but a creamy shade when fresh. Some small fragments occurred in four Phase 3 contexts, but the main use of this quarried stone must have been for the Phase 4 villa. Although this villa was modest in size, it was still apparently adorned with columns, and not all plain ones, since some had carefully moulded bases (Fig. 6.21, nos 2 and 6). Two columns could be measured (471, 472) and were found to have diameters of 188 and 200 mm, which fall within the size range suggested by Blagg as suitable for domestic buildings (2002, 189). A column more slender than these two (Fig. 6.21, no. 4) could have been part of a colonnade or veranda, while those slightly larger in size (eg Fig. 6.21, nos 2 and 6) could have belonged to a porch or entranceway. The corridor wall that was built during Phase 4 to join Buildings 8 and 9 seems the most likely candidate for the positioning of a colonnade.

The samples of building stone suggest that anything suitable may have been collected in the general local area and used for the stone structures at the Longdoles Field site, whether for walls of random rubble construction, or for mixed rubble infill. Pieces of Jurassic limestone appear to have been the main component. Some Jurassic sandstone was also used, and this probably came from the Kellaways Beds, which are known to contain sandstone doggers at South Cerney (Torrens 1982, 77). Three fragments of Lower Old Red Sandstone with slight wear traces may have belonged to paving stones. However there was no evidence for paved flooring from the villa, and these pieces from Phase 4 contexts (3555, 3563, 3574) may have been intended to be used for whetting.

Roman building stone was in general selected on very much a local basis, so that wide comparisons with other sites cannot be expected. The vast Roman quarries at Cirencester must have been employed mainly to provide building stone for Corinium. A plain column very similar to one from Claydon Pike (471) was noted from The Avenue, Cirencester (Corinium Museum). Ready made pieces such as this may have been exported from Corinium, and no doubt both the stonework and the transport for them were costly. Although the villa at Claydon Pike was modest in size, money was evidently found for some architectural features that would proclaim the importance of those living there. The villa (or farmstead?) at Barnsley Park is only 7 km (4.4 miles) from Corinium, and yet here they obtained no such domestic adornments. However, pieces of this quarried limestone were also found at the nearby sites of Roughground Farm (Allen *et al.* 1993, 161 and Ashmolean Museum) and Kempsford Multi-Agg Quarry (Digital section 8.4), while at Somerford Keynes some of the same stone had been utilised for carved monumental stone (Chapter 9). At Wanborough too there were two pieces of shaped masonry (Blagg 2001, 153 and Swindon Museum), which could have come from the same source. At none of these other sites were limestone columns recorded, but stone from the Corinium quarries seems to have been available for other purposes, for those willing and able to pay for it.

Limestone roofing tiles comparable to those from Claydon Pike are also limited very much to a local distribution. Further examples were found at Roughground Farm (Allen *et al.* 1993, 161 and Ashmolean Museum) and at Kempsford Multi-Agg Quarry (Digital section 8).

Figure 6.21 presents a selection of building stone from Phase 3/4 and Phase 4 contexts.

Illustrated catalogue: Building stone from Phases 3/4 and 4 (Fig. 6.21)

1. *1558 SF 5840* Complete small hexagonal roofing tile; 310 x 217 x 28 mm, 2.25 kg Great Oolite, shelly and oolitic limestone, Trench 13, Phase 4
2. *713 SF 472* Lower part of column with moulded base; diam of column 260 mm, max diam 350 mm, height now 1000 mm. Oolitic limestone with some shell fragments, probably from the Corinium quarries. Trench 17, Phase 3/4
3. *2356 SF 2015* Part of slender column, not freestanding, weathered, part of large block; column diam *c* 90 mm, thickness now 134 mm, length 237 mm, 5 kg. Shelly and oolitic limestone, weathered to a pale colour, rather coarse-grained, possibly from Corinium quarries. Trench 19, Phase 4
4. *2356 SF 2016* Column. Oolitic and shelly limestone. Trench 19, Phase 4
5. *720 SF 2928* Unevenly shaped slab with central cone-shaped sockets either side, probably column *base*; 272 x 223 x 77 mm, 7 kg. Fairly fine-grained oolitic limestone with scattered shells, probably from Corinium quarries. Trench 13, Phase 4
6. *2356 SF 2014* base of a small column, square base, square socket cut in underside; 225 x 173 x 171 mm, 8 kg. Oolitic and shelly limestone, probably from Corinium quarries. Trench 19, Phase 4
7. *2608 SF 2585* Shaped masonry. Forest Marble. Trench 13, Phase 4
8. *2829 SF 3061* Shaped masonry, slab of stone with straight edges, also chamfered, underside uneven; 304 x 201 x 58 mm, 5.250 kg. Great Oolite. shelly and oolitic limestone, probably from Corinium quarries. Trench 29, Phase 4

Fired Clay *by Alex Smith*

A total of 111 fragments of fired clay came from Phase 4 contexts with a further 91 from Phase 3/4, with most of the latter from the redeposited material within the pit groups in Trenches 19 and 17 (see above). The small number of identifiable fragments from both phases comprised daub and oven fragments, along with two spindlewhorls.

THE ENVIRONMENT

Full environmental reports from this phase of Claydon Pike can be found in Digital section 4.

Human remains (Fig. 6.22) *by Annsofie Witkin*

Eight burials were located within or surrounding two small enclosures adjacent to the northern double boundary ditch of a large enclosure, while another two, skeletons 2744 and 2746, were situated about 20 m east of the main cemetery on the other side of the double ditches (see above; Figs 6.13 and 6.22). The condition of the bones is similar amongst the individuals, with all skeletons being in poor condition. The bones are generally extremely fragmented and the outer surfaces were badly eroded, cracked and chalky. The completeness ranged from fair, with the survival of most major skeletal elements, to almost entirely destroyed. Hands, feet, ribs and vertebrae are generally absent. The pelvic elements are also largely missing. All crania are considerably fragmented and comprised largely vaults. Skeletons 2746 and 2777 are missing skulls. All that survived of skeleton 2746 was small fragments of leg bones. The vast majority of the teeth present were loose.

All the burials were of adults, with the youngest being no older than 18 years and the oldest over 40 years of age. Of the six that could be sexed, four are male and two female (Table 6.9). All but two, skeletons 2746 and 2769, had at least some of the dentition present, and the dental diseases present on some of the teeth would have been generally caused by poor oral hygiene and periods of childhood diseases, weaning and malnutrition. Few pathological lesions were present on the Claydon Pike individuals, which may indicate that this group of people were relatively healthy and suffered from few complaints, either at the time of death or earlier on in their lives. However, the poor preservation and completeness of the remains is the most likely reason for the low rate of pathological lesions.

There does not appear to be any coherent burial practice amongst the Roman inhumation burials at Claydon Pike, and the distinctive features are summarised in Table 6.10. Two of the burials were decapitations (2777 and 2744) (see Discussion below). Aside from skeleton 2777, which was accompanied by hobnailed footwear, none of the graves contained any furnishings. Grave furniture is not commonly associated with decapitated individuals, although this may reflect the general decline of grave goods in the late 4th century. The majority of burials with footwear are found in south central England and are almost exclusively associated with rural villas and other minor settlements (Philpott 1991, 167). Only one of the burials had coffin nails present (skeleton 2768) in the grave, and it was therefore clear that this individual had been buried in a wooden coffin. In this instance there is also evidence for a stone slate lining within the grave. Two other individuals (2770, 2771) may also

Table 6.9: Sex and Age-at-Death of late Roman burials

No.	*Sex*	*Age-at-Death (yrs)*	*Age-at-Death Category*
2744	Unknown	18-24	Young Adult
2746	Unknown	Unknown	Unknown
2767	Male?	Over 40	Mature Adult
2768	Female	Over 18	Adult
2772	Male?	18-24	Young Adult
2769	Male?	31-49	Mature Adult
2770	Unknown	17-18	Young Adult
2771	Female?	35-45	Prime Adult
2776	Male	32-43	Prime Adult
2777	Unknown	Over 40	Mature Adult

Table 6.10: Summary of the burial practices

No.	*Orientation*	*Body position*	*Grave furnishing*	*Burial container*
2767	NW-SE	Supine	None	Coffin
2768	NE-SW	Supine	None	Stone lined and a coffin
2769	NW-SE	Supine	None	None
2770	NE-SW	Prone	None	Coffin
2771	NW-SE	Supine	None	Coffin
2772	NW-SE	Supine	None	None
2776	NW-SE	Decapitated, supine	None	None
2777	NW-SE	Supine	Footwear	None
2744	SE-NW	Decapitated, supine	None	None
2746	SE-NW	Supine	None	None

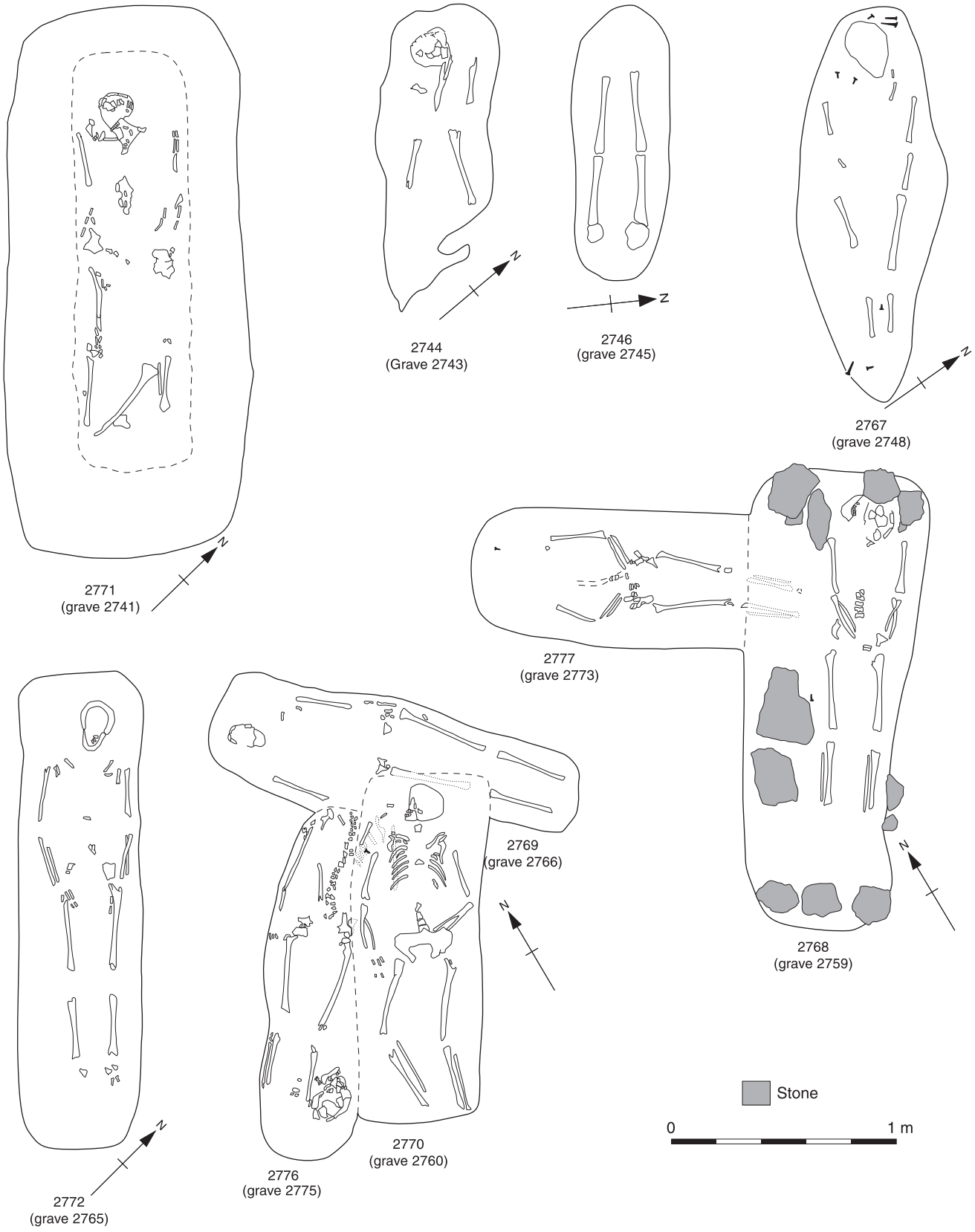


Fig. 6.22 Human remains from the late Roman cemetery

have been buried in wooden coffins, and is it is clear that evidence for the use of coffins was widespread within the region (Booth 2001, 25).

Radiocarbon dating was attempted on a number of skeletons from the cemetery, but unfortunately this produced no results, unlike those burials cutting through the villa (see Bayliss, Chapter 7).

Animal bone *by Naomi Sykes*

Animal bones were recovered from Phase 4 features in five of the seven trenches (Table 6.11). Again, most of the material (10,046 fragments) derived from Trench 13, with smaller quantities coming from Trench 19 (1367) and Trench 29 (400). Both Trench 27 and Trench 30 produced several hundred bone fragments but very few (40 and 24 fragments respectively) were identifiable, thus reducing the significance of these assemblages.

Construction of the villa seems to have had no bearing on patterns of animal exploitation and, in most respects, the Phase 4 material is little different to that from Phase 3: animal size and the relative frequencies of the main domesticates (cattle 50%, caprines 34%, horse 8% and pig 8%) remains almost static, body part patterns are largely unaltered, and ageing data suggest that on-site husbandry continued into the later phase. The only inter-period changes seem to be an intensification of the trends started in the earlier periods. For instance, the assemblage from Trench 13 indicates a continued broadening of the taxa spectrum, with an increase in both the frequency and species range of birds. Cattle and caprine cull-patterns indicate a further rise in the average age of animal slaughter (55% of cattle survived past 2-3 years and 80% of sheep/goat lived beyond 1-2 years), suggesting a sustained concentration on secondary products.

Table 6.11: Composition of the Phase 4 assemblage by trench, according to the NISP (MNI given in parentheses)

Trench	*13*	*19*	*27*	*29*	*30*	*Total*
Cattle	1518 (18)	114 (2)	26 (1)	42 (1)	15 (1)	1715
Sheep/goat	1063 (25)	109 (1)	14 (1)	62 (2)	5 (1)	1253
Pig	241 (7)	34 (1)		5 (1)		280
Horse	259	4		19	4 (1)	286
Donkey	1					1
Dog	22	3				25
Cat	10					10
Red deer	1					1
Roe deer	1					1
Badger		1				1
Fox	1					1
Wild cat	1					1
Field vole	4					4
Water vole	2					2
Mole	2					2
Rodent	2					2
Frog	7					7
Toad	1					1
Domestic fowl	76	4				80
Goose	32					32
Domestic duck	13					13
Duck	2					2
Teal	1					1
Swan	1					1
Crane	3					3
Dunlin	1					1
Snipe	2					2
Pigeon	2					2
Blackbird	1					1
Song thrush	1					1
Green finch	1					1
Magpie	1					1
Unidentifiable mammal	6676	1095	377	272	279	8699
Unidentifiable bird	95	3				98
Total NISP	10046	1367	417	381	303	12514

This, combined with the continued shift towards the maintenance of male cattle (70% of the adult herd were oxen/bulls) suggests that the agricultural economy and rural-urban provisioning systems became more even defined during the later period.

Perhaps the most notable changes are those exhibited by the equid assemblage. Ageing data indicate that, for the first time, foetal animals are represented, providing clear evidence that horses were being raised on-site. A number of sub-adult remains were also recovered, which may suggest that some young animals were slaughtered for their meat, although few remains exhibited butchery marks to support this contention. Indeed, the find of an articulating hind limb, which appears to have been buried without being stripped of flesh, would imply that consumption of horse meat was subject to a cultural prohibition. Simoons (1994) has demonstrated that taboo animals are often incorporated into religious doctorine. On this basis, it seems possible that the hindlimb represents a ritual deposit, especially since similar examples have been found on several contemporary sites (Noddle 1979; Wilson and Allison 1990). Furthermore body-part evidence for the Longdole's Field horses, which shows an over-representation of hind-limb bones, suggests that deposition of back legs may have been common practice.

Anatomical representation data for cattle are also of interest. As in the previous phase, scapulae are over-represented but, in this case, the majority of the shoulder blades came from a single context, pit 1989. Many of the scapulae exhibited butchery marks indicative of meat preservation through smoking or brining. That they were found in such high density within a single context suggests specialist activity and it seems possible that salted beef was produced on the site: certainly salt was being imported into Claydon Pike during this period (Miles and Palmer 1983; see Discussion below).

Charred plant remains *by Vanessa Straker, Martin Jones and Ann Perry*

Seventeen samples were analysed from Phase 4 contexts, which comprised five ditches, two pits, one layer, one oven and one hearth (Table 6.12). Spelt and emmer wheats were still consumed at this time as was barley, but there was no barley chaff or the tough rachis internodes of a free threshing wheat. Bread type wheat may still have been a minor component of the cereal fields but there is certainly no evidence from Claydon Pike to show that it was increasing in importance. Free threshing wheats were the dominant form in the Saxon and later periods, but when and where they came to prominence is still largely unknown.

Plants of damp ground such as sedges and spike-rushes in particular are rather more commonly found in Phases 3D/4A and 4 than elsewhere. These may relate to a variety of sources, and as Robinson (see below) has shown, damp grassland was a major feature of the local environment. However, the association of seeds of plants which are today associated with damp and wet ground with crop and arable weed communities has been noted for a number of Iron Age and Roman sites in the Thames Valley (eg Ashville, Jones 1978, and Barton Court Farm, Jones 1986) as well as being noted among cereals on the continent (Groenman van Waateringe and Pals 1983). It has been suggested (eg Jones 1988) that the frequent finding of the seeds of these types of plants charred with arable weed seeds provides evidence that fields were being cultivated in areas that became increasingly subjected to flooding. This may be the case for the fields of the villa estate, alongside the possibility of other taphonomic routes from neighbouring grassland.

Waterlogged plant and invertebrate remains
by Mark Robinson

Five waterlogged samples were successfully investigated from features within the late Roman (Phase 4) villa enclosure in the Longdoles Field site at Claydon Pike, all of which seem to have held standing water with the usual fauna of small water-beetles. The majority of the remains in the waterlogged deposits seem to have entered them through various natural agencies although a small quantity of agricultural debris was present in some of them. Most of the macroscopic plant remains probably had their origins within the villa enclosure, but pollen and insects came from a larger catchment.

The evidence of the pollen and Coleoptera suggests that grassland continued as a major aspect of the landscape at Claydon Pike into the late Roman period, although it is uncertain whether much of it remained as hay meadow. In large part, the late Roman villa seems to have been concerned with the grazing of domestic animals. Although parts of the floodplain were probably experiencing flooding, there was no evidence from the molluscan samples for flooding extending onto the edge of the villa site during the Roman period. Grazing on the floodplain seems to have been sufficiently well managed not to have resulted in damage to the sward in the wet areas around the edge of the platform. There was no evidence for any arable fields in the vicinity of the site although there were a few waterlogged crop remains from the villa and cultivation would have been possible on top of the gravel islands. It is therefore uncertain to what degree the site was involved in arable agriculture. At one extreme it is possible that crops were imported from elsewhere for consumption at the site. However, it is also possible that the villa estate included some higher ground that was used for arable.

The insect remains suggest two other economic activities which could have taken place at the villa. A total of three heads of worker honey bees (*Apis mellifera*) were identified from samples 502/7 and

Table 6.12 Phase 4 Charred plant taxon presence in x samples (no. of items)

		Phases	*4*	*4B*	*4A/B*	*4C*	*4D*
		No. of samples	*2*	*5*	*1*	*1*	*8*
Crops							
Triticum cf *dicoccum* Schübl.	emmer type	Grain	1 (7)	2 (9)	1 (5)	0	0
Triticum dicoccum	emmer wheat	Glume bases	0	1 (1)	1 (2)	0	0
Triticum cf *spelta* L.	spelt type	Grain	0	1 (4)	1 (1)	1 (1)	
Triticum spelta L.	spelt wheat	Glume bases	0	2 (12)	1 (17)	0	1 (5)
Triticum cf *dicoccum/spelta*	emmer/spelt	Spikelet forks	0	1 (1)	0	0	0
Triticum cf. *Aestivum*	bread wheat type	Grain	1 (1)	1 (1)	0	0	1(2)
Triticum sp.	wheat	Grain	2 (36)	3 (62)	1 (23)	1 (2)	4 (23)
Triticum sp.	wheat	Sprouted grain	0	0	0	0	0
Triticum sp.	hulled wheat	Glume bases	2 (5)	2 (42)	1 (54)	1 (1)	4 (65)
Triticum sp.	hulled wheat	Spikelet forks	0	0	1 (4)	0	0
Triticum/Hordeum sp.	wheat/barley	Grain	1 (5)	4 (38)	0	0	0
Hordeum sp.	barley	Straight grain	0	2 (4)	0	0	0
Hordeum sp.	barley	Twisted grain	0	3 (3)	0	0	0
Hordeum sp.	barley	Indeterminate grain	2 (12)	5 (39)	1 (22)	1 (1)	3 (9)
cf *Avena* sp.	cf oats	Grain	0	0	1 (1	0	0
Avena sp.	oats	Grain	0	2 (2)	0	0	0
Avena/Bromus sp.	oats/brome	Grain	0	0	0	0	1 (1)
Cereal sp.	cereal indet.	Grain	1 (9)	0	1 (23)	0	5 (30)
Cereal sp.	cereal indet.	Rachis fragments	0	0	1 (6)	0	3 (3)
Cereal sp.	cereal indet.	Plumule	1 (1)	0	0	0	0
Wild species		**Habitat range**					
Agrostemma githago L.	corn cockle	Da	0	0	1 (1)	0	0
Chenopodiaceae/ Caryophyllaceae			0	0	0	1 (1)	0
Chenopodiaceae	goosefoot family		0	0	1 92)	0	2 (3)
Chenopodium rubrum L.	red goosefoot	D Da	0	1 (1)	0	0	0
Leguminosae	clover, pea family	V	1 (6)	1 (1)	1 (3)	0	1 (1)
Lathyrus/Pisum	vetch, pea	Da, G C	0	0	1 (1)	0	0
Medicago cf *lupulina* L.	cf black medick	G	0	1 (1)	0	0	0
Trifolium sp.	clover	V	1 (1)	1 (6)	0	0	0
Roseaceae	rose family		1 (1)	0	0	0	0
Fragaria vesca L.	wild strawberry	W S	1 (1)	0	0	0	0
Umbelliferae	parsley family	V	1 (1)	0	0	0	0
Polygonum sp.	bistort	V	0	1 (1)	0	0	0
Fallopia convolvulus (A.) Löve	black bindweed	Da	0	1 (1)	0	0	0
Rumex sp.	sorrel, dock	Da G M S W	0	0	1 (1)	0	1 (1)
Rumex acetosella agg.	sheep's sorrel	Da G	1 (4)	2 (8)	1 (1)	0	0
Lithospermum arvense L.	corn gromwell	Da	0	1 (1)	0	0	0
Euphrasia sp./*Odontites verna*	eyebright, red bartsia	Da G	1 (2)	2 (2)	1 (2)	0	0
Rhinanthus sp.	yellow rattle	G	0	1 (1)	0	0	0
Prunella vulgaris L.	self heal	G	1 (1)	0	0	0	0
Plantago sp.	plantain	Da G	0	0	0	0	1 (1)
Plantago media L.	hoary plantain	G	1 (3)	0	0	0	0
Plantago lanceolata L.	ribwort plantain	Da G	1 (1)	0	0	0	1 (1)
Sherardia arvensis L.	field madder	D Da	1 (1)	1 (1)	0	0	4 (8)
Galium sp.	bedstraw	Da M G S W	1 (1)	2 (3)	0	0	1 (1)
Galium cf. *Palustre* L.	marsh bedstraw	M	1 (5)	0	0	0	0
Anthemis cotula L.	stinking chamomile	Da esp base rich	1 (1)	1 (1)	1 (5)	0	1 (1)
Tripleurospermum maritimum (L.) Koch	scentless mayweed	Da	0	0	1 (2)	0	0
Chrysanthemum leucanthemum L.	ox-eye daisy	D, Da G	1 (2)	0	0	0	0
Cyperaceae	sedge family	A M G	0	2 (5)	0	0	0
Eleocharis sp.	spike rush	A M G	0	1 (1)	0	0	0
Eleocharis palustris/uniglumis	spike-rush	A M G	1 (1)	3 (4)	0	0	0
Eleocharis quinqueflora (F.X.Hartm) Schwartz	few-flowered spike-rush	A M G	0	0	0	0	1 (1)
Carex sp.	sedge	V (mainly wet)	1 (1)	1 (6)	0	0	0
Carex spp.	sedges	V (mainly wet)	1 (1)	3 (38)	1 (9)	0	0
Gramineae	grass family		1 (12)	2 (5)	1 (2)	1 (1)	5 (18)

1989/B. This suggests a nest of honey bees in the vicinity of the site and raises the possibility of beekeeping. Sample 1989/B contained a total of six Elmidae belonging to the species *Elmis aenea, Esolus parallelepipedus* and *Limnius volckmari*. They live in clean flowing water, clinging to stones and aquatic plants. They do not occur in stagnant water, ditches or slowly flowing rivers. At present in the Upper Thames system they are mostly restricted to clean, fast-flowing tributary streams as is, for example, *Esolus parallelepipedus* (Walker 1911, 8). Elmidae were absent from all other waterlogged samples from the site and feature 1989, a rectangular pit cut below the water table, would have provided no more suitable a habitat for them than any of the other features on the site. The other water beetles from sample 1989/B, such as *Helophorus brevipalpis* gp., *Ochthebius* sp. and *Limnebius nitidus*, can live in stagnant water. One of the snails from the sample, however, *Planorbarius corneus*, which was absent from the other samples from the site, is a species of permanent bodies of water which flourishes in ornamental ponds. The Elmidae could have been transported by floodwater, but there was no evidence for flooding and feature 1989 was on a high part of the platform. A more satisfactory explanation is that feature 1989 was a tank used for the temporary live storage of fish, and the Elmidae were accidentally introduced with them. One of the items discovered in pit 1989 was an open wicker-work basket, scoop or fish trap. (Unfortunately this could not be found for re-examination and reporting.) Elmids would certainly crawl onto a fish trap or keep basket, if it were put into one of the small rivers near the site and would not readily let go if it were lifted out of the water. If the trap or basket were brought back and put into the tank, this would provide a ready means for the introduction of the beetles.

As to the immediate environment of the villa in Trench 13, the evidence from the Coleoptera is suggestive of manure heaps and foul vegetable material, along with the presence of timber buildings. There were probably a few ash trees within the villa enclosure or growing along its boundary, and it seems that box hedges or bushes were cultivated on site during this phase. There were seeds from horticultural crops which could have been grown within the villa enclosure. The only tree fruit was *Prunus domestica* cf. ssp. *insititia* (bullace or damson), although there was also a seed from another fruit, *Fragaria vesca* (wild strawberry), which could have been cultivated or grown wild. The herb and vegetable seeds included *Coriandrum sativum* (coriander) and *Apium graveolens* (celery) with *Papaver somniferum* (opium poppy) and *Daucus carota* (carrot) as either cultivars or weeds. There was also a single seed of *Foeniculum vulgare* (fennel). Although there are other records of fennel from Roman Britain (eg Willcox 1977), its seeds are not nearly as frequently found as are, for example, coriander seeds, and this is the first record for the Upper Thames Valley. Overall, the evidence for horticultural crops is what might be expected for a villa.

DISCUSSION *by Alex Smith*

The radical changes in the internal settlement organisation at Claydon Pike during the late 3rd to early 4th century AD (see Chapter 5) culminated in the construction of a modest masonry-footed villa which seems to have been the centre of a small estate operating a more varied agricultural economy. The villa complex underwent many changes during the 4th century, although the chronological parameters are not always that clear and it is difficult to define a date of abandonment with any certainty. An artists' reconstruction of the final main Phase (4 c/d) of this villa is presented in Plate 6.8. Some activity may have continued until the early 5th century, although it is highly likely that the villa building itself would have been in a ruinous state by this point. The finds and environmental evidence indicate both levels of continuity and change from the previous regime at the site but on the whole it is thought unlikely that there was any major disruption of population.

Settlement organisation and development

As with Phase 2, occupation in Phase 4 was more or less confined to Trench 13, which would have afforded most protection from potential flooding. The trackways and field systems may still have been in use (see Fig. 6.1), but there is little evidence for any domestic activity beyond the immediate confines of the villa area.

The villa buildings

Building 7 was replaced after a short period of time by a small masonry-footed building containing six rooms (Fig. 6.5). It lay upon exactly the same alignment as both of the previous two buildings in this area and was clearly the principal – if not the only – domestic residence within the settlement. It is uncertain whether the building's masonry footings and lower wall courses supported a plastered timber superstructure, or else full masonry walls. The lack of deep foundations in certain parts of the structure together with the general scarcity of building stone in the immediate area suggests that the former is more likely, and it has been preferred for the reconstruction as shown in Plate 6.8. The large number of nails, quantity of fired clay and certain Coleoptera (see above) also suggest a timber superstructure. Plastered walls are indicated but were probably only painted with a whitewash, unlike the brightly coloured walls of the earlier aisled building. The roof was most likely made up of a combination of reused roofing tiles, and limestone slate. Due to the modest nature of this building, its definition as a villa could be debated,

although the masonry foundations, plastered walls, multiplicity of rooms and intimate association with the hypocaust room in B 9, does seem enough to place the structure in this category. It would thus belong to the most modest 'cottage' style villas, as defined by Collingwood and Richmond (1969), and with examples at Park Street, Herts (O'Neil 1945) and Alfred's Castle on the Berkshire Downs, Oxon (Gosden and Lock 2003; see Chapter 16). Building 9 to the south lay upon the same alignment and was clearly part of the same household property. Perring (2002, 213) has noted that in several instances, such as the villa at Beadlam (Neal 1996), two adjacent buildings could have functioned as two wings of a single property incorporating different functions, despite the fact that they were not physically connected. The two buildings at Claydon Pike were in fact architecturally unified in the subsequent phase (early/mid 4th century), with what appears to have been a central open courtyard between them (see below).

Ascertaining room function at Claydon Pike is very difficult due to the disturbed and truncated nature of the interior, and additionally it is very likely that at least some of the rooms may have changed function during the course of the building's occupation. The initial villa building is likely to have had its entrance facing south-east, with Room 5/6 acting as an entrance vestibule, connecting the two larger northern and southern rooms and a range of three smaller rooms to the west (Fig. 6.5). The overall finds evidence from the building is certainly enough to indicate general domestic activity, but individual room function remains largely unknown. A possible exception is Room 3 to the south-west which contained a number of quern fragments and so may at some stage have been associated with food preparation. No ovens or hearths could be associated with the use of Building 8, which may in part be due to the disturbed nature of the interior. The interior floor of Room 2 in Building 9 was among the best preserved on site, and this produced a series of stone hearths and pits. There was also a stokehole (2134) leading through the wall towards Room 1 which seems to have contained a hypocaust – one of the few indications of luxurious living within the building complex (Fig. 6.5). The room could have functioned as a winter dining area, as Cosh (2001, 219) has recently stated that '*a heated room was an absolute necessity if the owners were to entertain guests at any time other than the summer*'. However, as he reiterates (2001, 232), such rooms could have had a variety of functions, with Pliny (*Epistulae* 2.17,43) categorising one type of room as either as a large bedroom or small dining room. It also remains possible that at a later date this part of the building may have been used to cure/smoke meat and/or fish products (see Site economy below). The ovens and pits within Room 2 mark this as a probable working area, although it is unsure whether they were original features. Whilst the ceramic assemblage is not very large, it is of quite a different character to that in B 8, with a much higher proportion of jar forms and much lower percentages of bowls and dishes. This could suggest that this area was used in part for storage and food preparation.

Later developments in the villa structure considerably altered the patterns of internal human dynamics. The addition of Room 8 to the south-eastern section of the main building and the continuation of its outer wall down towards B 9 effectively unified the two buildings in an architectural sense, creating what would appear to be an open 'courtyard' between them (Fig. 6.5). A possible gateway and corridor restricted access into this central space, from which there was presumably access into both of the buildings. It is possible that this was connected with a greater need for security and

Plate 6.8 Reconstruction of late Roman villa

privacy, as has been suggested by the small finds (see Cool above). It is uncertain if the main eastern entrance to the building continued in use at this stage, but at some point after the mid 4th century AD (Phase 4c) further rooms were added to the north-east, effectively blocking this area. This structural addition contained the very unusual sunken rooms, the function of which remains unclear (see Pl. 6.2). The southern (1969) chamber was dug well below the Roman water table and therefore must have held a body of water, while the shallower northern feature appears to have been clay lined, and so may also have been designed to hold water. Large quantities of iron nails came from these features and it is possible that there was a wooden floor above them. Their function may have been similar to that suggested for pit 1989 to the north of the building (Fig. 6.4), used for the temporary storage of river fish (see Site economy below).

At around the same time as this extension was added, the southern building was demolished, a well dug through part of the hypocaust room, and an enclosure dug around the whole area (see below). If this had not already happened in Phase 4b, the main entrance into the building is now likely to have moved to the south facing side, with Room 4 probably becoming the new entrance chamber (as shown on reconstruction Plate 6.8). The final structural modification of the villa building (4d) involved the insertion of a substantial drain into Room 2, which necessitated extensive rebuilding work. This may have been due to an increased flood risk during the latter half of the 4th century, although the environmental evidence does not provide any positive evidence for flooding in this area at this time. Alternatively it could relate to activity within the building which involved the use of substantial quantities of water. Either way, it does point to resources still being available for building work at this late date. The final abandonment of the villa building is unknown, although the evidence from coins suggests activity of some kind continued until the very end of the 4th century or the start of the 5th century AD.

The enclosures

At some point after the mid 4th century AD, there was a need to reorganise the settlement with the southern building being demolished and an extensive enclosure system (E 21) being dug around the remaining part of the villa (Fig. 6.4). The ditch was quite substantial in places (up to 1 m deep), with a 2 m wide entrance to the south along the line of the earlier entrance into the Phase 3 complex. Along with the position of the villa building itself, this shows further spatial continuity with the previous settlement. A masonry wall ran north from the villa building to the edge of E 21, clearly dividing the two halves of the enclosure at this point (Fig. 6.4). It is possible that it provided differentiation between public and private space, as was postulated for Phase 3 (see Chapter 5). The ash trees, box hedges, and horticultural crops of the earlier settlement were still in existence, and may have continued to be largely concentrated in the 'private' space to the west of the main domestic residence.

The social significance of enclosure boundaries is well known (see below), and in this case a defensive function is also likely, with the more luxurious aspect of the villa (ie the hypocaust) being removed at its expense. At least two further enclosures were attached to the north-east, possibly used as paddocks for livestock (Fig. 6.4). The finds from the enclosure ditches comprised very mixed material, with most probably deriving from deliberate infilling relating to the final major reorganisation of the site in the latter half of the 4th century. This comprised the creation of a much more substantial enclosure (E 22), encompassing almost three times the area of the earlier boundary, which was supplemented by a faced masonry wall running along its inside edge (see Plate 6.4). Given the scale of the ditch and wall arrangement, it would seem that increased security was clearly a greater consideration at this stage. The environmental evidence suggests that animals were kept in the compound, probably in some numbers (see below), possibly in order to provide increased protection for what would have been an important economic resource.

The shrine

The location, structural form and associated material culture, all strongly suggest that the circular masonry building in Trench 27 was a late Roman shrine (Fig. 6.12, Pl. 6.5). It was probably built in the latter half of the 4th century AD (360-70s?) on a slightly raised area, *c* 70 m east of the late Roman villa. A raised cobbled pathway led from the shrine, not towards the villa site, but away to the north, across a marshy area towards a known Roman road located *c* 100 m distant (Fig. 6.1).

As to the building's superstructure, the small amount of rubble found on site and the level surface of the top of the wall footings may indicate that the walls were probably of timber framing built on top of masonry foundations and wall footings. It is architecturally possible that the building could have had a two storey tower-like structure, but it is more likely to have been single-storey. As only minimal ceramic roofing tile and no slate was found, the roof was probably of the conical thatch type well known in such rural contexts (Perring 2002). Although no definite entrance was located (see above), an easterly orientation is more usual for religious structures in Britain, occurring in over 90% of those structures where an entrance has been located (Smith 2001, 153). The metalled pathway surrounding the exterior of the Claydon Pike shrine also has parallels in the temples at Woodeaton (Goodchild and Kirk 1954, 25) and Frilford (Bradford and Goodchild 1939) in Oxfordshire (see Chapter 16 for general discussion of religious sites

in the Upper Thames Valley). Internally there is no evidence for any cult focus, although a possible hearth in the northern area can be paralleled within a number of temples in Britain (Smith 2001, 152).

The Claydon Pike shrine has a number of parallels within southern Britain, with perhaps the closest in form, character and chronology being at Bancroft in Buckinghamshire, *c* 60 km to the north-east (Williams and Zeepvat 1994). Here, a small (5.7 m internal diameter) masonry-footed circular shrine was located on elevated ground, *c* 300 m north of a villa complex. It was dated to mid – late 4th century, and contained 23 coins, an iron spear tip and a large amount of late 4th-century pottery. Most of this was buried within a large pit within the centre of the shrine, which also included an articulated pig burial (Williams and Zeepvat 1994, 109). Additional circular masonry buildings in central southern Britain with an unequivocally religious function include Brigstock (Greenfield 1963) and Collyweston (Knocker 1965) in Northamptonshire, and Frilford (Bradford and Goodchild 1939) in Oxfordshire. Another possible example lies near to the villa at Chedworth in Gloucestershire (RCHM(E) 1976, 28). Claydon Pike, with an internal diameter of some 6 m, is slightly smaller than this series of buildings with diameters averaging some 10 m. Otherwise, details of both wall and flooring are closely comparable, especially at Brigstock, which also had a large quantity of finds (including many coins) deposited in specific zones on and within the floor surface (Smith 2001, 76).

The relatively small size of the Claydon Pike shrine, as well as its proximity to the villa/farmhouse, marks a close connection to another 'class' of circular masonry building found across central southern Britain, including Redlands Farm, Stanwick, Northants, and Ditchley and Shakenoak in Oxfordshire (Keevill and Booth 1997). Many such examples were located very close to – or were an integral part of – villa sites, and have been assigned a variety of different functions, from domestic to agricultural and industrial (Keevill and Booth 1997, 38). Some have been suggested as household religious structures (eg Darenth, Tring, Petersfield and Stroud: Rodwell 1980), although there are generally very few finds to aid in the interpretation, probably due to the nature of the rituals practised. A well-constructed octagonal building within the villa complex at Bancroft – despite having no directly associated finds – was suggested as a family shrine during the late Roman period (Williams and Zeepvat 1994, 110). It would therefore have been contemporary with the more rustic circular shrine to the north, which was probably of a public nature, patronised by the villa retainers and perhaps the local population. The shrine at Claydon Pike can perhaps be seen as fulfilling a similar 'semi-public' role, an idea strengthened by the presence of a trackway leading across the marsh to the main Roman road, rather than directly to the villa. However, there is no reason to suppose that the villa's occupants – who must surely have been responsible for the shrine's construction – were not also its patrons.

The cemetery *by Annsofie Witkin*

The pattern of the small late Roman cemetery at Claydon Pike, with its discrete cluster of burials within enclosures near to boundary ditches, is quite typical of small rural settlements and villas (Esmonde Cleary 2000), although the intercutting of graves is fairly unusual within the region (Booth 2001, 22; see Chapter 17 for a discussion of burial rites in the wider region). The burials were situated within activity areas demarcated by the field boundaries, suggesting that the disposal of the dead was integrated with other landuses and activities rather than set apart in a separate domain (Esmonde Cleary 2000, 132). The small enclosures indicate that for some of the burials, land was ritually set aside. The physical differentiation of the dead may indeed be a way to control the powerful dead from inflicting harm onto the living. It is likely that the north-south and east-west trackways of Phase 3 continued into Phase 4, and converged at the site of the late Roman villa. The small cemetery is equidistantly situated about 65 m away from the trackways and about 100 m west of the settlement (Fig. 6.1). The chosen location for burial is a clear indication that the cemetery was intended to be seen from the villa as well as from both of the trackways leading to the villa. The location may have been chosen to 'maintain them in the mental map of the inhabitants and passers-by' (Esmonde Cleary 2000, 137).

There does not appear to have been any coherent burial practice amongst the Roman inhumation burials at Claydon Pike, with up to four graves showing evidence for a coffin, one with evidence for hobnail shoes and two decapitations (see above). Such a variety of burial rites appears to have been quite common practice in late Roman cemeteries across the region (Booth 2001, 24). Most decapitation burials have been found in small rural cemeteries associated with farms, villas and minor settlements, with very few located in the larger well-organised urban cemeteries (Booth 2001). Chronologically, decapitation burials date from the 1st to the late 4th century AD, although the rite becomes more common in the 3rd century AD and most examples date to the 4th century. All of the dated Roman decapitation burials from the local region belong to the late Roman period.

Of those skeletons with cut marks present, it is clear the act of decapitation was performed from the front at or after the time of death. Four out of seven decapitation inhumations from Lankhills had cut marks present (Watt 1979, 342). These indicated that the neck was severed between the 3rd and the 4th vertebrae (the middle of the neck). Cut marks were present on the anterior surfaces of these vertebrae on all individuals with minimal bone damage. This

indicates skill and precision on part of the persons performing the severing of the heads. Moreover, the lack of bone damage strongly suggests that the individual was dead prior to the severing of the head. The surgical accuracy would have been extremely difficult to achieve if the individual had been alive (Philpott 1991, 80). Various theories as to the significance of this ritual have been put forward (Philpott 1991), with the most plausible revolving around the Roman and Celtic belief that the head was the seat of the life force and therefore a powerful totem. Through the ritual killing of a dead individual the supernatural life force was shifted to a beneficiary in this world.

The lack of grave furniture at Claydon Pike, aside from hobnails, is in accordance with the situation across most late Roman cemeteries in the region (Booth 2001, 33). Local variations do however occur, with the tradition persisting to the end of the Roman period. When artefacts are present, these have consisted of pottery and glass vessels, coins, equipment, personal ornaments and footwear.

Other zones within the settlement

It is likely that the major trackways into the site continued into the late Roman period (Fig. 6.1). There is no evidence for occupation outside the villa area, although it is possible that some small-scale industrial activity continued in the area of Trench 17, where two late Roman waterholes were found. The two probable corn-drying ovens to the north (1364) and south-east (1537) of the villa discussed in Chapter 5, may also have actually been of Phase 4 date. Activity of some kind continued in Trench 19, although its nature remains uncertain. Many of the finds from ditch 2375 (Fig. 6.2) probably derived from the demolition of the hypocaust building, as they included the highest percentage of box tile fragments on site. The pottery assemblage showed a distinct decline in fine and specialist wares compared to Phase 3, although it did include a high percentage of flagons, possibly also derived from Building 9. There is no positive evidence for continued religious activity in this area, although the late Roman wall (Fig. 6.2) did run along the same alignment as the earlier enclosures.

Economy and material culture

The economic character of the settlement appears to have changed in the late Roman period, and it is quite doubtful whether any of the surrounding grassland was still managed for hay meadows at this time. On the whole, the environmental evidence suggests that the late Roman villa was concerned with the well-managed grazing of domestic animals on the floodplain and 1st terrace, with dung heaps inside the compound indicating that animals were probably kept close to the villa building at certain times of the year. The animal bone assemblage itself appears to have exhibited little change from the Phase 3 settlement, with the exception of an intensification of the earlier trends. These include an increase in the species range, and an increase in the percentage of mature cattle and sheep, suggesting a greater reliance upon secondary products. Of particular note was the concentration of butchered cattle scapulae in pit 1989, which may well indicate the production of cured and/or salted beef on site. Horses were clearly being bred at the settlement, although whether this was for anything other than maintaining the population of working animals is unknown.

There is still little evidence for the growing of arable crops in the immediate vicinity, although such cultivation was certainly possible on top of some of the nearby gravel islands. However, these areas may still have been prone to occasional flooding as the charred grain seeds at Claydon Pike were frequently found in conjunction with specific types of arable weed seeds which suggests this was the case (see Straker *et al.* above). If the two corn-driers at the site belong to this phase, then they may suggest some arable activity on the estate. Horticultural crops such as coriander and celery were clearly still grown, but as with Phase 3, were probably only to serve the culinary needs of the resident population. Other possible economic activities that occurred at the villa complex include bee keeping and fishing, with the large 'tanks' that may well have been associated with the latter implying that this could even have been on a commercial basis. It is possible that at some stage the hypocaust room in B 9 was utilised for the curing of both fish and meat products.

Social structure and identity

The inhabitants of the late Roman villa appear to have presided over a moderately prosperous mixed agricultural estate, although not nearly in the same league as the grand Cotswold villas such as Woodchester, or even nearby Roughground Farm (see Chapter 17). The villa building itself, with its tiled roof and white-washed plastered walls, and the hypocaust in B 9 in particular, all suggest a family group with relatively high social pretensions within the context of the local area. The size of the resident population is difficult to estimate, although it would not appear to have been at the same level as in Phase 3. It has been estimated that the number of inhabitants within a villa may roughly correspond to the number of rooms (Perring 2002, 201), and so in this case a 'nuclear family' group of five to eight may be postulated. Any additional workers that had been attached to the estate – if they existed – may have resided outside of the excavated area.

The drastic structural changes that occurred around the middle of the 4th century AD – with the dismantling of the hypocaust building and enclosure of the villa – suggest that the display of social status was now more closely linked with the need

for greater security. Such an emphasis on higher levels of security has already been shown to be a notable feature of the late Roman finds assemblage (see Cool above). This grows even more apparent with the latest ditch and wall arrangement around the site, the construction of which was a significant undertaking and probably designed not only for defensive purposes, but also to impress those approaching the complex. The construction of a substantial circular shrine to the east may also have been in part a measure to maintain and/or increase social standing in the locality.

It was observed in the Phase 3 settlement (see Chapter 5) that the consumption of food and drink may have been a significant factor in developing social relations within and outside of the community. On the whole the late Roman assemblage of pottery and glassware vessels is quite typical of rural villa sites during this period, and implies that Roman style culinary habits continued. However, there is nothing either in the vessel form or spatial patterning to indicate that specific public acts of consumption may have been regular and/or important social events. As far as personal appearance is concerned, the small finds exhibit quite a typical range for this period, with a preponderance of bracelets that may all have come from a single local source (see Cool above and Chapter 13). This, together with the fact that all of the hair pins were made of bone, may imply that less resources were available for personal adornment than had previously been the case.

Chapter 7:
Saxon and Medieval Activity (Phase 5)

by David Miles, Simon Palmer and Alex Smith

INTRODUCTION

After the villa complex fell into disuse at the end of the 4th or early 5th century AD renewed activity is indicated by a number of finds and features, although many of these were not well dated (Fig. 7.1). A group of burials, radiocarbon dated to the middle-late Saxon period, cut through the eastern walls of Building 8, and two pits (1905, 1906) were dug within Rooms 1 and 7, seemingly at a time when the outer walls were still standing to some degree. Two distinct medieval ceramic phases were identified, dating broadly from the 11th to 15th century. A stone-lined box well (696; see Pl. 6.3) and section of walling (1999) were the only structural features associated with the medieval phase, although the later Roman outer boundary (E 22; Fig. 6.4) was clearly still a visible feature.

THE ARCHAEOLOGICAL SEQUENCE

Middle-late Saxon activity

Burial group

A total of five east-west inhumation burials cut the late Roman villa (800 (Pl. 7.1), 1971, 2105, 2129, 2277), while a further inhumation (702) lay *c* 4 m to the west (Fig. 7.1; see Witkin below). All lay within grave cuts and most were in good condition with the exception of skeleton 2277 which had been extensively disturbed post-mortem, probably as it lay within a shallower cut. The child burial 702 was only represented by parts of the skull, vertebrae, pelvis and femora.

The four adult graves cut through the eastern part of Building 8 in close proximity to each other. All were fully extended supine burials, with the possible exception of 2777 which was too disturbed to be certain (Fig. 7.2). An isolated crouched juvenile burial (800) was cut into the hypocaust room of Building 9 just to the north of late Roman enclosure E 21, and may have had stones deliberately placed around the head (Pl. 7.1, Fig. 7.2). The infant burial was also in an isolated position, cutting Phase 3 cobbled surface 687 to the east. There were no finds associated with any of the burials, although radiocarbon dating on three adult skeletons (2129, 1971, 2105) confirmed a mid to late Saxon date (see below). It is possible that the isolated infant and juvenile burials could be earlier, possibly contemporary with the Phase 4 settlement, and this is especially likely with the former as infant burials are well known on Roman settlements sites (eg Barton Court Farm: Miles 1986, 15).

Pits 1905 and 1906

Cutting through the northern side of Building 8 was a series of pits initially defined by 1905 and 1906 (Fig. 7.1). They cut through the internal wall between Rooms 1 and 7 but otherwise they seemed constrained by the Roman building. The pits were sub-rectangular in plan, measuring between 1 and 2 m across and *c* 0.5 m deep, with a clear stone and silt fill. The pits were clearly inter-cutting but the majority of their initial cuts was into gravel rather than adjacent pit fills. They may have been for gravel extraction; the clean fills do not indicate other functions.

The pits were not fully infilled and a depression was left. This was levelled out by gravel free silt, probably water-deposited, which contained pottery of the 11th-13th century AD. A Saxon coin of Alfred

Plate 7.1 Probable mid Saxon burial 800 looking east

(AD 871-99) was also recovered from this late silting (layer 694). It is of interest to note that several metres to the west a further late Saxon coin (Baldred of Kent, AD 823-24) was recovered in the rubble layer (693) immediately beneath the topsoil. The pits can thus be dated only by a broad range between the destruction of Building 8 (late 4th/5th century) and the late Saxon/early medieval activity on the site. The coins could well have been contemporary with the burials cutting the villa, which would then refine their dating to the 9th century (see Discussion below).

Medieval activity

The medieval activity on the site divides itself spatially and ceramically (see Mellor below) into two distinct phases. The focus of both phases of activity was Trench 13; it is perhaps significant that the late Roman enclosure (E 22) would still have formed a perceptible earthwork during this period (Fig. 6.4). The poor preservation of the southern side of Building 8 is obviously explained by this later activity on the site.

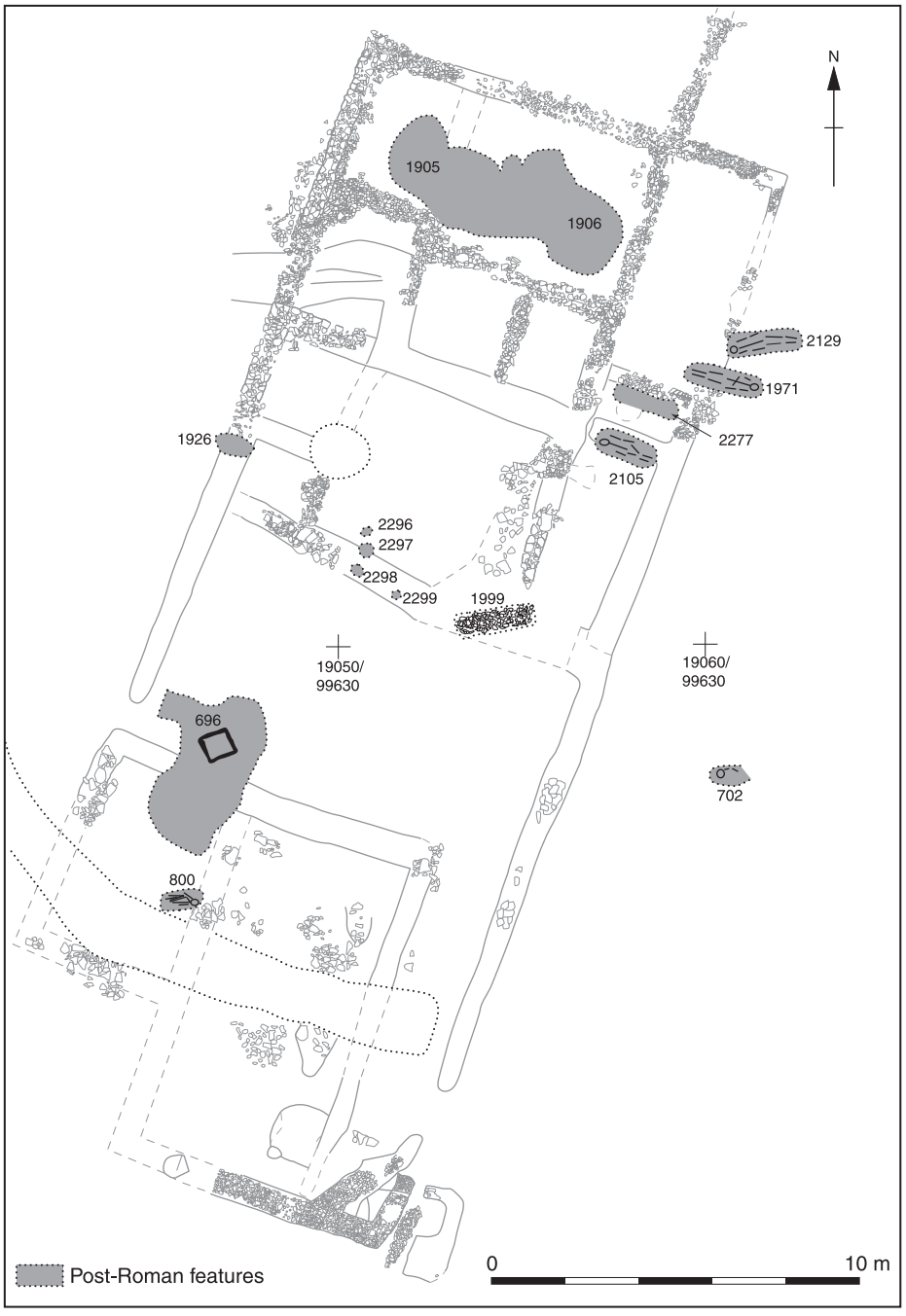


Fig. 7.1 Saxon and medieval features in Trench 13

Phase 1

The earliest phase, comprising several features and a spread of domestic pottery (11th-13th century), was centred over Building 8. The pottery was derived from layer 694 sealing pits 1905 and 1906, the southern part of Building 8 and the area between Building 8 and Building 9 (the later Roman open courtyard; Fig. 7.1).

Three postholes (2296-8) cutting the southern edge of Building 8 contained this earlier medieval pottery, while another posthole (2299) nearby was of similar dimensions and seems to have been contemporary. A small pit (1926), which cut the south-western corner of the robber trench of Building 8, also contained similar pottery. No structures were defined but the pottery was of domestic character, suggesting occupation of a slight nature.

Phase 2

The later medieval phase, dated on ceramic grounds to the 13th-15th century, was also confirmed by two stratified coins dated 1205-15 and 1473-7. Pottery in this phase was more dispersed but still confined to Trench 13. Four distinct sections of the late Roman enclosure ditch (E 22) produced this ceramic material on the west, south and east sides, always from the top layer, associated with alluvial deposits. A 13th-century cut half penny also come from this top ditch layer.

Two distinct features from the central area of Trench 13 can be assigned to this phase. Wall 1999 orientated NE-SW across the south-east corner of Building 8 overlay pottery of the earlier medieval phase (Fig. 7.1). This wall was only fragmentary and overlay collapsed rubble of the earlier villa, along with the layer of dark earth (1929) which lay in between B 8 and B 9. It may well have formed part of a structure. Associated pottery again was of a domestic nature including tableware.

To the south-west of this wall – and constructed on the same axis – was well 696, which cut the later Roman well 697 (Fig. 7.1, Pl. 6.3). This had been constructed by inserting a stone-lined box, 0.6 m², into the bottom of an excavated hollow. A series of steps led down to the 'box' from the north-east. The depth of the well was 1.9 m deep with the box forming the lower 0.7 m of it. The medieval date was confirmed by the recovery of ceramics and a 15th-century coin from the lowest level. The axis of the 'box' was divergent to the late Roman buildings but matched well that of wall 1999. The well contained well-preserved organic material (see Robinson below).

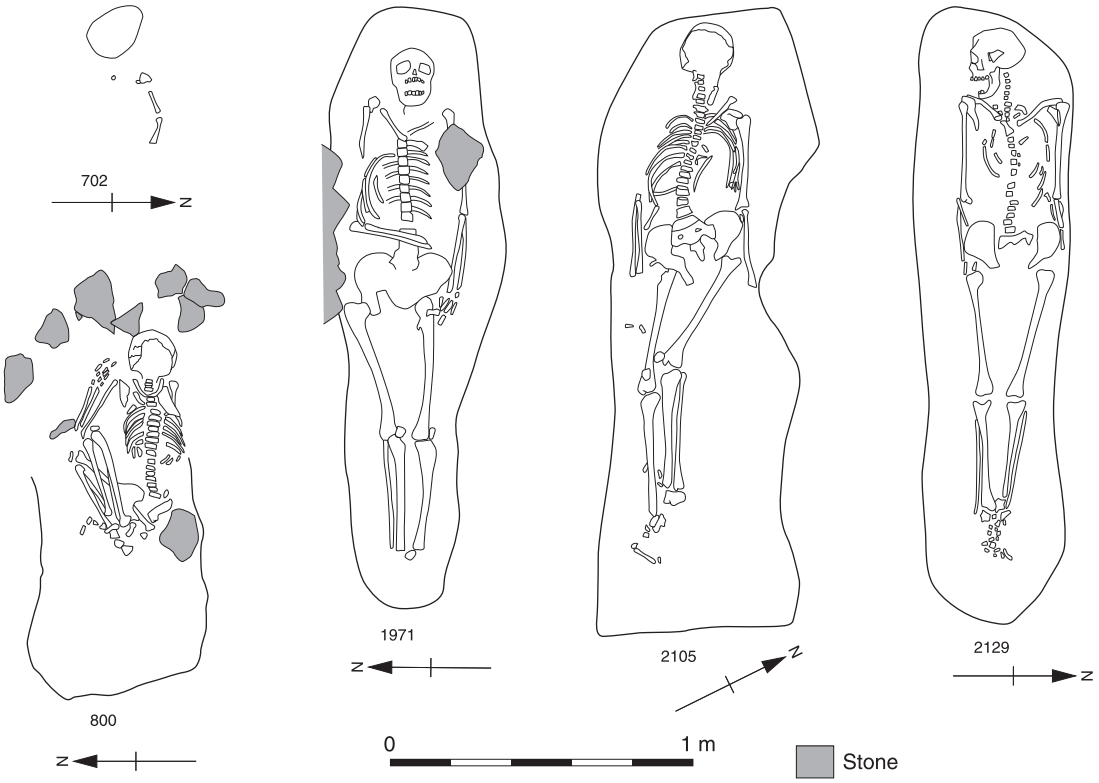


Fig. 7.2 Middle Saxon burial group in Trench 13

THE FINDS

Medieval and later pottery *by Maureen Mellor*

Some 100 medieval sherds were recovered. Four major ceramic traditions were present on the site between the 11th and 15th centuries. The first, a flint- and quartz-tempered ware similar to Oxford *BF*, Group II (Durham 1977, 113-20), supplied mainly cooking or storage pots P694/A/1. It is believed to originate in the vicinity of Newbury where it is a major tradition during the 12th century (Alan Vince pers. comm.). This Newbury ware was in competition with another tradition, a calcareous gravel-tempered ware similar to Oxford Early Medieval ware (Oxford *AC*, Group IB), which was ubiquitous throughout north Oxfordshire from the mid 11th- to the 13th centuries. Vessels from this site included two types of cooking or storage pots, globular types P694/A/1 and P694/A/1 and straight-sided or vertical cooking/storage pots P694/A/1. The pottery workshops for this tradition probably centred on Bladon, some 8 miles (13 km) north-west of Oxford.

The third source to supply domestic wares was Minety, in north-east Wiltshire (Vince 1983; Oxford *BB*, Group IB). These cooking pots often exhibit a poor glaze on the inside of the rim P501/U/1. It is probable that these Minety wares replaced the flint tempered and calcareous gravel-tempered wares in the 13th century.

The final major pottery source was the Brill/Boarstall kilns in central Buckinghamshire, which supplied fine tablewares. These pottery workshops were operating by the second quarter of the 13th century (Lambrick 1985, 177).

Two other sources were present. One, represented by a cooking pot rim and base, can be paralleled at Warminster and Potterne (Alan Vince pers. comm.), while the other, which comprised only a single vessel, may possibly be a London shelly/sandy ware P2366/A/1 (Pearce *et al.* 1985, 37). This may have travelled up the Thames as far as Lechlade in the later 12th/early 13th century.

The four major pottery sources suggest that Claydon Pike may be situated on the periphery of the major ceramic markets. Two operating during the 11th and 12th centuries, situated to the east and south-east of the site, to be replaced in the 13th century by the Minety kilns, lying to the south-west of the site and the Brill/Boarstall kilns to the east.

Small amounts of red earthenware dating from the 17th-19th century were found, some possibly originating from kilns at Ashton Keynes in Gloucestershire. An 18th-century moulded Staffordshire slipware dish was also noted.

Two groups of pottery were considered in more detail. Silting layer 694 sealing pits 1905 and 1906 contained 18 sherds, along with a coin of Alfred (AD 871-99). The pottery from this layer originated from two sources only, Oxford *BF*, Group II and *AC* Group IB. Both of these fabrics are present under the castle mound at Oxford built *c* 1070 AD (Hassall 1976, 233), but continue in use throughout the 12th into the 13th century. They do not occur in early 11th century deposits at Oxford, and while it may be argued that these traditions could begin slightly earlier on the Oxfordshire/Gloucestershire border than in Oxford, a date some 100-150 years earlier would be untenable and the coin must be regarded as residual.

A well (696), with a coin dated 1473-7, contained only two sherds – a fragment of a Minety pitcher (Fabric *BB*, Group IB) with combed decoration and green glaze, and a sherd with applied red strips from a pitcher from the Brill/Boarstall kilns (Fabric *AM*, Group III).

Post-Roman small finds *by Hilary Cool*

A small number of late Saxon and late medieval items were recovered. They consist of an item of harness and dress and belt fittings. As with the evidence provided by the very late 4th-century items, their significance is questionable, although the late Saxon objects are consistent with the revised dates for the small cemetery group cutting through the villa (see below). The few medieval items can be grouped with the pottery as evidence for low level activity at the site during this period.

Medieval glass *by Hilary Cool*

Only a single fragment of vessel glass (607), found unstratified in Trench 13, can possibly be ascribed a medieval date. It is a small blue/green body fragment decorated with opaque red spiral trails. Though the quality of the glass is very similar to that of all the fragments of Roman blue/green glass found, it is unlikely that this fragment is of Roman date as the combination of blue/green ground with opaque red trails would be most unusual for this period. Tentatively it may be suggest that it comes from a vessel of late medieval date when opaque red trails were used to decorate vessels of green glass, seen for example in a spouted jug found in a pit dated to AD 1200-1338 at Southampton (Charleston 1975, fig 221.1489).

THE ENVIRONMENT

The mid-late Saxon inhumations (Figs 7.1-2) *by Annsofie Witkin*

A small group of five inhumations cut through the late Roman villa (B 8 and B 9), while another skeleton (702) lay *c* 4 m further east (Figs 7.1 and 7.2). Three of the burials have been radiocarbon dated to the mid-late Saxon period (see below). In striking contrast to the late Roman inhumations in the western cemetery, these were all in a good state of preservation with slight degenerative changes to the cortical surfaces of the bones. Post-mortem breaks were generally minimal apart from skeleton 2277, which was very fragmented. Completeness

varied from fair to excellent. The children were generally less complete than the adults. Only part of the face and a few hand and foot bones were missing from skeletons 1971 and 2129.

The individuals consisted of four adults and two children (Table 7.1). The age and sex distribution are consistent with a small family burial ground used over a couple of generations. Complete long bones for the calculation of the stature was present from three of the four adults (Table 7.1), and this indicated one male in particular (1971) was especially tall, as the average stature for an Anglo-Saxon male was 1.73 m (Roberts and Manchester 1995, 27).

All of the individuals have dentition present with a variety of dental diseases – caries, ante-mortem tooth loss, enamel hypoplasia, calculus and periodontal disease. The causes of such diseases include trauma, childhood illness, weaning and malnutrition. The occlusal surfaces of the maxillary incisors on skeletons 1971 and 2129 are also damaged. The slight chipping on the occlusal margins is likely to have resulted from the use of the teeth in craft activities rather than being related to diet.

All pathological lesions observed are present on the adults only. Though there are only four adults in this group, there is a marked difference in the amount of lesions present when compared to the late Roman assemblage (see Witkin, Chapter 6). This is however not likely to be an indication of these people being in a generally poorer health but is likely to be an indication of the markedly better preservation and completeness amongst the Saxon skeletal remains.

Skeleton 2277, a young adult female, has pitting present on the orbital roofs (cribra orbitalia), caused by anaemia. The anaemia is likely to have occurred due to the bodies response to an infectious disease.

An oblique fracture is present on the distal end of the left fibula of skeleton 1971. The fracture was longstanding and completely remodelled. The bone appeared to have been poorly aligned causing the bone to bow medially at the fracture site. The distal articular joint surface of the right tibia may also have been fractured. Unfortunately the bones of the foot are missing but the appearance of the distal end of the tibia suggests that there had been major trauma involving the foot and ankle. The underlying aetiology of the infectious lesions present on the tibiae, fibulae and the bones present from the left foot of individual 1971 is likely to be traumatic in origin. The infectious lesions seen may have been caused by for example, a crush injury to the feet and ankles. This injury may also have caused open wounds, which would have enabled bacteria to enter causing an infection which became chronic. The abnormal grooves from the muscle tendons on the calcaneus indicates that this individual was walking on the outside of the left foot only. This altered gait would have caused him a great deal of pain. Ostoarthritic changes were also present on the distal right joint surface of the tibia, which was secondary to the traumatic injury.

Skeleton 2105, aged over 50, had ostoarthritis of both hip joints. Mild degenerative changes were present throughout the spinal columns of skeletons 1971 and 2129.

Skeleton 2129 had small areas of healed lamellar bone present adjacent to the *linear aspera* on both femora. The lesions were healed. A mixed woven and lamellar bone lesion was present on the distal end of the left fibula indicating that the periostitis was active. Periostitis is an inflammation of the periosteum, a lining of the bones. The healed periostitis on the femora of skeleton 2129 is very minor and was likely to have been caused by minor muscle tears at the attachment sites. The active lesion on the fibula may be due to minor shin trauma since the bone is very close to the surface.

As far as burial practice is concerned, there is no correlation between body orientation and gender, as the general direction of either east-west or west-east is applied to both sexes. It is interesting to note that the immature individuals were buried in a crouched position, away from the group of adults.

The inhumations were not buried with any grave goods, which with the general east-west orientation of the adults strongly suggests that this small family group was Christian.

Radiocarbon dating and stable isotope measurements of the burial group by Alex Bayliss (Fig. 7.3)

Of the nine samples of human bone from Claydon Pike submitted for radiocarbon dating, only three – from those burials cutting the late Roman villa – could be dated at all, and even these were not at

Table 7.1 The burials over the villa building

Skeleton Number	*Sex*	*Age*	*Category*	*Height (m)*	*Date (see Table 7.2)*
702	Unknown	1	Infant	-	-
800	Unknown	11-12	Juvenile	-	-
1971	Male	35-45	Mature adult	1.78	Mid-late Saxon
2105	Male?	Over 50	Ageing adult	1.72	Mid-late Saxon
2129	Female	35-45	Mature adult	1.65	Mid-late Saxon
2277	Female	18-23	Young adult	-	-

high precision. This was due to the very poor condition of the collagen in the bone, which resulted in no collagen being extracted following the demineralization and gelatinization processes. The dates for the three successful samples are given in Table 7.2. All fall into the mid to late Saxon period.

The samples were processed at the Radiocarbon Dating Laboratory, Palaeoecology Centre, University of Belfast. The sample pretreatment procedures used are based on Longin (1971). Radiocarbon content was measured by Liquid Scintillation Counting (McCormac 1992). The results reported here are conventional radiocarbon ages (Stuiver and Polach 1977), which are quoted according to the standard known as the Trondheim convention (Stuiver and Kra 1986). The corresponding calibrated date ranges were obtained by the maximum intercept method (Stuiver and Reimer 1986), using the IntCal04 data set (Reimer *et al*. 2004) and the calibration program OxCal v.3.10 (Bronk Ramsey 1995; 1998; 2001). Figure 7.3 shows the calibration of these results by the probability method (Stuiver and Reimer 1993), again using the IntCal04 data set and OxCal v.3.10.

Stable isotope measurements were also gained on sub-samples of the bones, carried out at the Rafter Radiocarbon Laboratory of the Institute of Geological and Nuclear Sciences, Lower Hutt, New Zealand (Beaven-Athfield *et al.* 2001). These are shown in Table 7.3, and indicate a largely terrestrial diet (Chisholm *et al.* 1982; Schoeninger *et al.* 1983).

Table 7.2 Radiocarbon dates from Claydon Pike

Laboratory code	*Sample*	*Burial*	*$d^{13}C$ (‰)*	*Radiocarbon age BP*	*Calibrated date range (95% confidence)*
UB-4896	FCP A	1971	-19.8	1233±60	cal AD 655-965
UB-4897	FCP B	2105	-20.1	1187±60	cal AD 675-990
UB-4898	FCP C	2129	-19.9	1271±60	cal AD 650-895

Table 7.3 Stable isotope measurements from Claydon Pike

Laboratory code	*Sample*	*Burial*	*%N*	*$d^{15}N$ (‰)*	*%C*	*$d^{13}C$ (‰)*	*C:N ratio*
28153-7	FCP A	1971	12.5	10.0	34.5	-19.5	3.2
28153-8	FCP B	2105	13.8	9.8	39.0	-19.8	3.3
28153-9	FCP C	2129	12.7	8.4	36.0	-19.6	3.3

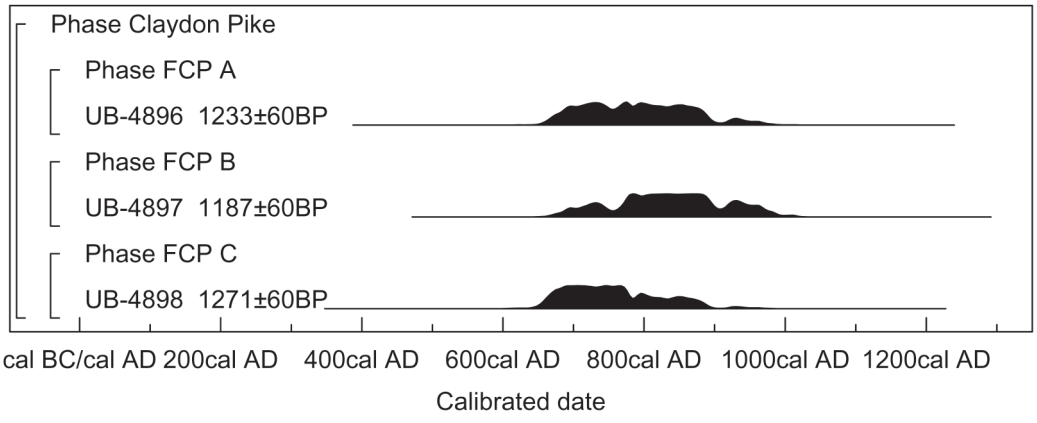


Fig. 7.3 Calibration of Longdoles Field, Claydon Pike, radiocarbon results by the probability method

Waterlogged remains *by Mark Robinson*

Two waterlogged samples were investigated from a medieval (Phase 5) well (696) cut through the late Roman ruins at Longdoles Field (Pl. 6.3, Fig. 7.1), while two samples of medieval alluvium from the top of Roman ditches were also investigated for molluscs. Water plants do not seem to have grown in the well but various small water-beetles, particularly *Helophorus* and *Ochthebius* spp., lived in its waters. Almost all the other plant and invertebrate remains seem to have entered the well through natural agencies. The molluscs from the alluvium comprised both riverine aquatic species which had been transported in floodwaters, and amphibious and terrestrial species which mostly lived on the site.

Pollen analysis (by J Greig) of the medieval well samples revealed rich open grassland floras. The Coleoptera also comprised rich grassland assemblages. Chafers and elaterid beetles which feed on roots in grassland (Species Group 11) had increased in abundance since the late Roman period to 6.9% of the terrestrial Coleoptera. However, the proportion of Scarabaeoid dung beetles (Species Group 2), at 2.3% of the terrestrial Coleoptera, was very low. This suggests that domestic animals were not concentrated in the vicinity of the well and that the grassland was no more than lightly grazed. The clover and vetch-feeding weevils of the genera *Apion* and *Sitona*, which tend to be more prolific in meadowland than pastureland (Species Group 3) were, at 7.8% of the terrestrial Coleoptera, rather abundant.

The macroscopic plant remains were almost entirely from grassland plants with a strong hay meadow element. However, the remains were not cut hay which had been brought to the site, they had mostly probably blown into the deposit from the surrounding vegetation. There were so few seeds from non-grassland plants that the well seems to have been set in an expanse of species-rich meadowland. Seeds of the hay meadow plants *Rhinanthus* sp., *Leucanthemum vulgare* and *Centaurea* cf. *nigra* were conspicuously present.

Much of the medieval meadowland at Claydon Pike would have experienced seasonal inundation. The upper fill of the Roman features around the edge of the platforms was silty clay alluvium of medieval date, although alluvium was not recorded from the top of the platforms. Late Saxon and early medieval alluviation in the Upper Thames Valley seems to have extended further than Roman alluviation (Robinson and Lambrick 1984). The molluscan assemblages from the alluvium at Claydon Pike were of a sort which is characteristic of floodmeadow rather than pasture (Robinson 1988).

The seeds suggest some variation in the vegetation. Seeds of *Carex* spp. were numerous and there were possibly stands of *Carex* spp. in the wetter parts of the meadowland. The thin dry soil over the Roman ruins perhaps supported *Daucus carota* and *Crepis capillaris*. Curiously, there was a single seed of *Centaurea cyanus*, a weed that is closely tied to arable agriculture, although there is no other evidence for this in the vicinity of the site.

The insects do not add much information on the composition of the grassland, although they comprised a very full meadowland fauna. There were numerous cicadellids from the genus *Aphrodes* which feed on grasses and chrysomelids from the genus *Longitarsus* which feed on meadowland herbs. There were also various beetles which tend to congregate on meadowland flowers such as *Cantharis rustica*, *Rhagonycha fulva* and *Oedemera lurida*. The carabids from the samples included many specimens of *Pterostichus madidus*, showing that by the medieval period this species had become very well established in the region.

Tree pollen was very sparse, comprising 0.8% of the total identified pollen. Wood and tree-dependent Coleoptera (Species Group 4) were absent, indicating that the medieval landscape was very open. The trees or woodland that were giving values of just under 10% for tree pollen from the 1st century AD to the late Roman period had been lost. There was only a slight presence of shrub pollen and a couple of seeds of *Sambucus nigra* from the samples. Any scrub or hedges seem to have been a minor or distant feature of the landscape.

Woodworm beetles (Species Group 10) were absent and the low values for the other groups of beetles associated with various sorts of accumulated organic material (Species Group 7-9) are consistent with the absence of any medieval settlement on the site. The values for these groups are no more than would be expected for grassland. However, the occurrence of a couple of individuals of *Typha stercorea* might hint at a small accumulation of old hay.

Overall, little remains to be said about site activities and the use of the site because the medieval evidence is for a block of meadowland rather than an occupation site surrounded by a somewhat varied landscape. Hay meadow does seem, on the basis of documentary and molluscan evidence, to have been one of the major uses of the floodplain of the Upper Thames Valley during the medieval period (Robinson 1988).

DISCUSSION *by Alex Smith*

Saxon graves

Prior to the recent radiocarbon dating of the skeletons cutting through the villa building, the burials were presumed to be of 'sub-Roman' date (5th to 6th century AD). However, the mid to late Saxon chronology provided by the radiocarbon dates (see above) places them within an increasing body of evidence for apparently isolated burial groups belonging to this period within the region (Blair 1994, 72). The three radiocarbon dates are not particularly precise, ranging from the late 7th to the 10th-early 11th century, although the calibrated dates

suggest that at least two burials, 1971 and 2105, probably belong to the 9th century (Fig. 7.3). Burial 2129 may have been slightly earlier, perhaps 8th century, although it is likely to belong to same general family group. The infant and juvenile burials are less certain, with the former at least possibly belonging to the later Roman period. The crouched juvenile burial may have been contemporary with the middle-late Saxon graves, but seems to have been deliberately isolated from them and disposed of in a different manner (see below).

Approximate parallels for the Claydon Pike burials may be found across the Upper Thames Valley region, and have been commented upon by Blair (1994). At Yarnton a small group of seven 9th-century burials were located *c* 100 m to the west of a middle Saxon settlement (Hey, 2004). The bodies, which were all adults, were laid out in an extended position with their heads to the west, and were presumably Christian (Hey 2004). Calibrated radiocarbon dates for two of the skeletons placed them in the 9th century, while one of group of sub-adult (6-8 years) burials within the nearby settlement also produced a date of this range. The apparent segregation of adult from juvenile burials at Yarnton in this period may present a parallel to the situation at Claydon Pike. Other cemeteries which have produced radiocarbon dates of this period include Chimney near Bampton (Crawford 1989) and Beacon Hill, Lewknor (Chambers 1976), both in Oxfordshire, while a number of isolated graves containing knives, probably dating from the 7th or early 8th centuries, have also been found across the region (Blair 1994, 72).

Perhaps the most striking parallel to Claydon Pike is the group of east-west inhumations which were aligned upon and partially cutting through Shakenoak Roman villa (Brodribb *et al.* 1972). These were probably slightly earlier than those at Claydon Pike, being 7th- to early 8th-century in date, but do form part of a growing corpus of Anglo-Saxon burials associated with Roman remains, with other examples at Great Tew and Frilford (Blair 1994, 33). A small group of burials overlying Barton Court farm villa were dated to the mid 6th century (Miles 1986, 19), suggesting that the association of Saxon graves and Roman monuments was quite long-lived.

Overall, Blair has suggested that many of the fifty or so undated isolated human burials across Oxfordshire may in fact belong to the 7th to 10th centuries (1994, 72), and the same may be true in Gloucestershire. Prior to the late Saxon period, when burials were formally organised in minster churchyards, it seems to have been the case that small dispersed family cemeteries were the norm, although these were probably still controlled to some extent by the ministers (Blair 1994, 73). The Claydon Pike cemetery is quite likely to have belonged one such family group, who may have chosen the site specifically as it was still clearly defined by the visible late Roman outer ditch, and the lower wall courses of the villa are likely to have still been standing.

There is no evidence for any associated settlement for this burial group, but one must have presumably lain in the vicinity. The cemetery at Butler's Field, 2 km to the east, went out of use in the 7th century, although 6th- to 8th-century pottery was recovered from cropmarks near to the site (Boyle *et al.* 1998, 5). The earliest documentary reference to Fairford is dated to AD 850, when two hides of land were transferred to the Abbess of the Church of Gloucester, and by 1066 it was an established Anglo-Saxon manor with the nobleman Brittric as its lord. There are no known early ministers in the immediate vicinity, although 9th or 10th-century minsters are well known along the Thames Valley, with examples at Bampton, 10 km to the east, Coleshill 6 km to the south-east and Cricklade, 10 km to the west (Blair 1994, fig. 41).

Medieval activity

The medieval activity at Claydon Pike appears to have been of very low intensity. The lower gravel terraces and floodplain surrounding the site appear to have been utilised as hay meadow, as was the case over much of the Upper Thames valley at this time (see Robinson above). The surrounding late Roman enclosure ditch would still have been a pronounced feature, although it appears to have been gradually filling up with alluvium. The late villa building appears to have acted as a focus for the limited activity on site, possibly because it lay at the highest point and was therefore the least susceptible to flooding. The nature of activity in the medieval period is unknown, but it does not appear to have involved any extensive domestic occupation. A structure of some kind was built, although little of this remained except a small section of masonry wall footings lying on the compacted rubble of the earlier building, while a stone-lined box well was inserted just to the south. A small number of postholes of possible 11th-13th- century date may have formed an earlier structure (see above). While the environmental evidence does not indicate the presence of animals in any quantity, it is possible that the site was used for limited quantities of livestock on a seasonal basis, possibly as part of the cycle of hay-making, with the well providing the necessary water source. The region around Claydon Pike certainly appears to have been flourishing in the 13th to 15th centuries, with the nearby towns of Lechlade and Fairford being granted market charters, and Cirencester to the west becoming one of the largest wool markets in England.

There is no evidence for any activity at Claydon Pike beyond the 15th century, with the exception of a few sherds of 17th- to 19th-century pottery.

Chapter 8
Claydon Pike: The Development of a Settlement on the Gravel Terraces

by Alex Smith

INTRODUCTION

The settlements at Claydon Pike have proved to be of fundamental importance in most discussions of the Upper Thames Valley during the Iron Age and Roman periods (eg Hingley 1984, 1988; Miles 1982, 1984; Lambrick 1992; Meadows 1999). These discussions have focused upon aspects such as social structure, settlement form, consumption habits, Romanisation and the nature of change. The current revised and updated analysis of the two sites has suggested significant changes in aspects of chronology and the interpretation of material culture, which considerably alters some of the conclusions from this earlier work. Specific discussions of the different phases can be found in Chapters 3 to 7, while an overall account is presented here. The site is discussed within its wider regional context – including finds and environmental evidence – in Chapters 13 to 17.

Middle Iron Age settlement at Warrens Field

Middle Iron Age activity at Warrens Field was recorded over three gravel islands on the first terrace of the River Thames (Fig. 3.1). It probably represents the settlement of one or two families, or one extended family. The settlement shifted eastwards over time, and a number of different phases of activity could be recognised on each island. A maximum of four roundhouse structures were in use on an island at any one time. The method of construction is unknown as little trace has survived in the archaeological record, however the use of mass wall techniques, perhaps with internal timber supports, appears to be the most likely. The majority of the structures were orientated towards the south-east, as is common on so many Iron Age sites in England and Wales (see Chapter 15). This may be a result of environmental factors but may also indicate cosmological concerns or belief systems. The structures contained varying quantities of occupation refuse in their surrounding drip gullies. Large quantities of domestic debris were also identified within associated enclosure ditches, although with the exception of Enclosure 4 and Enclosure 2, they are not thought to have surrounded roundhouse structures. The deposition of refuse appeared to be structured in a number of examples, with concentrations appearing in ditch and gully terminals, including the deliberate placement of large ceramic vessels which may have been used in communal feasts.

The inhabitants were pastoralists with a subsistence led mixed animal economy. Paddocks integrated into the settlement plan, and enclosures on the gravel islands suggest areas set aside for pastoral related activity. The extent of interaction between the inhabitants of Claydon Pike and other neighbouring groups is uncertain, however a close association with the nearby Thornhill Farm settlement may be suggested. The lower terrace or floodplain sites in the Upper Thames Valley do not appear to have been producing grain, although this would have formed part of their stable diet (see Robinson, Chapter 14 and Chapter 15). Grain may have been brought in from producer sites on the higher gravel terraces (see below). Quernstones, salt and Malvernian pottery were brought to the site from further afield and indicates an established region wide exchange system. This system may have been maintained through acts such as the giving of feasts.

The settlement at Longdoles Field

The Longdoles Field settlement has been subjected to much re-analysis, in order to achieve a more refined and accurate chronology and to further assess the nature of change within the main phases (see Post-excavation methodology, Chapter 2).

The late Iron Age to early Roman settlement

The establishment of a nucleated settlement upon a raised gravel island in the Longdoles Field in the early 1st century AD was part of a regional pattern of settlement expansion at this time (see Chapter 16). The settlement was characterised by a series of large and intensively recut enclosures, gullies, pits and substantial boundary ditches (Fig. 4.1). Within the site was identified a number of activity areas associated with domestic habitation, small-scale metalworking, and stock management. It appears to have operated a largely subsistence economy associated with cattle ranching, and in this respect was very similar to the nearby site at Thornhill Farm. However, there were noticeable differences between these sites, with Claydon Pike having an

increased emphasis upon the settlement boundary, along with larger numbers of imported goods associated with eating and to a lesser extent drinking. This may well be an indication of the growing status of the inhabitants at Claydon Pike in a period of general socio-political turmoil. Nevertheless, it must be seen within a regional context of socio-political change and does certainly not suggest that the inhabitants were consciously adopting strategies to become 'more Roman' (see below and Chapter 16). Indeed, there is nothing in matters of personal appearance to suggest any deep founded changes associated with Roman lifestyles, and the general economy of the site appears to have been largely unchanged by the conquest. It is not until 70 to 80 years after this event that we seen any radical changes in the settlement of Claydon Pike, and in the lifestyles of the people who lived there.

The 2nd to early 4th-century AD Roman complex

The early 2nd century saw dramatic changes in the settlement structure, spatial organisation, economy and personal lifestyles of the inhabitants at Claydon Pike. The enclosures, gullies and ditches of the earlier phase were replaced by two large rectangular enclosures, the northern of which contained a substantial aisled barn used for storage and an aisled house with a tiled roof and painted plaster interior (Fig. 5.1). This was probably the residence of an extended family group who were estate owners, and there is evidence to suggest that they utilised elements of Roman style dress as well as new eating/drinking habits. The economic basis of the site seemed to change from largely subsistence level pastoralism to a more mixed economy, incorporating the management of hay-meadows. This was probably on a commercial basis to sustain the needs of growing local population centres such as Cirencester (see Chapter 16). By the mid 2nd century AD the settlement expanded onto adjacent gravel platforms which seem to accommodate the lower status estate workers, as well as providing small stock enclosures and industrial areas. What appears to have been a possible religious precinct was also established at the heart of the settlement, overlooking a central open space. There were clear physical and social divisions between the aisled building compound and the 'working' areas to the west, with the point of access between the two possibly having social restrictions attached to it. A second possible entrance to the east of the main compound may have been used for wheeled agricultural traffic, and is possibly linked to a trackway seen on aerial photographs leading south-east towards another known settlement (SMR 3191; see below).

During the later 3rd century AD, the aisled house was dismantled and replaced with a small well built square building, while another stone founded structure was built to the west in Trench 17, possibly associated with an assemblage of Oxford fineware pottery. At the same time, the boundaries and gateway between the two zones appear to have been dismantled, which may signify that the strict social divide was no longer present. It is uncertain if such transformations in the spatial and social organisation of the site were linked to changes in site economy, but this does seem the most likely explanation. At some point during the end of this phase, there appears to have been deliberate and widespread clearing of the site with much domestic and structural material being deposited within pits and ditches. This probably marks the final stage of transition from the aisled building compound to the small late Roman villa estate

The late Roman villa complex

In the early 4th century AD a modest-masonry footed villa, comprising two separate structures, was built in the same area and upon the same alignment as the earlier domestic buildings (Fig. 6.1). The southern structure contained a hypocaust, seemingly used at least initially as a winter dining area. The villa was probably home to a nuclear family group who continued at least in part to adopt Roman style dress and culinary habits, as was typical for many rural settlements in the region during the late Roman period (Lambrick 1992, 103; see Chapter 17). A small inhumation cemetery plot *c* 100 m to the west is undoubtedly associated with the villa inhabitants. The surrounding gravel terrace and floodplain were no longer used for haymaking but instead had reverted to grassland used for grazing animals. It is possible however that some arable production may have occurred on certain gravel islands within the villa estate. Other economic activities may have included bee keeping and fishing, while salting and/or curing of meat and fish could also have occurred.

At some point after the middle of the 4th century quite drastic structural alterations occurred, including the imposition of an enclosure around the main building. This probably signalled a shift in emphasis towards greater perceived security needs, which is also stressed by the increase in higher security locking mechanisms amongst the small finds assemblage. The enclosure was later replaced by another on a much more substantial scale, comprising a ditch and masonry wall. A well built masonry footed shrine was also built around this time to the east, with a pathway heading out from the structure into the northern marshy area. It was probably an estate cult centre used by those in the local vicinity, and may have helped to increase the social standing of the villa inhabitants.

The final abandonment of the villa at Claydon Pike is unclear. The pottery indicates use into the latter half of the 4th century, but there is little to suggest occupation at the very end of this century. There are however, limited numbers of coins (AD 388-402) and small finds that do indicate activity of some kind until the start of the 5th century. The

general lack of clearly definable dating material of this period is well documented, although it is thought that farming in the region probably continued as it had done up until at least the very end of the 4th century (Henig and Booth 2000, 180; see Chapter 17). At Claydon Pike, despite the ambiguities, there is no reason to believe that this was not also the case, although the economic resources for the general upkeep of the buildings would undoubtedly have become increasingly insufficient.

Saxon and medieval activity

After the villa complex fell into disuse at the end of the 4th or early 5th century AD renewed activity is indicated by a number of finds and features, which included a group of six burials, three of which were radiocarbon dated to the mid-late Saxon period (Fig. 7.1; see Bayliss, Chapter 7). The four adult burials cut through the eastern walls of Building 8, while an infant burial lay to the east (possibly late Roman), and a sub-adult burial cut through Building 9 to the south. Parallels for the Claydon Pike burials may be found across the Upper Thames Valley region, and probably represent small dispersed family cemeteries, at a period before burials were formally organised in minster churchyards.

Two distinct medieval ceramic phases were identified, dating broadly from the 11th to 15th century. A stone-lined box well and section of walling were the only structural features to be associated with the medieval phase, although the later Roman outer boundary was clearly still a visible feature, despite it gradually filling up with alluvium. The surrounding gravel terrace and floodplain appear to have been used for hay meadows in the medieval period, and activity at Claydon Pike during this period was of very low intensity.

The nature of development

The widespread changes in the settlement pattern of the Upper Thames Valley during the later part of the late Iron Age are well documented (Fulford 1992, 27), and have been linked to innovations in agricultural practices (Lambrick 1992; see Chapter 16). Such agrarian developments included the significant expansion of arable production, primarily on the higher gravel terraces and the slopes and uplands of the Cotswolds. Pastoral intensification also occurred, utilising systems of paddocks and small enclosures, together with artificial waterholes. The pastoral settlements at Claydon Pike, Thornhill Farm and certain other sites on the lower gravel terraces are undoubtedly part of this intensification, with the environmental evidence suggesting that the surrounding grassland was heavily grazed at this time (see Robinson, Chapters 4 and 14). Such changes in settlement and agricultural patterns must have been at least partly as a result of increased population pressure. However, although seemingly quite widespread, they were probably occurring in quite a piecemeal fashion across the region, with individual sites reacting differently to new circumstances (Moore and Reece 2001, 22). The changes must also have been accompanied or indeed been stimulated by the significant socio-political developments of the late Iron Age, which probably resulted in increasingly centralised control of resources by certain factions of the native elite (see Chapter 16).

The Roman conquest had no direct archaeologically perceptible influence on settlement structure or agricultural regime at Claydon Pike. The only noticeable post-conquest difference was an increase in artefacts associated with Roman style culinary habits (amphorae, mortaria etc), which was quite pronounced when compared with other local sites such as Thornhill Farm. It has been reiterated many times (Millett 1990; S Clarke 1996) that the adoption of such 'Romanised' ceramic markers is certainly not directly indicative of Roman values and lifestyles. However, the very fact that the material culture was changing does imply that there were also changes in social practices, as the two were deeply integrated (Grahame 1998; Greene 2002). It is therefore possible that the adoption of Roman style eating habits was used by the inhabitants as one way of socially differentiating and elevating themselves within the local and possibly regional community. There is nothing within the material culture assemblage to suggest that personal appearance was also locally differentiated at this time, with for example the number and type of brooches being quite similar to that at Thornhill Farm. However, when compared to many other rural settlements across the region, such artefacts do seem quite prolific (see Cool, Chapter 13), which may suggest a stronger emphasis on individual identity.

The major changes in settlement structure, agricultural regime and material culture at Claydon Pike were originally thought to have occurred in the 2nd half of the 1st century AD, at about the same time as the new city of Corinium was being established to the west (Miles and Palmer 1990, 22). Furthermore, it was suggested that the site became under official control, with direct – if small-scale – military involvement, due to the presence of military metalwork, glass vessels and amphorae (Miles and Palmer 1990, 22-3). These finds included an amphora sherd, upon the inside of which was inscribed the letters LEG II (see Pl. 8.1). This graffito could not be convincingly authenticated, however, and so while its existence must be acknowledged, it cannot be used as evidence for a military presence at the site.

Re-analysis of the phasing (see Chapter 2) has indicated that the substantial changes are far more likely to have occurred in the early 2nd century AD, and there is nothing in the small finds assemblage which suggests a military presence at this time (see

Plate 8.1 LEG II grafitto

Cool, Chapter 5). Indeed, the only notable presence of military equipment belongs to the later Antonine/Severan period (late 2nd/early 3rd century AD), possibly where soldiers were involved in policing duties to ensure the steady supply of needed materials (see Chapter 16). This does certainly not imply that there was any direct official involvement at the site, and indeed Hingley (1989, 181) has cited numerous examples of civilian sites which contained military objects. Black (1994, 108) has suggested that the military equipment at Claydon Pike may be explained if the British landowner had served in the Roman army and come home with ideas derived from that experience. Although he was referring to the supposed 1st-century military objects (of which there is now only believed to be one), it is possible that this could account for the later equipment.

If the nature of settlement change cannot be associated with any direct official or military control, then it is likely the main inhabitants of the site were of native origin, albeit expressing certain aspects of their lifestyle in terms of Roman-style structures and material culture. They were certainly not being wholly emulative of Roman habits, but were clearly people of reasonable wealth and social standing who were now operating within a new socio-political system and were adapting accordingly. They may therefore have utilised Roman trappings to help maintain and/or increase their social standing within the local and regional community. Such social change was no doubt operating through a complex system of personal power negotiation between communities and individuals, which would account for the variability of settlement development and material culture throughout the region (see Chapter 16). Nevertheless there is also evidence for a more widespread pattern of landscape reorganisation in the Upper Thames Valley during the early 2nd century AD, which suggests that certain conditions now existed which must have facilitated such fundamental change.

The subsequent developments at Claydon Pike throughout most of Phase 3 seem comparatively minor, although the quantities of artefacts and environmental samples from individual sub-phase groups are generally too small to note any meaningful changes. Nevertheless, it does appear that the settlement continued to operate on a modestly successful basis until the start of the 4th century AD when it likely that hay meadows were no longer grown and radical structural alterations occurred, with most of the earlier site being systematically demolished. This change from the aisled building complex to the small villa estate operating a mixed agricultural economy probably took place over one or two generations and may be linked in some way to wider regional developments, such as the establishment of the new province of *Britannia Prima* (see Chapter 17). Nevertheless, as with the earlier periods, the development of the site is also likely to have been guided by the specific responses of the inhabitants to the circumstances of the period.

The settlement in the local landscape

Claydon Pike was part of a well-populated Upper Thames Valley landscape, both in the Iron Age and Roman periods, with a large number of settlement sites, field ditches, trackways and isolated finds being recorded in the immediate vicinity (see Chapter 2 and Fig. 2.1). However, aside from the adjacent Thornhill Farm which was less than 1 km distant, there are very few middle Iron Age sites in the near locality that have been comprehensively excavated. Parts of what would appear to have been quite an extensive middle Iron Age settlement have been discovered during archaeological investigations at Lechlade just 1.5 km to the east of Claydon Pike Warrens Field, as indicated by a number of boundary ditches, ring gullies and storage pits (Bateman *et al.* 2003; OA 2001). Further east at Hatford Down near Faringdon was a further middle Iron Age settlement (Bourn 2000). Lying 4 km to the west of Claydon Pike was a middle Iron Age site at Totterdown Lane, Horcott, which included ten ring gullies with an enclosure and associated field system (Pine and Preston 2004).

The relationship between the Warrens Field settlement at Claydon Pike and its local neighbours is of paramount importance in understanding the wider middle Iron Age landscape (see Chapter 15). The inhabitants appear to have been pastoralists with a subsistence led mixed animal economy, as is

the case for most other sites on the lower gravel terraces. Crop processing waste and the presence of quern stones across the site indicates that grain also played an important part in their diet, although it does not appear to have been grown in the immediate vicinity of the site. It must therefore have been brought in from elsewhere, potentially one of the sites located on the higher gravel terraces such as at Lechlade, or further afield like Gravelly Guy. Certain resources such as quernstones, Malvernian pottery and salt had also been brought to the site, but probably from much greater distances than the grain (see Chapter 15).

The local landscape of the Roman period appears to have been much more intensively settled, although it is still the case that many of the sites have not been comprehensively excavated to the same level as Claydon Pike. Furthermore, it appears that the majority of the sites where specific dating evidence is available did not start before the early 2nd century, while others, notably Thornhill Farm, were abandoned at this time. This period clearly saw major landscape redevelopment (see Chapter 16), and by examining the distribution and types of settlement around Claydon Pike, it is possible to start to gain some understanding of how the landscape was organised. The aisled building complex at Claydon Pike was clearly the centre of a larger agricultural estate, which appears to have specialised at least partially in the management of hay meadows. It is uncertain as to whether the nearby settlement at Thornhill Farm was deliberately abandoned at this point, but the overlying trackways and field ditches, together with evidence for hay fields, suggests that the area was subsumed into the Claydon Pike estate. The main east-west trackway in the Longdoles Field site probably continued westwards to become the NE-SW trackway running through Thornhill Farm. The track appears to have continued through a small Roman settlement at Kempsford Bowmoor, immediately south of Thornhill Farm, and is lost into a palaeochannel at some distance after this (OAU 1989a; Fig. 2.1). The site was badly disturbed, but appeared to consist of a series of enclosures with smaller areas of scattered rubble, spread over an area of *c* 1 ha. The pottery and coin evidence indicated occupation from the 2nd to early 4th century AD, thereby correlating with the Claydon Pike Phase 3 settlement. It is possible that this was a subsidiary domestic foci within the larger estate. Just to the south-west of this site at Whelford Mill was a small concentration of Roman pottery, rivets, weights and other metalwork, along with a small late 3rd-century coin hoard (see Chapter 12). As the finds were from surface collection there are no details on site context, although they presumably lie within the Claydon Pike estate, and would have been deposited during the transitional period at the end of Phase 3. Less than 1 km further west was the 2nd- to 3rd-century settlement at Whelford Bowmoor, which shows no environmental evidence for haymaking, and may have been part of a separate agricultural complex associated with the cropmark settlement on the opposite side of the river (see Chapter 10).

Trackways were seen leading north of Thornhill Farm to an unknown destination, while the northern trackway ditches at the Claydon Pike Longdoles Field site led towards extensive ditched field systems cutting the middle Iron Age settlement in the Warrens Field site. Running south from Longdoles Field, a trackway was traced as a cropmark for over 500 m, possibly heading towards an area of cropmarks just to the south of the River Coln, while to the east, at least another two trackways were traced running towards a known settlement at Green Farm, just 800 m distant (SMR 3191; Fig. 2.1). Although very poorly understood, this site comprised a 2nd-century well (0.68 m deep) and masonry building foundations, with finds including sandstone roofing tile, pottery and vessel glass. Fragments of parchment with writing, part of a wooden writing tablet and part of a leather shoe, all came from the well, associated with 2nd-century pottery (see Chapter 12). The finds and structures suggest this site to be of some importance, and was presumably related to the Phase 3 settlement at Claydon Pike in some way. Further Roman material, comprising tile fragments (including box flue), 2nd to 4th-century pottery, a fragment of tufa and a scattering of limestone slabs and iron slag, was recovered *c* 200 m to the east.

The major Roman site to the east of Claydon Pike was Roughground Farm, just to the north of Lechlade, which was established in the mid 1st century AD (Allen *et al.* 1993; Fig. 2.1). Only a small part of this settlement was excavated, although the sub-rectangular enclosures, ditches and pits were quite similar in nature to other sites in the region of this period, including Barton Court Farm and Claydon Pike. A number of droveways and an early 2nd-century cremation burial were also probably part of this phase, which has been interpreted as a group of several farming units operating a mixed agricultural regime (Allen *et al.* 1993, 181). There are no indications of any real high status activity on site prior to the early 2nd century AD, when a dump of imported fineware pottery was found beneath the later aisled building. It seems that this phase of the settlement continued until the early to mid 2nd century AD, when a timber aisled building and possibly another masonry structure were built, within a rectangular courtyard. This was probably slightly later than the major changes at Claydon Pike. The site was expanded and modified from the 2nd to 4th centuries, and has been classified as a 'middle size and status villa', with systems of droveways, trackways, enclosures and field systems spreading over large areas (ibid. 186). Excavations in and around Lechlade (eg Bateman *et al.* 2003) have revealed of number of Roman ditches which seem to have been part of field systems and trackways, probably associated with the Roughground

Farm villa. A substantial Roman ditch was excavated at Butler's Field, which appears to have been part of a wide trackway leading south from the area of Roughground Farm to a large (*c* 120 x 65 m) D-shaped enclosure revealed by cropmarks (SMR 592; Boyle *et al.* 1998). To the north of Roughground Farm, lying approximately half way between this site and Great Lemhill 'villa', was what appears to have been a minor settlement at Great Lemhill Farm, dating from the 2nd to 4th century comprising ditches and a small amount of occupation debris (OAU 1990). As with the Kempsford Bowmoor site, this is likely to have been part of a larger agricultural estate.

In all, the excavators suggested that the Roughground Farm estate may have covered an area of 600-800 hectares incorporating the 1st and second gravel terraces together with the floodplains of the rivers Leach and Thames, and being bounded by the villa estate at Great Lemhill, 1.7 km to the north and the Claydon Pike complex 2.5 km to the west (Allen *et al.* 1993 196). The mixed arable and pastoral regime would seem well suited to such a variety of landscapes, and in this we see what would appear to be one of the major economic differences between this site and Claydon Pike. The apparent specialised nature of the latter settlement may have ensured that its territory was limited to the lower gravel terraces and probably the floodplain, although this could have still encompassed a substantial area. The relationship between this 'non-villa' settlement and the villa at Roughground farm is one of substantial interest. Traditionally, the relationship between villa and non-villas is thought to have been tenurial, with the villas always being at the centre of agricultural estates, and other sites acting in a subsidiary role for such functions as worker's accommodation. However in this instance there is no reason to suppose that Claydon Pike was in any way subsidiary to Roughground Farm, and there are in fact very blurred boundaries between the two sites. Both redeveloped in the early to mid 2nd century into aisled building complexes (Claydon Pike probably the earlier), but the main structures at Roughground Farm soon expanded to become what could architecturally be a termed a villa complex. However, this does not necessarily imply that the settlement had become of much higher social status, as it is just another example of the way in which sites could develop in quite individual ways within the overall circumstances of the period.

Further changes in the local settlement pattern are apparent during the later Roman period, with a number of sites such as Kempsford Bowmoor and Whelford Bowmoor being abandoned. The early to mid 4th century at least is generally seen as a time of great prosperity in this region, and so it is unlikely that this represents a decline in population. Instead it is likely to indicate increasing centralisation, with a smaller number of settlements (villas) controlling larger amounts of territory, as has been suggested for Roughground Farm (Allen *et al.* 1993, xxi; see Chapter 17).

Overall, the landscape around Claydon Pike throughout the Roman period was probably quite densely settled, with a few larger agricultural estates (eg Claydon Pike and Roughground Farm) encompassing smaller settlements, at least from the early 2nd century onwards. A system of trackways appears to have provided local transport links and was probably connected to major arterial roadways such as Akeman Street 5-6 km to the north. The rivers themselves also may have been instrumental in encouraging trade and development, although it is uncertain as to how far they were navigable and indeed any evidence for river transport is strangely lacking. The final phase of occupation in sites like Claydon Pike and Roughground Farm appear to belong to the latter part of the 4th century AD, with continued maintenance beyond this being limited by the final collapse of the economic and administrative systems of the province (discussed in Chapter 17).

Part 2
The Minor Sites

Chapter 9
Excavations at Neigh Bridge, Somerford Keynes

by Alex Smith

INTRODUCTION

The site at Neigh Bridge, Somerford Keynes was originally identified by concentrations of surface finds, including an unusually large quantity of objects recovered from metal detecting (see below). Proposed gravel extraction at the site led to a rescue excavation being undertaken by the Oxford Archaeological Unit (OAU) between November 1986 and May 1987, and further intermittent salvage recording took place during the early stages of gravel extraction, up until Spring 1988.

Location and physical characteristics of the site

The site is located just to the south of Somerford Keynes village, within the Somerford Keynes parish in south-east Gloucestershire (NGR SU 019945; Fig. 9.1). It lies on the floodplain of the River Thames, which is located approximately 100 m to the north-east. It is now part of Neigh Bridge Country Park, within the western Cotswold Water Park.

Archaeological background (Fig. 9.1)

Neigh Bridge, Somerford Keynes is located within the westernmost part of the upper Thames valley, a region that has produced much evidence for archaeological activity from the Palaeolithic to the post-medieval periods (see Chapter 1). The site lies just over 6 km south of the Roman city of Corinium and 8 km west of Ermin Street Roman road, while in the more immediate vicinity are a number of known Iron Age and Romano-British settlements along with a series of undated sites known from cropmarks (Fig. 9.1). Lying 1 km to the south was a Romano-British settlement spread over 14 hectares, from which fragments of samian pottery were recovered (SMR 2404), while 1 km to the east was another Romano-British settlement which was partially excavated in 1971 (SMR 2406). Work by Oxford Archaeology at Cotswold Community 2 km to the north-east revealed an extensive Roman farmstead and trackway (OA 2003; 2004), while a further 1 km north-west of this is a probable Roman settlement as revealed by cropmarks (SMR 2368). Lying less than 1 km to the east and south-east of Cotswold Community were two further probable Romano-British settlements and trackways indicated by extensive areas of cropmarks (Wilts SMR 9580, 9584). Both sites were destroyed by gravel extraction without any archaeological investigation. Iron Age activity in the area is less well know, although a middle Iron Age settlement was partially excavated at Spratsgate Lane (SMR 2361) just 1 km north-east of the present site.

The Neigh Bridge site is located in the midst of this fairly dense pattern of Roman rural settlement. Its location near a crossing point of the Upper Thames may have contributed to the site's importance.

Excavation methodology

Excavations took the form of a salvage operation with very limited funding. Topsoil across the site (*c* 0.4 ha) was stripped mechanically, and a dense complex of soilmarks was revealed, covering an area of some 2.5 hectares (Pl. 9.1). A number of small trenches were excavated in order to gain a greater understanding of the archaeology as revealed from these soil marks. Some of these trenches were expanded as necessary, especially in the highest part of the site (Trench 5), which contained the most concentrated amount of archaeological features with the clearest stratigraphic sequences. Many of the lowest parts of the site to the north and east were subject to flooding and so excavation here was very limited. To the east of the site, near the River Thames, were visible earthworks which appeared to relate to the ditches on the main site (Fig. 9.2). A few trial trenches were dug in this area to observe this relationship but unfortunately no sub-surface features or finds were revealed.

Phasing and chronology

The archaeology of Neigh Bridge, Somerford Keynes comprised a mass of inter-cutting ditches, gullies and pits, along with at least one substantial aisled building (Fig. 9.2). Pottery from the whole site indicated occupation from the early-mid 1st to later 2nd or early 3rd century AD, and the phasing of features within the site is based upon this material. Small quantities of middle Iron Age pottery and later 3rd and 4th century coins and small finds do suggest activity of some kind before and after the main period of occupation, although none of these finds can be related specifically to any of the features. Trench 5 contained the most extensive archaeological deposits, and it is only in this area that it was possible to present a coherent

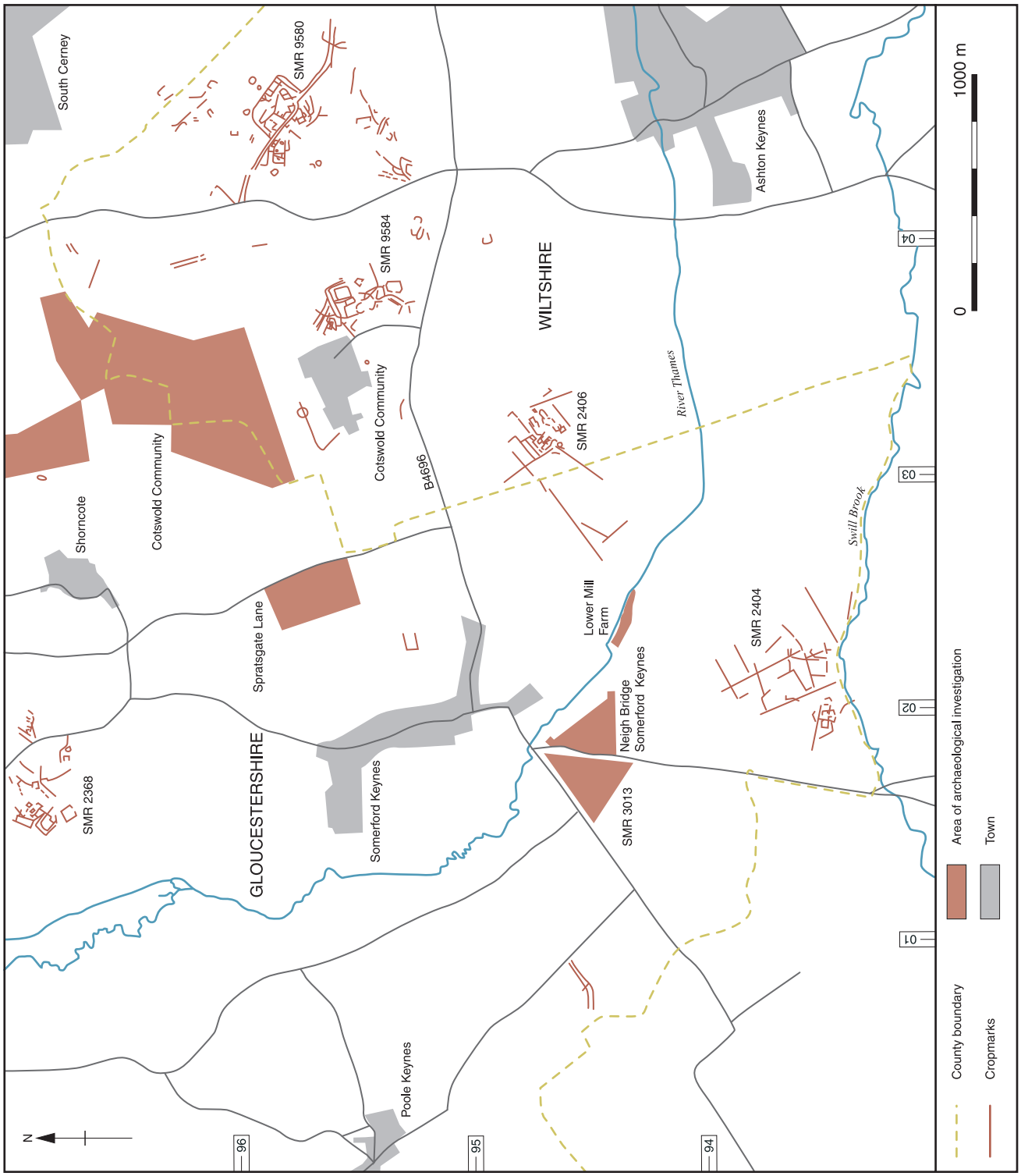


Fig. 9.1 Neigh Bridge, Somerford Keynes in relation to local archaeology

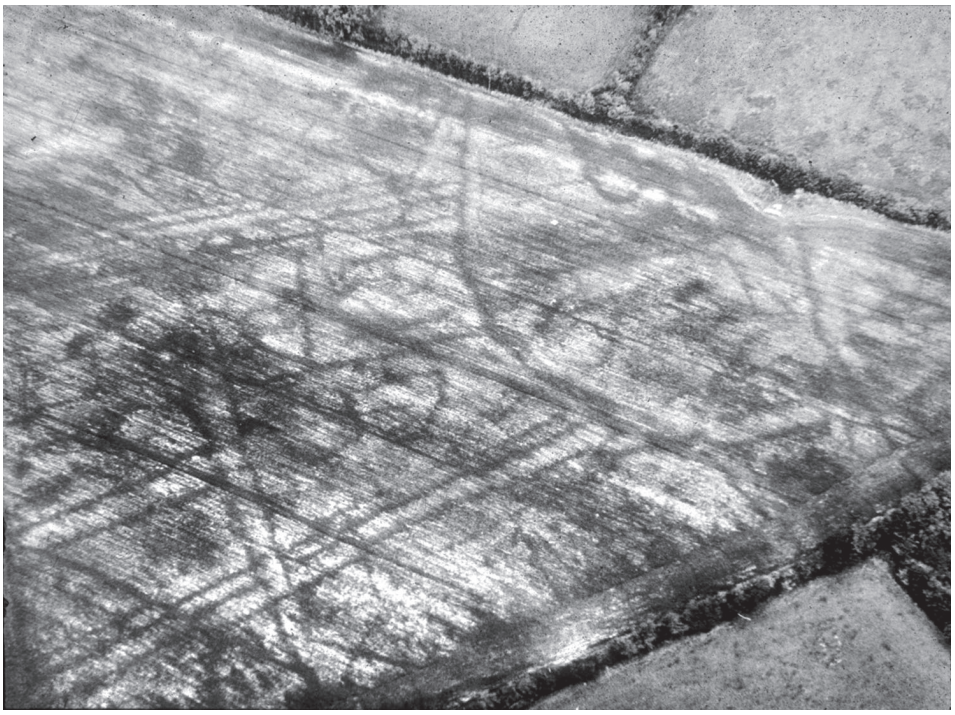


Plate 9.1 Aerial photograph of Somerford Keynes Photograph taken by Mark Millard. Reproduced with permission

system of phasing (Figs 9.3, 9.4 and 9.6). However, certain features from other trenches can be assigned to either Phase 1 or 2/3 with a reasonable level of certainty, based either upon pottery dating, or stratigraphic/spatial relationships with other phased features. The vast majority of small finds from the site were unstratified material from metal detecting, and many probably relate to areas that were not subject to excavation.

THE ARCHAEOLOGICAL SEQUENCE

Full archaeological descriptions of the features at Neigh Bridge, Somerford Keynes can be found in Digital section 5.2.

Late Iron Age and early Roman activity: Phase 1 (Fig. 9.3)

The earliest phase of activity within Trench 5 comprised a sequence of sub-rectangular ditched enclosures and sub-enclosures, varying in size and form, belonging to the later Iron Age and early Roman period (early/mid 1st century AD to early 2nd century AD). The phase is defined as all those features lying underneath the Phase 2 Roman linear boundaries, and is thus made up of many different stratigraphic sequences, presenting a composite picture rather than a single defined phase of activity. There are a number of smaller ditches and pits from other trenches that contain higher quantities of 1st-century AD material, but these do not form any coherent pattern.

Enclosures

At least five major enclosures or sub-enclosures were revealed beneath the Phase 2/3 boundaries in Trench 5.

E 1: Enclosure 1 lay at the western end of Trench 5, and comprised two lengths of ditch enclosing an area *c* 22 m across, with a 2.4 m wide entrance in the west. The northern section ranged from 0.6 to 1.9 m in width and 0.2 to 0.4 m in depth, while the southern section was *c* 1.5 m wide and 0.4 m deep. Two iron nails were recovered from the enclosure ditches, and no contemporary features were located in the interior. Pottery recovered from the ditch fills indicated a general later 1st/early 2nd-century AD date.

E 2: About 13 m to the west of enclosure 1 lay enclosure 2, about 18 m across, with the north-eastern side outside of the trench limits. The enclosure ditch was generally V-shaped in profile, and 1.25 m wide by 0.5 m deep. It cut E 4 and probably ditch 142, although the relationship here was not always certain. Finds comprised a single lead weight and pottery of mid to late 1st-century AD date. The interior contained a number of pits and postholes (see B 2 below) and a small (*c* 3 m diameter) circular gully (147) containing mid to late 1st-century pottery, along with two residual middle Iron Age sherds, an iron knife and an iron nail. A reasonable quantity of animal bone was also recovered, including cattle, horse, sheep and pig. It is similar to features found at Thornhill Farm, Fairford and Claydon Pike, which were interpreted as 'stack rings', used to store animal fodder. These were dated from the middle Iron Age to the early Roman periods.

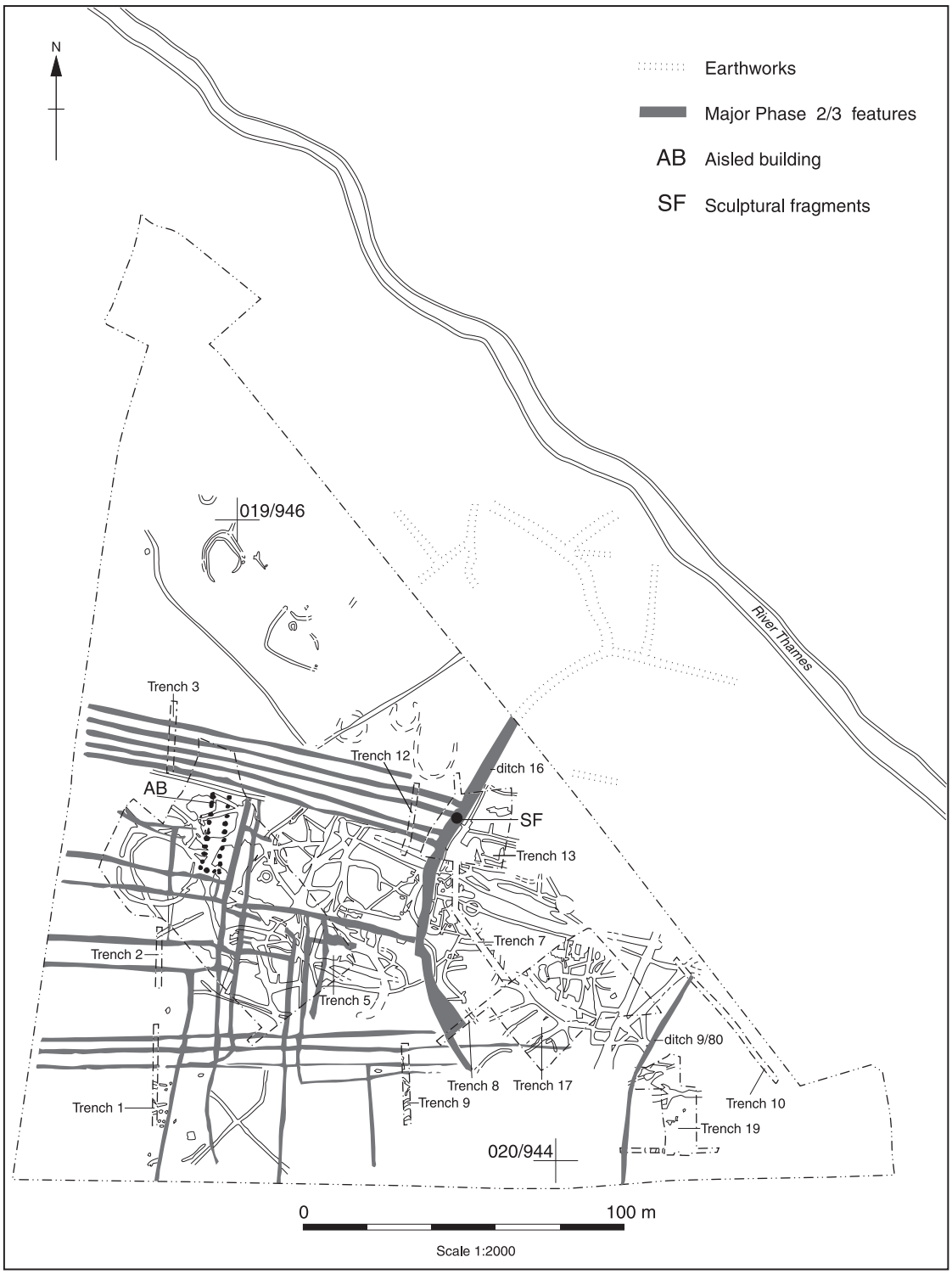


Fig. 9.2 Site plan showing trench locations

E 3: Enclosure 3 lay underneath the aisled building in the northern part of Trench 5, and enclosed an internal area *c* 12 m across. The enclosure ditch was approximately 1.5 m wide and 0.56 m deep. A shallow depression to the north-west obscured most features in this area, aside from part of the Phase 2 aisled building, and it is possible that the enclosure was open in this direction. The only finds comprised a small quantity of 1st-century AD pottery.

E 4: A possible sub-enclosure was positioned in the central part of Trench 5, consisting of a number of different cuts creating an area *c* 30 m across, with the south-eastern side apparently left open. It would seem to be one of the earliest major features in the trench, being visibly cut by E 2 and ditch 142, although the relationships with E 3 and E 1 were undetermined. The ditch contained a small number of finds, including two brooches (1st-mid 2nd century AD), a bracelet, a scoop, tweezers, an intrusive late 3rd-century coin, and a fired clay hearth plate. Pottery from the ditches ranged from early 1st to early 2nd century AD.

E 5: A possible sub-enclosure in the southern half of the trench is represented by a 16 m length of curving east-west ditch, with southerly extensions at the western and eastern ends. The southern side appears to have been left open. All parts were U-shaped and approximately 1.4 m wide and between 0.3 and 0.42 m in depth. An Iron Age Dobunnic coin and fragment of vessel glass were the only small finds from the feature. Pottery indicated a late 1st to early 2nd-century date.

Linear Ditches

In addition to the enclosures and sub-enclosures, there were a series of linear ditches in Trench 5 (Fig. 9.3). To the north, a shallow ditch (254/263) extended ENE-WSW for *c* 28 m and then turned south-east and was traced for a further 18 m. In the south was an arrangement of approximate north-south and east-west ditches (191, 169, 180, 166, 130), which may have formed part of a sub-rectangular enclosure (*c* 11 x 12 m). In the far south-eastern area of the trench lay a substantial ditch (123), orientated NNE-SSW and cut by enclosure 5. Another substantial ditch (142) lay to the north of this, running approximately NW-SE, and curving eastwards out of the trench.

Very few finds were recovered from any of these ditches, but these included copper alloy tweezers from 169, a brooch (mid-late 1st century AD) and Roman coin (AD 37-8) from 166, and a copper alloy finger ring, later 1st-century AD brooch (Fig. 9.12, no. 24) and 4th-century coin from 142. Pottery ranged from mid 1st to early 2nd century in date, with most coming from the earlier part of this range.

'Posthole structure' (B 2)

A possible posthole structure was located in the north-eastern part of Trench 5 within E 2 (Fig. 9.3). The 'structure' was approximately 10 m by 4 m in size, and lay on a SW-NE alignment. It does not relate to any of the Phase 2/3 linear ditch alignments, so the interpretation is far from certain. Ceramic dating evidence ranged from mid 1st to 2nd century and it is possible that it was contemporary with E 2 and the circular gully (147) lying just to the north.

The Roman complex: Phase 2 (early-mid 2nd century AD) (Fig. 9.4)

At some point in the early 2nd century AD, the Phase 1 features in Trench 5 were replaced by a more regular layout of east-west and north-south linear ditches forming rectilinear enclosures and trackways (Fig. 9.4). A substantial aisled building was also erected in this phase (Figs 9.5 and 9.5a, Pl. 9.2). Although much of the pottery was quite mixed, the general date range for features of this phase falls within the 2nd century, with a slight preponderance of early to mid 2nd-century material. There is some stratigraphic basis for dividing the phase into 2a and 2b (Fig. 9.4), although certain features (eg the aisled building) undoubtedly existed in both. It is not possible to date these sub-phases more accurately than the chronology given to the whole phase.

Phase 2a

Robber trench/beam slot 70 and gully 305

In the western part of Trench 5 lay a north-south robber trench or beam slot (70) extending for 22 metres, which may represent part of a substantial palisade. Throughout most of its length, it had steep sides with a roughly flat base, and was 0.8 m wide and 0.16 m deep. Stratigraphically, it cut all Phase 1 features, and was cut by the east-west trackway ditches 318 and 101. It may also have been cut by a curving east-west gully (305) orientated north-west, although the relationship is uncertain. To the north, both 305 and 70 were cut by Phase 2b gully 306. A copper alloy sheet and mid 2nd-century pottery were recovered from 70.

South-eastern ditches

A substantial east-west ditch (135) entered the trench from the east and ran for 24 m before being cut by one of the Phase 2b north-south trackway ditches (52). The ditch was between 1.35 and 1.7 m wide and 0.5 to 0.6m deep, and is likely to be broadly contemporary with north-south ditch 122 and east-west ditch 112, which ran parallel to 135, 5m to the south. The only finds recovered were a single fragment of fired clay and a small quantity of late 1st- to mid 2nd-century pottery.

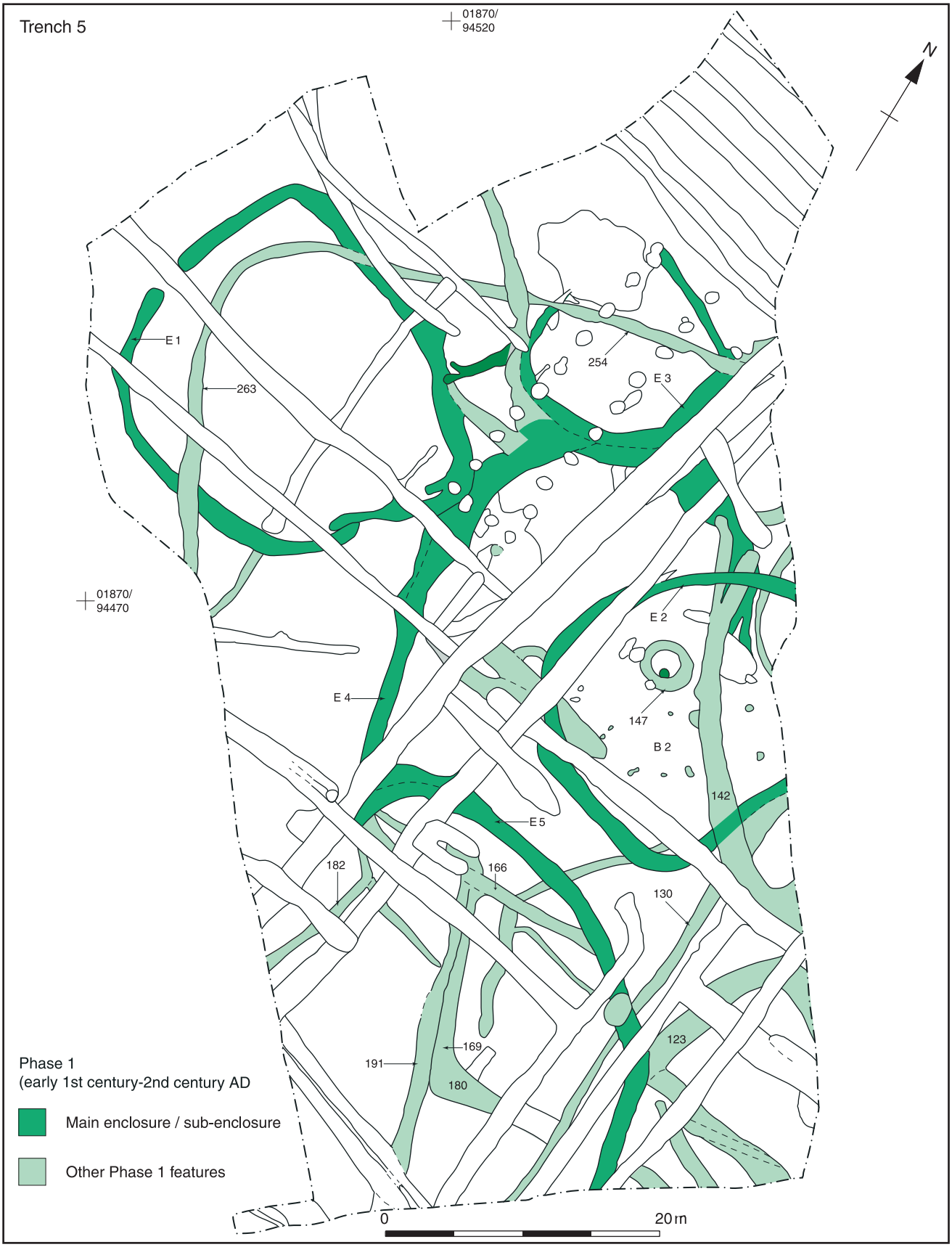


Fig. 9.3 Trench 5 Phase 1

Fig. 9.4 Trench 5 Phase 2

Phase 2b

Trackway ditches (52, 172, 318, 277/8, 101; sections 119, 101)

Two north-south ditches (52, 172) extended for 56 m through the middle of Trench 5, *c* 3 to 4 m apart, and it is suggested that they defined a possible trackway. They were between 1.4 and 1.7 m wide and 0.42 to 0.5 m in depth. Joining perpendicular to ditch 172 were two parallel east-west ditches (278/318 and 101), *c* 5 m apart, which may have formed another trackway. They ran for 34 and 39 m from the western end of the trench to apparently terminate at the north-south trackway, although no clear relationships were recorded. Ditch 278/318 was on average 1.5 m wide and 0.3 m deep, whilst the southern ditch (101) was more substantial, being up to 1.9 m wide and 0.5 m deep. It is quite possible that ditches 101 and 172 were still in use into Phase 3, although no longer functioning as part of trackways. Considering the length of the trackways, finds were quite scarce. The north-south ditches produced three Roman coins (one 2nd century and two late 3rd-4th century AD), a copper alloy tube, bone pin, iron cleat, and a lead weight. Finds from the east-west ditches included a 2nd-century AD copper alloy stylus and a copper alloy fitting. Pottery associated with both trackways was nearly all 2nd century in date, with fragments of early (AD 90-110) and later (AD 150+) samian.

Gully 306

Gully 306 was traced in an east-west direction for approximately 30 m from the western part of Trench 5, terminating at what must have undoubtedly been the outer wall of the aisled building, although no traces remain of this (see below). The gully was 0.94 m in width and 0.14 m in depth, and cut Phase 2a features 305 and gully/beam slot 70. Finds from the gully comprised tweezers, a fragment of window glass and early 2nd-century pottery.

General Phase 2 features

Aisled Building (Figs 9.5 and 9.5, Pl. 9.2)

Located to the north of ditch 318 and parallel with ditch 172 (Fig. 9.4) was a very regular alignment of postholes on a north-south orientation. All of the postholes were between 0.35 and 0.55 m deep (see sections, Fig. 9.5), 0.75 to 1.75 m in diameter, and formed a substantial aisled building, up to 27 m by 12 m in size (see Discussion below for reconstruction). Most of those on the south, east and west sides were about 1.5 m apart, while the north – where the entrance presumably lay – remained open (Fig. 9.5). Many of the postholes seem to have been replaced at some point, especially those along the western side. The postholes cut all other related features with the exception of shallow pit 260, which appears to have cut the north-east edge of posthole 257. Two stone-lined post-pits (310, 311) in the central interior of the building may have been part of the structure, though form no easily definable pattern, and 311 contained early to mid 1st-century pottery, so could well belong to Phase 1. Finds from within the posthole fills comprised two iron nails, a piece of glass, and fragments of a quernstone and whetstone. All postholes contained a small amount of pottery, most of it dating to the 2nd century AD and presumably part of the post

Plate 9.2 Aisled building looking south

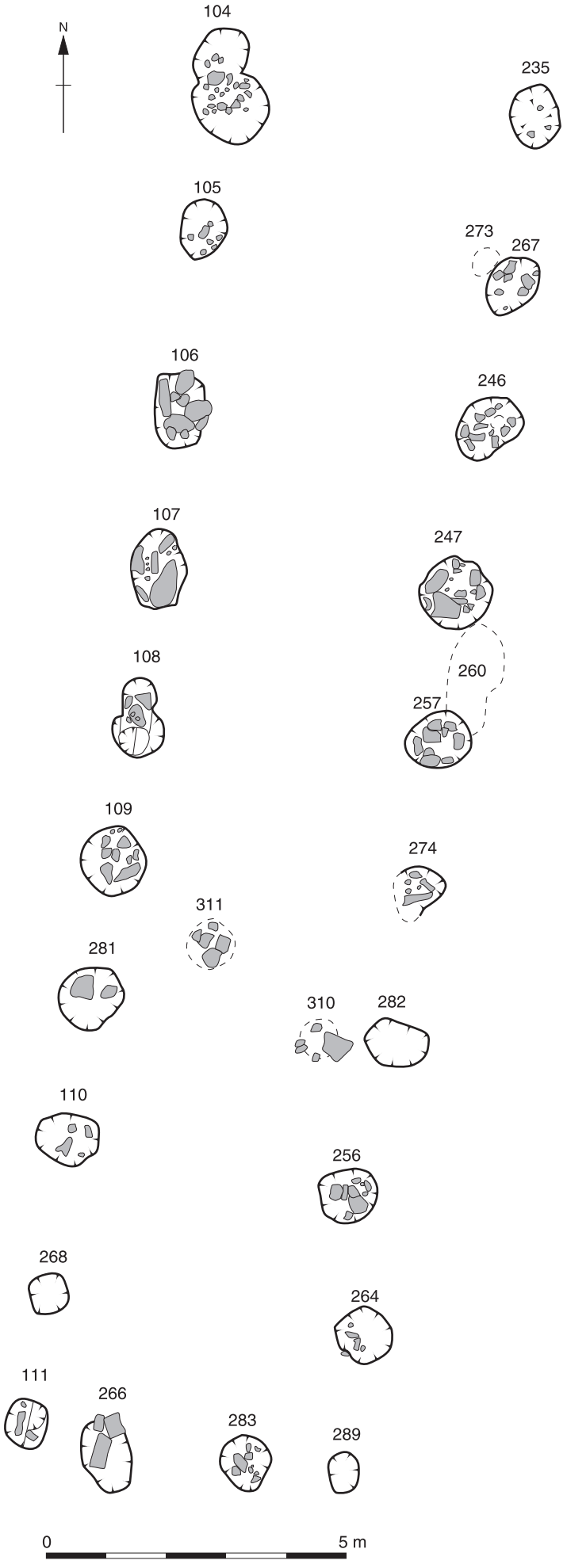
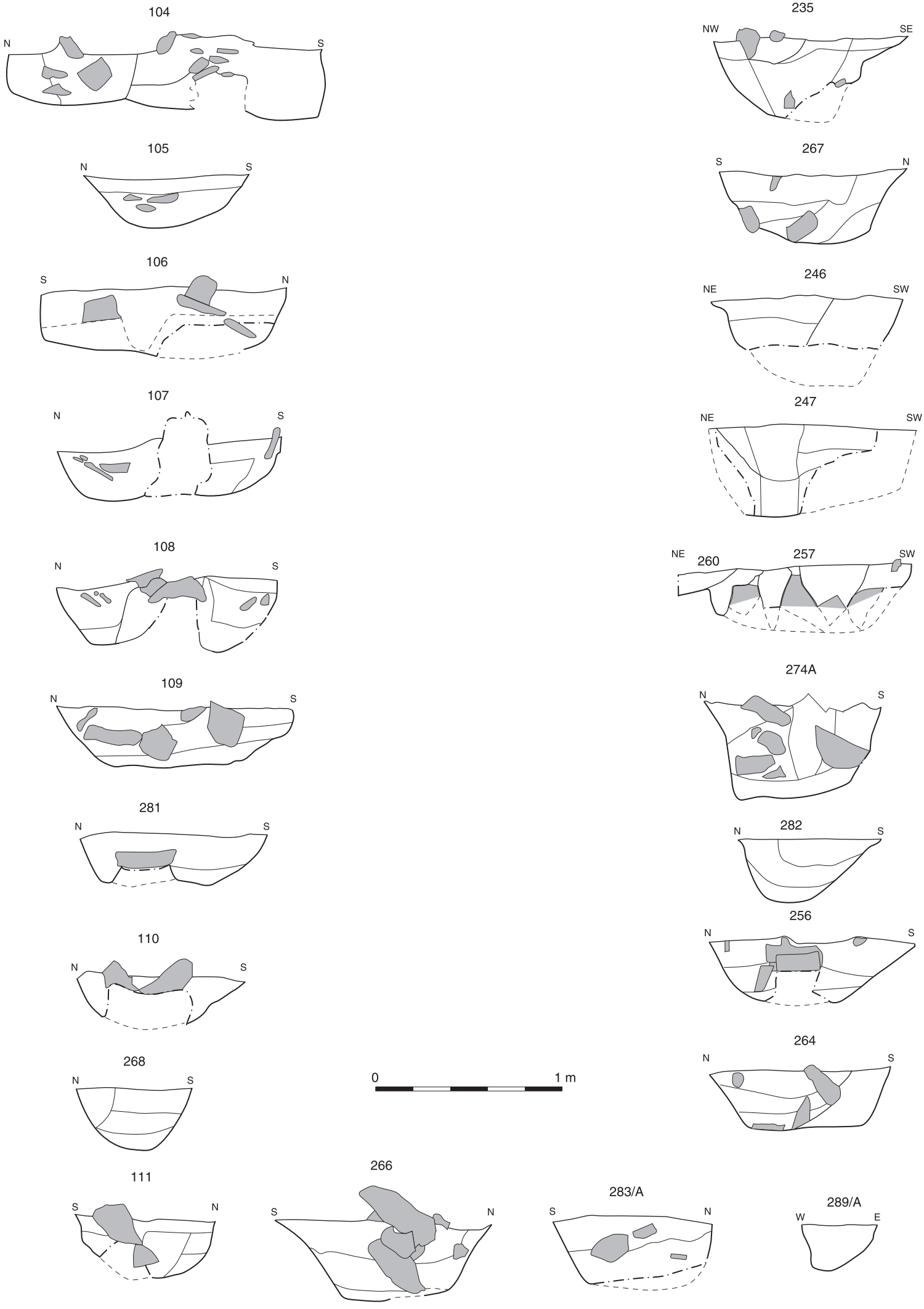


Fig. 9.5 Aisled building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packing. This assemblage included a small number of samian sherds, indicating a *terminus post quem* of AD 100-125 for the construction of this building.

Possibly related to the use of the building, was a substantial regular arrangement (12.4 kg) of ceramic roof tiles (301) lying over ditch 318 to the south. Although the majority of this comprised unidentifiable plain tile, there were also large quantities of definite tegulae and a limited amount of box flue tile. These looked to have been stacked against the exterior southern wall, and presumably relate to the later history of the building, in Phase 3 (see Discussion). In addition to this stack, much larger quantities (*c*100 kg) of mixed tile were found within a general layer (25) under the ploughsoil in Trench 5, lying immediately to the east of the aisled building. More ceramic tile was recovered within the ditches and pits in this area.

Northern parallel ditches

In the northernmost part of Trench 5 ran four parallel east-west ditches, lying between 2 and 2.5 m apart (Fig. 9.4). They were 1 to 2 m in width, but were not excavated in this trench. From the soil marks over the site, these ditches appear to run from the D-shaped enclosure, sectioned in Trench 13, and are probably 2nd century in date (see Parallel ditches below). In Trench 5 they appear to form the northern boundary of an enclosure around the aisled building.

The Roman complex: Phase 3 (mid 2nd-late 2nd/early 3rd century AD) (Fig. 9.6)

Around the middle of the 2nd century AD, many of the earlier features were overlain by a series of north-south and east-west oriented linear ditches, which probably represent a conscious revision and redefinition of the Phase 2 boundaries. It is likely that at least part of the earlier east-west and north-south trackways went out of use at this time, although the aisled building seems to have continued in use. New trackways appear to have been constructed. The phase is not well dated as most of the pottery was quite mixed. However, there is nothing in the stratified ceramic record that need be dated much beyond the later 2nd century AD, and so it is presumed that the ditches and building were largely abandoned by this point.

The 'corn-drier' and enclosure (Fig. 9.7, Pl. 9.3)

In the southern half of Trench 5, cutting through ditches 52 and 166 (Fig. 9.6), was a channel lined with several large flat pieces of limestone running around in a 'horseshoe' shape, about 4.2 x 3 m in size (Fig. 9.7). The slabs had traces of burning and there

Plate 9.3 Part of corn-drier structure 167, Neigh Bridge, Somerford Keynes

was a layer of burnt material on the base of the channel. Collapsed slabs in the east (167/C) suggest that the feature was originally covered over. The probable stokehole, which lay to the south east (section 167/B) led into the lined flue channel that was initially 0.32 m wide, but then broadened to *c* 0.8 m. The lowest fill within the flue lay underneath the slabs, suggesting that they represented a relining of the flue. Lining slabs were not present in all sections, having presumably been removed after the disuse of the structure. To the west (167/F), there is the clearest indication that the structure had more than one phase, as at least one later cut is visible. A pit in the north-western side may well have been an earlier stokehole, to be eventually replaced by the pit in 167/B, although this must remain uncertain. There were generally three fills throughout most sections of the feature, consisting of silty clay material with charcoal. The only small find recovered was a single iron nail. Pottery was quite mixed and ranged from late 1st to 2nd century in date.

Although not of the conventional T-shape, this feature was initially interpreted as a corn-drying oven. Physically, it can most easily be equated with Morris's 'rectangular' type drier found at sites such as Longthorpe in Cambridgeshire (Morris 1979, 101, fig.11). A more local parallel may possibly be found at Birdlip quarry in Gloucestershire (Mudd *et al.* 1999, 191), where an unusual elongated sub-rectangular pit with limestone blocks and a charcoal

Facing page: Fig. 9.5a Aisled building sections

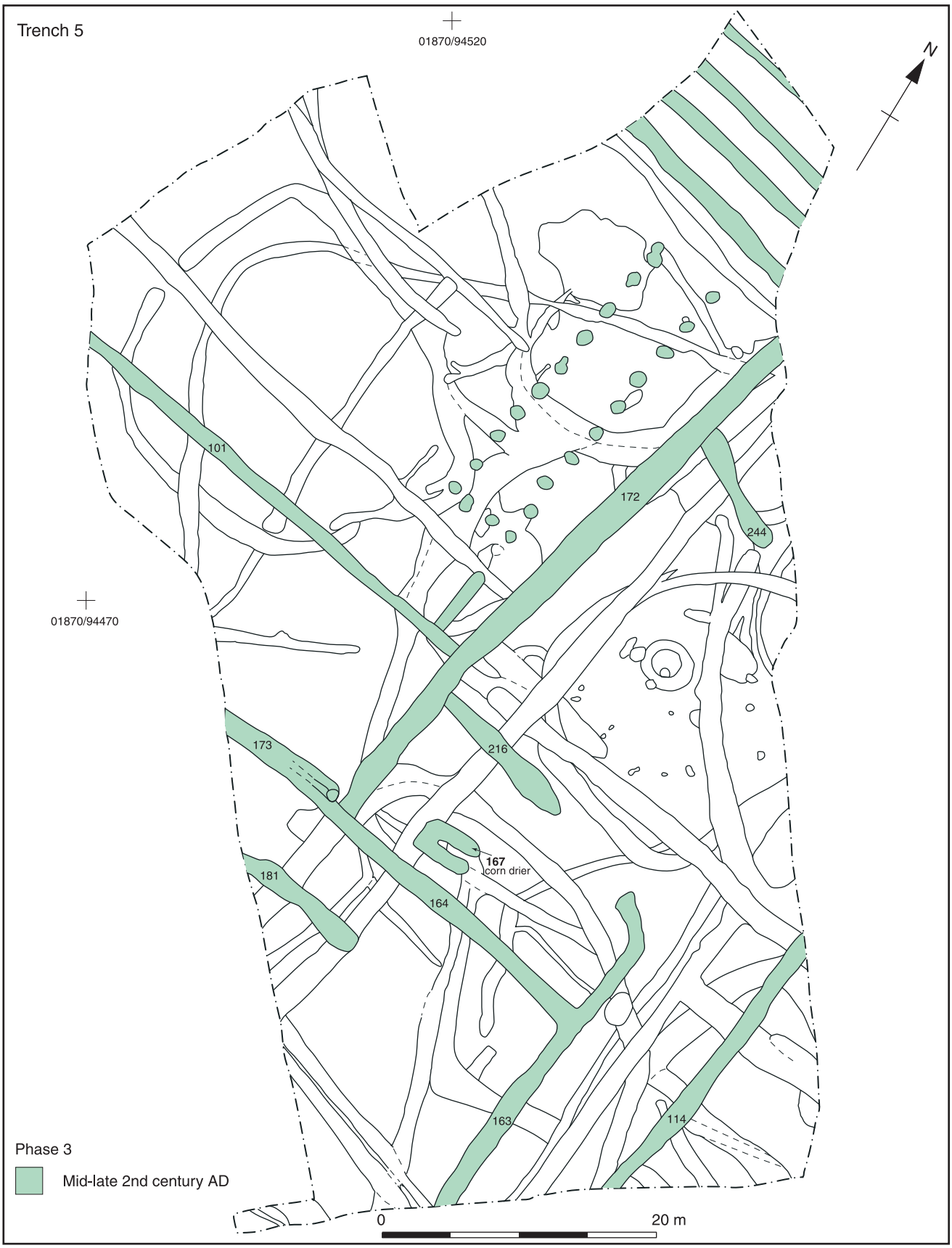


Fig. 9.6 Trench 5 Phase 3

spread resembles one side of the Somerford Keynes structure. However, the interpretation of the Birdlip Quarry structure remains uncertain (Mudd *et al.* 1999, 192). The principal argument against the Somerford Keynes structure being interpreted as a corn-drier is that the environmental samples only contained a single charred grain. It may therefore have been that this oven was utilised for a different purpose.

Structure 167 was positioned within the western side of a sub-rectangular enclosure (21 x 9 m) formed by ditches 163, 164, 216 and 172, with which it was undoubtedly contemporary. Finds from the enclosure ditches included four brooches (Fig. 9.13, no. 34), vessel glass, a copper alloy clothes fitting, a prehistoric metal smithing tool (Fig. 9.21, no. 3) and pottery of primarily mid to late 2nd-century date. A piece of slag was also recovered from ditch 163, which is slight evidence for some light industrial activity in the area.

Trackways

The southern ditch of the 'corn-drier' enclosure (164) appears to have formed part of an east-west trackway (5-6 m wide) which continued westwards as 173, and probably replaced the one further to the north. The southern ditch of this trackway (181; 0.9 m wide, 0.44 m deep) terminated 10 m into Trench 5, opening out onto a possible large rectangular enclosure. Both trackway ditches were seen to continue westwards to the edge of the site. Further to the east, a possible north-south trackway is suggested by ditches 114 (1.22 m wide, 0.54 m deep) and 163 (1.4 m in wide, 0.52 m deep). A piece of limestone masonry was recovered from 114, hinting at a structure within the vicinity.

Linear ditches

Ditches 172 and 101 appeared to continue in use, forming two sides of an enclosure surrounding the

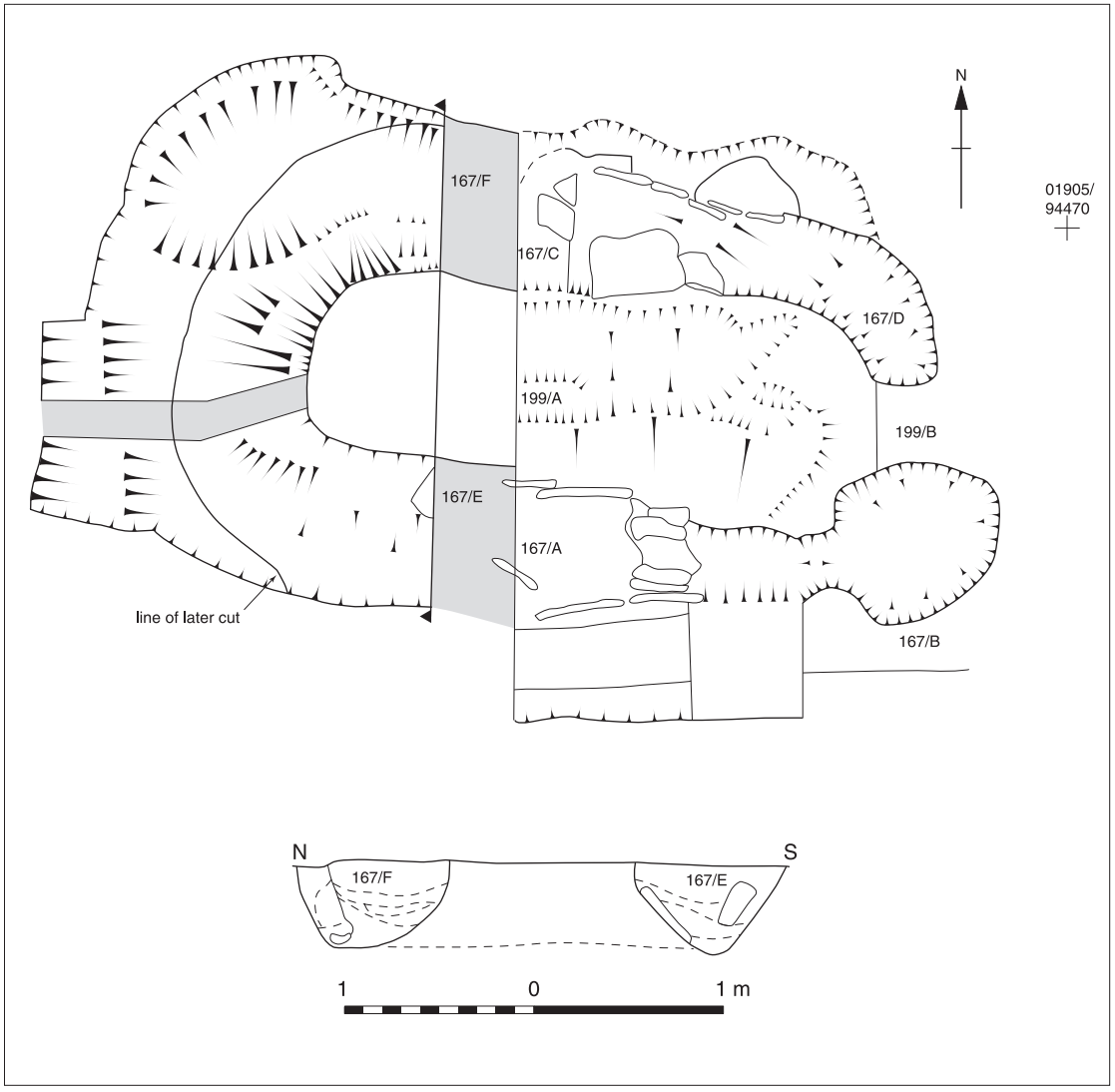


Fig. 9.7 'Corn-drier'

aisled building. Immediately south of this building lay north-south gully 320 (0.8 m wide, 0.5 m deep) which cut through the northern of the east-west trackway ditches (318) and terminated immediately to the north of the southern ditch (101). The function of this short length of gully is uncertain, but its proximity and shared alignment with the aisled building suggests some association.

Features from other trenches (Fig.9.2)

Enclosure ditch (16)

A major D-shaped enclosure ditch (16) was traced for just over 120 m within the eastern part of the salvage area (Fig 9.2). The ditch was partially excavated in Trench 13 and located further to the south in Trench 8. There were at least two major cuts with total dimensions being *c* 4.3 m wide and on average 0.4 m in depth. The ditch appears to have gradually silted up, although pottery recovered from all layers was generally 2nd century AD in date, suggesting that its entire period of use and abandonment lay within this period. Aside from pottery, the only finds comprised four pieces of stonework, two of which were sculptural fragments of the shield and eagle (see finds below; Figs 9.19-9.20), which were found on top of the north-western cut, just outside of the ditch.

Parallel ditches

Aligned approximately east-west from the northern and southern sections of the D-shaped enclosure were parallel rows of ditches (Fig. 9.2). Three of the northern ditches were excavated in Trench 13, and found to be contemporary with at least one cut of ditch 16. The ditches were between 1 and 1.4 m wide and from 0.2 to 0.28 m deep. None of these features had any associated finds to indicate date or function, although their relationship with ditch 16 indicates contemporaneity (ie 2nd century AD). However, it remains uncertain as to whether any or all were open at the same time, or if they represent a succession of northern boundaries for the site. The ditches were traced further west in Trenches 12, 5 and 3 (see northern parallel ditches above). Three parallel ditches were traced to the south, and partially excavated in Trenches 1 and 9. No finds were recovered. It is clear from the general distribution of metal detected finds from all periods, that these ditches defined the main areas of activity in the western part of the site.

'Inner enclosure'

At the far south-western corner of Trench 19, a short section of ditch (9/80) was partially excavated, although precise dimensions were difficult to ascertain due to waterlogging. The ditch was seen in the salvage area to continue curving round to the north-east towards the river and seemed to form part of a large 'inner' enclosure, traced for 70 m (Fig. 9.2). It is uncertain how it would have related to ditch 16 further west, but the recovery of late 1st- early 2nd-century pottery suggested that the two features could have been contemporary. However, the fact that there is no obvious spatial relationship (ie they are not concentric) may indicate that they did belong to different phases. Large quantities of 1st to 4th-century AD finds were recovered by metal detecting from topsoil in areas to the east of this 'inner' enclosure.

Features in Trench 17

Trench 17, located *c* 25 m east of Trench 5, was the second largest excavated area on site (Fig. 9.2). It contained a series of intercutting ditches, gullies and pits, although many of the relationships were unclear due a combination of shallow disturbed stratigraphy and problems of standing water. The chronological range of the pottery was quite similar to that of Trench 5 (1st-2nd century AD), with very little to suggest activity beyond the 2nd century AD. Only three stratified coins were recovered from features within Trench 17, two with a date of 1st-2nd century AD and the other belonging to the late 3rd century. Of the 52 small finds recovered from the Trench, 12 were brooches with a general 1st to mid 2nd-century AD date range. However, there were large quantities of late 3rd- and 4th-century small finds recovered by metal detecting in the vicinity of Trench 17 (see Fig. 9.9), which does point to late Roman activity of some kind in this area.

The spatial arrangement of ditches and gullies appears less regular than in Trench 5, and is difficult to reconstruct in a meaningful way. This, and the fact that the pottery appears to have been very mixed also ensures that accurate phasing of the features is not possible. Various layers of alluvial silt and gravel lay across the site, particularly obscuring features in the far eastern area. In the west was a layer of mid grey brown silty loam (34) containing much occupation debris (pottery, bone etc), including a small number of 1st- to 4th-century coins. A stone spread (427) was associated with this layer, being particularly concentrated in the tops of ditches. This may have been the remains of a metalled surface, perhaps relating to the late Roman activity at the site, although the layer is far too disturbed to be certain.

THE FINDS

A large finds assemblage was recovered from Neigh Bridge, Somerford Keynes, although a significant proportion of this was unstratified This is particularly pronounced with the metal small finds, many of which were found as a result of detectorist survey as opposed to by excavation (see below). Such differential methods of collection are undoubtedly a factor that has led to some pronounced discrepancies in the character of the different finds categories.

Full reports and catalogues on all the finds from this site can be found in Digital section 5.3.

Pottery (Fig. 9.8) *by Kayt Brown*

The assemblage comprises 10,183 sherds (*c* 100.2 kg) of predominately Roman pottery, with a small quantity of prehistoric material, largely residual in Roman features. The main assemblage can be dated from the mid-late 1st century AD to the late 2nd century AD. A small number of late Roman shell-tempered sherds suggest limited activity in the 4th century, although no features were assigned to this date.

Adverse soil conditions had a major impact on the condition of the assemblage; surface preservation is poor and many sherds displayed discolouring of surfaces hindering fabric identification. The average sherd size for the assemblage as whole is relatively low at 9.9 g, although there is variation in sherd size between the phases. Evidence of use is represented by sooting on the exterior of vessels, post-firing holes in a number of vessels, sherds with rivet holes and a number of lead rivets (see Cool below).

A quantification of fabrics by sherd count, weight and estimated vessel equivalents (EVEs) is presented in Table 9.1. Full fabric descriptions are included in Digital section 5.3.

Pottery and phasing

A large proportion of the assemblage is unphased (37% by sherd count), and the bulk was recovered from Trench 5, which is also the only area to produce any reliable phasing information.

Although three broad phases were identified through the stratigraphy, in ceramic terms the distinction is not always clear. There is significant overlap in the wares represented in all phases, due partly to the narrow time span of activity at the site and longevity of some fabrics during this period, but redeposition of sherds, and in some cases curation of vessels are also likely factors. The intercutting nature of many of the features to produce pottery, particularly in Trench 5, has resulted in many features from different phases producing a quite homogenous range of wares, with dating, particularly between Phases 2 and 3 based largely on a small number of diagnostic forms. Pottery by phase is detailed in Table 9.2.

Most features within Phase 1, including the enclosure ditches, can be dated to the late 1st -early 2nd century AD. The 'belgic' type wares and early reduced coarsewares (such as Savernake) form the bulk of the material recovered in this phase. There is very little mortaria or samian and no British fine wares. Residual middle Iron Age material amounts to 60 sherds. There are a few features which may indicate earlier activity at the site, although the individual assemblages recovered from these features are small. Posthole 310 contained grog-tempered sherds and limestone-tempered sherds, a combination that is indicative of the early to mid 1st century AD at the nearby site of Thornhill Farm (Timby 2004). Ditches 117, 314, and gullies 315 and 316 also contained mid-late 1st-century AD pottery.

The ceramics from this Phase 1 are comparable in both range of fabrics and forms, to Thornhill Farm periods E-F (*c* AD 75-120), which also appears to be a phase of intensive occupation. At Thornhill Farm, however, the quantity of ceramics diminishes during the 2nd century (phase 2, Thornhill Farm period G). At Somerford Keynes there is an increase in the amount of samian and black-burnished wares, including in the latter instance straight-sided bowls/dishes with flat topped rims, dated from the early-mid 2nd century. In Trench 5 it was possible to further sub-divide this phase into Phase 2a and 2b, on stratigraphic grounds, although again this is not reflected in the ceramics from these features. Included within Phase 2 is the pottery recovered from the postholes of the aisled building (B 1), which is consistently 2nd century in date, with a small quantity of Belgic wares. Belgic wares continue to appear alongside later fabrics into Phase 3 and although redeposition is the most likely factor, the average sherd weights of this material remain high.

General discussion of the assemblage

The small number of possible Bronze Age and early Iron Age sherds hint at limited early activity in the area, with stronger evidence for activity at the site probably from the mid 1st century AD and certainly from the late 1st century AD. The assemblage from Somerford Keynes shows many similarities to a number of rural sites within the region. As at Thornhill Farm and to a lesser extent at Claydon Pike there is a late 1st century-early 2nd century component of the assemblage which still comprises a significant proportion of 'local' grog-tempered wares. At Thornhill Farm, grog-tempered material was still a dominant fabric, occurring alongside Severn Valley and Savernake wares in period E-F (AD75-120+). Elsewhere in the region such fabrics tend to decline in importance by the end of the Flavian period, in deference to Romanised wares. Although no quantified data exists for the assemblage from Ashton Keynes, it would appear that there is a similar range of material present during the late Iron Age/early Roman period. The occurrence of limestone-tempered fabrics is also well recorded at these sites and at a number of other rural sites in the region such as Watchfield (Laidlaw 2001, 255) and Faringdon, Oxfordshire (Bryan *et al.* 2004), Groundwell Farm, Wiltshire (Gingell 1982, 61) and Kempsford Quarry, Gloucestershire (see Biddulph, Digital section 8.4).

Unlike other sites in the vicinity, such as Claydon Pike, Ashton Keynes, and to some extent Kempsford, activity at Somerford Keynes appears to cease in the late 2nd-3rd century. Locally

Table 9.1: Quantification of pottery fabrics from Somerford Keynes

Group	*Ware code*	*Description*	*Sherd count*	*%*	*Weight (g)*	*%*	*EVEs*	*%*
Prehistoric								
	A	Sand-tempered	3	0.03	29	0.03		
	F	Flint-tempered	8	0.08	22	0.02		
	L	Limestone	58	0.57	274	0.27	13	0.2
	Q	Quartizite	2	0.02	12	0.01		
	S	Shell-tempered	52	0.51	437	0.44	35	0.5
sub-total			123	1.21	774	0.77	48	0.6
Late Iron Age/early Roman wares								
	E	Belgic' type fabrics	244	2.40	2649	2.64	174	2.4
	E10							
Organic-tempered fabrics			184	1.81	1691	1.69	157	2.1
	E13	Organic and grog	16	0.16	394	0.39		
	E20	Fine sand-tempered fabrics	22	0.22	190	0.19		
	E21	Fine sand-tempered fabrics	8	0.08	59	0.06		
	E30	Medium/coarse sand-tempered fabrics	37	0.36	447	0.45	77	1.0
	E40	Shell-tempered fabrics	36	0.35	242	0.24	24	0.3
	E50	Limestone-tempered fabrics	5	0.05	64	0.06	15	0.2
	E60	Flint-tempered fabrics	7	0.07	131	0.13	12	0.2
	E80	Grog-tempered fabrics	1217	11.95	13257	13.23	607	8.2
sub-total			1776	17.44	19124	19.09	1066	14.4
Fine & specialist wares								
Amphora		A		6	0.06	331	0.33	
	A10	Buff fabrics	4	0.04	233	0.23		
	A11	South Spanish (Dressel 20) BAT AM 1 & 2	18	0.18	2089	2.09	100	1.4
	A12	Fine buff (CAM186C) (FCP1.5) CAD AM	1	0.01	15	0.01		
	A30	Coarse oxidised	1	0.01	34	0.03		
Samian S			1	0.01	5	0.00		
	S20	South Gaulish (including La Graufesenque)	35	0.34	292	0.29	81	1.1
	S25	Montans MON SA	2	0.02	3	0.00		
	S30	Central Gaulish (Lezoux)LEZ SA	90	0.88	666	0.66	162	2.2
	S32	Les Martres-de-Veyre LMV SA	25	0.25	338	0.34	74	1.0
Fine wares		F		0.00		0.00		0.0
	F22	N. Wiltshire glazed ware	1	0.01	2	0.00		
	F50	Colour-coated fabrics	2	0.02	4	0.00	10	0.1
	F41	Lyon LYO CC	1	0.01	1	0.00		
	M	Mortarium fabrics	2	0.02	229	0.23		
	M10	Buff fabrics	12	0.12	98	0.10	10	0.1
	M22	Oxfordshire OXF WH	7	0.07	419	0.42	11	0.1
	M30	Oxidised with white slip	1	0.01	37	0.04		
	M31	Oxfordshire WC OXF WS	1	0.01	45	0.04		
	M32	Cirencester SOW WS	1	0.01	35	0.03		
	M50	Oxidised	2	0.02	196	0.20	5	0.1
White-slipped fabrics			Q		1	0.01	6	0.01
	Q20	Oxidised fabrics	17	0.17	144	0.14		
	Q21	Oxfordshire fabric OXF WS	6	0.06	34	0.03		
White wares		W		2	0.02	27	0.03	
	W11	Oxfordshire Parchment ware OXF PA	1	0.01	18	0.02		
	W20	Sandy white wares	12	0.12	105	0.10	25	0.3
	W22	Oxfordshire sandy	2	0.02	5	0.00		
sub-total			255	2.50	5411	5.43	478	6.6

Table 9.1: Quantification of pottery fabrics from Somerford Keynes (continued)

Group	*Ware code*	*Description*	*Sherd count*	*%*	*Weight (g)*	*%*	*EVEs*	*%*
Coarse wares								
	B	Black-burnished wares	173	1.70	1202	1.20	194	2.6
	B10	Black-burnished ware	181	1.78	1287	1.28	138	1.9
	B11	Dorset fabric DOR BB1	665	6.53	6144	6.13	1109	15.0
	B30	Black-burnished type/imitation fabrics	320	3.14	1808	1.80	291	3.9
	B31		93	0.91	603	0.60	80	1.1
	C	Calcareous-tempered fabrics	98	0.96	558	0.56	35	0.5
	C10	Shell-tempered fabrics	66	0.65	477	0.48	41	0.6
	C12	Coarse, abundant shell	47	0.46	550	0.55	71	1.0
	C20	Limestone-tempered fabrics	44	0.43	299	0.30	23	0.3
	C21		201	1.97	918	0.92	82	1.1
	O	Oxidised coarse ware fabrics	410	4.03	3249	3.24	209	2.8
	O10	fine fabrics	18	0.18	256	0.26	54	0.7
	O20	medium sandy fabrics	664	6.52	4841	4.83	417	5.6
	O21	Oxfordshire sandy fabric	2	0.02	11	0.01		
	O30	Wiltshire wares	381	3.74	3465	3.46	424	5.7
	O32	Fine, iron inclusions [FCP 10.7]	2	0.02	11	0.01		
	O40	Severn Valley wares SVW OX2	103	1.01	1515	1.51	70	0.9
	O50	Miscellaneous fabrics	32	0.31	87	0.09	15	0.2
	O60	Calcareous tempered fabrics	2	0.02	9	0.01		
	O65	distinct calcareous grits	15	0.15	89	0.09		
	O80	coarse tempered fabrics	118	1.16	2304	2.30	26	0.4
	R	Reduced coarse ware fabrics	834	8.19	8365	8.35	481	6.5
	R10	fine fabrics	41	0.40	299	0.30	10	0.1
	R20	sandy fabrics	7	0.07	88	0.09		
	R30	Medium fine fabrics	2764	27.15	20331	20.29	1129	15.3
	R31	organic and sand inclusions	1	0.01	26	0.03	7	0.1
	R35	North Wiltshire	164	1.61	1999	2.00	347	4.7
	R36	glauconitic North Wiltshire	7	0.07	96	0.10	12	0.2
	R37	fine, sandy, occasional black iron, grog and organic inclusions	11	0.11	86	0.09		
	R38	as R37 but with distinct grog	182	1.79	3491	3.48	108	1.5
	R40	Miscellaneous fabrics	19	0.19	302	0.30	5	0.1
	R70	Calcareous tempered fabrics	6	0.06	48	0.05		
	R77	Oolitic limestone [FCP13.6]	5	0.05	27	0.03	6	0.1
	R85	SW 'micaceous' wares	1	0.01	12	0.01		
	R90	coarse-tempered fabrics	188	1.85	5477	5.47	185	2.5
	R94	cf Savernake	149	1.46	4257	4.25	185	2.5
	R95	Savernake SAV GT	7	0.07	188	0.19	17	0.2
sub-total			8021	78.77	74775	74.60	5771	77.8
post-roman								
	Z20	Medieval fabrics	3	0.03	24	0.02		
	Z30	post-medieval fabrics	5	0.05	78	0.08		
sub-total			8	0.08	102	0.10		0.0
Total			10183	100.00	100186	100.00	7402	100.0

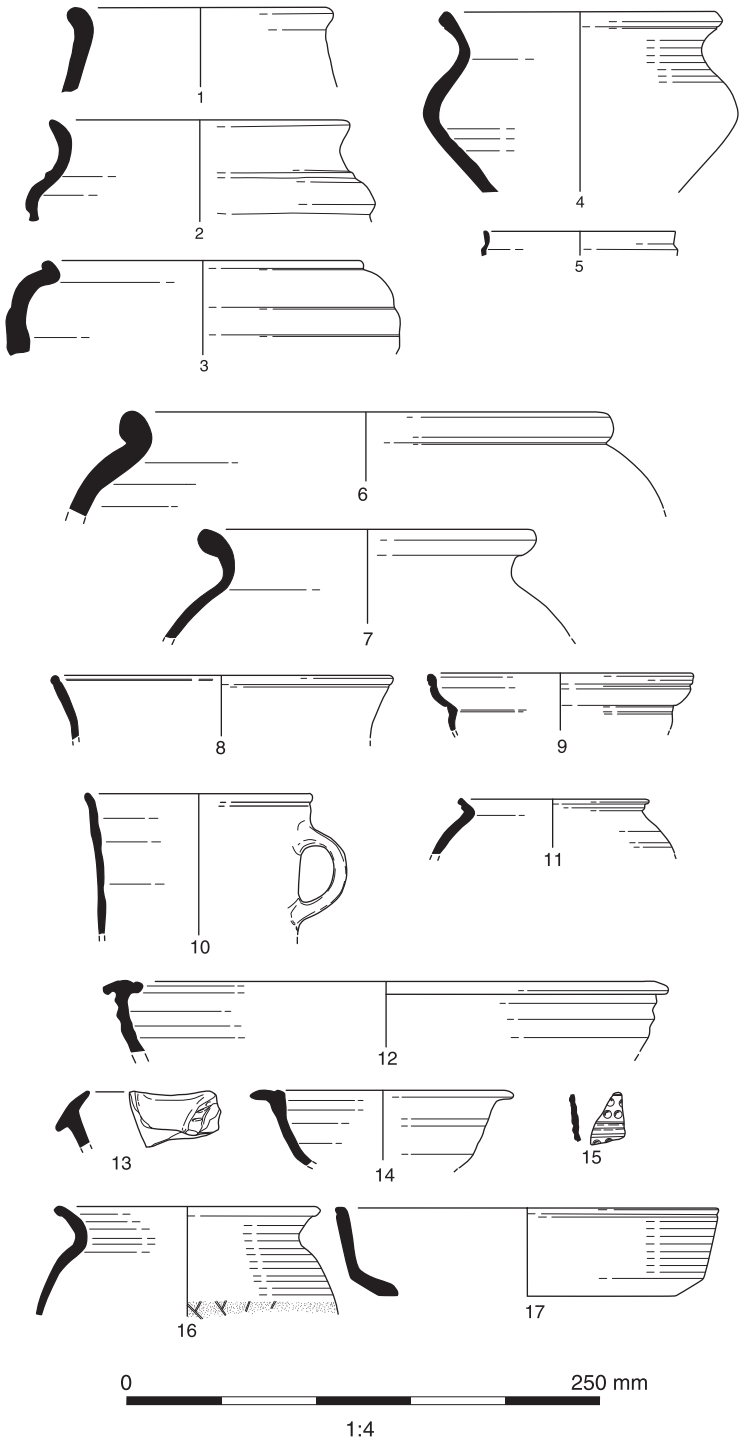


Fig. 9.8 Phase 1 and 2 pottery

Table 9.2: Total pottery by ware group and phase

Phase		Ware Group A	B	C	E	F	M	O	P	Q	R	S	W	Z	Total
0	Sherd count	5	528	169	734		6	723	30	15	1497	77	8	6	3798
	Weight (g)	138	4011	1501	7424		398	6845	225	134	15131	697	77	85	36666
1	Sherd count	6	133	168	565	1	3	156	61	3	442	10	1		1549
	Weight (g)	695	1125	644	5832	1	175	2011	342	16	4895	51	6		15793
1 or 2	Sherd count	4	16		37			21			92	6			176
	Weight (g)	705	105		235			329			1024	94			2492
2	Sherd count	2	156	19	85	1	1	164	8		214	23			673
	Weight (g)	82	1235	138	793	1	31	1486	56		2701	107			6630
2 or 3	Sherd count	12	381	62	166	3	15	526	17	6	1737	28	7	2	2962
	Weight (g)	1067	2452	249	2540	36	410	3860	110	34	16535	255	56	17	27621
3	Sherd count		218	38	189		1	156	8		404	9	1		1024
	Weight (g)		2116	270	2300		45	1275	57		4806	100	16		10985
total	Sherd count	29	1432	456	1776	5	26	1746	124	24	4386	153	17	8	10182
total	Weight (g)	2687	11044	2802	19124	38	1059	15806	790	184	45092	1304	155	102	100187

produced wares are the principal sources for the assemblage and in keeping with rural sites in the upper Thames Valley, the proportion of fine and specialist wares is low, at only 2.5% (by sherd count) and 5.5% (by weight – a higher percentage reflecting the presence of amphorae and mortaria sherds). Sites at Old Shifford Farm, Standlake (Timby 1995, 129) and Gravelly Guy, Oxfordshire (Lambrick and Allen 2004) both produced less than 1% fine and specialist wares, compared to the urban assemblage at Asthall where the figure is almost 7% during the same period (Booth 1997, 134). There is little evidence within the ceramic assemblage to indicate that it represents anything other than a rural, domestic assemblage, which would appear to be in contrast with the small find evidence (see Cool below). However there are hints, for example the presence of a Lyon colour-coated bowl, that the occupants at Somerford Keynes may have had access to luxury items, although the occurrence of all fine wares is severely limited. Combined with this, characteristically Roman forms such as mortaria, amphorae and flagons are all poorly represented within the assemblage, suggesting that Roman culinary practises may have had little impact on most of the inhabitants of the site. As on many rural sites of this period jars and bowls form the dominant vessel types. The presence of sherds from a triple vase and a tazza are the only elements of the assemblage that may indicate any form of ritual activity, but given the number of sherds involved this is a rather tenuous link.

Figure 9.8 presents a selected group of pottery from the site, from Phase 1 and Phase 2. All are wheel-thrown vessels unless specified. FS denotes 'featured sherd'.

Illustrated catalogue: Phase 1(numbers 1-5) and Phase 2 pottery (numbers 6-17) (Fig. 9.8)

1. FS 3083. Jar. Handmade. Out-sloping jar rim, fabric L2, context 315/A/1
2. FS 3079. Jar. Handmade. Cordon at base of neck and groove on shoulder, fabric E40, context 314/A
3. FS 3157. Jar. Fabric R90, context 324/B/3
4. FS 3159. High shouldered jar, fabric E10, context 324/B/3
5. FS 486. Lyon ware, rim of hemispherical bowl, fabric F41, context 130/C/1
6. FS 3450. Bead rim jar. Fabric R90, context 400/A/5
7. FS 3333. Jar rim. Fabric R94, context 400/A/3
8. FS 3392. Jar rim. Fabric O30, context 400/A/3
9. FS 3401. Bowl. Fabric O40, context 400/A/3
10. FS 3318. Tankard with single handle. Fabric O40, context 400/A/2
11. FS 3395. Beaker rim. Fabric O30, context 400/A/3
12. FS 3402. Reeded-rim bowl, Fabric O10, context 400/A/3
13. FS 3404. Bowl with spout. Fabric O10, context 400/A/3
14. FS 3461. Grooved flange bowl, fabric R30, context 400/A/5
15. FS 3530. Decorated sherd of North Wiltshire glazed ware. Fabric F22, context 407/C
16. FS 2251. Everted rim jar with faint burnished decoration on shoulder. Fabric E40, context 172
17. FS 2252. Straight side beaded rim dish. Fabric O80, context 172

Coins *by Cathy King*

A total of 278 coins was recovered from the site at Neigh Bridge, Somerford Keynes ranging in date from the Iron Age and Roman Republic to the late 4th century AD implying a period of continuous occupation (Table 9.3). Unfortunately most of the coins are unstratified and many are in poor condi-

tion, although the overall pattern of coin loss can be determined.

There is a relatively high proportion of early coins, with 34% belonging to the years *c* 40 BC to AD 192. Of these, thirteen are British Iron Age pieces dated to between *c* 40 BC and AD 30 and one is a Republican denarius of 32-1 BC. The Iron Age coins are all Dobunnic or copies of Dobunnic silver units with one exception, a debased British LZ stater. The predominance of Dobunnic Iron Age coins at this site is unsurprising since they occur frequently in Gloucestershire, Wiltshire, Oxfordshire, Hereford and Worcester, and Avon and more sporadically further afield including outliers in Essex and Kent (van Arsdell 1994, 73-83). More problematic is the question whether these coins can be related directly to the Iron Age occupation of the site or whether they reached it in the early Roman period of occupation. Dobunnic silver while clustering in Gloucestershire, Oxfordshire, and Wiltshire had a wide distribution throughout Britain as noted above and virtually all finds turn up in post-conquest contexts (Sellwood 1984, 203).

The presence of pre-conquest silver on Roman sites in Britain is comparatively rare apart from those which are both early and/or military in nature (eg Hod Hill, Alchester, Cirencester), temples (eg Hayling Island, Harlow), and civilian sites with a military supply component like Fishbourne. The single Republican denarius is the only silver coin recovered from Somerford Keynes until the Flavian period when two genuine denarii of Vespasian occur as well as a plated piece datable to AD 69-96. It is unlikely that the Republican denarius reached the site before the conquest.

Early bronze coins minted before AD 44 or copied coins minted before AD 44 again tend to be comparatively rare on most British sites. The absolute numbers of the pre-conquest and immediately post-conquest coins from Somerford Keynes is small but, by analogy with other early sites, their presence together with that of the Republican denarius seems to suggest an early arrival at the site. Some bronze issues may be related to the invasion itself. Sauer has argued, for example, that a large number of coins of Caligula from military bases can be linked to their foundation date in the 40s and 50s (Sauer 2000, 49). Despite the presence of early coinage, there is no direct evidence of military presence at Somerford Keynes in these years and the earlier of two groups of military finds from the site have been dated to the later 2nd and early 3rd centuries AD (see Cool below). However, Somerford Keynes is not far from Cirencester where a fort was established in the 1st century AD and although it does not seem to have survived beyond the sixties, the coin loss pattern is not dissimilar.

The proportion of bronze coins recovered at Somerford Keynes in the Flavian period AD 69-96 is higher than that of the preceding period, although such coinage continued in circulation long after they were minted and it was only in the later 3rd century that they disappeared from use. The percentage of coins of 2nd-century date (AD 96-192) also remains relatively high (8.5%) at Somerford Keynes. Bronze coins of the 3rd century AD are extremely rare on British sites and none datable to the period AD 192 to AD 260 have been recovered from this site. There are, however, two denarii from these years.

The number of coins recovered from Somerford Keynes that were minted between AD 260 and AD 402 is much higher than those datable to the years before AD 260 and in this respect the site conforms to the general pattern of loss on British sites in the later period. Within these chronological parameters, however, there are periods when coin loss peaks: AD 260-96, AD 330-48, AD 348-60, AD 364-78, and AD 388-402.

Somerford Keynes is an interesting and somewhat unusual rural site in producing so much coinage from the years before AD 192 suggesting some sort of activity dating from the 1st century AD. In this aspect the coinage mirrors the picture provided by the finds assemblages (see below).

Table 9.3: Coins from Somerford Keynes

Period	*Genuine*		*Imitations*		*Total*	
	No	*%*	*No*	*%*	*No*	*%*
40 BC-30 AD	8	2.9	5	1.8	13	4.7
32-31 BC	1	0.3	0	0.0	1	0.3
AD 36-68	7	2.5	5	1.8	12	4.3
AD 69-96	18	6.5	1	0.3	19	6.8
AD 96-138	5	1.8	2	0.7	7	2.5
AD 138-61	7	2.5	1	0.3	8	2.9
AD 161-92	6	2.1	1	0.3	7	2.5
AD 96-192	2	0.7	0	0.0	2	0.7
AD 36-192	23	8.3	3	1.1	26	9.3
AD 193-260	1	0.3	1	0.3	2	0.7
AD 260-86	17	6.1	2	0.7	19	6.8
AD 286-96	8	2.9	1	0.3	9	3.3
c AD 260-96	2	0.7	24	8.6	26	9.3
AD 296-315	3	1.1	0	0.0	3	1.1
AD 315-30	8	2.9	1	0.3	9	3.3
AD 330-48	24	8.6	12	4.3	36	12.9
AD 348-64	23	8.3	22	7.9	45	16.2
AD 364-78	10	3.6	0	0.0	10	3.6
AD 378-88	1	0.3	0	0.0	1	0.3
AD 388-402	1	0.3	0	0.0	1	0.3
c AD 330-64	1	0.3	1	0.3	2	0.7
c AD 260-402	9	3.3	7	2.5	16	5.8
Subtotal	185	66.3	89	31.5	274	98.3
Post-Roman	3	1.1	1	0.3	4	1.4
Total	188	67.4	90	31.8	278	99.2

Small finds (Figs 9.9 and 9.10-17) *by Hilary Cool*

A total of just over 1000 small finds was recovered from archaeological investigations at Neigh Bridge, Somerford Keynes, excluding coins and stonework. With the exception of nails, these are listed by functional category in Table 9.4, with the personal ornaments, which formed the largest single group, further broken down in Table 9.5. Only 13% of the total came from the excavation, the remainder was the result of surface collection and metal detecting. The overall spatial distribution of this material was plotted (Fig. 9.9), although there is not enough information for detailed phase by phase analysis.

The collection is biased in several ways, primarily through the use of metal detectors, and the lack of X-radiography on the ironwork until very recently. Despite the many problems, however, the finds do tell a most remarkable story especially when compared to the evidence of the pottery and glass vessels, where there is much divergence, both chronologically and in terms of function and status. By far the majority of the identifiable finds were of late Iron Age to early Roman date. There was a little mid 2nd- and 3rd-century material and a slightly larger amount of late 4th- to 5th-century material. The brooches in particular give a picture of activity from at least the early 1st century AD and the presence of some Augustan forms even hint at the possibility of activity in the late 1st century BC. As can be seen from Table 9.6, at least a quarter of all closely dated brooches can be assigned to the period prior to the main period of activity as indicated by the pottery. Equally early items can be seen amongst some of the other categories such as the vessel foot (Fig. 9.15, no. 43) and the looped fitting (Fig. 9.16, no. 56). It seems highly unlikely that such a large corpus of material can all be the result of unusual long curation of objects.

The range of items present is equally at odds with the pottery and the glass vessel assemblage as far as the status of the site is concerned. While they suggest a modest rural establishment, the finds suggest wide access to resources and a range of activities that would indicate higher status occupation. Even allowing for the fact that the population of this area of the country were voracious

Table 9.4: The Iron Age and Roman small finds from Somerford Keynes according to functional categories

Function	*1*	*1/2*	*2*	*2 a*	*2 b*	*2/3*	*3*	*U/S*	*Total*
Personal	10	3	-	-	1	10	5	286	315
Toilet	3	-	-	-	-	1	-	38	42
Textile	-	-	-	1	-	-	1	1	3
Household	-	-	-	-	-	-	-	6	6
Tools	2	-	-	-	-	2	-	9	13
Weighing	-	-	-	-	-	-	-	6	6
Writing	-	-	-	-	-	3	-	3	6
Transport	-	-	-	-	-	-	-	3	3
Buildings	14	2	1	1	4	20	6	1	49
Tools	2	-	-	-	-	2	-	9	13
Fasteners	3	-	-	-	1	6	1	61	72
Agriculture	-	-	-	-	-	-	-	4	4
Military	-	-	-	-	-	-	-	13	13
Religion	-	-	-	-	-	-	-	5	5
Total	34	5	1	2	6	44	13	445	550

Table 9.5: Personal ornaments by phase

Simple name	*1*	*1/2*	*2 b*	*2/3*	*3*	*U/S*	*Total*
Brooch	8	3	1	8	4	255	279
Bracelet	-	-	-	-	-	14	14
Finger ring	1	-	-	-	-	12	13
Bead	1	-	-	1	-	1	3
Hair pin	-	-	-	-	3	1	2
Shoe cleat	-	-	-	1	-	1	2
Buckle	-	-	-	-	-	2	2
Total	10	3	1	10	5	286	315

Fig. 9.9 Distribution of finds from metal detecting

Table 9.6: Summary of the dated brooches

Date	*Brooch Name*	*1*	*1/2*	*2/3*	*3*	*U/S*	*Total*	*Subtotal*
3rd to 1st century BC	Involute	-	-	-	-	1	1	1
Early to mid 1st century	Nauheim derivative	-	1	-	-	22	23	
	Strip bow	-	-	-	-	5	5	
	One piece	-	-	-	-	1	1	
	Langton Down	1	-	-	-	11	12	
	Rosette	-	-	-	-	3	3	
	Colchester	-	-	-	-	13	13	57
Mid to late 1st century	Aesica	1	-	-	-	3	4	
	Eye	-	-	-	-	1	1	
	Aucissa	-	-	-	-	3	3	
	Bagendon	-	-	-	-	1	1	
	Hod Hill	1	-	3	-	23	27	
	Disc brooch	-	-	-	-	2	2	
	Penannular D5	-	-	-	-	2	2	40
Mid 1st to 2nd century	Colchester derivative	-	1	-	-	17	18	
	Dolphin	-	-	2	-	14	16	
	Polden Hill	3	-	1	-	36	40	
	Lower Severn T-shape	-	1	2	-	16	19	
	Plate-headed T-shape	-	-	-	-	2	2	
	Backworth trumpet	-	-	-	-	7	7	
	Chester trumpet	-	-	-	1	10	11	
	Headstud	-	-	-	-	1	1	
	Keyhole	-	-	-	-	1	1	115
2nd century	Wroxeter	-	-	-	1	2	3	
	Plate-headed trumpet	-	-	-	-	3	3	
	Alcester	-	-	-	-	1	1	
	Half disc and trumpet	-	-	-	-	1	1	
	Plate	-	-	-	-	3	3	11
4th century	Crossbow	-	-	-	-	1	1	
	Penannular	-	-	-	-	1	1	2
Total		6	3	8	2	207	226	(226)

consumers of brooches and other ornaments, the amounts recovered at this site seem exceptional. Frocester Court (Price 2000), has produced a total of 101 brooches and brooch fragments; Kingscote a total of 196 (Mackreth 1998), but even these large numbers are small in comparison. Somerford Keynes has produced 279 brooches and brooch fragments, and amongst these disc brooches, penannulars and iron brooches are undoubtedly under-represented due to the sort of biases mentioned above.

It does not seem likely that metal detecting alone can account for this discrepancy, and a more plausible explanation is that the survey material came from a wider area and reflects areas of the site and types of activity that were not sampled by excavation. If the stratified and unstratified material is compared there are some grounds for thinking this might be a good explanation. Table 9.7 shows the brooches grouped in date categories according to whether they were stratified or unstratified. It is noticeable that the categories where more than 10% of the brooches are stratified reflect the dates suggested by the pottery. The earlier material is conspicuous by being overwhelmingly represented amongst the unstratified material.

A similar phenomenon may be observed if the functional categories are considered in the same light (Table 9.8). Excluding building materials, the unstratified material represents 13 categories, while only half of these are represented amongst the stratified material. Sometimes there is a noticeable difference between the precise types found stratified and unstratified. In the writing equipment, for example, the stratified material consists of styli which would not be unusual on an ordinary rural

Table 9.7: Summary of the stratified and unstratified brooches by date

Date	*Strat*	*U/S*	*%Strat*	*Total*
3rd to 1st century BC	-	1	0	1
Early to mid 1st century	2	55	4%	57
Mid to late 1st century	5	35	14%	40
Mid 1st to 2nd century	11	104	10%	115
2nd century	1	10	10%	11
4th century	-	2	0	2
Total	19	207		226

site. The unstratified material, by contrast, includes seal boxes which would be unusual. The unstratified finds are probably indicating, therefore, that occupation of a different status to that uncovered by the excavations, was taking place in the vicinity.

Another feature of the finds assemblage that suggests the site may be unusual, is the origins of some of the material. The detailed discussion of the types showed again and again that types with a very local distribution were present as might be expected on a small rural site. There are also, however, things that are either someway outside of their normal range or at the edge of the distribution. Amongst the early to mid 1st-century brooches, for example, there are five examples of Hull type 10D which Mackreth suggests is typical of the Atrebatic tribe and of Hull Type 12 which he suggests was a favoured form of the Durotriges. The Langton Down assemblage is also exceptional in the area. Slightly later in the 1st century we can note the presence of the dumbbell fitting and the dress fastener more typical of the north, later again there is the pelta and trumpet brooch. One might suggest that there is a strand of evidence that suggests people from outside the area were regularly attracted to the site, especially in the 1st century. A tentative suggestion is that the area was the location of a fair or some place of ritual activity.

Aside from the possible sculptural fragments of the Capitoline triad, there is no explicit evidence of any ritual activity either in the form of buildings, in the pottery types present or in explicitly religious finds. The types of finds assigned to the ritual category here are the sort of background 'noise' one gets on many sites. It may be noted, however, that the sort of items that are present in overwhelming numbers (personal ornaments, toilet articles) can often be observed being used as votive items on Romano-British religious sites (see Discussion below). Could this also be the explanation for the very high level of pottery repair and curation attested? In the absence of any contextual information for so many items, it will be difficult to come to any conclusion as to whether such a hypothesis is likely.

What is noticeable from the finds is that from time to time there was an 'official' interest in the site. Strangely there is no evidence of this during the peak 1st to mid 2nd-century occupation. It first becomes noticeable in the later 2nd to 3rd century when there are sufficient military items to suggest there may have been soldiers present on policing duty (Fig. 9.17; see Discussion below and Chapter 16). It also becomes apparent in the mid to late 4th century, although it is possible that this could be viewed as a fashion of the late civilian elite. Such an explanation seems less likely for the crossbow brooch (Fig. 9.15, no. 36), so on balance a late military or official presence in the vicinity can be postulated.

Figures 9.10-17 present a selection of finds from Neigh Bridge, Somerford Keynes.

Table 9.8: Comparison of stratified and surface collected material by function

Function	*Stratified*	*Unstratified*	*Total*
Personal	29	286	315
Toilet	4	38	42
Textile	2	1	3
Household	-	6	6
Tools	4	9	13
Weighing	-	6	6
Writing	3	3	6
Transport	-	3	3
Tools	4	9	13
Fasteners	11	61	72
Agriculture	-	4	4
Military	-	13	13
Religion	-	5	5
Total	57	445	501

Illustrated catalogue: Brooches (Figs 9.10-9.13)

All copper alloy unless stated

1. *25 SF 321. Involute*. C2-C1 BC. Length 29 mm. Trench 5
2. *U/S SF 984. Nauheim derivative*. Type Hull 11. Mid C1. Length 42 mm
3. *25 SF 536. Nauheim derivative*. Type Hull 11. Mid C1. Length 51 mm. Trench 5
4. *U/S SF 5042. Nauheim derivative.* Type Hull 10D. Mid C1
5. *U/S SF 154. Nauheim derivative*. Type Hull 10. Mid C1. Present length 49 mm
6. *U/S SF 5028. Strip bow*. Type Hull 12 +. Early to mid C1
7. *U/S SF 153. One-piece bow brooch*. Type Hull 19. First half C1. Length 44 mm, section of button 4.5 mm
8. *133 SF 719. Langton Down*. Type Hull 21. Mid C1. Length 61 mm. Trench 5, Phase 1
9. *25 SF 303. Colchester.* Type Hull 90. Early to mid C1. Trench 5
10. *U/S SF 217. Aucissa.* Type Hull 61. Mid C1
11. *U/S SF 161. Hod Hill*. Bent double. Type Hull 60. Mid C1. Length *c* 67 mm, width 16 mm
12. *U/S SF 150. Hod Hill.* Type Hull 62. Mid C1. Length 32 mm

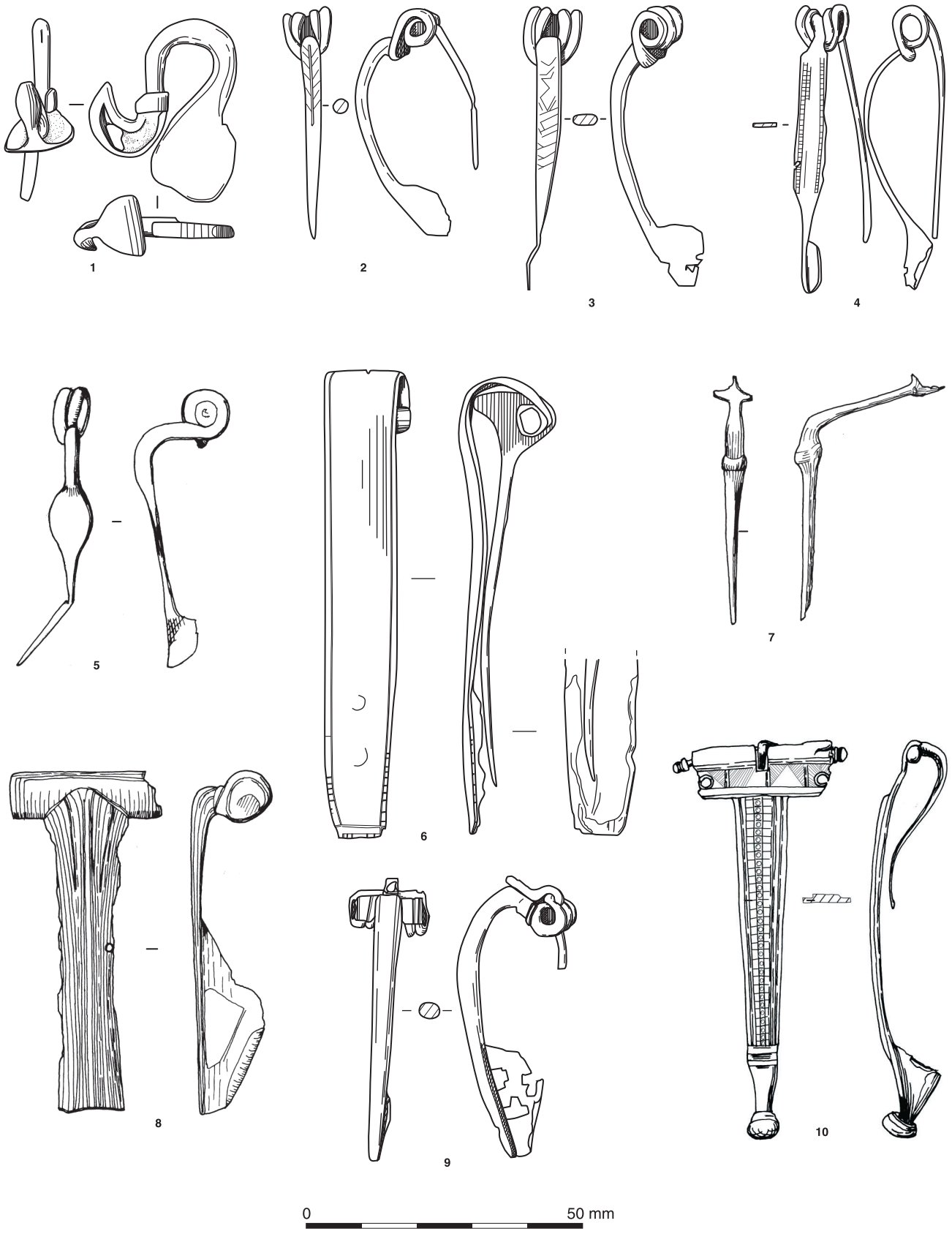


Fig. 9.10 Brooches (1-10)

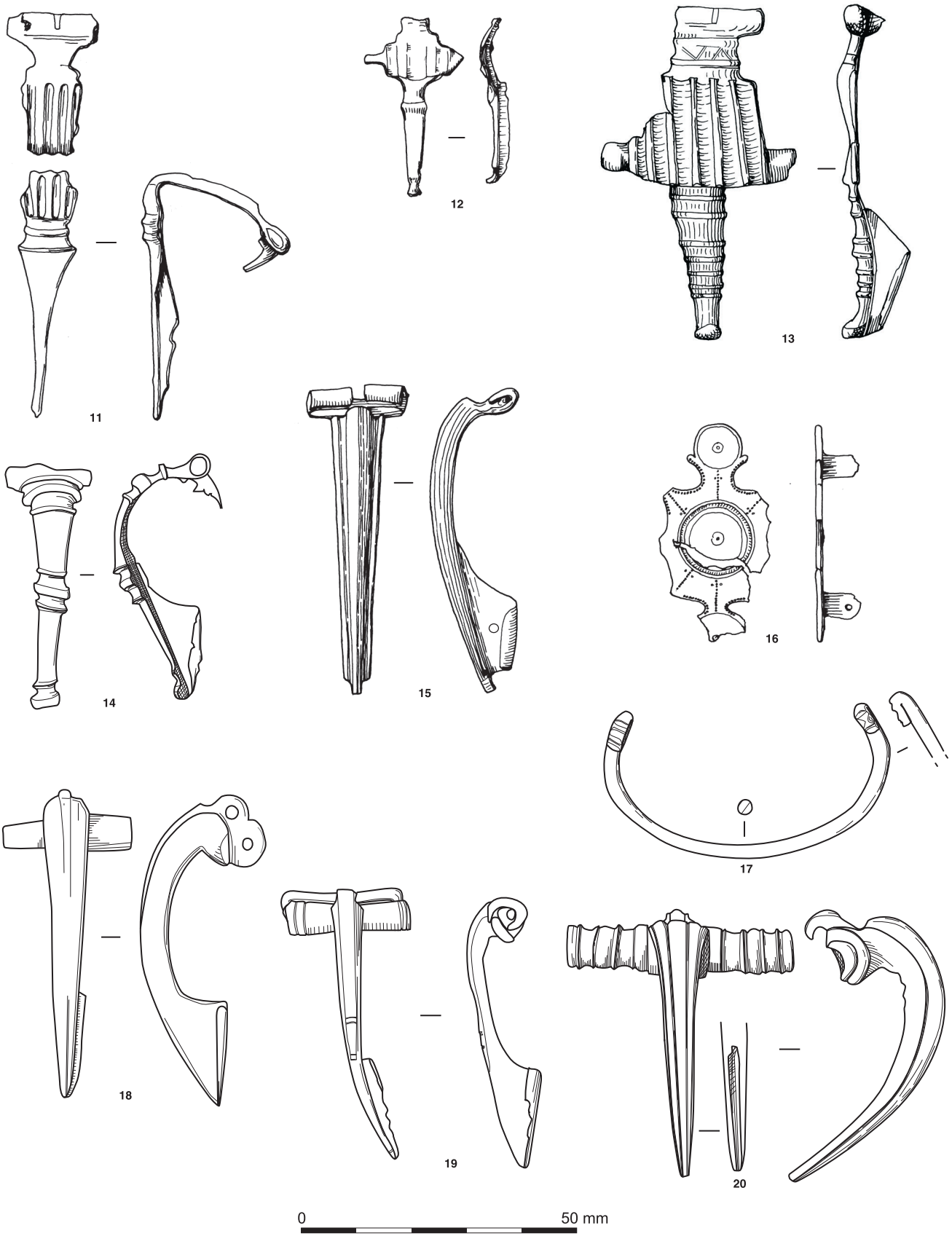


Fig. 9.11 Brooches (11-20)

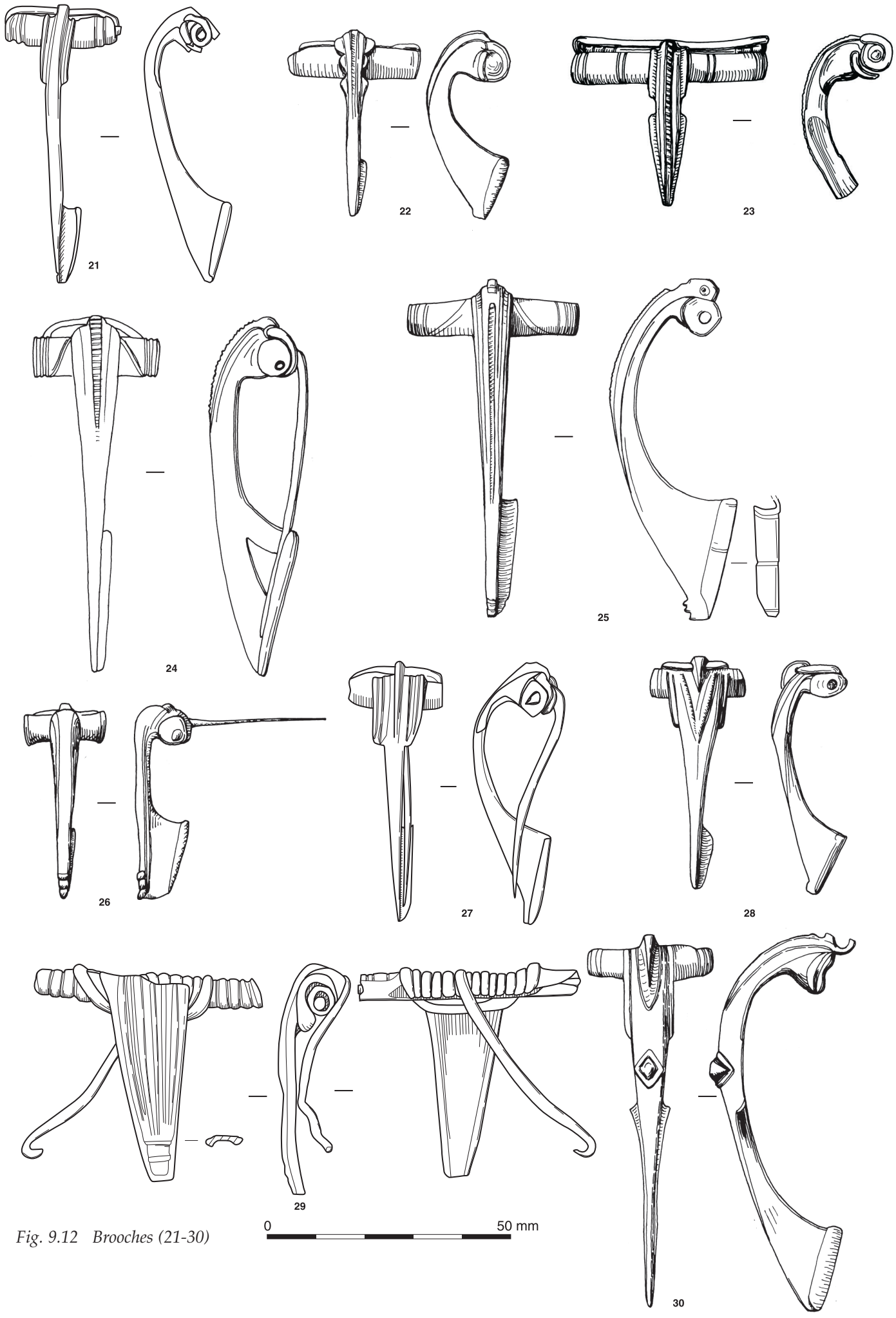


Fig. 9.12 Brooches (21-30)

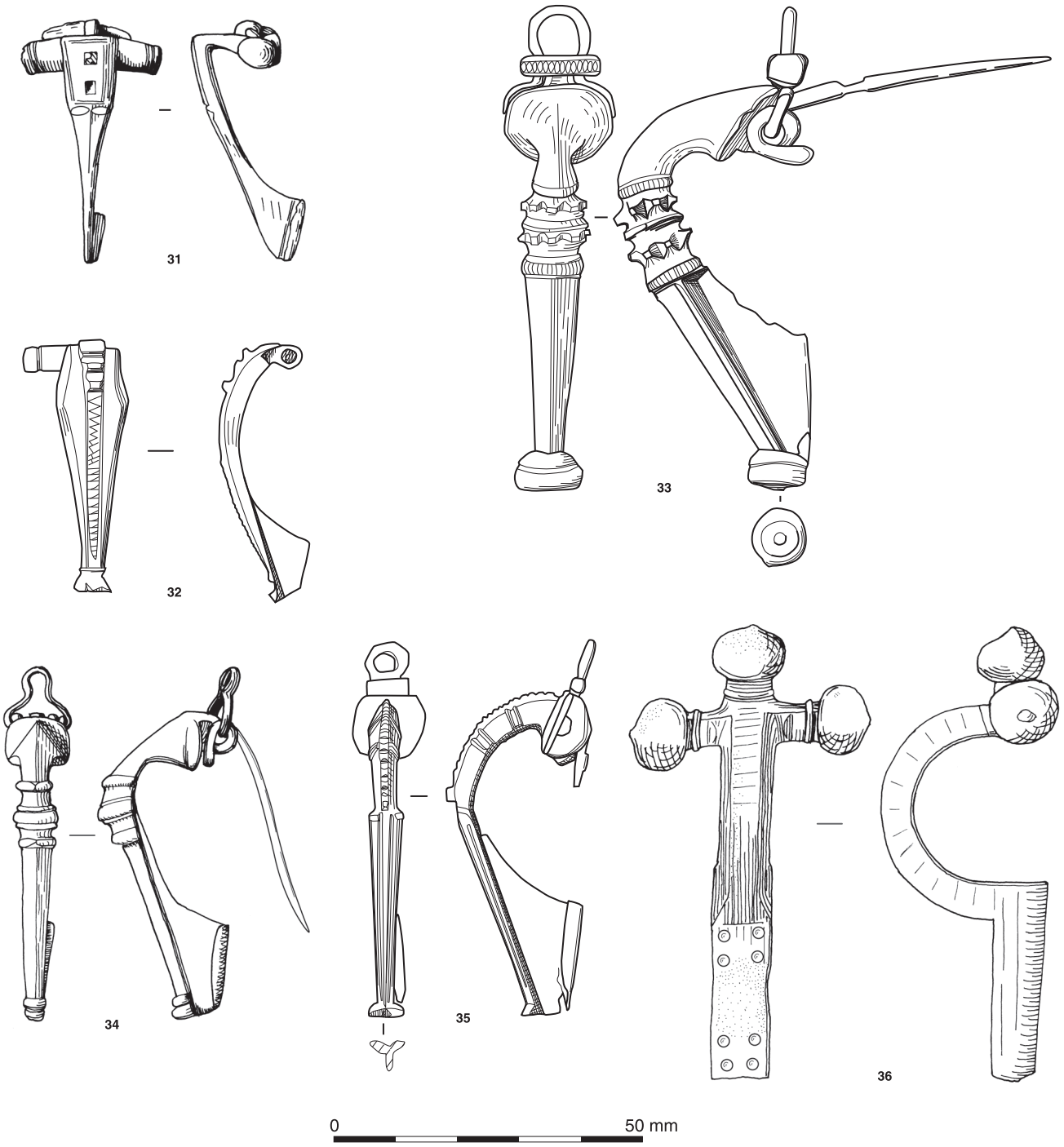


Fig. 9.13 Brooches (31-36)

13. *U/S SF 219. Hod Hill.* Type Hull 61. Mid C1. Length 62 mm, width spring cover 15 mm.
14. *400 SF 881. Hod Hill.* Type Hull 71. Mid C1. Length 44 mm, width of hinge cover 15 mm. Trench 17, Phase 2/3
15. *177 SF 793. Hod Hill.* Type Hull 70. Mid C1. Present length 56 mm, hinge width 17 mm. Trench 5, Phase 1
16. *U/S SF 197. Early disc brooch.* Mid C1. Present dimensions 38 x 19 mm
17. *U/S SF 5036. Penannular brooch.* Type Fowler (1960) D5. Present diameter 28 x 52 mm, section 3 mm
18. *U/S SF 60. Colchester Derivative.* Type Hull 93. Mid C1– into C2. Length 57 mm, width of spring cover 23 mm
19. *U/S SF 5117. Colchester Derivative.* Type Hull 93. Mid to late C1. Length 49 mm, width of spring cover 23 mm
20. *U/S SF 5006. Dolphin.* Type Hull 94. Mid C1. Length 50 mm, width 40 mm
21. *U/S SF 5018. Dolphin.* In 2 pieces. Type Hull 94. Mid C1 into C2. Length 60 mm, width 22 mm
22. *25 SF 317. Dolphin.* Type Hull 94. Mid C1 into C2. Length 38 mm, width 25 mm. Trench 5
23. *U/S SF 1173. Dolphin.* Type Hull 94. Mid C1 into C2. Present length 33 mm, width of spring cover 39 mm
24. *142 SF 790. Polden Hill.* Type Hull 98. 2nd half C1. Length 73 mm, width cylindrical spring cover 25 mm. Trench 5, Phase 1
25. *46 SF 556. Polden Hill*. Type Hull 98. Mid C1 into C2. Length 70 mm, width cylindrical spring cover 33 mm. Trench 8
26. *334 SF 723. Polden Hill.* Type Hull 98. Mid C1 into C2. Length 39 mm, spring cover 15 mm. Trench 5, Phase 1
27. *U/S SF 1146. Polden Hill.* Type Hull 103. Later C1 – mid C2. Present length 56 mm, width of spring casing 20 mm
28. *U/S SF 834. Polden Hill.* Type Hull 103. Later C1 – mid C2. Length 48 mm, width of spring cover 17 mm
29. *U/S SF 1138. T-shaped*. Type Hull 103, 104. Later C1-C2? Present length 42 mm, width of hinge 46 mm
30. *U/S SF 1178. Polden Hill.* Type Hull 100. Mid C1 -early C2. Length 65 mm, width 24 mm
31. *400 SF 741. T-shaped*. Type Hull 110. Later C1 – mid C2. Length 39 mm, width 20 mm. Trench 17, Phase 2/3
32. *U/S SF 5022. T-shaped.* Later C1 – mid C2. Length 41 mm
33. *25 SF 322. Trumpet.* Type Hull 158A. Later C1 – mid C2. Length 80 mm. Trench 5
34. *164 SF 770. Trumpet*. Type Hull 154 (Chester variant). Later C1 – mid C2. Length 59 mm. Trench 5, Phase 3
35. *U/S SF 969. Wroxeter type*. Type Hull 151. C2. Length 60 mm, width of head 13 mm. Trench 30
36. *U/S SF 216. Crossbow.* Type Hull 192. Mid 4C. Length 74 mm, width 38 mm

Bracelets and toilet equipment (Fig. 9.14)

37. *U/S SF 248. Penannular bracelet.* Cool Type 8B. C2. Diameter 45 mm, section at terminal 9 x 4 mm
38. *25 SF 310. Bracelet*. A very rare form. Diameter *c* 51 mm, hoop section 7 x 2 mm. Trench 5
39. *U/S SF 5138. Bracelet fragment*. This comes from a penannular bracelet with twisted back terminals. The inspiration is probably from finger rings with twisted back snake's head terminals. Cool Bracelet type 40. Present length 20 mm, maximum section 8 x 2.5 mm
40. *U/S SF 1094. Toilet implement.* This could be a nail cleaner such as those from Wilcote (Hands 1993, 38 no. 22, fig. 26; 1998, 60 no. 78, fig. 21) from a mid 2nd-century context (or possibly from a cosmetic spoon). Present length 42 mm, maximum section 5 mm
41. *U/S SFs 5026 and 5027. Tweezers and nail cleaner.* Tweezers complete. Length 61 mm, maximum width 6.5 mm. Nail cleaner C1? Present length 46.5 mm, maximum width 9.5 mm

Household objects, weights, writing equipment and tools (Fig. 9.15)

42. *U/S SF 198. Tankard Handle.* Handles of Corcoran (1952) Class V have been found on in 1st- to 2nd-century contexts. Present length 76 mm, maximum section 20 x 1 mm
43. *U/S SF 1055. Vessel fragment.* Pelta-shaped plate with central pointed projection and traces of three ring-and-dots. The shape of this item and the different treatments of front and back are consistent with this being the foot of a patera or bowl. They were used on the bowls belonging to the Hagenow style of jug and patera sets or the early to mid 1st century (Nuber 1972, 38) such as that from Snailwell (Lethbridge 1953, pl VII). Dimensions 35.5 x 15 mm, thickness 3 mm
44. *25 SF 346. Spoon.* Copper alloy with white metal coating. C4 (+). Length 161 mm, width of bowl 33 mm
45. *U/S SF 1045. Weight.* Lead. Probably a weight for a sextans (2 unciae) which should weigh either 54.58 g or 54.25 g (RIB II.2, 2). Diameter 23 mm, thickness 13 mm. Trench 30
46. *U/S SF 614. Weight*. Lead. Total length 75 mm, length of weight 60 mm, diameter 43 mm
47. *U/S SF 5040. Plumb bob.* Probably a leaded alloy. Length 30 mm, section 14.5 mm
48. *U/S SF 1106. Writing equipment?* Iron. Possibly a wax spatula used in the preparation of writing tablets. Present length 130 mm, length of blade 107 mm
49. *25 SF 575. File*. Iron. A variety of files are known in the Roman period. Those with finely cut teeth were metal-workers tools, though the very fine cutting seen here would appear to be unusually high (Manning *et al.* 1995, 249 no. 12). Length 162 mm, width 6 mm, thickness 5 mm

Fasteners and fittings (Fig. 9.16)

50. *U/S SF 835. Stud*. Square head with lug on each side; centre of head raised with four inlaid pointed ovals (possibly niello). C1. Head dimensions 20 x 21 mm, length 10.5 mm
51. U/S *SF 1109. Pottery rivet.* Lead. Maximum length 63 mm, maximum width 14 mm, thickness 29 mm. Trench 30
52. *U/S SF 1016. Rivet.* Lead. Length 60 mm, width 10.5 mm, maximum thickness 8 mm
53. *U/S SF 1022. Rivet*. Lead. Length 13 mm, maximum head diameter 10 mm
54. *U/S SF 1104. Plug*. Lead. Dimensions 22 x 14 mm, thickness 11.5 mm
55. *U/S SF 1030. Plug*. Lead. Diameter 55 x 46 mm, thickness 14 mm
56. *U/S SF 306. Fastener.* Hollow, toggle-shaped fitting with flat disc ends; small rectangular loop. This is a late Iron Age form whose use continued in the 1st century AD after the Roman invasion. The distribution is concentrated in the Severn Valley area. Length 29 mm, section 11 mm

57. *U/S SF 833. Terminal.* Pelta-shaped terminal; socket containing remnants of iron on underside. Copper alloy handles in the form of a fleur-de-lis for iron keys are quite common after the mid 2nd century (Crummy 1983, 126 no. 4161), but the pelta shape of this terminal suggests it may be of 1st-century date as it is very similar to military belt-buckles of that date (see Bishop and Coulston 1993, fig 59 nos 15 and 19). Length 37 mm, maximum width 30 mm, thickness 10 mm
58. *25 SF 290. Fastener.* Late 1– 2C. Length 19 mm, section (maximum) 9 mm. Trench 5
59. *U/S SF 1081. Fitting.* Possible holder for a cosmetic set. Length 32 mm, depth 31 mm, thickness 4 mm
60. *U/S SF 5015. Fitting.* Length 28 mm, width 13 mm

Military objects (Fig. 9.17)

61. *U/S SF 5078. Mount.* Hollow-backed rectangular mount with two integral rivets. A common find on mid 2nd to 3rd-century military sites and which may have been used as stiffeners on a variety of straps. This is an example of the normal form cf Catterick Site 273 (Mould 2002, 136 no. 6); South Shields (Allason-Jones and Miket 1984, 237 nos 3.877-8). Late C2 – C3. Length 27 mm, width 5.5 mm
62. *U/S SF 1054. Buckle*. Amphora-shaped. This seems to be the upper part of a large strap end. C4 into C5. Maximum width 33 mm, present length 21 mm, thickness of plate 2 mm
63. *U/S SF 1064. Plate*. Hawkes and Dunning (1961) Type IIA. Late C4 – C5. Width 39 mm, thickness 3 mm

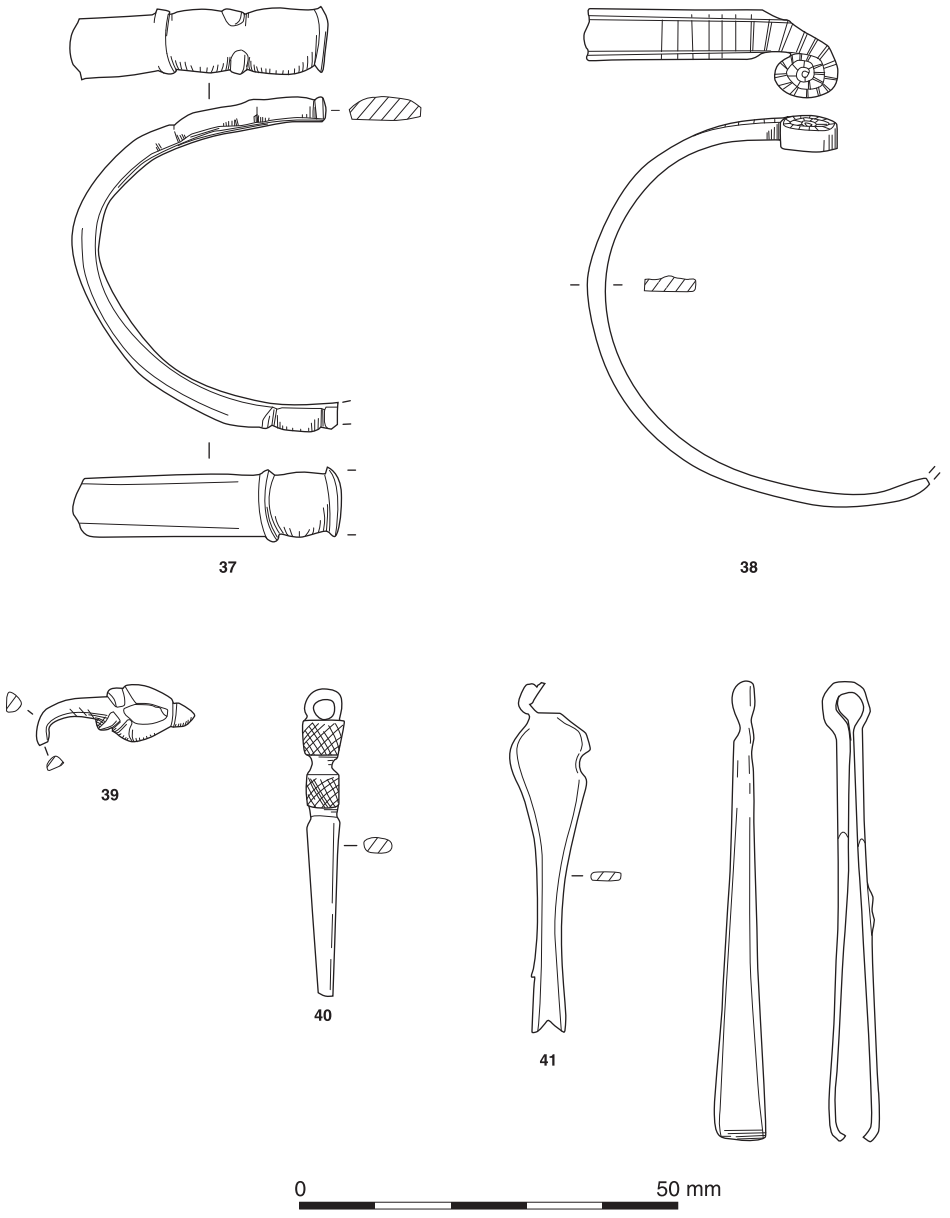


Fig. 9.14 Bracelets and toilet equipment

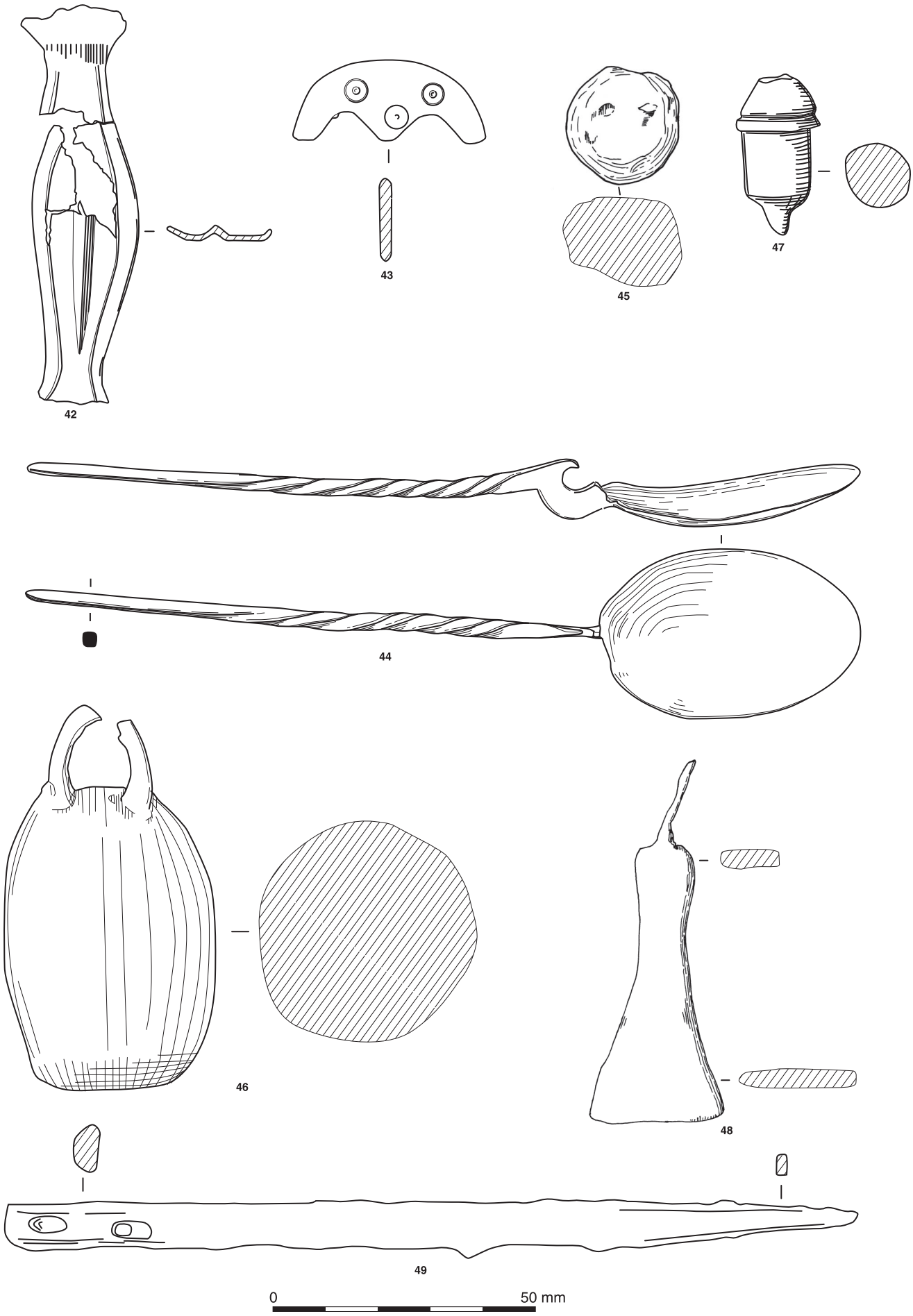


Fig. 9.15 Household objects, weights, writing equipment and tools

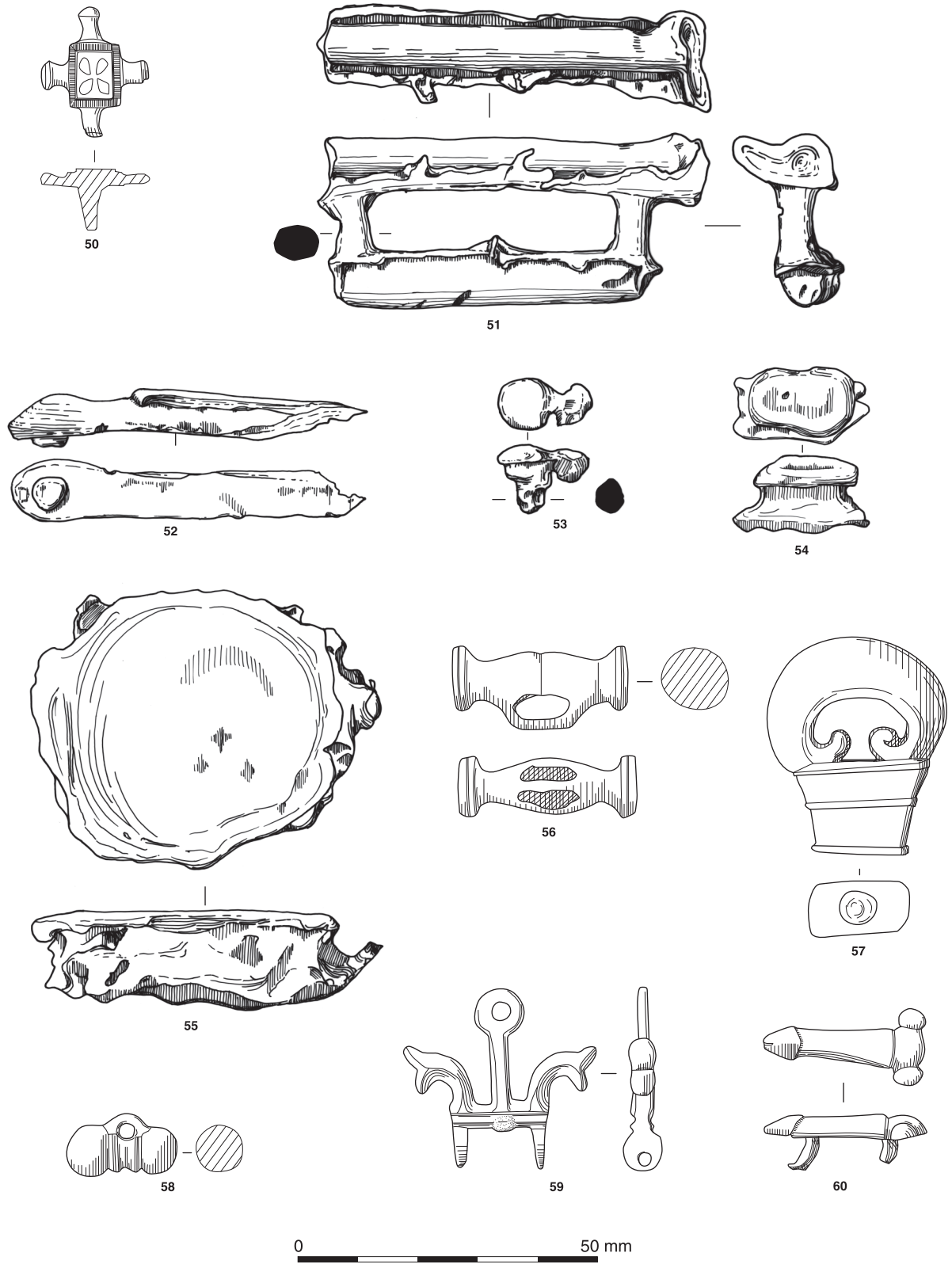


Fig. 9.16 Fasteners and fittings

Vessel glass (Fig. 9.11) *by Hilary Cool*

The excavation and survey produced a small amount of Roman vessel glass, the majority of it unstratified. Table 9.9 summarises the material by type and phase. The colours are indicative of a 1st to 2nd-century assemblage and the forms suggest a 1st to early 2nd-century date range. There is no indication of the presence of later 2nd century or later forms or colours of glass.

The fact that the assemblage is dominated by bottle fragments is typical of rural sites during the later 1st to 2nd centuries where whatever was in the bottles was clearly appreciated, and large bowls rather than drinking cups were favoured (Cool and Baxter 1999, 85). This small assemblage is typical of what might be expected on modest rural establishment of the 1st to 2nd centuries in this part of the country.

Illustrated catalogue: Vessel glass (Fig. 9.18)

1. *U/S SF 759. Prismatic bottle.* Blue/Green. Square or (less likely) hexagonal bottle; Lower body and base fragment. Base design – circular moulding with diagonal cross. Width of bottle 53 mm., diameter of circular moulding 35 mm, present height 15 mm. Isings (1957), Form 50; Price and Cottam 1998, 194-202. C1-C2 (mid C3).

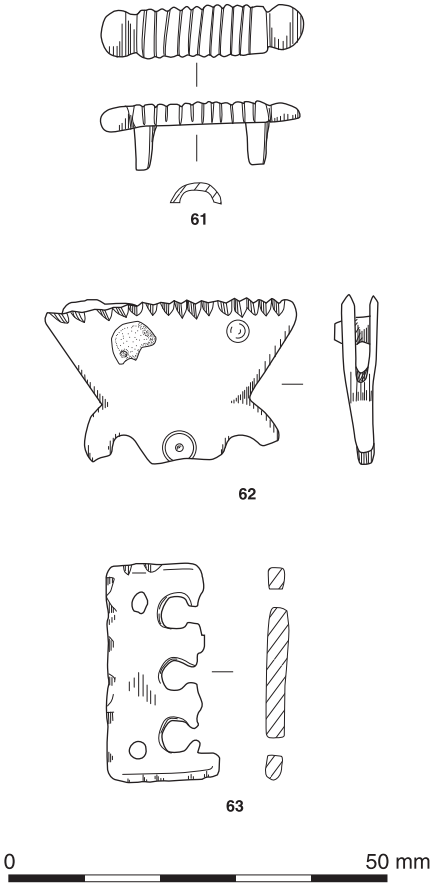


Fig. 9.17 Military objects

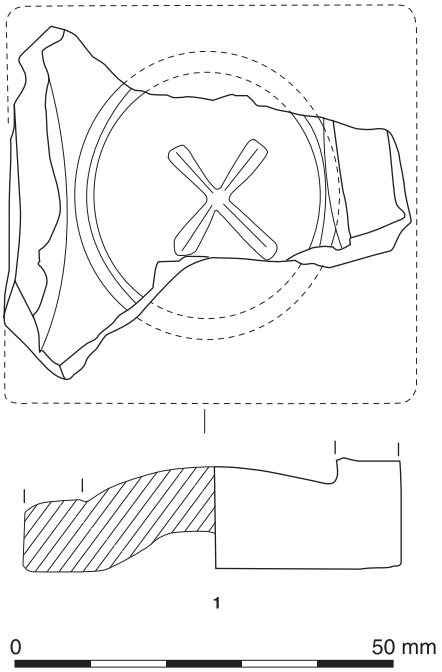


Fig. 9.18 Vessel glass

Table 9.9: Vessel glass by type and phase

Simple name	*1*	*1/2*	*2 b*	*2/3*	*3*	*Unphased*	*Total*
Pillar moulded bowl	-	-	-	-	-	1	1
Collared jar	-	-	-	-	1	-	1
Jug	-	-	-	-	-	1	1
Body fragment	3	1	1	1	-	5	11
Cylindrical bottle	-	-	-	-	1	1	2
Square bottle	-	-	-	-	-	4	4
Prismatic bottle	-	-	-	1	2	3	6
Bottle	-	1	-	-	-	2	3
Total	3	2	1	2	4	17	29

Roman sculpture (Fig. 9.19-20, Pl. 9.4)
by Martin Henig

Two pieces of Roman sculpture, an eagle and a shield, were found during excavations at Somerford Keynes, carved in oolitic limestone with scatted, larger fragments of fossil shell (Figs 9.19-20, Pl. 9.4). They were recovered just outside of the large D-shaped enclosure ditch (see Fig. 9.2).

The bird is carved in the round with the plumage indicated on the left side of the body and on the wing (Fig. 9.19). On the right side the execution is more summary and in place of a wing there is an indication of what appears to be the end of some garment, perhaps the cloak from an accompanying statue of Jupiter. Although generally in good condition, the head of the eagle is lacking, together with its feet and any base on which the bird might originally have stood. Comparable examples from the Cotswolds have been found at Price's Row, Cirencester (Henig 1993, 56 no. 166, pl 41), and Cole's Hill near Spoonley Wood villa (Henig 1993, 56-7 no. 168, pl 41), although these are not as good quality. In both of these cases the sculptures seem to have come from a shrine, though admittedly none was associated with a Jupiter figure. However, the relationship of this god with his familiar has been demonstrated on many occasions, with a prime example being on the probable cult altar at Bath (Cunliffe and Fulford 1982, 10 no. 30, pl 9).

The oval shield is carved with a pronounced *umbo* and a rim (Fig. 9.20, Pl. 9.4). On its back side and covering the grip, drapery is carefully indicated. Behind it, less carefully delineated, is another fold of the garment. The shield is supported on a low base or ledge. Once again the attribute would have been positioned on the left side of a figure, because the well-carved drapery must have been visible from the front. The top quarter of the shield is lacking but otherwise what is left is in good condition. Although similar simple shields with prominent bosses are best known from the Cotswold region on votive altars of Mars, they are also associated with Minerva, as seen for example on votive reliefs from Lower Slaughter and Bath (Henig 1993, 29-30 no. 88, pl 24; Cunliffe and Fulford 1982, 9, no. 25, pl 7). The low drapery on the Somerford Keynes example strongly suggests that Minerva was the accompanying deity.

Figures of Jupiter and Minerva together with one of Jupiter's wife Juno would comprise the Capitoline triad, the major deities of Rome. It is *prima facie* likely that the eagle and the shield came from a representation of the triad, which has otherwise not survived. Such a grouping would indicate an official aspect to Somerford Keynes, although not necessarily military. The group appears to have been carved from stone derived from quarries in Roman Cirencester (see below), and were presumably the work of a highly skilled sculptor from this town. Although local sculpture is very hard to date with any certainty, the naturalistic cutting would certainly suit the late 1st or early 2nd century AD.

Worked stone (Fig. 9.21**)** *by Fiona Roe*

There are 15 worked stone objects from Somerford Keynes. A further seven pieces of monumental and architectural stone include a carved limestone eagle and shield, which are described by Henig above.

Grinding of corn was an essential occupation, and querns predominate amongst the objects, as might be expected (Table 9.10). One of the quern fragments (SF 875) may come from a saddle quern of possible middle Iron Age date, while one of the rotary quern fragments (SF 765) is a small and thick example that might fit into a late Iron Age/early Roman context. The remaining rotary querns of disc type (SF's 636, 637, 874) are typical of the Roman period, as was the fragment of millstone (SF 887). Other Roman items comprised mortars (SF's 281, 829), whetstones (SF's 483, 769) and a pot burnisher (SF 832). A more unusual item is a metal smithing tool or "cushion stone" (SF 812; Fig. 9.21, no.3), which is a type of artefact known to occur in Beaker contexts (Clarke 1970, II, 573, note 56), although recorded examples are few in number.

The materials used for the Roman objects are all

Table 9.10: Summary of worked stone objects and materials

Object	*Stone*	*Total*
Saddle quern	Lower Old Red Sandstone Brownstones	1
Rotary quern	Upper Old Red Sandstone, sandstone and quartz conglomerate	4
Millstone	Millstone Grit	1
Mortar	Jurassic limestone, shelly, some ooliths	2
Whetstone, rod	Kentish Rag	2
Whetstone, reused tile	Lower Old Red Sandstone Brownstones	2
Whetstone/polisher	Pennant sandstone	1
Pot burnisher	Quartzitic sandstone	1
Metal smithing tool	Cornish greenstone	1

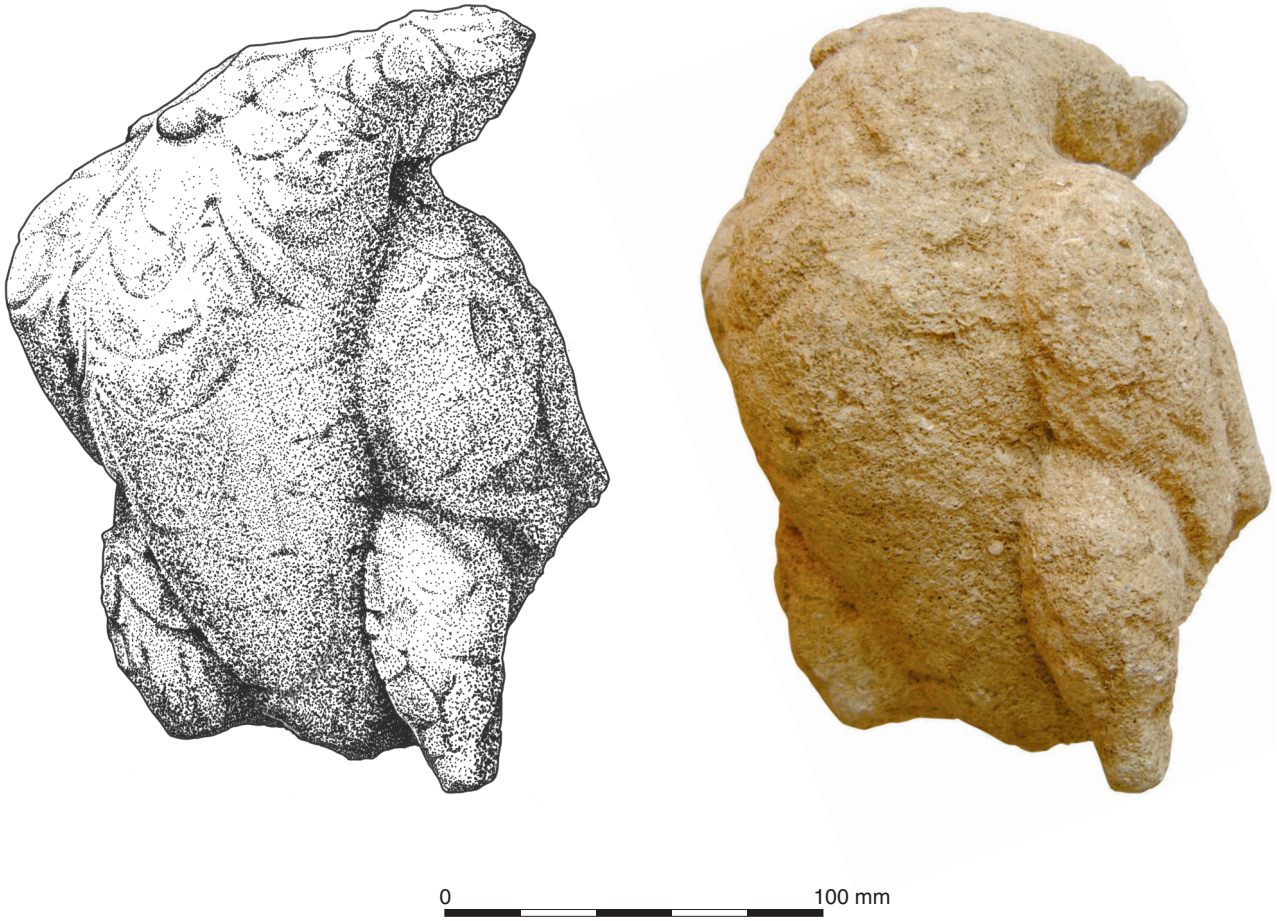


Fig. 9.19 Eagle sculpture

Plate 9.4 Shield sculpture

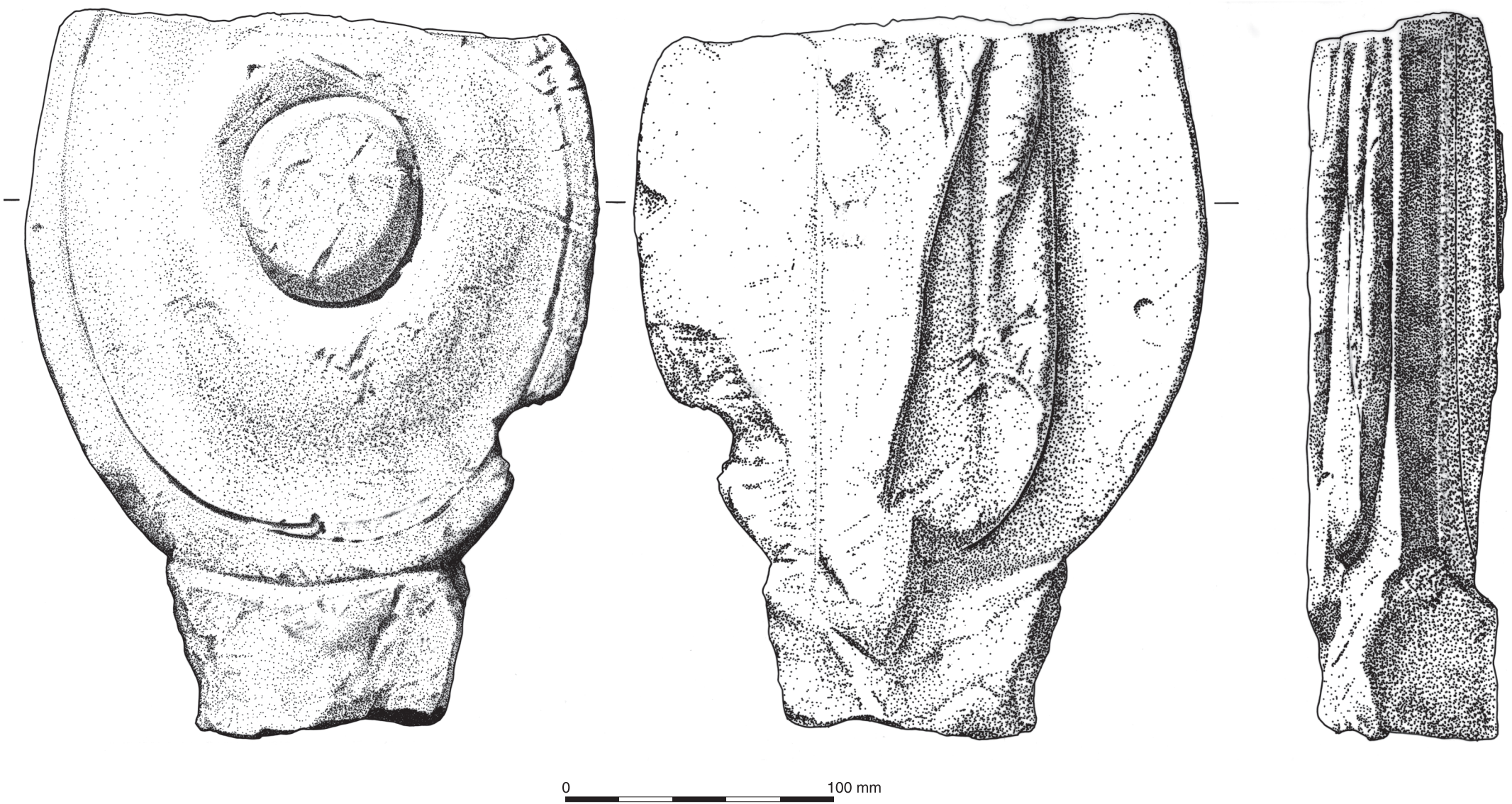


Fig. 9.20 Shield sculpture

typical of the region, rotary querns made from Upper Old Red Sandstone being particularly common on local sites, including Longdoles Field at Claydon Pike (see Chapter 2). Most of the stone for artefacts was brought in from outside the area (Table 9.11). The shelly and rather coarse-grained limestone used for the two mortars can be matched at the Roman quarries on the outskirts of Corinium, 6 km to the north (McWhirr *et al.* 1982, 31). The Forest of Dean was a significant source area, especially for the good quality stone needed for corn grinding, but also for whetstones. Other whetstones came from further afield, and ones made of Kentish Rag are well represented on other Gloucestershire sites, including Claydon Pike. These small items could have been easily distributed, but the millstone fragment represents considerable organisation in order to transport Millstone Grit from a source area near Sheffield.

Monumental and building stone

The monumental stone, in the form of an eagle and shield, is clearly of importance, but there is little stone that was clearly used for architectural purposes. Three unworked fragments are Jurassic limestone of varieties suitable for use as freestone, and so may have been utilised for carving, if not for building. A shaped limestone slab may represent paving, while Old Red Sandstone and Pennant Sandstone were Roman roofing materials.

Figure 9.21 presents a selected group of worked stone objects from Neigh Bridge, Somerford Keynes.

Illustrated catalogue: Worked stone (Fig. 9.21)

1. *25 SF 483. Whetstone.* Kentish rag. Rod type with rectangular cross section and trace of groove from original manufacture into bar; 41.5 x 26 x 15.5 mm, 25 g
2. *30/A SF 636. Rotary quern fragment.* Upper Old Red Sandstone. Upper stone with trace of handle slot in upper surface, small part of rim, grinding surface worn smooth; now 108 x 79 mm, max thickness 53 mm, 530 g
3. *164/H SF 812. Prehistoric metal smithing tool.* Possibly Cornish greenstone. Squared object with one smooth, flat face and four bevelled edges, uneven under surface, made from pebble, likely to be earlier prehistoric "cushion stone" or metal smithing tool; 68 x 66 x 43 mm, 365 g
4. *25 SF 829. Fragment of mortar.* Jurassic limestone. Weathered, flat base, sloping bowl; external diameter *c* 265 mm, thickness at rim 94 mm, thickness in centre 46 mm, 3 kg

Ceramic building material (Pl. 9.5) *by Leigh Allen*

A total of 678.5 kg of ceramic building material was recovered from the excavation at Neigh Bridge, and six different types of tile were identified, as shown in Table 9.12. Examination of the identifiable tile types revealed that there was only one distinct fabric present, although there was a great variation in the degree of firing. The material is almost certainly from the Minety kilns, Wiltshire (McWhirr and Viner 1978) only 12.5 km to the south of the site.

At least six examples of animal paw-marks were noted on plain tiles and bricks. These belonged to animals (small dogs mainly) that wandered over the

Table 9.11: Summary of sources for worked stone

Stone	*Source*	*Uses*
Local		
Quartzitic sandstone	Pebble, local river gravels	1 pot burnisher
Oolitic limestone with shell fragments		2 carved pieces
Shelly limestone, some ooliths	Corinium, Roman	2 unworked fragments
Fine-grained shell fragmental limestone	Quarries	2 mortars
		1 fragment paving or architectural stone
Oolitic limestone	Probably local, or just possibly from Roman quarries around Painswick	1 fragment
Imported		
Lower Old Red Sandstone Brownstones		2 whetstones
Upper Old Red Sandstone,		1 probable saddle quern
Sandstone	Forest of Dean	2 rotary querns
Upper Old Red sandstone, Quartz conglomerate		2 rotary querns
Pennant sandstone	Forest of Dean or Bristol Coalfield	1 whetstone or polisher
		1 fragment
Kentish Rag	Maidstone area of Kent	2 whetstones
Millstone Grit	Pennines around Sheffield	1 millstone fragment
Greenstone	Cornwall	1 prehistoric metal smithing tool

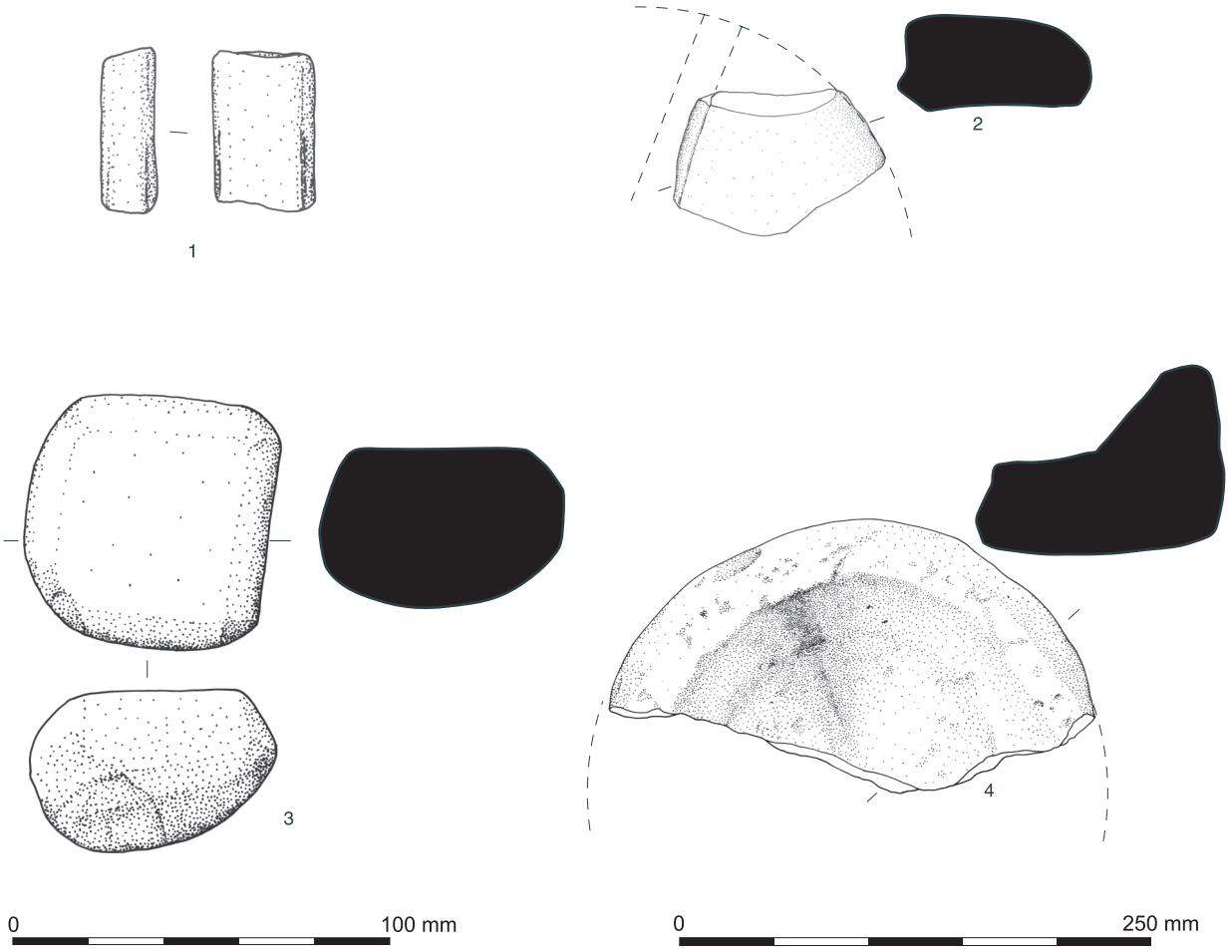


Fig. 9.21 Worked stone

tiles whilst the tiles were lying out to dry prior to firing. A large number of the tegulae fragments were marked at one end with a simple semicircular 'signature'.

A single fragment of plain tile from a surface deposit (437) near the edge of ditch 428 in Trench 17 bears the remains of the stamped letters FB (Pl. 9.5). This is probably a fragment from the TPF series of stamps many examples of which have been recovered from Gloucestershire in particular along the route of Ermin Street at Wanborough, Stanton Fitzwarren, Cirencester and Hucclecote and to the south and west of Ermine street at Minety, Easton Grey, Rodmarton and Bisley (McWhirr and Viner 1978, 365). The TPF series of stamps either appear on their own or with the additional letters A, B, C or P which probably denote different workshops of tilers. The letters are cut deeply into the tile and they have serifs, there are no stops and no frame around the letters unlike the stamps in the A, C and P series. A single example of a TFPB stamp has been recovered from Cirencester (McWhirr and Viner 1978). It is difficult to pinpoint a place of production with such a wide spread of material, but a single fragment of stamped TPF tile from Minety (McWhirr and Viner 1978) make it a good candidate.

Table 9.12: Ceramic tile types at Somerford Keynes

Tile type	*Weight (kg)*	*% of total*
Tegulae	108.1	15.93
Imbrices	29.8	4.39
Tubuli (box flue)	71.6	10.55
'Plain' tile	212.3	31.29
Brick	122.1	18.00
Miscellaneous	134.6	19.84

Overall, the ceramic building material assemblage from the site is large and was recovered from a well-defined area outside the walls of the aisled building in Trench 5. The assemblage is larger than that recovered from the site at Claydon Pike, although just over 32% of the assemblage is from unstratified contexts. The average fragment weight is 61.6g and the material is not particularly worn, although there are only a handful of complete examples. The roofing material (tegula and imbrices

together) makes up 20.32 % of the total assemblage; the floor tile in the form of large plain tiles and bricks makes up 48.87 % of the assemblage. This compares well with the quantities recovered from Claydon Pike where 25.10% of the total assemblage was roofing material and 48.6% flooring. At Neigh Bridge hypocaust material including fragments from box tiles and a number of complete pilae were recovered although it is not believed that the aisled building had any form of under floor heating. This hypocaust material makes up 7% of the total assemblage compared to 10.55% of the total assemblage at Claydon Pike where a heated building is known to exist in the late Roman period. It can therefore be assumed that if this building was not heated there is the remains of a heated building still to be found in the area.

The fact that the spread of tile respects the wall line of the aisled building could indicate that the tile was being stored outside or even up against the building, perhaps for the refurbishment of this building or for transportation elsewhere. There is some evidence for tiles being stacked up, but the lack of many complete examples and the general fragmentary nature of the assemblage imply that this tile spread is more a result of demolition than reconstruction.

Plate 9.5 Stamped tile

In addition to the ceramic building material discussed above, there were also four fragments of fired clay recovered from the site, comprising a tuyère, a fragment of kiln floor, a possible hearth plate and a unidentified fragment.

THE ENVIRONMENT

Animal bone *by Emma-Jayne Evans*

A total of 6282 fragments (77048 g) of animal bone and teeth were recovered from the site. The remains excavated were generally in good condition, although their fragmentary nature only allowed for the identification of 1639 bones and teeth to species. A list of all the species identified is shown in Table 9.13 and a full report is in Digital section 5.4.

During the late Iron Age and Roman period in southern Britain it would seem that cattle and sheep/goat were generally of relatively similar importance, with pig usually being present in low numbers (Hambleton 1999). Judging from both the minimum number of individuals and total fragment count, this is reflected in the results seen at this site, with no changes in species representation from Phase 1 through to Phase 2/3, with the exception of an increase in horse.

The remains of cattle from both the late Iron Age/Roman (Phase 1) and Roman (Phase 2/3) periods suggests that although cattle were being killed at the optimum age for meat production, many others were surviving to maturity, probably for secondary products such as traction, milk and manure. The idea that cattle were used for traction may be supported by certain palaeopathological conditions on a small number of bones from all phases.

Age at death of sheep/goat suggests that during Phase 1 a slight majority of sheep/goat were being killed at the optimum age for meat production, but many were being kept into adulthood probably for breeding and wool production. During Phase 2/3 there is an increase in the number of adult bones found, which may indicate a change in the use of sheep/goat from both meat and wool production to primarily wool production.

Table 9.13: Total number of bones identifiable to species and date

date	*cattle*	*horse*	*s/g*	*dog*	*pig*	*d. fowl*	*duck*	*red deer*	*roe deer*	*toad*	*unid*	*Total*
LIA/Roman	261	158	179	48*	14	1			1		1619	2281
Roman	438	141	296	9	43	1	1	4	2	1	2843	3779
Uncertain	13	5	10		1						127	156
Topsoil	5	3	4								54	66
Total	717	307	489	57	58	2	1	4	3	1	4643	6282

*39 fragments from one dog burial

At Somerford Keynes, as at Owslebury and Winnall Down in Hampshire (Maltby 1985b), horse was well represented during both the late Iron Age and Roman periods. Cut marks on the horse bones suggest that the inhabitants at Somerford Keynes may have exploited horses for meat as well as traction. The presence of osteoarthritis present on articulating horse thoracic vertebra may well indicate riding and/or traction. The withers heights calculated generally fall into those expected for both periods, which are roughly equivalent in size to small ponies.

It is likely that the pig remains at the site are the remains of pigs used for consumption. Butchery marks and age at death of pigs may support this. As pigs can produce large litters outside the usual seasonal cycles followed by cattle and sheep, a plentiful supply of pork is always available, therefore pigs are usually killed prior to full maturation (Dobney *et al.*1996).

The presence of dogs from both periods may indicate animals used as guard dogs or hunting dogs. There is no evidence that the dogs have been butchered. One dog burial is evident from the late Iron Age/Roman period, an adult dog probably disposed of by the inhabitants on its death.

Birds apparently provide very little to the diet of the population from both periods, although they

Table 9.14: Charred plant remains from ditch 164 (excluding charcoal)

Context		*Roman ditch 164/H*
Sample		*12*
Sample volume (litres)		*10*
Cereal grain		
Triticum spelta L.	spelt wheat	2
T. dicoccum Schübl. or *spelta* L.	emmer or spelt wheat	12
Hordeum sp. - hulled	hulled barley	3
Hordeum sp.	barley	3
Avena sp.	oats	2
Cereal indet.		116
Total cereal grains		138
Chaff		
Triticum spelta L. - glume	spelt wheat	1
T. dicoccum Schübl. or *spelta* L. - glume	emmer or spelt wheat	9
Cf. *Triticum* sp. - awn	wheat	1
Hordeum sp. - rachis	barley	1
Total chaff (excluding awns)		11
Weed seeds		
Caryophyllaceae indet.		1
Chenopodium album L.	fat hen	5
C. ficifolium Sm.	fig-leaved goosefoot	1
Atriplex sp.	orache	9
Vicia or *Lathyrus* sp.	vetch or tare	2
Polygonum persicaria L. or *lapathifolium* L.	redshank or pale persicaria	6
Fallopia convolvulus (L.) Löv.	black bindweed	2
Rumex sp.	dock	1
Odontites verna (Bell.) Dum.	red bartsia	1
Galium aparine L.	goosegrass	8
Tripleurospermum inodorum (L.) Koch.	scentless mayweed	2
Anthemis cotula L.	stinking mayweed	1
Eleocharis S. *Palustres* sp.	spikerush	5
Carex sp.	sedge	9
Gramineae indet.	grass	1
Weed seeds indet.		22
Total weed seeds		76
Total items (excluding awns)		225

may be underrepresented due to excavation and preservation conditions at the site. It is apparent that deer were only rarely exploited for meat.

Overall it is clear that there were not any major changes in on-site activity as far as faunal remains are concerned from the late Iron Age through to the Roman period, with the exception of the slight increase in the number of horses. It is clear that horses were treated differently from cattle, sheep/goat and pig, with the presence of more complete adult horse bones and only a few bones bearing cut marks, suggesting they were kept mainly for reasons other than consumption, such as traction and for riding. The evidence from the main domestic species on its own does not point to the site having been one of high status, with the meat from cattle and sheep/goat coming as much from young animals as older animals that had likely served their purpose for farming for their secondary products.

Charred plant remains *by Mark Robinson*

Twenty bulk samples, mostly of around 10 litres, were floated onto a 0.25 mm mesh to recover charred plant remains, and a number of those with the highest potential were analysed in full. Five samples were taken from different localities within the possible corn-drier (context 167), although the only charred remains from it other than charcoal was a single grain of *Triticum dicoccum* or *spelta* (emmer or spelt wheat). When corn-driers are used for cereal processing, either for the parching of spelt wheat spikelets prior to de-husking or for malting grain, this usually results in the presence of much processing waste amongst the ashes. In this case, there were copious quantities of charcoal from the oak used to fuel the corn-drier, but cereal remains were virtually absent. This raises the possibility that the structure was in fact a kiln with another purpose.

A substantial quantity of charred crop processing remains, particularly grain and weed seeds, was found in a section of Phase 3 ditch 164, where it formed the south-western corner of the 'corn-drier' enclosure (Table 9.14). *Triticum spelta* (spelt wheat) predominated amongst the identified grain and chaff but hulled *Hordeum* sp. (hulled barley) was also present. While grain comprised 37% of the assemblage, weed seeds made up 60%. The most numerous weed seeds were from *Atriplex* sp. (orache), *Galium aparine* (goosegrass) and *Carex* sp. (sedge). The first two species are common arable weeds that grow on a range of soils. *G. aparine* is characteristic of autumn-sown crops. *Carex* spp. are marsh and wet-ground plants that sometimes spread into crops where the cultivated area extends up to marshy ground or has wet flushes in it. The high proportion of weed seeds in the sample suggested that the assemblage represented waste from a late stage of crop cleaning.

Table 9.15: Mollusca from ditch 252

Context	*Roman dtch: 252/A*
Sample	*10*
Sample weight (kg)	*1.0*
Lymnaea truncatula (Müll.)	2
Anisus leucostoma (Milt.)	4
Cochlicopa sp.	4
Vertigo pygmaea (Drap.)	2
Pupilla muscorum (L.)	12
Vallonia excentrica Sterki	3
Vallonia sp.	8
Zonitoides nitidus (Müll.)	1
Trichia hispida gp.	56
Total	92

Molluscs *by Mark Robinson*

A sample from Phase 2 ditch 252 in the north of Trench 5 contained many shells of terrestrial molluscs, particularly *Trichia hispida* gp., but including species characteristic of dry open conditions, such as *Pupilla muscorum* and *Vallonia excentrica* (Table 9.15). They probably lived on the general ground surface. There were also examples of the amphibious to slum aquatic molluscs *Lymnaea truncatula* and *Anisus leucostoma* that are likely to have lived in puddles of stagnant water in the ditch bottom. There were no shells of flowing water aquatic species as might be introduced by floodwaters and which were present in the alluvial sediment in the tops of some of the Roman ditches.

THE NATURE OF OCCUPATION AT NEIGH BRIDGE, SOMERFORD KEYNES *by Alex Smith*

Overall interpretative analysis of the archaeology at Neigh Bridge, Somerford Keynes is hampered by a number of factors. Firstly, the excavations themselves were by necessity somewhat limited, and it is only in the largest trench on the highest part of the site that we have any coherent system of phasing. Another factor concerns the collection methodologies for the finds, which may well have led to the significant discrepancies with regard the nature of the different assemblages (see The Finds above). Nevertheless, what emerges is a picture of a multifunctional settlement which was probably established in the late Iron Age, although middle Iron Age activity almost certainly occurred in the vicinity. There was a radical transformation of the settlement in the early 2nd century AD, possibly as part of some widespread landscape re-organisation (see Chapter 16). It was located just 6 km south of the major urban centre at Cirencester, in an area with widespread evidence for contemporary settlement (Fig. 9.1), and provides an important contribution to our understanding of the socio-political and economic development of this part of the Upper Thames Valley.

Middle Iron Age activity

There is a small group of middle Iron Age pottery from the site which is enough to suggest some activity during this period. The limited extent of excavation could well mean that a middle Iron Age settlement focus did lie in the vicinity.

Late Iron Age and early Roman activity

Settlement organisation

The earliest recognisable phase of activity within the site comprised a sequence of sub-rectangular ditched enclosures and sub-enclosures, varying in size and form, which on ceramic evidence could be pushed back as far as the early 1st century AD, although most features seem to be dated to the post-conquest period (mid/late 1st to early 2nd century AD; Fig. 9.3). The nature of these enclosures can be readily paralleled at other sites such as Thornhill Farm (Jennings *et al.* 2004) and Claydon Pike (Phase 2; see Chapter 4), *c* 18 km to the east, where such features are characteristic of the later Iron Age and early Roman phases. There is no conclusive evidence for any domestic structures during this phase at Somerford Keynes, which again mirrors the situation at Thornhill Farm and Claydon Pike, and indeed is a common situation at many settlement sites in the region during the later Iron Age and Roman periods (Allen *et al.* 1984; Henig and Booth, 2000, 95; see Chapter 16). The only possible excavated structure from this phase comprised a group of postholes (B 2) within an enclosure, although these formed no readily identifiable pattern (Fig. 9.3). However, the arrangement is very similar to an example at Thornhill Farm in period E (*c* AD 75-120), in which a group of pits and postholes (S 202) lay within a sub-rectangular enclosure (Jennings *et al.* 2004, 49, fig 3.16). Both structures were also adjacent to small circular gullies, interpreted as possible stack rings used for animal fodder. Whether or not the Somerford Keynes posthole arrangement did represent a domestic structure of some kind, it is clear from the finds evidence that domestic activity (cooking, eating, crop processing etc) was occurring on site (see below).

In addition to a series of enclosures, of which only a small number were probably in contemporaneous use, there were a number of long linear ditched boundaries that clearly belonged to this early phase of the site. Such features are also a prominent component of the Phase 2 site at Claydon Pike, where they appear to come at the end of the sub-phasing sequence (see Chapter 4), demarcating the outer boundaries of the settlement. Although the stratigraphy at Somerford Keynes is inconclusive, it is possible that the long linear ditches may have served a similar purpose at a similar stage in the site's development.

Site economy

The late Iron Age/early Roman settlements at Thornhill Farm and Claydon Pike are regarded as largely pastoral farmsteads specialising in cattle husbandry (see Chapter 4). Although the ratio of cattle to sheep/goat may not be as high at Somerford Keynes, it is clear that they were a dominant part of the agrarian regime, and the site probably operated a similar kind of pastoral economy. As with Thornhill Farm and Claydon Pike, it seems that cattle were being reared, butchered and consumed on site, which points to a largely subsistence rather than commercial economy. An interesting difference lies with the age structure, which suggests that at Somerford Keynes a higher proportion of cattle may have been kept into adulthood for traction and secondary products such as milk and manure.

Unfortunately, we have no environmental evidence for the earliest phase of activity on site, and so it is not known if cereal crops were grown in the vicinity. No quernstones were actually recovered from Phase 1 contexts, although an unstratified rotary quern in Trench 17 was suggested as being of late Iron Age/early Roman date (see above), and therefore provides some evidence for crop processing on site.

The pottery evidence is consistent with that of a low status rural settlement, with a preponderance of local grog-tempered wares, mostly in the form of jars, similar to periods E-F (*c* AD 75 to 120) at Thornhill Farm. Only a very small amount of samian, mortaria and amphora hint at more Roman style culinary habits, but it is clear these were not widely adopted at this time.

The metalwork deposits

It is clear that the low status rural agrarian site described above is somewhat at odds with the exceptionally large and rich group of small finds found by metal detecting survey across the site, despite many of these objects being of definite 1st-century AD date. Chronologically the survey finds assemblage seems to have a greater emphasis on earlier material (late 1st century BC/early 1st century AD), and derives from a much wider geographical area than the majority of the stratified assemblage. Furthermore, there seems to be a genuine difference between the nature of those finds which came from stratified deposits and those that derived from metal detecting, with for example the former having only half the number of functional categories of the latter. As Cool has suggested (see above), the unstratified finds are probably indicating that occupation of a different status to that uncovered by the excavations, was taking place in the vicinity.

The finds themselves, which include large numbers of 1st- to early 2nd-century brooches and coins, do give some indication as to the nature of

this activity. Such an assemblage is typical of what may be expected within a late Iron Age or Roman religious site, with coins and personal ornaments being by far the most numerous types of deposited objects within temple sites in Britain (Smith 2001, 155). The preponderance of brooches is especially typical of late Iron Age/early Roman religious sites (Smith 2001, 69), and is in accordance with the general increase in such objects at this time, which has been termed the 'fibula event horizon' (Jundi and Hill 1998). Perhaps the best comparative example is at Harlow in Essex where large numbers of coins, brooches and other metal items were deposited prior to the construction of the Roman temple in the pre-Flavian period (France and Gobel 1985; Bartlett 1988). Indeed, there are now an increasing number of religious sites across Britain that seem defined by concentrations of finds, but without necessarily having any temple structures, such as Higham Ferrers in Northamptonshire (OA in prep c), and the early phase at Chelmsford (Wickenden 1992). In Haselgrove's discussion of Iron Age/early Roman brooch deposition, he suggests a possible religious interpretation for a number of sites which yielded large quantities of coins, brooches and other metalwork, mostly as surface finds (1997, 66). Furthermore, many of these sites were near river sources or crossings, similar to Somerford Keynes (see below).

If it is accepted that the unstratified finds are likely to have come from a religious context – and it must be stressed that this still remains quite speculative – then it is probable that the actual location of this potential shrine was not too far from the area of excavations. A primary candidate would be an area closer to the river Thames, perhaps even in the vicinity of the river crossing, as an association between rivers and sacred sites, including ritual deposition, is well attested (Fitzpatrick 1984; Smith 2001, 150; see above). The finds may then have been redeposited within the area of the excavated site at a later stage, although at what period and for what purpose remains uncertain. It is likely to have been at some point during or soon after the Phase 2/3 reorganisation, as the overall spread of this material does seem to be bounded by the rows of parallel ditches to the north and south.

The nature of the Phase 1 settlement

The earliest recognisable phase of activity within the site is also perhaps the most problematic, as it is here that the evidence from the various finds assemblages are at their most divergent. The environmental and ceramic evidence from the excavations all consistently point to a low status rural settlement, probably operating a pastoral regime, whilst the unstratified small finds suggest a much higher status site, quite possibly with a religious aspect. Perhaps the best explanation for this is that the unstratified finds relate to a ritual site situated a little away from the main areas of excavation, and were subsequently redeposited at a later date. The main excavated settlement is certainly similar to a number of sites along the gravel terraces of the Upper Thames Valley, which were established in the middle or late Iron Age and continued until the early 2nd century AD, when many were either transformed or abandoned (see Chapter 16). Such transformation also appears to have occurred at Somerford Keynes.

Settlement reorganisation in the 2nd century AD

Settlement organisation

During the early 2nd century AD, the enclosures and sub-enclosures of the earlier settlement were replaced by a rectilinear system of ditched boundaries and trackways, along with a substantial aisled building (Fig. 9.2, Pl. 9.2). There appears to have been at least two main zones at the site, possibly representing different functional areas. To the east a substantial curvilinear ditched enclosure was dug, behind which lay a series of boundaries probably representing successive phases of an enclosure system. Nearly all datable features from this area indicated that activity was restricted to the 2nd century AD. Further to the south-east, another substantial curved ditch was located, which, if contemporary, may have acted as an inner boundary, although as this was not concentric this is far from certain. The western part of the site was defined to the north and south by parallel ditches running from the D-shaped enclosure, although it is uncertain how many of these were contemporary as dating evidence is slight. Between the two sets of ditches was an arrangement of trackways and enclosures. The two main trackways ran north-south and east-west, joining in the central area of Trench 5 where they formed part of an enclosure within which lay the aisled building (see below). Although the D-shaped enclosure and radiating parallel ditches are strikingly unusual within such a Roman settlement context, the general organisation of rectangular enclosures, trackways and an aisled building has very close similarities with the situation at Claydon Pike (see Chapter 5) and Roughground Farm (Allen *et al.* 1993).

In the mid to late 2nd century AD (Phase 3; Fig. 9.6), there is evidence for extensive redevelopment in site organisation, although the aisled building remained in use and it is unlikely that the general character of the site changed too radically. The principal alterations comprised the redefining of the trackways further to the south and east, and construction of a possible corn-drying oven within an enclosure in the centre of the site.

The aisled building

The aisled building at Somerford Keynes is quite an unusual example in the region, being relatively long and having two post settings at the southern end

(Fig. 9.5, Pl. 9.2). The outer walls were presumably constructed purely of timber, and a reasonable reconstruction based upon calculations by Mackreth (1996 66) would give overall outside dimensions of 10-12 m wide and 27 m long. It was therefore considerably longer (by 8-10 m) than either of the aisled buildings from Claydon Pike. One of the closest comparable examples is that found in 2001 excavations of the Birmingham M6 Toll road (OWA 2002) which was 30 by 9 m in size and also had an intermediate central post setting at one end. It was dated to the 2nd century AD.

Romano-British aisled buildings had a wide variety of functions, although previous analysis has indicated that many of the simpler structures of 2nd-century AD date were used as domestic buildings (Morris 1979, 61). Unfortunately there is no direct evidence for domestic occupation at Somerford Keynes as no floor surfaces survive, but it is certainly possible that at least part of the structure was used for such activity, as indicated by the amount of domestic finds from this phase. Part of the building may also have been used for tile storage, given the quantity and range of such material in the immediate vicinity (see below), although it must be said that only very small quantities of tile were actually found within the structure.

Site economy

There is a range of environmental and artefactual evidence from the site that provides some picture of the economy of the 2nd-century AD settlement, although the generally poor stratigraphic integrity ensures that there may well have been much mixing of finds within the different phases. This may in part account for why the animal bone assemblage in particular does not exhibit any major changes within the 2nd-century settlement, with the exception of the slight increase in the number of horses. It appears that the main domesticates continued to be used as part of the economic basis of the site, and there is nothing to suggest any particularly high status activity. The same is true of the pottery assemblage, which continued to be dominated by local coarsewares, and where characteristically Roman forms such as mortaria, amphorae and flagons are all poorly represented. A noteworthy point to make here however is that the amphorae came from more than one source, suggesting at least some limited adherence to Roman culinary tastes, and a wider geographical emphasis with regard to trade and supply. The environmental evidence from this phase suggests an open landscape with spelt wheat and barley grown in the vicinity, at least during the later 2nd century. Crop processing on site is indicated by a number of quern fragments, all of which are typical of Roman rural sites in this region. A fragment of millstone was also recovered. These are often found on larger Roman sites and point to more centralised crop processing (Shaffrey pers. comm.). The overall evidence may imply that whatever the nature of the dramatic physical changes in site organisation in the early 2nd century, most of the people living and working at the site continued much as before, at least in so far as their culinary habits were concerned.

A Roman tile depot?

Perhaps the most significant development as far as finds are concerned is with the Roman tile, of which comparatively large quantities were found both in unstratified and Phase 2/3 contexts. Most of the stratified and unstratified tile was recovered from areas immediately south and east of the aisled building, with some of it apparently stacked up in regular arrangements. This material may have lain within what was effectively a builder's yard. The variety of tile types suggests that they did not derive from the aisled building alone, and the fact that they all appear to be of one fabric does suggest that they came from a single tile production centre in the vicinity. Well known tile kilns were located *c* 4 km to the south at Minety, the products of which were spread throughout the Upper Thames Valley and Cotswolds, including Corinium and Claydon Pike (McWhirr and Viner 1978, 368). This seems to have been the source of the Somerford Keynes tile.

If the aisled building complex at Neigh Bridge was indeed some kind of tile depot, and this is far from certain, the products could quite possibly have been stored and distributed from the site, either by road or by river down the Thames valley to the east, assuming that this was navigable to shallow craft at this time (see discussion, Chapter 16). Although no definite Roman road is known from this area, it is possible that one may have followed the line of the current road just to the west of the site, which leads down towards Minety. Most of the known Roman settlements in the immediate locality (Fig. 9.1) have produced at least small quantities of tile, and although nothing is recorded of the fabric, a Minety source seems most likely.

There is still relatively little known about tile production and distribution in Roman Britain but it is likely to have been seasonal and possibly linked with farming (Brodribb 1987 139). Official interest in the industry is occasionally well attested, with the prime example being stamped tiles of the *classis Britannica* (Brodribb and Cleere 1988; Peacock 1982, 146). An official city brickworks is known at Gloucester operating from the early 2nd century AD, with tiles and bricks stamped with the letters RPG (REI PUBLICAE GLEVENSIUM) being found within the town and the area of its *territorium* (McWhirr 1981, 109). Aside from such official centres, the exact nature of tile production and distribution mechanisms remains generally uncertain. None of the tiles from Somerford Keynes show any sign of a stamp which may be linked to official production and it is perhaps likely that they were the products of civilian kilns, operating on a

seasonal basis. The only certain stamp found at the site is incomplete, but may have originally read TPFB (Pl. 9.5), part of a group of TPF stamps found throughout Gloucestershire, and thought to belong to varying workshops within a civilian brickworks (McWhirr 1981, 111; see Allen above).

Despite the lack of official stamped tile, there are grounds for suggesting some official presence at the site, even if this was only for limited periods and concerned with the centralised distribution of a number of products, of which tile was possibly one. The small finds belonging to the Phase 2/3 period were relatively scarce compared to earlier and later periods, but they did include a group of military equipment belonging to the later 2nd to 3rd century AD. Cool (see above) has related such equipment with the presence of soldiers carrying out policing and similar tasks (see wider discussion, Chapter 16). An official, although not necessarily military, aspect is also indicated by the presence of sculptural fragments of the capitoline triad, tentatively dated to the 2nd century AD. The worship of Jupiter, Juno and Minerva was especially prevalent among the army and in urban centres, although no certain examples of a *capitolium,* a joint temple to the three, have yet been found in Britain (Frere 1987 313). At Somerford Keynes, it is possible that such a shrine may have replaced or even complemented an earlier local religious focus near to the site (see above). Although the sculptural fragments were undoubtedly removed from their original position on site, it is unlikely that this was too far away, and therefore the substantial curved enclosure and unusual radial ditches be well be in some way related to the cult.

The control of all kinds of resources, including foods, metals and ceramic products, has been regarded as an essential factor of the military supply economy in Roman Britain, especially in the later 2nd and early 3rd centuries AD (Faulkner 2000, 54; see Chapter 16). The exchange systems are not always well understood, but it is likely that there were only relatively few directly controlled imperial estates such as that postulated for the fens in East Anglia (Finsham 2002). For the most part, there was probably a complex system of commercial negotiation between individuals throughout the social scale, which ensured that a steady supply of goods was maintained. The military and official objects from Somerford Keynes certainly do not indicate direct official control, or even that the site was run on behalf of the state. Nevertheless, it could well have been a part of the general state supply network, which was deemed important enough for a small scale policing presence to be established there at some point in the late 2nd to early 3rd century AD.

The nature of the Phase 2/3 settlement

It is clear that during the early 2nd century AD the site underwent a major transformation in form and function. The sub-rectangular enclosures of the previous farmstead were replaced by trackways, regular enclosures, and a substantial curving ditch with radiating parallel linear ditches branching off to the west. It is suggested that the site incorporated a depot possibly involved in the distribution of ceramic tile and other products. This seems to have necessitated a small, and probably intermittent, official presence on the site, an idea which is furthered by the likely presence of a *capitolium*. However, despite this, it does seem that the main residents of the settlement may have continued with relatively little disruption in day to day living, as agricultural practices were maintained and there is nothing to suggest much in the way of Roman style culinary habits. Occupation of the site appears to cease by the early 3rd century AD, perhaps associated with a decline in the tile-making industry, and there nothing to suggest further activity beyond this until the later 3rd or 4th century.

Late Roman activity

Although there does not appear to be any further structural phases within the site, the overall quantity of later 3rd- and 4th-century coins and small finds suggests continued activity of some kind in the area. Furthermore, the nature of the small finds indicates a continued official state presence. These finds include a group of late Roman military equipment, which although not an absolute indication of the presence of soldiers, do at least indicate the presence of an elite with late military trappings. Further indication of this lie with the mid 4th-century crossbow brooch, as such brooches appear to have been part of the regalia of late Roman officers and administrators (see Cool, above).

Unfortunately, there are no real indications as to the nature of occupation in the late Roman period, even if it did certainly seem to include an official element. The largest concentrations of late Roman small finds from the site occurred to the east of the large curvilinear enclosure (Fig. 9.2), and it is possible that the layer of metalling found sealing some of the features in Trench 17 could have represented a late Roman surface. The date range of the late Roman finds indicates that activity probably continued into the early 5th century AD (see Chapter 17 for a wider discussion of this period in the Upper Thames region).

Chapter 10
Archaeological Investigations at Whelford Bowmoor, Gloucestershire, 1983, 1985 and 1988

by Alistair Marshall, Simon Palmer and Alex Smith

INTRODUCTION

Three archaeological investigations were undertaken at Whelford Bowmoor in the 1980s, prior to proposed gravel extraction by ARC/Kingston minerals (Figs 10.1 and 10.2). Brief salvage work took place in 1983 (WB 83), while trial trenching and selective excavation occurred in 1985 (WB 85). In 1988 an archaeological evaluation took place across an adjoining area to the south (WB 88, Fig. 10.2). Together, these enabled the examination of a large area of Roman settlement, previously known only from sporadic surface finds and tenuous cropmark features. Despite the investigations being quite limited in scope, they provided clear evidence for a Romano-British farmstead with associated paddocks, trackways and field systems.

Location and physical characteristics of the site

The site lies just to the north of Whelford and to the east of Bowmoor in the parish of Kempsford, Glos. (SO 172 996; Fig. 10.1). It is 200 m east of the River Coln which flows south past the site to join the Upper Thames near Lechlade. The area is part of the River Coln's immediate floodplain, with very slight relief varying between 77 m and 78.5 m OD. Detailed contouring of WB 83 and 85 showed that they were crossed by a shallow central depression running parallel to, and presumably part of, the immediate sub-surface drainage system of the Coln periphery. Geologically the site rests on part of an extensive first gravel terrace to the Upper Thames in an area in which it is overlain by a narrow band of alluvial clay flanking the River Coln.

The whole area had been permanent water-meadow pasture and subject to fairly frequent winter flooding until the early 1980s, when WB 83 and 85 were brought into cultivation after an extended period of fallow use. The effects of the subsequent ploughing could be gauged by contrasting the lack of surface relief in this field with the marked ridge and furrow in the field immediately to the south (WB 88), an area which continued as pasture. The site now forms part of the eastern Cotswold Water Park.

Archaeological background (Fig. 10.1)

The archaeological importance of this area was defined initially in terms of its proximity to the extensive Iron Age and Roman complexes at Claydon Pike and Thornhill Farm lying on the first gravel terrace to the east, principally as an element in the study of the wider archaeological landscape (see Chapter 1). In the more immediate vicinity, on the western side of the River Coln less than 100 m from Whelford Bowmoor, is a series of undated enclosures and linear ditches extending over 2 hectares, revealed as cropmarks on aerial photographs (SMR 2425). The nature and proximity of these features suggests that they were contemporary with the Roman settlement. A further 1.5 km to the west lay the extensive middle Iron Age and Roman settlement at Totterdown Lane, Horcott (Pine and Preston 2004). Ten middle Iron Age ring gullies were found, with an enclosure and associated field system. The late Iron Age/early Roman phase of activity comprised a number of circular enclosures and associated ditches. During the 2nd and 3rd centuries the landscape was parcelled into various fields and paddocks around a 'T'-shaped trackway. Burials and cremations were also found. Further excavations just the west revealed a 2nd- to 3rd-century field system and seven Roman cremations (Pine and Preston 2004). A hoard of middle or late Iron Age sword-shaped currency bars was also found.

Excavation methodology (Fig. 10.2)

WB 83

In 1983 the western edge of the Whelford field was stripped of its topsoil prior to gravel extraction. Although an earlier field survey did not suggest much activity a watching brief was kept and salvage recording undertaken. A complex of ditches was recorded with an apparent Roman trackway running NW-SE. Further ditches and gullies ran across this line (stratigraphic relationships were not recovered) but few finds were recovered. No actual excavation was undertaken.

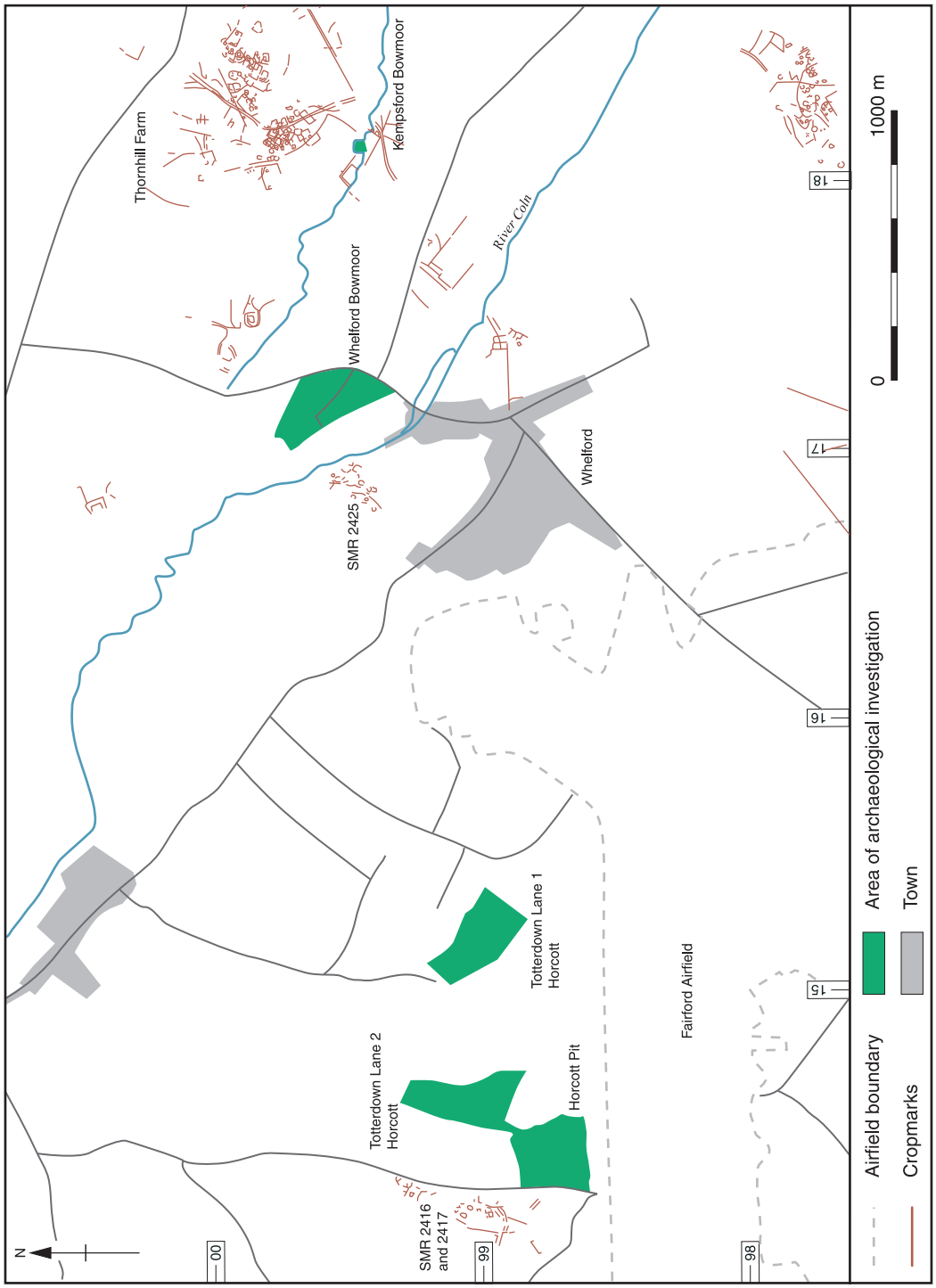


Fig. 10.1 Whelford Bowmoor in relation to local archaeology

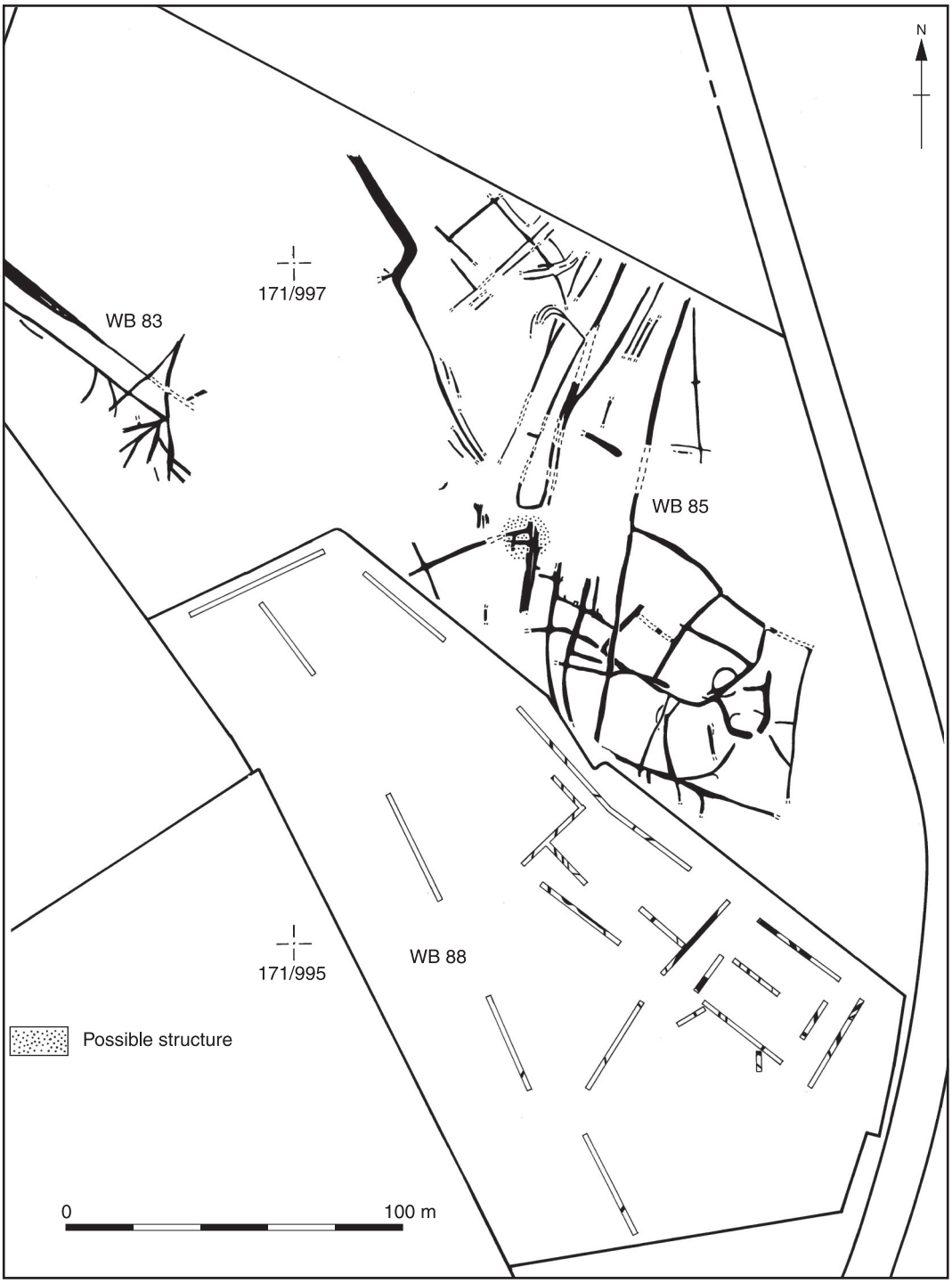


Fig. 10.2 Location of archaeological investigations

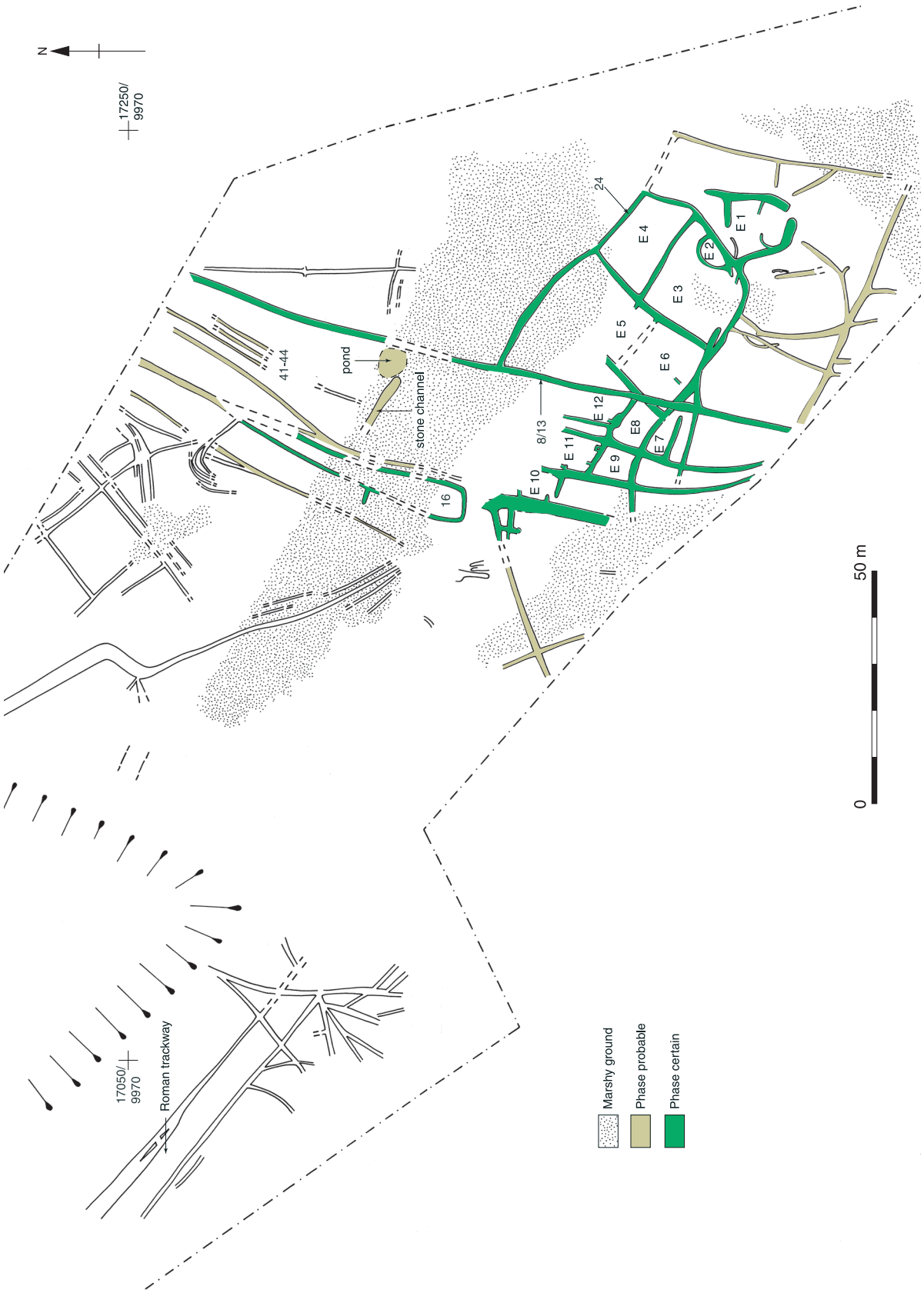


Fig. 10.3 Phase 1

WB 85

The southern and eastern parts of Whelford field (4.085 ha; Fig. 10.2) were proposed for gravel extraction in 1985. A metal detector survey of the field pinpointed areas of possible occupation and the incidence of general rubbish scatters. These seemed to correlate with the topography and suggested the presence of a structure on a slight platform on the gravel island in the central southern area of the field. Cropmarks also hinted at an enclosure on the south-east side. Initial work was thus aimed at elucidating these areas. A programme of trial-trenching by JCB followed by selective excavation was completed before the topsoil was stripped by ARC prior to gravel extraction. Further salvage work continued when the site was totally exposed but preservation of features and deposits was more variable due to the nature of topsoil removal.

WB 88

In 1988 an archaeological evaluation was conducted on behalf of ARC on a field to the south of WB 83/85 (Fig. 10.2). It was aimed at assessing the density, character and preservation of any archaeological remains, in particular those associated with the Romano-British farmstead to the north. An earthwork survey was followed by machine trenching, initially on a grid pattern, to provide a 2% sample of the site. These were designed to locate linear features and record the spread, if any, of archaeological material. This sample size was increased on the north-east side of the field when archaeological features were encountered. These features were sampled to ascertain date and to assess environmental preservation.

THE ARCHAEOLOGICAL SEQUENCE

No explicit evidence for pre- or post-Roman occupation or activity on the site was obtained either in terms of structures or scatters of materials, although a series of small earthworks in WB 88 may have formed some kind of medieval water meadow arrangement. Aside from this, activity and settlement on the site appear to be entirely Roman and to date from the early 2nd to early 3rd centuries AD. Except for the later phase building, it appears to consist of agricultural enclosures, pens and paddocks presumably peripheral to associated areas of settlement. Phasing is based on stratigraphy (although little was recovered) and pottery dating. As the site developed in a gradual and amorphous fashion, it is quite possible that this imposed phasing masks continuity of activity on the site. Figures 10.3 and 10.4 show both those features that could be definitely phased on a chronological and/or stratigraphic basis, along with those unexcavated features that have been assigned a phase on spatial grounds.

Full stratigraphic descriptions can be found in Digital section 6.2.

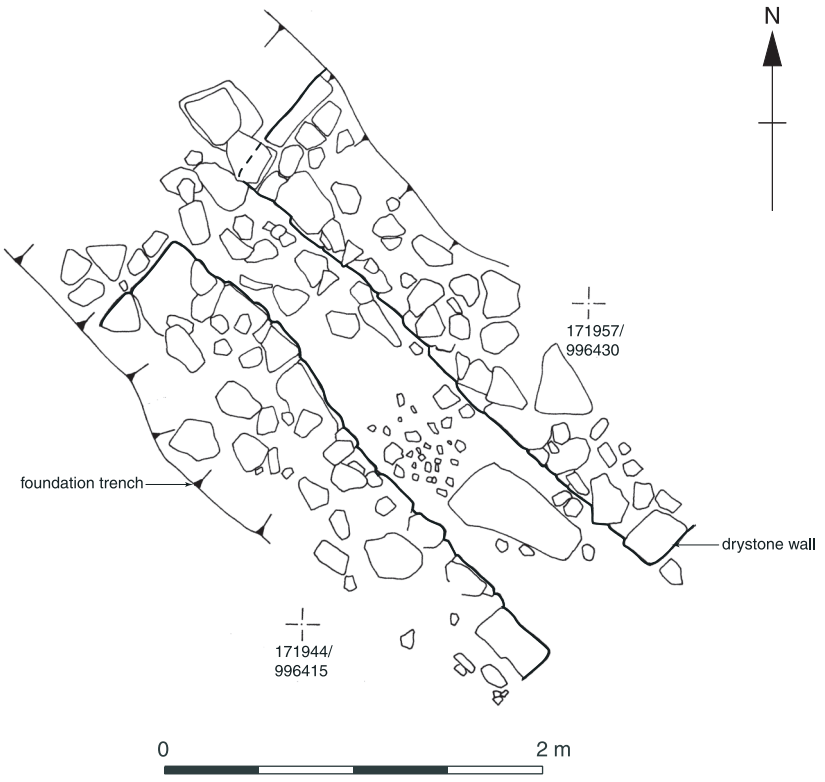


Fig. 10.4 Stone channel

Plate 10.1 Water channel at Whelford Bowmoor

Phase 1 (early 2nd to mid 2nd century AD)
(Fig. 10.3)

The earliest activity at the site comprised a sequence of enclosures in the south-east side of the field, covering an area *c* 80 x 60 m and dating to the early 2nd century AD. Further smaller enclosures of early to mid 2nd-century date were located to the north-west, along with a series of long north-south linear ditched boundaries which may have been part of this phase. Very limited dating evidence from ditches in WB 88 to the south suggests that these also belonged to this phase. A stone-lined channel (Fig. 10.4, Pl. 10.1) to the north of the main enclosure groups could belong to Phase 1 and/or Phase 2.

Enclosures 1-6

Enclosures 1 to 6 in the south-eastern part of the site seemed to form a coherent group, although it is uncertain how many of these were contemporary as the plan suggests a gradual shift in various boundaries.

Sub-rectangular Enclosure 1 lay in the south-east corner of the field and measured 11 m x 12 m internally, with ditches *c* 0.45 m deep and from 1.2 to 1.8 m wide. Entrances were noted (*c* 2 m wide) to the south and north, with the southern terminals being recut on a number of occasions. Internally, the enclosure appears to have been sub-divided by two small shallow curving gullies (0.3-4 m wide, 0.1-2 m deep). A small quantity of Roman pottery, a Colchester Derivative brooch (Fig. 10.9, no. 4) and a piece of copper alloy binding came from the enclosure ditches.

A small (6.5 m x 4 m) semicircular enclosure (E 2) was formed by curving gully lying within Enclosure 3, and abutting its eastern ditch. The gully was 0.6 m wide and 0.3 m deep, and contained a small quantity of animal bone and a small piece of copper alloy sheet with traces of gilding. Enclosure 3 (*c* 18 m^2) was situated centrally within the south-eastern group, and shared its boundaries with E 1, 2, 4, and 6. The ditches ranged from 1.2 m to 1.4 m wide and 0.45 to 0.6 m deep, and were generally V-shaped in section. The very small amount of pottery recovered dated from the late 1st to 2nd century AD, and the only other finds comprised an early 1st-century AD brooch (Fig. 10.9, no. 2) and a sling stone. Within its interior was a shallow peat filled depression (2) which may have been a midden, almost certainly belonging to Phase 2 (see below).

Just to the north of E 3, and sharing a boundary ditch, was Enclosure 4, measuring 18 m x 11 m. The northern ditch, 24, (1.3 m wide, 0.3 m deep) was traced running SE-NW for *c* 48 m along the southern margins of the marshy area through the middle of the site, and seems to have formed the northern limit to the south-eastern enclosure complex. Three small fragments of Roman coarse-ware pottery and two iron nails derived from the upper fills of this enclosure.

Enclosure 5 (*c* 20 m x 12 m) lay to the west of E 4 and north of E 6, and appears to have been open on its north-western side. The southern ditch, which divided E 5 from E6, was quite shallow (0.25 m deep) and difficult to fully trace, but did contain a small amount of animal bone and 2nd-century Roman pottery in its upper fill. Enclosure 6 (15 m x 13 m) formed the south-western limit of this enclosure group. The western ditch (1.3 m wide, 0.5 m deep) was cut by Phase 2 ditch 8, and contained a small quantity of 2nd-century pottery in its upper fill. The only internal feature was a small unexcavated section of gully (*c* 0.4 m wide), which may well have been contemporary as it was on the same alignment as the enclosure ditches. This gully may have sub-divided the enclosure.

Enclosures 7-12

Enclosures 7 to 12 further west were generally smaller and lay on a different alignment than enclosures 1 to 6. They may have been associated with the long linear ditch 8/13, although very few excavated sections ensured that stratigraphic relationships were often unknown.

Enclosure 7 (*c* 10 m x 4 m) lay to the south-west of E 6, and only one part of its western boundary was sectioned. This was 1.5 m wide and 0.4 m deep and contained a single fragment of 2nd-century pottery. The northern boundary appeared to curve southwards, and the southern boundary terminated 1.8 m short of linear ditch 8/13 (see below). It is uncertain if they were contemporary, but if so, this gap may have formed an entranceway. A parallel gully lying 4 m south of the southern E 7 boundary

was located during salvage operations, and may have formed part of a larger enclosure.

To the north of E 7 lay another small enclosure (E 8; 10 m x 6 m) none of which was excavated. Its eastern boundary may well have been linear ditch 8/13, as this shared the same alignment as that to the west. To the west of E 8 was a small enclosure (*c* 7 m^2) with shallow and irregular ditches (*c* 1.5 m wide, 0.3 m deep). During later salvage work, both of the north-south ditches were found to continue southwards, though curving slightly to the east.

Just to the south-east of, and partially overlain by, the Phase 2 rubble building platform was enclosure 10 (*c* 7 m^2). Its southern entrance was formed by two short gullies, the positions of which created a short angled passage. The western boundary was part of a triple ditch system overlain by the rubble platform (see below).

The southern parts of two enclosures were located to the north of E 8/9. E 11 was *c* 7 m across and traced northwards for 10 m, while further east, E 12 was sub-divided by a narrow ditch/gully, and probably used ditch 8/13 as its eastern boundary. Within an excavated section of this ditch was found part of a triple vase. No other parts of these enclosures were excavated.

Wider enclosure group

Further elements of the enclosure groups were found to the south and east in salvage operations, but not excavated. These features included two long linear boundaries, that together with ditch 24 and 8/13, seemed to form a large (*c* 75 x 60 m) rectilinear enclosure that encompassed many of the smaller enclosures in the south-east. On spatial grounds, this enclosure is likely to belong to Phase 1, although it could have continued in use into Phase 2.

Ditch 8/13

Ditch 8/13 was traced for 75 m aligned north-south through the central part of the site, although most of this was located only within salvage areas and therefore not excavated. Three sections were dug in the area of the enclosures, where it cut through E 6, with dimensions approximately 1.7 m in width and 0.3 m in depth. It is likely that this ditch formed the eastern boundary of the group of small rectilinear enclosures (E 7-12) with which it shared a common alignment, although it seems to have still been in use into Phase 2. It may also have formed the western boundary of a large rectilinear enclosure (see above). Finds included iron nails, fired clay daub and oven fragments and 29 sherds of pottery dating from the 2nd to early 3rd century AD.

Other linear boundaries

On the western edge of the main enclosure group were three parallel ditches (100-2), one of which (100) formed the western side of E 10 (Fig. 10.6). They were not substantial features, ranging from 0.7 to 1.3 m wide and 0.1 to 0.3 m in depth, although a reasonable quantity of 2nd-century pottery came from their fills. The only other find comprised a copper alloy ligula. Ditch 102 was connected to a 'mesh' of probable drainage channels to the west, all lying under the later Phase 2 rubble platform (see below; Fig. 10.5). Water would thus have been drained from the area of the gravel island towards a waterlogged peaty sump in the area of the probable Phase 2 midden (54; Fig. 10.5). A single piece of fired clay daub was the only find recovered from the channels.

To the north of the rubble spread was a U-shaped ditch (16; 0.8-1.05 m wide, 0.4 m deep) which seems to have formed part of an elongated sub-rectangular enclosure (Fig. 10.3). A small amount of pottery (possibly 2nd century AD), an iron plate and a number of iron nails were the only finds recovered. A substantial ditch/gully ran north from this group parallel to the enclosure, and could well be contemporary. It may well have continued northwards to become the westernmost of four parallel linear ditches (41-4), which were traced for a short distance in the north-eastern part of the site (Fig. 10.3). No finds were recovered from these features and their function is uncertain, although they were on the same general alignment as the other ditches in the area and therefore presumably contemporary.

Stone-lined channel (Fig. 10.4, Pl.10.1)

Aligned east-west through the central depression of the field was a well constructed stone-faced channel (1.5 m long, 0.25 m wide, 0.3 m deep) made up of five levels of drystone walling and a roughly cobbled floor sloping north-west. It was set within the eastern end of a purpose-built trench, and ran away from a sunken feature which may have functioned as a pond (7 m across, 0.5 m deep). This may suggest that the stone structure acted as a sluice mechanism to control the overflow of water away from this hollow depression. No finds were directly associated with the stone channel, but a small amount of 2nd-century pottery came from black peaty clay of the ponded area. The structure could therefore belong to Phase 1 and/or Phase 2.

Features from WB 88

A number of evaluation trenches in the north-eastern side of the WB 88 field revealed Roman ditches and gullies sealed beneath alluvial material that were undoubtedly a continuation of the enclosure system from WB 85 to the north (Fig. 10.2). This, along with the recovery of eight sherds of 1st to 2nd-century pottery, suggests that they belonged to Phase 1.

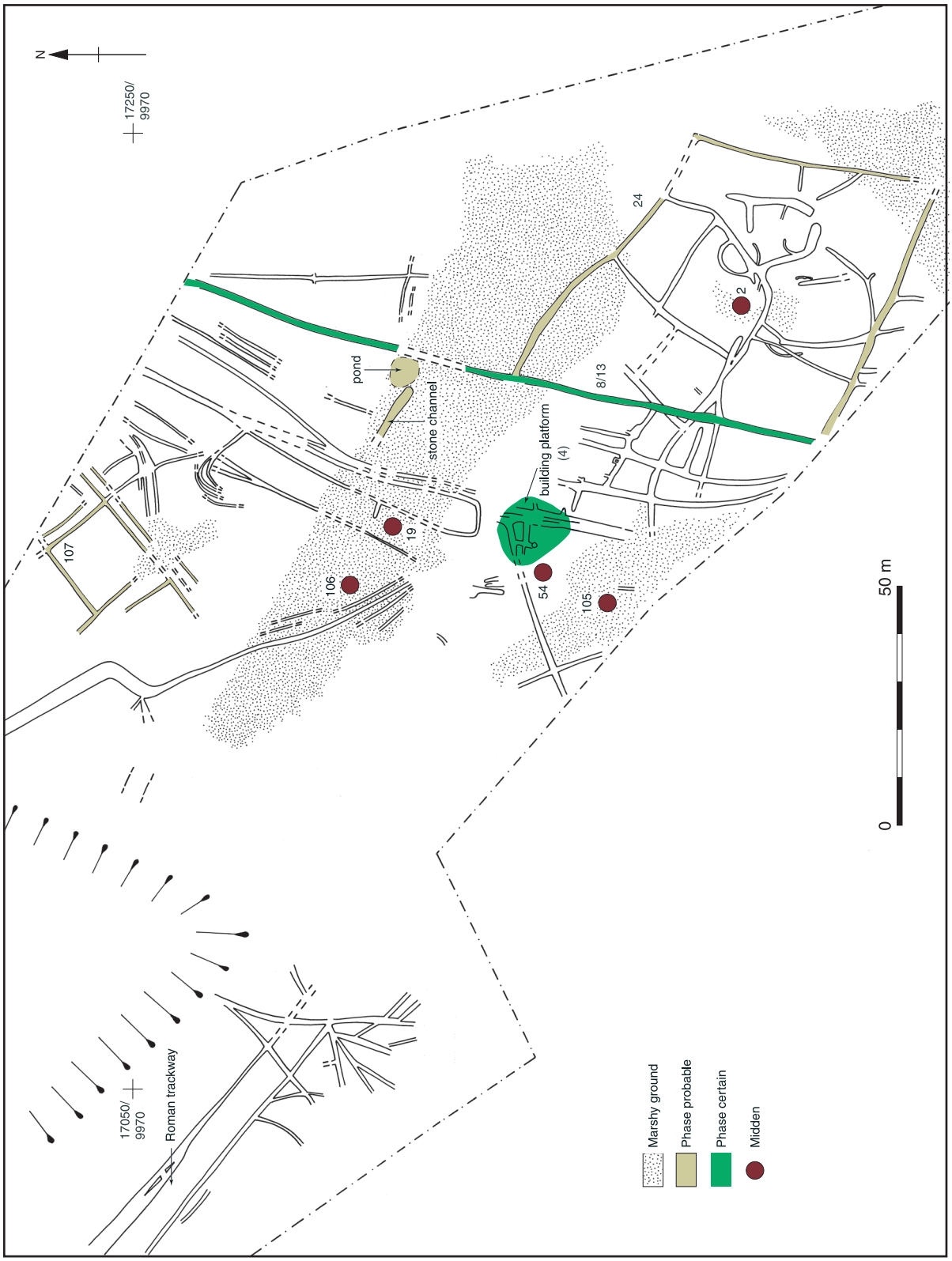


Fig. 10.5
Phase 2

Phase 2 (c mid/late 2nd to early 3rd century AD) (Fig. 10.5)

The final development consisted of a small rubble platform (4) established over the top of the highest area of the site, which would have formed a relatively well-drained island of gravel (Figs 10.5 and 10.6). This platform presumably served as the base for an essentially timber-framed building resting on stone footings, and was associated with large quantities of Roman fine and coarseware pottery, dating primarily from the late 2nd to early 3rd centuries AD. The other probable Phase 2 features comprised a number of likely middens (2, 54, 105, 106). Linear ditch 8/13 was also probably still in use at this time, as may have been the stone-lined channel in the centre of the site. It is uncertain if there was any chronological gap between Phase 1 and Phase 2 occupation.

Building platform (Fig. 10.6)

An area of ditches (100-2, 18, 52) approximately 10 m² was surfaced by rough limestone rubble paving and light stone footings (4). This building platform seems to have served as the base for a timber-framed unit resting on, rather than cutting into, the gravel. Two pits (50, 53) cutting through the earlier Phase 1 ditches were also covered by the rubble, and one of them (50) contained a stone-packed posthole (51; 0.5 m wide, 0.2 m deep). Large sherds of a late 2nd-century pottery vessel were recovered from the base packing of the posthole suggesting that it was part of the building structure, although no other postholes were identified. Four areas (55-8) of limestone paving were located within the rubble spread, which may have formed part of the foundations for the building, or its interior. Three of these paved areas (55, 56, 58) had definite

Fig. 10.6 Rubble platform

evidence for faced edges, though the exact shape and dimensions of any building remain unknown. Another area of more rough paving to the north-west (30; not on plan) may well have been part of an external courtyard.

A prolific quantity of pottery, tile and other domestic debris was recovered from layers above, below and within the rubble platform, thereby helping to confirm the presence of a domestic building. These finds included anomalously high levels of fine wares, both of British and of continental origin (see Brown below), along with quern fragments, iron structural fittings and two coins (late 2nd and early 4th century AD). Most diagnostic metalwork and pottery date the occupation clearly to the late 2nd/early 3rd century AD.

Middens (Fig. 10.5)

A number of waterlogged depressions were located across the site that seem to have served as middens for the disposal of domestic waste, mostly dating from the 2nd to the early 3rd century AD. Feature 2 within E3 was a shallow peat filled depression (*c* 2.6 m wide, 0.15 m deep) within which was a small gully. The depression contained large quantities of 2nd- to 3rd-century pottery in its upper fill, along with an iron snaffle bit (Fig. 10.9, no. 8) and smaller amounts of flint and animal bone. The large unabraded sherds were similar in nature to those from other probable midden deposits. A much larger shallow depression (19; 8 m across, 0.35 m deep) was located within the central marshy area to the west of ditch 16, and contained 2nd-century pottery, two coins (2nd and late 3rd century AD), a stone roofing slate, animal bone and a copper alloy ring with intaglio.

The most extensive midden deposits came from feature 54, a large area of peaty black gravel just to the south-west of the rubble building platform (Fig. 10.5). Finds included large volumes of 2nd- and 3rd-century pottery, whetstones, quern fragments and an array of metalwork, mostly miscellaneous iron fragments. Many animal bones were also recovered and it is clear that this represented the main dumping area of domestic refuse for the inhabitants of the central building. Two other middens (105, 106) were located during salvage work to the south and north-west of the main domestic area (Fig. 10.5). Both produced quantities of 2nd- and 3rd-century pottery along with a range of metalwork, recovered by metal detecting. Midden 106 contained eight lead weights, representing nearly all such objects found at the site.

There is nothing intrinsic about any of these deposits which suggests that they may have been structured in any way, although the possibility must remain that some kind of 'ritual discard' may have been performed, especially given the unusually large quantity of fine ware pottery within them (see Discussion below).

Other probable Phase 2 features

A small amount of late 2nd- to early 3rd-century pottery from the upper fills of ditch 8/13 suggested that this linear boundary may still have been in use during Phase 2, perhaps representing the eastern limit of the main area of occupation, and forming the western boundary of a large rectilinear enclosure (see above; Fig. 10.5). It is possible that parts of the western enclosure group (E 7-12) may also belong to this period, although none of the minimal amount of pottery recovered can be confidently dated beyond the 2nd century AD.

During salvage operations to the north-west, a square enclosure (107; 16 m^2) was located just south of the field boundary. The north-eastern side produced most of a 2nd- to 3rd-century pot, suggesting that it was in use during Phase 2. Other unexcavated ditches surrounding this feature were on a similar alignment and have therefore been tentatively assigned to the same phase.

Unphased features from salvage work

During salvage work in 1983 and 1985, there were many features which although apparently Roman in date, could not be assigned to a specific phase. A trackway (7 m wide) running NW-SE was traced for over 60 m in the far west of the site, along with a number of ditches, some of which were clearly not contemporary (Figs 10.3 and 10.5). A further series of linear ditches were found in 1985 about 75 m to the east of the trackway, running NE-SW into the depression in the middle of the field contemporary (Figs 10.3 and 10.5). These features were not excavated.

THE FINDS

Full finds reports can be found in Digital section 6.3.

Pottery (Figs 10.7-8) *by Kayt Brown (with contribution from Brenda Dickinson on the samian)*

The excavations produced a total of 3551 sherds of pottery, weighing 35.1 kg (Table 10.1). The ceramics display a tight chronological range from the early 2nd century to early-mid 3rd century, with a few sherds in a late Roman shelly fabric, probably of 4th-century date.

Fine and specialist wares account for over 15% of the assemblage by sherd count and 25% by weight. Within this, amphora and samian are particularly well represented. Amphora comprised body sherds of southern Spanish amphorae, most probably form Dressel 20, while a sizeable samian assemblage was predominately Central Gaulish (Lezoux) and Antonine in date. British finewares were restricted to a single sherd of Oxfordshire colour-coat. Sources for mortaria are Oxfordshire white-ware and white-slipped ware, and a South-west white-slipped fabric. Of the coarsewares, it is noticeable that the

Table 10.1: Quantification of pottery fabrics from Whelford Bowmoor

Group	*Ware Code*	*Description*	*No. Sherds*	*%*	*Weight (g)*	*%*
Fine/ Specialist wares						
Amphora	A10	Unsourced buff fabrics	182	5.1	3199	9.1
	A11	South Spanish (Dressel 20)	5	0.1	362	1.0
Samian	S	Unidentified samian (sherds <2 g)	55	1.5	74	0.2
	S20	South Gaulish Samian	3	0.1	14	0.0
	S30	Central Gaulish Samian	250	7.0	2080	5.9
	S32	Les Martres de Veyre	3	0.1	22	0.1
	S40	East Gaulish Samian	20	0.6	337	1.0
Mortaria	M20	White fabrics (unsourced)	4	0.1	388	1.1
	M22	Oxfordshire	29	0.8	683	1.9
	M30	Oxidised with white slip (unsourced)	4	0.1	216	0.6
	M31	Oxfordshire white slipped	3	0.1	359	1.0
	M32	Cirencester	6	0.2	218	0.6
	M50	Oxidised (unsourced)	2	0.1	87	0.2
British finewares	F50	Unsourced colour-coat ware	1	0.0	1	0.0
	F51	Oxfordshire colour-coat ware	1	0.0	25	0.1
White wares	W21	Verulamium region white ware	1	0.0	29	0.1
White-slipped wares	Q20	Oxidised fabrics (unsourced)	3	0.1	65	0.2
Sub-total			572	16.1	8159	23.3
Coursewares (Local and unsourced)						
Grog-tempered wares	G	Grog-tempared coarse ware fabrics	10	0.3	157	0.4
Oxidised sandy wares	O	Romanised oxidised coarse ware fabrics	46	1.3	527	1.5
	O10	Fine fabrics	5	0.1	57	0.2
	O20	Medium sandy fabrics (includes Oxfordshire)	270	7.6	1335	3.8
	O30	Wiltshire wares	263	7.4	1468	4.2
	O32	Fine, iron inclusions (cf.FCP10.7)	15	0.4	75	0.2
	O40	Severn Valley wares	89	2.5	473	1.3
	O50	Miscellaneous fabrics	22	0.6	230	0.7
	O80	Coarse tempered fabrics	117	3.3	4290	12.2
	O84	Lumpy, Savernake type ware	6	0.2	276	0.8
Reduced sandy wares	R	Romanised reduced 'coarse' ware fabrics	180	5.1	1371	3.9
	R10	Fine fabrics (Oxfordshire)	1	0.0	25	0.1
	R20	Coarse sandy fabrics	6	0.2	172	0.5
	R30	Medium sandy fabrics (includes Oxfordshire)	1085	30.6	6230	17.8
	R31	Organic and sand inclusions	1	0.0	12	0.0
	R35	North Wiltshire	416	11.7	3872	11.0
	R38	Fine, sandy, occasional black iron and organic inclusions, grog inclusions	44	1.2	1067	3.0
	R90	Coarse tempered fabrics	21	0.6	679	1.9
	R94	cf Savernake	75	2.1	2150	6.1
	B30	Black-burnished imitation fabric	272	7.7	2267	6.5
	B31	Black-burnished imitation fabric	26	0.7	123	0.4
Coarsewares (Regional)	B10	Dorset black-burnished ware	9	0.3	77	0.2
Sub-total			2979	83.9	26933	76.7
Total			3551	100.0	35092	100.0

'Belgic' type (E ware) and other grog-tempered coarse wares, characteristic of the late Iron age/early Roman period at other sites within the region, are virtually absent within this assemblage. There was a small number of later, Romanised, grog-tempered coarse ware fabrics (O80, O84); such coarse sandy and grog-tempered fabrics were being produced at Purton, west of Swindon from the late 2nd century (Anderson 1979). Regional, presumably local, coarse wares accounted for over 50% of the assemblage (by sherd count, 44% by weight). Within this group of wares, unsourced fabrics,

which probably include sherds of Oxfordshire and north Wiltshire fabrics (the identification of which was obscured due to the poor preservation conditions), are the predominant ware groups. Such material generally dates from the early 2nd to 4th centuries AD. Also particularly well represented within the Whelford Bowmoor assemblage are sherds of black-burnished ware imitation fabrics (9% by sherd count), whereas Dorset black-burnished wares are comparatively poorly represented (only 9 sherds).

Although they are the principal form, jars comprise only *c* 58% of the assemblage by estimated vessel equivalents (Table 10.2). Jar forms are also quite restricted in range, with everted rim jars and medium mouthed jars being the principal forms noted. No early jar forms such as bead rim, carinated or high shouldered 'necked' jars, common vessel types in 1st-century groups within surrounding assemblages, are present within this material. Bowls are the next significant form group represented (15.5% by estimated vessel equivalents), with a number of these forms comprising curving sided bowls. This is a reflection of the large proportion of samian wares within the assemblage as most of these vessels are Dragendorff forms 31, 31R and 37. This high proportion of bowls to jars is very significant, as most assemblages in the region that span the same period tend to show a much higher proportion of jars to bowls, which decrease over time as the proportion of bowls increase. The third best-represented class are cups at over 8% of the assemblage as a percentage of estimated vessel equivalents. This figure again reflects the large number of samian vessels, comprising forms Dr. 33 and Dr. 27. Other forms represented to a lesser extent include plates, dishes, mortaria and flagons, each class forming less than 5% of the assemblage by vessel equivalents. The only miscellaneous form present was the base of a triple vase occurring in Phase 2 (Fig. 10.7, no.5).

Table 10.2: Main pottery forms (EVEs) from Whelford Bowmoor

Form group		*EVEs*	*%*
B	Flagons	0.42	1.43
C	Jars	17.13	58.27
D	Jar/bowl	0.27	0.92
E	Beakers	0.35	1.19
F	Cups	2.47	8.40
H	Bowls	4.56	15.51
I	Bowls/dishes	0.39	1.33
J	Dishes/platters	0.66	2.24
K	Mortaria	1.33	4.52
L	Lids	0.87	2.96
Z	Uncertain/unkown types	0.95	3.23
Total		29.4	100.00

Just over 20% (by weight) of the pottery that could be phased was assigned to Phase 1 contexts, and this material was generally in a poor condition, restricted to jars, bowls and lids in local and regional coarseware fabrics. By far the bulk of the assemblage, including all the imported material that could be phased, was recovered from the building platform and associated layer (Phase 2), dated to the mid 2nd century AD. This material was much more diverse in nature in terms of vessel forms and fabrics represented, and together with the large sherd size, supports the theory that this is domestic material from the site. The assemblage does contrast with other domestic assemblages in the region, notably in the proportion of bowls to jars. The unusually large quantity of imports is also not characteristic of a low-status rural assemblage. As a proportion of the assemblage, the fine and specialist ware is much higher than would perhaps be expected of a typical 'rural' site in the region (see Booth, Chapter 13). The combination, therefore of the high proportion of fine and specialist wares, and the variety of forms such as cups, plates and mortaria, would suggest either a high status site or a highly 'Romanised' lifestyle of the inhabitants. Rural sites in the vicinity with continuous occupation from the Iron Age into the roman period generally maintain a strong 'native' element within the ceramic assemblages until well into the 2nd century. The Whelford Bowmoor assemblage provides a good contrast to such a pattern. The assemblage displays a relatively tight chronological range, restricted in the main to the 2nd century AD, with a small quantity of early-mid 3rd-century material.

Figures 10.7-8 present a selection of illustrated vessels from Phase 1 and Phase 2.

Illustrated catalogue: Phase 1 pottery (Fig. 10.7)

1. Coarse ware jar, fabric R38, FT37/SCA/LR3
2. Small bowl/dish, fabric R35, FT37/SCA/LR3
3. Flagon, fabric O32, 40/A
4. Jar with burnished zone on shoulder and burnished lattice decoration, fabric R10, 36/A/3
5. Part of triple vase, fabric O32, 13/A/2

Illustrated catalogue: Phase 2 pottery (Fig. 10.8)

6. Cooking jar, fabric B30, 4/1
7. Large jar with groove on upper shoulder, fabric R38, 4/1
8. Necked, cordoned jar/bowl, fabric O30, 4/1
9. Bowl with flat rim, fabric R30, 4/1
10. Mortaria with spout and groove along inner rim surface, fabric M32, 4/1
11. Lid, fabric R35, 54/B
12. Medium mouthed jar/bowl, fabric R30,106
13. Coarse ware jar, fabric O80, 106
14. Complete profile of bowl with burnished lattice decoration, fabric B30, 106
15. Flanged bowl, fabric O30, 106
16. Mortaria, fabric M30, 106

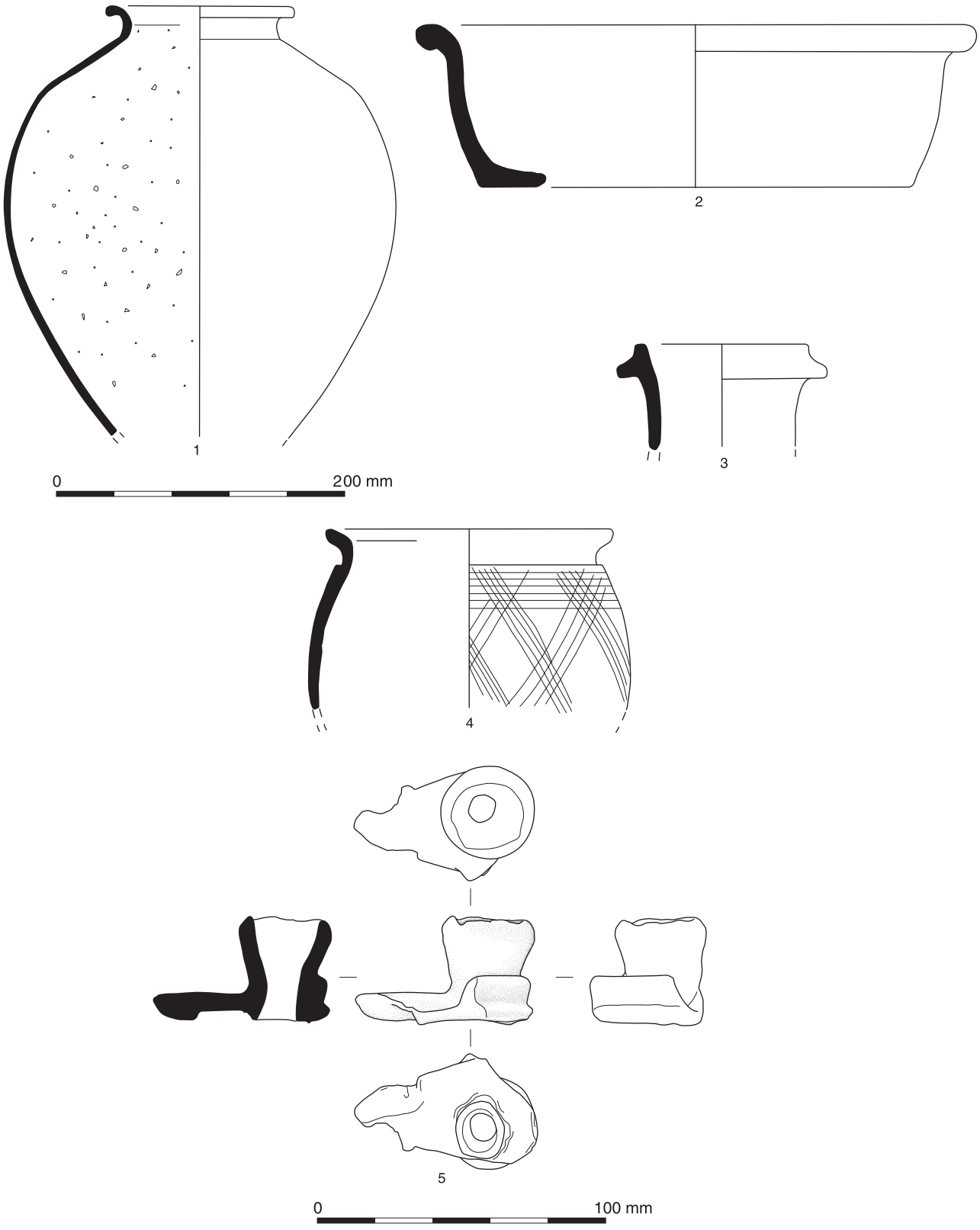


Fig. 10.7 Phase 1 pottery

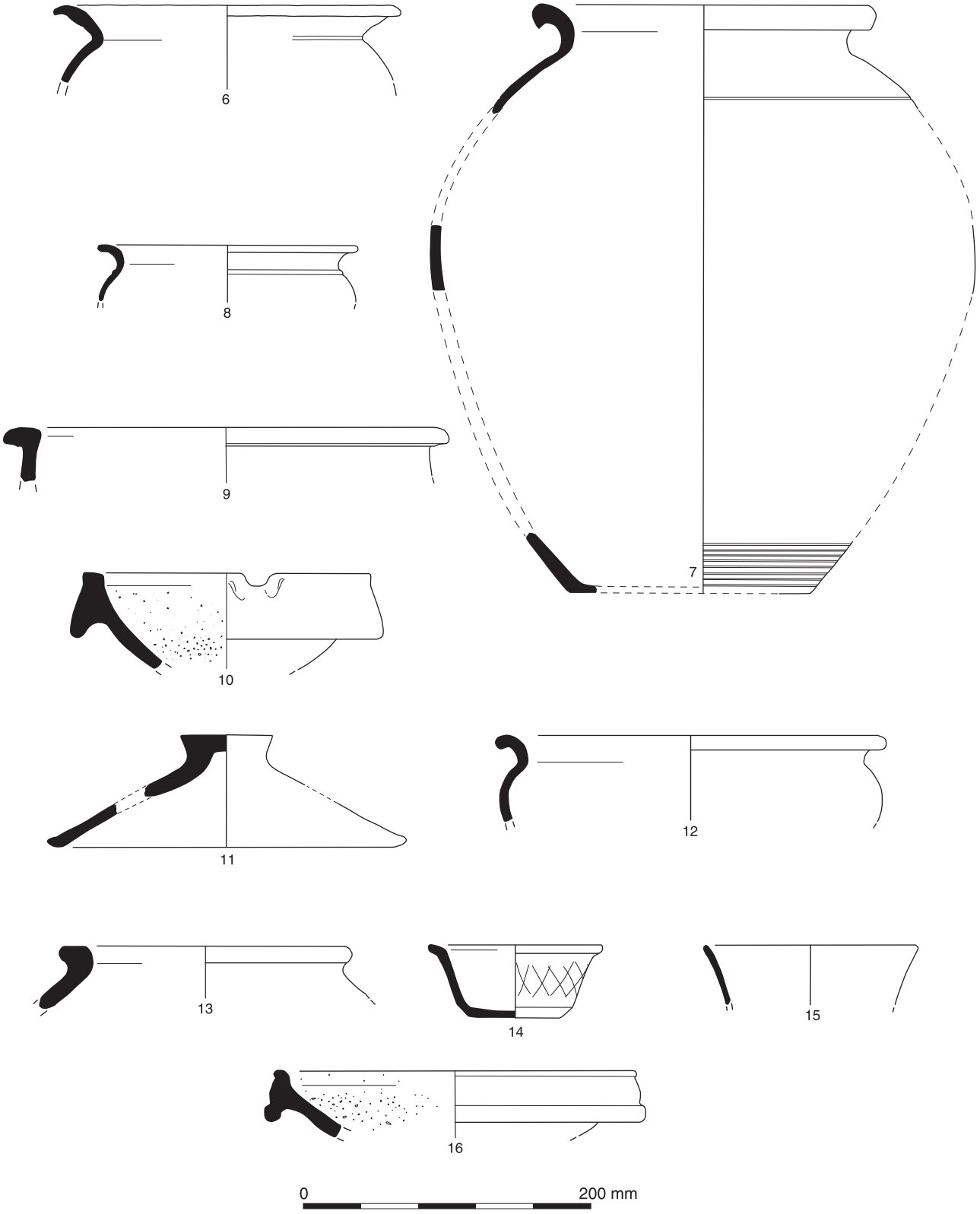


Fig. 10.8 Phase 2 pottery

Table 10.3: Coins from Whelford Bowmoor

	Genuine		*Imitation*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
2nd C.	4	100	-	-	4	16.7
200-260	2	66.6	1	33	3	12.5
260-284	4	80	1	20	5	20.8
286-293	1	100	-	-	1	4.2
293-310	-	-	-	-	-	-
310-330	3	100	-	--	3	12.5
330-348	1	50	1	50	2	8.3
348-364	-	-	2	100	2	8.3
3rd-4th C illegible	4	100	-	-	4	16.7
Total	19	79	5	21	24	100

Table 10.4: Small finds by phase from Whelford Bowmoor

Function	*1*	*2*	*Unstratified*	*Total*
Personal	2	8	11	21
Toilet	1	1	-	2
Transport	-	1	1	2
Building	5	26	1	32
Tools	-	3	1	4
Fasteners	1	11	15	27
Agriculture	-	1	-	1
Miscellaneous	2	55	3	60
Total	11	106	32	149

Coins *by Cathy King*

The 24 coins recovered from the site at Whelford Bowmoor were scattered over an area of *c* 0.5 hectare (Table 10.3). Two of the three silver coins are denarii of Severus Alexander and there is also a plated core of a denarius of Caracalla; they all belong in the years AD 193 to AD 260 and the single bronze coin of the earlier empire was produced in the late second century AD. The only period of peak loss that is well represented is AD 260-96 with six coins or 25% of the total for the site (Table 10.3). The apparent under-representation of coins from the later 3rd and 4th centuries is due in part to the illegible coins of these years (4 coins, 16.7%) and the small size of the group as a whole but it may be worth noting that there are no coins from the years AD 364 to AD 378 which figure so prominently at Claydon Pike and Leaze Farm (see Chapters 6 and 12). Although the coins from Whelford Bowmoor were recovered from a small area, their rather wide chronological distribution does not support their being a hoard.

Small finds (Fig. 10.9) *by Hilary Cool*

A total of 149 small finds were recovered from archaeological investigations at Whelford Bowmoor, excluding coins, worked stone, obviously modern items and the featureless fragments of metal from the topsoil (Table 10.4). Of the material considered, one item came from the 1988 season and two from that of 1983. All of the rest of the material was recovered in 1985. The assemblage is biased in that no worked bone artefacts are present presumably because bone does not survive well at the site. As noted when discussing Somerford Keynes (see Chapter 9), such a lack is a serious loss.

The assemblage is small compared to those from Somerford Keynes and Claydon Pike, but despite this it does cast some interesting light on the site activity. The first thing to note is that the brooch assemblage does indicate some activity in the area prior to the suggested early 2nd century start date for Phase 1. The earliest brooch was an example of a La Tène III brooch from an unstratified context (Fig. 10.9, no. 1). This form was certainly in use in the 1st century BC and into the 1st century AD, and although they are occasionally found in post-Conquest assemblages, this brooch would, on balance, probably indicate pre-Conquest activity. Another early brooch from a Phase 1 context belongs to the Nauheim Derivative family (Fig. 10.9, no. 2) and seems related to the expanded bow form (Olivier 1988, 37 no 15) found in the south-west. A date early in the floruit of Nauheim Derivatives (ie mid 1st century AD), would seem most likely. These two brooches predate the suggested start date of activity on the site, and it is difficult to imagine that they would still have been in use by the early 2nd century. There are also two other unstratified brooches which suggest occupation prior to the 2nd century AD. The remaining brooches and other items that can be assigned typological dates confirm the 2nd- to 3rd-century date suggested by the pottery. There is no evidence that occupation or even casual use of the area continued into the later 3rd or 4th centuries.

Aside from brooches, other personal items included two finger rings (Fig. 10.9, no. 7), which belonged to the simple expanded type typical of the 1st to 3rd centuries (Henig 1978, types II and III). Both of these finger rings may be dated to the later 2nd/3rd century AD, a period when other aspects of the material culture such as the fine ware pottery are suggesting that the inhabitants had greater access to more expensive items. Wearing a ring with an intaglio device, no matter how crude, suggests aspirations towards a Romanised lifestyle and this may be another strand of evidence to suggest that occupation in Phase 2 was of a different nature than that of Phase 1. It may also be noted that the only stratified hobnails (12) were also recovered from a Phase 2 context. The implications for changes in lifestyles that the adoption of Romanised footwear implies have been discussed in the Claydon Pike report (see Chapter 5). It is possible that here too the adoption of such footwear was a late choice.

The structural items from buildings were dominated by nails, with a slightly more diverse

range of finds associated with the Phase 2 activity. The poor quality of the preservation of ironwork on the site probably means that the tools category is under-represented, although identifiable objects included two knives (Manning types 13 and 11; Manning 1985, 114), a possible smiths set and a triangular blade probably coming from a small adze.

As has been noted in the other Cotswold Water Park sites, lead pottery repairs form a major part of the assemblage in the fittings and fasteners category. Both the types of repairs used and the relative rate of recovery of the different forms are similar to those found at Somerford Keynes and Claydon Pike. As noted in the case of those two sites, where the repairs retain pottery sherds, it is clear that coarse pottery is being riveted. The high curation rate of coarse pottery here seems at odds with the proportions of finewares, amphorae etc which has led Brown (see above) to conclude that the site was either high status or highly Romanised. Whether there were things on the site that their owners wanted to lock up is a matter of debate. There is one latch lifter from a Phase 2 context, but these are more designed to close doors rather than secure them. It may be noted that there is a notable paucity of studs, rivets, miscellaneous bindings etc that normally make an appreciable part of a Roman small find assemblage.

A remarkable find is the billhook found in the Phase 2 platform. It appears complete, though now broken in two, allowing for post-excavation flaking. Typologically it belongs to Manning's Type 2 billhooks, though lacking the spike on the back (Manning 1985, 58), a form that was in use throughout the Roman period. It seems likely that the break may have occurred before deposition, and it is not consistent with accidental damage. The presence of such a large, complete and probably deliberately broken item is of considerable interest, and raises the possibility that this was not casual rubbish disposal but a form of deliberate structured deposition.

Overall, the range of finds recovered is curiously limited. If Table 10.4 is inspected it can be seen that only seven different functional categories are present. This may be compared to the 14 as Somerford Keynes and 16 at Claydon Pike. Although this is a much smaller assemblage and suffers from bone not surviving well, this paucity of functional categories is probably more a result of the nature of the occupation on the site rather a collection problem. The site was metal detected and whilst this can lead to a bias in what is found, it does not lead to systematic under-representation of particular categories with the possible exception of toilet equipment.

A category that is conspicuous by its absence here is that of household equipment. The paucity of the normal stud etc element of the fastener and fitting range has already been noted, and many of those items would have come from objects found in a domestic environment. The small find evidence would thus appear to be at variance with that of the pottery where the level of samian and amphorae recovered hints at a site with aspirations above that of a basic level farmstead. Only the finger ring (Fig. 10.9, no. 7) hints at similar aspirations amongst the finds considered here.

Illustrated catalogue: small finds from Whelford Bowmoor (Fig. 10.9)

1. *U/S SF 98. La Tène III brooch.* Copper alloy. C1 BC–early (to mid) C1. Present length 46 mm
2. *14 SF 67. Nauheim derivative brooch.* Copper alloy. Type Hull 11. Mid C1. Length 57 mm. Trench 7, Phase 1
3. *15 SF 69. Penannular brooch.* Copper alloy. Pin missing. Fowler (1960) Type D5 – this notched sort is known in a pre-Flavian context at Usk (Manning *et al.* 1995, 94 no. 76, fig. 28). Diameter 30 mm, section 2.5 mm. Trench 5
4. *20 SF 95. Colchester Derivative brooch*. Copper alloy. Type Hull 93. Mid C1 into C2. Length 46 mm, width 18 mm. Phase 1
5. *U/S SF 224. T-shaped brooch*. Copper alloy. Type Hull 111. Later C1 – C2. Present length 15 mm, width of hinge 19 mm
6. *U/S SF 225. Penannular bracelet.* Copper alloy. C2. Present length *c* 70 mm, section 3 x 2 mm
7. *U/S SF 97. Finger ring.* Translucent deep blue moulded glass intaglio. Impression shows standing figure, possibly helmeted, with left arm bent vertically at elbow and right arm bent downwards, possibly holding a sword. Henig Type II. C3. Diameter 22 x 19 mm, hoop section 2 mm, width of bezel 12 mm, intaglio dimensions 11 x 10 mm
8. *2 SF 99. Snaffle bit.* Iron. Two link snaffle bit. Diameter of side ring 58 mm, length of link 70 mm. Trench 8, Phase 1-2

Roman glass *by Jennifer Price and Hilary Cool*

Twelve pieces of Roman glass were found; four fragments of vessel glass, one window glass and seven melted lumps. In addition one piece of post-medieval flat glass, probably from a window pane, was recorded. The vessel glass fragments come from four square bottles of 1st- or 2nd-century date. The window glass fragment came from a cast matt-glossy pane, also probably of 1st- or 2nd-century date. The melted lumps of glass are not closely identifiable; they probably come from a vessel or a window pane badly affected by heat.

Ceramic building material *by Leigh Allen*

A total of 28 fragments of tile weighing a total of 1 kg were recovered from the Whelford Bowmoor excavations. The fabrics present were in general the same as those found at Claydon Pike. Unfortunately the sample is so small and the fragments so abraded that it is not possible to distinguish the types of tile present nor is it conclusive evidence for the existence of a tiled building. These fragments are more likely to have been amongst rubble brought on to the site for use in the construction of a pavement or building foundation.

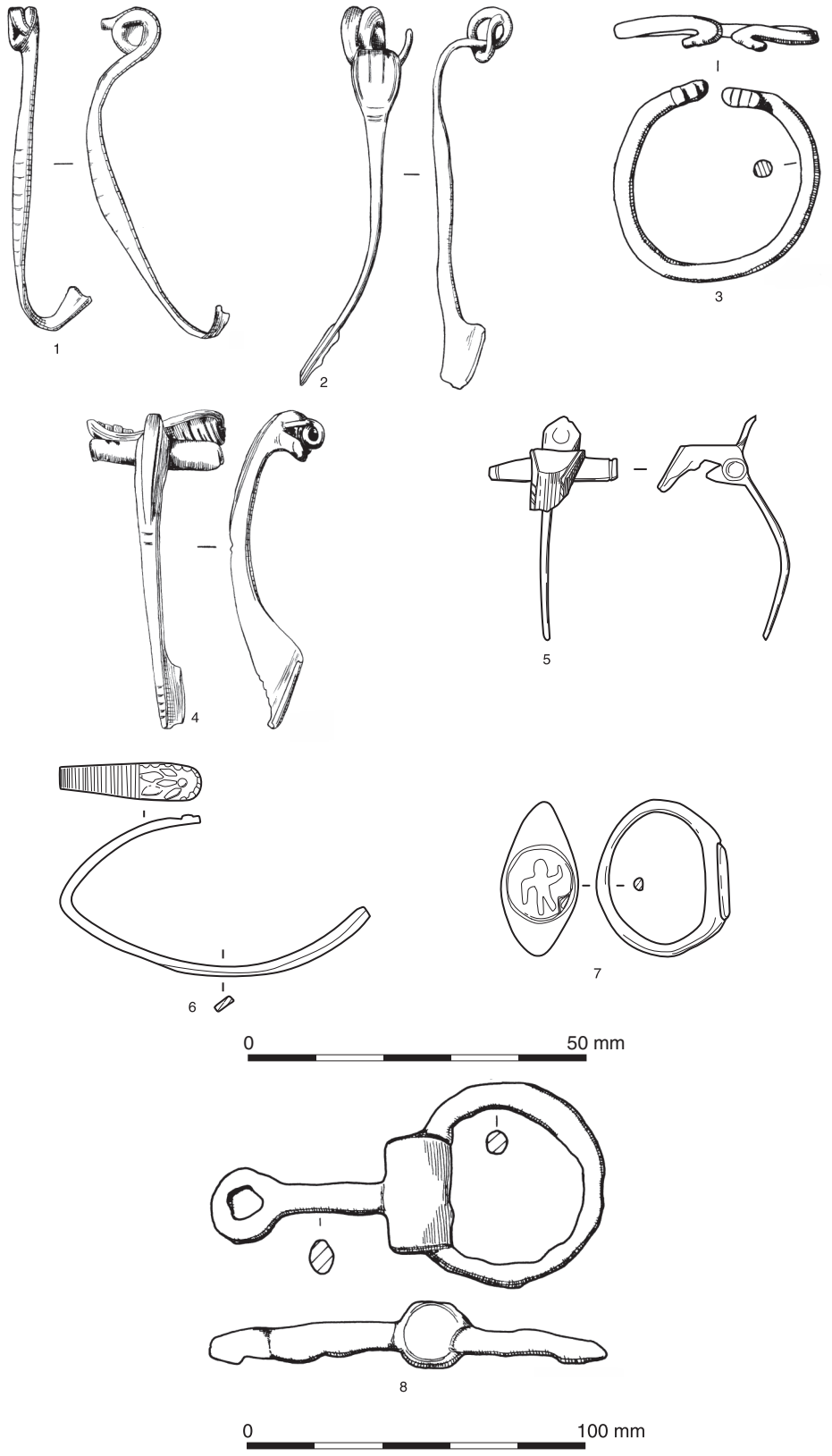


Fig. 10.9 Small finds

Fired clay *by Ian Scott*

A total of 34 pieces of fired clay was recovered from excavations at Whelford Bowmoor, of which 14 are featureless fragments. The range of types of material is limited, comprising daub, oven plates and oven pieces. The daub is all stratified with two pieces coming from the rubble spread (context 4) which formed the building platform in the second phase of occupation (see Fig. 10.6). The oven plates and oven pieces (14 fragments) include 5 unstratified pieces and 5 from context 4. The unidentified fired clay is predominantly from context 4.

THE ENVIRONMENT

Faunal remains *by Mary Harman*

A total of 217 animal bone fragments were recovered from Whelford Bowmoor (Table 10.5). Cattle heavily dominated the assemblage, followed by sheep, and with very small quantities of horse, pig and dog. The bones are in poor condition due to the acidity of the soil on this site. Most of the long bone shafts were split with eroded surfaces and there are several groups of teeth which belong together but lack the alveolar bone. The bones of sheep and pig are more likely to have decayed beyond recovery or recognition than the larger bones of cattle and horse and thus the numbers of fragments from each species are unlikely to reflect the situation on the site. Bones from immature animals would also be more likely to decay.

Table 10.5: Faunal remains by phase from Whelford Bowmoor

	Phase					
Species	*1*	*1/2*	*2*	*Un-stratified*	*Total*	*%*
Cattle	41	13	90	21	165	76.04
Sheep	5	9	15	5	34	15.67
Pig	0	0	2	1	3	1.38
Horse	3	0	5	0	8	3.69
Dog	0	0	1	0	1	0.46
Indeterminate	5	0	1	0	6	2.76
Total	54	22	114	27	217	100.00

Waterlogged plant remains *by Mark Robinson*

Macroscopic plant remains were absent from the bottoms of the Roman ditches, either because the contemporaneous permanent water table was below the ditch bottoms or because the recent lowering of the water table, associated with gravel extraction in the area, caused their decay. Very degraded seeds of plants of wet grassland, such as *Ranunculus repens* (creeping buttercup) were noted in the late Roman peat which survived in a desiccated state above some of the early Roman ditches. This suggested the development of fen grassland over some of the lowest-lying areas of the site.

Carbonised plant remains *by Julie Jones*

Four samples from the Roman archaeological features were floated onto a 0.5 mm mesh to recover charred plant remains, which were found in low concentrations. The results are given in Table 10.6. They showed evidence for the use of *Triticum* sp. (wheat) and *Hordeum* sp. (barley), although it was not possible to identify the cereals to species. The chaff suggested some processing of the grain was occurring on the site. One of the weeds, *Anthemis cotula* (stinking mayweed), occurs amongst arable

Table 10.6: Charred plant remains from Whelford Bowmoor (four 10 litre samples)

Context			*20*	*10*	*8*	*37*
Cereal grain						
Triticum sp.		Wheat	-	-	1	1
Hordeum sp.		Barley	1	-	2	1
cereal indet.			4	1	1	-
Cereal chaff						
Triticum sp.	- rachis	Wheat	1	-	1	-
Hordeum sp.	- rachis	barley	1	-	1	-
Avena sp.	- awn	oats				
cereal indet.	- culm node	straw				
Weed seeds						
Rubus sp.		blackberry etc	1	-	-	-
Potentilla sp.		cinquefoil	-	-	1	1
Anthemis cotula L.		stinking mayweed	-	1	-	-
Luzula sp.		woodrush	-	-	-	2

crops on base-rich, heavy soils and it is possible that the crops were grown nearby. The other weed seeds, however, were from plants of grassland and scrub. The carbonised remains may be interpreted as general agricultural debris typical of a Roman rural settlement.

DISCUSSION *by Alex Smith*

The archaeological features and associated finds from Whelford Bowmoor do not always provide a coherent picture of the nature of activity at the site, which may in part be because of the limited excavation strategy. Nevertheless, there are clearly two discernible phases of occupation, spanning the 2nd to early/mid 3rd century AD, and there are some noticeable differences in the material culture between them (see Figs 10.3 and 10.5).

Settlement organisation

The earliest features revealed during excavations (Phase 1; Fig. 10.3) comprised a regular system of sub-rectangular enclosures in the south-east (E 1-6), which undoubtedly continued south into the north-eastern area of WB 88 (Fig. 10.2). These can be dated by ceramic evidence to the early-mid 2nd century AD, although there are a number of brooches from the site which point to earlier activity, in the 1st century AD (see Cool above). The enclosures do not seem immediately associated with habitation, as little material was recovered from excavated sections, and they were probably used for livestock management (see below). Two features contrasted with this regular pattern of ditches. E 2 was a small penannular gully attached to the internal side of E 3, and its size, paucity of debris and lack of structural features argue against a building. It is perhaps best seen as a small pen or stack stand. The other feature, E 1, formed a more irregular enclosure with a small causeway on the south side, possibly for use in the control of livestock movement.

A group of smaller enclosures (E 7-12) lay further to the west, possibly with ditch 8/13 forming an eastern boundary. They were on a slightly different alignment to the south-eastern enclosures, and although the dating evidence suggests a general 2nd-century date, they were probably a later development. There is no real evidence for function, as they have very little associated occupation material, but they clearly differed in size and form from the south-eastern enclosures. Nevertheless they were possibly still used in some aspect of livestock management. A comparable example of such a tightly knit enclosure system can be found in the nearby, but slightly earlier site at Thornhill Farm (Jennings *et al*. 2004).

It seems likely that many of these enclosure ditches went out of use by the latter part of the 2nd century AD (Phase 2). It was during this period that there was the only convincing evidence for domestic activity within the site, in the form of a rubble building platform (4) and associated 'midden' deposits, dating from the later 2nd to early/mid 3rd century AD (Fig. 10.5; see below). Evidence for low-status rural domestic structures from the Romano-British period is quite scarce within the Upper Thames Valley and surrounding regions, as such structures seem to leave little archaeological trace (Henig and Booth 2000, 95; see Chapter 16). The Whelford Bowmoor building, which stood upon the highest gravel island, was undoubtedly made more ephemeral because of damage by ploughing and probable stone robbing in an area where building stone was scarce. Nevertheless, there is certainly enough evidence to suggest that a timber-framed building did exist, resting upon stone footings above a hard-packed rubble platform. Furthermore there is some evidence that this structure was associated with a roughly paved yard area.

The other main feature that may have been contemporary with the building (possibly spanning both phases) was the stone drainage channel (33), lying *c* 40 m to the north-east (Fig. 10.4, Pl. 10.1). It appeared to be of much better construction than the stone platform structure, although this may well have been because of its sheltered position within a trench, which saved it from plough damage. The ponded depression which it appeared to drain water from lay in the lowest part of the site, and would probably have contained water for much of the year (Fig. 10.3). The channel may therefore have ensured a steady water supply for the occupants of the site. The north-south ditch (8/13) just to the east of the pond feature, appears to have defined the eastern limit of the main area of activity during this phase, as all but one of the 'middens' lie to the west of it.

Most of the features to the north and west of the site, including the NW-SE orientated trackway, cannot be assigned to either phase, but are assumed to have been contemporary with the Roman activity. The trackway was *c* 8 m in width, and may have functioned in part as a droveway for the movement of animals to and from the site.

Site economy and material culture

The scant environmental evidence ensures that very little can be said about the economy and environment of the Roman settlement. On the basis of morphological similarities with the enclosures at Thornhill Farm, 1 km to the east, it may be suggested that pastoralism was the primary economic activity, with the surrounding floodplain and lower gravel terraces being largely grassland. This is even more likely given that much of this area may have been prone to seasonal flooding (see below), making large scale arable activity less likely. Nevertheless, it is possible that some arable crops may have been grown on the higher ground in the vicinity, and there is some evidence, in the form of quernstones, for limited crop processing on site. The

billhook found within the rubble platform also points to possible arable production.

The finds assemblage on the whole suggests that the two major phases of occupation at the site were of quite different character. During Phase 1 in the early to mid 2nd century AD, the pottery largely comprised coarseware jars and bowls, while the limited number of small finds consisted mostly of iron nails. The stone platform and 'middens' of Phase 2 produced an altogether different assemblage, with relatively high quantities of imported fine and specialist wares (cups, plates and mortaria), in addition to finger rings, bracelets and evidence for hobnail shoes. This certainly indicates a change in the nature of activity on the site, seemingly associated with more conspicuous acts of consumption and display (see below).

The nature of activity at the site

It is difficult to be certain as to the nature of the activities occurring at Whelford Bowmoor, although a mixed economy is most likely, with particular emphasis on pastoralism (see above). As the site lies upon the immediate floodplain of the river Coln, it is likely that flooding occurred on a regular basis, although there is little direct environmental evidence for this. There is, however, some reason to believe that incidences of flooding were slowly increasing throughout the 2nd and 3rd centuries AD (see below). In response to this, there is a possibility that the site became occupied only on a seasonal basis, as has been suggested for the Iron Age and Roman settlement at Farmoor on the Thames floodplain in Oxfordshire (Lambrick and Robinson 1979, 136). If such was the case, then the quantities of fine ceramics associated with eating and drinking together with the much higher number of animal bones from Phase 2, may be explained in terms of seasonal feasting associated with the re-occupation of the site. There was still probably a very low actual resident population on site, with limited increases at very brief intervals during the year. The 'midden' deposits, and even the mass of finds within the rubble platform itself, could all have been associated with such seasonal activity. Furthermore, the deliberately broken billhook (see Cool above) may suggest that at least some of these deposits had ritual associations.

The end of activity at the site

The general absence of later 3rd or 4th-century AD material from the site suggests that settlement and structurally defined agricultural activity may have shifted from the area entirely, towards drier locations further up the gravel terrace, which were less prone to flooding and waterlogging. This could indicate progressive development of a shallower water table and increased frequency of flooding from the 1st to the 3rd centuries AD. Although there was no clear evidence for very extensive alluvial deposition before or during the early roman period, there were certainly extensive areas of waterlogging which survived as layers of organic peaty clays with mainly 2nd- to early 3rd-century AD occupation material. This waterlogging was also apparent as desiccated peaty layers in and over the top of silted Phase 1 ditches. Together, this does provide clear evidence that some flooding did occur during occupation of the site.

At some time after the abandonment and destruction of the Phase 2 building, a layer of mid brown alluvial clay built up over its rubble, along with the totally silted-up ditches of the earlier enclosures. This may have been part of the increased deposition of flood silts in the Upper Thames Valley dated on other evidence to the medieval period. However, at Whelford Bowmoor at least, there is no reason why this alluvial material could not have been deposited during the later Roman period (for wider discussion see Robinson, Chapter 14).

An extreme and unitary deposition of alluvial silt occurred some considerable time after the Phase 2 building was rubble. The shallowness of this alluvial clay layer, lying immediately underneath approximately 0.2 m of ploughsoil, suggests on purely subjective grounds a medieval or post-medieval date.

Chapter 11
Archaeological Investigations at Stubbs Farm, Kempsford, Gloucestershire, 1991-1995

by Anne Marie Cromarty, Mark R. Roberts and Alex Smith

INTRODUCTION

A programme of archaeological investigations was carried out in an area known as Stubbs Farm, to the east of the village of Kempsford in south-eastern Gloucestershire (Fig. 11.1). Oxford Archaeology carried out the work between June 1991 and July 1995, on behalf of the developer, Multi-Agg Ltd, in advance of gravel extraction. This work included evaluation trenching, watching briefs and limited open area excavations targeted on the two enclosures known from cropmark and evaluation evidence. Further archaeological evaluations were carried out in areas adjoining to the north (Manor Farm, OAU 1992) and west (Multi-Agg Quarry extension, Booth and Stansbie forthcoming; see Digital section 8.4; Fig. 11.1). Together, these sites revealed part of a Roman landscape incorporating large field systems, trackways, multi-ditched enclosures, and a masonry-footed building.

Location and physical characteristics of the site (Fig. 11.1)

The site lies less than 1 km to the north of the River Thames in the parish of Kempsford, east of the village and on the northern side of the course of the old canal, at grid reference SU 167 970. It is situated on the first gravel terrace of the River Thames at a height of around 75 m OD. The ground is fairly level but does slope gently down towards the river to the south. The underlying geology is composed of Oolitic Limestone of Middle Jurassic date. Most of the site is overlain by the gravels of the first terrace, although along the southern part of the eastern boundary there is an area of alluvium. A slight hill to the east of the site is formed of an outcrop of Oxford Clay (see Fig. 1.3).

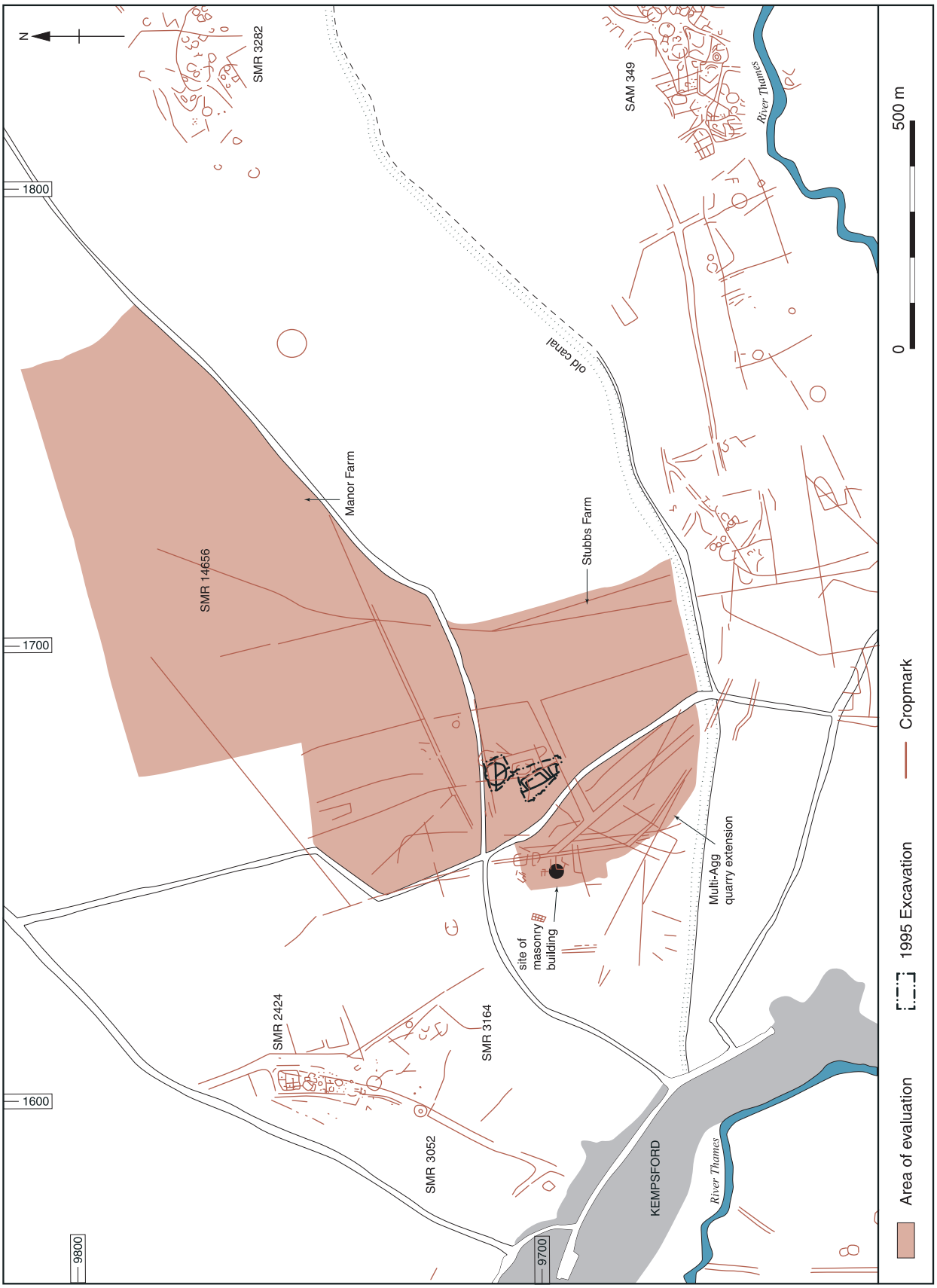
A series of shallow palaeochannels formed a drainage system throughout the area. One group of these features began at the eastern end of the Manor Farm site and extended in the direction of Stubbs Farm, almost certainly forming part of the palaeochannel observed along the eastern side of the current site. This part of the channel was traceable as a ribbon of alluvium cutting through the first terrace river gravel that underlay the rest of the site. Together these palaeochannels formed a series of braided streams running along the western side of a slight ridge on the eastern side of Manor Farm and down along the eastern side of the current site to the River Thames. The ridge was also flanked on the eastern side by a similar series of palaeochannels draining to the east. It is unknown when any these streams originated, but they may not have been very ancient.

The fields that made up the site had been ploughed in recent times. The ploughsoil ranged from 0.21 to 0.25 m deep and directly overlay the natural subsoil.

Archaeological background (Fig. 11.1)

Most of what was known of the archaeology in the vicinity prior to initial investigations in 1991, came from aerial photography and fieldwalking. Cropmarks of linear features were revealed crossing the site (Fig. 11.1), forming large fields aligned approximately north-south by east-west. The rectangular and circular enclosures discussed in the present report were particularly clear features. Immediately to the north of the site the cropmark system continued at Manor Farm (SMR 14656). There, another rectangular enclosure was visible alongside the same north-south linear boundary, and was of a similar size to that on the Stubbs Farm site. Evaluation of the Manor Farm site in 1991 dated the field system to the Roman period (OAU 1992).

A pair of parallel linear cropmarks, probably a trackway, ran west from the Stubbs Farm site across the adjacent field to intersect with another trackway running NW-SE. Spreads of stone rubble and Roman roof tile in the area around and to the north of this intersection suggested a masonry building. An archaeological evaluation of this area (covering 8 ha) in 1997 confirmed the presence of at least two buildings, one with stone foundations, interpreted as being part of a modest Romanised farmstead (Booth and Stansbie forthcoming; see Digital section 8.4). These structures and their immediate environs were preserved *in situ*, while gravel extraction of an area covering 6 ha to the south was preceded by a series of archaeological investigations in 2000 and 2001 (Booth and Stansbie forthcoming; see Digital section 8.4). These excavations revealed a late Iron Age/early Roman ditched field system, which was


N
SMR 3282
SAM 349
River Thames
1800
old canal
Manor Farm
SMR 14656
Stubbs Farm
1700
site of masonry building
Multi-Agg quarry extension
SMR 2424
SMR 3164
1600
SMR 3052
KEMPSFORD
River Thames
9800
9700
0
500 m
Area of evaluation
1995 Excavation
Cropmark

superseded in the early 2nd century AD by a very regular layout of trackways, probably linking the local settlements (Stubbs Farm and the masonry farmstead) with wider field systems (see Discussion below). Less than 1 km to the north-west of this site lay a further series of cropmarks, which include substantial parts of a Bronze Age settlement (SMR 3052, 3164) in addition to Roman enclosures and ditches (SMR 2424).

Some of the north-south aligned cropmarks at Stubbs Farm continue to the south of the site, towards an area of linear and oval cropmarks. These in turn link into an extensive area of cropmarks further east, covering approximately 30 ha north of the River Thames. The whole of this cropmark area is a Scheduled Ancient Monument (SAM 349; Fig. 11.1), and includes elements of Bronze Age, Iron Age and Roman date.

To the north and north-east of Stubbs Farm lay the excavated Iron Age and Roman settlements at Whelford Bowmoor, Thornhill Farm and Claydon Pike. The Stubbs Farm cropmarks appeared to form part of the planned agricultural landscape associated with these settlements.

Within this system prehistoric elements can be discerned. Part of a large sub-circular enclosure was visible to the west of the Manor Farm rectangular enclosure and was tentatively dated to the Iron Age. Another complex of cropmarks (SMR 3282), which includes circular ditched enclosures, lying 1.5 km to the north-east of Stubbs Farm, has been dated by fieldwalking to the Iron Age.

Excavation methodology

Archaeological investigations at Stubbs Farm began in June 1991 after a programme of mineral extraction and subsequent ground restoration was proposed by Multi-Agg Ltd. Gravel was to be extracted from an area of 19.08 hectares, in an area where cropmark evidence suggested the presence of archaeological remains. In response to conditions placed on the planning consent to record archaeological remains on site in advance of the work, OAU was commissioned to investigate the archaeology of the area. Investigation of the site was carried out in a number of phases over the next four years.

Field evaluation

The initial two phases of the investigation in June and September 1991 took the form of field evaluations. The first of these involved excavation of five trenches in the south-western part of the site, while a further 35 similar trenches were excavated across the rest of the site in the second phase of evaluation, adding up to a one percent sample of the site (see Digital section 7 for plan). In each trench the topsoil was stripped by machine to reveal any archaeological features cut into the natural gravel. Any features located in this manner were then sampled by hand to determine their nature and depth and to recover dating evidence. The larger ditches were excavated by machine. Excavated features were recorded in plan and section. The machine stripped ploughsoil and machine excavated ditch fill was monitored to recover finds.

This work revealed a regular Roman field system incorporating a rectangular enclosure as suggested by the cropmark evidence. The field system was shown to cut across a circular enclosure, but the character and relationships of the other features were not fully established. A further phase of work was required in order to do this. This was to involve two complementary elements: strict archaeological monitoring of the stripping of the whole site and area excavation around both the rectangular and circular enclosures.

Watching brief

The planning condition for the gravel extraction specified a watching brief to be carried out over the entire area. The topsoil was to be stripped over areas rather than having a working face. This was done using a 360º excavator with a toothless bucket under archaeological supervision.

Excavation

The 1995 excavation was aimed at elucidating the chronology and nature of the two multi-ditched enclosures. An area of approximately 60 x 90 m around the rectangular enclosure and 60 x 50 m around the circular enclosure was machine stripped under archaeological supervision (Fig. 11.2). All discrete features were hand excavated by a minimum volume of 50%. Approximately 10% by volume of the ditches were hand excavated to determine their character, form, and stratigraphic sequence and to recover datable artefacts. When the circular enclosure could not be clearly dated using this strategy a different approach was tried. The entire volume of the ditches was machine excavated and the spoil hand sorted to recover datable artefacts. Only 14 sherds of pottery were recovered in this way. The surface of the site was examined by Mark Maillard using a metal detector, and several metal objects (SF 1027, 1023, 1024 and 1025) and half a dozen pieces of lead were located by this means. Unfortunately, vandals removed many of the latter before they were archaeologically recorded. Significantly, nothing was recovered from the surface of the field prior to the excavation by local detectorists.

Facing page: Fig. 11.1 Stubbs Farm, Kempsford in relation to local archaeology

THE ARCHAEOLOGICAL SEQUENCE (Fig. 11.2)

Due to extensive damage from animal disturbance, the preservation of features and stratigraphy on the site was not good, and most of the ditches had spatial rather than stratigraphic relationships. This disturbance may also have contaminated some deposits with later pottery, although nearly all recovered dating evidence suggested that activity was largely confined to the 2nd century AD.

Full archaeological descriptions can be found in Digital section 7.2

Natural features and early tree clearance

The general soil type was a silty clay loam with small inclusions of gravel. Natural features were filled by very clean silty clay with no gravel content, implying that they predated man-made disturbance of the soil. This included the fills of tree-throw holes and the palaeochannels identified during the evaluation stages of the project, and contrasted with the archaeological features which were filled by grey silty clay with varying proportions of gravel.

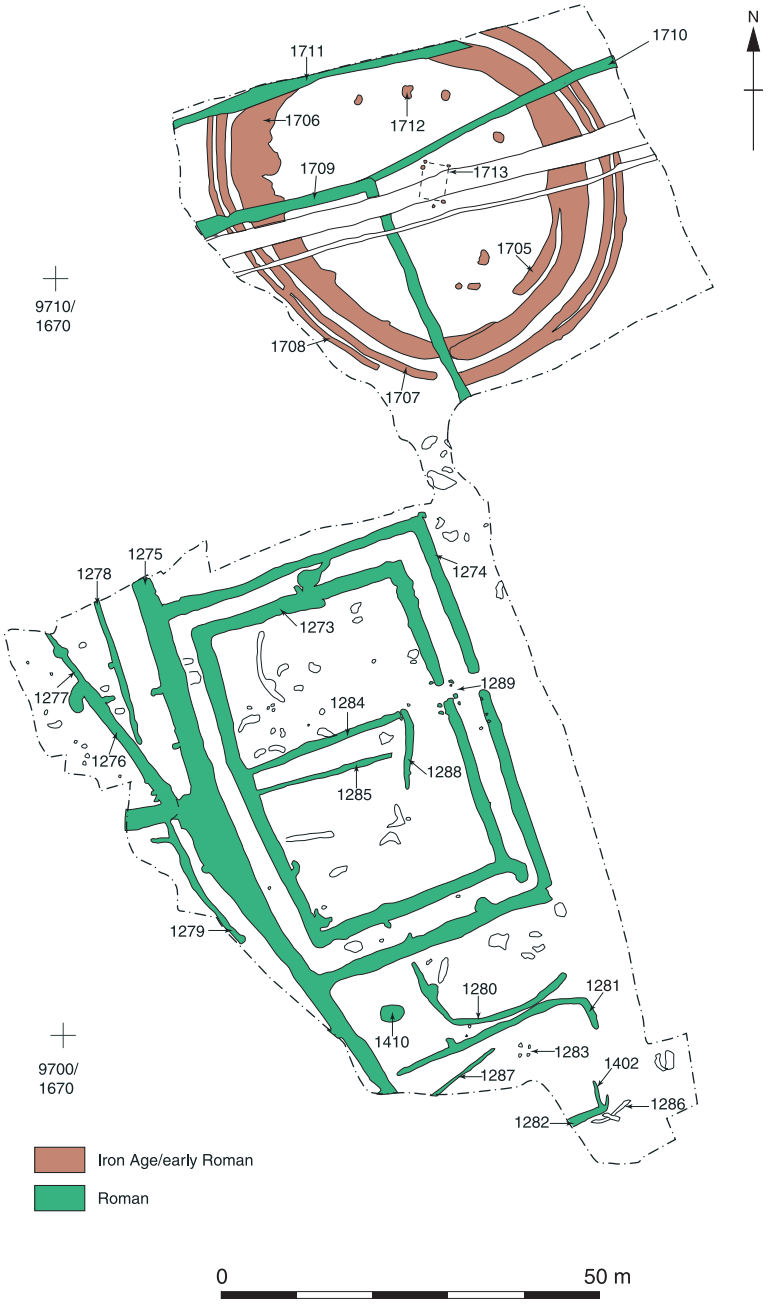


Fig. 11.2 Plan of excavated site

The palaeochannels observed during the stripping of eastern parts of the Stubbs Farm site were comparable with those located during archaeological investigation of the Manor Farm site (OAU 1992) to the north and east (Fig. 11.1), and are likely to form parts of the same drainage system (see above).

The tree-throw holes contained material that showed signs of burning. This may be evidence for deliberate land clearance, though it is unclear when this took place. It may be that the land was cleared earlier in the prehistoric period but no other traces of the use of the area during earlier periods remained, possibly indicating use was at most very light and sporadic before the occupation of the ditched enclosures.

The multi-ditched circular enclosure (Fig. 11.2)

The circular enclosure measured up to approximately 55 m in diameter externally and 35-40 m internally. It was formed of three concentric sets of ditches, which need not all have been contemporary.

Inner ditches

The innermost of these ditches (1705 and 1706) had been recut repeatedly and not always on exactly the same alignment. Around most of the circumference of the enclosure the innermost ditch (1706) was found to be composed of three cuts. This included two shallow cuts, approximately 0.8 m wide and 0.2 m deep with a wide U-shaped profile, and a larger cut 1.2 m wide and 0.5 m deep, also with a U-shaped profile, in the centre. The two most northerly sections showed additional cuts, including what appeared to be a terminus. Although unfortunately the ditch was cut by part of the later field system, which destroyed any stratigraphic relationships. A further cut (1705) could be traced around the eastern side of the enclosure on the inner side of 1706. This ditch was 1.2 m wide and 0.4 m deep with a broad U-shaped profile. Where observable, the sequence of fills was fairly uniform; an initial gravelly slip was overlain by clean clay silting, while a gravelly layer over this may indicate the slighting of bank material. This was overlain by clean clay silt indicating disuse. Second-century pottery came from the upper silts of the ditch on the west side of the enclosure, but a single middle Iron Age sherd was found in the lowest silt of the larger cut on the west side. Very few other finds were retrieved from this enclosure ditch, with only a few fragments of animal bone from the fills of the latest recuts of 1706 and two flints from 1705.

Outer ditches

Beyond these innermost ditches were two further concentric ditches (1707 and 1708). These features were fairly similar and had not been recut. The middle ditch (1707) lay around 0.25-0.6 m beyond the innermost ditch and was represented by a single cut with a U-shaped profile, 1 m wide and 0.3 m deep. The outermost ditch (1708) lay up to 0.5 m beyond this and also had a U-shaped profile. It was slightly smaller than the middle ditch at 0.8 m wide and 0.15 m deep. Both ditches had very similar fills; friable, mid brown silty clay with gravel, which yielded some pottery sherds of 2nd-century AD date. These two ditches appeared to merge in the north-eastern and southern parts of the circuit, although this may have been a result of plough damage. and it is possible that they were contemporary.

It was not entirely clear where the entrance or entrances to the enclosure were located. It may have varied with the successive renovations, as represented by the recutting of the innermost ditch. A well-defined terminus to 1705 may indicate the entrance at one time was orientated to the SSE. A terminus of ditch 1706 is evident on the southern side of the enclosure around 12.5 m further west of the 1705 terminus. The later field boundary ditch (1709) cutting through the enclosure immediately to the west of this terminus has destroyed the other half of this entrance, but a fairly narrow opening, perhaps only around 2 m wide is indicated. A 2m wide entrance through the middle ditch (1707) corresponded to this one exactly.

The interior of the circular enclosure

Six postholes (1713) lay at the centre of this enclosure. These postholes averaged 0.3 m wide and 0.25 m deep with a U-shaped profile. All were filled with deposits of mid grey brown silty clay with gravel; no finds were recovered from any of these features. The large 18th-century ditch which cut east-west across the centre of the enclosure may have destroyed other similar features, but enough survived to very tentatively suggest a rectangular structure 3 m x 5 m.

Along the eastern edges of the interior an alignment of probable pits (1712) was located, lying concentric with the circular gullies, 3-4 m distant. One of these features was a well defined pit (1 m wide and 0.8 m deep), while the others were shallower and somewhat less regular in plan and profile. They may have been plough damaged shallow pits or possibly tree-throw holes. No finds were recovered from any of these features to give any hint of the date or function.

Field ditches

Two 2nd-century field ditches cut across the circular enclosure. A slight gully (1710) 0.8 m wide and 0.2 m deep was aligned east-west, while a larger ditch (1709), 1.3 m wide and 0.4 m deep, entered the circular enclosure through the southern entrance and cut 1710 in the centre. Ditch 1709 then turned to follow the east-west line of 1710.

Double-ditched rectangular enclosure
(Figs 11.2 and 11.3)

The rectangular enclosure measured 53 m x 42 m externally, and was formed of two parallel ditches (1274, 1273; Fig. 11.2). An entrance through both ditches was seen on the eastern side (1289; Fig. 11.3), and two parallel gullies (1284, 1285) subdivided its interior. The enclosure ditches were cut away by a large north-south field ditch (1275) to the west.

Inner ditch

The inner ditch (1273) had two cuts visible in section around the north-east, north, north-west and southern sides. The earlier cuts were 0.5 m deep and 1.7 m wide and V-shaped in profile. They formed a ditch which had completely filled in before the later cut was excavated. The later cut was 1.5 m wide and 0.6 m deep. The fills of the ditch suggested that once the sides had stabilised, it had slowly silted up. In the north-east side of the enclosure, a considerable quantity of domestic debris had been dumped in the ditch, including 250 sherds of pottery dating to the early 2nd to mid 3rd century AD. A gravelly layer was seen in the top of the ditch and probably represents the slighting of the bank by ploughing (see below). This gravelly layer was overlain by clean silts which indicate abandonment of the site.

Outer ditch

The outer ditch (1274) was 0.8 m wide and 0.3 m deep, and appeared to have completely silted up before being recut on the southern and western sides. The recut was 1.2 m wide, 0.5 m deep and V-shaped in profile. The fills of the ditch suggested a similar pattern to that of the inner ditch; a period of stabilisation followed by slow silting, with the bank material then being slighted into the ditch. The site was left as the slight earthwork hollow and filled slowly with clean silt. A considerable quantity of domestic material was dumped in the earthwork along the northern side. This dump included a coin and almost 500 sherds of pottery.

Bank

The fills of the inner and outer ditches had gravelly layers in their upper fills, and from the way these tipped into the ditch cuts from the area between the ditches it is likely that a gravel bank lay between them. Modern ploughing had removed evidence for this.

Gate (Fig. 11.3)

A posthole group was seen around the terminals of the inner and outer ditches on the eastern side, and may have formed a gate structure (1289). The

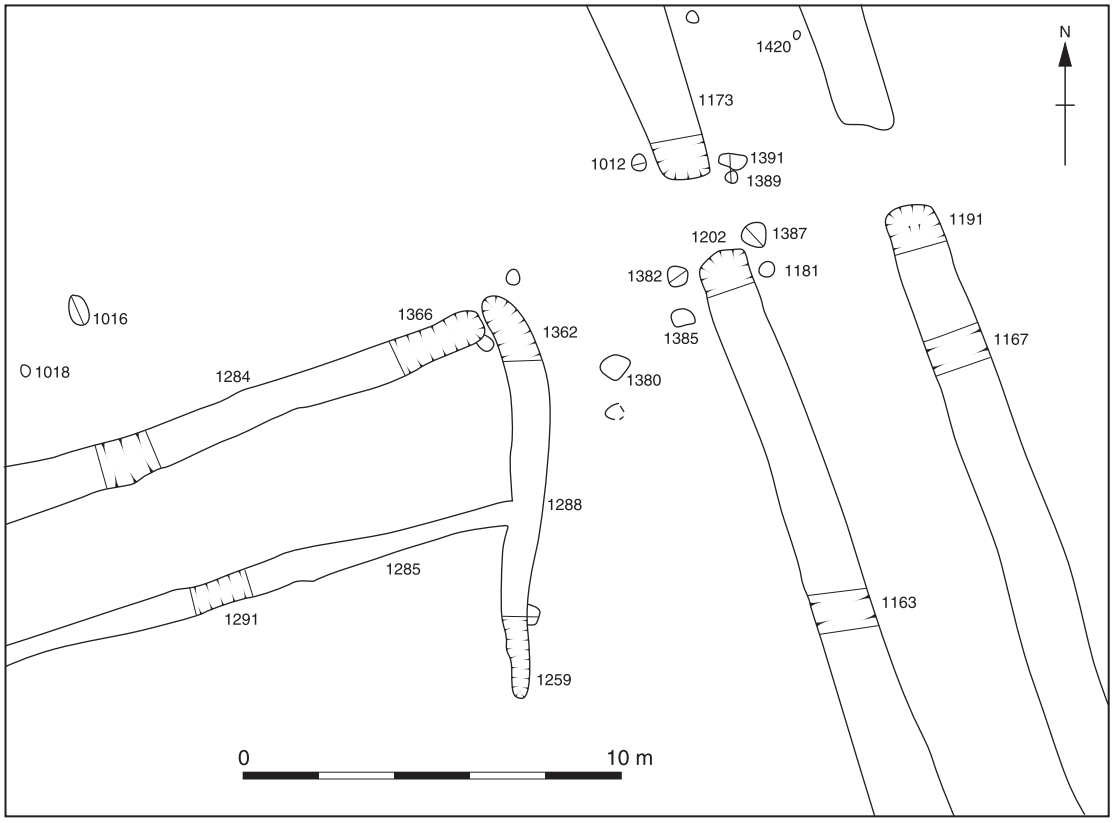


Fig. 11.3 Plan of enclosure gateway

postholes ranged in size from 0.2 to 0.4 m in diameter and were up to 0.3 m deep. One posthole (1420) lay to the north of the entrance. Outside the inner enclosure ditch were two pairs of postholes, one pair each side of the entrance. One of each pair (1387, 1391) were large, 0.4 m diameter, while the others (1389, 1181) were smaller at around half the size. Three postholes lay inside the inner entrance on the edge of the ditch. One posthole (1012) lay to the north of the entrance and two (1382, 1385) lay to the south. It is likely that this arrangement formed a timber gateway structure around the inner enclosure.

One large posthole (1380) lay between the gate and gullies 1284, 1285 which sub-divided the interior of the enclosure, and may have restricted access between the two areas.

Inner gullies

Two roughly parallel gullies were traced for 18-21 m in an east-west direction, sub-dividing the interior of the enclosure. The northern (1284) was 1 m wide and 0.20 m deep, and the southern (1285) was 0.7 m wide and 0.1 m deep. The profiles of these gullies were not clear as they had been extensively truncated by deep ploughing. A north-south gully (1288) lay at the east end of these features. It was 0.62 m wide, 0.32 m deep and 10 m long. As it was slightly deeper the profile was observed as U-shaped with a flat bottom. It contained metal-working slag and 2nd-century pottery.

Features to the south (Fig. 11.2)

Immediately to the south of the rectangular enclosure was a semi-circular gully (1280). It was 0.5 m wide and 0.35 m deep with a vertical sided and flat bottomed profile. Its northern end began *c* 0.3 m from the southern side of 1274, and its deep vertical sided profile suggested that it was a palisade trench for holding upright timbers. To the west of this gully lay a large pit (1410), 2.3 m across and 0.86 m deep. Two parallel gullies (1281 and 1282) were aligned east-west to the south of 1280, on the same axis at the main rectangular enclosure. They were 0.8 m wide and 0.3 m deep with a U-shaped profile, and formed an enclosure (*c* 26 x 15 m) with an entrance to the east. An extra gully 1402 had been cut into the east end of 1282, reducing the entrance width to 10 m. Within this enclosure were 1287, a 10 m length of shallow gully, and 1283, a structure formed of four-postholes. Gully 1287 was 0.57 m wide and 0.23 m deep.

No finds were recovered from these features, but they are presumed to be contemporary with the rectangular enclosure on spatial grounds.

Field ditches (Fig 11.1 and 11.2)

Along the western boundary of the excavated area were a series of linear ditches, probably belonging to a larger field system shown in aerial photos, dating approximately to the 2nd and early 3rd centuries AD. Half way down the western side of the rectangular enclosure the north-south field ditches (1275, 1277) changed direction slightly, and this area seems to have been a nodal point where several sets of field enclosures met (Fig. 11.2). It is likely that the earliest component of this nodal point was formed by a NNW-SSE gully (1277), which was 0.8 m wide and 0.32 m deep; it was traced for a distance of 10 m from the north-west corner of the trench, until it was cut by a larger ditch (1276), 1 m wide and 0.44 m deep.

The large north-south ditch 1275 (1.6 m wide, 0.4 m deep) cut through the western outer ditch of the rectangular enclosure 1274, although both features were probably broadly contemporary. A shallow gully (1278), was aligned parallel to 1275 and terminated before 1276, suggesting that it was part of the Roman field system. A similarly aligned gully (1279), 0.6 m wide and 0.1 m deep, was seen further to the south and may have been contemporary.

THE FINDS

Full finds reports can be found in Digital section 7.3.

Pottery (Fig. 11.4) *by Paul Booth*

The excavations produced some 907 sherds of pottery weighing 9120 g. The material was all of the Roman period apart from a single flint-tempered sherd which may be assignable to the Iron Age. The bulk of the pottery was probably of 2nd-century date. The sherds are generally in moderate to poor condition. Much of the material is quite badly fragmented, though recent breaks were discounted as far as was possible, and surfaces were often heavily eroded, making identification of fabrics difficult in some cases and removing much evidence for decoration.

Fabrics

The two principal components of the assemblage were reduced coarse wares (R) and black-burnished ware (B), with oxidised wares (O) of lesser importance and the combined 'fine and specialist' wares (samian, fine wares, amphorae, mortaria, white and white-slipped wares) totalling only 3.3% of sherds (7.7% of weight). As would be expected, the coarse ware fabrics for the most part indicate domination of the assemblage by local production sources, particularly the North Wiltshire industries. The principal non-local fabric was Dorset black-burnished ware (fabric B11), which formed a significant part of the assemblage. However, the similarity between B11 and some probable sherds of R35 raises the possibility that there were local attempts to copy black-burnished ware. In some cases it could be seen that the similarity extended not only to characteristics of the fabric, but also to

its finish and decoration and the range of forms, particularly the occurrence of jars of 'cooking pot' type.

The 'fine and specialist' wares require little comment. The small samian assemblage, almost entirely of Central Gaulish origin, included no decorated sherds. Fine wares were notably absent, with the single identified example being a rim of a small beaker of 2nd-century type but of uncertain source. It is just possible that this sherd was of fabric F65, originating in the Upper Thames region and with a 2nd- to 4th-century date range. Mortaria were from the Oxford region and (almost certainly) from the Verulamium region, though the sherds in this fabric were very worn and the grits distinctive of this source were therefore absent. The sole white ware sherd was a large part of an Oxford parchment ware bowl of the common type P24.

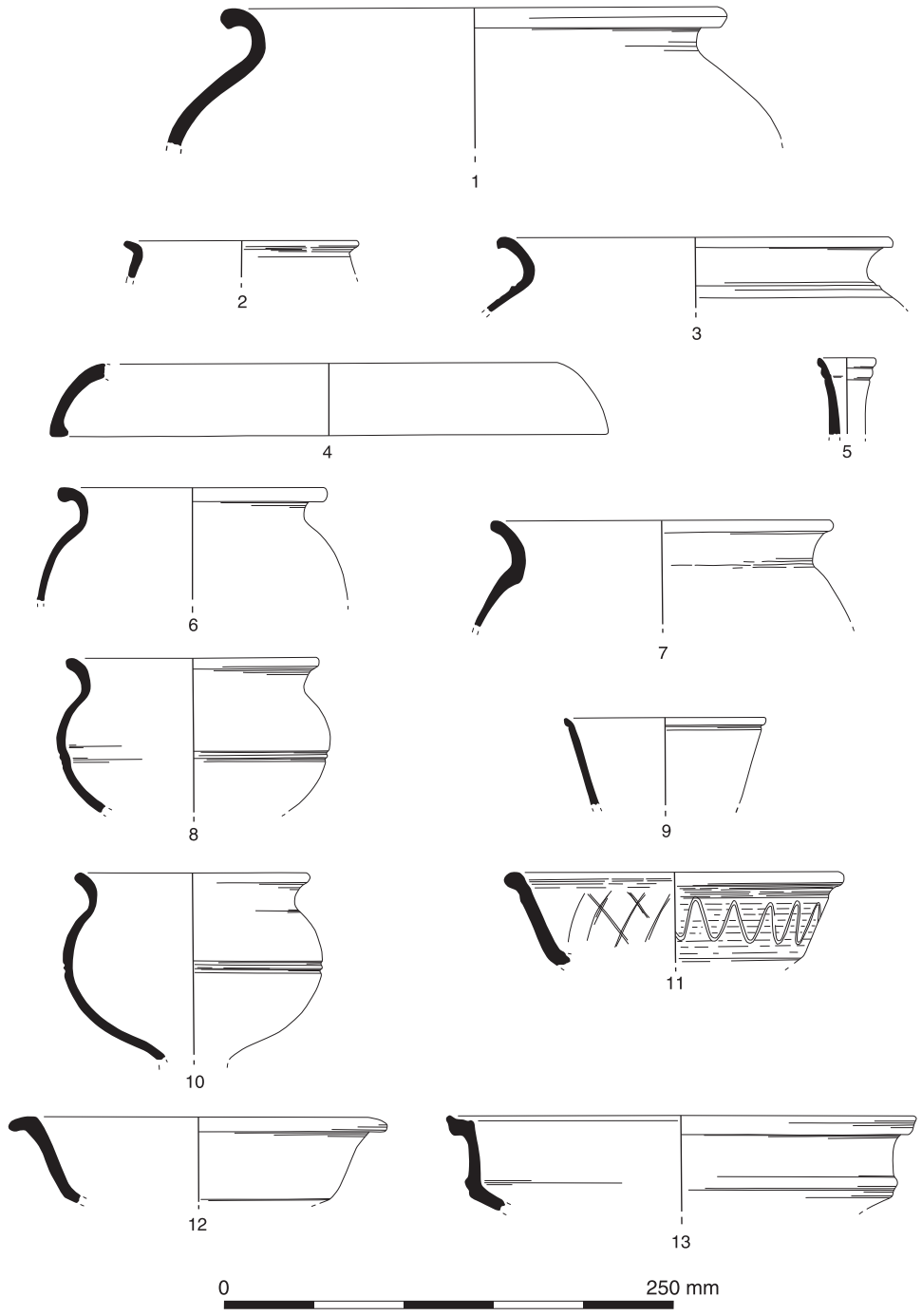


Fig. 11.4 Pottery

Table 11.1: Correlation of vessel types with fabric, quantification by EVEs at Stubbs Farm, Kempsford

Type	*Description*	*Fabric*												
		S30	*F60*	*M22*	*W11*	*O30*	*O51*	*R30*	*R35*	*R38*	*R95*	*B10*	*B11*	*Total*	*%*
BA	Flagon					0.52								0.52	6.1
CD	Medium mouthed jar					0.41		0.80	1.06	0.11				2.38	27.7
CK	'Cooking pot type' jar								0.38				1.46	1.84	21.4
C	Jar, general category					0.55		0.01	0.89		0.28			1.73	20.2
D	Jar/bowl					0.04		0.08	0.12					0.24	2.8
E	Beaker		0.05			0.31								0.36	4.2
GA	Tankard						0.21							0.21	2.4
HA	Carinated bowl				0.22								0.11	0.22	2.6
HB	Straight sided bowl													0.11	1.3
I	Bowl/dish	0.12				0.02			0.05					0.19	2.2
JA	Straight sided dish								0.20			0.13	0.27	0.60	7.0
K	Mortarium			0.18										0.18	2.1
Total		0.12	0.05	0.18	0.22	1.85	0.21	0.89	2.70	0.11	0.28	0.13	1.84	8.58	
	%	1.4	0.6	2.1	2.6	21.6	2.4	10.4	31.5	1.3	3.3	1.5	21.4		

Vessel types

The assemblage was dominated by jars (vessel class C, CD, CK), which constituted over 69% of the total EVEs, with uncertain jar or bowl types (class D) a further 2.8% of the assemblage (Table 11.1). Jars occurred in oxidised, reduced and black-burnished fabrics. Straight sided dishes (class JA) were the second most common type, at 7% of the total EVEs. Bowl forms, which in most assemblages in this region are second only to jars in importance, amounted only to 3.9% (classes HA and HB together), although uncertain bowl/dish forms (class I) were a further 2.2% of the assemblage. Bowls and dishes, with the exception of the carinated bowl (Young P24) in Oxford parchment ware, were mostly in black-burnished ware and the reduced fabric R35, though the only rim fragments of samian ware were in the indeterminate bowl/dish category. A single ring-necked flagon rim (class BA) in fabric O30 constituted 6.1% of the total EVEs and beakers (class E) amounted to 4.2%. These types, and the only tankard represented, occurred mostly or entirely in oxidised fabrics. Specialist forms were generally not represented by rims. The sole mortarium rim was of Young type M3, of 2nd-century date (Young 1977, 68-70).

Chronology

A number of aspects of the character of the assemblage suggest that it is largely of 2nd-century date. The ubiquitous grog-tempered and related 'Belgic type' fabrics so characteristic of the late Iron Age-early Roman period in the region are completely absent, and the only possible pre-Roman sherd is the single fragment in the flint-tempered fabric FN4. The regularity of the inclusions in this fabric might suggest a date in the late Iron Age rather than earlier, but this is by no means certain. This isolated sherd apart, the absence of 'unromanised' fabrics precludes a start date for the assemblage before the Flavian period at the very earliest. As indicated above, the principal fabrics in the assemblage are probably North Wiltshire products and Dorset black-burnished ware. The North Wiltshire kiln sites in the Swindon area, including that at Purton, are thought to have developed in the Hadrianic period (Anderson 1979, 9). Similarly, the large-scale advent of black-burnished in the region is unlikely to be earlier than about AD 120, the 'traditional' date for the expansion of this industry (Gillam 1976, 57), though some pieces may have arrived before this date. The Kempsford black-burnished ware, as far as can be seen, occurs entirely as common 2nd-century (and occasionally later) forms, and there is no reason to believe that any of this material is significantly earlier than *c* AD 120. There are also a few examples of later black-burnished ware, including a single bowl with a crude bead and flange rim unlikely to date before the later 3rd century.

The few examples of fine and specialist ware types all suggest, or are consistent with, a 2nd-century date for the bulk of the assemblage. This is also indicated by the balance of the vessel types. The relatively high representation of jars, at about 69% of the total vessels, is broadly comparable to figures for the early/mid 2nd to 3rd-century phases in Area A at Asthall (between 62.4% and 71.2%, unpublished), whereas earlier and later representations of jars at the same site are respectively higher and lower. Cumulatively the evidence suggests that the most intensive activity on the site was probably in the period from the early/mid 2nd century to the late 2nd/early 3rd century. The absence of characteristic late Oxfordshire products (with the sole exception of the single example of type P24) and

other typical later Roman fabrics and forms, suggest that activity of later 3rd-4th-century date was on a much reduced scale. The ceramic evidence is insufficient to indicate if this later activity was continuous.

Discussion

In terms of the fabrics and sources represented the assemblage appears typical of sites in the region, although because of its small size and relatively restricted date span the range of fabrics is quite limited. This may also have been a function of socio-economic status. A survey of assemblages from the region (Henig and Booth 2000, 173) indicates that low status sites (expressed in archaeological terms, ie of site layout, structures and artefactual evidence) of 1st- and 2nd-century date have fine and specialist ware representations below 5% (of sherd numbers), and that contemporary sites with a higher level of fine and specialist ware are villas or related rural sites and roadside settlements and towns. The Kempsford assemblage falls squarely in the low status bracket, with a fine and specialist ware representation of 3.9% of sherd count, contrasting for example with figures of 7.5% for the villa at Roughground Farm (Green and Booth 1993, 141) and 7% for Asthall. Nearby Thornhill Farm had only 0.7% fine and specialist wares, but this very low figure is only characteristic of sites with intensive 1st-century activity, many of which terminate in the early-mid 2nd century (cf Lambrick 1992, 82). The position of Kempsford within the low status group is emphasised, however, by the fact that the base level of fine and specialist wares increases significantly in the later Roman period and any site, even of low status, occupied through the 3rd century would be expected to have a fine and specialist ware level above 5%. The fact that this is not the case at Kempsford seems to confirm its relatively low status.

The most distinctive features of the Kempsford assemblage relate to its chronological range, in that it starts in the early 2nd century AD but does not continue to the end of the Roman period. In this respect it is comparable to an assemblage of *c* 50 kg of pottery from Whelford Bowmoor (see Chapter 10), only *c* 2 km distant, which is also dated largely to the 2nd-3rd centuries AD.

A limited number of representative vessels were selected for illustration in Figure 11.4. All were from ditch fills. They are presented as context groups where possible. In each entry the details of the vessel are followed by the context information.

Illustrated catalogue: Pottery (Fig. 11.4)

1. Fabric R38, type CD, medium mouthed jar. 1603, ?top fill of middle ditch of circular enclosure
2. Fabric F60, type E, beaker. 1055, fill of inner ditch of rectilinear enclosure
3. Fabric R35, type C, jar. 1112, fill as above
4. Fabric M22, type K, mortarium (Young 1977 type M3). 1047, fill as above
5. Fabric O30, type BA, narrow ring-necked flagon. 1047 as above
6. Fabric R30, type CD, medium mouthed jar. 1047 as above
7. Fabric B11, type CK, 'cooking pot type' jar. 1047 as above
8. Fabric R30, type CD, medium mouthed jar. 1098, fill of outer ditch of rectilinear enclosure
9. Fabric O51, type GA, tankard. 1095, fill as above
10. Fabric R30, type CD, medium mouthed jar. 1095 as above
11. Fabric B10, type JA, straight sided dish. 1095 as above
12. Fabric B11, type JA, straight sided dish. 1320, fill of N-S ditch on W side of rectilinear enclosure
13. Fabric W11, type HA, carinated bowl (Young 1977 type P24). 1198, fill as above

Coins *by Paul Booth*

(SF1023) Sestertius of Trajan (AD 98-117). Obverse IM]P TRAIANO AVG[. The reverse has a standing figure facing left; the legend is illegible

(SF 1013) Dupondius of Antoninus Pius (AD 138-61). Obverse]NVS AVG [. Reverse, libertas standing left, LIBERTAS C[.

Coin 1023 was found in the evaluation backfill of the large north-south field ditch 1275. The second coin (1013) was found by metal detecting adjacent to the domestic dump in the north side of enclosure 1274. Both of these coins are in poor condition but neither was very heavily worn when lost. This suggests that they were lost within the 2nd century.

Small finds (Fig. 11.5) *by Hilary Cool*

All of the stratified finds were found in the fills of ditches 1273 and 1274 of the double-ditched rectangular enclosure. If the obviously modern and the undiagnostic material from the topsoil is excluded from consideration, there are 17 items that that could relate to the Roman occupation. Nine of these are iron nails (quantified by numbers of heads) and two are undiagnostic iron fragments. Of the remaining material the only relatively closely dateable item is the foot of a T-shaped brooch (1025; Fig. 11.5) found unstratified. The hollow back and

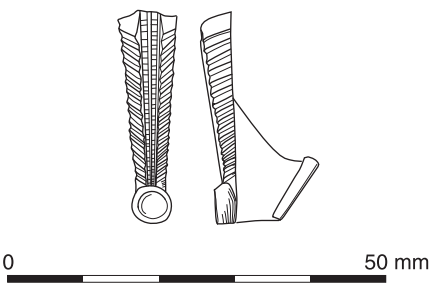


Fig. 11.5 Brooch

forward facing foot knob cell identify it as coming from a Hull Type 132 or Nor'Nour brooch (Hull 1967, Type 17). This example is more elaborate than the type normally is but side mouldings as here are occasionally noted (eg Hull 1967, 38 no. 85, fig. 16). The form belongs to the Lower Severn tradition of T-shaped brooches, though the majority of examples still come from the site of Nor'Nour on the Scilly Isles. It is not closely dated but a later 1st to 2nd-century date is appropriate. The other items consist of a lead pottery repair clamp (1019) retaining a fragment of reduced pottery and three iron shoe cleats (1010).

Illustrated catalogue: Brooch (Fig. 11.5)

1001 SF 1025. T-shaped brooch. Copper alloy. Later C1-C2. Present length 27 mm

Table 11.2: Ceramic building material from Stubbs Farm

Type	Context	No	Weight (g)
Tegulae	1031	1	20
	1047	1	27
	1060	1	20
	1095	1	269
	1117	1	225
	1198	1	10
Tegulae total		6	571
Imbrices	1198	1	72
Imbrices total		1	72
Box-flue	1032	1	185
	1095	1	179
	1117	1	401
Box-flue total		3	765
Flat tile	1047	1	15
	1060	1	23
	1096	1	12
	1110	1	238
Flat tile total		4	288
Miscellaneous	1021	3	2
	1031	2	11
	1056	1	18
	1060	3	147
	1060	1	15
	1082	1	97
	1092	1	53
	1095	7	45
	1096	3	10
	1110	1	36
	1169	1	31
	1198	6	84
	1376	1	87
Misc. total		31	636
Total		45	2332

Ceramic building material *by Kate Atherton*

The excavation produced an assemblage of 45 pieces of Roman ceramic building material with a total weight of 23.32 kg (Table 11.2). Six fragments of tegulae (total weight 571 g) were identified in two different fabrics. Only one fragment (72 mm) of imbrex was found although it is possible that there are other examples among the flat tile and miscellaneous fragments that are too small for the profile to be apparent. This fragment was made from the same white/pink fabric as the majority of the tegulae, suggesting that both forms of roof tile were from the same source. Three pieces of box-flue tile were found (765 g), all worn and abraded with no combing visible. Two pieces showed traces of burning. One appeared to be made from a similar fabric to the tegulae and imbrex but was slightly more orange. There are four pieces of flat tile (288 g), two of which are probably tegulae fragments, and two possibly box-flue fragments. The remaining 31 pieces (636 g) have no surviving dimensions and can only be classified as miscellaneous fragments.

The assemblage is not a large one but few fabrics are represented and it is likely that there was only one, local, source for the tile fragments. The fabrics are all similar with the main difference being one of colour. The majority of the fragments are worn and there are relatively few surviving dimensions. This is partly because of the soft nature of the fabrics but it may also be partly due to subsequent disturbance of the tile. The presence of box-flue tile, as well as the more usual tegulae and imbrices, suggests a substantial building of some status in the vicinity of the site.

The evaluation by OA at the Multi-Agg quarry site in 1997 uncovered a sample of Roman ceramic building material that was made from a similar fabric to the ones represented at Stubbs Farm (see Digital section 8.4). It is, therefore, a reasonable hypothesis that the tile from Stubbs Farm came from the same source as the tile from masonry building, if not from the structure itself.

THE ENVIRONMENT

Animal bone *by Nicola Scott*

A total of 1077 bone fragments were recovered of which 59 were identified to species and anatomical part. The low rate of identification is due mainly to the highly fragmented nature of the bones and their poor surface condition. The bone fragments include cattle, sheep/goat, horse and pig but cattle and horse fragments predominate. Two unidentified fragments from ditch 1275 show bone callous either caused by disease or injury to the animal. The poor preservation of the bones prevented the identification of any butchery marks.

Charred plant remains *by Mark Robinson*

During the excavation of the early Roman settlement at Stubbs Farm, Kempsford, bulk samples were floated from 14 contexts to recover biological remains. Much charcoal was found in a tree-throw hole of uncertain date. Small quantities of charred remains, probably including cereals, were present in some of the flots of Roman date. The flots from the primary fills of the Roman ditches contained shells of species of stagnant and temporary bodies of water, such as *Aplexa hypnorum* and *Anisus leucostoma*, which probably lived in the bottom of these features. Terrestrial species, such as *Pupilla muscorum* and *Vallonia pulchella*, probably reflected damp grassland conditions around the edge of the features. In contrast, the upper fills of some of the ditches contained a much wider range of aquatic molluscs including the flowing-water snail, *Bithynia* sp., which would suggest the impact of floodwaters, perhaps with alluviation, on the deposits. It is likely that this flooding occurred after the end of the settlement on the site although it is uncertain whether the flooding was of late Roman or post-Roman date.

DISCUSSION *by Alex Smith*

The Stubbs Farm enclosures clearly relate to a wider system of field boundaries, trackways and settlements in the local area (Fig. 11.1), although their exact form and function remain somewhat uncertain. Nevertheless, it does seem that occupation of a relatively low status was associated with the features, and that the rectangular enclosure at least was linked with the 2nd-century settlement just to the west at the Multi-Agg quarry site (Booth and Stansbie forthcoming, see Digital section 8.4). There is only very limited evidence to suggest activity prior to the early Roman period, and this is also matched at the Mult-Agg site.

Settlement development

Enclosures (Fig. 11.2)

The two enclosures excavated at Stubbs Farm would seem to relate to separate phases of activity. However, no direct stratigraphic evidence remained to suggest how the two features related to one another, and although it is most probable that the circular one predated the rectangular, this is by no means certain.

The main inner and outer ditches of the circular enclosure are likely to have been contemporary, possibly with a gravel bank between them. They were clearly recut several times, which suggests that the enclosure was in use for a reasonable period. During this time, it seems that the entrance shifted position on a number of occasions, but always facing a southerly direction. Internally, there is little of archaeological note, except for a possible rectangular posthole structure in the centre, and an arc of pits/tree-throw holes inside the northern inner ditch. The function of these features – and indeed the enclosure as a whole – is uncertain, as finds were very scarce. Domestic activity is not indicated, and it may be that the enclosure was used for livestock control. The small amount of pottery suggests that the enclosure was at least partially open until the 2nd century AD, although the 2nd-century linear ditches clearly cut the feature and these would appear to have been contemporary with the rectangular enclosure to the south.

The rectangular enclosure also comprised an inner and outer ditch, with evidence for a gravel bank in-between. It appears that the ditches had largely silted up prior to being recut, which may indicate a brief period of abandonment or at least reduced activity. A clear entrance gap of 2 m was located in the middle of the eastern side, with a series of postholes around the terminals of the inner enclosure indicating the presence of a gate structure in this area. Such a double ditch and gate arrangement suggests a concern for privacy and/or security. Internally the enclosure is clearly divided into a northern and southern area by two east-west shallow gullies (1284, 1265), which may not have been contemporary. A north-south ditch (1259) appears to have been associated with the northern gully (1284), acting as a passageway into the southern half of the enclosure. Ironworking slag from this feature may give some indication as to one of the activities occurring in this area (see below). The northern area contained a larger number of pits, tree-throw holes and gullies than in the southern zone, although none of these features could be dated. Nevertheless, most of the pottery from the site came from the northern section of enclosure ditches, which may suggest domestic occupation in this area.

To the south of the rectangular enclosure lay a number of ditches, pits and a four-post structure which are presumed to have been approximately contemporary. There are no finds to indicate function.

Larger field systems (Fig. 11.1)

Extending throughout the Stubbs Farm site and the surrounding evaluation areas was a series of linear ditches and gullies which seemed to form part of major field boundaries. Dating evidence was sparse although generally indicated a 2nd- to 3rd-century date. Many of the undated boundaries may be much later, although they do not align with known post-medieval field systems as shown on Inclosure maps.

The earliest elements in the field system would seem to be the circular enclosure at Stubbs farm and a curving ditch forming a similar, larger enclosure at Manor Farm to the north (Fig. 11.1). The latter ditch, which was located in the westernmost field was cut by one of the linear Roman ditches, and may have been of Iron Age or early Roman date. A

single sherd of Iron Age pottery was recovered from ploughsoil in the trench cutting through the feature (OAU 1992).

Within the main Roman field system, there were three substantial ditches aligned approximately north-south through the evaluation areas. The eastern ditch (1.5 m wide, 0.5 m deep) bifurcated at two points and continued southwards towards the cropmark complex to the north of the Thames (SAM 349; Fig. 11.1). The central ditch lay *c* 130 m east of the Stubbs Farm excavations, and appeared to be connected with the WSW trackway to the south of Stubbs Farm (see below). The western ditch had several recuts where it was examined, and was associated not only with the Stubbs Farm enclosures, but also possibly with a similar feature to the north at Manor Farm, measuring 50 m wide and over 100 m long (no north side was located by trenching). Between the western and eastern ditches were several sets of smaller ditches which subdivided the larger fields.

Excavations at the Multi-Agg quarry site to the west revealed part of an early Roman field system which preceded the 2nd-3rd-century trackway (Booth and Stansbie forthcoming, see Digital section 8.4). It is possible that the circular enclosure at the Stubbs Farm site may relate to this early Roman phase of activity, as both were overlain by the system of mid Roman ditches.

Trackways (Fig. 11.1)

To the south of the main area of excavation, a pair of parallel ditches was located in an evaluation trench, running WSW. These are shown on aerial photos to have been part of a trackway leading towards the NNW-SSE trackway near to the masonry-footed rectangular building in the Multi-Agg quarry extension site (Booth and Stansbie forthcoming, see Digital section 8.4). The trackway ditches at the Mult-Agg site were dated to the 2nd century AD, and seemingly redefined by the middle of the 3rd century (Booth and Stansbie forthcoming, see Digital section 8.4).

Another trackway dating to the Roman period was seen aligned ENE-WSW at Manor Farm (Fig. 11.1), leading off from the central north-south field boundary ditch. The southern ditch was shown to have terminated where the ground became wetter because of the old stream courses. Parts of another possible north-south trackway appeared in the east of the Manor Farm evaluation area running north-south, although no dating evidence was recovered.

Site economy and material culture

The environmental evidence from Stubbs Farm was very poor, and as a result very little is known of the economy and surrounds of the site. The presence of charred cereal grains is typical of most Roman-British rural sites, but it does not necessarily indicate that arable land lay in the immediate vicinity. Indeed, if the community living at the Stubbs farm did operate a mixed agricultural economy, then it is likely that the crops were grown on the higher ground to the north and east. The environmental evidence from the Multi-Agg site just 200 m to the west indicated a large open grassland area (Booth and Stansbie forthcoming, see Digital section 8.4), and this is also likely to have been case around the Stubbs Farm site. At both sites there is evidence for flooding in the upper fills of the ditches, suggesting that the water table was rising throughout the Roman period leading to wetter conditions in the lower lying areas. This may have been a contributing factor in the abandonment of both sites before the later Roman period, although socio-political and economic factors were probably more important (see wider discussion, Chapter 16).

The very small animal bone assemblage demonstrates a fairly typical range for Roman rural sites in the Upper Thames Valley, and suggests that the surrounding grassland was largely utilised for the grazing of cattle and horses. The smallness of the assemblage probably indicates that most of the faunal refuse was removed from the main area of occupation.

The finds assemblage from Stubbs Farm indicates nothing other than a low status farmstead, with mostly local coarseware pottery and no finds to suggest Roman style appearance. Limited metalworking appears to have been practised, possibly restricted to the southern part of the enclosure which may well have been a working yard of some kind.

The nature of activity at the site

The earliest activity at Stubbs Farm appears to have been associated with the circular enclosure, although only a very tentative Iron Age/early Roman date can be assigned. The scarcity of finds associated with the use of the feature suggests a non-domestic function, possibly the corralling of animals.

The rectangular enclosure clearly belongs to a later phase of activity, in the 2nd and 3rd centuries AD. The overall character of this phase is indicative of a low status rural farmstead operating a largely pastoral economic regime amidst the grasslands of the lower gravel terrace and floodplain. Despite the paucity of what may be termed high status material culture, the rectangular enclosure itself represents a considerable investment of labour. Such a construction, which featured a very prominent boundary and post-built entranceway (Fig. 11.3), was probably not only concerned with security, but may also acted as a symbol of social exclusion and status (Hingley 1990a). There is no real evidence for house structures at the site, and in this respect it is very different from the Multi-Agg quarry settlement, which featured at least two stone foundationed buildings, but with no evidence for an outer enclosure. Furthermore this site contained a much higher

percentage of fine and specialist ware pottery, in addition to a reasonable quantity of ceramic tile including box-flue, suggesting the presence of a bath house in the vicinity (Booth and Stansbie forthcoming, see Digital section 8.4). The relationship between these two sites is of crucial importance in understanding the local landscape, as they were both occupied contemporaneously, would have been inter-visible, and were linked via trackways. The Multi-Agg site is characterised by Roman style buildings (ie tiled roof and possible bath house), along with a greater emphasis on Roman style eating and drinking. It is still uncertain as to whether the site can be termed a villa as so little has been investigated, but the inhabitants of the settlement were clearly operating a different social strategy to those at Stubbs Farm. This does not necessarily mean that the Stubbs Farm site was a lower status dependent settlement, as both could have been operating an independent economy with defined territories. On a wider scale, it is possible that both sites were connected in the some way to the large Roman settlement known from cropmarks (SAM 349) about 1 to 1.5 km to the south-east, on the northern bank of the River Thames (Fig. 11.1). Certainly the field boundary ditch east of Stubbs Farm heads towards this area, as does the trackway at the Multi-Agg Quarry site.

Both the Stubbs Farm and Multi-Agg Quarry settlements appear to have gone out of use by the second half of the 3rd century, with the latter probably lasting slightly longer. It is possible that this resulted from an increasingly centralised control of agricultural land in the later Roman period, with more marginal areas being subsumed into larger estates (see Discussion, Chapter 17).

Chapter 12
Cotswold Water Park Survey Sites

by Alex Smith, Cathy King and Hilary Cool

INTRODUCTION

While excavations were being carried out at Claydon Pike in the early 1980s, a number of field-walking and metal detecting surveys were conducted in a private capacity by Mark Maillard in the Lechlade-Fairford area (Fig. 12.1). At some of these sites, quantities of Roman material were uncovered, which demonstrated the intensity of occupation in this area during this period. With the exception of Green Farm (LGF), the finds from all the surveys were derived from surface collection, and therefore no stratigraphic information was obtained. However, the finds from Leaze Farm, Lechlade (LLF) and Cottage Field (LCF) were plotted to generalised areas, which were recorded on a plan (see below and Fig. 12.2).

The survey sites were mainly concentrated in the eastern part of the Lechlade Parish, south-east of the River Leach and north of the River Thames (Figs 12.1 and 12.2). Other sites lay between the rivers Coln and Leach, while one lay to the south of the Thames in Buscot Parish, Oxfordshire. The general location and character of the survey sites is shown in Table 12.1 and Figure 12.1. The range of finds from the sites is shown in Table 12.2. These finds were recorded in the 1980s and have unfortunately not been available for re-analysis.

Full finds descriptions can be found in Digital section 8.2.

Table 12.1 Survey sites incorporated in the Cotswold Water Park project

Survey Site	*Finds*	*Date*	*Site Character*
Leaze Farm , Lechlade (LLF)	Many coins and metal small finds	1st/2nd– late 4th C	Settlement/ritual site?
Warren's Cross, Lechlade (LWC)	Coins and limited small finds	Late 2nd–4th C	Unknown
Campfield, Lechlade (LC)	Coins	4th C	Small hoard
Cottage Fields, Lechlade (LCF)	Coins and small finds	1st– 4th C (most late)	Settlement?
Wigmore, Lechlade (LW)	Coins and limited small finds	2nd–4th C	Settlement (known from AP)
Buscot (LB)	Coins and limited small finds	4th C	Unknown
Green Farm, Lechlade (LGF)	Pottery, Wooden tablets etc	2nd–4th C	Settlement
Whelford Mill , Kempsford (KWM)	Coins and lead weights	Late 3rd C	Small hoard

Table 12.2 Finds from the Cotswold Water Park survey sites

Function	*LGF*	*LB*	*LC*	*LCF*	*KWM*	*LLF*	*LW*	*LWC*	*Total*
Coins	1	4	22	37	42	249	51	18	424
Personal	-	-	1	4	1	24	4	-	34
Toilet	-	-	-	-	-	1	-	-	1
Household	-	-	-	-	2	1	3	1	7
Weighing	-	-	-	-	1	4	-	-	5
Writing	1	-	-	-	-	-	1	-	2
Transport	-	-	-	-	-	-	-	1	1
Structural	15	-	-	-	-	1	1	-	17
Tools	1	-	-	-	-	5	-	-	6
Fasteners	-	3	-	2	4	9	6	4	28
Agriculture	-	-	-	-	-	2	-	-	2
Military	-	-	-	1	-	3	-	-	4
Metal working	1	-	-	-	-	-	-	-	1
Miscellaneous	3	3	-	3	19	68	22	12	130
Total	22	10	23	47	69	367	88	36	662

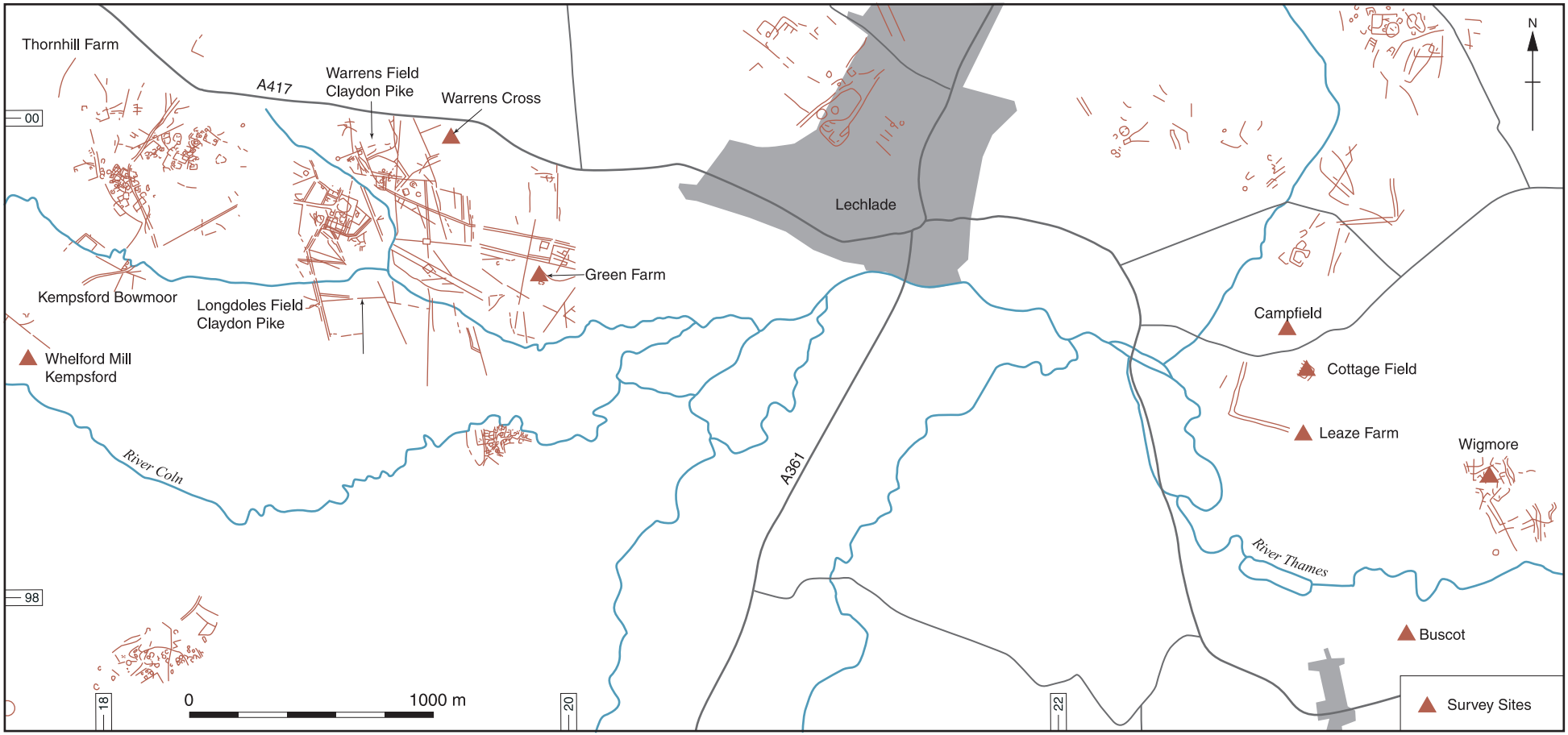


Fig. 12.1 Location of the survey sites

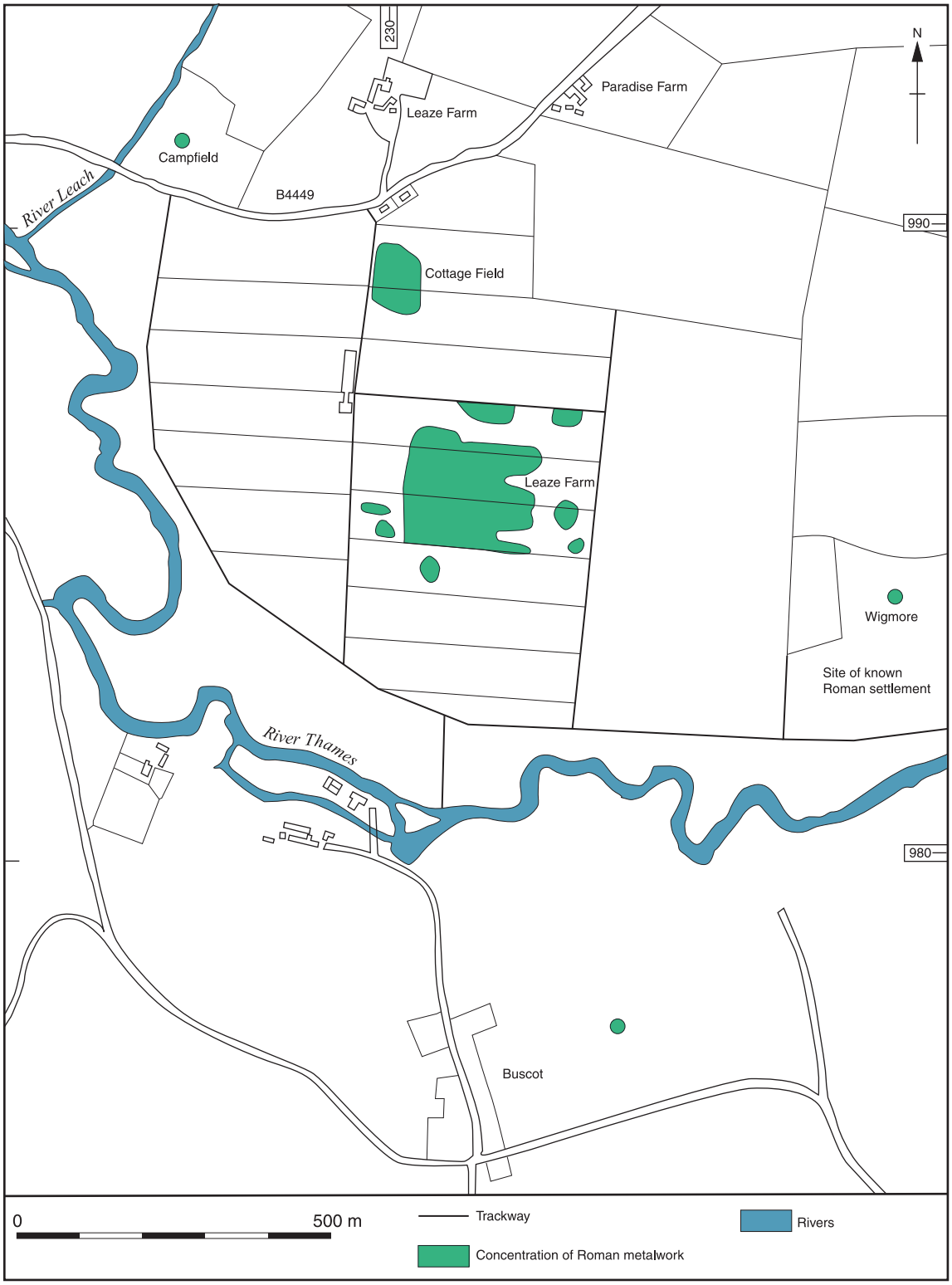


Fig. 12.2 Finds distribution at Leaze Farm

THE EASTERN SITES (Fig. 12.2)

Leaze Farm, Lechlade

A large quantity of Roman metalwork was found spread over an area *c* 4 ha in extent, about 600 m west of a known Roman cropmark settlement at Wigmore (see below), and 1.5 km east of Lechlade. Although individual finds were not plotted, the extent of the areas which produced finds concentrations were recorded and the individually numbered finds were assigned to these areas (Fig. 12.2). There is no evidence to indicate the nature of the site, and the objects are too widespread to have been a single hoard. The nature of the finds does suggest the possibility that they could have been ritual deposits, although it must be stressed that this is far from certain. A parallel L-shaped linear cropmark, possibly a trackway, is seen to the west of the concentration heading SSW for about 250 m before turning sharply eastwards and leading towards the site. The feature is undated, but could be related in some way. The finds suggest a 2nd- to 4th-century date, although a small number of coins do hint at earlier activity (see below).

Coins

A total of 249 coins were recovered during field walking and metal detecting at Leaze Farm (Table 12.3). The number of coins found, of which two are post-Roman, is much larger than those from any of the other survey sites and they form the third largest group of the Cotswold Water Park coin assemblages. The coin loss pattern is interesting in having a small but significant proportion (6.4%) of early material, including silver, minted before AD 193. There are nine silver coins in total ranging in date from the Iron Age to the late 4th or early 5th century AD. There is also a small but significant amount of bronze coinage of the 1st and 2nd centuries (4.8%) of which nine coins (3.6%) were minted in the second century AD. The most unusual coin recovered was a semis of Nero probably minted at Lugdunum although the obverse is too perished to be absolutely certain of this mint attribution. Semisses are rare as British finds although four were recovered in the excavations at Harlow Temple and a barbarous piece was found at Hayling Island probably imitating a piece from Rome (France and Gobel 1985, 67-70; Briggs *et al.* 1992, 23, no. 245).

Table 12.3: Coins from Leaze Farm, Lechlade

	Gen.		*Imit.*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
Celtic	1	100	-	-	1	0.4
1st C	3	75	1	25	4	1.6
2nd C	7	100	-	-	7	2.8
1st-2nd illegible	4	100	-	-	4	1.6
193-250	2	66	1	33	3	1.2
250-260	-	-	-	-	-	-
260-284	10	58.8	7	41.2	17	6.9
284-296	1	100	-	-	1	0.4
3rd illegible	5	83.3	1	16.7	6	2.4
296-305	-	-	-	-	-	-
305-320	3	100	-	-	3	1.2
320-330	5	100	-	-	5	2
330-348	47	83.9	9	16.1	56	15.4
348-364	16	42.1	22	57.8	38	15.4
364-378	62	100	-	-	62	25.1
378-388	1	100	-	-	1	0.4
388-402	17	100	-	-	17	6.9
4th illegible	11	91.6	1	8.4	12	4.8
3rd-4th C illegible	8	80	2	20	10	4
Total	203	89.2	44	25	247	99.8

At Leaze Farm the actual number of coins found that were minted before AD 260 is small and the site, like that of its near neighbour Claydon Pike, is dominated by coins of the 3rd and 4th centuries. Leaze Farm's pattern of peak coin loss for these years is somewhat unusual in having a low proportion of radiates (9.6%) minted between AD 260 and AD 296. This is the lowest percentage of any of the excavation and survey sites discussed in this volume with the exception of the shrine at Claydon Pike (4%), which is believed to be later 4th-century in date (see Chapter 6). Leaze Farm also has the highest number of coins (6.8%) minted in the years from AD 388 to AD 402 and in addition it has a relatively high percentage of coins (25.7%) from the years AD 364 to AD 378. This is again exceeded only by the shrine at Claydon Pike (43.5%) and Campfield (59.1%). The 4th-century coin loss pattern at Leaze Farm is most like that of the shrine at Claydon Pike, which may suggest that this site also had some kind of ritual function.

Small finds (Fig. 12.3)

The largest group of small finds came from Leaze Farm and for this site they can provide some insights into the date of occupation. The brooch assemblage ranges from a mid 1st-century Hod Hill brooch (Fig. 12.3, no.1) to a 3rd-century gilded disc brooch (Fig. 12.3, no. 5), but the main focus of the brooches is on 2nd- and 3rd-century forms. It does not suggest much occupation in the 1st century. Metal detecting is very good at recovering bow brooches and, as will be clear from the brooch assemblages for the other Water Park sites (see Cool, Chapter 13), this is an area where brooches were worn and lost in large numbers during the 1st century. The absence of the normally ubiquitous Colchester Derivatives is probably a good chronological indicator. The 2nd- to 3rd-century date is also supported by items such as the silver jewellery item and probably by the finger rings which are not uncommon in the 3rd century though still in use in the 4th century (Fig. 12.3, nos 8,7, see also Digital

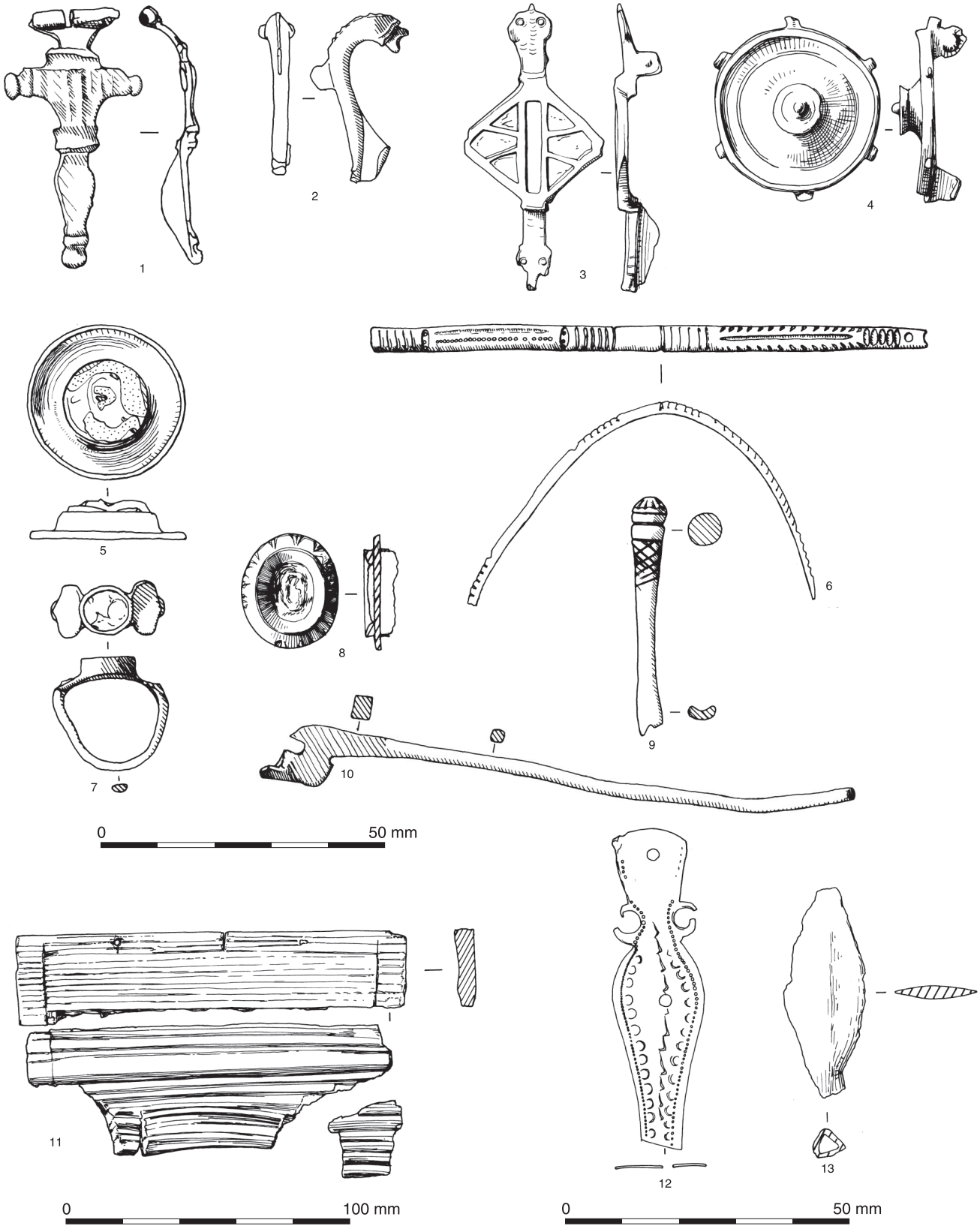


Fig. 12.3 Small finds from the survey sites

section for more examples). Fourth-century occupation is indicated by the bracelets and a late 4th-century presence is demonstrated by the strap ends (Fig. 12.3, nos 6, 12, see also Digital section for further examples).

Cottage Field

Another smaller concentration of finds was recovered at Cottage Field, approximately 200 m north of the main Leaze Farm site (Fig. 12.2). The finds lay within an area of known cropmarks, which probably relate to the Roman finds.

The 37 coins from Cottage Field range in date from a first-century bronze coin of Vespasian to two coins of the years AD 388 to AD 402 (Table 12.4).

Table 12.4: Coins from Cottage Field, Lechlade

	Gen.		*Imit.*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
1st C.	1	100	-	-	1	2.7
2nd C	-	-	-	-	-	-
1st-2nd C illegible	1	100	-	-	1	2.7
193-250	-	-	-	-	-	-
250-260	1	100	-	-	1	2.7
260-284	3	37.5	5	62.5	8	21.6
284-296	-	-	-	-	-	-
3rd C illegible	1	50	1	50	2	5.4
296-305	-	-	-	-	-	-
305-320	2	100	-	-	2	5.4
320-330	-	-	-	-	-	-
330-348	12	80	3	20	15	40.5
348-364	2	66.6	1	33.3	3	8.1
364-378	2	100	-	-	2	5.4
388-402	2	100	-	-	2	5.4
Total	27	73	10	27	37	99.9

Table 12.5: Coins from Wigmore, Lechlade

	Gen.		*Imit.*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
1st-2nd C illegible	2	100	-	-	2	3.9
193-250	-	-	1	100	1	1.9
250-260	7	30.4	16	69.5	23	45.1
260-284	4	80	1	20	5	20.8
284-296	1	100	-	-	1	1.9
296-305	-	-	-	-	-	-
305-320	-	-	-	-	-	-
320-330	1	100	-	-	1	1.9
330-348	12	75	4	25	16	31.4
348-364	2	66.6	1	33.3	3	5.8
364-378	2	100	-	-	2	3.9
3rd-4th C illegible	1	100	-	-	1	1.9
Total	32	56.7	23	43.2	55	100

There are no silver coins and only two bronze coins minted before AD 192. The majority of the coins (79.5%) are concentrated in the periods of peak loss as follows: AD 260-96 (10 coins, 27%); AD 330-48 (15 coins, 40.5%); AD 364-78 (2 coins; 5.4%); AD 388-402 (2 coins, 5.4%). This pattern is not incompatible with that for rural sites established by Lockyear in his statistical analysis of the data from Reece's 140 sites (Lockyear 2000, 415-16, fig. 14; Reece 1991). Other small finds recovered included two undiagnostic brooch fragments, a bracelet and other personal items in copper alloy.

Wigmore

A small group of metalwork was recovered from an area of cropmarks just north of the River Thames at Wigmore, *c* 600 m east of the Leaze Farm finds concentration (Fig. 12.2). The cropmarks reveal a number of linear boundaries, trackways and enclosures, and the finds recovered from metal detecting and field walking presumably relate to the occupation of the settlement. They indicate activity from the 1st to 4th century AD, with concentrations in the late 3rd to mid 4th centuries.

The 51 coins from Wigmore are chronologically concentrated in the years between AD 260 to 296 and AD 330 to 348 (Table 12.5). There is a noticeable decline in the later 4th century with no finds securely datable after AD 378. There is one silver coin, the core of a plated denarius of Caracalla, minted between AD 193 and 260 and two illegible bronzes of the 1st and 2nd centuries AD.

The remaining small finds from Wigmore are somewhat limited, comprising a small number of copper alloy objects, including personal items, along with waste/debris and undiagnostic fragments (Table 12.2, Fig. 12.3, no. 3). There is a single iron object, a ring-headed pin. The lead comprises waste, and offcuts, rivets and plugs from ceramic repairs and the ubiquitous weights. The most interesting find is a pewter bowl, although its form and date are not known.

Campfield

A small number of coins were recovered from a site about 100 m east of the river Leach and 350 m north-

Table 12.6: Coins from Campfield, Lechlade

	Gen.		*Imit.*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
330-348	2	66.6	1	33.3	3	13.6
348-364	2	66.6	1	33.3	3	13.6
364-378	13	100	-	-	13	59.1
4th C illegible	3	100	-	-	3	13.6
Total	20	90.9	2	9	22	99.9

west of the Cottage Field site (Fig. 12.2; Table 12.6). All the coins are from the 4th century, minted between AD 330 and 378. The chronological distribution is concentrated in the years AD 364 to 378 (13 coins, 59.1%) suggesting that this group is a small hoard. This hypothesis is supported by the fact that the finder has stated that the coins were recovered from a small area. The only other find recovered from this site find was a copper alloy bracelet.

Buscot

A small number of Roman objects were recovered from Buscot in Oxfordshire, lying approximately 200 m south of the river Thames and 600 m south-west of the cropmark settlement at Wigmore (Fig. 12.2). The nature of the site at Buscot is unknown and the group of coins recovered (4) is far too small a sample on which to base a valid chronological pattern of loss. However, the fact that three of the four coins were minted between the years AD 330 and 360 and the last is an illegible 4th-century piece may be worth noting. The other finds recovered include two copper alloy objects, a single iron nail and three lead objects.

THE WESTERN SITES

Warrens Cross

The finds at Warrens Cross were recovered about 0.5 km north-east of the main Roman settlement at Longdoles Field, Claydon Pike, not far from Warrens Field (Fig. 12.1). The small number of coins retrieved (18) from Warrens Cross gives little indication as to the site's character although they do concentrate in the later 3rd and 4th centuries (Table 12.7). They range in date from an illegible bronze coin of the 2nd century AD to the later 4th century AD. The only silver coin is an illegible plated third century denarius minted between AD 193 and 260. In terms of the periods of peak loss, three coins (16.6%) can be dated to the years to AD 260 to 296 and four (22.2%) to the years AD 330 to 348. The group ends with a piece of Valens from the period AD 364 to 378. There are five illegible coins (27.7%) from the 3rd or 4th centuries. Other finds include a fragment of a copper alloy vessel and stud, along with lead rivets, weights and waste.

Table 12.7: Coins from Warrens Cross, Lechlade

	Gen.		*Imit.*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
1sr C	-	-	-	-	-	-
2nd C	-	-	-	-	-	-
1st-2nd illegible	1	100	-	-	1	5.5
193-250	-	-	1	100	1	5.5
250-260	-	-	-	-	-	-
260-284	2	66.6	1	33.3	3	16.6
284-296	-	-	-	-	-	-
296-305	-	-	-	-	-	-
305-320	-	-	-	-	-	-
320-330	3	100	-	-	3	16.6
330-348	4	100	-	-	4	22.2
348-364	-	-	-	-	-	-
364-378	1	100	-	-	1	5.5
4th C illegible	2	100	-	-	2	11.1
3rd-4th C illegible	3	100	-	-	3	16.6
Total	16	88.8	2	11.2	18	99.6

Green Farm

Green Farm lies about 800 m east of the Longdoles Field site at Claydon Pike (Fig. 12.1). It is the only one of the survey sites included here to have been the subject of archaeological investigation, in the form of a brief salvage operation prior to gravel extraction (Rawes 1979, 129). The excavations revealed a stone-lined well, 0.68 m deep, within which was found sandstone roofing tiles, 2nd-century pottery, fragments of a green glass bottle, four quernstone fragments and a small quantity of ironwork including a hammer, spike and nails. The waterlogged conditions in the well also preserved part of a leather shoe, two pieces of wooden plank and 18 fragments of a wooden wax writing tablet (Fig. 12.3, no. 11). The writing on the larger pieces of the tablet appeared to be indecipherable (Mark Hassall pers. comm.). Unfortunately the writing tablet could not be found for re-examination during the recent phase of post-excavation work. Just to the north of the building lay masonry building foundations, although no ground plan was recorded. Other non-stratified finds from the area included 2nd- to 4th-century pottery sherds and a barbarous radiate coin of Tetricus I (AD 271-3), limestone slabs and iron slag. The exact nature of the gravel pit site remains uncertain, although the masonry structure and writing tablet suggest that it may have been of at least some local significance. The site may well have been connected to the Claydon Pike complex in some way, as a trackway can be seen on aerial photographs leading from this general area towards the Longdoles Field site (see Fig. 12.1).

Whelford Mill, Kempsford

A small number of metal finds were recovered from Whelford Mill, Kempsford, *c* 200 m north of the River Coln and 500 m south-west of Kempsford Bowmoor (Fig. 12.1). The 42 coins represent a small hoard since 81% of the identifiable coins were minted in the years between AD 260 and 296 (Table 12.8). There are no silver coins, no early bronze coins and no identifiable 4th-century coins but some, if not all, of the eight illegible coins (19%) almost certainly belong in the later 3rd century as

well. The coins were surface finds recovered from a small area, along with a quantity of lead objects, some of which are waste. These objects included a number of weights or possible weights.

Table 12.8: Coins from Whelford Mill, Kempsford

	Gen.		*Imit.*		*Total*	
	No.	*%*	*No.*	*%*	*No.*	*%*
260-284	26	86.7	4	13.3	30	71.4
284-296	4	100	-	-	4	9.5
3rd-4th C illegible	8	100	-	-	8	19.5
Total	38	90.5	4	9.5	42	99.9

Illustrated catalogue: Small finds from the survey sites (Fig. 12.3)

1. *SF 246. Hod Hill brooch.* Copper alloy. Type Hull 63. Mid C1. Length 45 mm. Leaze Farm, Lechlade (LLF)
2. *SF 245. Trumpet variant brooch.* Copper alloy. Type Hull 170. C1–C2. Length 29 mm. LLF
3. *SF 484. Zoomorphic equal-ended bow brooch.* Copper alloy. Type Hull 228. C2. Length 50 mm. Wigmore, Lechlade (LW)
4. *SF 249. Disc brooch.* Type Hull 239. C2. Diameter 33 mm. LLF
5. *SF 264. Disc brooch*. Probably a gilded disc brooch of 3rd-century date (Hattatt 1987, 253). C3. Diameter 28 mm. LLF
6. *SF 258. Bracelet*. Copper alloy. Multiple unit. Cool Group 31. C4. Present length 95 mm. LLF
7. *SF 250. Finger ring.* Copper alloy. Finger ring. Oval box bezel with scalloped shoulders. Cool Group 16A. C3-C4. Diameter 19 x 20 mm. LLF
8. *SF 266. Jewellery element*. Silver. Finger ring? Such fluted flanges are found surrounding the box bezels of late 2nd to 3rd-century rings and brooches (see Henig 1981, 129 pl 8.1 nos 6, 8 and 9; Marshall 1911, 340 nos 2871-2). C2–C3. Dimensions 20 x 17 mm. LLF
9. *SF 294. Nail cleaner*. Copper alloy. C1–C2. Present length 40 mm. LLF
10. *SF 293. Spoon.* Copper alloy. Probably late Roman. Present length 105 mm. LLF
11. *SF 677. Writing tablet.* One side of a wax tablet. Length 138 mm. Green Farm, Lechlade (LGF)
12. *SF 261. Strap end.* This is a Tortworth style strap end (Clarke 1979, 281) in use during the second half of the 4th century and possibly into the 5th century. Present length 56 mm. LLF
13. *SF 347. Spear head*? A possible socketed spearhead, although most spear-heads are much larger. It is possible that this should be regarded as a deliberate miniature object, used for religious purposes. Length 32 mm. LLF

Part 3
The Landscape

Chapter 13
The Material Culture

by Paul Booth, Cathy King and Hilary Cool

COTSWOLD WATER PARK ROMAN CERAMIC ASSEMBLAGES IN THEIR REGIONAL CONTEXT *by Paul Booth*

Introduction

There have been relatively few attempts to summarise broad aspects of Roman pottery supply in the Cirencester area. Cirencester itself was included in a wider survey of early military assemblages by Darling (1977, 64-67), while more recently Cooper (1998) has provided a brief overview of quantified chronological trends for Cirencester, but based on a limited number of assemblages, which inevitably raises questions about the extent to which these can be regarded as representative of the town as a whole. At the same time, Timby (1998, 263-4) summarised briefly the pottery from Kingscote, well to the west of Cirencester, in its regional context, drawing principally on comparative quantified date from Uley and Frocester, both lying even further west, following this with another brief summary of pottery from the A417/419 Swindon to Gloucester Road Scheme sites in their wider context (Timby 1999b, 362-5). The following discussion is based largely but not entirely on assemblages for which quantified data are available, summary information for the most important of which is tabulated below (Table 13.1). All except one are from sites within 20 km of one or more of the Cotswold Water Park (CWP) sites discussed in this volume (see Chapters 2-11). Kingscote, which falls only just outside this definition, is included because of the size and importance of its assemblage. Occasional reference is also made to more distant sites, mostly in Oxfordshire to the east, which are not tabulated here.

The chronology of pottery supply

The regional late Iron Age ceramic tradition had two main components, leaving aside the question of how far material of middle Iron Age character remained in use at this time. The principal late Iron Age temper types were calcareous inclusions and argillaceous material, referred to here for convenience as grog (cf Trow 1988, 74). The former represented a continuation of earlier regional practices, while the latter can be seen as an intrusive tradition from south-eastern Britain. In their implementation in the region, however, there is no clear distinction between these traditions in terms of vessel shaping technology (both fabric traditions were used for wheel-thrown and hand-made vessels) or of repertoire of vessel forms (both were used for simple forms with middle Iron Age ancestry as well as for the more distinctive types, such as high shouldered jars and carinated forms, characteristic of the south-eastern 'Belgic' tradition). For the most part the sources of such material are unknown in detail, but one identifiable component, in a middle Iron Age ceramic tradition, was provided by Malvernian wares. These included both calcareous and igneous rock-tempered fabrics, the former usually considerably more common than the latter, though at Thornhill Farm (Fairford) both were quite well-represented, the calcareous fabric (C22) comprising 8% of sherds and the igneous rock and metamorphic fabrics (E71 and E82) 1.5%. Some 1.1% of sherds at Claydon Pike were assigned to fabric C22, but without a specific identification as Malvernian products (see Chapter 4). Four of the A417/419 sites, three to the north-west of Cirencester and one to the south-east, produced Malvernian limestone-tempered ware (Timby 1999a, 322-323) and it was also present at The Ditches, north of Cirencester (Trow 1988, 64). Other palaeozoic limestone-tempered fabrics are encountered in the region, such as C21, found at Somerford Keynes and alongside the Malvernian C22 at Thornhill Farm. Fabric C21 comprised 2% of the total sherds at Somerford Keynes (where C22 was not isolated) and may have included some sherds of Malvernian origin (see Chapter 9). Equally at other sites Malvernian products may not have been specifically distinguished from other limestone-tempered fabrics of middle-late Iron Age character. The Fairford area seems to mark the eastern limit of any significant Malvernian distribution; substantial middle-late Iron Age into early Roman assemblages from further down the Thames, such as Gravelly Guy (Stanton Harcourt) (Lambrick and Allen 2004) and Yarnton (Hey and Timby forthcoming), are characterised by an almost total lack of these fabrics. Their distribution was probably closely linked with that of Droitwich briquetage which, although not common, is better represented than Malvernian pottery in the Oxfordshire Upper Thames sites. This situation may also prevail in the middle Iron Age in the Water Park area – as is clearly the case at middle Iron Age Claydon Pike (see Jones, Chapter 3) –

Table 13.1: Sites not reported in this volume considered in CWP ceramic review

Site	*Type*	*Location*	*Distance from FCP*	*Chronology*	*Quantified assemblages*	*Principal pottery references*
Bagendon	'oppidum'	SP 0106	20 km WNW	1C	No	Fell 1961
The Ditches	enclosure/ 'oppidum'	SO 9909	23 km WNW	mostly mid 1C	Yes	Trow 1988
Cirencester	Civitas capital	SP 0201	17 km W	mid 1C-late 4C+	Some	Cooper 1998
Asthall	Small town	SP 2911	15 km NE	mid 1C-late 4C	Yes	Booth 1997, 104-134
Wanborough	Small town	SU 1985	14 km S	1C-4C	No, but extensive treatment	Seager Smith 2001
Birdlip Quarry	Roadside settlement	SO 9413	28 km NW	2C-4C	Yes	Timby 1999b
Kingscote Site 2	?estate centre	SO 8095	40 km W	late 1C-4C	Yes	Timby 1998, 239-267
Roughground Farm, Lechlade	Villa and associated settlement	SP 2100	3 km NE	?l 1C-4C	Some	Green and Booth 1993
Barnsley Park	'villa'	SP 0806	13 km NW	late 1C-late 4C	Little - W&S 1983, 168	Webster 1981, 63-77; Webster and Smith 1982, 147-169
Middle Duntisbourne	Enclosure	SO 9807	22 km WNW	mid 1C	Yes	Timby 1999a, 329-332
Duntisbourne Grove	Enclosure	SO 9906	21 km WNW	mid 1C	Yes	Timby 1999a, 332-335
Court Farm, Latton	Uncertain, quarry pits etc	SU 0995	11 km WSW	1C-early 2C	Yes (not all details in print)	Timby 1999a, 335-337
Weavers Bridge, Cricklade	Midden	SU1094	10 km ENE	late 2C-4C	Yes	Timby 1999a, 337-339
Langford Downs	Rural settlement	SP 2102	4 km NNE	1C	No	Williams 1946/7
Thornhill Farm	Rural settlement	SU 1899	1 km W	1C-?mid 2C	Yes	Timby 2004
Kempsford Multi-Agg Quarry	Field system etc	SU 1696	3 km SW	2C-4C	Yes	Forthcoming (see Digital section 8.4)
Watchfield	Rural settlement	SU 2590	10 km SE	?1C-4C (most 1C-2C)	Yes	Laidlaw 2002
Faringdon	rural settlement	SU 2894	10 km ESE	?1C-mid 4C (most 1C-2C)	Yes	Forthcoming
Ashton Keynes	rural settlement	SU 0694	14 km WSW	1C-4C	Very rough totals only	Coe *et al*. 1991; unpublished WA assessment report

whereas later it may have been reversed, with briquetage appearing in smaller quantities than the more durable pottery in the late Iron Age and early Roman periods.

The Malvernian fabrics represent a relatively unusual continuation of a ceramic tradition from the middle Iron Age into the early Roman period. In contrast, the most obvious examples of the introduction of new material from outside the region from the late Iron Age onwards are a range of imported wares. These include amphorae (see below), samian and Gallo-Belgic wares. Pre-conquest assemblages including both these last components occur at Bagendon and the nearby (and surely associated) sites of The Ditches (Trow 1988), Middle Duntisbourne and Duntisbourne Grove (Timby 1999a), while amphorae alone (?) are noted at Ashton Keynes (Coe *et al*. 1991) and a single example at Watchfield (Birkbeck 2002). Gallo-Belgic wares are also present at Cirencester, but here they belong to the early Roman military phase (Rigby 1977; 1988, 63), where they were associated with other early Roman imports characteristic of such assemblages.

Outside the Bagendon complex and Cirencester quantities of Gallo-Belgic and other early Roman fine wares are remarkably low and their significance in terms of trade networks and site character, if any, correspondingly difficult to assess. Five sherds of Lyon ware (fabric F41) and a note of Central Gaulish green glazed ware from Claydon Pike, for example, cannot be taken as indicative of a military association for the site in the mid 1st century (see Chapter 4). Military assemblages are clearly present at Cirencester and quite probably also at Wanborough, where the range of such material (Seager-Smith 2001, 299), and the 'entirely Roman character of the assemblage as a whole' (Anderson *et al.* 2001, 345) reflect the likely proximity of a military site and associated settlement, though no certain military features were recorded. Elsewhere in the area there is evidence for early military activity at sites such as Asthall, although this is not reflected clearly in the excavated pottery assemblage (Booth 1997, 149), and a fort has been suggested to the west at Rodborough Common (eg Swan 1975, 44), although this suggestion is rightly treated with caution (eg McWhirr 1981, 19). Here some aspects of the pottery assemblage (Rennie 1959, 36-42; Clifford 1964) may be consistent with military occupation (cf Rigby 1982a passim), but the general character of the published material, at least, is much more reminiscent of Bagendon than of early military Cirencester. Cooper's summary of the military phase assemblages at Cirencester (1998, 325-7) makes it clear that, even allowing for the potentially biasing effects of the Leaholme fort ditch group (Rigby 1982a, 179-87), these assemblages are dominated by imported wares, in line with a widely observed regional pattern (cf Darling 1977). The contrast with contemporary civilian assemblages is therefore very marked, although the occurrence in some of the latter of components normally considered to be of military character – such as the 'honey pots' from Claydon Pike (see Chapter 4) – still raises questions about the overlap of military and non-military supply networks. The principal distinctions between these two, however, are in relation to different requirements for fine wares and functionally specific vessel types, such as flagons and other liquid containers, mortaria and lamps, amongst others, met by the military either by importation or localised specialist production (Darling 1977; cf eg Timby 1990 fig 2, from Kingsholm). In this region it was possible for both military and civilian coarse ware requirements to be met largely by local or regional producers, in contrast to the position on some military sites further west where even coarse ware vessels had to be produced initially by incoming potters (eg at Usk, Greene 1993, 8, cf 50).

Two important local/regional production centres played a role in supplying pottery to the military and other markets from the every beginning of the Roman period (see Table 13.2). Known centres of the Severn Valley industry lie north-west and west of the CWP area, though it is certain that despite recent work (eg Evans *et al.* 2000) more of its production sites remain to be located. The Savernake industry lay some 35 km south of Claydon Pike, but had a direct major road access to Cirencester via Mildenhall and Wanborough. Both industries have been seen as post-Conquest developments (eg Webster 1976, 40; Swan 1975), but in both cases Jane Timby has suggested more recently that their origins lie in pre-Roman traditions (1990; 2001). The case for a pre-Conquest origin for Savernake ware is perhaps less compelling than for Severn Valley ware, but nevertheless appears to be good. It may be supported by the appearance of Savernake vessels at a number of low status late Iron Age/early Roman rural settlement sites in the Upper Thames where they are associated exclusively with other 'Belgic type' grog-tempered pieces of late Iron Age type. This is seen most clearly in the Period II and III assemblages at Linch Hill Corner, Stanton Harcourt, Oxfordshire, considered by Harding as a type site for the late Iron Age ceramics of the Upper Thames (Grimes 1943, 53-6; cf Harding 1972, pl 70). The presence of Savernake ware (identified by the writer during inspection of the material in the Ashmolean Museum) in groups such as these seems insufficient evidence to insist on a post-Conquest date for the assemblages as a whole. There is no doubt, however, that military sites such as Mildenhall, Wanborough and Cirencester and beyond, including as far afield as Alcester, Warwickshire (Booth and Evans 2001, 306; Mudd and Booth 2000, 33), formed an important part of the market for Savernake wares (Timby 2001, 83).

While occurring together in early assemblages in the region the distributions of Severn Valley and Savernake wares are different – inevitably considering the very different locations of the sources in

Table 13.2: Representation of selected wares at FCP area sites (% of sherd totals)

Site	*SV wares (O40 etc)*	*Total oxidised coarse wares*	*Savernake wares (R95 etc)*	*Total reduced coarse wares*	*BB1 (B11)*	*Other BB wares including R34*	*Total sherds*
Bagendon	Y	?	Y				
Cirencester							
Asthall	1.0	9.7	4.0	57.8	13.4	0.5	11399
Wanborough							
Birdlip Quarry	24.5	30.5	0.7	14.4	39.3	0.2	16641
Kingscote Site 2	6.3	?	<1.0	?	24.5	7.8	468.65 EVEs
The Ditches, Roughground Farm, Lechlade, 1990	1.2	5.3	Y	59.5	21.1	0.4	2168
Barnsley Park	Y				Y		
Middle Duntisbourne	44.8	45.2	17.6	20.8	-	1.3	880
Duntisbourne Grove	30.9	33.4	17.0	21.0	0.2	2.4	1935
Court Farm, Latton	10.9	16.3	9.1	39.8	2.7	17.5	331
Weavers Bridge, Cricklade	0.1	4.7	0.1	45.8	13.1	-	781
Thornhill Farm	12.4	14.3	14.8*	15.8	0.1	0.5	11450
Claydon Pike	1.9	9.2	3.8	41.4	?18.4	3.8	35225
Whelford Bowmore	2.6	24.7	?2.2	54.4	0.3	8.9	3364
Stubbs Farm, Kempsford	-	19.0	1.4	35.9	39.2	2.6	906
Kempsford Multi-Agg Quarry	-	11.0	-	67.5	14.9	-	409
Watchfield	-	2.7	19.0	64.2	17.4	-	2954
Faringdon	-	9.9	2.9	71.0	1.9	0.1	3144
Ashton Keynes	Y	?	Y	?	Y	?	c 50000
Somerford Keynes	1.0	17.1	?1.5	44.3	6.5	7.5	10182

*includes fabrics not listed as 'R' wares

relation to the CWP area. Severn Valley ware concentrated in the north-western part of the area, and was a particularly significant component of the mid 1st-century assemblages from Middle Duntisbourne and Duntisbourne Grove. At Thornhill Farm, not occupied after the mid 2nd century, Severn Valley fabrics comprised some 12% of the total sherds but at nearby Claydon Pike they comprised only 2% of the Phase 2 assemblage and in subsequent phases also occurred at roughly that level. As with the Malvernian wares, Claydon Pike lies towards the eastern margin of significant Severn Valley ware distribution. So at Roughground Farm, just to the east, Severn Valley wares comprised 1.2% of the total sherds from the 1990 excavation (Green and Booth 1993, 135), while at Asthall the figure was less than 1% (Booth 1997, 116, 118). Less easily explained, however, is the apparently complete absence of Severn Valley Ware at both Kempsford sites, only 3 km distant from Claydon Pike.

Severn Valley ware generally increased in significance in more westerly sites, a point neatly illustrated by Timby's figures for Kingscote, Uley and Frocester, at 6.3%, 13.5% and 26.9% respectively (Timby 1998, 263, percentages of EVEs), while at Birdlip it comprised 24.5% of sherds (21.1% EVEs) (Timby 1999b, 341). The importance of Severn Valley ware at Cirencester itself is variable, but the figures given by Cooper show that Cirencester fabric 10 comprised 7.7% of EVEs in the early 2nd century (Cooper 1998, 330) while in subsequent phases the total never exceeded 4%. These figures seem to imply that Cirencester was not a major marketing centre for Severn Valley ware, even though circumstantial evidence has been taken to suggest the possibility of production relatively close by (Webster 1976, 38).

The principal local industries supplying the CWP area produced a range of fabrics that for the most part contrasted with Savernake and Severn Valley wares in being characteristically tempered with moderate to abundant fine sand inclusions. This tradition seems to have been established in two different areas. The first of these is in north Wiltshire, with known production sites at Brinkworth (Currie 1992), Purton (Anderson 1979, 5-6; 1980), Whitehill Farm (Anderson 1979, 6-9), Toothill Farm (Anderson 1979, 2), Westlea Down (Swan 1984, fiche 5.666) and Eastleaze Farm (Frere 1984a, 323) all in Lydiard Tregoze parish. At Brinkworth, ceramic production included tiles as well as pottery, and there is a possibility that this association also occurred at Minety some 7 km north of Brinkworth, but known principally for tile manufacture (McWhirr 1979, 181). Few of these sites have been published in detail.

A second likely centre of fine sandy ware production probably lay in west Oxfordshire, though the actual site(s) has yet to be located. The fabrics in

question, principally R37, are superficially very similar to north Wiltshire products, and there are also similarities in the repertoire of forms in the two industries. The distribution of R37 and related fabrics, however, does not suggest a north Wiltshire origin. These fabrics dominate the assemblages in the Akeman Street settlements of Asthall (eg Booth 1997, 117) and Wilcote (Hands 1993, 77, fabric 2, and probably including other Wilcote fabrics as well) and a number of nearby unpublished sites such as Gill Mill (Ducklington), as well as forming a significant component of assemblages from sites further east such as Yarnton. On the grounds of distribution alone a source in the Asthall/Wilcote area seems probable. A possible correlation with known kilns at Cassington has been suggested (Booth 1997, 133) but is now thought less likely (cf Evans 2001a, 354; Henig and Booth 2000, 171). Establishing the westward and south-westward extent of the distribution of products of this industry is problematic as it has only recently been recognised as distinct from its north Wiltshire counterpart, to which, indeed, it may have been related.

The interrelationship of the marketing areas of these two industries, which presumably overlapped in the Upper Thames Valley, therefore remains to be clarified in future work. This could include re-examination of assemblages such as that from Barnsley Park, equidistant between Asthall and the north Wiltshire kiln sites. A substantial number of the illustrated vessels have very close parallels at Asthall and Wilcote (Webster 1981, figs 20-7). These include tankards and a range of jars, some with rusticated decoration, and suggest at least the possibility that some of the pottery from this site, potentially from 'local kilns, as yet unknown' (Webster 1981, 63), may have derived from the west Oxfordshire source. Meanwhile, at sites such as Claydon Pike (also approximately equidistant between the two centres), potential west Oxfordshire products will have been recorded under the general codes (R35 and O31) for the north Wiltshire industry fabrics (see Chapters 4-6). It is likely, but not presently demonstrable, that the latter were dominant in these assemblages and that the core distribution area of the west Oxfordshire industry lay north of the Thames, along Akeman Street and in areas to the north of that road.

A number of other important regional industries provided pottery to the CWP area and its surroundings. To the east the Oxford industry was significant as a supplier of colour-coated wares, mortaria and, to a less readily-quantified extent, other white wares, but the CWP area seems to have been generally outside the distribution range of the oxidised and coarse wares of this industry. Oxford mortaria reached the area from the 2nd century onwards, but the principal impact of this industry was not felt until the introduction of the late colour-coated ware repertoire in the mid 3rd century, after which Oxford dominated mortarium supply in the region as well as being the most important source of fine wares. To the west a widespread regional tradition of highly micaceous reduced coarse wares, generally defined as Gloucester TF5 (Ireland 1983, 101), suggests the existence of another important production centre or centres, although the location of this is as yet unknown. These wares were very important at the western margin of the wider study area, for example at Kingscote (Timby 1998, 263), from the 2nd century onwards, but are only encountered further east in small quantities (cf Allen and Fulford 1996, 262-3 for broad distribution). At sites such as Somerford Keynes they will have been subsumed under a general R30 ware code (though the *floruit* of these wares postdates the main phase of settlement here) and at Cirencester they generally comprise less than 1% of assemblages (on the basis of their absence from the list of major fabrics given by Cooper (1998, 325)). In the absence of quantified assemblages from sites between Somerford Keynes and Kingscote it is at present impossible to define the eastward tail-off in the distribution of these wares.

The regional industries discussed above were supplemented by one major coarse ware supplier from outside the area, other extra-regional sources of both coarse and fine and specialist wares being of relatively minor importance in quantitative terms. The exception was black-burnished ware, BB1 of south-east Dorset origin. The significance of this fabric in relation to Claydon Pike has been discussed at some length in Digital section 3.2 and some of the issues addressed there may be relevant to other sites. The principal problem relates to the reliability with which Dorset BB1 can be isolated from other black-burnished type fabrics. The latter include the early wheel-thrown fabric R34 (Cirencester fabric 5), but there are other black-burnished ware imitations as well, grouped as B10 (if handmade) or B30 (if wheelthrown). Most if not all of these fabrics may have been north Wiltshire products – their general sandy character is certainly consistent with other products of that industry.

The data in Table 13.2 show a considerable variety in the representation of Dorset and more local black-burnished type wares. A study by Allen and Fulford (1996) of the distribution of black-burnished ware in south-west Britain, including the CWP region, principally used data based on EVE and weight measurements. Comparative data on black-burnished ware both for the CWP region and other selected sites in Oxfordshire are therefore given in Table 13.3, showing representations by EVEs (strictly rim equivalents (REs) rather than values calculated on rim *and* base % data) as well as those based on sherd count. These figures demonstrate *inter alia* a rather different pattern of BB1 consumption east of Cirencester from that indicated by Allen and Fulford, whose analysis was based on more limited data in this area. Some aspects of the chronological complexity of the BB1 distribution here have already been discussed by Evans (2001a, 365). Nevertheless, Allen and Fulford's identifica-

Table 13.3: Representation of BB1 at FCP area and other Oxfordshire sites

Site	*% no. sherds*	*% EVEs (REs)*	*Other BB wares including R34*	*Total sherds*	*Total EVEs (REs)*
Bagendon					
Cirencester					
Asthall	13.4	13.6	Y	11399	149.61
Wanborough					
Birdlip Quarry	39.3	43.0	Y	16641	104.26
Kingscote Site 2	?	24.5	Y	?	468.65
The Ditches, Roughground Farm, Lechlade, 1990	21.1	18.0	Y	2168	32.10
Barnsley Park	?				
Middle Duntisbourne	-	-	Y	880	
Duntisbourne Grove	0.2	?	Y	1935	
Court Farm, Latton	2.7	?	Y	331	
Weavers Bridge, Cricklade	13.1	32.5	-	781	6.68
Thornhill Farm	0.1	0.7	Y	11450	77.54
Claydon Pike	18.4	16.9	Y	35225	404.56
Whelford Bowmore	0.3	0.5	Y	3364	25.70
Kempsford Stubbs Farm	39.2	21.4	Y	906	8.58
Kempsford QU	14.9	28.8	-	409	1.56
Watchfield	17.4	19.5*	-	2954	149*
Faringdon	1.9	?	Y	3144	
Ashton Keynes	?	?	?	c 50000	?
Somerford Keynes	6.5	15.0	Y	10182	74.02
Alchester 1991	5.0	4.6	-	36252	565.97
Hatford	-	-	-	1756	20.77
Old Shifford	3.6	?	-	3579	?
Gravelly Guy	0.3	?	-	10999	?
Yarnton	1.7	2.0	Y	8898	148.65
Wally Corner	3.2	5.3*	-	2319	285*

*Figures based on vessel count

tion of Cirencester as a focal point for distribution and consumption of BB1 in the region (1996, 244, 258, 266) clearly holds good, although the pattern of distribution to the east equally clearly reflects a complex interaction of factors including chronology, settlement type and communications networks. The latter aspect is emphasised by Allen and Fulford (1996, 266-7), whose conclusion is broadly supported by the present evidence, but it should not be considered in isolation.

Some of these variations can be explained by chronological or spatial factors; the low levels of all types of black-burnished wares at the Duntisbournes, Thornhill Farm, Faringdon (Weaver and Ford 2004), Hatford (Booth and Simmonds 2004) and Gravelly Guy (Lambrick and Allen 2004) being related to the exclusively or largely early Roman date range of these sites, for example and the fact that some of these sites lie beyond the range of distribution of the early wheelmade BB1 fabric R34 (Cirencester 5). Relatively high levels of non-Dorset black-burnished wares are seen at sites such as Somerford Keynes (see Chapter 9) and Latton, which are amongst those closest to probable source of these wares in the north Wiltshire industry, though this interpretation does not work so well for Kingscote and Whelford Bowmoor. The Whelford Bowmoor assemblage is puzzling not only in this respect but in the almost total absence of Dorset BB1 (0.3% of sherds; Chapter 10), which contrasts markedly with the figure of 39.2% recorded from the closely contemporary assemblage of Stubbs Farm, Kempsford, barely 3 km to the north (Chapter 11; the comparative REs figures are 0.5% and 21.4% respectively, still a marked contrast, though not as extreme as in relation to sherd count). The high levels of BB1 at Stubbs Farm are in fact consistent with values from a group of sites in the area – Claydon Pike itself, the villa at Roughground Farm, Kempsford Multi-Agg Quarry and, rather further south, Watchfield, at all of which black-burnished ware comprised between *c* 17% and 29% of REs. In this context it is the figure for Whelford Bowmoor that is anomalous. Even making allowance for the local black-burnished wares in this assemblage this site is well short of the totals from its neighbours. In view of the proximity and close contemporaneity of these sites this anomaly only seems explicable in

terms of a marked functional peculiarity of the site, for which there is little supporting evidence, or a specific decision to exclude BB1, though whether by the inhabitants of the site or by external agencies is unknown (see Chapter 10 for discussion of site). It is notable that the pottery from this site is quite varied and the assemblage cannot be characterised as markedly anomalous in this respect when compared with nearby sites.

Elsewhere BB1 representation is highest at some of the major nucleated centres of the region (Cirencester and Birdlip, both with over 40% by EVEs), but at others, such as Kingscote, is no more numerous than in the Claydon Pike area. Other high or relatively high figures (at Somerford Keynes and Weavers Bridge) may reflect the marketing hinterland of Cirencester. BB1 representation at Asthall and further east at Alchester, while not high, is well above the levels proposed by Allen and Fulford (1996) and probably relates to a road based distribution which privileges the larger settlements. At both these sites, however, and at low status rural settlements equally distant from Cirencester, BB1 is hardly present before the mid 2nd century and does not appear on those (numerous) sites in the area (such as Hatford and Gravelly Guy) abandoned in the generation before that date.

Chronological trajectories of sites

The issue of general site chronology referred to above is of considerable interest for the region. Several different patterns of chronological development can be discerned. These are generally identified on the basis of ceramic evidence, but are also of relevance for understanding the evolution of ceramic assemblages within the region.

A small group of late Iron Age/very early Roman sites can be identified centred on Bagendon. These include Middle Duntisbourne and Duntisbourne Grove as well as Bagendon itself and The Ditches just to the north. These sites have distinctive ceramic signatures including the presence of significant (but variable) quantities of imported fine and specialist wares and high representations of Severn Valley wares. The exact chronology of Bagendon remains debatable, with particular interest centred on the date of its establishment, some favouring a largely post-conquest date (eg Swan 1975, 59-61) while the review of the samian ware suggests that most of this could belong in the 20 years or so before the Conquest (Dannell 1977), an assessment supported by a consideration of the Gallo-Belgic wares (Rigby 1988, 62). It seems most improbable that this site did not have its origins at this period, if not slightly earlier, and there are hints that The Ditches hillfort might have been a chronologically primary focus for the Bagendon complex (Rigby 1988). Nevertheless there is general agreement that the bulk of the excavated material from both Bagendon and The Ditches is probably of early post-conquest date (Trow 1988, 76).

A substantial number of settlements in the Upper Thames Valley can be shown to have occupation sequences running through the late Iron Age into the early Roman period. In some cases, as at Claydon Pike (Longdoles Field) these seem to be new establishments (see Chapter 4). In others, as at Thornhill Farm and particularly further east, both down the Thames Valley (at Gravelly Guy and Yarnton, for example) and in the Vale of the White Horse (at Watchfield, Faringdon and Hatford), these sequences involved some continuity from middle Iron Age activity, though often marked by a change in the physical characteristics of settlement. The other defining feature of this period is of course the change in ceramic tradition marked by the introduction of wheel-throwing technology and grog-tempering, though it is important to note that neither characteristic is completely dominant in late Iron Age assemblages. The date of introduction of these characteristics remains uncertain, as dating is dependent largely, and in most cases entirely, upon the ceramics, with the ensuing risk of circular argument. As already mentioned, however, the key assemblage from Linch Hill Corner, Stanton Harcourt, regarded by Harding as fundamental to the understanding of late Iron Age pottery in the region, produced Savernake ware from the earliest phase of the ceramic sequence. This could be taken to suggest (eg implicitly in Booth 1996, 81-2) that Savernake ware could have been associated with other 'Belgic type' wares from their first use in the region, and thus to indicate a fairly late pre-Conquest date for the arrival of these wares in the Upper Thames Valley (such an association, but with a very different conclusion, was noted by Swan (1975, 60) in relation to Bagendon). This assumption may be unwarranted, but cannot be disproved conclusively at this present.

At Langford Downs, near Lechlade, Harding's other key late Iron Age assemblage from the Upper Thames (Harding 1972, pl 71), Savernake ware was absent from the published pottery but was present on the site (unpublished material in Ashmolean Museum). The assemblage comprised mainly late Iron Age 'Belgic type' pottery with a little earlier (perhaps residual) pottery and Williams (1946-7, 58) commented specifically on the absence of Roman pottery. A few grey ware sherds are present amongst the Ashmolean material, however. It is quite possible that all these were unstratified, but it is less clear if the two extant Savernake ware rims belong with this group or with the 'fragments from other necked bowls... not illustrated' (Williams 1946-7) implicitly of late Iron Age date. The evidence from Langford Downs is therefore equivocal on the relationship between Savernake ware and other 'Belgic type' coarse wares, while the appearance of Savernake ware at Linch Hill Corner *may* indicate that this site should be assigned to the later part of the (ceramically defined) late Iron Age, rather than spanning the whole of that period. This would allow an earlier chronology for the arrival of

'Belgic type' pottery in the region, perhaps in the later part of the 1st century BC, but this remains speculative. It is clear that this material remained in use, though perhaps not in production, at least into the Flavian period.

Langford Downs is unusual in having no evidence for continuity of occupation past the 'late Iron Age', as defined by the pottery. Almost all the other sites known to be occupied at that time in the region, including Linch Hill Corner, show continuity of settlement at least into the early Roman period, indicated by the presence of 'Romanised' reduced wares and sometimes other products as well. In Oxfordshire a substantial number of sites then cease to be occupied, or see significant relocation of settlement, in the first half of the 2nd century AD. In fact a larger number of rural settlements in the Thames valley around Oxford have discontinuity of occupation at this time than continuity (cf Henig and Booth 2000, 106-9). Their pottery generally includes a large proportion of 'Belgic type' (E wares) material, which at sites like Gravelly Guy (Stanton Harcourt) dominates the assemblage, and are additionally characterised by early Oxford wares (including fine oxidised and reduced 'coarse' wares, some white wares and occasional mortaria) and a general absence of black-burnished ware and Central Gaulish samian ware.

The precise chronology of this settlement hiatus remains uncertain, and a major question relates to its nature – are we seeing evidence for a single distinct 'event' or for a rather longer drawn-out trend which may have extended through the entire first half of the 2nd century AD? The answer to this question has major implications for the explanation of the hiatus. On present evidence, however, there is a notable convergence of evidence suggesting the termination of occupation at a number of sites around the period *c* AD 120-30, for reasons as yet unknown.

This pattern appears to be less prevalent in Gloucestershire than in Oxfordshire. It can be seen at Thornhill Farm and perhaps at Court Farm, Latton, though here the assemblage is small and derived largely from gravel pits associated with road and track surfacing operations rather than from settlement. The chronology of the beginning of Phase 3 at Claydon Pike, with its radically new layout (Chapter 5), and the coeval change in settlement plan at Somerford Keynes (Chapter 9), is also compatible with this development. On pottery evidence a number of sites, including Whelford Bowmoor (Chapter 10) and Stubbs Farm, Kempsford (Chapter 11) appear *de novo* at about this time. The assemblages from these two sites, as would be expected, are characterised by a complete absence of E wares. The principal coarse ware categories are different at each, however, because of the marked contrast in representation of black-burnished ware between them discussed above. At Stubbs Farm BB1 was more common than reduced coarse wares, while the latter were dominant at Whelford; oxidised wares comprised a fifth to a quarter of both assemblages. A further chronological peculiarity of these two sites is that significant occupation at both appears to have ended in the early 3rd century, a characteristic apparently unique to them. Elsewhere, sites in occupation from the early to mid 2nd century, as well as the few, such as Weavers Bridge, Cricklade, at which activity may not have commenced until the later 2nd century, tend to continue to be occupied at least well into the 4th century. Characteristics of the Weavers Bridge assemblage include an almost total absence of Savernake and Severn Valley wares. In the first case the evidence reflects the chronological range of Savernake ware, production of which may have ceased by about the middle of the 2nd century (Timby 2001, 81). In the case of Severn Valley ware both chronological and geographical factors come into play: the site lies towards the south-east margin of Severn Valley ware distribution, but also in an area in which these wares are most strongly represented in the early Roman period, as at the Duntisbournes and Thornhill Farm (see above), rather than later.

The principal component of the Weavers Bridge assemblage was reduced coarse wares, supplemented by BB1 and an unusually high level of Oxford colour-coated ware (at least in terms of sherd count (20.5%), the representation by weight and EVEs being half this amount). The reduced wares will have included a large component of north Wiltshire products, but the chronology of the later phases of that industry remains uncertain. Most of the known production sites are dated to the 2nd and 3rd centuries, though there is some evidence for late 3rd-early 4th century production at Whitehill Farm (Anderson 1979, 9). Evidence from the consumer sites supports the suggestion of continued production at that time. At Wanborough, north Wiltshire grey wares were noted as very common in Phase 3B, dated AD 325-400+, though the interpretation of this was uncertain (Seager Smith 2001, 243-4), while at Cirencester it was only in the second half of the 4th century that north Wiltshire products were considered to be 'in decline' (Cooper 1998, 340; cf Keely 1986, 163). At Claydon Pike consistent levels of fabric R35 were maintained throughout the life of the site from the early 2nd century onwards and certainly suggest continued production into the early 4th century if not later. The end of production of the corresponding west Oxfordshire industry is also not well dated, though this industry may have been in decline after the early 4th century on the evidence from Asthall (Booth 1997, 117-8), while further afield fabric R37 was considered to be residual at Alchester in the 4th century (Evans 2001a, 353).

The identification of local and regional industries whose products replaced the north Wiltshire ones is not always easy. At Cirencester a late 'local gritty greyware' (fabric 117, Keely 1986, 163-4) was important in the second half of the 4th century, but had

many characteristics in common with earlier north Wiltshire fabrics (Keely 1986) and may represent a late development of that industry. Further west the micaceous Gloucester TF5 industry was important up to the end of the Roman period and in the north of the area the same was probably true of Severn Valley ware. The main non-local coarse ware type appearing *de novo* in the late Roman period was of course shell-tempered ware, perhaps mainly from the Harrold industry (Brown 1994). On many sites this was only ever a minor component of assemblages, but at The Beeches, Cirencester, for example, it comprised 20% of EVEs, while at Asthall shell tempered fabric C11 constituted 11% of sherds in the 4th century Phase 6 (Booth 1997, 119). At Claydon Pike fabric C11 accounted for 2.9% of the sherd count in Phase 4 (see Chapter 6) and similar figures (for 'calcite gritted ware') are observed in the latest phases at Barnsley Park (Webster and Smith 1982, 168), while at Birdlip late shell-tempered sherds comprised only 1.4% of the Phase 6 material (Timby 1999b, 349-50). Sites such as Wanborough seem to have lain at the margins of the distribution of this ware, for only 26 late Roman shell-tempered sherds were noted there (Seager Smith 2001, 249, fabric 85).

An overall decline in the proportion of coarse ware fabrics in most late assemblages is generally compensated for by an increase in colour-coated wares, particularly from the Oxford industry and to a lesser extent from its Gloucestershire 'clone' (fabric F59, Cirencester fabric 105), sometimes known as South-west brown-slip ware (cf Cooper 1998, 340: Evans 1994, 147-8). These products were supplemented by small amounts of New Forest and Nene Valley wares.

Site status and function

Pottery evidence can shed considerable light on aspects of site status, function and general character. A useful indicator of status can be the representation of what have been termed 'fine and specialist wares' (see Digital section 3.2 for definition of these). This category was defined in the study of a sample of Warwickshire sites (Booth 1991), an approach that has since been applied to a number of sites in the Upper Thames Valley (Booth forthcoming; the results summarised in Henig and Booth 2000, 173-5 and fig 6.11 – in some cases there are differences between the figures given there and those used here, reflecting the use of interim data in the earlier publication). The simple (and unoriginal) premise is that there is a broad correlation between the incidence of fine/specialist wares and site status or character, the interpretation of which may depend upon social and/or economic factors. Meaningful examination of this correlation is only possible with quantified data, however. In addition, site chronology is an important factor in determining variation in the occurrence of some major ware groups and it is therefore important for the purposes of comparison that assemblages are broadly contemporary. At the very least, early and late Roman assemblages have to be considered separately. Subdivision of assemblages into century date brackets is preferable, but some assemblages are insufficiently large to provide meaningful data when divided on this basis, and many phasing schemes are not expressed in these terms, so this approach has not been followed here.

As can be seen in Tables 13.4 and 13.5, there is an increase from early to late Roman periods in the baseline level of fine/specialist ware representation, resulting principally from the widespread distribution of Oxfordshire colour-coated wares across the region. Direct comparison of 1st- to 2nd-century and later 3rd- to 4th-century groups is therefore invalid. Since, however, the histories and phasing schemes of the sites considered do not usually fall into neat chronological blocks there is inevitably some blurring of definition and some overlap between the datasets summarised in Tables 13.4 and 13.5. Assemblages from Kempsford Quarry, Watchfield and Faringdon, have been placed in their entirety in the early Roman table. In all cases there is a small 'tail' of later Roman material, but it was thought that separation of this material would make no significant difference to the figures presented, nor would it result in the generation of late Roman data in sufficient quantity to be meaningful. Cirencester is not included in the tables, principally because of a lack of data quantified in a manner comparable with the figures given here. The selected data based on EVEs measurement presented by Cooper (1998) demonstrate, as would be expected, that Cirencester was 'different' from other sites, particularly in the 1st and 2nd centuries, but they also show that there was considerable potential for variation in fine/specialist ware representation between individual sites in the town. Such potential also exists in the sites from which the assemblages tabulated here derive, and it cannot always be assumed that the recorded pottery samples are representative of those from complete sites. This is shown in the discussion of spatial variation within Claydon Pike (see above and Chapter 4) and is also clearly demonstrated by the contrasting late Roman assemblages from different parts of the Roughground Farm settlement.

The 17 sites in Tables 13.4 and 10 in Table 13.5 are arranged loosely in geographical sequence starting in the north-west of the study area and ending beyond its eastern margin with Oxfordshire Thames Valley sites, with a cut-off at Yarnton, upstream from Oxford. Late Iron Age to early Roman and solely post-Conquest sites have been grouped together in Table 13.4. They show a variation in fine/specialist ware representation from 0.2% to 11.5% of sherds. Within this range the 'bottom' five sites, from Old Shifford (0.2%) to Yarnton (2.8%) were all occupied in the late Iron Age as well as later. These may be considered to represent typical rural settlements on which the

Table 13.4: CWP area and selected Oxon sites, percentages of total sherds in major ware groups, early Roman

	1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*
	Mid 1C	*mid 1C*	*1-2C*	*1-2C*	*1-e 2C*	*mainly 2C*	*mainly 2C*	*mainly 2C*	*1-e 2C*	*e 2-e3C*	*m 1-e 3C*	*mainly 1-2C*	*mainly 1-2C*	*1-e/m 2C*	*1C*	*1-e/m 2C*	*1-2C*
Ware group																	
S	0.3	0.2	2.1	1.5	0.1	4.4	1.7	1.5	1.4	4.4	3.2	3.1	0.7			0.1	0.3
F	6.0*	0.4*		+		+	0.1	1.7	1.4	0.2	0.4	0.1	1.6	0.3			0.8
A	0.6	0.9	1.8	0.3	0.2	5.6	0.6	1.2	0.9	0.2	0.4	+			0.1		+
M				0.3	+	1.4	0.8	0.7	0.4	1.0	0.3	0.2	0.1				0.2
W	2.4	1.6		0.2	0.2	+	0.1	0.5	3.6	1.5	1.5	5.1	1.7	4.8	0.1	0.5	1.2
Q	0.5	0.8	0.6	0.2		0.1	0.1	0.2	1.0	0.2	1.4						0.2
Fine & specialist ware subtotal	9.8	3.9	4.5	2.5	0.5	11.5	3.3	6.4	8.7	7.5	7.1	8.6	4.1	5.1	0.2	0.6	2.8
E	2.5	3.3	3.6	17.4	36.5	0.3		0.7	23.2	1.1	5.1	7.1	9.1	56.6	99.0	66.2	41.1
O	47.5	33.4	16.3	17.2	14.3	24.7	19.0	11.0	10.3	4.0	12.2	2.7	9.9	0.7	0.1	0.6	3.5
R	20.8	21.0	49.8	43.1	15.8	54.4	35.9	67.5	27.5	72.8	72.3	64.2	71.0	37.7	0.7	32.3	43.0
B	1.3	2.6	20.2	14.1	0.1	9.1	41.8	14.9	13.6	12.4	2.8	17.4	2.0			0.3	0.6
C	17.0	32.9	0.3	4.5	32.5				16.8	1.1	0.4		4.0				9.0
Unclassified	1.2	2.8	5.1	1.2	0.3				+	1.1							
Total sherds	880	1935	331	10174	11450	3364	906	409	4971	523	2457	2954	3144	1756	893	10999	4240

*Includes fine imported oxidised and reduced wares not in OA coding system

Key for sites
1. Middle Duntisbourne
2. Duntisbourne Grove
3. Court Farm
4.Somerford Keynes
5. Thornhill Farm
6. Whelford Bowmoor
7. Stubbs Farm, Kempsford
8. Multi-Agg Quarry, Kempsford
9. Claydon Pike Phase 2
10. Rough Ground Farm 1990
11. Asthall Phases 2-4
12.Watchfield
13. Faringdon
14. Hatford
15. Old Shifford
16. Gravelly Guy
17. Yarnton

impact of specialised 'Roman' ceramics (as opposed to the 'Romanisation' of coarse ware technology) was fairly minimal. At both Somerford Keynes and Yarnton, sites occupied through the 2nd century, the principal fine/specialist ware was samian, but this was barely represented at Gravelly Guy and Thornhill Farm and was completely absent at Old Shifford.

The majority of sites with fine/specialist ware levels in the middle of the range, bracketed by the two Kempsford sites, with 3.3% and 6.4% fine/specialist wares respectively, may also be assigned to this category. Of these, Faringdon, Hatford and perhaps Court Farm showed continuity from late Iron Age settlement, the Kempsford sites were certainly or probably post-Conquest foundations and Duntisbourne Grove has a restricted date range around the middle of the 1st century AD and in this and other respects is associated with Middle Duntisbourne, which had a rather higher fine/specialist ware representation. At Hatford, from which samian ware was completely absent, the fine/specialist ware component consisted almost entirely of white wares. The disparity in fine/specialist ware representation between the two closely adjacent Kempsford sites may not be statistically significant, but the higher figure from Kempsford Multi-Agg Quarry could reflect the slightly later date range of this site and/or its closer association with a nearby site containing buildings with stone foundations.

The early Roman sites with the highest fine/specialist ware representation (from 7.1% to 11.5%) are a more heterogeneous collection. They include a small town (Asthall) and part of a villa complex (Roughground Farm) and, with even higher levels of fine/specialist wares, four less readily characterised settlements, Claydon Pike Phase 2 and Watchfield, Middle Duntisbourne and Whelford Bowmoor. Asthall is somewhat isolated geographically from the rest of the group, but the fact that its fine/specialist ware levels are comparable with those of some non-nucleated rural settlements is interesting. In the wider context of Oxfordshire sites it is notable that this characteristic applied also in the early Roman period to Alchester, albeit for material derived from extra-mural settlement at this small town (cf Henig and Booth 2000, 173, fig 6.11). Contrasting 'urban' values are presumably indicated by figures from Cirencester Insula VI, where three phase groups from late 1st to mid 2nd century have successively 18.2%, 23.8% and 30.1% of fine/specialist wares (percentages of EVEs, Cooper 1998, 328-31), although the late 2nd-century

Table 13.5: CWP area and selected Oxon sites, percentages of total sherds in major ware groups, late Roman

	Birdlip	*Ashton Keynes*	*Weavers Bridge*	*Barnsley Park Phases 5-10*	*Claydon Pike Phases 3-4*	*Rough Ground Farm 1990*	*Rough Ground Farm East*	*Asthall Phases 5-6*	*Old Shifford*	*Yarnton*
	m-l 2-4C	m 2-4C	l 2-4C	m-l 4C	e-m 2-4C	3-4C	l 2-4C	m 1-e 3C	mainly 4C	3- 4C
Ware group										
S	2.4	1.5	0.8	?	3.3	3.2	4.5	7.0	0.6	1.1
F	7.0	7.1	21.0	4.7	6.7	4.3	15.5	4.9	10.5	3.9
A	1.4	0.3	0.4	?	1.7	1.0	0.2	1.5	0.3	+
M	1.2	0.9	1.3	2.0	1.2	1.2	2.5	0.7	2.2	1.2
W	0.5	?	1.8	0.7	1.7	0.6	1.0	1.1	3.9	0.8
Q	0.5	?		?	2.2	0.8	0.9	0.4		0.2
Fine & specialist ware subtotal	12.7	9.8+*	25.2	7.4**	17.0	11.1	24.6	15.6	17.5	
7.2										
E	0.6	?			1.8	0.5	0.3	0.2	6.6	14.7
O	30.5	?	4.7	13.1	9.3	5.7	4.4	9.0	1.0	6.6
R	14.4	?	45.8	48.5	44.8	55.4	40.5	53.9	61.5	53.5
B	39.5	?	13.1	28.8	24.1	24.4	22.8	16.9	4.8	3.3
C	0.5	?		2.1	2.9	2.7	6.7	4.3	8.5	14.6
Unclassified/ Misc	1.7	90.2-*	11.1		0.2	1.1	0.7	0.2		+
Total sherds	16641	48987	781	13022**	28409	1645	5599	8853	2686	3090

*No data are given for white or white-slipped wares. These would increase the overall F&S representation

**Total excludes samian and amphorae, for which no quantities are given

(Phase 4) group there takes a curious (and unexplained) drop to 10.9% before reviving to 30% in the early 3rd century (Cooper 1998, 332-3).

The rural sites with high fine/specialist ware levels in the CWP area are notable for their general lack of structural evidence to provide further pointers to site character – with the obvious exception of Roughground Farm. They also have differing chronological ranges. Middle Duntisbourne is dated around the middle of the 1st century AD and its pottery stands out as a high status assemblage, particularly in view of the early date. The neighbouring site of Duntisbourne Grove, with the same date range and some of the same material (though less well-represented) should be seen with it, and both must have been associated with contemporary developments at nearby Bagendon. Whether this means that the occupants of these sites were themselves of high status, as opposed to benefiting from a very locally based redistribution network for imported ceramics, is a different question, however. Of the other three sites, Watchfield Area 10 had a notably rectilinear layout from the late Iron Age onwards (Birkbeck 2002, 232-7), but with no indication of structures. At Claydon Pike (Phase 2) (Chapter 4) and Whelford Bowmoor (Chapter 10), however, there are no characteristics of plan or other aspects of site layout to distinguish these sites from others, geographically as far apart as Somerford Keynes and Yarnton, with much lower fine/specialist ware levels. On this evidence it is clear that, if fine/specialist ware representation is to be correlated with status at all, it is not necessarily linked to forms of status display expressed in (archaeologically recovered) structural terms. The Whelford Bowmoor assemblage is the most surprising of all. This had the highest levels of samian ware and amphorae of any of the quantified groups in this period. It is unlikely that the figures are skewed by the continuation of activity on the site into the early-mid 3rd century. The unusually high amphora levels may indicate the presence of a number of well-fragmented pieces, but the quantity of fine/specialist wares expressed as a percentage of EVEs is almost identical to the figure based on sherd count. Altogether, this is an unusual assemblage, as the remarkably low quantities of black-burnished ware in it have already been commented upon. Together these data may suggest a distinctive functional characteristic of the site which could be status-related.

Ordering of the late Roman assemblages on the basis of their fine/specialist ware representation produces a sequence which raises more questions in terms of correlating these figures with site status. The range of variation remains wide (from 7.2% to 25.2%), but is less extreme than in the early Roman period. As already indicated, the presence of Oxfordshire colour-coated ware (fabric F51) is primarily responsible for the enhanced levels of fine/specialist wares. The occurrence of F51 is far from consistent, however. It is lowest at Yarnton, the site nearest to the source in the present sample and highest (20.5% of all sherds) at Weavers Bridge, on Ermin Street south of Cirencester, though it is possible that it is over-represented in terms of sherd count (cf Timby 1999a, 338, Table 7.13). The late Roman assemblage at Yarnton clearly includes a high proportion of residual material (eg 14.7% E wares), which has the effect of depressing the fine/specialist ware figure. Allowing for this could result in an overall fine/specialist ware figure of more than 10%, and possibly nearer to the 17.5% observed at Old Shifford, some 13 km up the Thames from Yarnton (a site also producing residual E wares in the 4th century but to a lesser extent), though a lower figure is likely. There is no clear indication of a specialised distribution network for F51 based on centres such as Cirencester. While the fabric is generally common within Cirencester itself (eg forming an estimated 23% of vessel count in the ceramic phase 7 group from the cemetery site, and 16.4% of EVEs from The Beeches in the second half of the 4th century; Cooper 1998, 338-40) its representation is not clearly different from that in some other sites in the area. In addition, F51 is surprisingly poorly-represented at Barnsley Park, only *c* 7 km from Cirencester, which should have been comfortably within the reach of any Cirencester-based distribution.

The Barnsley Park fine/specialist figure of 7.4% excludes residual samian and amphorae, for which there are no published data, but even with these is unlikely to have passed 10%, still leaving it close to the bottom of the late Roman fine/specialist ware range. This figure is quite comparable to that from the 1990 excavation at Roughground Farm, a site which can be defined unequivocally as a villa, unlike Barnsley Park. In complete contrast is another assemblage from Roughground Farm, a rather larger group of material from the 'native' settlement just to the east of the villa, and clearly related to it (Allen *et al.* 1993, 89–110), which had a fine/specialist ware component of 24.6%. This material does not seem to have suffered the selective discard that affected the assemblages from the earliest years of excavation at the site which, together with the reasonable size of this group, suggests that the figures can be considered with some confidence. It may give a more reliable picture of pottery supply to Roughground Farm than the data from the 1990 excavation, perhaps simply based on insufficient material. However other factors may also be at work, including genuine intra-site assemblage variations. Late Roman Claydon Pike, also loosely within the 'villa' category, at least in Phase 4, has a fine/specialist ware representation midway between those of the two Roughground Farm sites.

It is notable that the two nucleated sites in this sample, Birdlip and Asthall, both have fine/specialist ware levels in the middle of the range. As with Cirencester (but for different reasons), this does not suggest that these sites had a particularly

well-developed redistributive role for such wares in the local economy, although such a role might be suggested for Alchester and (particularly) Dorchester-on-Thames in relation to the products of the Oxford industry. Sites such as Birdlip and Asthall are generally characterised by a wider range of fine/specialist wares than is seen in the rural settlements, but not necessarily by greater overall quantities of these wares.

The variation in fine/specialist ware representation in late Roman settlements in the area therefore does not form readily recognisable patterns. The principal (though by no means the only) components of this group are Oxford wares, including colour-coated ware, parchment and other white wares and mortaria, and it may be reasonable to suggest that there is a close link between the mechanisms for the distribution of these particular wares and the observed range of fine/specialist ware values across a variety of site types. A straightforward pattern of road based distribution using nucleated settlements as intermediate market centres does not seem to be supported by the available evidence. A river based distribution network would explain high Oxfordshire (and hence fine/specialist) ware levels at Old Shifford, Claydon Pike and even Weavers Bridge and perhaps Cirencester itself, but equally does not account for low levels at Yarnton or the widely contrasting figures from the two Roughground Farm sites. On the whole, however, the latter model works better than the former in this area (and would certainly explain low Oxford ware quantities at sites such as Barnsley Park). Nevertheless there appears to be room for other factors affecting late Roman fine/specialist ware distribution, probably seen most clearly at Roughground Farm. Invocation of negative evidence to explain otherwise unresolved problems is always unsatisfactory, but it is possible that at Roughground Farm east, Oxford colour-coated ware represented the 'top of the range' dining service in the lower status settlement attached to the villa, while in the main villa complex itself the equivalent was vessels of glass and metal, leaving Oxford wares a relatively minor, subsidiary role. The incomplete nature of the archaeological record in respect of these recyclable materials is generally more of a problem in relation to higher status sites, as they can be assumed to be largely or even entirely absent on other settlements. The problem of the unquantifiable role of organic containers to complement the ceramic assemblage remains for sites of all types and status, however.

Understanding of assemblage character through examination of the range of vessel types present is less easily achieved in the CWP area because of a relative shortage of appropriately quantified assemblages. In a number of cases, such as most of the A417/419 sites, fabrics have been quantified in detail but vessel types, even at a general level suitable for broad-brush analysis, have not, or the assemblages are too small for such data to be very meaningful. The following discussion is therefore more tentative than the preceding one. Overall there are more data for the early Roman period than for later, as seen in relation to fine/specialist wares.

As with the representation of fine/specialist wares, the figures in Tables 13.6 and 13.7 show a broad and well-understood chronological pattern in which early Roman sites, and particularly lower status rural settlements, have assemblages completely dominated by jars, the percentages of which then decline gradually through time. The larger nucleated settlements usually follow the same general pattern but start with more diverse vessel type assemblages and therefore with lower proportions of jars. Although there are no useable published data for Cirencester it is presumed that the town would show an extreme form of this pattern. This is demonstrable in the Leaholme fort ditch group in which 69% of vessels were in fabrics which would not have been used for jar forms (Cooper 1998, 326, table 18), but this remarkable group cannot be taken as representative of all military assemblages in Cirencester, which is why it has not been used in relation to the discussion of status above, though providing important pointers to aspects of these assemblages.

The early Roman sites presented in Table 13.6 show a range of jar representation (including class D – uncertain jar/bowl types – on the basis that these are usually more likely to be jars than bowls) from 59.2% to 91.9% of REs (Watchfield has 92.3% jars, based on vessel count). The six sites with over 80% of jars in this period (Claydon Pike, Yarnton, Thornhill Farm, Hatford, Gravelly Guy and Watchfield (in ascending order of jar representation – the last three over 90%) all have late Iron Age origins. As already seen, Claydon Pike Phase 2 has significant fine/specialist ware levels, but it is notable that the vessel type data indicate that this is essentially a typical rural assemblage at this time, though the jar dominance characteristic of such sites is less pronounced than in those lying east of the CWP area. A slight difference between Claydon Pike and Yarnton, on the one hand, and Hatford, Gravelly Guy and Watchfield on the other, is in the bowl-dish representation, which for the first two sites is 11-12% while it does not exceed *c* 5% for the others. This may suggest a subtle difference in character between these two groups of sites.

Three assemblages, Somerford Keynes, Stubbs Farm (Kempsford) and Asthall, group together with jar levels between 71.9% and 73.9% (the RE data from Kempsford Quarry are unfortunately too few to be usable). The bowl-dish levels at these sites are comparable with those seen at Yarnton and Claydon Pike, so the types which increase in importance in this group are those associated with storage and consumption of liquids (amphorae, flagons, beakers, cups and tankards) and also miscellaneous types, notably lids (4.9%) at Asthall and, unhelpfully, unidentified types (5.9%) at Somerford Keynes. Like the sites with the highest levels of jar

Table 13.6: CWP area and selected Oxon sites, percentages of major vessel classes (REs), early Roman

	Somerford Keynes	*Thornhill Farm*	*Whelford Bowmoor*	*Stubbs Farm, Kempsford*	*Claydon Pike Phase 2*	*Asthall Phases 2-4*	*Watchfield*	*Hatford*	*Gravelly Guy*	*Yarnton*
	1-2C	1-e 2C	mainly 2C	mainly 2C	1-e 2C	m 1-e 3C	mainly 1-2C	1-e/m 2C	1-e/m 2C	1-2C
Vessel class										
A	1.4	0.3								
B	3.0	1.8	1.4	6.1	1.0	1.8	0.7		0.9	1.9
C	60.6	86.7	58.3	69.3	81.8	68.4	92.3	90.2	91.9	81.2
D	11.3	0.8	0.9	2.8		5.5		0.3		2.1
E	2.7	1.3	1.2	4.2	0.1	1.9	4.0	4.8	0.1	1.6
F	1.7	0.1	8.4		1.7	1.0			0.1	0.2
G	0.4	1.9		2.4	2.1	1.4			0.8	0.2
H	9.4	5.0	15.5	3.8	10.6	5.9		0.4	5.1	8.3
I	1.6	0.4	1.3	2.2		2.7		0.3		1.7
J	1.0	0.7	2.2	7.0	1.4	5.8	3.0	2.8		1.4
K	0.3		4.5	2.1	0.2	0.4				0.5
L	0.7	0.9	3.0		0.2	4.9			0.5	0.3
M	0.1	0.1								
Z/Unclassified	5.9		3.2		0.7	0.1		1.1	0.8	0.6
Total REs	74.02	77.54	29.40	8.58	44.26	38.48	149*	17.59	117.03	67.76

*Vessel count

representation discussed above, Somerford Keynes was occupied from the late Iron Age, but its vessel assemblage shows a number of small and perhaps significant differences from that of its nearest (approximate) contemporary, Claydon Pike: fewer jars, more liquid-related vessels and more unidentified types as already mentioned. It is possible that the difference in jar representation reflects the slightly different chronological range of these sites, with Somerford Keynes occupied through the 2nd century (Chapter 9) while Phase 2 at Claydon Pike ended in the early part of the century (Chapter 4), but this is not certain.

In contrast with these assemblages, that from Whelford Bowmoor stands out as somewhat anomalous. The jar representation (classes C and D together), just less than 60%, is significantly lower than in contemporary sites. Again it can be argued that the emphasis of the chronological range is later than that of some other sites in this group and that following the general trend this might have resulted in lower jar representation. This should not be overemphasised, however, for Stubbs Farm, Kempsford effectively has an identical date range but a number of differences in character. Both sites have broadly similar representation of liquid-related vessel classes. That from Stubbs Farm is actually the highest of all the early Roman sites considered, but this broad similarity conceals a significant difference, which is the (relatively) very large quantity of cups at Whelford, amounting to 8.4% of the assemblage. The great majority of these vessels, here as elsewhere in the region, were in samian ware (mostly form 33). The main differences between the assemblages are in jar representation (fewest at Whelford) and bowls, which were particularly well-represented at Whelford – dishes at Whelford occurred at much the same level as in the other assemblages in this group. Some 3.2% of REs at Whelford were of unidentifiable types, but even allowing for this the representation of 'other' types was the highest seen in any of these assemblages. Here this grouping comprised lids and mortaria – the latter, at 4.5%, being substantially better-represented at this site than any other. The reasons for this are not clear, but in combination with other characteristics discussed above again identify the Whelford assemblage as a rather unusual one. The high figures for cups and bowls-dishes suggest an above-average emphasis on food consumption at this site (see discussion, Chapter 10).

Only a very small sample of late Roman sites provide useful data on the incidence of vessel types and only one of these, Yarnton, can be regarded as a relatively typical lower status rural settlement. Here the incidence of jars (classes C and D combined) had declined by about 10% to 74.4%, still a high figure. The other two rural sites in the group, Claydon Pike (Phases 3-4) and Roughground Farm 1990 (the 2nd-century vessel types have been included with the later ones here to produce a viable sample), had 65.4% and 55.4% of jars respectively, the other principal difference between them relating to the occurrence of bowls-dishes, which constituted a remarkable 29.7% of the Roughground Farm assemblage while at Claydon Pike they were a much more typical 17.1%. The vessel class figures for later Roman Asthall and for Birdlip, of broadly compa-

Table 13.7: CWP area and selected Oxon sites, percentages of major vessel classes (REs), late Roman

	Birdlip	*Weavers Bridge*	*Claydon Pike Phases 3-4*	*Rough Ground Farm 1990 all phases*	*Asthall Phases 5-7*	*Yarnton*
	m-l 2-4C	l 2-4C	e-m 2-4C	2-4C	m 1-e 3C	3- 4C
Vessel class						
A	1.1		0.6		0.1	
B	4.6		2.9	1.5	2.9	0.3
C	58.8	60.2	65.4	55.4	58.0	72.8
D			0.1		3.3	1.6
E	1.8	4.3	3.5	5.0	2.9	3.3
F	0.5		2.1	1.3	1.9	0.3
G	2.3		1.6	1.2	0.5	0.8
H	12.4	7.3	12.1	16.6	9.7	9.2
I			0.1	6.0	4.9	2.0
J	14.0	20.7	4.9	7.1	7.3	4.5
K	4.2	7.5	3.1	2.5	1.7	3.4
L	0.2		1.4	2.1	6.1	0.8
M			0.2			0.3
Z Unclassified	0.1		2.1	1.2	0.8	0.7
Total EVEs	104.19	6.68	339.15	32.10	111.13	51.03

rable character, fall approximately between those for Claydon Pike and Roughground Farm, with jars at 61.3% and 58.8% and bowl-dishes at 21.9% and 26.4% respectively. It is notable that the high representation of lids seen at Asthall in the early Roman period is maintained later. This is most likely to reflect an unusual emphasis on the production of this type on the part of the local sandy reduced ware (fabric R37 etc) potters. All these four sites have a consistent representation of vessels associated with liquid storage and consumption, while at Yarnton the corresponding figure (4.7%) is rather lower, the difference being caused mainly by smaller quantities of flagons and cups (but not beakers) in the Yarnton assemblage. In this respect Yarnton is closely comparable to Weavers Bridge (with a rather smaller assemblage), but other aspects of the Weavers Bridge assemblage, in particular the representation of jars and bowls-dishes, are very similar to Birdlip. The comparable roadside location of Birdlip and Weavers Bridge may be relevant here.

Unfortunately the lack of data means that it is impossible to tell if Yarnton is representative of low status rural sites in the region in this respect, but Evans (2001b, 29-30) has shown that rural sites in the Severn Valley region generally have quite strong representation of drinking vessels (presumably reflecting a high incidence of tankards), in contrast with south-west British rural settlements. Yarnton fits the pattern of the latter quite neatly.

More generally, comparative data (using vessel count) on vessel types have been compiled by Evans (2001a, 376; cf 2001b, 27) comparing Alchester, to the east of the CWP area, with a series of other Midlands assemblages. The Alchester figures show a decline in jar representation from a 1st-century high (87%, interpreted by Evans as indicating a 'rural' assemblage at this time) to 'urban' values by Period 6 (*c* AD 180-240). From this point onwards the basic jar and bowl/dish levels remain remarkably consistent through to the end of the Roman period; there is no further significant shift in the ratio between the two class groupings. With the exception of the Alchester data themselves, however, Evans' approach does not define chronological variation clearly. It is argued that such definition would enhance the value of this kind of analysis substantially. This can be seen from examination of Figure 13.1, in which two chronologically distinct groups of data form overlapping clusters. Without at least broad chronological definition the significance of these is lost. For example, Yarnton and Asthall produce effectively identical vessel class breakdowns, until it is realised that it is early Roman Asthall and late Roman Yarnton that coincide. In this case the contemporary assemblages retain the distinctions that separated them in the early period.

Amphorae

Amphorae can be a particularly sensitive indicator of assemblage character (cf Evans 2001b, 33). They were distributed widely across the CWP area, but rarely occurred in substantial quantities. Some amphorae reached the area well before the time of the Roman conquest. A particularly important assemblage of 31 sherds, including fragments of Dressel 1 (at least 3 examples, one stamped), Dressel 1/Pascual 1 and a Catalonian Dressel 2-4, comes from Ashton Keynes (cf Coe *et al.* 1991, 46), but it is not clear if these were associated with any other

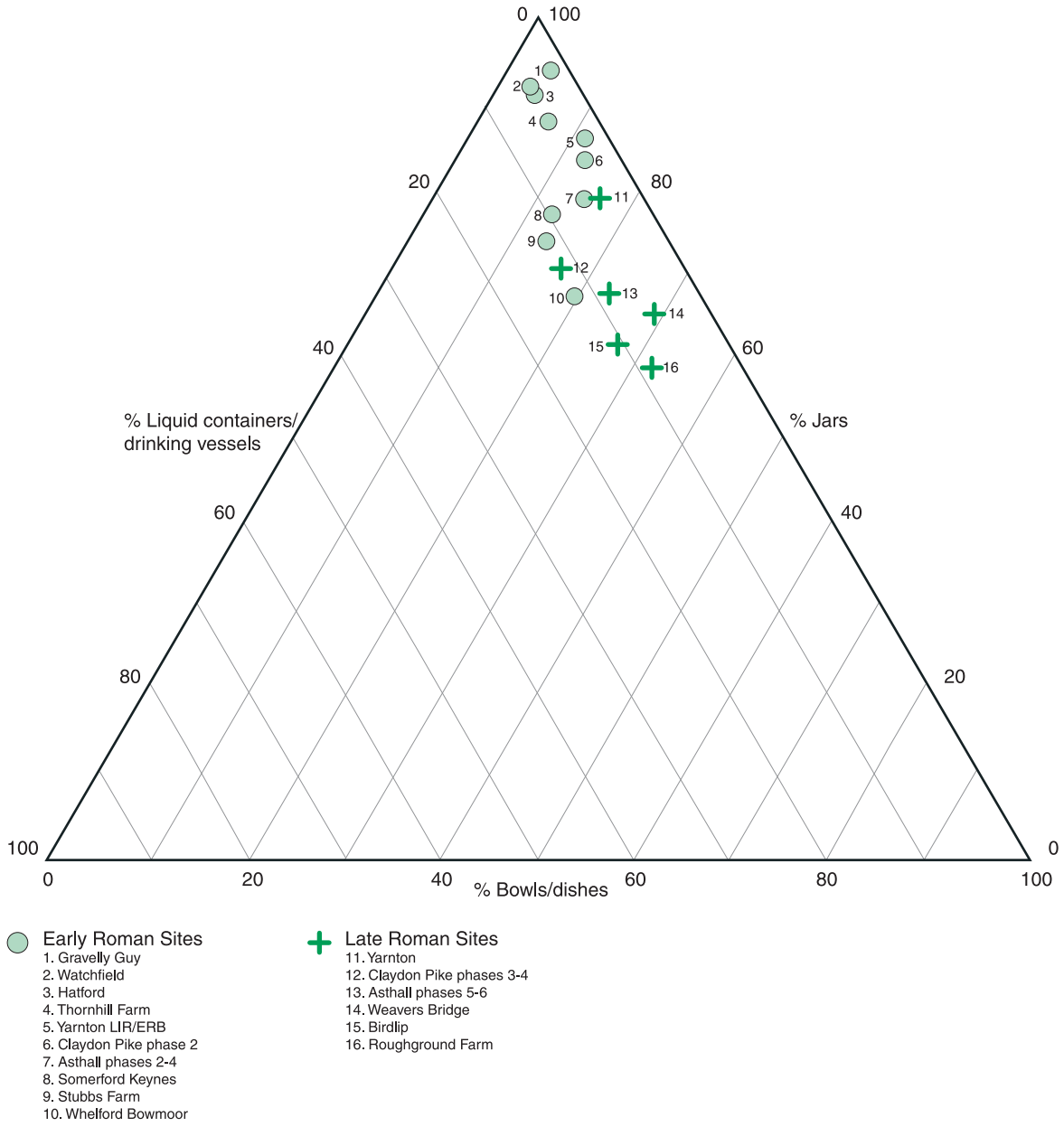


Fig. 13.1 Proportions of ceramic vessel types within early and late Roman sites in the Upper Thames Valley

imported ceramics or simply found alongside standard late Iron Age material of local origin. In passing, the presence of another stamped Dressel 1 amphora, of type 1b, may be noted at Watchfield (Laidlaw 2001, 255).

Two other areas within the region produce relatively diverse amphora assemblages. The Bagendon region, unsurprisingly, is one of these, though the quantities of material noted at Bagendon itself are small (Fell 1961, 230; Peacock 1971a, 180-1). The dating of Bagendon means that it is coeval with an 'early Imperial' phase of importation of amphorae into Britain post-dating the period in which Italian Dressel 1 was the principal type imported (cf Fitzpatrick 2003b, 13). The Bagendon fragments are supplemented by finds from The Ditches (only Dressel forms 7/11 and 20 were represented here (Trow 1988, 63), and from the relatively small assemblages from Duntisbourne Grove and Middle Duntisbourne. Both the Duntisbourne sites produced South Spanish vessels probably of the late Republican/early imperial form Camulodunum 185A/Haltern 70 and sherds of Dressel 2-4 of Italian origin (Williams 1999). A wider range of amphora fabrics and forms was encountered at Claydon Pike, but in a period covering the first two centuries AD; there are no certain examples of pre-conquest amphorae here (see Chapters 4 and 5). The anomalous sherd of Campanian Dressel 2-4 at nearby Thornhill Farm may represent a vessel

(perhaps already in a fragmentary state) redistributed there from Claydon Pike, along with slightly larger quantities of Dressel 20 sherds in what was otherwise a very conservative assemblage. Dressel 2-4 amphorae from Campania or other parts of Italy are indicated by small numbers of sherds only at Claydon Pike, Thornhill Farm, Middle Duntisbourne, Duntisbourne Grove and Bagendon, as well as at Cirencester (Rigby 1982a, 157, fabric 39).

Cirencester inevitably received a variety of amphorae in different periods, and presumably served as a regional distribution point for such vessels and their contents at least from the later 1st century AD. This distribution was, however, largely confined to the ubiquitous Dressel 20 and, to a lesser extent, to south Gaulish wine amphorae such as Gauloise 4. These two types accounted for all of the amphora sherds from Birdlip, Weavers Bridge and the two Kempsford sites, for example. This was probably also true of the Roman assemblage at Ashton Keynes (as opposed to the late Iron Age group mentioned above) and perhaps Whelford Bowmoor, though here a number of amphora fragments were only assigned to a general fabric category (A10) that includes the standard Baetican Dressel 20 fabric (A11). Even at substantial local market centres such as Asthall there was only a single amphora sherd (out of 141 sherds) that certainly could not be assigned to one of these categories (Booth 1997, 114). There was variation within the area, however: sites such as the villa at Roughground Farm, where amphorae were not particularly numerous, nevertheless produced a greater variety of fabrics than places like Asthall. East of the CWP area some of the lesser rural sites (such as Coxwell Road, Faringdon (Cook *et al*. 2004)) produced no amphora sherds at all, reflecting a situation seen more commonly a little further down the Thames Valley, where amphorae are characteristically extremely scarce or non-existent in a number of low status rural assemblages. Unfortunately, the less common fabrics typically occur as small body sherds which are rarely attributable to specific vessel forms and/or sources.

In the light of this background the amphora assemblage at Claydon Pike is not completely unexpected, but its relative size and diversity of sources is notable. Also notable is the fact that while the assemblage, as on other sites, is dominated by south Spanish fabric A11, the south Gaulish fabric A13, typically the second most common amphora fabric in the region, is completely absent here. The reason for this absence is uncertain, but might indicate a quirk of the supply network that provided amphorae to Claydon Pike. The explanation cannot lie in the slightly later chronological range of Gauloise 4 compared with Dressel 20, for example, since the site was occupied continuously through the Roman period and the dated parallels for the examples of Dressel 20 from Claydon Pike, while concentrating in the 1st-mid 2nd century, did include some later examples as well.

COTSWOLD WATER PARK COIN ASSEMBLAGES IN THEIR REGIONAL AND NATIONAL CONTEXT *by Cathy King*

Introduction

The Cotswold Water Park (CWP) coins all come from a relatively small geographical area located approximately between Cirencester to the west, Cricklade to the south, and Lechlade to the east. The objectives in examining the different assemblages together are to assess how they relate to one another, and to see how they relate to other sites from the same geographical area and sites from other parts of Britain. Recent work on coin finds in Roman Britain, based on excavated material and casual losses, have concentrated initially on establishing a general pattern of British coin loss, starting from the hypothesis that this pattern would reflect the numbers of coins supplied to Britain and/or locally produced pieces that circulated in the province (Reece 1996, 342). This pattern is now well-enough established for Reece to argue that within fairly roughly defined parameters it is possible to say what coins will turn up on almost any site in Britain before it is excavated (Reece 1996, 342 and note 3).

Reece's current research has focussed on identifying a specific profile for different types of sites, eg temples, villas, rural settlements etc and attempting to analyse whether there is regional variation within these groups (Reece 1991; 1993; 1995; 1996; Reece and Guest 1998). In other words, is it possible to distinguish, for example, differences between the patterns of coin loss between temples located in eastern Britain from those in the west? He has produced a methodology which has evolved over the years which is relatively easy to apply to groups of data and it has yielded some interesting results. The data have been re-examined by Lockyear using two more formal statistical methods that have allowed him to demonstrate that the potentially highly variable quality of the data is no barrier to effective analysis (Lockyear 2000, 413-9).

A somewhat different approach to the analysis of coin finds from the Cotswold Water Park sites has been attempted here, which has objectives that are similar to those of Reece. The first is to see whether the pattern of coin loss from all of the various sites is the same, closely similar or different. If different, can the sites be formed into subgroups? Secondly, what sort of relationship does the Cotswold Water Park sites have to other sites of the same type as loosely classified by Reece. Thirdly, can any significant geographical differences be identified between sites of the same type in eastern or western Britain or more narrowly within the area in the west roughly encompassing Gloucester, Bath, Cirencester, Alcester, Asthall, and Alchester?

In order to analyse these potential similarities and differences, the coinage has been examined in somewhat smaller and differently defined groups

from those used by Reece. Because the coins from Somerford Keynes (Chapter 9), for example, seem to have a higher percentage of early coins and a reasonable, if small, proportion were silver, it seemed worth assessing in the first instance how many silver coins were retrieved from the other CWP sites to see if any showed a similar pattern. Equally, as the number of bronze coins recovered from the first and second centuries was relatively large, it was decided to assess how many of the CWP sites showed a similar pattern. Finally the patterns of loss from what Reece correctly defines as peak periods: (AD 260-96, AD 330-48, AD 348-64, AD 364-78, AD 388-402) were calculated to see how the CWP sites compared with one another (Table 13.8). It also seemed worth examining how comparable the CWP sites were with others of the same type and/or from the same loosely defined, geographical area, and the periods of peak coin loss for these sites are presented in Table 13.9.

The additional sites chosen for analysis consist of three civitas capitals, Cirencester, Gloucester and Colchester. The small towns and settlements comprise: Asthall and Wilcote in Oxfordshire, Kingscote, Coln St. Aldwyns, Dorn and Wycomb in Gloucestershire, and Catsgore and Camerton in Somerset. Villas include Chedworth and Great Witcombe in Gloucestershire and Bancroft in Buckinghamshire. The military sites are Alchester in Oxfordshire and Alcester in Warwickshire while temple sites include Hayling Island in Hampshire, Harlow in Essex, Nettleton in Wiltshire and Bath in Bath and Avon. Finally, two sites which have been classified as 'miscellaneous', as they do not fit readily into the standard classifications of site types, are Fishbourne in Sussex and Hod Hill in Dorset.

One of the more striking features of the CWP sites was their different chronological coin profiles despite their geographical proximity. A clear example is the different chronological patterns of the settlement and the shrine at Claydon Pike (see Chapters 4-6). It was for this reason that coins from larger sites, such as Gloucester and Colchester, included separate areas within the total complex, since they can also yield dissimilar chronological profiles.

Reece, and Lockyear both rejected sites they found to be aberrant since they can conceal or distort the general pattern of British coin loss. Reece, for example, has justifiably not included early post-conquest sites that end in the first century AD as they cannot give an overall picture of British coin loss from the 40s AD to AD 402. Lockyear excluded Fishbourne, again a site with large numbers of early coins since it distorted the graphical representation of the chronological and geographical picture he was trying to construct on the basis of correspondence analysis using Reece's 140 sites (Lockyear 2000, 407; Reece 1991). The 'miscellaneous' sites included in Table 13.9 were included precisely because they were aberrant in having such a high concentration of early material. They present a different profile and as such are useful in comparative terms when analysing the significance of the early coins from CWP sites.

The interrelationship of the Cotswold Water Park sites

One of the more interesting aspects of the coinage from the Cotswold Water Park sites, to which Roughground Farm can be added, since it is in the Lechlade area, is their apparent dissimilarity to one another in terms of their coin loss patterns, despite the fact that all of the sites are ostensibly rural and in relatively close proximity to one another geographically. One way in which they are alike is in the predominance of coins from the later third and fourth centuries but as that is true of most British sites, it is not particularly helpful. Six of the

Table 13.8: Periods of peak loss within Cotswold Water Park sites

	AD 260-296		*AD 330-348*		*AD 348-364*		*AD 364-378*		*AD 388-402*	
Site	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
Neigh Bridge, Somerford Keynes	54	19.4	36	12.9	45	16.2	10	3.6	1	0.3
Warrens Cross	3	16.6	4	22.2	0	0.0	1	5.5	0	0.0
Kempsford Mill	34	80.9	0	0.0	0	0.0	0	0.0	0	0.0
Whelford Bowmoor	6	25.0	2	8.3	2	8.3	0	0.0	0	0.0
Claydon Pike (All)	142	19.4	171	23.3	71	9.7	157	21.4	21	2.9
Claydon Pike (shrine)	10	4.0	47	18.9	35	14.1	108	43.5	10	4.0
Claydon Pike (settlement)	132	27.2	124	25.6	36	7.4	49	10.1	11	2.2
Campfield	0	0.0	3	13.6	3	13.6	13	59.1	0	0.0
Leaze Farm	24	9.6	56	22.5	38	15.2	64	25.7	17	6.8
Wigmore	24	43.6	16	31.4	3	5.8	2	3.9	0	0.0
Cottage Fields	10	27.0	15	40.5	3	8.1	2	5.4	2	5.4
Buscot	0	0.0	1	25.0	2	25.0	0	0.0	0	0.0
Roughground Farm	9	18.3	17	34.7	11	22.4	1	2.0	1	2.0

Table 13.9: Periods of peak coin loss in other sites

	AD 260-296		AD 330-348		AD 348-364		AD 364-378		AD 388-402	
Site	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*
Civitas Capitals										
Cirencester 1998 All	732	21.7	799	23.7	514	15.2	380	11.3	609	18.0
Cirencester 1982	1	2.9	0	0.0	1	2.9	0	0.0	0	0.0
Glos. Kingsholm 44/72	9	22.5	2	5.0	1	2.5	0	0.0	0	0.0
Glos. Kingsholm 9/83	24	22.0	27	24.7	3	2.7	5	4.6	0	0.0
Glos. Kingsholm 81/73	0	0.0	1	6.6	1	6.6	0	0.0	0	0.0
Colchester Lion Walk	181	31.1	117	20.1	33	5.6	38	6.5	49	8.4
Colchester Balkerne L.	393	35.2	213	19.0	28	2.5	31	3.7	39	3.5
Colchester Cups H.	64	22.0	162	56.0	14	4.8	8	3.8	4	1.4
Colchester Butt Road	36	5.9	228	37.5	168	27.6	89	14.6	24	3.9
Colchester Middlebor.	75	54.7	14	10.2	4	2.9	4	2.9	2	1.4
Small towns/Settlements										
Asthall	2	4.6	13	30.2	6	13.9	7	16.3	0	0.0
Wilcote 1990-1992	7	23.3	3	10.0	2	6.6	0	0.0	0	0.0
Wilcote 1993-1996	1	4.1	3	12.5	1	4.1	0	0.0	0	0.0
Wilcote Quarry	2	1.6	82	65.6	20	16.0	1	0.8	0	0.0
Wilcote 1993-96 SF	22	31.4	18	25.7	8	11.4	8	11.4	0	0.0
Kingscote Site Finds	367	31.0	340	28.7	98	8.2	100	8.4	8	0.6
Kingscote 1	85	16.3	173	33.0	61	11.6	160	30.5	8	1.5
Kingscote 2	369	33.3	315	28.5	122	11.0	12	1.1	2	0.2
Kingscote 1976	61	17.0	163	45.5	64	17.8	1	0.3	0	0.0
Coln St. Aldwyns	254	18.2	471	33.8	93	6.6	219	15.7	53	3.8
Dorn	13	14.1	15	16.3	6	6.5	17	18.5	13	14.1
Wycomb 1	11	4.5	115	47.7	55	22.8	41	17.0	6	2.5
Wycomb 2	15	5.6	63	23.7	63	23.7	49	18.5	26	9.8
Camerton	342	57.2	114	19.0	27	4.5	10	1.6	0	0.0
Catsgore	117	21.8	119	27.2	27	6.3	22	5.0	4	0.8
Villas										
Chedworth	73	19.9	71	19.3	36	9.8	115	31.3	1	0.2
Great Witcombe	57	25.3	44	19.5	25	11.1	47	20.8	6	2.7
Bancroft 1973-1978	19	9.1	91	43.7	12	5.8	18	8.6	10	4.8
Bancroft 1983-1986	52	8.1	280	43.9	78	12.2	85	13.3	13	2.0
Bancroft Mausoleum	2	3.2	15	23.5	7	11.3	14	22.5	11	17.7
Bancroft Shrine	0	0.0	7	24.1	5	17.3	7	24.1	10	34.5
Military sites										
Alchester	3	37.5	1	12.5	1	12.5	0	0.0	0	0.0
Alcester ALB 75	2	13.3	4	26.6	2	13.3	4	26.6	1	6.6
Alcester AES 76-7	43	41.7	15	14.5	9	8.7	2	1.9	4	3.9
Alcester ALC 69	4	26.6	2	13.3	0	0.0	0	0.0	0	0.0
Alcester ALC 72/3	10	43.5	1	2.3	0	0.0	0	0.0	1	2.3
Temples										
Nettleton	283	13.9	448	22.1	220	10.8	507	25.0	196	9.7
Bath	1930	15.3	1332	10.5	761	6.0	257	2.0	42	0.3
Hayling Island	38	11.5	58	17.5	22	6.7	28	8.5	7	2.1
Harlow	35	7.0	33	6.6	2	0.4	13	2.6	1	0.2
Miscellaneous										
Hod Hill	1	1.5	0	0.0	0	0.0	0	0.0	0	0.0
Fishbourne	75	28.2	1	0.3	1	0.3	0	0.0	0	0.0

survey sites have yielded fewer than 50 coins in total and the finds from two of them (Kempsford Mill and Campfield) seem to be small bronze hoards of the years AD 260 to 296 and *c* AD 330 to 378 respectively (see Chapter 12). Thus it is unsurprising that no silver or bronze coins of the early empire were recovered from either of them. The assemblage from Buscot consists of only four coins, three of which were produced between AD 330 and 360, and is too small a group to interpret with any degree of certainty, but again there were no silver or early bronze coins. Of the remaining sites, Wigmore and Cottage Field have similar coin loss profiles for the later empire although Wigmore has a higher proportion of coins (43.6%) from the period AD 260 to 296 than Cottage Fields (27%) does. Both sites were apparently active throughout much of the 4th century and their coin loss peaked with coins of the years AD 330 to 348 and declined thereafter. The latest coins from Wigmore date to the years AD 364 to 378 but Cottage Fields has two coins (5.4%) from AD 388 to 402. The proportion of early coins from both sites is small and the only 'silver' coin from Wigmore is the bronze core of a plated denarius. The proportion of early bronze coins is also negligible at both sites consisting of illegible 1st- or 2nd-century pieces.

Despite the small number of coins from Whelford Bowmoor (Chapter 10) and Warrens Cross (Chapter 12), they both have a higher proportion of early coin than the other small sites. However the actual number of early coins retrieved is very small, since they had only one bronze coin each, and the one 'silver' coin from Warrens Cross was a plated denarius of the years AD 193 to AD 260. Whelford Bowmoor had two genuine denarii and the core of a plated denarius from this period as well. The coins from the later empire are moderately well-represented in the period AD 260 to 296 at both sites and they exist in reasonable numbers at Warrens Cross as well in the years AD 330 to AD 348 but then decline. At Whelford Bowmoor there are few 4th-century coins and the latest are from the years AD 348 to 364. If the smaller Cotswold Water Park sites are looked at as a group, the few silver coins that have been found all come from the years AD 193 to 260 and a significant proportion of them are plated or consist of the bronze core of plated pieces while the 1st- and 2nd-century bronzes from these sites tend to be few and illegible. In this regard the smaller sites fit the pattern observed by Lockyear for rural sites but they differ in not having a high proportion of coins of the late fourth century (Lockyear 2000, 415-6, fig. 14).

Claydon Pike is a rural settlement site with a 4th-century shrine and villa (Chapter 4-6). Coin loss from villas tend to peak between AD 330 and 378 while religious sites peak in the years AD 348 to 364 and/or AD 364 to 378. Some rural sites can also peak in the years AD 388 to 402 (Lockyear 2000, 416-7, figs. 14-16). The coin loss pattern for Leaze Farm in the later third century (Chapter 12) approximates that at Claydon Pike and both have about the same proportion (8%) of earlier coins minted before AD 260. In terms of the periods of peak coin loss, Claydon Pike has a higher proportion of coins from the years AD 260 to 296 and lower ones in the periods from AD 348 onwards. The pattern of coin loss at Leaze Farm in the peak periods between AD 260 and AD 402 is much more like that of the shrine at Claydon Pike than the settlement although the shrine has a significantly higher proportion of coins from the years AD 364 to 378. This similarity of pattern could support the view that Leaze Farm may also have some sort of ritual function but it is not sufficient on its own to sustain the theory.

The coin loss pattern at Roughground Farm, also a villa site, is compatible with other villa sites but contrasts with the Claydon Pike settlement area (Chapter 6) and Leaze Farm (Chapter 12) in having higher proportions of coins from the mid-fourth century (AD 348 to 364) and very few from the years AD 364 to 378. Only two of the 48 coins (4.1%) were minted before AD 260 and the single silver coin is a clipped siliqua of Arcadius. The site at Somerford Keynes is unique among this group in having so many coins (35%) minted before AD 260 and does not fit the pattern of rural, temple, or villa sites (Chapter 9). It fits better within the patterns established for early military or civitas capitals although there is nothing to suggest that there was a significant early military presence or that the site was a 'small town' however that is defined.

The Cotswold Water Park sites in a British context

Attempting to set the Cotswold Water Park sites into a broader context within Britain gives rise to a number of difficulties both of definition and methodology. The most obvious way of analysis is to compare and contrast them with other sites of the same or potentially related types. Before this can be achieved however, it is necessary to identify not only the sort of site type the various Cotswold Water Park groups represent individually and/or collectively, but also to define what features are included in the category. Reece (1991) grouped his material from 140 sites in Britain into five categories: 1) certain and possible civitas capitals, 2) villas, 3) military sites, 4) temples, and 5) rural sites not otherwise classified. Some of the sites Reece placed in the rural sites category have been classified by others as towns (Dorn, Wycomb, Kingscote) roadside settlements (Coln St. Aldwyns), major settlements, minor settlements, villages (Catsgore) etc. and there is considerable discussion, for example, as to what features a settlement has to have in order to be considered a town (eg Timby 1998, 3-5; 429-33; Booth 1997, 158-9).

It can be argued that the rigorous application of categories like town, major settlement, etc. to the sites under discussion here and more generally obscures rather than illuminates their nature since

most are not identical in function or character. For that reason the writer have chosen to adopt Reeces's category of 'rural sites not otherwise classified', and to modify his description by referring to them as small towns/settlements (Table 13.9). This allows the inclusion of a variety of sites like Asthall, Wilcote, Kingscote, Dorn, Coln St. Aldwyns, Wycomb, Camerton and Catsgore which can be variously described as towns, roadside settlements etc. within a single category. However it is important to note that none of the settlements in this group, which are sometimes classed as towns or small towns, have the status or complexity of structure and function of the civitas capitals and their pattern of coin loss differs from such sites.

Reece's remaining site-type categories do not, on the whole, need any modification of definition, but there can be difficulties establishing to which category a given site belongs, or whether a site can belong in more than one group. This latter problem has particular relevance to the potential overlap between military sites and towns, including civitas capitals (see Digital section 3.3). It is clear that towns like Cirencester, Gloucester, Colchester and Alchester have coin loss patterns that are characteristic of military sites as well as those of towns. The question arises in this context of whether when defining and interpreting coin loss patterns coins from individual excavations from the same site should be combined or analysed separately. The answer to this question is dependent on whether one wishes to emphasise the differences between various areas of a given site or present an overall picture. In the case of Alchester, combining the early and late groups flattens the first century of the coins found in the area of the fortress and to a lesser extent, the dominance of coins of the later third and fourth centuries leaving a gap in the middle.

The data presented in Table 13.9 represents a mixture of the total site approach and specific excavation analyses. The material from Gloucester has been presented in the form of specific excavations while at Cirencester, the sites published in 1998 are treated as a whole although the 1982 excavations are in the form of a separate entry. Data from Colchester has been compiled for separate areas made up of several individual excavations. Alcester regarded by Reece as a 'rural site' has been listed under military sites in Table 13.9 and the individual excavations given separate entries. The classification is based largely on the basis of its high proportion of 1st-century bronze coins minted in the Flavian period. However, the different excavations have a different balance between coins of the early and late empire and it may be more appropriate to consider Alcester as a site that does not fit easily into a single category.

The temples included in Table 13.9 (Nettleton, Bath, Hayling Island, and Harlow) have, with the exception of Nettleton, a large proportion of early coin and disproportionately low numbers of late coins when compared to Reece's 141 sites which are accepted here as representative of the usual pattern of coin loss. The 'aberrant' sites were specifically chosen because they had significant amounts of early coin, silver and Iron Age pieces. Consequently their coin loss pattern contrasts with that of Reece rather than conforming to it. The tabulated villa sites (Chedworth, Great Witcombe and Bancroft) conform to the general pattern of coin loss for villas identified by Reece, with Bancroft being chosen because it had a rural shrine and was potentially useful in comparative terms with Claydon Pike.

Finally, there is the category which has been labelled miscellaneous containing only two sites (Hod Hill and Fishbourne). These sites were selected because they are clearly aberrant in having very high proportions of early coin and low amounts of late coin. Fishbourne was characterised by Reece as a site that did not conform to the normal British pattern and was excluded by Lockyear in his analysis of Reece's 141 sites on grounds that it seriously distorted the coin loss pattern in Britain (Reece 2002, 101; Lockyear 2000, 407). Hod Hill, an early Roman fort that was not included by Reece in his 141 sites, has a very high concentration of bronze coins of the first century AD, most (83%) of which was produced between AD 36 and 68, a few coins of Trajan, one Antoninianus of Gallienus and no 4th-century coins. It is significant since it gives a picture of the loss pattern from an early military site, and it can usefully be compared with the early temple sites of Harlow and Hayling Island. Fishbourne is neither a military nor a religious site, despite having a military component, but it does have a high proportion of early coins and again virtually no 4th-century material. It appears to end with a fairly high percentage (28%) of coins minted between AD 260 and 296. Fishbourne, like Hod Hill, is interesting because it has quite a high proportion of 1st-century bronze coins (32%) from the years AD 36 to 68.

Cotswold Water Park Sites compared with British 'rural' (town/settlement) sites

Lockyear has described the parameters of the British coin loss pattern for rural (town/settlement) sites as follows: 1) rural sites do not tend to have much if any early coin, and 2) they have above average amounts of later 4th-century coins, particularly those dated between AD 388 and 402, and to a lesser extent, those dated between AD 378 to 388 (Lockyear 2000, 415 and fig 14). If the survey sites of Campfield and Kempsford Mill are excluded on grounds that they are hoards (Chapter 12), and Somerford Keynes because of its different coin loss pattern and proximity to Cirencester (Chapter 9), the incidence of early coinage from the remaining sites meets Lockyear's first criterion. None has amounts of 1st- and 2nd-century bronze coinage that exceeds 6% although seven have percentages ranging from 4% to 6%. However, the CWP sites do not altogether match his second criterion. Claydon Pike and Leaze

Farm peak slightly earlier in the 4th century between AD 364 and 378 while Whelford Bowmoor and Wigmore peak in the late 3rd century and Cottage Field and Roughground Farm between AD 330 and 348. However, it must be reiterated that Reece's sites do not always have above average numbers of very late 4th-century coins. If the coin loss pattern from the CWP sites is compared with that of the rural (small town/settlement) coins in Table 13.9, which are largely composed of sites in Oxfordshire and Gloucestershire, it is clear that most of the sites in both groups have small numbers of early coins compared with very high proportions, often in excess of 70%, of coins minted between AD 260 and 402. Again, most of the additional sites meet Lockyear's first parameter for a rural site but not the second since only Wycomb (9.8%) and Dorn (14.1%) have relatively high percentages of very late coins.

One of the reasons that the CWP and other regional sites do not fit well into the 'rural' (town/settlement) category is that they may have had more than one function during the course of their existence. Claydon Pike, for example, can be classed as a 'rural' settlement but it also had had a villa and shrine built in the 4th century (see Chapter 6). All three of these categories have somewhat different coin loss patterns and consequently Claydon Pike may not fit precisely into any one of them. However, if the coins from the shrine at Claydon Pike are analysed separately, their peak between the years AD 364 and 378 does match the pattern described by Lockyear (Lockyear 2000, 415, figs. 15, 16). The coins from the Bancroft shrine also peak in the years AD 348 to 378 (41.4%) but the largest individual group (34.5%) is that from the years between AD 388 and 402 (Davies 1994, 276). This high number of very late 4th century coins does not conform to the coin loss pattern for temples identified by Lockyear. The coins from the Bancroft Mausoleum are also predominantly 4th-century in date with a peak in the years AD 330 to 348 and another between AD 364 and 378, together with a high number of coins from AD 388 to 402 (*c* 18%). The coins from the two excavations at Bancroft villa conform generally to Lockyear's pattern for this type of site, but peak between AD 330 and 348 declining thereafter as do the coins from the Chedworth and Great Witcombe villas.

Cotswold Water Park sites compared with civitas capitals and military sites

Lockyear has shown that both military sites and civitas capitals have significant proportions of early coinage and civitas capitals, in particular, are dominated by coinage of the years beginning before AD 41 to 138. Military sites tend to have higher proportions of coins minted before AD 260 apart from 'Saxon Shore forts', which have large numbers of later 4th-century coins (Lockyear 2000, 413-416, figs. 12-13). In addition, on the basis of the data he has used, some civitas capitals are relatively well-represented in all periods. It is clear from the preceding discussion that the only Cotswold Water Park site with a high proportion of early coin is Somerford Keynes. As it does not fit the pattern for rural sites, it may be useful to examine the extent to which its coin loss pattern conforms to that of the military sites and three civitas capitals, two of which are in Gloucestershire (Cirencester and Gloucester) and one in Essex (Colchester).

If the sites within Cirencester from the 1998 excavations are considered as a whole, the percentage of silver coin is very low (1.5%) compared with Somerford Keynes (8.6%) despite the fact that they are less than 3 km apart and one would normally expect a rural settlement to have small numbers of early coins. The percentage of silver from the 1982 Cirencester excavations is not much larger (2.1%), although this may in part be related to the fact that only 34 coins were recovered in total. The Roman coins from Gloucester from the Kingsholm site consist of three groups representing different areas of the site. Two of the sites have silver coin percentages of 7.5% and 6.4% respectively (Kingsholm 44/72 and Kingsholm 9/83), all of which are earlier than AD 36 and the third had no silver coins at all. The Kingsholm 9/83 site (a 'native' site) is most like Somerford Keynes in having Iron Age and Republican silver coins while silver coins from the Kingsholm 44/72 site (the fortress) are Republican or early imperial in date. By contrast with the Kingsholm sites, the silver coinage from Somerford Keynes is more broadly distributed chronologically (see King, Chapter 9).

The five Colchester sites (Lion Walk, Balkerne Lane, Cups Hotel, Butt Road and Middleborough) represent more than one type of coin loss profile. The 'area' sites are composed of a number of individual excavations whose coin finds are grouped together to form a single total. Some of them like Lion Walk and Balkerne Lane have percentages of silver coin comparable to Somerford Keynes overall but peak in the years AD 193 to 260, which is later than their peak at Somerford Keynes. All of the Colchester sites have a much higher proportion of coins from the periods of peak coin loss overall than Somerford Keynes (52.4%) although the Kingsholm, Gloucester sites have less. In the case of Balkerne Land and Butt Road, the high proportion of 4th-century coins may be linked to the fact that there was a temple and possible shrine outside the main gate (Balkerne Lane) and a church in Butt Road where a large number of coins were recovered (Faulkner 1994, 111).

Within the coin loss pattern for silver at the military sites, Alchester has a relatively high percentage (16.6%) based on a small coin sample (24). Only one of the three Alcester sites (76-7) has any silver coin (2.9%) and it is spread over the 1st to the 3rd centuries, up to AD 260. An examination of the comparative material from other site types shows that of the early temple sites Hayling Island has the highest percentage of silver (26.7%)

dominated by the Iron Age coins (*c* 20%); the 36 Roman silver pieces are all imitations as are more than half of the Iron Age coins which makes this site unusual in a British context. Harlow Temple has a much smaller proportion of silver (3.2%), again dominated by Iron Age pieces but none are imitations. Hod Hill and Fishbourne, which have been characterised as 'miscellaneous' sites, have silver percentages of 15.3% and 4.9% respectively with coins of the Republic up to AD 36 predominating. The Hod Hill silver coins end in the 2nd century AD while Fishbourne silver continues into the 3rd century. The amount of silver coin recovered from Bath is less than 3% ranging in date from the Iron Age to the later 4th century AD.

The amount of bronze coins of the 1st and 2nd centuries AD is a significant determinant of the amount of early coin found on British sites. It is therefore worth examining the proportion found at Somerford Keynes from these years in the context of the numbers retrieved from civitas capitals, military sites, early temples and miscellaneous sites in order to see if similar patterns of coin loss occur (see Chapter 9). In this context it is important to remember that the civitas capitals used in this analysis have an early military establishment. The percentage of bronze coins at Somerford Keynes minted between the years AD 36 and 192 is 26.6%. This is significantly lower than that for the Cirencester 1982 excavations (88.2%) and the Kingsholm, Gloucester sites which range from 32.9% (Kingsholm 9/83) through 62.5% (Kingsholm 44/72) to 86.6% (Kingsholm 81/73). The Somerford Keynes total is closer to the Colchester sites of Balkerne Lane (24.4%) and Lion Walk (17.7%). The Cirencester 1998 figure (6.9%) which is based on the total of all the excavated sites published in that year is much lower than that at Somerford Keynes and is closer to the Colchester sites of Middleborough (8.7%), Butt Road (4.6%) and Cups Hotel (3.8%). Overall, it is clear from these figures that the coin loss pattern of 1st- and 2nd-century bronze coins from Somerford Keynes does not fit very well with that of the civitas capitals apart from the occasional individual excavation. But given the fact that Somerford Keynes was not a civitas capital, there is no particular reason why the pattern from the two sites should match closely.

The high incidence of bronze coins on British sites minted before AD 68 is a good indicator that the site is early and may have had some sort of military connection, even if brief, in the conquest period or immediately thereafter. If the years AD 36 to 68 are examined separately, Somerford Keynes has a much smaller proportion of coins from this early period (4.3%) than the Cirencester 1982 excavations (61.9%), Gloucester Kingsholm 81/73 (86.6%) or even Gloucester Kingsholm 9/83 (29.3%). The Somerford Keynes total is much nearer that of the Cirencester 1998 excavations (2.2%) and the Colchester sites. If the fortress at Alchester with its very high proportion of bronze coins (62%) minted in the years between AD 36 and 68 is regarded as a paradigm of an early military site, then the coin loss pattern at Somerford Keynes is not indicative of military activity. However, as previously discussed, the identification and behaviour of military sites or those with a military component is more complex than it seems. This problem is exemplified by the roadside settlements of Asthall and Wilcote in Oxfordshire. Both are listed in the 'rural' (town/settlement) category in Table 13.9 and both lie on Akeman Street, as does Alchester. Asthall has been identified as a small town with a Roman camp nearby, with no previous Iron Age settlement, situated where Akeman Street crosses the Windrush (Booth 1997, 3-5; 158-9). Its three silver coins can be dated to the 2nd and early 3rd centuries AD (before AD 260) and its bronze coinage (11.6%) begins in the Flavian period and ends in AD 161. The coin base is small (43), which may in part explain why, despite the presence of an adjacent Roman camp, there is no evidence of early 1st-century bronze coinage. Another possibility is that the area containing early Roman coin may not have been excavated.

Wilcote, which is 9 km east of Asthall, is an even more difficult site to interpret. The pottery and presence of early Roman coin support the probability of an early settlement but there are no substantial structures (they are mostly timber) of any date (Hands 1998, 1). As with Alchester there are two groups, consisting of early and late coins, with very little 'middle' material. The two excavations (1990-1992 and 1993-1996) produced early coins from areas adjacent to one another (Hands 1993; 1998); the earlier of 1990 to 1992 yielded no silver coins but those of 1993 to 1996 produced three (including an imitation) all of 2nd- or early 3rd-century date as did. Unlike Asthall, Wilcote has a high proportion of early bronze coin from both excavations, mostly produced in the years between AD 36 and 138. There is a strong component of bronze coins from the years AD 36 to 68 and a slightly smaller one for the Flavian period. There are also a significant number of imitations of the coinage of AD 36 to 68. Thus, the coin pattern strongly suggests an early military presence without any substantial structural evidence to support it. The excavator has suggested that the origins of Wilcote lay either in the availability of stone for building Akeman Street or the army's need for staging posts at regular intervals along the road (Hands 1998, 1). The group of coins from the quarry at Wilcote are predominantly 4th century in date, peaking in the years between AD 330 and 348 (Table 13.9). There is also a group of stray finds, also of the later empire, that peak in the years between AD 260 and 296 but with a strong 4th-century component ending in AD 378. Neither the coin loss pattern from Asthall nor that of Wilcote is really close to that of Somerford Keynes, yet all seem to have possibly similar functions in some respects. Once again, the problem arises of classifying sites into categories in any meaningful way in functional terms.

Conclusions

It should be clear from the preceding discussion that analysis of the settlement and other site types is complex and that 'rural' (small town/settlement) sites in particular, as Jane Timby argues, 'defy compartmentalised classification' (1998, 435). Settlements can have different origins, function, evolution, and length of existence that depend on a variety of factors not all of which may be clear to us today. That being said, the settlement picture in the Cotswolds that has emerged in the light of recent excavations and published research is certainly more complex than was thought in earlier years, with a hierarchy of settlement types clearly seen in the region. Timby (1998) has suggested that there was a heterogeneous mix of local centres in the Cotswolds, which probably acted as markets for the region, and that town and country had a symbiotic relationship. It is into this framework that the Cotswold Water Park sites must be fitted and the context in which the coins have been discussed here.

It should come as no surprise, therefore, that if the settlements are so heterogeneous in nature their coin loss patterns do not always match very closely those of supposed 'similar' sites. Thus the diversity of the CWP sites is in the end less striking than it appears at first sight. But as Faulkner has appositely remarked 'no straightforward relationship between coin loss and human activity can be assumed for….any site' (Faulkner 1994, 111). What is heartening, however, is the extent to which certain types of site do conform to the British pattern of coin loss as established by Reece and supported by Lockyear's statistical analysis. This pattern can provide parameters within which we can at least try to compare individual sites set in a broader provincial context. What has yet to be established, however, is distinct regional patterns of coin loss within Britain. Although Reece has in recent years attempted to define differences in coin loss pattern between eastern and western towns in Britain, Lockyear's analysis has failed to substantiate it (Lockyear 2000, 418-9).

The pattern of coin loss in Britain must in some way be related to how and when coin was supplied to the province and the mechanisms by which coin entered circulation and ultimately left it. In an ideal world it would be possible to link these processes to the economy of individual sites, specific geographical areas and then the province and the empire at large. But until the processes themselves are better understood and more clearly formulated, and the nature and functions of different sites can be defined more precisely, we will have to live with a more generalised picture of how military, geographic, and economic factors may have influenced the pattern of coin loss on British sites.

THE SMALL FINDS IN THEIR REGIONAL CONTEXT *by Hilary Cool*

Introduction

In total nearly 1,500 coins and over 5,000 other items have been studied as part of the Cotswold Water Park (CWP) project. The digital reports (Digital section 3.4) provide detailed considerations of this material on a site by site basis; and the precise details of typology and dating will be found in those. The detailed reports also consider the biases in the assemblages, often brought about by the way in which the artefacts have been collected. This is a particular problem at Somerford Keynes, where the assemblage is also biased by the poor survival of bone (see Chapter 9). Despite some shortcomings, the assemblages provide a good base on which to explore the broad patterns in the use of objects on rural sites in this area. The aim of this overview is to bring together certain themes that have emerged from the detailed work. The sites lie towards the northern boundary of an area that had a very distinctive suite of material culture during much of the Roman period. This manifested itself in many ways from regional styles of jewellery (Hattatt 1987, 100-3 and fig 36; Cool 1990, 175-6) and toilet equipment (Crummy and Eckhardt forthcoming), to a marked preference for using stone mortars (Cool forthcoming(a)) compared to the rest of the country. The finds from the CWP sites show many aspects of this regional style; but they have also highlighted some hitherto unsuspected habits which further research in the area should be able to explore in more detail.

The native world

Finds other than pottery only start to occur in any quantity towards the end of the 1st century BC. Earlier material is very scarce and tends to be made of stone. The earliest item is a possible smithing tool of Beaker date from Somerford Keynes (SF 812; Chapter 9); and saddle quern and rubber fragments were associated with the middle Iron Age occupation at Warrens Field, Claydon Pike (Chapter 3) and possibly also at Somerford Keynes (see Roe Digital section 5.3). No diagnostic items of metalwork of this period have been recovered, though a few scraps of copper alloy and a possible knife blade fragment were found stratified in the middle Iron Age contexts at the Warrens Field site.

The earliest independently dated item of metalwork is an involute brooch of the 3rd to 1st century BC from Somerford Keynes (SF 321; Chapter 9), but this stands alone; and, in the main, activity is seen starting in the late pre-Roman Iron Age around the beginning of the 1st century AD. The brooches, which are very common on the CWP sites, show this very well. It is possible to group types into those that were in use in the early to mid 1st century; and those that appear to have developed soon after the conquest, and which then had

varying lifespans into the later 1st or 2nd centuries. Table 13.10 shows the early to mid 1st-century brooches from the two most prolific sites studied in the project (Claydon Pike and Somerford Keynes; Chapters 4-6 and 9) compared to the brooches from other relatively local sites with sizeable brooch assemblages at Cirencester, Kingscote and Frocester Court. In each case the total is shown as the percentage of all 1st- to 3rd-century brooches (excluding penannular ones). As can be seen, on the sites where other classes of evidence such pottery provide undoubted late Iron Age occupation prior to the Roman period (Claydon Pike and Frocester Court), the early to mid 1st-century types form a quarter of the assemblage. In the sites with a Roman period foundation (Cirencester and Kingscote) the proportion drops markedly.

The observed pattern has important implications for the period when activity started at Somerford Keynes as the very large brooch assemblage from the site clearly belongs to the pre-Roman foundation pattern; whereas the pottery merely hints at the possibility of this, and most pottery in the Phase 1 features is of late 1st to early 2nd century (Brown, Chapter 9). The pattern of the brooches seems to be matched by the coins as King (Chapter 9) has drawn attention to the unusually high number of pre-Conquest silver coins at Somerford Keynes. She points out that generally they tend to be rare, apart from on early sites with military connections. The finds assemblage has produced nothing indicative of early military activity with the possible exception of a wide cuff bracelet (SF 5142) which recent work has suggested may be a form of military *armilla* (Crummy forthcoming). Early military sites generally have quite a distinctive vessel glass assemblage (see for example, Price and Cool 1985; Price forthcoming), and there is no sign of this at Somerford Keynes. On balance, therefore, activity on the site is likely to have started early in the 1st century AD and to have been a native development. The brooch assemblage from Whelford Bowmoor (Chapter 10) is small (10 items), but also suggests occupation in the earlier 1st century, again earlier than the pottery. The pattern of brooches apparently pre-dating the period of activity suggested by other classes of artefacts has been noted before on sites in the region (Cool 1998, 221). There is, of course, the possibility that what are normally thought to be early to mid 1st-century forms, continued in use much later in this part of the world than they do elsewhere; but the pattern seen in Table 13.10 would suggest that they are, indeed, reflecting early to mid 1st-century activity.

There is a problem in exploring the pre-Conquest use of material culture on the CWP sites because so much of it has been found unstratified. Dating the material has to be done on typological grounds, and that naturally biases dates to the post-Conquest period. Typological dates are developed from studying associations with more closely dated items, and there is a very large increase in the availability of the latter, in the form of coins and samian pottery, after the conquest. Typological dates are also developed by examining the occurrence of items on sites which are known to have short periods of occupation. Again there is an explosion of such sites in the form of short-lived military establishments after the conquest. It is possible to develop a pre- and post-conquest typology for brooches because they are found in such large numbers. The dating for other classes of material found in smaller quantities such as toilet equipment, tends to be more sparse, but it is clear that that this class of artefact too had developed prior to the conquest and was part of a native regime of personal care (Crummy 2001, 3). Toilet equipment is very common on the CWP sites, and that from Somerford Keynes (Chapter 9) and Leaze Farm (Chapter 12) includes forms that were certainly in use in the third quarter of the 1st century,

Table 13.10: Early to mid 1st century brooches in selected Upper Thames Valley/Cotswolds sites

Brooch aame	*Somerford Keynes*	*Claydon Pike*	*Cirencester (Viner 1998, table 14)*	*Kingscote (Mackreth 1998)*	*Frocester Court (Price 2000, 33-41)*
La Tène III	-	-	7	-	9
Nauheim derivative	23	4	1	10	-
Strip bow	5	3	-	2	5
Continental	1	1	-	-	-
Langton Down	12	-	1	1	1
Rosette	3	1	2	1	2
Colchester	13	3	2	4	5
Birdlip	-	1	-	2	1
Total (early to mid 1st century)	57	13	13	20	23
Total brooches	222	49	96	151	56
As percentage of total brooches	26%	27%	14%	13%	41%

and which might be suspected to have developed in the pre-conquest period (SF 5027, SF 210 and SF 709; SF 294).

Amongst other items at Somerford Keynes for which a pre-conquest date is likely there are items that have both a local regional distribution such as the looped toggle (SF 306), and ones that are clearly imports such as the patera foot (SF 1055). The early to mid 1st-century brooches also show a mix of local types and those from further afield. The pattern is summarised in Table 13.11 where forms such as the Durotrigian strip bow and the Atrebatic Nauheim derivative form Hull Type 10D which seem to be on the edge of their distribution range are summarised as possible imports, and ones that are much commoner in eastern England (Langton Down, Birdlip) or are of definite Continental origin are classified as imports. As can be seen in both cases; though the bulk of brooches are either local or non-regional forms, a substantial proportion appear to be non-local. This pattern can also be seen at Frocester and Kingscote (see Table 13.10). In general, therefore, the pre-conquest society in this area seems regularly to have been acquiring items from the central and eastern parts of Britain as well as occasionally from the Continent. Again this observation can be used to put the Somerford Keynes assemblage in context. In the detailed report it was noted that there were regular occurrences of items that were outside of their normal range of distribution, and it was suggested (Cool, Digital section 5.3) that this might have been because the site was attracting people from outside of the area. We can now see that this pattern may be regarded as normal on sites in this region. It is just more visible at Somerford Keynes because of the size of the assemblage.

It seems reasonable to regard the pre-conquest society in this area as one which was interested in acquiring and using objects; unlike, for example, the population in the north which showed little interest in this aspect of behaviour. There is evidence that distinctive regional types were already developing, but that people were also acquiring material from elsewhere. In this area in the mid 40s the Roman army and authorities would thus have encountered a society that was already consumer orientated. How did people respond to the new types of goods that became available?

Table 13.11: origins of the early to mid 1st century brooches at Somerford Keynes and Claydon Pike

Origin	*SK*	*CP*	*Total*
Local or not regional	34	7	41
Possible import	10	4	14
Import	13	2	15
Total	57	13	60

The coming of Rome

It is interesting to speculate when people living on the CWP sites would have noticed they were part of a new political reality. Apart from the possible military *armilla* noted above and a cavalry pendant from Claydon Pike (SF 124; see Chapter 4), the sites provide no evidence in the form of military equipment, for the presence of soldiers in the conquest period. There is an unusually high level of early Roman coinage at Somerford Keynes (see King above), but perhaps that is best seen as a continuation of the deposition / loss habits that led to the unusually high levels of British pre-conquest coinage at the site. The first question to be asked is whether, in the decades following the conquest, the finds provide any evidence that being part of the Roman Empire was having an effect on the lives of the of the people who lived at the CWP sites?

There were changes in the way people ornamented themselves at about the time of the conquest, but it is open to question whether this had anything to do with people responding to political change by asserting certain visual identities. It has been pointed out that during the later 1st century BC to 1st century AD brooches became increasingly visible (Jundi and Hill 1998, 129). Nauheim Derivatives and even Colchester brooches provided little scope for decoration, and were generally left in the colour of the alloy they were made from. Some pre-Conquest forms such as the Langton Down, the Rosette and the Birdlip do offer a larger area for decoration, but as can be seen from Table 13.10, these forms were distinctly in the minority in the region. Hod Hill brooches are definitely a foreign fashion that arrived with the conquest, but were relatively short-lived, going out of use during the later 1st century with some variants disappearing earlier. They were much more decorative both in their shape, and in the fact that they were frequently tinned; they would have been very shiny and eye-catching. Table 13.12 shows the incidence of all the brooches that belong to the mid to late 1st century or the mid 1st to 2nd century. As can be seen, Hod Hill brooches were adopted at all the sites but it is noticeable that they generally form a small part of the assemblage compared to Colchester Derivatives. These were a native post-conquest development that were often more highly ornamented than the earlier Colchester brooches. It could be argued that the post-conquest developments in native brooch types were just the continuation of trends that had started well before the conquest. The new Hod Hill brooches would have been acquired by some people because they fitted into these trends, but they do not appear to have been particularly favoured. The evidence for the adoption of other, more specifically Roman fashions, seems to post-date the 1st century on these sites; which also suggests that fundamental changes did not occur in the mid 1st century.

An interesting feature of Table 13.12 is the fact that at Cirencester, the only military/urban site included, Hod Hill brooches form a much higher proportion of

the assemblage than they do on any of the rural sites. The distinctive Lower Severn T-shape forms also appear to be absent at Cirencester, though well represented elsewhere. A note of caution has to be expressed because the Cirencester figures as published are a summary table, rather than a proper report; and inspection of the online archives of the Corinium Museum (http://www.cotswold.gov.uk/museum/Roman.asp) reveals some Lower Severn T brooches amongst the antiquarian finds, presumably from Cirencester. However, if the figures as published can be taken at face value, they offer the intriguing possibility that in this part of Gloucestershire, urban and rural populations may have favoured visually very distinct brooch types in the mid to later 1st century. If this is correct, then there might be grounds for thinking that the changes seen in the brooches on the native sites were indeed just the result of continuing trends in brooch fashion, rather than any attempt to emulate Roman ways. Whether one should go beyond that, and suggest that either the population at Cirencester, or the native population in the rural sites, were actively manipulating their appearances so as to distinguish themselves from each other, is a matter of personal choice; but it is a possibility. It has been suggested that the growth of Cirencester was as a result of activities of the pre-Roman elite in the area (Clarke 1996, 81). If this was so, there should be no marked differences in the brooch assemblages between it and the surrounding sites; but currently there appears to be one which cannot explained simply by the short-lived military phase.

One element of the finds assemblage that can be explored quite closely for change in the post conquest period is the vessel glass assemblage. Glass vessels were extremely rare in Britain prior to the conquest, and mid 1st-century forms are very distinctive. Unlike coins which continued to circulate for a considerable time after their minting, glass vessel are unlikely to survive for any great length of time. So the presence of a mid 1st-century vessel indicates use on the site during that time, whereas mid 1st-century coins could have arrived many decades later. At these sites, it is only Claydon Pike that has mid 1st-century glass in the form of a drinking cup and an unguent bottle (Chapter 4). At both that site and Somerford Keynes (Chapter 9), however, glass vessels do not really start to be used with any regularity until later in the 1st century when the inhabitants adopted glass bowls and the contents of whatever was commonly shipped in the ubiquitous blue/green bottles. This bowl/bottle dominated assemblage is something often observed on rural sites of the later 1st century, and again hints that serious changes in the material culture used were not happening for some decades after the conquest.

The 2nd and 3rd centuries

Of the CWP sites, it is only Claydon Pike that provides a sufficiently large stratified assemblage to be able explore the changes with time without having to rely on the typological dates of the items (see Chapter 5). There, it is clear that major changes

Table 13.12: mid 1st to 2nd century brooches in selected Upper Thames Valley/Cotswolds sites (Key as Table 13.10)

Brooch name	*SK*	*CP*	*Ciren*	*Kings*	*Froc*
Aesica	4	1	-	1	1
Eye	1	-	-	-	-
Aucissa	3	-	1	4	1
Bagendon	1	-	-	-	1
Hod Hill	27	4	34*	15	5
Colchester Derivative	74	19	36	40	14
Lower Severn T-shape	19	3	-	20	3
Plate-headed T-shape	2	2	-	-	1
Backworth Trumpet	7	-	3**	3	1
Chester Trumpet	11	1	-	9	1
Headstud	1	-	2	1	-
Keyhole	1	-	-	1	-
Equal-ended plate	-	1	-	-	-
Total (mid 1st into 2nd century)	151	31	76	94	28
Total brooches	222	49	96	151	56
As percentage of total brooches	68%	63%	79%	62%	50%

*Includes Hod Hill / Aucissa types unspecified

** all trumpet types

take place between Phase 2 and Phase 3, which would place the transition from a native to a Romano-British way of life to a period after the early 2nd century. The change becomes visible at the time of a major re-organisation of the landscape, and so the timing may be site specific; but many aspects of Phase 3 assemblage at Claydon Pike can be recognised on the other sites, and there are hints that on those too it was happening in the 2nd century.

It is during the 2nd century that specifically Romanised fashions can start to be detected. This is most obvious at Claydon Pike where hairpins and hobnails are not found stratified until Phase 3 (Chapter 5). The former are indicative of women wearing their hair in new fashions, and the latter of the adoption of Roman style shoes made of properly tanned leather. It is possible to show that the hobnail distribution is highly unlikely to have come about by chance (see Digital section 3.4), and so this change in lifestyle seems a real one. Hints can be picked up of something similar happening at other sites. At Somerford Keynes hairpins are seriously under-represented because of biases in collection and survival, but the only hairpin present is of 2nd-century date (Chapter 9). At Whelford Bowmoor the only stratified hobnail belongs to Phase 2 (Chapter 10). A similar pattern emerges at Frocester Court (Price 2000) and Wilcote (Hands 1993; 1998) where the hairpins are concerned. Unfortunately, hobnails are not reported on in sufficient detail at either site for their chronological distribution to be examined. At Frocester Court brooches are regularly recorded as coming from 1st-century contexts (13 out of a total of 61 items), whereas hairpins are not recorded from unequivocal 1st century ones; the earliest comes from a late 1st- to 2nd-century deposit, there is also one from an early 2nd-century context and two from 2nd-century ones (out of a total of 58 items). A similar pattern occurs at Wilcote. Eight of the 44 brooches reported have associations suggesting a 1st-century date; whereas of the 49 hairpins a single example comes from a later 1st- to mid 2nd- century context and 19 have 2nd-century associations. If it is indeed the early 2nd century when Roman fashions and forms of material culture start to become acceptable, then this may have implications for our understanding of the dating of some sites in the area. We might expect sites to become more visible chronologically when their inhabitants start to use more obviously Romanised material, and so in this area that would be the early 2nd century. Sites that apparently start to be occupied then, may have more complex histories. Whelford Bowmoor seems to provide an example of this. It is viewed as primarily a 2nd-century site on the basis of a pottery assemblage that has been described as having a relatively tight chronological range with an unusually high proportion of samian and amphorae (see Brown, Chapter 10). The brooch evidence though, suggests earlier occupation.

An intriguing aspect of the jewellery assemblage at this period is the number of penannular bracelets that have been recovered. Ten were recovered from Somerford Keynes, four from Claydon Pike and two from Whelford Bowmoor. None come from stratified contexts, but where it is possible to suggest dates on typologically grounds, it seems likely they were a 2nd-century development. One from Whelford Bowmoor (SF 225) can be placed within a Roman milieu in that it appears to have the typical mouldings representing an Asclepian snake and thus belongs to an international style of jewellery; though one that seems only to have been adopted in Britain after the mid 2nd century (Cool 2000a, 33). The other penannular bracelets do not belong to international styles and are clearly indigenous, some having very limited distributions in the south-west. In Britain as a whole, bracelet or armlet wearing is unusual in the 2nd or 3rd centuries, and so the regular occurrence of such bracelets on these sites suggests a style of ornamentation that is local. It may hint at the development of specific clothing fashions as, for these bracelets to be appreciated, at least the forearms would need to have been bare. It has to be stressed again that the dating evidence for these objects is not strong, but there does appear to be some hints here that at the same time that people were adopting Roman fashions, new indigenous ones were also developing in this area. Judged by the number of these bracelets that have been found in Cirencester (for example six fully decorated and two with leaf snake's head – data from Cool 1983), this was a fashion shared by the inhabitants of town and country. We are not, therefore, simply looking at the emulation of Roman ways; but rather at a more complex evolution of new identities in the area.

One of the characteristics of the Roman period compared to the later Iron Age or the post-Roman period was that iron was much more widely available than before. This had implications for many aspects of life such as building methods, craft activities and household furnishings. The occurrence of highly specialist tools in the form of crozes used for barrel making at Claydon Pike (Chapter 5) and a metal-working file from Somerford Keynes (Chapter 9), in addition to the normal run of smith's punches, carpenter's chisels and saws etc, shows that these sites developed very sophisticated craft traditions during the Roman period. At Claydon Pike the effect of the increasing amounts of iron can be seen first in building methods with nails and other types of structural fittings appearing in Phase 2 contexts, but the greatest impact is seen in Phase 3 when not only do structural fittings increase tenfold, but there is also an explosion in the quantity and range of craft tools, knives etc (see Chapter 5 and Digital section 3.4). This is also the point at which keys and other security fittings, light fittings etc start to appear. Something similar can be seen at Frocester Court where the occasional iron tool was recovered from a 2nd-century context, but far more came from 3rd-century contexts which was

also the time when security fittings first appeared (Price 2000, 65-84; eight tools and three security items from 3rd-century contexts). More data from well-dated stratified contexts are needed to explore this change; but there are hints that iron did not become plentiful on some rural sites in this area until well into the Roman period.

A recurrent aspect of the finds from the CWP sites is the recovery of lead fittings used to repair pottery. They were present on every site apart from one of the survey sites, and have frequently been found in large numbers. The study of pottery repair on Roman sites is normally the province of the pottery specialists, who have developed measures which look at the number of rivet holes compared to number of sherds to provide an index by which sites can be compared. Riveting rates of *c* 0.05 to 0.2% have been noted in a variety of lowland sites while a higher rate (2.5%) was noted in a highland zone farm in Gwynedd. Normally it is samian that shows the highest level of riveting. Different patterns emerge from the CWP sites. Comparing the pottery and the lead repairs produces riveting rates of 0.12% at Claydon Pike (including records in pottery database which are separate from the small finds); 0.32-0.45% at Somerford Keynes and 0.62% at Whelford Bowmoor. It is possible that the Somerford Keynes figure is inflated because so many small finds were recovered during survey rather than excavation (see Chapter 9), but the Whelford Bowmoor figure suggests high rates may not be exceptional in the area. What is also clear is that it was not only samian vessels that were being curated. At Claydon Pike, for example, sufficient of the pottery was preserved in 22 cases for the fabric to be identified. In ten cases the vessels riveted were made in Black-burnished ware compared to eight cases of samian vessels. There were also seven other coarse pottery vessels with evidence of repair compared to only one item of fine ware and three mortaria (see Booth, Digital section 3.2). Coarse pottery as well as samian was also being repaired at Somerford Keynes.

Elsewhere in the region the repair of both coarse pottery and samian is recorded at Asthall (Booth 1997, 123) and Wilcote (Hands 1993 and 1998, samian nos. 2, 30, 250, 256, 298, 315, 390, 342, 416; coarse pottery nos. 949, 1068, 1108, 1518, 1987). As published at the latter site, more samian than coarse pottery appears to be riveted, but the coarse pottery is probably under-represented because undiagnostic riveted sherds would not have been noted. At Kingscote repair is not an aspect of the pottery that has been studied, but the published lead clamps which retain pottery were clearly repairing coarse pottery vessels (Redknap 1998, 112 nos. 23-4), and rivet holes were noted in the samian (Timby 1998, 37, 241). Pots were clearly being repaired at Frocester Court (Price 2000, 87 nos. 9 -16), but again there is no consideration of this in the pottery report, and so it is not possible to say what types of vessels were being treated in this way.

Because pottery repair is very erratically recorded in the published literature, it is difficult to evaluate the evidence of repair presented by the CWP sites and others in the vicinity. It would appear that the level of coarse pottery repair is unusual, and it is to be suspected that overall the amount of pottery being repaired is high within a broad Romano-British context. Certainly, in my experience of dealing with non-ferrous metal assemblages from comparable rural sites around the country, I have never encountered them so regularly, and in such large numbers, as I have done when working on the CWP sites. The phenomenon clearly starts in the 1st to early 2nd century as repairs have been found in contexts of that date at both Claydon Pike and Asthall. At Claydon Pike very few of the repairs are stratified but small numbers occur in both Phase 3 and 3/4 (Chapter 5). The fact that later Roman vessels such as an Oxford white mortarium in fabric M22 and Oxford Colour-coat ware (F51) were being repaired also indicates the practise was of long duration. At Asthall too it was noted that most of the repairs came from late Roman contexts.

Normally it is assumed that high levels of pottery repair indicate that it was not easy to replace the vessels. This seems unlikely in the case of these sites. They do not appear to be particularly impoverished; they are in an area of abundant pottery supply; and at Claydon Pike the type preferred for riveting (Black-burnished ware) is one of the dominant fabrics at the site, so the vessels are not likely to have been particularly rare. It might be suspected that the reasons for the repair might not have been purely utilitarian, but could have been part of a pattern of behaviour that saw certain vessels being singularised by society. There is a brief, but intriguing aside in the Kingscote report which notes a quarry fill dated to the later 3rd century having a particularly high level of drinking vessels and repaired samian (Timby 1998, 37). Deposits such as this might provide clues as to how the riveted vessels were used; but until there is a more systematic recording of the repair phenomenon, it will be difficult to study it in any detail.

The evidence of the styli suggests that as early as the 2nd century at least some parts of the population on the CWP sites became literate. At Somerford Keynes two styli were recovered from 2nd-century Phase 2-3 contexts (Chapter 9), whilst at Claydon Pike one was found in Phase 3 context with three others being found unstratified (Chapter 5). Evidence for the use of styli on other rural sites in the region in the 2nd to 3rd centuries is also found at Kingscote and Wilcote. At the former site two copper alloy examples were found in a quarry pit fill of the later 2nd to early 3rd centuries (Viner 1998, 187 nos. 2-3); at the latter three examples were recovered from contexts dated to the 2nd century (Hands 1993, 38 no. 16) and the mid to late 2nd century (Hands 1998, 58 nos. 57-8). Other evidence for literacy at the sites includes a possible wax

spatula from Somerford Keynes (Chapter 9) and a part of a wax writing tablet from the Survey site Green Farm (Chapter 12), neither of which come from stratified contexts.

This evidence for literacy should perhaps be viewed alongside large numbers of weights that have been found, mostly for steelyards but also for equal-armed balances. The need to measure commodities accurately might well imply there was a need to record the quantities and keep accounts as well. There were six weights from Somerford Keynes (Chapter 9), five from Claydon Pike (Chapter 5-6) and a total of five from the Survey sites (Chapter 12). On all these sites, therefore, there was a regular need to measure quantities, indicative of commercial or exchange relationships. Unfortunately none of the weights come from stratified contexts, and so it is not possible to trace whether this interest in weighing and measuring was contemporary with the introduction of writing and the paraphernalia that accompanied it. An intriguing find was a weight from an equal-armed balance found at Somerford Keynes as the markings and extant weight are consistent with it being intended to weigh a *sextans* (two *unciae*). This piece explicitly indicates the adoption of Roman standards for weights and measures, in a way that steelyards do not. Though the steelyard itself is a Roman style introduction, there would be nothing to stop a user calibrating it to a native standard. The weight measured by a steelyard relies not simply on the weight of the weight itself; but on the position of the weight on the arm, and which of the two fulcra was being used. For equal-armed balances, by contrast, the weight alone governs the amount measured.

Another interesting feature of the finds assemblage is the presence of military equipment of the later 2nd to 3rd century at both Somerford Keynes (Chapter 9) and Claydon Pike (Chapter 5), and possibly also at one of the Survey sites (Cottage Field, Lechlade (LCF); Chapter 12). Similar material from Cirencester (Paddock 1998, 306) can be fitted into Bishop's model of dispersed military units in towns carrying out policing and similar duties (Bishop 1991). It is possible that when it is found in smaller towns or roadside settlements such as Asthall (Lloyd-Morgan 1997, 80 no. 13) it might also represent such dispersed units. When it is regularly found on rural sites such as the CWP ones, it is perhaps worth questioning whether it is actually reflecting soldiers on active service, and if it is, then it implies a very actively policed countryside (see Chapter 16). Another model, however, might be that advanced by Black (1994) that these items represent the property of retired soldiers returning home after a period of service in the army. In his paper Black used all types of military equipment including weapons and armour as well as belt and other strap fittings. It is a vexed question as to the extent to which a soldier 'owned' his equipment, and could remove it from military control when he was discharged; rather than it going back into a common pool. Helmets, for example, have provided epigraphic evidence not only of reuse by different individuals, but also that they were owned by the unit and not an individual soldier (Bishop and Coulston 1993, 46). There is evidence from graves that belts and their fittings might well have been personal possessions as people are found buried with them. Graves with late 2nd- to 3rd-century belts have been found in a number of provinces (eg Wheeler 1985, 269 no. 15; Petculescu 1995). The later 2nd- to 3rd-century military equipment found on the CWP sites are the types of fittings that come from belts and baldrics; so it is possible that it could be the property of retired soldiers. If we follow the retired soldier model; then the regularity with which the material is found in these sites might suggest that quite a few people in this area could have had the experience of military life in different parts of the province or even empire.

Late antiquity

Late Roman artefacts are only found in quantity at Claydon Pike (Chapter 6). It is clear from the pottery, coins and small finds that there was some 4th-century activity at Somerford Keynes (Chapter 9); but it was on a much reduced level in comparison to the pre- and early to mid Roman activity there; even if allowance is made for the possibility that 4th-century artefacts are under-represented at that site because of the recovery methods. At Claydon Pike, for example, a considerable number of 4th-century bracelet fragments were recovered; but these are the type of find that metal detecting is bad at locating. For the 4th century, therefore, the CWP sites do not provide the range of data across the sites that has allowed more general trends to be picked out for the earlier periods, other than for one curious feature which concerns the incidence of late Roman military equipment.

At Somerford Keynes this material consists of two strap ends, a belt plate, and fragments of a buckle frame and a buckle plate. At Claydon Pike there is a buckle fragment and at Leaze Farm there are two strap ends. All of this material can be dated to the second half of the 4th century and in some cases into the 5th century. In addition a mid 4th-century crossbow brooch found at Somerford Keynes should probably be viewed alongside this material as such brooches appear to have been part of the uniforms for the military and administrators (Swift 2000, 3-4). Gold ones for example were given out by the Emperor as gifts (see for example RIB II.2 no. 2421.43). As with the later 2nd- to 3rd-century material, the question needs to be asked whether this 'military' material reflects an active military presence on the sites (see Discussion, Chapter 17).

There is a very large mount of such equipment at Cirencester which Paddock (1998, 307) has suggested indicates a continuing military presence in the city. It has to be noted, however, that such

fittings are found very commonly on sites in the region where there is no other evidence of a military presence such as at the villa at Frocester (Price 2000, 57 no. 350; 63 no. 475) and the small town at Wanborough (Hooley 2001, 84 nos 51, 53-4). It is also noticeable that some of the belt-fittings in the south-west appear to have developed into forms that did not have a military connection (Swift 2000, 213). The question to be asked is whether this late 'military' equipment indicates troops, or whether it was a fashion statement by the south-western elite who might have taken on late military trappings as part of their costume. It is possible that the presence of cross-bow brooches might be a more reliable indicator of official activity. On sites with an undoubted late military presence such as Caister-on-Sea, Norfolk (Butcher 1993a, 74 nos. 5-12) and Richborough (Hull 1968, 91 nos. 76-83), crossbow brooches tend to occur in some quantity alongside the belt fittings. This is not always the case in sites in CWP region. Cirencester does have a quantity of crossbow brooches (Viner 1998, table 14), and there is also one from Somerford Keynes; but they are missing at Frocester, Wanborough and Claydon Pike despite large quantities of 4th-century finds at these sites. The combination of the belt equipment and crossbow brooch at Somerford Keynes might suggest some form of official presence at the site during the middle of the 4th century, and the coin evidence has a mid 4th-century peak which might support this (see King above and Chapter 9). The belt equipment, however, appears to have *comparanda* that places it slightly later in the century and into the 5th century; a period when the coin evidence is dropping off steeply. It has to be said that the case cannot be proven for a late 4th-century official presence at Somerford Keynes and it could well be that here, as elsewhere in the CWP sites, the belt equipment is reflecting elite fashion rather the presence of the official military.

Conclusions

As will have become apparent in this discussion, the CWP sites show a great deal of uniformity in their material culture, a uniformity they share with other sites in the area. The differences in the scale of work at the different sites, and the different methodologies used, make direct detailed comparison between the assemblages of limited value; but it is informative to compare the large assemblages from Claydon Pike and Somerford Keynes. This is done in Table 13.13 where the late Iron Age and Roman finds are tabulated by function excluding structural and miscellaneous items. The table includes the worked stone artefacts, but excludes the vessel glass fragments and coins. The sites are not directly comparable as Claydon Pike appears to have more sustained occupation in the later Roman period. There are also problems from the various biases in the Somerford Keynes assemblage where for different reasons neither bone nor iron survived well.

Table 13.13: A comparison of the late Iron Age and Roman assemblages from Somerford Keynes and Claydon Pike

Function	*Somerford Keynes*	*%*	*Claydon Pike*	*%*
Personal	315	63	355	44
Toilet	42	8	17	2
Textile	3	1	13	2
Household	13	3	67	8
Recreation	-	-	5	1
Weighing	6	1	8	1
Writing	6	1	6	1
Transport	3	1	11	1
Tools	19	4	93	11
Bone working	-	-	6	1
Metal working	-	-	11	1
Fasteners	72	14	193	24
Agriculture	4	1	8	1

The first thing to notice is the large size of the Somerford Keynes assemblage. Given this was salvage recording over a much smaller area than at Claydon Pike, the quantity recovered is considerable and the number of brooches found were exceptional even in this area of very high brooch use. As the table stands there is a far more domestic feel to the Claydon Pike assemblage with noticeably higher percentages of items being recorded in the household, tools and fasteners categories. The difference in the tools might be due to the problems with the survival of the iron, but the other biases should not materially affect the other categories. Personal equipment, in the form of jewellery and toilet equipment, forms a much higher proportion of the assemblage at Somerford Keynes. Superficially this seems to reflect the normal pattern seen on Roman sites where it is not unusual for personal ornaments to make up two-thirds of a small finds assemblage (see for example Viner 1998, table 17; Cooper 1999, fig 110). Originally, however, the assemblage may have been dominated by them to an even greater extent. Had bone survived, many bone pins could have been expected. At Cirencester, for example, 16% of the personal ornaments were bone pins (Viner 1998, table 17, 297 – excluding shank fragments), while at Claydon Pike, the figure is 7%. It is also likely that large though the brooch assemblage at Somerford Keynes, it is smaller than might have been expected if it had been acquired under more controlled circumstances; penannular brooches, disc brooches and those made of iron are undoubtedly under-represented. Though no penannular brooches were found at Claydon Pike, this does not seem to be the normal pattern in the area. At both Cirencester (Viner 1998, table 14) and Kingscote (Timby 1998, 114-49), for example, penannular brooches make up 9% of the assemblage; whilst at Frocester Court they formed 18% (Price 2000, 33-41). At Somerford Keynes they made up

less than 2% reflecting the difficulty of locating them via metal detecting (see Chapter 9).

The very high incidence of personal equipment at Somerford Keynes is therefore, notable and may give a clue as to some of the activities being carried out on the site. It is precisely this category of find that is often found forming a large part of votive deposits on religious sites (Woodward and Leach 1993, 332, table 20). If it was some type of formal depositional activity that led to the large numbers of personal items here, it could explain the unusual composition of the toilet equipment, where tweezers form a significant proportion – much higher than is normally found on sites in the area. Different types of equipment often seem to have been preferred at particular shrines. At Lydney, for example, large numbers of bracelets were recovered (Wheeler and Wheeler 1932, 82-4), whilst at Great Walsingham, Norfolk, seal boxes formed an important part of the ritual (Bagnall-Smith 1999, 40). If there was a tradition of coming to this site to make offerings, then it would also provide a context for the unusually high levels of native and early Roman coinage found on the site as coins are often another type of votive find. A place where people come and go for particular devotional practices, would also explain the mismatch between the picture painted by the pottery and vessel glass of a relatively modest rural settlement; and the picture painted by the small finds and the coinage of a richer community. People may never have lived at the site in any great numbers, instead they could have visited it from time to time; and the focus of their visit may well not have been a built shrine but rather sacred woods or the like.

The finds from the CWP sites have told us much about the occupation at the different sites, but possibly more importantly they provide various patterns that would be well worth further more systematic research. The people in this area became voracious consumers of brooches in the late Iron Age and the brooch wearing habit continued well into the 2nd century. The brooches include many types that appear to have strongly localised distributions; detailed study of these might well provide a useful aid for understanding the relationships between the different communities in the area. The possibility that there was a noticeable difference between those worn by the urban population at Cirencester and those in the surrounding rural sites is particularly intriguing. As the 1st century progressed, brooches became increasingly showy and decorative. They would have been a fairly obvious visual sign to the observer. Who wore what and when may well have gone beyond the whims of fashion; it could have been related to age, sex, tribe, clan or any combination of these factors. There can clearly be quite major differences between assemblages over relatively short distances. The variant of the Polden Hill Hull 98 that is so common at Somerford Keynes, for example, is relatively rare at Claydon Pike. We cannot start to explore this until we have a good understanding of the distribution of the different variants. Such a survey might also help to identify sites that had a pre-Roman origin, given the frequent mis-match in dating evidence between the pottery and the brooches. The curation of pottery vessels in this area is also something that needs investigation. At a basic level we need to know the types of vessels and wares that were being repaired and they types of associations they have. Was this part of everyday life, or were they for special rites for which only particular vessels could be used? Are the large numbers of lead repairs found at Somerford Keynes, for example, another clue to the fact that it was a focus of devotional activity.

The possibility that one of the indicators of ritual activity in this area might be the incidence of lead pottery repairs is, admittedly, a strange one; but it shows what may emerge if there is the possibility of studying a large range of finds from a variety of sites in the same area as has been possible here. The quality of the data has been variable, but useful patterns have emerged. Our understanding of how material culture was manipulated in Roman Britain would benefit greatly if we had more area surveys like this one.

Chapter 14
The Environment

by Claire Ingrem and Mark Robinson

COTSWOLD WATER PARK FAUNAL REMAINS IN THEIR REGIONAL CONTEXT

by Claire Ingrem

Introduction

The recovery of significant quantities of faunal remains from four individual sites, Warrens Field (Chapter 3) and Longdoles Field (Chapters 4-6) at Claydon Pike, Somerford Keynes (Chapter 9), and Thornhill Farm (Jennings *et al.* 2004), has allowed for detailed analyses and investigations of the various aspects of human-animal interactions at the site level. In this section, these results are integrated with those from contemporary sites in the Upper Thames Valley and southern Cotswold region, to formulate a picture of the development of animal husbandry regimes and land use from the middle Iron Age through to the late Roman period.

Pre-middle Iron Age

Animal bone dating to earlier periods is fairly scarce, however a few sites have produced small assemblages which provide an indication of animal husbandry practices in the region prior to the middle Iron Age. At Gravelly Guy (Mulville and Levitan 2004) animal bone recovered from late Neolithic and early Bronze Age features was dominated by the remains of cattle with pig the second most numerous species. Similarly, the small sample from Neolithic deposits at Barton Court Farm (Wilson 1986) produced an overall abundance of cattle and pig, a pattern considered characteristic of the late Neolithic of southern Britain (Tinsley and Grigson 1981). The high proportion of pig to sheep at sites dated to this period may reflect the exploitation of regenerated woodland which followed the clearance of forests during the early Neolithic (Smith *et al.* 1981). A small assemblage of animal bone dated to the early Bronze Age was recovered from the site of Spratsgate Lane, Somerford Keynes and although none of the fragments were unidentifiable to species, the predominance of large sized mammal suggests again that cattle were the most frequent taxa (Ingrem unpublished).

Middle Iron Age

The samples available from middle Iron Age deposits are fairly small but it is clear that the assemblages recovered from the three gravel islands (1-3) in Warrens Field at Claydon Pike contain a high proportion of cattle and sheep/goat, as do middle Iron Age deposits from the site of Spratsgate Lane, Somerford Keynes (Ingrem unpublished). A similar general pattern of species representation has been recognised at other contemporary Upper Thames Valley sites, suggesting that environmental conditions were suited to both cattle and sheep/goat husbandry. The small middle Iron Age assemblage recovered from Thornhill Farm displays a particularly high ratio of cattle and horse and whilst there is little doubt that cattle played a major role in the economy, poor preservation, in combination with sample size, may have deflated the frequency of caprines and similar size animals.

This high frequency of cattle contrasts with the pattern generally seen at Iron Age sites in Wessex where assemblages tend to be sheep/goat dominated: at Danebury caprines comprised 70% of the assemblage (Grant 1984b). It has long been suggested that this is a reflection of differences in the local environment; the chalk downlands of Wessex being ideal for sheep farming whereas the lush pastures of the Thames valley gravels are more suited to large-scale cattle rearing (Maltby 1996, 20). Interestingly, caprines are more numerous than cattle in the small assemblage of animal bone recovered from Guiting Manor Farm (Clark and Chapman unpublished), a site located on oolitic limestone in the northern Cotswolds, implying that animal husbandry practices were indeed dictated by the local environment. At Gravelly Guy (Mulville and Levitan 2004), cattle are only three-quarters as abundant as sheep/goat; this site is located on the second gravel terrace of the Thames and the lower abundance of cattle may therefore reflect it's slightly higher position and dryer landscape. The low frequency of pig contrasts with evidence from earlier periods but is also usual for sites of this period (Hambleton 1999, 46). As pigs compete with humans for grain (Harris 1997) their scarcity could reflect a concentration on arable production. In addition, an increase in the amount of arable land under cultivation may have required the removal of woodland thereby reducing the amount of available pannage, particularly close to settlements.

The suitability of the local environment for providing high quality grazing for cattle and suffi-

cient water to maintain large herbivores implies that it would have easily met the requirements of equids with their ability to survive on poorer fodder and in drier conditions (Clutton-Brock 1992, 20). However, except in areas of particularly high quality mixed grasses, they need to range over large areas and remain in relatively low numbers (Clutton-Brock 1992, 20). The relatively high proportion of horse at Cotswold Water Park sites and presence of sub-adult animals renders it highly probable that breeding took place locally. It has been suggested that equids were not generally bred at occupation sites during the Iron Age rather that feral animals were periodically rounded up (Harcourt 1979, 158). In light of the earlier evidence for the intensification of arable production, it seems unlikely that feral equids would be afforded grazing on the fertile valley soils but instead roamed less productive areas, higher up the valleys. Alternatively, it is possible that some communities specialised in horse breeding (Grant 1984b, 522), a suggestion supported by evidence at Rooksdown (Powell and Clark unpublished), Hampshire where the remains of male and female horses ranging in age from foetal to neonatal were recovered. In such a scenario, high quality grazing would need to have been set aside to ensure an adequate supply of high quality fodder and it may be that, as the predominance of adult horses suggests, their value as working animals providing traction and transport (Maltby 1996, 23) was sufficient to warrant this.

Mortality profiles of cattle and sheep/goat from Claydon Pike Warrens Field (Chapter 3) are also typical of other Upper Thames Valley assemblages; the scarcity of very young and very mature animals indicative of a mixed economy in which cattle and sheep/goat were raised primarily for meat but also for secondary products. At Gravelly Guy, where 40% of cattle were slaughtered between 8 and 30 months the preponderance of prime meat animals was interpreted as indicating a move towards a meat economy, the adult group representing animals that had reached the end of their working/milking lives. Similarly, at Spratsgate Lane, evidence for the cull of bull calves in the first autumn or winter is suggestive of non-intensive milking. A mixed-husbandry strategy also appears to have been employed for caprines; at the Warrens Field site indicated by the culling of immature animals to provide good quality mutton, and the keeping of adults to provide secondary products. Similarly, at Gravelly Guy a peak in mortality occurs at 6-12 months followed by the regular slaughter of adults peaking toward 4-6 years. It has been suggested (Sykes, Chapter 3; Hambleton 1999) that the absence of foetal and neonatal bones could signify the practice of a transhumant strategy whereby animals were grazed away from the settlement at the lambing/calving season. In light of evidence for neonatal cattle and caprines at Spratsgate Lane and the possibility that poor conditions for bone preservation may equally explain their absence, this must remain speculative.

There was no evidence for hunting or fishing at Warrens Field, Claydon Pike where wild animals were represented solely by a single specimen belonging to buzzard/kite. Present day habitat preferences of these birds (Heinzel *et al.* 1998, 84, 94) hint to at least some deciduous woodland remaining close to the site. Scarcity of wild animals is usual in assemblages of this period, suggesting that hunting took place only on a small scale. This is evidenced by the assemblage from Gravelly Guy which contained just a few red and roe deer specimens and five heron bones, possibly from the same bird. Two wildcat specimens were also recovered. Although rare in the Iron Age, wildcat have been recorded from a few sites, including Danebury, which leads to the suggestion that cat domestication originated at this time (Harcourt 1979). Other animals present in small numbers at Gravelly Guy include goose and fish, the last being represented by a few bones, mostly from a single skeleton, that were not identified to species.

Late Iron Age/early Roman period

Two of the sites discussed earlier in this volume produced animal bone assemblages dating to the late Iron Age/early Roman period: Longdoles Field, Claydon Pike (Chapter 4) and Neigh Bridge, Somerford Keynes (Chapter 9). In addition, the nearby site at Thornhill Farm (Jennings *et al.* 2004) also produced an assemblage of this date. Despite some inter-feature variation in taxa representation at the Longdoles Field site, aggregated results indicate the predominance of cattle followed by sheep/goat, horse and pig, a pattern characteristic of other Upper Thames Valley sites (Hambleton 1999). The frequency of cattle increases at both Longdoles Field, Claydon Pike and Thornhill Farm is in line with the national trend, which has been associated with the effects of Romanisation (King 1978; 1991). However, as discussed by Sykes (Chapter 4) the frequency at the Longdoles Field site does not reach those seen at 'typical' Romanised settlements and the increase may simply reflect a continuing regional specialisation. Dating of the deposits from Somerford Keynes was less coherent with the animal bone assigned to the broader categories of late Iron Age/Roman and Roman but again, a high proportion of cattle is apparent. The frequency of horse is significantly higher in deposits assigned to the late Iron Age/Roman period than in the purely Roman deposits, consequently cattle and caprines appear more numerous in the later. Pig on the other hand, becomes twice as numerous in the Roman deposits, a pattern mirrored at the Claydon Pike sites. A similar increase in the frequency of cattle and pig was noted at Gravelly Guy, but here caprines continue as the major taxa throughout its Roman occupation. A high frequency of pig is another

feature associated with the process of 'Romanisation' but again levels at the sites mentioned above remain more suggestive of 'native' sites.

Gravelly Guy, with its predominance of caprines may have been less suited to cattle husbandry than the lower-lying settlements of Claydon Pike and Somerford Keynes. In contrast, sheep/goat were poorly represented in the assemblage from Thornhill Farm. Poor preservation and recovery strategy are likely to have been major factors affecting taxa representation at this site but there is little reason to doubt that cattle were the mainstay of the economy. Caprine frequency at Somerford Keynes is in-between that at Thornhill Farm and Gravelly Guy suggesting the existence of slightly different farming strategies, each probably most suited to maximising the return from the available land. As Levine (2004) points out, the high frequency of cattle and horse at Thornhill Farm is probably also due to local environmental conditions. Both taxa require a considerable supply of water and both site location (close to the Upper Thames floodplain) and the high frequency of Scarabaeoid dung beetle indicate that some of the surrounding land is likely to have been wet and marshy. On wet sites, sheep are prone to foot rot and there is evidence for the presence of the snail *Lymnea truncalula*, the host of sheep fluke, in early Roman deposits at Thornhill Farm. It would therefore not be surprising if large-scale sheep farming was considered non-viable on low-lying sites.

The considerable drop in the average age of slaughter evidenced at the Longdoles Field site with over half the cattle culled before reaching 15-26 months of age points to the importance of meat production. The preponderance of adult females indicates that it was mainly surplus bullocks that were slaughtered for meat, females being kept to provide milk. At Thornhill Farm, Levine (2004) also notes the large proportion of cattle slaughtered before reaching adulthood and although ageing data for cattle from late Iron Age/Roman deposits at Somerford Keynes is slightly ambiguous, results again suggest that meat production was important. There may have been some variation between the age of slaughter at individual sites, cattle at Somerford Keynes appear to have been culled at the slightly older age of 18-30 months (although this might be to some extent, reflect the mixing of late Iron Age and Roman material).

In contrast, caprines were kept to an older age at both Longdoles Field, Claydon Pike (32% surviving into adulthood) and Somerford Keynes, indicating the increasing importance of manure and wool production. Meat production was probably still the primary objective at this time despite a move towards an increasing emphasis on secondary products. Interestingly, data from purely Roman deposits at Somerford Keynes shows the majority of the caprine population survived into adulthood, clear evidence that secondary products (milk, wool, traction and manure) had become more important over time. Caprines at Gravelly Guy display a more marked kill off of animals aged between 2 and 3 years during the Roman period suggesting that here, raising animals for meat production was important. There is evidence for cattle and sheep breeding at Thornhill Farm in the form of neonatal and subadult remains although at the Longdoles Field site the only definite evidence for animal rearing on site came from foetal bones belonging to pig.

As would be expected for an animal kept primarily to provide meat, the majority of pigs at sites discussed here, appear to have been culled prior to maturity. At Gravelly Guy, the emphasis on sub-adult animals during the Iron Age suggested a specialist interest in the best meat animals, unsurprising given their high fecundity and status as providers of meat and hides, as there would have been no advantage to keeping pigs alive to an older age.

Scarcity of immature equids remains and the sex profile of the large sample from Thornhill Farm led Levine (2004) to discount the possibility that equids were bred at the site. Instead it is suggested they may have been managed as semi-feral herds, as occurs today with the New Forest ponies. This need not rule out the possibility that some degree of selective breeding was practised, as suggested by the 100 mm increase in withers height at the Longdoles Field site. Interesting, about a third of the horses at Gravelly Guy were juveniles and there is evidence for one very young animal, strongly suggesting that horses were being bred at some sites in the region. Two species of equid E. caballus and E. Asinus, were identified at both Thornhill Farm and the Longdoles Field, Claydon Pike site and the possibility has been considered that hybrids of the two were also present (Levine 2004). All equids are likely to have been valued primarily as working animals; evidence for partial disarticulation and butchery marks at many sites suggests that at least some horses provided meat and hides but this may have occurred after an animal had reached the end of its working life. Certainly, the fact that horse bones were generally less comminuted suggests that they were not processed for food in the same manner as cattle.

Hunting appears to have continued on a small-scale. Although a range of wild animals was present at Longdole's Field, only weasel, quail and pigeon are likely to represent animals deliberately caught for their fur/feathers and meat. A few bones belonging to red and roe deer were found at Gravelly Guy and Somerford Keynes and the later site also produced a duck bone. Other than a single heron bone, no wild mammal remains, nor those belonging to bird or fish, were recovered from Thornhill Farm. A wider variety of wild animals was recovered from Iron Age deposits at Barton Court Farm including cat, red deer, fox, duck, and a few fish bones belonging to pike, eel and cyprinid.

During this period several sites produced a small numbers of bones belonging to domestic fowl including Claydon Pike Longdoles Field, Somerford Keynes, Barton Court Farm and Gravelly Guy. This is not unusual, domestic fowl bones have been found at contemporary sites although the earliest authenticated find is from late Iron Age deposits at Danebury (Coy 1984). At Gravelly Guy, the scarcity of bones belonging to domestic fowl led to the suggestion that the settlement was not particularly Romanised (Mulville and Levitan 2004). A few bones belonging to domestic duck and goose also came from the Longdoles Field site at Claydon Pike, taxa present at Gravelly Guy but where it is not known if the remains belong to domestic or wild forms.

Roman activity during the 1st/2nd to 3rd centuries

Longdoles Field, Claydon Pike was the only one of the four sites to produce animal bone assigned specifically to the 2nd and 3rd centuries AD (Chapter 5). As in previous phases, aggregated results indicate a slight but consistent increase in cattle at the expense of both caprines and pig. This trend is also visible in the small assemblage from the 1st- to 2nd-century Roman house at Barton Court Farm where it was suggested (Wilson 1986) that such changes reflect the continued effects of the Roman economy, a topic discussed in some detail earlier in this volume by Sykes (Chapter 5).

Changes in the mortality profiles of cattle and caprines are also apparent. At the Longdoles Field site, caprines were slaughtered at a slightly older age than in the preceding period, with 75% of the population surviving past 1-2 years perhaps indicating an increased dependence on wool and manure. Growing importance of secondary products is also reflected by cattle mortality, which shows an increase in the number of adult animals and a decrease (from 50% to 35%) in the proportion of cattle slaughtered by 15-26 months, a trend also seen at Barton Court Farm. By comparison to the earlier periods a much higher percentage (64%) of the adult cattle at the Longdoles Field site were male, which is interesting considering that an abundance of prime-aged females has been noted in Roman towns (Maltby 1994). This suggests that females were preferentially selected for urban provisioning whilst oxen and bulls were retained on rural sites, most probably for use in traction. A shift in the sexual composition of the herd could explain the increase in cattle size noted at the Longdoles Field site, although the other domesticates also increased in size at this point, indicating that other factors may be responsible. It seem likely that new animal breeds appeared in this period, but whether they were imported from the continent or selectively bred from native stock is difficult to ascertain. Certainly animals were now bred on site, as is indicated by the presence of foetal/neonatal cattle and caprine bones.

All the changes seen at Longdoles Field, Claydon Pike probably represent a post-conquest increase in production and commercialism, with the development of urban markets and a standardisation of rural-urban provisioning. At Barton Court Farm, the comparatively small sample recovered from 1st-2nd-century deposits led Wilson (1986) to consider the possibility that animals were kept in reduced numbers, perhaps due to an increase in arable land at the expense of pasture. An increase in the amount of arable land necessitated by the post-conquest rise in population (P Dark 2000, 82), has also been used to explain the decline in the frequency of pigs and increasing emphasis on cattle. The removal of woodland would have reduced the pasture available to pigs whilst the need for strong draught animals could have dictated the decision to retain male cattle and import or breed larger animals. Sheep/goat manure, higher in nutrients than that of cattle, would have been valued as fertiliser to improve the soils of the river gravels and may explain the keeping of caprines to an older age, and the increase in numbers evidenced at the Longdoles Field site.

An increased frequency and range of wild taxa was recovered from Longdoles Field with red deer, roe deer, hare, badger, fox, field vole, mole, duck, coot, grey heron, dunlin, snipe, blackbird, song thrush, crow and eel all represented. As Sykes (Chapter 5) states, 'this is clear evidence for the uptake of hunting, fowling and fishing'. The proportion of domestic fowl also increases to 3% and it has been suggested that this widening of the resource base resulted from a post-conquest change in dietary preferences, especially since hunting and the consumption of domestic birds are thought to have been traits of the Roman lifestyle (King 1991). According to Millett (1990), the uptake of hunting probably has more to do with a change in the social structure, the new elite having time to hunt and a desire to display wealth.

Late Roman activity

Longdoles Field, Claydon Pike also provides evidence for the continuation of on-site animal husbandry into the late Roman period and the intensification of trends started in earlier periods (see Chapter 6). The average age at death of cattle and caprines continue to rise indicating a concentration on secondary products; predominance of male cattle also suggesting definition of the agricultural economy and rural-urban provisioning systems. Similar patterns are exhibited by the 3rd-5th-century villa deposits from Barton Court Farm, where Wilson (1986) proposes that production concentrated on cereals, followed by domestic animal meat, dairy, hides, wool, game and fish. The possibility that salted beef was produced at the Longdoles Field site is hinted at by the high density of scapulae, many of which exhibit butchery marks indicative of smoking or brining.

The most notable change at Longdoles Field, Claydon Pike is the presence of foetal and sub-adult equid specimens which provides clear evidence that equids were now raised on site. This is not so unusual in the Roman period although horse breeding does not appear to have been ubiquitous; despite the increased frequency of horse in the small sample from Thornhill Farm and Barton Court Farm there was no evidence to suggest on-site breeding. The scarcity of butchery marks at the Longdoles Field site and the frequency of complete and articulated remains led Sykes (Chapter 6) to suggest that horses were treated differently to the other major domesticates. The recovery of an articulating hind limb, which appears to have been deposited complete with flesh, and the general abundance of hind-limb bones found both here and at contemporary sites, hints at some form of 'ritual' deposition.

The continued increase in the range and frequency of birds suggestive of a broadening dietary spectrum can also be seen in 3rd–5th-century deposits at Barton Court Farm where the numbers of domestic fowl increase and domestic duck and geese appear along with a wide range of wild birds, of which at least dove and plover were probably eaten. The presence of freshwater fish, perch, pike and eel suggest the small-scale exploitation of local waterways and the inclusion of fish in the diet.

Conclusion

Animal husbandry practices in the Cotswold Water Park and surrounding area appear to have developed in response to local environmental conditions and the pressures exerted by socio-economic forces. Although, displaying a different pattern to that seen at Wessex sites during the Iron Age, sites in the southern Cotswold region may have followed individual trajectories, in response to immediate environmental conditions. Since Neolithic times, cattle appear to have been kept in considerable numbers and despite the replacement of pig by caprines during the Iron Age, continue as the dominant species at most sites throughout the Roman period. In spite of the abundance of cattle in pre-Roman deposits and suitability of the local environment for cattle farming, their frequency does not increase to the levels reached at many settlements during the Roman period. Hence, whilst many of the changes in animal husbandry follow the nationwide trends generally attributed to the socio-economic influences of Romanisation, there are hints that these were essentially native sites. The post-conquest changes in the age, sex and size of domestic animals are therefore probably multi-causal in origin but appear to reflect the widespread agricultural intensification associated with population expansion. As a result, wooded areas were probably turned over to ploughland as greater areas of land were taken into arable production.

THE ENVIRONMENTAL ARCHAEOLOGY OF THE COTSWOLD WATER PARK

by Mark Robinson

Introduction

The Cotswold Water Park comprises an area extending about 20 km westwards primarily along the northern side of the River Thames from its confluence with the River Coln at Lechlade almost to Kemble south of Cirencester. In places, it is over 5 km wide, and is a low-lying area, much of which, before the onset of the major gravel extractions which created the Water Park, was First Gravel Terrace of the Thames and its tributaries. The Cornbrash Limestone of the lower slopes of the Cotswolds rises to the north, the Roman road of Akeman Street running westwards along the Limestone to Cirencester (see Fig. 1.3). There are some exposures of Oxford Clay between the Limestone and the First Terrace, while there is an area of the higher Second Gravel Terrace to the north from Lechlade. To the south of the Thames are further gravels, then Jurassic geology including Oxford Clay. The First Terrace is crossed by the Coln and various streams which drain from the Cotswolds into the Thames. The terrace is also dissected by shallow palaeochannels which in places resulted in the formation of islands of gravel terrace surrounded by broad areas of floodplain, but elsewhere the expanses of terrace are more extensive and the palaeochannels are narrow. There are some higher areas of Oxford Clay and Second Gravel Terrace between the Coln and the Thames.

The modern soils of the First Terrace range from the brown calcareous loams of the Badsey Series to the gleyed loam soils of the Kelmscot Series where drainage is impeded (Jarvis 1973). The floodplain has a soil of gleyed alluvial clay and experiences inundation some winters. Occasional severe floods extend onto parts of the gravel terrace. However, as will be outlined below, major hydrological changes have occurred to the floodplain during the Flandrian.

Much archaeological excavation has been undertaken in the area of the Cotswold Water Park over the past 25 years, particularly in advance of gravel extraction but also related to road-widening along the route of Ermin Street, which runs south-east from Cirencester across the Park (Fig. 1.2). The largest of these excavations was at Claydon Pike, at the eastern end of the Park, which is the main subject of this volume (see Chapters 3-8). However, important results were also obtained from the nearby site of Thornhill Farm, published separately (Jennings *et al.* 2004). Smaller excavations which are considered include Neigh Bridge, Somerford Keynes (Chapter 9), Whelford Bowmoor (Chapter 10) and Stubbs Farm, Kempsford (Chapter 11), and Latton "Roman Pond", Shorncote Quarry and Kempsford Multi-Agg Quarry (Mudd *et al.* 1999; Brossler *et al.* 2002; Barclay and Glass 1995; Digital section 8.4). It is not possible to obtain a complete

Flandrian environmental sequence for the Park from these sites but it is possible to show aspects of change and to obtain a more detailed picture for the Roman period.

Glacial environment

The First Gravel Terrace was laid down during the cold conditions of the Late Devensian and largely comprises limestone derived from the Cotswolds. Just before the end of the Late Devensian, river flow of the Thames became confined to fewer, more deeply incised channels and part of the terrace was reworked, lowering the surface level (Robinson and Lambrick 1984). Some of the shallower channels crossing the gravel terrace ceased to flow, leaving swampy hollows with still-water pools. That this change occurred under cold conditions was shown by the presence of seeds of *Betula nana* (dwarf birch) in organic marl in one of the shallow palaeochannels between two of the gravel islands at Claydon Pike. It is a low-growing arctic/highland-moor shrub. The overall picture of the Late Glacial (Late Devensian) landscape of Claydon Pike, which is probably applicable to the remainder of the Cotswold Water Park area, was of tundra conditions. The landscape was open, with a sparse herb cover to the gravel surface and some areas of dwarf birch scrub up to 1 m high. There were many small bodies of water fringed with sedges and Chara sp. (stonewort) grew in the deeper pools in the palaeochannels.

Early prehistoric environment

Climatic amelioration was suggested by the replacement of *B. nana* seeds by those of a tree species of birch in peat above the organic marl in the palaeochannel. This deposit possibly corresponded to the start of the Flandrian around 10,000 BP. Unfortunately other evidence for the early to middle Flandrian environment of the Cotswold Water Park was lacking. Pollen analysis of organic sediment from a palaeochannel? on the floodplain of the River Leach to the north of Lechlade, which was dated to 9510±120 BP (Birm-1169), gave evidence of a landscape which was largely open but in which pine and tree birch were becoming established (Crabtree 1985, 46-8). However, the presence of some pollen of *Juniperus communis* (juniper) and *B. nana* showed that the Late Glacial vegetation had not entirely disappeared.

Evidence from elsewhere in the Upper Thames Valley suggested the development of complete tree cover and woodland succession on the floodplain and First Gravel Terrace (Allen and Robinson 1993, 135-8). By 6540 BP (Flandrian II), alder-dominated woodland was established on the floodplain, while oak and possibly lime woodland, with a hazel understorey, grew on the First Terrace. Pollen evidence from Daisy Banks Fen, Barrow Hills, near Abingdon, suggested lime and elm predominated on the Second Gravel Terrace, with oak and hazel also present, at 4350-3750 cal BC (circa 5240 BP)(OxA-4559), shortly before the Elm Decline and the start of the Neolithic (Parker 1999, 260-3).

Further downstream, the valley floor of the Upper Thames Valley experienced much Neolithic activity. Neolithic tree-throw holes on the floodplain at Drayton, with evidence of burning, appear to have been related to clearance (Robinson 1992a, 50-51) and at Barrow Hills, major clearance occurred in the early fourth millennium cal BC and conditions remained relatively open thereafter (Parker 1999; Robinson 1999a). However, Drayton, for example, experienced episodes of clearance and regeneration. The picture that has emerged of the landscape on the gravels of the Middle and Upper Thames throughout the Neolithic is of a mosaic of clearings of various sizes set against a background of old woodland. Clearances were not necessarily permanent even when associated with major monuments such as the Drayton Cursus, indeed it is possible that most became overgrown with scrub or returned to woodland (Robinson 1999a, 272). There was certainly some Neolithic activity around the area of the Cotswold Water Park, for example there is a later Neolithic monument complex including a cursus on the Second Gravel Terrace to the NW of Lechlade and the Buscot Wick Cursus lies to the south of the River Cole near to its confluence with the Thames (Barclay *et al.* 2003, 190-213). Evidence of possible Neolithic impact on the environment within the area of the Cotswold Water Park was limited to undated tree-throw holes with signs of burning at Shorncote Quarry (Brossler *et al.* 2002, 41-2) and Stubbs Farm, Kempsford. Neolithic flints are known from the area and Neolithic and Bronze Age ring ditches were excavated at Shorncote Quarry, Somerford Keynes (Barclay and Glass 1995). Neolithic activity in the area does, however, seem to have been less than further downstream in the Upper Thames Valley.

An organic deposit in a palaeochannel of the Thames at Buscot Lock, about 5 km east of Claydon Pike, formed under woodland conditions similar to those in the Water Park during the Neolithic (Robinson and Wilson 1987, 31-2). A radiocarbon date of 2900-2300 cal BC was obtained from an alder log within the sediments. Pollen and macroscopic plant remains suggested dense alder woodland alongside the river. The deposit contained many fruits of *Tilia cordata* (small-leaved lime), an insect-pollinated tree which does not produce large quantities of pollen. When differential pollen productivity is taken into account, the pollen can be interpreted as showing lime-dominated woodland on the drier ground. This appears to have been the major woodland type on better-drained soils over much of Southern England and the Midlands in the later Mesolithic and the Neolithic (Greig 1982). The terrestrial insect fauna from the Buscot deposit was characteristic of ancient woodland. Bones from Buscot gave evidence of some of the larger wild mammals which

lived in the woodland, including red deer and the now-extinct wild cattle, the aurochs.

Human activity was also occurring at Buscot. The bones from Buscot included a human femur and bones of domestic cattle. Pollen of *Plantago lanceolata* (ribwort plantain) and seeds of *P. major* (great plantain) suggested that there were small open areas, while Scarabaeoid dung beetles from the genera *Geotrupes*, *Aphodius* and *Onthophagus* were probably feeding on the droppings of domestic animals. Light-demanding thorn shrubs, such as *Prunus spinosa* (sloe) and *Rhamnus catharticus* (purging buckthorn), which were represented by their seeds, probably fringed the clearings. Crop remains were absent from Buscot but gathered woodland food plants, particularly hazel nuts, were utilised alongside cultivated cereals during the Neolithic (Moffett *et al.* 1989).

The degree of clearance on the gravel terraces and floodplain of the Upper Thames Valley during the early and middle Bronze Age remains uncertain. Many of the ring ditches which have been excavated further downstream from the Water Park tend to contain a layer of fine sediment above their primary silting, which has been interpreted as resulting from a long stable grassland phase (Robinson 1992a, 53). There is evidence for large permanent open areas on the Second Gravel Terrace at the monument complexes of Barrow Hills, near Abingdon and the Devil's Quoits, Stanton Harcourt (Robinson 1999a, 272-3). However, some areas of floodplain certainly retained their tree cover into the Bronze Age, for example parts of the lower Windrush floodplain (Robinson 1999a, 273). Within the area of the Cotswold Water Park, a cremation associated with a ring ditch at Shorncote Quarry, Somerford Keynes contained a tuber of *Arrhenatherum elatius* (onion couch grass), a grass of abandoned arable land and ungrazed pastureland which has often been found in Bronze Age cremations (Robinson 1995). A few cereal grains were also present in cremations from this site. Other parts of the Water Park remained wooded until the late Bronze Age, for example Latton "Roman Pond" (Scaife 1999).

Clearance was probably complete in the main valley of the Upper Thames downstream of the Cotswold Water Park, although clearance was still taking place on the floodplains of some of the tributaries, in the late Bronze Age (Robinson 1992a, 53). Agricultural intensification seems to have been occurring on the gravel terraces during this period. The pit alignments at Butler's Field, on the Second Gravel Terrace to the north of Lechlade (Boyle *et al.* 1998, 13-18) and in the Water Park at Somerford Keynes Cotswold Community (OA 2003) were perhaps features of the division of the landscape for agriculture. Around Latton "Roman Pond" oak-lime-hazel woodland was being cleared at about 1376-929 BC (NZA-8579) although some oak-hazel-alder woodland and scrub remained (Robinson 1999b; Scaife 1999). There was also evidence for persistence of some woodland in the late Bronze Age at Shorncote Quarry on the First Gravel Terrace (Robinson 2002). A well, dated to 1110-811 cal BC, in a Bronze Age settlement, became overgrown by trees of *Acer campestre* (field maple) following its abandonment, although insect evidence suggested some grazed grassland as well as mixed woodland in the wider catchment.

Even though the area of the Cotswold Water Park was perhaps not fully cleared until the end of the late Bronze Age, progressive clearance and agricultural intensification were causing a change in the hydrological regime of the floodplain of the Upper Thames (Robinson 1992a 55; 1992b). The floodplain soil showed a greater similarity to the soil of the First Gravel Terrace and there was only a thin covering of soil over the floodplain gravel until the Iron Age. During the Neolithic and much of the Bronze Age, the water table of the floodplain was low and little or no flooding was taking place (Robinson and Lambrick 1984). However, the water table rose in the late Bronze Age. This was manifest within the Cotswold Water Park at Latton "Roman Pond" (Robinson 1999b, 497-500). The "Roman Pond" proved to be a shallow Pleistocene palaeochannel in the top of the First Gravel Terrace. The gravel bed of the channel showed involutions characteristic of tree-throw holes which cut a thin mineral soil overlying the gravel. These features were overlain by fen peat, the base of which was dated to 1376-929 cal BC (NZA-8579). The palaeochannel had probably been dry throughout most of the Flandrian and trees grew in a terrestrial soil on its bed. A rise in water table in the late Bronze Age resulted in the death of the trees and subsequently the formation of peat.

Iron Age environment

By the start of the Iron Age, around 650 BC, the gravel terraces and floodplain of the Upper Thames Valley, in all probability including the Cotswold Water Park, presented a fully agricultural landscape. At Claydon Pike, the houses and enclosures of the middle Iron Age settlement of Phase 1 (*c* 3rd – 1st century BC) were situated on three gravel islands separated by tributary palaeochannels (see Chapter 3). There was an extensive area of First Gravel Terrace to the north-east of the settlement, while the tributary palaeochannels opened into a broader area of floodplain to the south. Palaeoenvironmental evidence was limited by the lack of waterlogged sediments but mollusc evidence suggested dry open conditions on one of the islands. The floodplain was not as wet as the palaeochannel at Latton and fen-peat formation did not occur. Neither was there any evidence of flooding, although a particularly low-lying area of floodplain downstream at Yarnton, which comprised the bed of a shallow Late Devensian channel, experienced the onset of seasonal flooding in the Iron Age (Robinson forthcoming).

The bones and charred plant remains showed the occupants of the settlement were using the products of a mixed agricultural economy. Cattle and sheep were the main domestic animals, followed by pig and a few horses. Spelt wheat predominated amongst the cereal remains but hulled barley was also present. There was a little chaff of emmer wheat and a single rachis internode of free-threshing wheat but these need have been no more than minor components of the wheat crop. A few grains of oat were more likely to have been from wild oats growing as weeds. The domestic animals and crops were very much the familiar range known from the Iron Age of the Upper Thames Valley, for example the settlement on the Second Gravel Terrace at the Ashville Trading Estate, Abingdon (Jones 1978; Wilson 1978), indeed they are the usual domesticates for much of Southern England during the Iron Age (see Ingrem above). As at Ashville, the kill-off patterns for the cattle and sheep suggested the importance of secondary products from these animals. The weed seeds were interpreted as mostly being from crop-processing waste and gave useful information on the cultivated soils. The occurrence of *Galium aparine* (goosegrass) suggested some of the crops were autumn-sown, while that of *Rumex acetosella* agg. (sheep's sorrel) is characteristic of circumneutral soil over the higher areas of gravel terrace and the presence of *Eleocharis* sp. (spike rush) would suggest that cultivation extended onto soils experiencing at least spring waterlogging. All these aspects were also shown by some of the Iron Age weed assemblages from Ashville.

The interpretation of Iron Age and Roman charred crop and weed assemblages in an attempt to establish whether a settlement was an "exporter" or "consumer" site for grain has become a contentious issue, Stevens (2003) challenging some of the already contradictory views of Hillman (1981), Jones (1985) and van der Veen (1991). Their arguments will not be reviewed here in relation to Claydon Pike but it is still possible to make some useful comments on the Iron Age charred remains beyond the taxa grown and the weed ecology. Firstly, the assemblages from Claydon Pike were dominated by weed seeds and chaff rather than grain, so represented processing waste (see Chapter 3). As hulled cereals, spelt wheat and six-row hulled barley would probably have been traded as ears, spikelets or, in the case of the barley, grain still enclosed in the lemma and palea. If grain were to be subjected to pit storage, it would be essential that it had not been de-husked, otherwise grain damaged in the process would rot. (Grain storage pits were present on some Iron Age settlements on the Second Gravel Terrace, such as Gravelly Guy, Stanton Harcourt and Ashville, but are generally absent from the lower-lying sites, including Claydon Pike.) Therefore, the results suggest that grain was being de-husked and cleaned on the site but they do not indicate whether it was grown locally. Secondly, the concentration of remains was very low in comparison with that found on some of the larger settlements with storage pits on the Second Gravel Terrace. The average concentration of remains from the middle Iron Age samples at Claydon Pike was 1.5 items per litre whereas the concentration for Ashville was over 9 items per litre (chaff was not quantified) (Jones 1978). Either the Claydon Pike settlement was only processing grain on a small scale or the products of the later stages of grain processing were neither being used for fuel nor burnt as waste but were, for example, being fed to domestic animals. It is entirely plausible that cultivation plots on the First Gravel Terrace supplied all the cereal needs of the settlement, even if the raising of domestic animals was a more important activity.

The middle Iron Age settlement at Thornhill Farm was of similar character to the middle Iron Age settlement at Claydon Pike, although the area of uninterrupted gravel terrace was more extensive because the shallow palaeochannels which formed extensions of the floodplain were narrower (Jennings *et al.* 2004). Although the middle Iron Age evidence was limited, waterlogged macroscopic plant remains suggested very open conditions, with nutrient-rich disturbed ground around the settlement. Charred cereal remains were absent but only one sample floated for charred remains could be attributed with certainty to the middle Iron Age. Very small quantities of cereal remains were recovered from a small middle Iron Age settlement at Shorncote Quarry (Pelling 2002). Cattle and sheep predominated amongst the animal bones from both Thornhill Farm and Claydon Pike.

The overall impression of the middle Iron Age landscape of the Cotswold Water Park is one of an open agricultural landscape which was perhaps primarily used for the raising of domestic animals but with arable fields on the drier ground being cultivated for crops including winter cereals. Doubtless some areas retained woodland which was exploited for structural purposes and fuel but its extent is uncertain. The relatively high water table, especially on the floodplain, would have ensured good growth of grass in summer while parts of the First Gravel Terrace would have been well-enough drained for successful cultivation and the overwintering of animals. It was perhaps significant that the Claydon Pike settlement was at a junction between the floodplain and the gravel terrace. It is thought likely that arable activity on the Water Park sites was not as great as on some of the settlements further downstream such as the Ashville Trading Estate.

Late Iron Age/early Roman environment

Major changes occurred at Claydon Pike during the early 1st century AD (see Chapter 4). Settlement was concentrated on a gravel island to the south of the area of floodplain, at Longdoles Field. Occupation of the Phase 2 settlement lasted for

about one century, from *c* AD 25-125. The settlement comprised penannular ditched enclosures although some linear boundaries were added towards the end of the phase. Some of the ditches were waterlogged and good environmental evidence was available for this phase. The evidence of pollen and Coleoptera suggested that the landscape during this phase was predominantly heavily-grazed grassland. Any woodland was distant from the site, although it is possible that there was oak woodland beyond the river gravels. The waterlogged seeds suggested marshy pasture on the lower-lying parts of the site, with tussocks of the *Juncus effusus* group of rushes. The pasture in the vicinity of the enclosures seems to have experienced overgrazing and damage from trampling, in places being churned into mud enriched with dung with weeds such *as Juncus bufonius* (toad rush) and *Chenopodium rubrum* (red goosefoot). Scarabaeoid dung beetles, such as *Aphodius granarius*, were particularly abundant. The seeds and pollen also gave a hint of dry calcareous grassland growing on the unoccupied gravel islands. The same range of domestic animals was represented by bones as was recorded for the middle Iron Age. However, the presence of the marsh snail *Lymnaea truncatula*, which is the intermediate host of the sheep liver fluke, would have made conditions more suitable for raising cattle or horses rather than sheep.

The carbonised plant remains comprised the same crop species as in the middle Iron Age, with weed seeds and chaff again predominating. The charred weed seeds as before included species such as *Rumex acetosella* agg. (sheep's sorrel) and *Sherardia arvensis* (field madder) which would be appropriate to well-drained soil on the gravel terraces. However, the concentration of remains had fallen to 1 item per litre. A little waterlogged chaff of spelt wheat was also found.

Very similar results to those from Phase 2 of Claydon Pike were obtained from the late Iron Age phase of Thornhill Farm (Periods B and C). Waterlogged macroscopic plant remains, charred plant remains, molluscs and insects were all analysed from the enclosure ditches of the settlement. Conditions were very open, with grassland predominating. There were again many waterlogged seeds of ill-drained pasture with rush tussocks while Scarabaeoid dung beetles, such as *Aphodius granarius*, were so abundant as to suggest a particular concentration of domestic animals around the settlement. The concentration of charred remains was lower than at Claydon Pike and, unusually for a site of this date, the great majority of the carbonised seeds were not of arable origin but appear to have been derived from coarse herbage. The only crop identified with certainty was spelt wheat. The settlement area itself seems to have been drier than the settlement at Claydon Pike, with weeds of various disturbed or waste-ground habitats. There was evidence from woodworm beetles for the presence of timber structures on both settlements but there were few other settlement-associated insects. Another site in the Cotswold Water Park, Kempsford Multi-Agg Quarry, on the First Gravel Terrace, had ditches of late Iron Age / early Roman date which held waterlogged sediments. These too contained seeds of plants of damp pastureland, such as *Potentilla anserina* (silverweed).

The primary and possibly the sole purpose of the 1st-century AD settlements at Claydon Pike and Thornhill Farm appears to have been the management of grazing in the valley bottom. Indeed it is possible that Thornhill Farm was an outlier of Claydon Pike. It is probable that the heavily-grazed pasture with ill-drained tussocky areas in the floodplain hollows covered several square kilometres of the valley bottom. Such an interpretation would be consistent with the layout of the enclosure ditches. Given the presence of the snail *Lymnaea truncatula* at both sites, the settlements probably shared an emphasis on the raising of cattle or horses. The occupants of the settlements certainly used cereals and it is possible that they were grown on the higher areas of gravel terrace. The weed assemblages were similar to those from the middle Iron Age settlement at Claydon Pike, including the presence of species characteristic of autumn-sown cereals. However, the very low concentration of cereal remains at Thornhill Farm was used to suggest that cereals had been imported from elsewhere.

It has already been argued that there was some degree of specialisation of settlements in the Upper Thames Valley during the middle Iron Age, with settlements on the floodplain and First Gravel Terrace concentrating on pastoralism, while the settlements on the Second Gravel Terrace and higher terraces concentrated on arable cultivation. The rising water table and the increasing extent of flooding, such that much of the floodplain was experiencing seasonal inundation by the end of the Iron Age, would probably have encouraged such specialisation. An increasing wetness and a reluctance to reduce floodplain grazing in the wetter months resulted in the development of overgrazed marshy pasture with rush tussocks and areas of nutrient-rich mud elsewhere in the Upper Thames Valley, including Port Meadow and Farmoor, during the middle Iron Age (Lambrick and Robinson 1988, 65-71). High proportions of Scarabaeoid dung beetles likewise showed the grazing pressure on these sites.

What is unclear about the settlements of Claydon Pike and Thornhill Farm is their relationship with other settlements in the region, especially on the drier ground to the north. If they were subsidiary grazing settlements, they would probably have been supplied with their grain needs from a parent settlement on the higher ground. If, however, they were independent settlements, it is much more likely that they would have grown some cereals even if domestic animals were traded to purchase, for example, metal items.

The period covered by Phase 2 of Claydon Pike and Periods B and C of Thornhill Farm extended from the late Iron Age to well beyond the Roman conquest of Britain in AD 43. The Roman fort at Cirencester would have been contemporaneous with the second part of Phase 2 at Claydon Pike. While it is plausible that the garrison of Cirencester obtained supplies from Claydon Pike, the environmental archaeology of Phase 2 remained Iron Age in character. The various horticultural crops which were Roman introductions to Britain and found from the subsequent Roman phases of the site were absent. The arable weeds of Mediterranean origin which arrived in Britain shortly before the Roman conquest, such as *Agrostemma githago* (corn cockle), were also absent.

The Roman environment of the 2nd and 3rd centuries AD

A major re-organisation of the layout of the settlement at Claydon Pike occurred in the early 2nd century AD (see Chapter 5). The circular enclosures of the previous phase, on the gravel island at the Longdoles Field site, were replaced by large rectilinear ditched enclosures, aisled buildings and a ditched trackway. The layout of the Phase 3 settlement lasted until the early 4th century, albeit with numerous modifications. A wide range of palaeoenvironmental evidence was available both from the settlement and from some of the outlying ditches. The pollen from Phase 3 suggested that the landscape remained as open as in Phase 2, with some distant oak woodland. However, there was evidence from macroscopic plant and insect remains to suggest that some of the boundaries on the site were lined with osiers and ash trees. The main environment suggested by the pollen, macroscopic plant remains and insects from the outlying ditches was species-rich hay meadow belonging to MG4 or MG5 of the National Vegetation Classification. Such grassland is characterised by a distinctive flora including *Ranunculus acris* (meadow buttercup). *Rhinanthus minor* (yellow rattle), *Leucanthemum vulgare* (ox-eye daisy) and *Centaurea nigra* (knapweed), which were represented by their seeds. On the wetter areas of the floodplain, this grassland seems to have graded into fen meadow. There was no evidence for extensive areas of disturbed or cultivated ground outside the settlement. It is thought probable that seasonal flooding was occurring on at least the lowest part of the floodplain at Claydon Pike during Phase 3 but there was no evidence of flooding extending onto the gravel islands.

The settlement area itself seems to have been drier than in Phase 2, which was perhaps due to the Roman ditch system. The ditched boundaries within the settlement appear to have been lined with trees and hedgerow shrubs. Those areas of the settlement that were not bare ground mostly supported weed communities of disturbed and neglected ground. In comparison to the previous phase, there was a great increase in the proportion of *Anobium punctatum* (woodworm beetle) and various other synanthropic beetles which occur in indoor habitats and in accumulations of organic material such as old straw and haystacks. These results very much support the archaeological evidence for the presence of timber buildings. There was plenty of evidence from the waterlogged macroscopic plant remains for the importation of plant material, particularly hay. Some of the hay showed a floristic association with the vegetation of the wetter parts of the floodplain yet there were also seeds of species from well-drained hay-meadow communities.

One waterlogged deposit contained cereal straw and chaff of *Triticum spelta* (spelt wheat), along with seeds of weeds strongly tied to arable agriculture, *Agrostemma githago* (corn cockle) and *Scandix pecten-veneris* (shepherd's needle). However, charred cereal remains were very much more abundant. The average concentration of charred remains was ten times greater than in Phase 2, with an average of 11.2 items per litre. One pit contained 117.5 items per litre and a sample from an oven contained 221.6 items per litre. The charred assemblages were dominated by chaff from the de-husking of spelt wheat and there was a wide range of weed seeds. As previously, spelt wheat and hulled *Hordeum vulgare* (six-row hulled barley) were the main grains. Any oat grains could have been from wild oats growing as weeds. It is possible that *T. dicoccum* (emmer wheat), which was represented by a significant quantity of chaff, was grown as a crop in its own right but it is also possible that it was growing as a minor component of the spelt wheat crop. There was a very slight presence of chaff of free-threshing wheat but it is thought to have been growing amongst the cereal crops. Oven 2103, which probably belonged to the later 3rd or early 4th century AD, had probably been fuelled on the de-husking waste of spelt wheat. Over 90% of the cereal remains from the oven were glumes of hulled wheat. It is possible that the oven had been used both for the parching of spelt wheat, to facilitate de-husking, and the parching of sprouted spikelets as part of the malting process. The oven probably represented a centralised cereal-processing facility for the settlement.

The charred weed assemblages included the same species that were found in the middle Iron Age that were argued as suggesting that at least some of the crops were autumn sown and the areas of cultivation ranged from well-drained circumneutral or calcareous soil to soil experiencing at least spring waterlogging. A characteristically Roman aspect of the weed assemblages was the first appearance in Phase 3 of *Anthemis cotula* (stinking mayweed), which is typical of heavy calcareous soil. This phase had a higher proportion of charred seeds of grassland plants, including hay-meadow species such as *Rhinanthus* sp. (yellow rattle). Some of the

weed seeds could have been from burnt hay rather than from cereal-processing waste.

Remains of other possible field crops from this phase included *Linum usitatissimum* (flax) and *Vicia faba* v. minor (field or celtic bean). Only single seeds of each were found charred, but neither crop usually comes in contact with fire during processing, so they will be under-represented in charred assemblages. It is not possible to ascertain the importance of either crop, although waterlogged seeds and capsules of flax were also found. The First Gravel Terrace would probably have been well-suited to flax cultivation.

Cattle, sheep, pig and horse were again represented by bones and the sheep parasite *Melophagus ovinus* was identified. Scarabaeoid dung beetles indicated that domestic animals grazed in and around the settlement but they were only about a third as abundant as in the previous phase. Some grazing was probably occurring on the grassland being cut for hay. Indeed, the traditional management of Upper Thames Valley hay meadows was for the hay to be cut in late June or early July and the aftermath grazed from August until early spring, unless prevented by flooding (Baker 1937).

Whereas the environmental archaeology of the Phase 2 settlement at Claydon Pike was of Iron Age or "native" character, the Phase 3 settlement showed a fully Roman character. The increase in the proportion of synanthropic beetles related to a greater intensity of occupation has already been mentioned, although those beetles introduced by the Romans which are associated with the large-scale storage of processed grain were absent. There was also a proliferation of horticultural crops, most of which were Roman introductions, including:

Brassica sp. (not nigra) ?cultivar (cabbage etc)
Coriandrum sativum (coriander)
Prunus domestica (plum)
Apium graveolens (celery)
P. avium (cherry)
Anethum graveolens (dill)
Pyraster pyraster (pear)
?*Satureja hortensis* (savoury)

All these fruits, flavourings and vegetables could have been grown in plots within the settlement area. *Buxus sempervirens* (box) and *Pinus pinea* (stone pine) were possibly grown for ornamental or ritual purposes, although the cone of P. pinea could have been a Mediterranean import. The bones also suggested a more varied diet, with both fish and bird being eaten alongside the domestic mammals that were consumed in the earlier phases. Shell of marine oysters was present.

It is clear that at least one of the major activities of the Claydon Pike settlement was the management of hay meadow on the floodplain and gravel terrace and the collection of the hay at the settlement. Evidence from a Roman roadside ditch at Thornhill Farm, about 0.75 km to the west, suggested that the hay meadow extended at least that far. The scale of hay production seems greater than would have been needed for use as fodder for domestic animals overwintered within the settlement, given the decline of Scarabaeoid dung beetles in comparison with the previous phase. One possible interpretation of the site would be that Phase 3 of Claydon Pike was a depot concerned with the production of hay, possibly for supply to the civil administration, although there is no direct evidence for this. This area of the Cotswold Water Park would have been particularly suitable for the production of hay. The rise in water table would have reduced problems from early summer drought while the underlying gravel would have prevented permanent soil waterlogging. The vulnerability of the grassland to damage by overgrazing when the ground was seasonally waterlogged, as occurred during Phase 2, would have been removed by this change of management. The establishment of towns such as Cirencester would have resulted in a major demand for fodder.

Various other agricultural activities also occurred at Claydon Pike. Cereals could have been grown on the higher areas of the gravel terrace at least to supply the needs of the occupants of the site. The dung-beetle evidence showed that some domestic animals were being kept locally and a likely management regime of the meadowland to prevent the development of coarse, tussocky herbage would be the grazing of the aftermath. It is possible that the site generated a surplus in animal products beyond its own needs (see Chapter 16 for wider discussion).

Other Roman settlements of similar date to Phase 3 of Claydon Pike have been excavated in the Cotswold Water Park but not much palaeoenvironmental evidence is available from them. Small quantities of charred crop-processing remains, including spelt wheat and hulled barley, were found at Neigh Bridge, Somerford Keynes (Chapter 9), Whelford Bowmoor (Chapter 10) and Stubbs Farm, Kempsford (Chapter 11). *Quercus* sp. (oak) seems to have been the main fuel used at Somerford Keynes. There was no reason to believe the sites were other than mixed farming settlements.

Some aspects of the Romanisation shown by Phase 3 of Claydon Pike were shown by other sites in the Upper Thames Valley and beyond. It seems that no later than the third century AD, the diet of the inhabitants of the Upper Thames Valley had become very Romanised, with the consumption of spicy, oily food (Robinson 1992a, 58). Exotic fruit were being eaten, including plum and cherry, both of which appear to have been Roman introductions to Britain, although well-suited to local cultivation (Moffett *et al.* 1989, 246). The meat component of the diet also became more varied. Domestic fowl bones were present on most sites and marine oyster was being imported into most settlements in the region. Wild birds and fish were also being consumed. The exotic horticultural crops were even being used on low-status sites such as Farmoor (Lambrick and

Robinson 1979, 127). Leaves of box were also found at Farmoor. The increase in beetles which flourish in various habitats associated with buildings, including the woodworm beetle, occurred on other sites and was probably a result of a greater intensity of occupation on the gravels (Robinson 1992a, 58). The centralisation of cereal de-husking using corn-driers is also a feature of many settlements.

Where Claydon Pike differed from other settlements on the Upper Thames Gravels was the apparent emphasis of the site on the production of hay. Claydon Pike was not the only site in the Upper Thames Valley with evidence for the management of grassland in the region as hay meadow. A sample from an early Roman well at Farmoor contained a component of cut hay (Lambrick and Robinson 1988) and it is possible that the use of hay was a practice introduced to the region by the Romans. However, no other site has the scale of evidence as Claydon Pike and no similar site is known from outside the region.

Despite the evidence from some aspects of material culture, there was little in the environmental archaeology of Phase 3 at Claydon Pike to suggest that it was of high status. The cone of stone pine is the one possible exception. Most discoveries of stone pine in Britain have been from towns, military sites and large villas (Kislev 1988).

Late Roman environment

In the early 4th century AD, occupation became confined to the eastern end of the settlement at Claydon Pike and a small villa was constructed, which defines the beginning of Phase 4 (see Chapter 6). The main villa building was later surrounded by two successive enclosure ditches. Agricultural enclosures were located to the west. The villa remained in use until at least the end of the 4th century AD and possibly did not fall into disuse until the early 5th century AD. As for the previous phase, a wide range of environmental evidence was available from Phase 4.

The pollen results suggested that grassland continued as a major aspect of the landscape throughout the late Roman period. The background presence of ancient woodland remains low while the macroscopic plant remains suggested that there were ash trees growing along some of the boundaries. There was a trace of pollen from hay-meadow plants, such as *Rhinanthus* sp. (yellow rattle) and *Centaurea nigra* (knapweed), but there was no evidence of hay brought to the site. A rise in the proportion of Scarabaeoid dung beetles suggested a significant presence of domestic animals around the site and it is thought likely that more of the grassland was being grazed than in Phase 3.

Both the waterlogged macroscopic plant remains and the insects gave evidence that part of the villa enclosure was overgrown with stinging nettles and other coarse herbs, such as *Malva sylvestris* (common mallow). There was no reduction in beetles associated with structural timbers, other indoor habitats and accumulations of decaying organic material, showing that the intensity of occupation of the villa remained high. The waterlogged remains included small quantities of crop-processing remains, including flax as well as cereals. The concentration of charred remains, at 5.7 items per litre, was only half that of the previous phase but charred remains were still consistently more abundant than from Phase 2. There was a higher proportion of grain than in the Phase 3 samples but chaff and weed seeds were also well represented. A similar range of weed seeds was present as in the previous phase. The bones likewise suggested that the same range of domestic animals was being kept and that secondary products retained their importance.

Most of the same horticultural crops that were used in the previous period were also present in Phase 4 at Claydon Pike. Two additions were *Fragaria vesca* (wild strawberry) and *Foeniculum vulgare* (fennel). There were also interesting records of Brassica species. Both *B. nigra* (black mustard) and another Brassica cultivar, possibly *B. oleracea* (cabbage), were identified. Insect remains suggested two other economic activities which could have taken place at the villa. Several examples of worker honey bees were found, raising the possibility of bee-keeping. The occurrence of flowing-water beetles from the family *Elmidae* in a rectangular tank cut below the water table suggests that fish might conceivably have been brought from the river to the tank for live storage. The late Roman villa was perhaps primarily concerned with the grazing of domestic animals. Much of the floodplain was probably experiencing flooding but would still have been suitable for grazing. There was no evidence that flooding extended onto the gravel island, on which the villa was situated, during the late Roman period. It is possible that the villa had a mixed agricultural economy and some higher ground was used for arable.

Limited palaeoenvironmental evidence was obtained from other sites in the Cotswold Water Park for this period. In general, the evidence was of increasing wetness on the low-lying areas of these sites. At Whelford Bowmoor, late Roman peat developed above some early Roman ditches (see Chapter 10). The results from Phase 4 of Claydon Pike show many similarities with the Barton Court Roman Villa near Abingdon (Miles 1986 fiche 6-9). This site too was involved in mixed farming, although flax cultivation seems to have been more important than at Claydon Pike. The Barton Court Villa showed all the aspects of Romanisation shown by the villa at Claydon Pike, including, for example, the use of horticultural crops. Although both sites had faunas of synanthropic beetles including minor pests of stored food products, neither site had any examples of the serious insect pests of stored grain. These beetles, which were introduced by the Romans, are associated with

larger-scale storage of processed grain and have been recorded from villas in other regions. Roman villas are uncommon on the gravels of the Upper Thames Valley and small settlements laid out alongside droveways were more usual. The settlements on the edge of the floodplain tended to concentrate on the raising of domestic stock and the exploitation of floodplain grassland (Robinson 1992a, 57). By the late Roman period, flooding was extending over the full area of the modern floodplain. There had been a few early Roman attempts at cultivation on high areas of the floodplain, for example at Yarnton (Robinson forthcoming) and Drayton (Robinson 1992b, 203) but both these were abandoned and the ploughsoils were sealed beneath Roman alluvial clay.

Post-Roman environment

Earlier Saxon evidence was lacking from the Cotswold Water Park sites. Evidence from sites further downstream suggested that an open agricultural landscape remained on the gravel terraces following the end of the Roman period but that floodplain alluviation largely ceased (Robinson and Wilson 1987, 59-62). Alluviation resumed in the late Saxon period and continued into the early medieval period. Alluvial sediment of this date filled the tops of Roman ditches around the gravel islands at Claydon Pike (Chapter 7). Analysis of molluscs from the alluvial sequences has shown that much of the floodplain changed from being pasture to hay-meadow in the late Saxon or early medieval period (Robinson 1988). Alluvium containing hay-meadow molluscan faunas was found overlying Roman ditches at Claydon Pike, Thornhill Farm, Somerford Keynes and Stubbs Farm, Kempsford. Similar alluvium filled the top of the Latton "Roman Pond" (Robinson 1999b, 499-500). Alluviation in the Upper Thames Valley largely ceased in the late medieval period but flooding of the floodplain has continued to the present day.

Although settlement did not continue at Claydon Pike beyond the end of the Roman period, waterlogged deposits were found in a late medieval well cut through the late Roman ruins in the Longdoles Field site (see Chapter 7). Pollen evidence suggested that the medieval landscape was more open than the Roman landscape, with any woodland, scrub or hedges being very minor or distant features. Pollen, waterlogged seed and insect evidence all pointed to an environment of hay meadow. The seeds of a mixed meadowland flora included:

Ranunculus cf. *Acris* (meadow buttercup)
Plantago lanceolata (ribwort plantain)
Rumex acetosa (sorrel)
Leucanthemum vulgare (ox-eye daisy)
Primula cf. *veris* (cowslip)
Centaurea nigra (knapweed)
Rhinanthus sp. (yellow rattle)
Leontodon sp. (hawkbit)

This meadowland could have belonged either to *Alopecurus pratensis – Sanguisorba officinalis* flood meadow (MG4) or *Cynosurus cristatus* – Centaurea nigra meadow (MG5) of the National Vegetation Classification (Rodwell 1992). Both of these categories of grassland only retain their species composition if shut up in late winter/early spring, mown in June or July and the aftermath grazed. The occurrence of Scarabaeoid dung beetles suggested that some light grazing was occurring, which could have been the grazing of the regrowth. There is much documentary evidence for hay meadow on the floodplain of the Upper Thames Valley well into the 20th century, supplying the needs of animals kept in byres over winter and in the towns. It has now largely disappeared as a result of fertiliser application, ploughing and re-seeding and herbicide use. Traces of ridge and furrow on the higher area of gravel terrace at Thornhill Farm, however, showed that at least some medieval cultivation was occurring in the Water Park area (Jennings *et al.* 2004).

Conclusion

The environmental archaeology studies in the Cotswold Water Park have shown major changes brought about to the vegetation and landscape over the past 10,000 years. The climatic amelioration at the end of the Devensian Glaciation was initially responsible for driving the changes, with the stabilisation of river channels re-working the floodplain gravels and the abandonment of shallower channels. Warming also caused the replacement of tundra vegetation with open woodland and woodland succession. Major human impact began in the Neolithic, with small-scale and probably temporary clearance. Although major permanent clearances probably began earlier further downstream in the Upper Thames Valley, an open organised agricultural landscape had been created by the Iron Age. The human-induced changes, however, had their unintended consequences. A rise in water table during the Bronze Age and a subsequent onset of flooding has been attributed to the effects of tree clearance in the catchment (Robinson and Lambrick 1984). The mixed farming settlements of the middle Iron Age were replaced in the 1st century AD by a more specialised settlement at Claydon Pike concentrating upon grazing the low-lying grassland. However, the increasing wetness resulted in damage to the grassland by overgrazing. Political factors were probably responsible for the early Roman re-organisation of the Claydon Pike – Thornhill Farm area (see Chapter 16) but it resulted in a better management of the valley bottom in relation to the increasing wetness. Hay was produced on the lower-lying areas and cereals were probably grown on the driest part of the First Gravel Terrace. Romanisation resulted in the arrival of various exotic horticultural crops. The late Roman change

at Claydon Pike from an establishment concerned with the collection of hay to a small villa undertaking was again probably political (see Chapter 17). The abandonment of this villa was due to the ill-understood events which caused the collapse of Roman Britain, rather than any local environmental factors. However, late Saxon agricultural revival, with increasing cultivation of the Cotswold slopes, caused soil to be eroded into the river system and extensive alluviation occurred on the floodplain (Robinson and Lambrick 1984). The cessation of this alluviation was possibly one of the effects of the Black Death, when large tracts of the Cotswolds which had formerly been cultivated were turned over to sheep pasture. The floodplain and lower areas of the First Gravel Terrace became, from the late Saxon period onwards, highly productive hay meadow, very much taking advantage of the beneficial aspects of the seasonal flooding.

Many of the developments shown in the Cotswold Water Park follow the general pattern shown further downstream. On present evidence, there seems to have been less alluviation on the floodplain, in the Roman period, above Lechlade than below. However, the one feature which stands out is the management of the large area around Claydon Pike for hay meadow by the early to mid Roman establishment of Phase 3. This was possibly the result of the proximity of the area to Cirencester, although no such evidence has been obtained from the vicinity of Dorchester, a major town on the gravels of the Upper Thames Valley.

Chapter 15
The Middle Iron Age Landscape

by Grace Perpetua Jones

INTRODUCTION

The Iron Age settlement at Claydon Pike is part of a growing corpus of such sites to have been excavated on the gravel terraces and floodplain of the Upper Thames Valley over the past 30 years (Fig. 15.1). Claydon Pike had been selected for investigation in the 1970s in part because the cropmark evidence indicated open Iron Age roundhouse clusters located on low-lying gravel islands. The project, therefore, had the potential to complement the data from other middle Iron Age settlements to the east, such as Mingies Ditch (Allen and Robinson 1993), Watkins Farm (Allen 1990) and Farmoor (Lambrick and Robinson 1979). In particular Claydon Pike offered the opportunity to examine the issue of seasonality, which had been investigated on the floodplain at Farmoor, and economy and structure: was Claydon Pike a predominantly pastoral site and if so were the round house clusters visible on aerial photographs contemporary? [Fig. 15.1]

Substantial settlements did not fit the models of pastoral farming communities which were put forward in the Upper Thames settlement hierarchy. In the event, excavation confirmed that Claydon Pike's middle Iron Age settlements were predominantly pastoralist, with houses probably occupied year-round by small family groups who over several generations shifted location. The site plan gave the impression of a larger community but horizontal stratigraphy clarified that only a limited number of buildings were occupied at any one time.

Most of the middle Iron Age sites for which full data is readily available lay to the east of Claydon Pike, further down the Thames Valley in Oxfordshire, as mentioned above. Perhaps the most relevant middle Iron Age site closer to Claydon Pike was Thornhill Farm (Jennings *et al.* 2004), which lay just 1 km away. This site provided the ideal opportunity for detailed comparisons of later prehistoric and Roman settlements with strikingly different layouts. Other nearby sites include Allcourt Farm in Lechlade (OAU 2001) and Totterdown Lane, Horcott west of Whelford (Pine and Preston 2004). Within the western Cotswold Water Park, middle Iron Age occupation has been found in a number of excavations, such as at Cotswold Community (OA 2003), Latton Lands (Stansbie and Laws 2004) Cleveland Farm near Ashton Keynes (Coe *et al.* 1991) and Spratsgate Lane east of Somerford Keynes (Parry 1991). Together, these sites are helping to greatly increase our understanding of middle Iron Age settlement patterns and social practices within the Upper Thames Valley.

THE BRONZE AGE AND EARLY IRON AGE LANDSCAPE

During the Bronze Age the Middle and Upper Thames Valley underwent a period of clearance as the demand for land suitable for agriculture and pasture increased (see Chapter 14). The landscape became increasingly ordered with the layout of field systems and enclosures. The proximity of these landscapes to the River Thames is thought to be related to the role of the river in the importation of bronze from the Continent (Allen 2000, 6). Prestige metalwork was deposited in rivers within the Thames Valley from the early Bronze Age, although towards the end of the period the bronze trade and the burial of bronze goods in rivers appears to have ceased, signalling the late Bronze Age to early Iron Age transition (Bradley 1992, 21).

The late Bronze Age economy of the Upper Thames Valley was orientated towards pastoralism and cattle rearing (Lambrick 1992, 87). Throughout the early Iron Age there is an increase in both arable agriculture and the pastoral economy. Mixed farming economies focused on the higher terraces of the Thames Valley, at sites such as Gravelly Guy, Ashville, Abingdon and Mount Farm (Lambrick 1992, 90). The intensification in agriculture affected the hydrology of the gravels, causing a rise in the water table, followed by flooding during the middle Iron Age and eventually the onset of alluviation in the late Iron Age (Robinson 1992b, 54-5).

SETTLEMENT STRUCTURE AND DEVELOPMENT (Fig. 15.1)

Lambrick (1992, 93-97) has identified three broad settlement types in the Upper Thames Valley during the middle Iron Age period, one of which is the open settlement with paddocks, typified by Claydon Pike (see Chapter 3). Enclosures may occur within the open settlement, but 'there is no physical boundary around the area of domestic occupation' (Bowden and McOmish 1987, 81). The second form is the more enclosed farmstead, such as Mingies

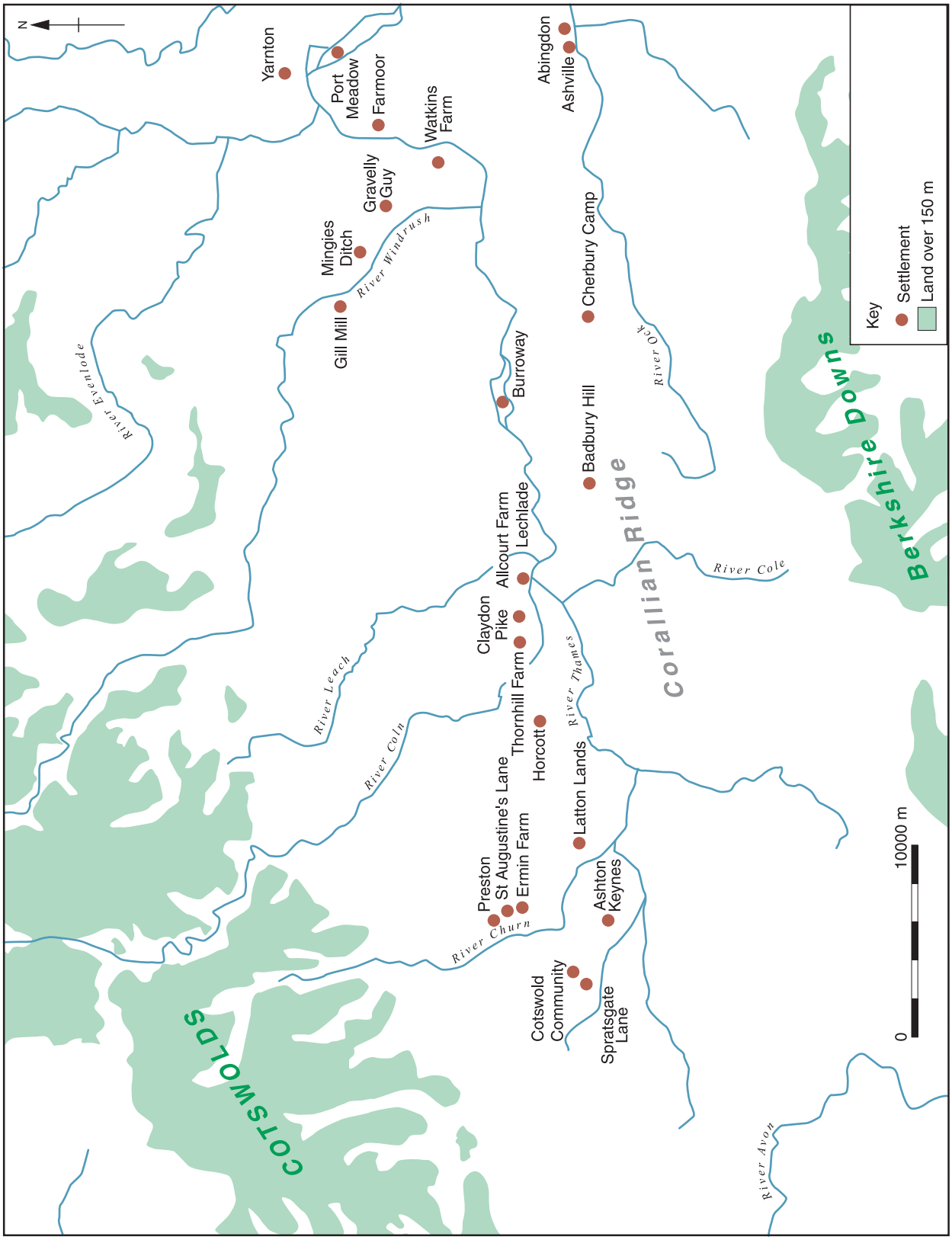


Fig. 15.1 Middle Iron Age sites in the Upper Thames Valley

Ditch and Watkins Farm, both displaying hedge-lined ditches and funnelled entrances in much the same form as banjo enclosures. The third form consists of short lived seasonal farmsteads such as Farmoor, clearly evidenced in pits containing occupation deposits divided by episodes of flooding.

By the middle or later Iron Age there were many banjo enclosures on the Cotswold slopes and Downland dipslopes (Featherstone and Bewley, 2001; Lambrick 1992, 94; Winton 2004), although there have been no excavations of such sites on any scale and so details of their chronology, social and economic base are sadly lacking. This location (and comparison with similar sites, for example, in Wessex) suggests that they operated a mixed economy with access to both upland pastures and well-watered valleys (Fasham 1987). Hillforts physically dominate the area, sited on prominent positions on the Cotswold uplands to the north, the Corallian ridge between the Thames and Ock Valleys, and the chalk downland to the south (Miles *et al.* 2003, fig 14.5, 261). There are also rarer examples of substantial earthwork enclosures such as Cherbury and Burroway on lower lying sites. Relatively few hillforts have been systematically excavated, although recent excavations and geophysical surveys of Ridgeway hillforts at Segsbury, Uffington Castle and Alfred's Castle indicate the considerable variation in these sites, in particular in the density of internal occupation (Payne 2005). Where dating is available, it seems that their floruit was in the early to middle Iron Age.

Local hillforts not only show considerable variation in morphology; excavation evidence points to differences in function, Uffington Castle for example, adjacent to the White Horse figure, provided a communal focus for religious celebration. In contrast the much larger Segsbury Camp was more evidently integrated into the yearly farming cycle: a place for sheep (and to a lesser extent cattle) herders to exchange animals (promoting genetic variation), cull lambs and enjoy feasting. Both sites could, therefore, play complementary roles within a single community. Similarly, lowland Iron Age farmsteads, some (eg Claydon Pike) with the emphasis on pastoralism and others cultivating cereals (particularly spelt wheat and six row barley), formed part of integrated community networks occupying the valleys and upland slopes.

The enclosed farmsteads of Watkins Farm and Mingies Ditch appear quite late in the middle Iron Age period, although the enclosing of the settlements would not appear to be wholly defensive in nature. Authors such as Hingley (1990a) and Bowden and McOmish (1987) have suggested that enclosures may have acted as indicators of social status and that boundaries were not necessarily constructed for defence. However, the artefactual record from these sites does not suggest higher status than other settlements in the area (Miles 1997, 15). The double ditches at Mingies Ditch certainly appear to have played a very practical role with the area between the ditches used to corral animals (Allen and Robinson1993). At Watkins Farm only a single ditch surrounded the settlement and therefore animals may have been brought into the interior, this may be borne out in the deeper gullies and ditches surrounding features at this site (Allen 1990, 75).

The physical construction of the enclosure ditches would have been labour intensive, and may have required more people than the two or more households estimated to have inhabited Watkins Farm and the one or two households at Mingies Ditch (Allen 1990, 77). The importance of maintaining social relationships between neighbouring communities can therefore be inferred, and the suggestion of 'an integrated system of family farms' (Miles 1997, 14) implied.

Domestic structures

The domestic structures of the middle Iron Age period in the Upper Thames Valley tend to be circular and surrounded (and identified) by a concentric penannular drainage gully of approximately 10-13 m in diameter. A variety of construction techniques were used, although these are often not discernible in the archaeological record. Post-rings have been seen on a number of sites, including Structure 18 at Claydon Pike (see Chapter 3 and Fig. 3.10), and may indicate the wall of the structure, or an internal aisle. An area of Roman ploughsoil preserved a ring-groove of Structure 15, suggesting a stake wall (see Chapter 3 and Fig. 3.10).

The environmental evidence from sites such as Farmoor and Port Meadow suggest that much of the Thames floodplain consisted of 'vast treeless expanses of pastureland' (Robinson 1992b, 56-7). Much of the higher clay slopes would have been wooded and timber may have been obtained from these areas. However, given the large quantities of timber required to build an entire house it is likely that many of the structures in the region were constructed using other materials. Mass walls of turf or cob could be supplemented with a timber and thatch roof. Straw and reed thatch would have been available on the floodplain and higher terraces, and the local clays were suitable for cob walling and daub (Allen *et al.* 1984, 89). At Farmoor there is good evidence that turf was stripped in the area surrounding one of the enclosures and it is suggested that this may have been used to build the walls of a roundhouse (Lambrick and Robinson 1979, 70-71).

The gravels do not offer more durable building materials such as flint or freestone (Fulford 1992, 37). The Cotswold region is synonymous with building stone, where 'dry-stone building using the local limestone had been traditional since the Neolithic period' (Saville 1984, 144). However, the middle Iron Age internal structures at Salmonsbury were all timber constructed (Saville 1984, 147) and

there is no good evidence for the use of stone in Iron Age houses elsewhere in the region.

Iron Age houses tend to be orientated towards the east or south-east, and this is evident on the majority of structures at Claydon Pike and Thornhill Farm. Lambrick and Robinson (1979, 69) have suggested that this may be to offer maximum protection from the prevailing wind. Work by Parker Pearson and Richards (1994) and Oswald (1997) has further explored this subject and suggested that cosmological concerns may have influenced the orientation of the houses as the entrances 'face either sunrise at the equinoxes and midwinter, or points between them' (Fitzpatrick 1997, 77). Fitzpatrick concludes that the evidence suggests that 'east was the required orientation for the crossing of thresholds' (Fitzpatrick 1997, 78). The penannular gullies at Watkins Farm are unusual in not conforming to this pattern, although the main entrance to the enclosed area is orientated to a point immediately north of east.

Hill believed that several 'rules' structured the layout of many prehistoric settlements in Southern Britain, including a concern for the direction of the cardinal points and sunrise, and also an emphasis on the threshold area (Hill 1995, 79-93). The use of space within houses may have been structured according to a set of beliefs, although this is almost impossible to examine for so many of the structures in the Upper Thames Valley as so few *in situ* features, artefacts and ground surfaces survive within the areas defined by penannular gullies. Notwithstanding, Fitzpatrick (1997, 78) has suggested that distinctions between right and left, and light and dark are embodied in a number of early Iron Age houses in the Wessex region. Fitzpatrick (1997, 77) has further examined the shape of the houses, asking 'why are roundhouses round?' Roundhouses begin to be constructed after the construction of stone circles and henges, concerned with marking the passage of time, cease. The roundhouses may therefore have in part continued this role (Fitzpatrick 1997). The circular structures that characterise the middle Iron Age in the Upper Thames Valley are finally abandoned in favour of more sub-rectangular enclosures, such as those seen in Phase 2 at Claydon Pike (see Chapter 4).

Grain storage

Underground storage pits have been excavated on a number of Cotswold sites including Guiting Power (Saville 1979). The high water table of the floodplain and first terrace sites of the Upper Thames Valley would have rendered below-ground storage of grain in pits impossible. It is therefore suggested that some form of above ground storage was used, possibly in four-post structures. Two such structures were identified at Claydon Pike (S 22 and within S 20; see Chapter 3, Figs 3.2-3.3) and also at a number of other sites including Mingies Ditch and Groundwell Farm (Allen 1990, 78). The structures tend to have substantial footings, and a complete absence of such structures at Watkins Farm (Allen 1990) suggests other methods of storage may also have been in use.

THE MIDDLE IRON AGE ECONOMY

The processes of agricultural intensification seen throughout the late Bronze Age and early Iron Age continued into the middle Iron Age period, with the higher terraces exploited for arable production and the more low-lying areas primarily utilised for pasture (Robinson 1992b, 56; see Chapter 14). By the middle Iron Age 'much of the valley bottom was an open, organised, agricultural landscape' (Allen and Robinson 1993, 149). It was densely settled, and these settlements were usually open. The population expansion caused pressure on the land and there is evidence from Ashville and Mount Farm that the arable land base was expanding onto much poorer soils. The weed flora from Ashville indicated that drier more stony ground to the north and west of the site was being exploited, and that damper ground to the south and south-west was also being used. A depletion of soil nitrogen during this period and a decrease in crop purity indicate the intensity of arable agriculture (Parrington 1978, 109). The pressure on land caused by the intensification of agricultural regimes appears to have led to the development of intensified pastoral regimes.

The economies of the settlements in the Upper Thames Valley during the middle Iron Age were predominantly determined by environmental factors and land use strategies, and the period is marked by 'increased diversification and specialisation of settlement types' (Allen 2000, 10). The lower gravel terraces and the floodplain were not always suited to arable agriculture and sites located in this area, such as Claydon Pike, Thornhill Farm, Mingies Ditch, Port Meadow and Farmoor appear to have operated largely pastoral economies. The risk of flooding during the middle Iron Age resulted in these sites either being occupied seasonally or else situated on gravel islands above the damper ground (Robinson 1992b, 57). Drainage ditches also provided suitable protection, as seen at Claydon Pike. Plant remains suggest that the landscape in the lower lying areas was predominantly grassland, and sites may have been positioned to maximise grazing potential. The Mingies Ditch inhabitants were able to exploit the lush grazing adjacent to the nearby stream and the River Windrush. The site at Farmoor was clearly subject to flooding and was occupied on a seasonal basis. It was therefore positioned solely for the maximum exploitation of resources, presumably with the predominant aim of grazing livestock. The high water table meant it was unlikely that areas of grassland would become dry and parched, and rich grassland would have been available from the late spring through to the early autumn (Lambrick and Robinson 1979).

The settlements on the higher gravel terraces tended to be less transient and operated mixed farming economies. Cereal debris was ubiquitous at Ashville, and the waste was often weed infested and chaff rich suggesting the initial stages of crop processing (Parrington 1978, 108). 'Such a ubiquity of debris would be expected to arise from a situation in which a large part of the human activity on the site was devoted to the processing and handling of cereal crops' (Parrington 1978). The low lying sites on the gravels produced evidence of cereal consumption which would have formed the dominant part of the diet of the inhabitants. However weed seeds present among the charred plant remains suggest that they were not grown on the floodplain. Instead the inhabitants may have either grown the grain on higher gravel terraces, or else imported it from such settlements as such as Ashville and Gravelly Guy, probably on an annual basis.

The dominant crops produced during the Iron Age in the Upper Thames Valley were spelt wheat and six-rowed hulled barley, with bread type wheat, emmer wheat, rye, celtic beans and oats forming minor components of the diet (see Robinson, Chapter 14). It is likely that wild leaves, roots and fruits would have supplemented the Iron Age diet. At Farmoor wild carrot and plants from the cabbage/turnip family were collected (Lambrick and Robinson 1979), and there is evidence for the collection of wild blackberries at Mingies Ditch. It has furthermore been suggested that a few herbs and vegetables may have been grown within the enclosure at Mingies Ditch (Allen and Robinson 1993, 145). No evidence of the collection of wild plants has been identified at Claydon Pike, although it is likely that it would have taken place (Robinson, Chapter 14).

During the middle Iron Age high proportions of both cattle and sheep/goat are recorded in the Upper Thames Valley, indicating that the environmental conditions were suited to sheep and cattle husbandry (see Ingrem, Chapter 14). Horse and pig are also represented in the archaeological record, but in smaller proportions. Within the region there appears to be a focus on cattle husbandry in the more low lying areas, and on sheep in the upland parts. Certain diseases which affect sheep, such as liver fluke and foot-rot, are more infectious on wetter ground, this may be part of the reason they were pastured on the higher drier terrace. Cattle and horses are less susceptible to these conditions and were therefore more suited to the lower damper areas (Wilson 1978, 136). Eighteenth-century historical records indicate that the Cotswolds pasture was known for its suitability for sheep rearing (Saville 1979, 149). Wilson (1978, 136) states that land drainage and the availability of pasture may be strong determinates in animal husbandry regimes.

The cull patterns exhibited at Claydon Pike indicate that cattle and sheep/goat were raised for meat products, but were also exploited for secondary products (see Sykes, Chapter 3). A stronger emphasis on dairying has been suggested for Mingies Ditch and Farmoor and cull patterns from the former suggest that maximum beef production was not of primary importance (Allen and Robinson 1993, 144). Sheep were kept for both meat and secondary products, and would provide a more manageable source of meat for a smaller settlement (Allen and Robinson 1993). These sites may be viewed as specialist stock centres operating within a subsistence led economy.

Horse is the third best represented taxon at Claydon Pike, and is also present in high quantities at Thornhill Farm. One immature animal was identified in the Claydon Pike assemblage, and a number of sub-adults have also been recorded from other low-lying sites in the Upper Thames Valley. Both Watkins Farm and Mingies Ditch produced foal bones suggesting the possibility that horses may have actually been bred on the sites (Allen 1990, 78-9). The numbers of horses present appear to represent greater numbers than just wild animals rounded up for riding. Horse remains were less frequent on the second terrace site of Ashville (Wilson 1978, 136), however high numbers were again identified at Gravelly Guy. Horses would have been bred for trade, riding and status, and not for their meat products, although the large proportion of young horses and foals may suggest that animals considered to be of insufficient quality for trade were consumed (Lambrick and Allen 2004). Maltby (1996) has indicated that the breeding of horses would have necessitated high quality grazing and their value as work animals was sufficient to warrant this. The lower gravel terraces provided an ideal environment.

There is no evidence for hunting and fishing at Claydon Pike, with only one wild animal, a buzzard or kite, represented (see Sykes, Chapter 3). This is quite standard for animal bone assemblages in the region and indeed southern England as a whole during the Iron Age (Hill 1995, 63). Wild bird remains have been identified from the middle Iron Age phase at Ashville where a heron, mallard duck, domestic duck and jackdaw are all represented (Bramwell 1978, 133).

MATERIAL CULTURE

The artefactual assemblages from middle Iron Age sites in the Upper Thames Valley tend to consist predominantly of ceramics with relatively few objects of personal adornment or weapons. This is usually taken to be indicative of the low status of sites, however this may be too subjective an interpretation. Hill (1995) has warned that the material recovered from archaeological sites is a fraction of the material that would have originally been in use. Organic items made from wood or basketry have not survived and assumptions made about settlements based on artefactual assemblages do so without the full repertoire of objects. For the most

part there is little differentiation between the gravel sites assemblages, although a wide range of artefacts was recovered from the early to middle Iron Age phases at Gravelly Guy including brooches and also weaponry in funerary contexts (Wait and Boyle 2004). A rare discovery of a fused mass of Iron Age currency bars was made at Totterdown Lane, Horcott (4 km south-west of Claydon Pike) during excavations in 2001 (Pine and Preston 2004), although these may be late Iron Age in date.

Barrel- and globular-shaped vessels dominate the middle Iron Age pottery from the region. The fabrics predominantly contained coarse inclusions of shelly limestone or sand, and the proportion of calcareous fabrics to sandy wares within a single assemblage has been seen to be chronologically significant. The bulk of the material represents local procurement of resources and local production, however at a number of sites including Claydon Pike and Thornhill Farm non-local Malvernian pottery has been identified. Furthermore, at Claydon Pike sandy fabrics containing grains of glauconite suggests an origin from a Greensand source, located 14 km distant (see Chapter 3).

Fragments of salt container material have been recovered in varying quantities at a number of sites in the Upper Thames Valley including Claydon Pike, Mingies Ditch, Allcourt Farm (Little London, Lechlade) and Gravelly Guy. They have also been found to the south of the Thames at Groundwell Farm, Swindon, and to the north at a number of Cotswolds sites. The briquetage containers were used to dry and transport salt from the brine springs at Droitwich, Worcestershire and have been found at sites up to 80 km from the source (Morris 2004). The low quantity of salt container material recovered from Claydon Pike (351 g) was suggested to indicate the south-eastern edge of the distribution (see Morris, Chapter 3). A far greater quantity was recovered from Gravelly Guy (5 kg from early to middle Iron Age features), (Morris 2004).

Pottery distributed from a specialist potting industry centred in the Malvern Hills, Herefordshire (Peacock 1968) is often recorded from sites with Droitwich briquetage. Very small quantities of Malvernian pottery were recovered from Claydon Pike and Thornhill Farm. The Malvernian wares did not appear at Gravelly Guy in the middle Iron Age phase which is surprising given the quantities of briquetage recovered. 'It appears as though the need for salt as a commodity extended its distribution beyond that of the tribe using Malvernian pottery as a group identity marker' (Morris 2004). On the whole the quantities of briquetage and Malvernian pottery recovered from sites in the Upper Thames Valley during the middle Iron Age is small and suggests that this area was at the limit of the distribution network. Salt was a luxury item and probably used only as a condiment. Practices such as salting meat would require far greater quantities which are likely to have left more visible remains on archaeological sites (Allen and Robinson 1993, 147).

Potting clay was widely available, although the gravels do not offer material suitable for querns and these were brought in from some distance. At Claydon Pike nearly all the quernstone material came from the same direction, either sandstone from the May Hill area, 51 km to the north west, or Upper Old Red Sandstone from the Forest of Dean, 64 km away, and one Greensand quern from the opposite direction, Culham in Oxfordshire, 37 km down stream (see Roe, Chapter 3). Saddle querns recorded from Gravelly Guy were also identified from these sources, the Greensand from the Culham area dominating the middle Iron Age assemblage, although the proximity of both the source and the site to the River Thames may explain the dominance of this material (Wait and Boyle 2004). The rotary quern identified on gravel Island 3 at Claydon Pike is unusual as querns recovered from the Upper Thames Valley tend to be saddle querns. The middle Iron Age use of rotary querns has been recorded in the Wessex region at Gussage All Saints, Dorset and Winnall Down, Hampshire (Wait and Boyle 2004).

Evidence of textile production is often recovered from sites in the region. At Claydon Pike a small number of triangular loomweights was identified and indicate weaving was practised there. At Gravelly Guy a wider range of tools associated with textiles was recovered, including a variety of worked bone objects such as bobbins, combs and needles. Bronze needles were also identified and iron awls which suggest leather working (Wait and Boyle 2004).

TRANSPORT

There was no evidence for roadways at Claydon Pike until the late Iron Age/early Roman period (Phase 2; Chapter 4), although various trackways and droveways were no doubt in use, and may be suggested in the north-eastern area of Island 3. It is possible that many of the later trackways were merely defining pre-existing routes through the landscape. The rivers of the Upper Thames Valley would undoubtedly have played an important role in the life of the settlement, particularly for bringing heavy items such as querns, limestone and timber to the site. The rivers may also have acted as boundaries.

RITUAL AND BELIEF SYSTEMS

Most of the buildings seen in the middle Iron Age are vernacular, and evidence for specialised constructed sacred space does not appear until the late Iron Age, where it is still very rare (Smith 2001, 67). The ritual and belief systems of the middle Iron Age appear to be more tied in with the fabric of everyday existence, 'a practical/domestic versus religious dichotomy is inappropriate for most

places and most times during the British Iron Age' (Gwilt and Haselgrove 1997, 2). Evidence of belief systems and associated behaviour must therefore be gathered from the evidence of everyday life.

Special deposits of human and animal bone have been recorded from a number of Iron Age sites in southern England (cf Hill 1995), and appear to have been treated differently from other waste. The burial of articulated cattle bones in a pit at Claydon Pike (Chapter 3) and an isolated sheep/goat cremation at Mingies Ditch do not represent the usual patterns of disposal of animal bone remains. Horse fragments from Totterdown Lane, Fairford, were relatively complete and implied a different use and disposal pattern (Reilly 2002, 17). Furthermore, there appeared to be deposits of human cremated bone, although not actual cremation burials, in roundhouse gullies at this site (Pine and Preston 2002, 24). At Farmoor part of a horse skull from an animal of around 12 years of age was discovered in the southern terminus of a roundhouse gully, while in the northern terminus was the jaw of a horse approximately 5 years old (Wilson 1979, 129). Special deposits of human infants, dogs, horses and other burials were seen across the early and middle Iron Age site at Gravelly Guy, where they are thought to 'represent an aspect of spiritual life that was associated with, or deliberately linked to, the fabric of ordinary living' (Lambrick and Allen 2004). The deposits were probably laid down relatively infrequently, at Gravelly Guy this is suggested as every 6-7 years in the early Iron Age and every 4-5 years in the mid to late Iron Age (Lambrick and Allen 2004).

Concentrations of debris in the terminals of penannular gullies are fairly typical of roundhouses in the region. An increase in finds towards the gully terminals was noted in two of the Ashville structures, and Parrington suggested that this 'would seem to indicate that domestic rubbish from the huts inside the ditch circles was thrown into the ditch by the entrance as the occupants emerged' (Parrington 1978, 35). More recent work by Hill on a number of sites in the Wessex region has indicated that the disposal of 'rubbish' may be more structured and that terminal deposits emphasised the entrance (Hill 1995, 79-80). These terminal concentrations were also seen at Claydon Pike and it appears significant that the largest and most complete vessels recovered from the site were also seemingly placed in gully and ditch terminals.

The large vessels from Claydon Pike had very high mean sherd weights and did not appear to have been discarded in the same way as pottery from other parts of the site (see Chapter 3). Two of these vessels appeared to have been used in cooking and may therefore have been used to prepare a communal meal, and possibly a feast. The giving of feasts may have been an important part of the social technology of the site and played a role in reinforcing and renegotiating relationships (Morris 2002, 55). Ceramic vessels may have been one of the tools that facilitated such feasts and it is perhaps not surprising that their disposal was in some way structured.

There is very little evidence for the practices and beliefs associated with the disposal of human remains during the middle Iron Age in the Upper Thames Valley. Isolated fragments are often recovered from pits and ditches, however actual cemeteries are extremely rare. A middle Iron Age cemetery has been excavated at Yarnton, located 50 m north-west of the settlement containing the remains of 35 crouched inhumations 'with their heads to the north facing south' (Hey *et al.* 1999). They were of mixed age and sex and without grave goods (Hey *et al.* 1999). The exceptional nature of this site highlights the paucity of evidence for middle Iron Age burial elsewhere in the region.

EXCHANGE SYSTEMS AND SOCIAL RELATIONS

Within the Upper Thames Valley the middle Iron Age began a period of increasing economic specialisation, with settlements on the floodplain and First Gravel Terrace operating a largely pastoral economy, and those located on the second terrace operating a more mixed farming economy. The former could be quite seasonal settlements, such as Farmoor, while the latter tended to be permanent. This divide appears to be a response to environmental and topographic considerations, which had a great affect upon animal husbandry regimes. Thus, cattle dominated the animal bone assemblages of the lower lying sites, while sheep were more numerous in the upland areas. The pastoral sites appear to have been occupied by only one or two family groups, or perhaps one extended family group. They were self-sufficient in many ways, but did not appear to be producing grain, at least not in the immediate vicinity. Environmental evidence in the form of carbonised remains, together with the presence of quernstones, indicate that cereals were certainly processed on the lower lying sites, but these may well have been imported from settlements on the higher gravel terraces (Allen 1990, 78).

The low-lying pastoral sites would therefore appear to be part of an agricultural network that included the settlements on the second terrace (Allen 1990, 79), although the mechanisms behind such a network are completely unknown. The settlements were often quite close together, Watkins Farm and Mingies Ditch, both seemingly self-contained settlements, were separated from their nearest neighbours by 1 km (Allen and Robinson 1993, 149). Thornhill Farm and Claydon Pike were also only 1 km apart, with the settlement at Allcourt Farm, Lechlade, lying 2 km to the east, and ten possible middle Iron Age roundhouses located 4 km to the south-west at Totterdown Lane, Horcott. The question of how independent such settlements on the lower gravel terraces were, and the nature of their links to the other settlements is one of the most

difficult to define in the archaeological record. How they interacted with each other, if there was a system of grazing rights and how they obtained produce from the arable community are all key issues.

Allen and Robinson (1993, 144-5) have suggested two models that may have facilitated the import of grain at Mingies Ditch. The first is that the settlement was 'part of a complementary agricultural system' and provided summer grazing for those sites on the higher terraces. In this case over winter the inhabitants would have managed only enough animals to meet their subsistence requirements, but during the late spring to autumn would have provided grazing areas for the other settlements, particularly for cattle. Alternatively one or more species would have been raised as self-sustaining herds to produce a surplus of animals which could then be traded as livestock or for their products. These models are further complicated by the suggestion that Gravelly Guy was capable of producing a surplus of both pastoral and arable products, and that horse rearing may have formed part of the settlement's economy (Lambrick and Allen 2004).

In the case of seasonal sites such as Farmoor the inhabitants may have formed part of a settlement elsewhere, at any rate they would have needed to find winter accommodation. The specialisations exhibited in the economy of the region at this time suggest a complex social system to facilitate them. Lambrick and Robinson have also explored a number of possibilities for the Farmoor inhabitants, who may represent independent herdsmen who moved seasonally with their families and livestock to exploit the maximum potential from their environment, exchanging or selling their produce to obtain other goods such as grain. Equally they may have been less independent and formed part of a more complex society with a well organised division of labour designed to maximise production (Lambrick and Robinson 1979, 135).

The inferred relationships between settlements in the Upper Thames Valley serve as a reminder that Iron Age societies 'operated not simply at the level of the individual nuclear or extended family group, but also within wider communities, probably kinship groups that evolved out of the common use of Neolithic monuments and Bronze Age burial grounds' (Allen 2000, 13). The communities were exchanging grain and possibly grazing rights. Neighbouring settlements may have been called upon to supply labour during periods of construction work, such as the digging of ditches. Allen and Robinson (1993, 149) have examined ethnographic studies which suggest workers were rounded up for major construction work by a number of methods including providing parties and feasts.

Two large vessels recovered from Claydon Pike displayed areas of sooting and indicate the vessel was used for cooking or heating, presumably for a communal meal and possibly for a feast (see Jones, Chapter 3). Hingley states that the 'feast should be envisaged as an act which reinforced the solidarity of the community formed out of the association of local social groups' (Hingley 1990a, 100). Hayden argues that feasts are a major component of 'the creation and maintenance of social relationships that are predicted on securing access to resources, labour, or security' (2001, 26). The apparent structured deposition of such large vessels in the terminals of gullies and ditches again indicates the importance of the feast, and thereby social relationships, that they represent. The presence of local and non-local sandy wares at Claydon Pike may be further evidence of the 'maintenance of exchange networks' which were 'vital for the survival of Iron Age communities' (Morris 1997, 38).

CONCLUSION

The middle Iron Age period saw a population expansion in the Upper Thames Valley and surrounding region, and the land clearance that began in the Bronze Age affected the hydrology of the region causing flooding at this time. Nonetheless the floodplain and first gravel terrace were widely exploited by small, probably single family, settlements operating largely specialised pastoral regimes with an emphasis on cattle husbandry. Settlements on the higher second terrace were better drained and operated mixed farming economies. Horse rearing may have been a particular speciality of the more low lying sites, and has also recently been proposed for the second terrace settlement at Gravelly Guy.

In terms of ceramic vessels and textiles, the sites within the region were largely self-sufficient, and would have been in a position to produce a range of other articles including organic items such as baskets. Salt and quern material were not locally available and had to be brought into the area, as part of wide networks of exchange. Furthermore, the low-lying sites did not appear to be producing grain but were consuming it, indicating they were part of a wider agricultural network.

The landscape of the Upper Thames Valley was densely settled and the relationships between these settlements were no doubt complex. The supply of grain to the lower lying sites, the communal labour force implied by the digging of the Mingies Ditch enclosure ditches, the presence of Malvernian pottery and Droitwich briquetage indicate the importance of these relationships. Feasting may have been one way in which these networks were maintained, however further work will need to investigate the complexities of the producer/consumer relationships.

Chapter 16
The Late Iron Age and Roman Landscape

by Alex Smith

INTRODUCTION

The landscape of the Upper Thames Valley became increasingly densely occupied throughout the later Iron Age and Roman period (Fig. 16.1), although there was still significant heterogeneity in settlement form and development. Our knowledge of settlement patterns in this region has greatly increased over the past 30 years through excavations in advance of gravel extraction (see Chapter 1). All of the key sites in this volume were gravel quarry sites, and those at Claydon Pike (Chapters 2-8) and Somerford Keynes (Chapter 9) in particular remain pivotal to any overall interpretration of archaeology in the region. This chapter places these sites within their regional context in terms of the late Iron Age and early-mid Roman landscape. The later Roman landscape is discussed in Chapter 17.

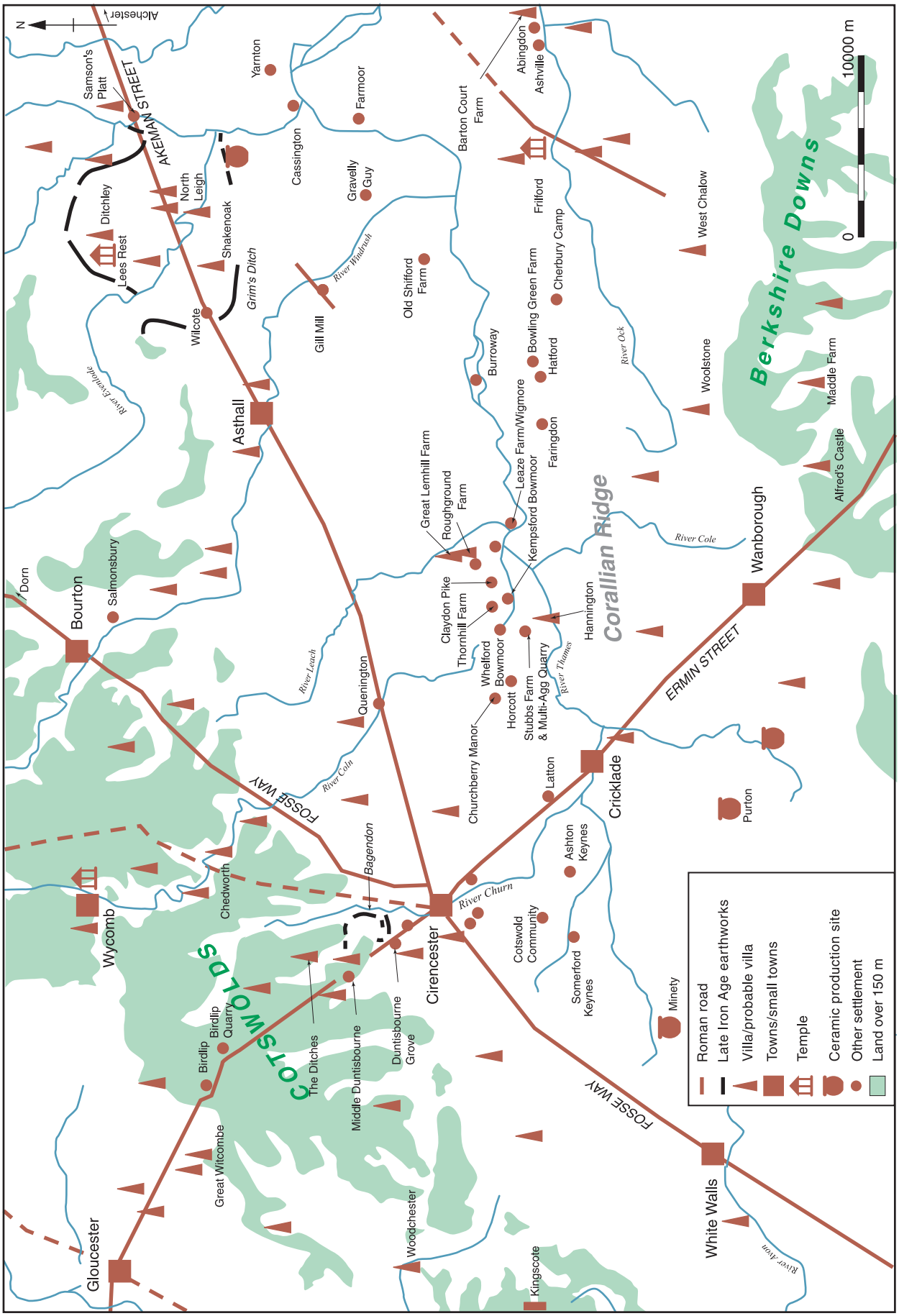
It is as a consequence of the wealth of information for the Upper Thames Valley that care must be taken when specific comparisons are drawn with areas further north and south which have generally received less archaeological attention. Roman occupation of the Cotswolds in particular is still heavily biased towards villas, 'small towns' and other visually dominant remains, and even many of these were excavated many years ago and lack the detailed chronological sequences known from the Thames Valley sites. Furthermore, although the Royal Commission Monument Survey on Iron Age and Roman settlement in the Cotswolds (1976) has highlighted many possible lower status rural settlements, virtually nothing is known of their specific chronology or character. Hingley (2000, 15) has recently emphasised that even in areas of southern Britain where villas do occur, such sites make up no more than 15% of rural settlement. Yet in most cases we still do not have an adequate sample of the remaining 85% of non-villa settlements on which to base an informed understanding of the Roman province.

SETTLEMENT STRUCTURE AND DEVELOPMENT (Fig. 16.1)

Late Iron Age

It has already been remarked upon (Chapter 8) that there were apparent widespread changes in the settlement pattern of the Upper Thames Valley during the late Iron Age, with a number of sites either being newly established, abandoned, or shifting in location (Lambrick 1992, 83). This is perhaps best seen further to the east in Oxfordshire, where middle Iron Age sites such as Mingies Ditch and Watkins Farm were abandoned, while at others such as Gravelly Guy new settlements were established, often adjacent to a previous middle Iron Age site (Lambrick and Allen 2004). Such settlement disruption is also a feature further west along the Thames Valley, being evident at Claydon Pike (Chapter 4) and Somerford Keynes (Chapter 9). At sites such as Latton Lands, Totterdown Lane, Horcott, Cotswold Community, Ashton Keynes and Thornhill Farm, there is more evidence of continuity, from as early as the late Bronze Age in some cases, although the intensity and nature of occupation does often appear to change during the late Iron Age. It must be stressed however that the nature of change is far from constant, and it probably occurred over a period of many generations. This suggests that there was no single determining factor that influenced such widespread disruption, but rather it was probably a consequence of matters such as population pressure, changing environmental conditions, and developments in the socio-political structure (see below).

Most of these late Iron Age sites lay upon the floodplain or lower gravel terraces of the River Thames, which appears to have remained largely open grassland, with much of the floodplain itself experiencing seasonal inundation (see Chapter 14). There is generally far less evidence for ditches and hedges than in later Roman periods, which may explain the poor drainage encountered on sites such as Claydon Pike. Many settlements seem to have operated a pastoral led economy (see below), which can clearly be seen in their physical layout. They are often characterised by a series of enclosures and droveways, seemingly used for the management and control of livestock. Such an increase in specialist activity is characteristic of the period within this region, although it is likely that many sites also had some cultivated land (see Agriculture below). Another particular characteristic of these late Iron Age Thames Valley settlements is the lack of evidence for domestic structures, a situation which continues into the Roman period with regard to low status sites. The most commonly accepted explanation for this is that such structures were using mass-walled construction techniques and


N
Alchester
Samson's Platt
AKEMAN STREET
Yarnton
Cassington
Farmoor
Barton Court Farm
Abingdon
Ashville
Ditchley
Lees Rest
North Leigh
Shakenoak
Grim's Ditch
Gravelly Guy
Frilford
Cherbury Camp
West Chalow
Wilcote
River Windrush
Old Shifford Farm
Gill Mill
Bowling Green Farm
Hatford
River Evenlode
Asthall
Burroway
River Ock
Woolstone
Berkshire Downs
Maddle Farm
Great Lemhill Farm
Roughground Farm
Leaze Farm/Wigmore
Kempsford Bowmoor
Faringdon
Alfred's Castle
Dorn
Bourton
Salmonsbury
Claydon Pike
Thornhill Farm
Whelford Bowmoor
Horcott
Stubbs Farm & Multi-Agg Quarry
Hannington
Corallian Ridge
River Cole
Wanborough
River Leach
Quenington
River Thames
ERMIN STREET
Churchberry Manor
Latton
Cricklade
Purton
FOSSE WAY
River Coln
Bagendon
Chedworth
Wycomb
River Churn
Ashton Keynes
Cotswold Community
Somerford Keynes
Minety
COTSWOLDS
Birdlip
Birdlip Quarry
The Ditches
Middle Duntisbourne
Duntisbourne Grove
Cirencester
Great Witcombe
Woodchester
Kingscote
White Walls
Gloucester
River Avon
0
10000 m
Roman road
Late Iron Age earthworks
Villa/probable villa
Towns/small towns
Temple
Ceramic production site
Other settlement
Land over 150 m

therefore do not generally survive in the archaeological record (Allen *et al.* 1984, 94; Henig and Booth 2000, 82).

In the Cotswolds further north there is not quite the same degree of evidence for settlement disruption during the late Iron Age, although as stated in the introduction to this chapter, this may be in part due to the lack of comprehensive excavation, especially of 'non-monumental' sites. Middle and later Iron Age activity was certainly quite widespread in parts of this region, with sites at Birdlip (Parry 1998), Highgate House (Mudd and Lupton 1999), Guiting Power (Marshall 1997) and elsewhere. Furthermore, there is some evidence for changes in the Cotswold settlement pattern during the 1st century BC to 1st century AD, although it is certainly not uniform, with sites and regions adapting in different ways and at different times (Moore and Reece 2001, 22). Perhaps the most significant aspect of late Iron Age settlement development in the Cotswolds was the establishment of large high status ditched settlements, or oppida, at sites like Bagendon (Clifford 1961a), Duntisbourne (Fell 1964) and The Ditches (Trow 1988) just north of Cirencester. Bagendon is of particular importance, as it has traditionally been seen as the seat of the tribal rulers of the Dobunni (Wacher 1975, 292; Darvill and Gerrard 1994, 49). It comprised a series of discontinuous dykes defining an area of approximately 200 ha (Pl. 16.1), and although excavations have not been very comprehensive, they have uncovered evidence for coin production and high status occupation, in the form of relatively large amounts of imported pottery. Its origins are still uncertain but it is thought to have been established a few decades before the conquest, with no evidence for any earlier middle Iron Age activity. Indeed Moore and Reece (2001, 22-3) have recently pointed out that the whole area around Bagendon would have been quite forested until the late Iron Age, and so this new high status site was located in what may have previously been marginal land. All of this suggests that the social structure of society towards the end of the Iron Age was somewhat in a state of flux (see below).

The smaller 'oppidum' at Salmonsbury further north is less well known, but seems to have been first occupied in the 1st century BC, continuing into the early Roman period (Dunning 1976). Although there was not the same quantity of finds as from Bagendon, they still included imported Arretine and Lyon wares, suggesting high status occupation around the period of the conquest. Further east, other possible 'oppida' have been located at Cassington (Case 1982), Abingdon (Allen 1993; 1994) and Dorchester-on-Thames (Hingley and Miles 1984, 65-7), while the extensive North Oxfordshire Grim's Ditch earthworks is also likely to have been late Iron Age (1st century AD) in date (Copeland 1989, 287). Although all quite different

Plate 16.1 Bagendon dykes

Facing page: Fig. 16.1 Late Iron Age and Roman sites in the Upper Thames Valley

in many ways, these sites could possibly be seen as élite power centres, incorporating markets, industry, agriculture and possibly ritual foci.

The Roman conquest

The Roman conquest itself and its immediate aftermath are largely invisible within the archaeological record of the region, with little noticeable disruption to the settlement pattern, as seen at sites such as Claydon Pike (Chapter 4) and Neigh Bridge, Somerford Keynes (Chapter 9). An exception lies in a small group of sites near Bicester in Oxfordshire, which appear to terminate around the conquest period (Henig and Booth 2000, 106). It may be significant that these probably lay outside Dobunnic territory in the neighbouring tribal area of the Catuvellauni, which hints at distinct regional variations formed perhaps on political grounds.

A military fort was established at Leaholme (Cirencester) south of Bagendon between two and twelve years after the conquest (Darvill and Gerrard 1994, 54), with the coin and ceramic evidence pointing to a date around AD 49/50. The dating and sequence of construction for the major Roman roads of Ermin Street, Fosse Way and Akeman Street have recently been discussed by Hargreaves (1998), and all are likely to have been in existence by *c* AD 50, in order to provide communication between military centres. Relatively little is known about the Leaholme fort, although a large dump of pottery dating AD 60-65 possibly relates to a change in garrison, and the final abandonment of the site was probably around AD 75 (Wacher and McWhirr 1982, 66). There are no indications that the fort was used wholly to suppress a hostile native power centre, and instead its establishment may have helped to bolster the power of the local élite, while perhaps also keeping them in check (Wacher and McWhirr 1982, 66). This draws parallels with the situation within the Atrebatic client kingdom at Fishbourne and Chichester in West Sussex (see Jennings *et al.* 2004), and may suggest that a short-lived client kingdom also existed in at least part of Dobunnic territory, focusing upon the Bagendon area (see below).

Aside from Leaholme and Kingsholm (Gloucester), which lay a further 30 km north-west, there is no evidence for any intensive Roman military settlement in the region, although a military origin for Wanborough has been suggested in the Neronian-Vespasianic period (Anderson *et al.* 2001, 345). Furthermore, the previous interpretation of 1st-century military activity at Claydon Pike no longer seems sustainable (see Chapters 4 and 8). However, further east at Alchester there is evidence for a substantial and very early vexillation fortress, dating to just after the conquest in AD 44 or even AD 43 (Sauer 2002, 84), and it has been suggested that it may have assumed a key function in the conquest and administration of the south-east of Britain at this time (Sauer, 2003, 95). The size and date of the fortress ensure that it must have had a great effect upon other military dispositions in the wider region, including the early military activity postulated at Wilcote and Asthall, both positioned along Akeman Street between Corinium and Alchester (Booth 1998, 11).

It is often the case in southern Britain that civilian settlements (*vici*) grew up around early military establishments, with some such as at Alchester developing into substantial urban centres. It seem highly likely that such a *vicus* was attached to the Leaholme fort, and that this then developed into the city of Corinium upon the departure of the army in *c* AD 75 (Darvill and Gerard 1994, 57). The early development of the town is unclear, although it seems that the initial programme of public building works began in the later 1st century, and would have taken many decades to complete (Darvill and Gerard 1994, 60). There were few other settlements in the region with anything that could be termed urban characteristics, especially within the early Roman period. Nevertheless, Timby (1998, 433) has identified a number of 'small towns' or roadside settlements, most with early Roman origins of some kind, such as Dorn, Bourton, Wanborough, Cricklade Quenington and Asthall. Each of these settlements, despite varying a great deal in character and chronology, were spaced at least 8-10 km from Corinium and each other, and probably stood in their own distinct territory (Timby 1998, 429). They may have formed local market centres, and possibly had some administrative functions, although none contained any recognisable public buildings (see below). Cricklade is the only one of these 'small towns' to be sited within the Upper Thames Valley itself, although very little is known of its origins or character (Haslam 2003). Nothing in the archaeology suggests that Cricklade was of particular importance, but it is possible that it was established as a staging post at the crossing-place of the Thames by Ermin Street, at a point half way between Corinium and Wanborough (Haslam 2003).

Although many of these local centres appear to have been established in some form by the end of the 1st century AD, very few of the large numbers of villas from the region can be ascribed to this date. One example is that within The Ditches hillfort just to the north of Bagendon, an earthwork which is thought to have been part of the élite late Iron Age tribal centre (Trow 1988). The unusual location of this villa, in an elevated position away from a good water source, suggests that the occupants had personal or political associations with the pre-Roman native enclosure, and may have used this location to help maintain and bolster their own influence (Trow and James 1989, 85; see below). A further group of villas also dating to the end of the 1st century AD is located within the area of Grim's Ditch in north Oxfordshire, and include North Leigh, Ditchley and Shakenoak (Hingley 1989, 107-8; Henig and Booth 2000, 108). As with The Ditches villa, this shows a marked degree of continuity from what is presumed to be a late pre-Roman power

centre (see below). The roadside settlement of Wilcote also lay within the circuit of Grim's Ditch, and its early establishment at this location may well have been dictated by such association (Booth 1998, 10). An interesting point noted is that fragments of carrot amphorae were recovered from Wilcote as well as from the nearby villas at Shakenoak, Fawler and Ditchley, and such amphora types were not only rare, but also most commonly associated with military sites (Booth 1999, 48). This suggests that there may have been some early military presence in the area, or at least that there was some military connection apparent with certain members of the local élite (Booth 1999, 48). There would certainly have been a temporary military presence in this area, at least during the construction of Akeman Street, which cut through Grim's Ditch. Military traffic would have undoubtedly passed along this road from Corinium (Leaholm) to Alchester.

Settlement development in the 2nd and early 3rd centuries AD

One of the most striking aspects of settlement development within the Upper Thames Valley during the Roman period is the apparent widespread disruption and reorganisation of the landscape that occurred during the early 2nd century AD, in what appears to have been a relatively short period of time. This has recently been commented on with explicit reference to Oxfordshire sites (Lambrick 1992; Henig and Booth 2000, 106), and although there is much inter-site variation, the changes can also be seen at many sites in Gloucestershire. All of the key Cotswold Water Park sites presented in this volume were either newly established at this time, or else underwent major transformation. At Claydon Pike (Chapter 5) and Neigh Bridge, Somerford Keynes (Chapter 9), this transformation resulted in the construction of substantial settlement enclosures, trackways and timber framed aisled buildings. Occupation at Whelford Bowmoor (Chapter 10) and Stubbs Farm, Kempsford (Chapter 11) commenced at this time, although the physical form and nature of activity at these sites appears markedly different to that of the aisled building settlements. It is possible that Whelford Bowmoor would only have been occupied on a seasonal basis, while both sites were probably abandoned at some point in the 3rd century, possibly as result of increased flooding and/or further landscape reorganisation in this area. Analysis of the local settlement patterns around the Cotswold Water Park sites (Chapters 8 to 11) has often indicated further changes occurring in the early 2nd century AD. For example, at Totterdown Lane, Horcott, the nature of activity within the excavated area changed from a series of stock enclosures bearing some similarities to Phase 2 Claydon Pike, to fields, paddocks and enclosures which were obviously peripheral to the main settlement (Pine and Preston 2004, 92).

To the west of Claydon Pike, Thornhill Farm was abandoned during the early 2nd century and the small rural settlement of Kempsford Bowmoor was established, while to the east on the second gravel terrace the villa at Roughground Farm was constructed. This was one of very few villas from the Thames Valley itself, although another possible example lay just over 2 km to the north at Great Lemhill (SMR 311) and a villa was investigated in the late 19th century on the junction of the floodplain and first gravel terrace at Hannington Wick (Goddard 1890). Both of these villas appear to have had their origins in the 2nd century, and continued until the late Roman period. There are a number of other sites in the Thames Valley that have evidence for rectangular masonry footed structures, but for which the term villa might well be misappropriate. At Churchberry Manor near Fairford the remains of two such buildings were discovered during an archaeological evaluation (OAU 1989b). They were associated with pits, postholes and ditches, but very little domestic debris was recovered. Other masonry structures have been found at the Multi-Agg quarry site at Kempsford (see Digital section 8.4) and at Green Farm to the east of Claydon Pike (Chapter 12), although neither of these has been investigated thoroughly. These would all seem to have been quite substantial buildings, although their status and relationship to other settlements is largely unknown.

Large scale excavations and aerial photographs within the Upper Thames Valley have provided evidence for ditched trackways running through the landscape (Pl.16.2), which appeared to remain as open as in the previous late Iron Age/early Roman period, although with some small areas of woodland in places (see Chapter 14). In addition there is increased evidence for ditched and hedged boundaries defining paddocks and areas of cultivated land (see Agriculture below).

The trackways, which were features of all CWP sites in this volume (Chapters 4-6 and 9-11), seemingly connected the various field systems and settlements within and outside of the valley. Where dated, they invariably belong to the early 2nd century, often continuing in some form into the later Roman period. While many of the trackways may well have existed in some form before this time, their definition and construction still represents a considerable input of resources, the impetus for which is not certain (see below). Henig and Booth (2000, 99) noted the recurrence of a Y-shaped trackway configuration on a number of sites in the Upper Thames Valley such as Appleford and Stanton Harcourt. Similar arrangement can be seen near Lechlade, both at Butler's Field (Boyle *et al.* 1998), where one track leads to a possible enclosed settlement, and at Roughground Farm, where two trackways converge on an open area adjacent to the villa. Similar open spaces, sometimes likened to 'village greens' (Hey 1995, 172) have been found at Appleford and Standlake, and it has been suggested

Plate 16.2 Thornhill Farm trackway

that they may have functioned as livestock markets (Lambrick 1992, 103). Aside from such examples, there was much heterogeneity in the arrangement of trackways, field ditches and enclosures, which formed the outer holdings of settlements. At Yarnton in Oxfordshire for example, there were a number of droveways leading down to the lowest part of the floodplain, which would have experienced seasonal flooding and was used as pastoral land, while other parts of the floodplain and gravel terraces were used – for a time at least – for arable purposes (Hey and Timby forthcoming). Around most other Thames Valley sites where environmental evidence has been forthcoming, all of the floodplain appears to have been used for grazing purposes, with trackways at Farmoor leading down to this area and linking with another running parallel to the river, along which were a number of probable paddocks (Lambrick and Robinson 1979). Taylor (2001, 52) has recently highlighted the importance of including landscape features such as trackways and field boundaries within our studies of rural settlement in Roman Britain. Certainly the extent of the trackways within the Upper Thames Valley suggests that the inhabitants had a particular concern with defining lines of access both within and between settlement boundaries. This was probably not only concerned with the movement of agricultural produce, but may also have helped to create and maintain relationships between different settlements.

In addition to changes in the physical structure of settlements and their immediate environment, it is uncertain how far there were also changes in settlement territory and ownership in the early 2nd century. It seems quite likely that the Claydon Pike territory at least would have expanded westwards at the expense of Thornhill Farm, suggesting that in this instance, the changes in the physical structure were matched by an increase in associated territory (see Chapters 4 and 8). It is likely that such specific changes concerning the control of land were quite piecemeal, and largely dependent upon matters of personal circumstance and power negotiation (see below).

Further north in the Cotswolds the evidence for significant settlement change in the early 2nd century AD is far less pronounced, although this may in part be due to the lack of comprehensive archaeological investigation. The early villas centred on Grim's Ditch and that at The Ditches do not appear on present evidence to have been affected in any way, and the same is true of those 'small towns' such as Asthall and Wanborough. An explanation for the apparent comparative lack of sudden change in this region may lie with the fact that it was an area associated with higher status settlement, both in the late Iron Age and Roman period. The estates of the élite may have been far more stable than the land within the Thames Valley, possibly reflecting differences in social structure between the two areas (see below).

One likely phenomenon of the early to mid 2nd century is the construction of *mansiones* within certain towns along the main road network in the region, including Wanborough (Phillips and Walters 1977) and possibly at Asthall (Booth 1997, 158). Most *mansiones* can be dated to this period, when Trajan and Hadrian made the civil service and not the local civitates responsible for maintenance of the *cursus publicus* (Black 1995).

The overall number of villas in the Cotswolds certainly increases in the 2nd century AD, although the evidence is generally insufficient to ascertain an early, mid or late date, and so this cannot readily be related to settlement developments in the Thames Valley. Nevertheless, such an increase in villas at this time is similar in some way to the situation in Sussex, where a small number of large 1st-century villas proliferated into many more modest examples in the 2nd century AD (Rudling 1998, 51). It has been suggested that the initial villas were probably constructed by members of the tribal élite during the period of the client kingdom, and as this became absorbed into the province, the number of more modest villas increased, probably representing a rise in the number of landowners who had benefited financially from integration into the Roman state (Ruddling 1998, 51). It is possible that the increase in villas in the Cotswolds – and indeed those few in the Thames Valley itself – may also have arisen partly as a result of the increased scope for social and financial ascendancy during this period, together with a desire to display this status in terms of Roman style symbols (see below).

As with the early Roman period, there is very little detailed evidence for non-villa rural sites

within the Cotswold region, and so it remains uncertain how far the pronounced settlement disruption of the Upper Thames Valley affected such settlement here. The distribution and organisation of Iron Age and Roman low status sites in the Cotswolds was examined by Hingley (1984, 78-82), in comparison with that of the Thames Valley. He concluded that the Cotswold sites were fewer, more widely spaced and more clearly defined than those in the valley, reflecting differences in the organisation of society (Hingley 1984, 78-82). There does certainly appear to have been a genuine difference between some aspects of the settlement patterns of the two regions, although the density of low status sites in certain parts of the Cotswolds is becoming increasingly apparent, with for example around 19 probable settlements being located within *c* 6 km of Corinium, including Neigh Bridge, Somerford Keynes (Timby 1998, 432; Chapter 9). In this instance, it is likely that the growth of the town itself is likely to have had a significant effect upon the development of these surrounding settlements, and also quite probably those further afield such as Claydon Pike (see below and Chapter 5).

The initial building programme of public works in Corinium is likely to have been completed by the early 2nd century, although further monumental works are attested, including one of the first public market halls (*macella*) in Britain, which was ascribed to the early-mid 2nd century (Holbrook 1998, 186). Also of this period is the first possible evidence for a defensive earthwork around the city, although this is still quite tentative (Holbrook 1998, 94). In the mid 2nd century the first definite defensive earthwork was constructed enclosing an area of 96 ha (Holbrook 1998), while the amphitheatre – one of the largest in civilian Roman Britain – is also likely to belong to this date (Holbrook 1994, 79). In the later 2nd century, a large enclosed courtyard – possibly a temple precinct – was constructed in insula VI, immediately south-east of the forum. It has been suggested that the city was elevated to the status of *muncipium* in the 2nd century (Frere 1984b, 68), and while there is no real evidence for this, it is clear that it was growing at a scale and pace which outstripped most other urban centres in Roman Britain. Furthermore, such growth is bound to have had a significant effect upon other settlements in the region, both in terms of economic and population demands, and – despite the assertions of Clarke (1996) – patterns of social behaviour (see below). What is unclear at present is to what extent the growth of Corinium directly contributed towards the widespread landscape changes in the early 2nd century AD.

Just as the Cotswold settlement pattern appears quite distinctive in many ways, the Roman landscape of the Berkshire Downs, to the south of the Thames Valley, is even more so. A number of settlements, including a few modest masonry villas and non-villa sites, often appeared quite closely integrated, with systems of trackways between them. The villas generally date to the 3rd and 4th century AD, with the exception of the 'cottage-style' villa at Alfred's Castle, which lay within an Iron Age hillfort (Gosden and Lock 2003). It was probably originally constructed in the late 1st or early 2nd century AD, the earliest villa type building in the area, and is seen as 'an obvious and visual statement on the Berkshire Downs' (Gosden and Lock 2003, 73). On the present dating evidence its construction cannot be directly related to the widespread changes in the Thames Valley, and it appears to have collapsed at some point in the 3rd century AD (Gosden and Lock 2003), at the point when other nearby villas such as Maddle Farm (Gaffney and Tingle 1989) were being constructed. Many of the numerous non-villa settlements on the Downs appear to have been occupied at an earlier date than the villas, with for example the village at Knighton Bushes being dated *c* AD 180-240 (Gaffney and Tingle 1989, 239-40), and nearby Odstone ranging from the late 1st to 4th century AD (Gaffney and Tingle 1989, 239-40). The relationship between these two sites and the nearby Maddle Farm villa is undoubtedly complex and at present is ill understood. Perhaps the most archaeologically distinctive aspect of Roman settlement on the Downs are the pronounced field-systems, which greatly expanded from the 1st to mid 3rd centuries AD, indicating significant agricultural intensification (see below).

Between the Berkshire Downs and the Thames Valley lay the Vale of the White Horse and the Corallian Ridge, which contained a few poorly understood villas and other non-villa sites (Miles 1982). Recent excavations at sites such as Hatford (Bourn 2000), Watchfield (Birbeck 2002) and Coxwell Road, Faringdon (Saunders and Weaver 1999) have started to increase our understanding of non-villa sites in this region. Occupation at all of these three settlements appears to have ceased (or shifted location) by the early 2nd century, and therefore may belong to the same widespread pattern of settlement disruption found in the Thames Valley. It is still uncertain how far this was true of the area as a whole because of a lack of detailed dating information, although it is known that a major nucleated settlement at Bowling Green Farm, Stanford in the Vale, was occupied from the 2nd century until the late Roman period (Mudd 1993). Further east, there are a number of poorly understood villas lying at the foot of the Downs, including Woolstone, West Challow and possibly Wantage, although it is debatable whether the latter site is actually a villa or a roadside settlement (Barber and Holbrook 2002, 335). It has been suggested that there was a shift in agricultural emphasis from the Downs to the Vale from the mid 3rd century onwards (Gosden and Lock 2003, 76), and these villas may be associated with this.

There were no further widespread changes noticeable in the archaeology of settlement development in the Thames Valley and Cotswolds region

until the later Roman period. The sites certainly did not remain static however, as there is evidence for substantial individual and local development, such as the apparent abandonment of domestic occupation at certain east Gloucestershire sites like Whelford Bowmoor (Chapter 10) and Stubbs Farm, Kempsford (Chapter 11) in the 3rd century AD. At a small number of sites there is evidence for some low level military activity in the later 2nd to early 3rd century AD. Military equipment of this date has already been commented upon in connection with Claydon Pike (Chapter 5) and Neigh Bridge, Somerford Keynes (Chapter 9) within the Thames Valley, and it also occured at Corinium (Wacher and McWhirr 1982, 126), Alchester (Booth *et al.* 2001, 442-3) and Birdlip Quarry (Scott 1999, 387). Bishop (1991, 22-5) has noted the presence of late 2nd-3rd century military equipment in a number of sites across southern Britain, from large urban centres such as Silchester and Verulamium to smaller settlements like Scole and Wickford. He suggests (Bishop 1991, 26) that such equipment implies the presence within these settlements of elements of the regular army acting in some unknown capacity, and the Severan period *beneficiarius consularis* inscription from Dorchester-on-Thames (Henig and Booth, 2000, 40) would certainly support this. It is possible that the apparent increased military presence at certain places during this period was in a policing capacity to ensure the maintenance of supply networks, although it is also possible that the equipment was derived from retired soldiers as advocated by Black (1994; see Cool, Chapter 13).

SETTLEMENT STATUS AND HIERARCHY

Attempts to measure settlement status and hierarchy in the archaeological record are always fraught with difficulty. Measurable indicators of status in particular can be highly subjective and are culturally, geographically and chronologically variable. Furthermore, it is often somewhat questionable how far archaeologists may be able to identify indicators of status within the material record which are consistent enough be able to construct inter-settlement hierarchies. Nevertheless, in a Romano-British context there are a number of ways in which aspects of status within and between settlements have been measured. In this volume (Chapter 13) Booth has used the representation of fine and specialist wares in the ceramic record in order to compare the status of settlements of similar periods. Whilst care must be taken not to always directly associate such wares with 'Romanisation' (see below), their level of occurrence does seem quite valid as a general indicator of status, especially when compared with geographically and chronologically similar sites. Meadows (2001) has taken this further and examined the drinking and eating habits evident in a number of late Iron Age and early Roman sites within the Upper Thames Valley, in terms of the type of social expression displayed. Thus at Barton Court Farm there is the suggestion that the wealth and status of the inhabitants was expressed through the giving of feasts during the late Iron Age, but that this was redirected during the early Roman period towards the construction of a house and boundary (Meadows 2001, 253).

The settlement structure itself is often used as an indicator of relative status. Hingley (1990a) has suggested that in many Iron Age and Romano-British settlements, boundaries may have been used as symbols of social exclusion and could therefore be seen as comparative indicators of status. This can clearly be seen both internally, such as in the division within the Claydon Pike Phase 3 site (see Chapter 5), and externally, with the pronounced boundaries surrounding many villa sites such as Ditchley (Radford 1936) and Barton Court Farm (Miles 1986). In a Roman context, the villa building itself is often one of the better measures of status and wealth, as these were highly visual structures with outward trappings such as tiled roofs, at least partial masonry superstructure and often painted plaster walls. Together with internal aspects such as mosaics and heated rooms, and the rich material culture that is usually associated with such complexes, this suggests that the occupants had the desire to express their social status through highly visual means. As a corollary of this, it ensures that such sites are readily identifiable as high status within the archaeological record. Yet even within settlements which have evidence for such Roman-style attributes, there are many regional variations that would not seem to be directly associated with degrees of wealth. For example, Gosden and Lock (2003, 79) have recently highlighted the difference between settlement patterns in north Atrebatic territory, characterised by modest villas and aisled buildings, and that of the Dobunnic Cotswolds where there is the highest concentration of large grandiose villas in the country. It is unlikely that the two areas were too far opposed in terms of intrinsic wealth, but just that differing social structures led to different strategies for the display of status and wealth. As with ceramic evidence, the best practise when attempting to compare the status of sites is to examine those from within the same region and period.

Despite the difficulties it is possible to identify a broad hierarchy of settlement within the Upper Thames Valley and Cotswold region, and to try and examine the relationships between them. During the latter part of the late Iron Age, there is evidence for a series of sites across the region which may have acted as élite centres of power, with associated industrial, economic and possibly religious functions (see above). Although they varied in many ways, they were broadly characterised by extensive ditched boundaries, covering hundreds of hectares in the case of Grim's Ditch and Bagendon, and often containing quantities of imported pottery. The discovery of a number of imported amphorae sherds in the late Iron Age phase at Ashton Keynes

(Coe *et al.* 1991), *c* 10 km south of Bagendon, suggests that this site was also part of a high status distribution network, and it has been suggested that it functioned as an élite centre (Moore and Reece 2001, 23), although this is quite difficult to sustain just on the presence of such material. The relationship of these sites to others around them is problematic, as very few have been comprehensively excavated, but it is fair to assume that their influence was probably quite widespread. Furthermore the establishment of such sites may have been associated in some way with the with late Iron Age settlement dislocation noted across much of the Upper Thames Valley.

As highlighted above, the conquest and its immediate aftermath appear to have made very little difference to the pattern of occupation in the region. However, within thirty years or so, some of the major aspects of Roman provincial infrastructure were in place. The town of Corinium was established at the junction of three main roads during the later 1st century AD (see above), and would have been the most important social, political and economic centre in the region, despite what appears to have been a relative lack of large-scale industry. Timby (1998, 434) has noted that the concentration of occupation around Corinium far exceeds that of the 'small towns' in the region such as Bourton and Wycomb, thus demonstrating its significant influence on the surrounding settlement pattern. This seems to follow on from the late Iron Age situation, with the Bagendon group of sites at the centre, and therefore suggests significant continuity in terms of the basic power structure (see Clark 1996 and below). The early Roman villas in the Cotswolds also appear to have been concentrated near to pre-Roman centres of power, thus exhibiting a similar level of continuity.

Further away from Corinium along the major road networks was a series of settlements at regularly spaced intervals (25-35 km), and despite considerable variation in terms of individual form and development, a clear regional settlement hierarchy seems to have emerged (Timby 1998, 435; Fig. 16.1). The regular spacing and often early Roman origins of these smaller nucleated settlements, such as Wanborough and Asthall, suggests that they may well have had official origins (Timby 1998, 430). Certainly a number of them probably contained a *mansio* for the use of the *cursus publicus* (see above), and they almost certainly would have functioned as local market centres, as demonstrated at Asthall (Booth 1997, 158). This settlement was equidistant from the large centres of Corinium and Alchester, with two smaller settlements (Sansom's Platt and Quenington) spaced (*c* 15 km) at mid points between them and Asthall. There would thus appear to have been an evenly spaced hierarchy of settlements, although, very little is known about most of these smaller centres, and so they do not necessarily all follow a simple sequence of decreasing social and economic importance. Furthermore there are other settlements such as Wilcote, 9 km further east along Akeman Street from Asthall, where the relationships are far from certain (Booth 1997, 159). Despite the lack of any substantial structures from this site, it was established at a very early date, and may well have had specific associations with the military and the villas within Grim's Ditch (see above).

In the Thames Valley itself, there are comparatively few known substantial settlements that may have acted as local market centres. One such site lay along a road at Gill Mill (Lambrick 1996), *c* 10 km south-east of Asthall, while further west, Cricklade may also have had a local market function (see Fig. 16.1). To the east, there was also a large but poorly understood settlement at Abingdon (Henig and Booth 2000, 71-2) along with the walled town of Dorchester-on-Thames (Burnham and Wacher 1990, 117-22). There would seem to have been no substantial nucleated settlement for at least 10 km in either direction along the Valley from Claydon Pike, and it is likely that Corinium itself, at *c* 18 km distant, would have exerted the greatest influence upon the sites in this region.

As an ever growing number of Roman sites are excavated across the Upper Thames Valley, the substantial variety of settlement form, function and development becomes increasingly apparent. It is therefore simply not possible to establish any kind of simple pyramidal hierarchy based on economic or social status, as varying social-economic strategies appear to have been adopted at different times and in different places. At Barton Court Farm for example, the late Iron Age site appears to have developed into what has been termed a 'proto-villa' in the later 1st century AD, with evidence for coin use that is unusual in such a rural context (Miles 1986). A similar situation probably existed at Appleford further down the Thames, although there is no evidence for coin use at this site (Booth and Hardy 1993). The inhabitants of both sites thus appear to have consciously adopted new social strategies to adapt to the changing socio-political and economic environment of the time. In contrast at Old Shifford Farm there was very little evidence for any Roman impact at this time, in terms of structural features or material culture. Meadows (2001, 257) has suggested that this may have been a deliberate decision, which may have enhanced their reputation and status with some members of the local community. Even when the spatial organisation of some sites appears to have been relatively similar, such as at Phase 2 Claydon Pike and nearby Thornhill Farm, the associated material culture can suggest that quite different social strategies were being adopted. In this particular case, the higher levels of 'Romanised finds' (fine and specialist ware pottery) at Claydon Pike probably had some connection with the fact that this site was radically redeveloped in the early 2nd century AD, while the neighbouring site was abandoned (see Chapters 4 and 5).

Throughout much of the Upper Thames Valley, it was ultimately this distinct early 2nd century period that saw the most significant changes in settlement development and status, and this must have been paralleled by major social changes. The landscape of the 2nd and 3rd centuries AD may have had its roots firmly in the earlier period, and indeed the basic pattern of power structure may not have been too dissimilar to that of the late Iron Age, but radical changes certainly occurred, with many individuals and groups negotiating new social identities in attempts to successfully operate within a region that was now a well established part of the Roman Empire.

ECONOMY

Agriculture

Throughout the late Iron Age and Roman period, agriculture remained by far the most important economic activity in the Thames Valley and Cotswolds, although many different regimes were practised, reflecting particular geographical, chronological and undoubtedly personal factors. Increasing agricultural intensification and specialism is well noted during the late Iron Age, usually explained in terms of population pressure, changing environmental conditions and developments in socio-political structure (Lambrick 1992). Certainly many late Iron Age and early Roman sites on the floodplain and lower gravel terraces that have environmental evidence appear to have operated largely pastoral economies, which are well suited to the broad expanses of open grassland (see Chapter 14). It appears that much of this grassland was overgrazed, at least around some settlements, which does suggest increased pressure on land-use in the valley. What is at present unknown is whether such specialist sites were all wholly self-contained agricultural units with perhaps some arable crops grown on higher ground, or else reliant upon some kind of exchange with other settlements higher up the valley. At sites such as Thornhill Farm and Claydon Pike (Chapters 4 and 5), there are certainly no indications of any arable activity in the vicinity, and so it would depend upon whether the territory used by the inhabitants expanded onto the upper gravel terraces. Gravelly Guy to the west had a clear ditched boundary dividing arable activity on first gravel terrace from pastureland on the river Windrush floodplain (Lambrick and Allen 2004). This appears to have remained the case throughout the Iron Age and early Roman period, and suggests that this settlement at least was largely self-sufficient. Other sites such as Yarnton, Old Shifford Farm and possibly Farmoor are likely to have been quite similar in this respect, all probably having some elements of a mixed economy. On the whole, the evidence suggests that there was a variety of agrarian regimes and landholding arrangements across the Thames Valley, reflecting differences already seen in matters such as settlement form and social practice.

There were a number of factors introduced by the Romans that are bound to have had a profound effect upon agricultural practices in parts of the province. The introduction of tax collection would have brought much of the rural population into a monetary economy, although materials other than coins may have also been used, especially during the early post-conquest period. The influence of taxation is very difficult to discern archaeologically, although it would undoubtedly have had significant economic and social effects upon parts of society. In particular, the idea of farming for profit was a major innovation, and it came to provide the income required to invest in buildings and other trappings that could be used to maintain and increase social status within the Roman province (Branigan 1994, 14). This developing commercial economy saw the creation of nucleated market centres (see above), where arable and animal surpluses could be sent. The market hall (*macellum*) at Corinium for example had evidence for large-scale butchery in the vicinity (Holbrook 1998, 187), suggesting that animals may have been brought in on-the-hoof from surrounding rural areas (possibly including Claydon Pike) for slaughter in the town.

As with other aspects of the landscape in the Thames Valley, there is evidence that agricultural practices in some areas at least were transformed in the early 2nd century AD. Most pronounced was the shift from largely subsistence level pastoralism to an economy based partly upon the management of hay meadows in the Claydon Pike/Thornhill Farm area (see Chapter 5). This activity could have been for provisioning the urban market at Corinium, which would have been quite well developed by this point. An official interest in this practice cannot be ruled out, possibly to supply the needs of the civil administration. This idea may gain more credence by the fact that, aside from possibly at Farmoor, there is no evidence for hay meadows in any other part of the Thames Valley or beyond during this period, and therefore its introduction is likely to have had some external stimulus. Certainly the value of hay fodder to the Roman state was well known, as a single cavalry *ala* needed 360 ha of grazing (Wacher 2000, 20). It is thought that hay was gathered in from 15-20 km around York (Wacher 2000, 20), and so the Claydon Pike/Thornhill Farm hay meadows would have been in quite a suitable location for providing for the needs of Corinium. However, aside from a possible military policing presence at some settlements during the late 2nd/early 3rd century (see above and Chapter 5), there is no real evidence for direct official involvement in any of the Thames Valley sites, and it is still quite possible that non-state markets alone were being catered for.

Aside from the Claydon Pike/Thornhill Farm area, which was particularly suitable for the production of hay (see Robinson, Chapter 14), it

seems that most of the low lying valley sites continued to concentrate on pastoral activity, although arable production was also a part of most settlements' economic structure. Horticultural crops such as fennel and coriander start to appear on a number of sites, and further down the Thames Valley at Mount Farm, the recovery of celery seeds has suggested the possibility of market gardening for the nearby town of Dorchester-on-Thames (Robinson 1992a, 58).

In many areas of the Upper Thames Valley field systems appear to have expanded, generally becoming more pronounced and regular. Furthermore, different zones appear to have been linked by systems of ditched trackways, suggesting that the agricultural landscape had become more defined (see above). This may indicate an increased emphasis on the control and ownership of land, although it is clear from the settlement pattern around Gravelly Guy that there were still a number of areas where communal land was probably utilised by a number of different groups (Lambrick and Allen 2004).

The picture from the Cotswolds is generally less clear than that of the Thames Valley, but it seems that mixed agricultural practices were the norm. Defined field systems are rare in this region, although this may partly be because of a lack of extensive area excavation around settlement sites. Small rectangular hedged enclosures were connected to the Ditchley villa compound and although these may not have been used for crops, the sizeable granary indicates that the estate must have incorporated large areas of arable land (Radford 1936, 52). Pastoral activity would also have been widespread, with a higher proportion of sheep grazing than in the Thames Valley due to the presence of more suitable land. From the later 1st century onwards, it is likely that the agrarian regimes in the Cotswold region became increasingly dominated by villa estates such as Ditchley, and this was especially so during the later Roman period (see Chapter 17).

The environmental evidence from Hatford indicated that this part of the Corallian ridge to the south of the Thames Valley was primarily short-turf grassland cleared of trees (Bourn 2000, 65), although most sites probably operated a mixed economy with some arable and pastoral. Further west in the Vale of the White Horse at Watchfield, the economy appears to have been largely pastoral with cattle being the dominant animal (Birbeck 2002, 288), as was the case in the Thames Valley. The extensive and pronounced field systems on the Berkshire Downs further south (mentioned above) indicate that arable land use was of major importance in this region, although 'blank' areas also indicate probable pasture land.

Overall, the evidence from different regions indicates that a great variety of agricultural regimes were in operation at any one time. The apparent increase of land turned over to arable activity in many areas during the Roman period probably reflects its increasing economic importance, as it would almost certainly have brought in greater returns than pastureland. The resulting pressure on pastureland may have led to the overgrazing seen in parts of the Thames Valley, and possibly to the introduction of hay meadows to provide animal fodder, which would have drastically reduced the amount of grazing land needed.

Industry

Prior to the Roman conquest, most industrial activity in the region would have been very local in scale, with communities providing for most of their own needs in matters such as ceramics and metalwork. Longer trade networks certainly existed (see below), but aside from possibly at Bagendon, no major pre-Roman centre of manufacture has yet been located in the region. At Bagendon there is some evidence for a variety of industrial practices, including the minting of coins which were no doubt distributed over wide areas (Darvill and Gerard 1994, 49). For some period after the conquest, it is likely that most communities continued as before, although new demands, created initially by the army and later by urban centres and civic authorities, would have ensured that the scale and variety of industrial output increased substantially. There was no major source of any metals in the region and so most of this material must have been imported, probably in raw form for use by local metalworkers. The primary raw material of the Cotswold area was Great Oolite limestone, which was used extensively for construction and other purposes. The massive developments at Corinium and Gloucester in the late 1st and 2nd centuries AD would have required huge volumes of suitable building stone, and a number of quarries have been located around the amphitheatre at Cirencester (Holbrook 1994, 84). Other types of building material such as timber, lime, sand and gravel must have been supplied from the Cotswolds and Upper Thames Valley region, and are unlikely to have travelled too far from the source of origin.

Ceramic building material production was a completely new industry that arose some time after the Roman conquest and probably reached its floruit in the 2nd century AD, when tiles were widely used as roofing material. Official brick and tile production is known within Gloucester (Heighway and Parker 1982), while at Minety – 12 km south of Corinium – there was one of the biggest civilian tile-works found in Roman Britain, with over ten kilns being located (McWhirr and Viner 1978). It is products from here that seem to have been transported via the site at Neigh Bridge, Somerford Keynes, if this site's interpretation as a tile depot is correct (see Chapter 9).

A number of other civilian brickworks were probably located elsewhere in the region, some of which appeared to have had associated stamps such

as TPF, TCM and VLA (McWhirr 1981, 111). Non-official brick-stamps are very rare outside Gloucestershire and McWhirr (McWhirr 1981, 111) has suggested that civilian brickmakers were consciously following the municipal works in Gloucester. The volume of bricks and tile produced during the 1st and especially 2nd century AD would have ensured the need for large quantities of suitable clay, which was quite abundant in certain parts of the region. Large bands of Oxford Clay are found throughout the Upper Thames Valley (see Fig. 1.3), and they were utilised not only for brick and tile making, but also for pottery production. In Chapter 13, Booth noted that local pottery production centres were centred on north Wiltshire and probably west Oxfordshire, possibly around the Asthall/Wilcote area. It is likely that the scale of production in these areas increased substantially during the 2nd century AD as the markets became further developed, although this would also have ensured that more imported ceramics came into the region.

Aside from such comparatively large-scale industries, many small-scale enterprises also developed once Roman infrastructure had become established. Some of these crafts were no doubt rooted in traditional skills such as metalworking, although the products could be quite new. For example, a detached building outside Bath Gate in Corinium contained over 2000 hobnails and a smithing hearth, providing some evidence for industry at the town (Holbrook 1994, 84). Other skills would have been quite new to Britain, such as the mosaic-making, which in this region appears to have been centred on Corinium. The earliest mosaics here were dated to the mid 2nd century AD, although it was not until the late Roman period that the 'industry' became fully developed (McWhirr 1981, 116). Other skilled workers who would have operated within the region include painters, sculptors, carpenters, tanners, bone-workers, jewellery makers and oculists, the stamps of whom were found at Corinium and Lydney. It was ultimately the development of the market economy that enabled such specialised crafts to become established here, and many of them would probably have relied exclusively on official, high status and/or urban markets.

Communication and trade networks

The development of the market economy during the Roman period ensured that increasing amounts of surplus agricultural produce, raw materials and manufactured products needed to be transported to and from the varying market centres. Of course, trade networks across the region and beyond had already been established for a long time prior to the Roman invasion, and in the late Iron Age, high status sites such as Bagendon contained quite large quantities of imported goods (see above). However, when the region became part of the Roman province, the scale of trade would have increased dramatically, placing greater pressure on new and existing transport networks to ensure the supply of goods was maintained. The major Roman roads through the region, although military in origin, would have been used for such a purpose, along with the increasing number of minor roads and trackways. It has already been suggested (see Sykes, Chapter 5) that livestock may have been moved on-the-hoof from sites such as Claydon Pike to markets at places like Corinium, while wheeled vehicles would almost certainly have been used to transport products and raw materials. Clear wheel ruts in some sections of Ermin Street corroborate this, as does the Roman cart linch pin found on the surface of this road (Mudd *et al.* 1999, 265). Wheel ruts were also noted in a trackway surface leading towards Ermin Street at Court Farm, Latton (Mudd *et al.* 1999, 126), and there is much evidence from within Corinium itself (Holbrook 1998). Water-borne transport may also have been of great importance in transporting materials to market centres, although there is perhaps surprisingly little evidence for this. The Thames itself would probably have been navigable to flat-bottomed river craft at least as for as Lechlade, and possibly up to Cricklade, where goods could have been transferred to carts to travel along Ermin Street, although this remains speculative at best (McWhirr 1981, 136).

In addition to the transport of local produce to and from market centres, there existed wider regional, national and Empire-wide trade networks. Booth has already commented upon the principal trading centres of pottery coming into the region, from areas such as the Severn Valley, Wiltshire, Oxfordshire and south-east Dorset (Chapter 13). Much smaller quantities of pottery came from other regions such as the Nene Valley and New Forest, while imports of samian, amphorae and other ceramic products from Gaul, Spain, Italy and other areas of the Empire attest to much longer distance trade networks. The uneven distribution of products like amphorae, which are extremely scarce on lower status rural sites east of Lechlade, points to certain peculiarities in the trade networks. However, attempts to relate distribution patterns of certain ceramics to specific trade networks are very difficult, as no doubt there were a number of factors to do with chronology, status, politics and individual circumstances which may have affected supply and demand.

Other materials that were imported to the region include Millstone Grit from the Pennines around Sheffield, Kimmeridge Shale and Purbeck Marble from Dorset, Niedermendig Lava from northern Germany and Old Red Sandstone from the Forest of Dean. It is likely that iron was also brought from the latter destination, where the industry was possibly under official control (Walters 1992), while lead would probably have come from the known state-controlled mines in the Mendips. Trading routes and commodities would no doubt have fluctuated considerably over the course of the Roman period,

relating at least in part to the actual control of resources, whether it was the state, private organisations or individuals.

POWER AND CONTROL OF RESOURCES

The huge wealth of archaeological information from the Cotswolds and Upper Thames Valley does enable us to gain some small insight into the socio-political structure of the late Iron Age and Roman period in this region. The appearance of massive ditched complexes such as Bagendon, Salmonsbury and Grim's Ditch during the later part of the late Iron Age have been discussed above. They would seem to represent élite centres of power within the overall tribal area of the Dobunni, although this is certainly not to say that they were all equal in function and status. 'Dobunnic' society at this time was clearly in some state of flux, with substantial changes occurring in agricultural practices and settlement patterns, but this was in no way geographically or chronologically constant (see above). Studies of Dobunnic coins and their distribution have attempted to reconstruct aspects of the political situation of the period in terms of the various tribal leaders (van Arsdell 1994; Creighton 2000). However, it is far more difficult to trace any dynastic associations among the rulers named on this coinage compared with dynasties further south (Atrebates) and east (Catuvellauni/Trinovantes). The earliest inscribed issues were those of Bodvoc and/or Corio, perhaps ruling different parts of Dobunnic territory simultaneously in the later 1st century BC. Some coins of Bodvoc were the first to depict a bust on the obverse, and it has been suggested that this was perhaps influenced by coins of Tasciovanus, thus indicating some sort of political alignment with the north Thames kingdom (De Jersey http://athens.arch.ox.ac.uk/coins/). Other named rulers include Anted, Comux, Eisu, Catti and Inam (van Arsdell 1989, 272-83), although nothing is really known about the nature of any relationships. It is possible that one of these rulers was the Dobunnic leader was mentioned by Cassius Dio as submitting to Aulus Plautius in AD 43.

In reality it is far from certain how centralised power would have been during this period, although individuals – probably of some considerable influence – were certainly producing inscribed coins, and one of the mints at least can be placed within the oppidum at Bagendon. Furthermore, the construction of the massive earthworks at such sites would have required the effective mobilisation and control of large numbers of people. It is therefore likely that an increasingly hierarchical political structure was developing during the late Iron Age, albeit still operating within quite a heterogeneous landscape in terms of social and settlement organisation.

Archaeological indicators suggest that the conquest and its immediate aftermath had a negligible effect upon settlement organisation and material culture in the region, and therefore it is reasonable to assume that the indigenous political structure also remained largely unchanged at this time. The earliest military establishments lay along the lines of newly constructed roads such as Akeman Street and it is argued that these would have acted more as frontier bases for pushing into unfriendly territory further north and west than to suppress the native population (Darvill and Gerard 1994, 55; Henig and Booth 2000, 37). It is known that the Atrebatic territory to the south was placed under the client king Togidubnus, while the western Catuvellauni probably had a similar political set-up, at least during the early post-conquest years. It is therefore quite possible that at least the southern Dobunnic territory remained under semi-autonomous indigenous leadership for much of the early Roman period, with political power remaining in existing centres. The early Roman fort at Alchester lay on the boundary between the Dobunni and the Catuvellauni and would thus have played a key role in negotiating power structure at this time. It would thus have been possible for the Roman military to keep an eye on the western Catuvellauni, while also protecting the eastern Dobunnic region, which was presumably the area that had been previously encroached upon by their eastern neighbours.

It is also possible that there may have been some areas not under indigenous control which could even have become Imperial estates, either during this time or at a later period. This has been suggested by Henig for the area around Kingscote (Timby 1998, 187), although as Timby points out (1998, 432), it is very difficult to discern archaeologically, as the distinction is likely to be legal, not material. There is certainly no positive evidence for any of the sites within the Cotswold Water Park area being part of an imperial estate.

After the Boudiccan revolt in AD 61, Togibubnus's client kingdom supposedly underwent significant expansion, and it has been suggested that this may now have incorporated all territory south of Akeman Street (Henig and Booth 2000, 38). Whether or not this was the case, or whether there was a continuation of the possible early Dobunnic kingdom, it remains quite possible that the Upper Thames Valley and southern Cotswolds region was semi-autonomous until the end of the 1st century AD, despite traditional assertions that the *Civitas Dobunnorum* was established in the early Flavian period (Wacher 1995). This is not to say however that there would not have been great social changes occurring, especially among certain members of the native élite who may have started to re-negotiate power and status along Roman lines. The construction of villas during the later 1st century AD centred upon pre-Roman power centres is probably a fine example of such behaviour. Perring has argued that such distinct architectural and decorative arrangements were specifically designed to provide a setting for social

behaviour that followed Roman practice (2002, 212). It was also during the later 1st century – after the military presence had been withdrawn – that the main urban centre of Corinium was established. Taken together with the early villas, it does imply that significant socio-political changes were occurring at this time, at least amongst some of the élite. In a study of Romanisation in the Cotswold region, Clarke (1996) asserted that that there was very little social change among the élite around Cirencester, especially compared to area around Gloucester. It would certainly seem likely that the establishment of the Gloucester colonia and its *territorium* at the end of the 1st century AD would have had a much more disruptive effect upon the élite in this area (see Hurst 1999, 130). In addition, as expressed above, it is quite likely that the existing political structure remained largely intact in southern Dobunnic territory up until the later 1st century AD. However, the establishment of Corinium towards the end of the 1st century AD (*c* AD 75) would certainly have acted as a catalyst for significant social and political change in the region around it, and it is likely that the direct military presence would have bought about some social change before this.

Roman society was essentially urban in nature, with towns being required for effective civil administration to function (Faulkner 2000, 27). Furthermore, participation in Roman civic life depended upon the ownership of urban property, and therefore it was probably not until the late 1st and early 2nd century AD that any members of the native élite in the south Dobunnic region would have actively participated in Roman state administration. It must have been at this point that such leading local landowners (*decuriones*) would have formed the administrative council (*ordo* or *curia*) of the newly formed civitas, with responsibility for public works and tax collection. However, it must be stated that prior to the last quarter of the 2nd century, there is no evidence for particularly high status housing in Corinium (Holbrook 1998, 378), and so the primary residences for the élite may still have been rural. There is likely to have been greater scope for social and political advancement during the 2nd century, taking advantage of new economic opportunities. This is possibly reflected in the increasing number of villas and other medium to high status dwellings (eg aisled buildings at Claydon Pike and Somerford Keynes) from this period onwards – a similar phenomenon is seen in Sussex after the client kingdom became part of the province (Rudling 1998, 51).

It is certainly not the case however that the 'native élite' were a single body, all acting in the same way, to the same ends. The key to understanding the huge variety in settlement form, function and development in the region is the realisation that power was ultimately based upon social and political dialogue between individuals. There are always many different ways of gaining and losing social and political influence in complex societies, and it is generally through some level of personal discourse that such change is bought about. It has been pointed out on a number of occasions that 'Rome ruled though people' (Grahame 1998, 4), with men such as Agricola having huge resources available to establish bonds of patronage and clientage amongst large numbers of people. In such ways social change could eventually permeate all levels of society to varying degrees and in varying forms.

The considerable changes observed in settlement and landscape organisation during the early 2nd century AD undoubtedly had some kind of connection with widespread developments in social, political and economic spheres. This is clearly seen at sites such as Claydon Pike, where not only was the whole settlement re-organised but the material culture and economic infrastructure also underwent radical change (see Chapters 5 and 8). Such developments were probably not too long after the *curia* had been established in Corinium, and so may have been partly initiated by certain *decuriones*, operating from their newly built town houses and rural villas, perhaps to take advantage of the rapidly developing market economy. It has been suggested that a possible further stimulus for the comparatively rapid changes may even have been provided by specific political initiatives, or at least the side-effects of them (Henig and Booth 2000, 110). Hadrian's visit to Britain in AD 122 may be seen in light of such a suggestion, as in addition to the more obvious structural legacies, it is almost certainly the case that his presence would have had a profound social and political effect upon many aspects of life in Britain, especially among the élite classes. Although extremely tentative, it is possible to suggest that specific political initiatives associated with his visit may have created the circumstances by which the landscape in the Upper Thames Valley and elsewhere may have been more susceptible to change. Furthermore, the resources available to the emperor must have been vast, so that the network of patronage and clientage could have affected all aspects and levels of society. Black for example has interpreted the busts found at Lullingstone villa as representing ambitious local élite who may have entered imperial service upon Hadrian's visit (1994, 109).

Ultimately, the quite abrupt changes in landscape organisation and in some cases even social identity (see below) were probably due to a combination of socio-political and economic developments in the later 1st and early 2nd century AD, together possibly with specific political initiatives and the influence of networks of personal discourse associated with a direct imperial presence.

IDENTITY

The interpretation of identity within the archaeological record has been the subject of increasing academic debate over recent years, especially

within the context of Roman Britain (eg Allason-Jones, 2001; Hill 2001; Perring 2002; Carr 2001). One of the great preoccupations of Romano-British archaeology has been with aspects of 'Roman' versus 'Native' identity, and in particular the resistance to or acceptance of Rome. Such aspects of the 'Romanisation' debate have been criticised on a number of occasions (eg Barrett; 1997; Woolf 1998; Grahame 1998; Perring 2002), as it is realised that neither Roman or native identity stand as isolated concepts to be measured against each other. Instead, as discussed above, there was more likely to have been a complex pattern of power relations based upon personal discourse, with many objects having quite different meanings within different contexts. A perceived association with official state power is certainly one aspect of identity which needs to be explored, but it should be viewed alongside others such as gender, class and age (Hill 2001, 18). Furthermore aspects of material culture must not be examined as isolated indicators of identity, but viewed along with other contextual associations, including patterns of food and drink consumption and the built environment.

The first concept to make clear at this stage is that there must be some link between material culture and identity – and therefore socio-political structure – even if the meanings behind such links are far from clear or indeed constant (Grahame 1998; Greene 2002). Therefore at sites such as Claydon Pike, the substantial and quite rapid changes in material culture, economic practices and settlement organisation in the early 2nd century AD must reflect conscious changes in identity and social structure (see Chapter 5). In this instance, the aisled buildings with painted plaster and tiled roofs, uptake of hunting and fishing, changes in butchery practices, new ways of preparing drinks, adoption of different hairstyles and the wearing of Roman style footwear are all consistent with a relatively sudden increase in social. The appropriate symbols of social status and power would have been used by the inhabitants, and this must be seen within the context of a local landscape which had just become fully incorporated into the Roman political system (see above). Interestingly, intra-site analysis at Claydon Pike revealed significant differences in the material culture of the two main inhabited parts of the site, which mirrored the notable structural differences. Thus objects such as hairpins, hobnails and toilet articles, which generally only appear on site during Phase 3 (early 2nd-early 4th century AD), are concentrated in the aisled building compound, suggesting that there were different social strategies with regard to personal appearance within the settlement status (see Cool, Chapter 5).

Neigh Bridge, Somerford Keynes, despite also having abrupt changes to the settlement pattern at around the same time, has no evidence for any associated developments in matters such as personal appearance or patterns of food consumption (see Chapter 9). This may in part be because of a much lower intensity of occupation, but also presumably because the lower status inhabitants at this site did not actually undergo so much in the way of social change.

At other settlements in the region, especially those of perceived lower status, the nature and development of personal identity is sometimes difficult to discern, although this is often due to the comparative lack of personal objects found at such sites. Carr (2001) has examined changes in identity within certain non-élite sites in Roman Britain, in terms of body-related artefacts through time. Thus, the general increase apparent in objects such as hairpins, brooches and toilet articles may suggest that people were taking more trouble over personal appearance and grooming during the late Iron Age and early Roman period, although the social meaning of such artefacts could vary greatly both chronologically and geographically (Carr 2001, 121). In particular, it is reiterated that not all 'Roman-style' artefacts were used to create a Roman style of life, as many may have been incorporated into indigenous ways of expression (Carr 2001, 121). As ever, it is only when all contextual considerations have been taken into account, the nature of identity may be better understood. At Thornhill Farm for example, there was a comparatively large number of brooches of many different types, which contrasts with the paucity of other objects on site, especially those which may be considered high status (Jennings *et al.* 2004). It therefore seems that brooches may have been seen as particularly important at this site for matters of personal identity and social expression, and may even have served to help differentiate the inhabitants from others in the vicinity. In addition, its has been suggested (Jundi and Hill 1998, 126) that such personal items may well be associated with periods of social stress, and so their proliferation at Thornhill Farm may also be associated with the eventual abandonment of the site in the early 2nd century AD (Jennings *et al.* 2004).

Of course personal appearance is not the only way of expressing identity in a social setting. Meadows (2001) for example has suggested that the high percentage of specialist serving-type ware at the essentially low status site at Watkins Farm may indicate that the wealth, status and therefore group identity of the inhabitants could have been expressed through the giving of food to the local community.

Ultimately, the expression of personal and group identity could take many different forms and is likely to have been quite fluid, especially in times of social stress. Furthermore, such changes were undoubtedly more frequent and pronounced within the upper echelons of society, who would have had to adapt quickly to new socio-political situations if they were to maintain and increase their power.

SACRED SPACE AND RITUAL PRACTICE

Religious expression within the Iron Age appears to have been largely integrated within domestic spheres, or else set among natural features such as springs, rivers, lakes and bogs. Thus at Warrens Field, Claydon Pike there is evidence for structured deposits within roundhouse gully terminals and pits within the site (see Chapter 3), while a similar phenomenon is noted at Thornhill Farm (Jennings *et al.* 2004). The beliefs behind such practices remain unknown, although Hill (1995, 28) has suggested that for some sites in Wessex it may represent the remains of feasts which have been deposited in a deliberately structured way. It is probable that such traditional integration of ritual and domestic activity continued through into the late Iron Age and Roman period, as suggested for example by the double horse burial at Farmoor (Lambrick and Robinson 1979, 132) and structured deposits at Gravelly Guy (Lambrick and Allen 2004) and Barton Court Farm (Miles 1986, microfiche 8:B7-B12). Such continuity of Iron Age depositional practices into the Roman period has been highlighted by Scott (1991), and suggests that underlying belief systems probably persisted to a large degree in most if not all levels of society.

The concept of specialised constructed sacred space appears only to have become fully developed in Britain during the Roman period, although there are a small number of late Iron Age shrines dispersed throughout the south of the country (Smith 2001, 67). In the Upper Thames Valley there are no convincing examples of specialised shrines prior to the Roman period, and even after this such sites appear to remain quite rare. To the east at Frilford a Romano-Celtic temple was constructed in the mid to late 2nd century AD, continuing until the late 4th/5th century. The temple appears to have been part of a large religious complex spread over 30 hectares, which included a substantial amphitheatre (Bradford and Goodchild 1939; Hingley 1985; (Lock *et al*. 2003). The complex lay near to the river Ock, a tributary of the Thames, and was on the tribal/civitas boundary between the Dobunni and Atrebates (and possibly also the Catuvellauni) – a factor which may have contributed to its initial establishment. Further north, 8 km south of Alchester, lay another large temple site at Woodeaton, also situated on a tribal boundary, between the Dobunni and Catuvellauni (Goodchild and Kirk 1954). The first temple is thought to have been constructed in the later 1st century AD, although the presence of Iron Age brooches and coins suggest earlier activity of some kind. Later modifications included a substantial masonry temenos wall built in the later 2nd century (Goodchild and Kirk 1954, 19), and it seems to operated right up until the very late Roman period and probably into the 5th century. The wealth of finds from the site have been studied extensively by Jean Bagnall-Smith (1995; 1999), and include iconographic representations of Mars, Venus, Cupid and Minerva, along with images of eagles and a number of miniature weapons.

There are no other known sites comparable to Frilford or Woodeaton within the Upper Thames Valley, although judging from the numbers of altars and sculptural fragments, it is highly likely that further temples and shrines of some kind must have existed. For example the roadside settlement at Gill Mill contained a relief of Mars and a figure of a *Genius Loci*, both of which are likely to have come from a shrine (Bagnall-Smith 1995, 201), while an altar depicting a *Genius* was recovered from a possible river crossing shrine at Bablock Hythe near Northmoor (Henig and Booth 2000, 42). A probable shrine has recently been excavated upon the Corallian Ridge overlooking the Thames Valley at Coxwell Road, Faringdon (Weaver and Ford 2005). The excavations revealed part of a substantial masonry footed circular structure interpreted as a shrine on the basis of form and associated artefacts, which included a small number of coins, a copper alloy bracelet and an iron spearhead (Weaver and Ford 2004).

At Claydon Pike, there is some evidence to suggest that a religious precinct may have existed within the centre of the site, probably established around the mid 2nd century AD (see Chapter 5). However, nothing is really known of the nature of the rituals practised there, and its interpretation must remain quite tentative. Evidence for a religious focus at Somerford Keynes is equally enigmatic, although the presence of abnormally large numbers of 1st- to early 2nd-century brooches and coins does suggest that a shrine existed in the vicinity, possibly at the river crossing (see Chapter 9). Furthermore, the presence of fragments of the Capitoline triad may indicate that the earlier focus was succeeded by a *capitolium*, possibly indicating some official interest either within or near the site. The presence of large quantities of coins and personal objects at Leaze Farm near Lechlade may also be indicative of a religious site (see Chapter 12). There are an increasing number of the ritual sites which are characterised by votive offerings but have minimal or no structural remains, such as at Frensham in Surrey (Grahame 2001), Lowbury Hill (see below) and the earliest phases at Harlow (France and Gobel 1985) and Wanborough (O'Connell and Bird 1994). The Leaze Farm site has never been properly investigated, and that is was a religious focus, perhaps associated with the nearby settlement at Wigmore, must remain a possibility.

To the north of the Thames Valley in the Cotswolds, large amounts of religious sculpture has been found (Henig 1993) along with a number of temple sites. Near to the source of the Thames at Hailey Wood Camp, Sapperton, is a possible temple, with a double ditched enclosure along with various structural material and small finds (Moore 2001). Further north-east, located less than 1 km from Chedworth villa, was the remains of what

appears to have been a very substantial Romano-Celtic temple overlooking the River Coln, dating early 2nd to 4th century AD (Baddeley 1930). The size of the temple, the unusual nature of the villa and the quantity of religious iconography recovered from the area has led Webster (1983) – not unreasonably – to suggest that the whole site may in fact have been a large pagan religious complex, although it seems to have contained Christian elements in the later Roman period (see Chapter 17). One of the better known temple complexes in the Cotswolds – thanks to meticulous excavations between 1977 and 1979 – was at Uley, on the edge of the Cotswold escarpment overlooking the River Severn (Woodward and Leach 1993). A large (*c* 50 x 15 m) sub-rectangular enclosure with central posthole structure appear to represent the earliest religious focus on the site, dating from the early-mid 1st century AD (Woodward and Leach 1993, 238). In the early 2nd century AD the site was levelled and a masonry temple complex constructed, at the same as the major developments at nearby Frocester Court (3 km distant) and possibly the initial construction of Woodchester villa, just 5 km away.

Other known temples in the region include those within the settlements at Wycomb (Timby 1998) and Bourton (Renfrew 1977), though neither is well understood. At Corinium itself, despite the considerable quantity of religious sculpture, including part of a Jupiter column, no actual temples have yet been located. Further east in Oxfordshire is the temple site at Lees Rest, which lies within the boundary of Grim's Ditch near to the villa at Ditchley. The site has not been properly investigated, but geophysical survey has revealed a concentric triple ditched enclosure with a probable entrance on the south-eastern side (Henig and Booth 2000, 129). Among the objects recovered from the site was a small stone head thought to be of Mercury and a number of brooches (Bagnall-Smith 1995, 200).

South of the Thames Valley on the eastern edge of the Berkshire Downs was a probable temple site at Lowbury Hill, situated within a large walled enclosure (Fulford and Rippon 1994). No actual remains of a temple or shrine have been recorded, but large quantities of finds were recovered, including almost 900 coins, large numbers of brooches, and a number of iron spearheads, some of which were clearly for ceremonial use (Bagnall-Smith 1995, 194). The main period of use for the sacred site appears to have been in the later Roman period, although there is evidence for activity of some kind from the later Iron Age.

In total the evidence for constructed sacred space in the Upper Thames Valley and much of the region immediately surrounding it is not as great as further west in parts of Gloucestershire and Somerset, even during the early-mid Roman period. The Thames Valley itself is particularly lacking in temple sites, although the quantity of iconography from the region suggests that smaller shrines may have been established in a number of places. This lack of temples reflects the comparative lack of other Roman-style structures in the Thames Valley, most notably villas (see above). Throughout Roman Britain a close geographical and chronological correlation between temples and villas has been demonstrated (Smith 2001, 144), and it is highly likely that the majority of rural temples were paid for and maintained by the local élite villa-owning class, and situated on their land. Both temple and villa would have been highly visual local landmarks and could have been used as a way of expressing social status within the context of the Roman provincial socio-political system. Furthermore, the fact that many temples were positioned on or near prominent local landmarks and were sometimes associated with older monuments, may have provided a strong link to the landscape and the past, which could have helped legitimise social positioning.

CONCLUSION

The landscape of the Upper Thames Valley underwent tremendous changes during the late Iron Age and Roman periods, although there was always considerable heterogeneity in terms of settlement form, economic regimes and social structure. The region lay on the borders of three major tribal (and later civitas) boundaries, with Dobunnic territory probably centred upon the Bagendon/Cirencester area, and the Atrebates to the south and Catuvellauni to the east. Late Iron Age society in these regions appears to have been in a state of flux, with increased political hierarchy and centralisation probably leading to the establishment of a number of élite power centres, such as at Bagendon, Salmonsbury and Grim's Ditch. Together with factors like changing environmental conditions and population pressure, such socio-political developments may account for the developments in settlement patterning in the Upper Thames Valley, with a number of sites either being newly established, abandoned, or shifting in location. An increase in agricultural specialisation at this time led to the establishment of a number of dedicated pastoral settlements on the lower gravel terraces and floodplain of the valley such as Claydon Pike.

The Roman conquest appears to have made very little immediate difference to the patterns of settlement organisation, economic regimes or social structure in much of the area. It seems possible that the southern Dobunnic region – including the Upper Thames Valley – was part of a client kingdom until the later 1st century AD, in much the same way as the Atrebates further south. Military sites were certainly established nearby (Cirencester, Alchester etc), although these are likely to have been as bases for further advances, rather than to suppress the native population. A system of major roads was also constructed, along which were a number of nucleated settlements arranged in a

distinct hierarchy that suggests official involvement of some kind. The military withdrawal, establishment of Corinium and construction of villas during the later 1st century AD hints at much greater socio-political changes at this time, at least among certain members of the élite classes. Certainly by the time that Corinium had become properly established as a major urban centre at the start of the 2nd century AD, it is likely that the leading local landowners were part of the council (*curia*) which would have been largely responsible for running affairs within the newly formed civitas. This undoubtedly led to significant changes in social practices and identity in order that individuals could successfully operate within a region that was now a well established part of the Roman Empire.

It may have been at least in part due to such developments in élite socio-political circumstances that widespread changes in land-use occurred across much of the Upper Thames Valley and some areas beyond during the early 2nd century AD, including all of the key CWP sites in this volume. Some settlements were abandoned, and many others were newly established or altered radically, while economic regimes also changed on a number of sites. A market economy would now have been quite well developed within the region, and the need for increased profits from land may have been another factor behind the early 2nd-century disruptions. Further north in the Cotswolds there is far less evidence for sudden settlement change, possibly because many of the estates in this region were directly controlled by leading members of the civitas élite.

The socio-political and economic developments could have created the underlying conditions for landscape change, but it may also have involved more direct political initiatives, especially if – as is quite possible – most of the changes occurred within a single generation. The huge variation in terms of landscape reorganisation at this time may be partly explained by the way in which power and social influence was spread via personal discourse throughout the social strata. Thus networks of clientage and patronage were established which would ensure that the fortunes of some individuals might increase while others could decline. These networks are likely to have been quite fluid over time, which may help account for the large variety in subsequent settlement development.

Chapter 17
The Late Roman Landscape

by Alex Smith

INTRODUCTION

Developments in late and sub Roman Britain are among the most widely discussed aspects of Romano-British archaeology, and there have been a number of different views expressed over the fate of the land (eg Casey 1979; Esmonde Cleary 1989; Reece 1992; Faulkner 2000; K Dark 2000). It is generally accepted that in the later 3rd century under Diocletian, the two provinces of Britannia Superior in the south and Britannia Inferior in the north (divided under Severus in the early 3rd century AD) were further divided into four or possibly five provinces. These provinces formed the Diocese of Britain and the area of the Upper Thames Valley (including the CWP sites) and surrounding regions have generally been regarded as belonging to the province of Britannia Prima, with Corinium being the capital (but see Urban Centres below). The orthodox view, as expressed by Esmonde Cleary (1989, 131), is still that this was a 'golden era' within most parts of Roman Britain, especially the West Country, at least up until the end of the 4th century AD, after which there was a sudden and dramatic collapse with most traces of Romano-British culture quickly disappearing. Others such as Reece (1992) and more recently Faulkner (2000) have argued that Romano-British institutions – especially urban centres – were in decline long before this, from as far back as the early-mid 3rd century AD, and that most of the old towns were little more than 'administrative villages' in the 4th century. Faulkner does reiterate however that towns were still important to the late Roman state, as they were centres of an increasingly centralised and militaristic administration without which the countryside could not be controlled (2000, 126; see below). Ken Dark (2000, 15) has recently argued that late and post-Roman Britain had far more similarities with other parts of the western Empire than has previously been thought, with towns retaining political, economic, administrative and high status domestic functions even at the start of the 5th century. Furthermore, he suggests that most aspects of Romano-British culture did not dramatically stop at AD 400 but gradually wound down over centuries (Dark 2000, 228).

The late Roman landscape of the Upper Thames and surrounding areas needs to be looked at in relation to the views of Britain expressed above. However, the evidence suggests that no single viewpoint can be established as 'correct', as with increased archaeological data there is greater evidence for wide heterogeneity in the development of settlement and landscape.

THE LATE ROMAN SETTLEMENT PATTERN

In parts of the Upper Thames Valley and Cotswolds, the organisation and structure of many settlements changed quite significantly in the space of *c* 50-70 years, from the middle of the 3rd to the early 4th century AD. The late 3rd century in particular can be seen as a time of widespread transformation within the region, with changes affecting urban and non-urban and high and low status settlements alike. Of the sites in this volume for example it appears that only at Claydon Pike did sustained activity continue on into the 4th century (see Chapter 6). Although environmental evidence is quite patchy, there are some indications of major changes in land use as well, although in most cases it is unlikely that the overall character of the landscape was altered too radically (see below and Chapter 14). Within the later Roman period itself, there is less evidence for any widespread changes, and despite the well documented problems of dating in the very late Roman period (Henig and Booth 2000, 178-9), it does seem that the general settlement pattern was not too dissimilar towards the end from what it was at the beginning of the 4th century. However, the nature of occupation at each site could still vary substantially.

Urban centres

The late Roman landscape of the region must have been dominated to a large extent by the city of Corinium. The main period of civil construction work in the city dates from the late 1st century to *c* AD 170 (Holbrook 1998; see Chapter 16), and although there were relatively few indications of extensive activity during the 3rd century compared to periods before and after (Holbrook 1998, 121), it is suggested from construction work on town

houses that occupation levels reached their peak in *c* AD 250 (Faulkner 1998, 378). In *c* AD 240-70 a masonry wall was inserted in front of the existing earthwork defensive circuit (Wacher and Salvatore 1998, 98). Faulkner (1998, 379-83) has suggested that Corinium was being fortified at this time by the military-bureaucratic administration which was dominating the empire, as a result of the late Roman countryside being beset with barbarian incursions, brigandage and other strife. However, as illustrated below, the late Roman countryside of the Upper Thames Valley and Cotswolds does certainly not appear to have been under particular stress and indeed the construction of lavish undefended villa estates hardly suggests that brigandage or barbarian incursions were rife in the region. The need for improved urban defences must have been at the core of the new building works – possibly due to the longstanding period of unrest within the empire as a whole – but there is no evidence to suggest any substantial direct threat to the city. Faulkner furthermore suggested that such urban defences corresponded with the decline of the municipal gentry (Faulkner 1998, 379), although there is no real evidence for a decline in the élite urban class of Corinium at this time.

The province of Britannia Prima was probably created towards the end of the 3rd century AD (see above) and is traditionally thought to have encompassed most of southern Britain from Dobunnic territory westwards. Despite some views to the contrary (eg Birley 1981, who though that the province lay entirely west of the River Severn) this remains the orthodoxy, and as the largest city in this region, Corinium is generally regarded as the provincial capital (Darvill and Gerard 1994, 74; Faulkner 1998, 379). This idea is furthered by the finding of a Jupiter column in the town, with a dedication by L. Sep[timis..], governor of Britannia [..Prima?] to Jupiter. The exact interpretation of this is still debated (Holbrook 1994, 74), and Reece (1999, 78) has recently emphasised the need to keep an open mind as to whether Corinium or Glevum (Gloucester) was the provincial capital.

If Corinium was made capital of the new province at the end of the 3rd century AD – as would still seem most likely – it is probable that significant changes may have taken place within the city and surrounding region, and there is considerable evidence that this was indeed the case. Certainly the program of public building work appears to have been approached with renewed vigour, with for example the forum-basilica complex having large scale reconstruction work in the late 3rd/early 4th century (Holbrook 1998, 385). In fact this complex appears to have functioned as a civic structure throughout the 4th century and probably into the early 5th century, with a number of late modifications (Holbrook 1998, 121). This is quite different from many other Romano-British cities such as Verulamium and Silchester, where the forum-basilica complexes generally fell into terminal decline in the early-mid 4th century, and as such could well be related to Corinium's elevated position as a provincial capital (Faulkner 1998, 379). Some other public buildings, such as a possible temple in *insula* VI, were also occupied throughout the late Roman period and probably some way beyond (Holbrook 1998, 139), while the amphitheatre was radically changed in *c* AD 350/60. This structure seems to have fallen out of use by the late 3rd-early 4th century, and the later modifications – which included widening the entrance to admit wheeled vehicles – indicate a change in use, perhaps as an extra-mural market (Holbrook 1998, 174). Further modifications indicate its use well into the post-Roman period (see below).

Elsewhere in Corinium the evidence for late Roman activity is quite variable. A building in *insula* II was abandoned and partly demolished in AD 350-60, but the side ditch by the property was maintained until the end of the 4th century AD (Holbrook 1998, 186). In *insula* VI shops and houses were abandoned and demolished by the mid 3rd century and the site was vacant for over a century until the construction of a large domestic town house (Holbrook 1998, 244). Many other large houses appear to have been built in the latter half of the 4th century, and altogether the evidence points to a fully functioning and vibrant urban society at this time, albeit operating within quite different a political climate from that of two centuries earlier (see below).

Finds of late Roman military equipment are especially plentiful in Corinium – more so than any other urban site in Britain other than London (Holbook 1998, 306). This surely must reflect its position as a provincial capital, and it has been suggested (Holbrook 1998) that these object probably represent part of the field army (*comitatenses*) stationed in the city. Whether or not this was the case, the finds indicate that there was still a significant military presence within the town at the very end of the 4th century, and it is quite possible that not all of the soldiers would have left for the continent with Constantius III in AD 407 (see below).

So how does the situation at Corinium compare with other urban centres in the region? To the north at Glevum (Gloucester), the evidence is more patchy, but it appears that the city wall was strengthened in the later 3rd/early 4th century, and mosaic floors were still being laid in the last quarter of the 4th century (Heighway and Garrod 1980, 84). There is also evidence for timber buildings being constructed in the later 4th century and probably into the 5th century as a radiocarbon date of around AD 430 came from one structure (Heighway and Garrod 1980). One of the latest phases of construction found in the centre of Gloucester was the laying of an extensive well-metalled area, which levelled at least part of the forum and extended it northwards, at the end of the 4th or early 5th century AD (Heighway and Garrod 1980). This large open space

was bounded on at least one side by still standing columns and may have acted as a market place, continuing well into the post-Roman period. There are strong hints of a military presence in late Roman Gloucester (Hurst 1999, 130), and the relatively high percentage of late Roman coins (Reece 1999, 79) may also point to a garrison being stationed there.

Further east at Alchester the evidence from within the walled area itself is very limited, but excavations within the northern extramural settlement indicated continuing agricultural activity throughout the late Roman period and new timber buildings were certainly constructed after AD 350 (Booth 2001, 178). Late Roman activity at Dorchester-on-Thames is far more pronounced, with a number of buildings dating not before the last decade of the 4th century, and with a comparatively very high percentage of Theodosian (AD 388-402) coins. Continuation of activity within this town into the post-Roman period is also far clearer than most (see below).

Most of the 'small towns' within the region appear to have been at their most prosperous in the 4th century, as is quite typical of many parts of the country, especially in the Midlands and West Country (Burnham and Wacher 1990). Bourton seemed to continue as a market centre into the late and post-Roman period (Timby 1998, 383), while Wycomb also appeared to continue into the 5th-6th century, on the evidence of grass tempered pottery and a 5th-century belt buckle (Timby 1998, 351). The settlement at Dorn on the Fosse Way was defended in the late 3rd/4th century, possibly because it had some official or military function (see below), although the chronological evidence for activity at this site is very poor (Timby 1998, 339). At Asthall along Akeman Street there is evidence that the settlement decreased in size towards the end of the 4th century AD, although there is nothing to suggest that the core of the settlement did not continue into the very late or post-Roman period, as Theodosian coins were present in quantity (Booth 1997, 152). Further east at Wilcote there is less evidence for late Roman activity, although this may in part be due to the effects of subsequent plough damage (Hands 1998).

There is little evidence for the nature of 4th-century occupation at Cricklade within the Thames Valley, although activity is said to have spanned the whole of the Roman period (Haslam 2003). Further south at the 'small town' of Wanborough there is quite good evidence for the nature of late Roman activity, which seems to have been at its most extensive, covering some 25 ha (Anderson *et al.* 2001, 347-50). The *mansio* was probably still functioning, and there is evidence for a well-developed street system, possible commercial outlets, numerous craft-working activities and a possible religious focus (Anderson *et al.* 2001).

The overall evidence for large and small scale urban settlement within the region during the late Roman period is quite mixed – as would be expected given the huge variety in form and function – but nevertheless the general impression is one of relative prosperity and stability until at least the end of the 4th century AD. It is quite likely that all would have continued to function as local – and in some cases regional – market centres at this time, although this is likely to have changed fairly rapidly upon the collapse of the monetary market economy in the early 5th century, even if many of the settlements themselves continued in some form or another (see below).

The Cotswold 'villa landscape'

During the late Roman period, the settlement pattern of the Cotswolds continued to be quite divergent from that of the Thames valley (see Chapter 16), and perhaps became even more so. By far the greatest quantity of information we have for this period in the region is concerned with villas and their associated agricultural holdings, and although there is thus a bias against lower status settlements, it remains the case that this area had one of the highest concentrations of villas in the country.

The early villas (*c* late 1st century AD), based in the area of Grim's Ditch and at The Ditches north of Corinium, have already been discussed in Chapter 16, and would seem to represent the continuance of power in some form from the late Iron Age. More villas appear to have become established during the 2nd century AD, such as Chedworth (Goodburn 1972), Whittington (O'Neil 1952a), Duntisbourne Abbots (Baddeley 1923, 295) and possibly Woodchester (Clarke 1982). These villas were spread over a large area and may have become established through specific grants of land control given to individuals at this time by the official administration (see Chapter 16). Although some villas such as Great Witcombe (Leach 1998; Pl.17.1) were established in the early 3rd century AD, the most significant changes with regard to villa construction came in the later 3rd and early 4th century. New villas were established at places such as Farmington (Chapman 1963) and Spoonley Wood (O'Neil 1952b), while at other sites such as Frocester Court (Price 2000) previous non-villa settlements were transformed by the construction of large stone-built villa buildings. Also at this time there is evidence for substantial embellishment of existing villas such as Great Witcombe (Pl.17.1), Woodchester and North Leigh (Ellis 1999). These three courtyard villas were particularly extensive and lavish with large mosaics and a number of bathhouses, and were probably the residences of very high ranking officials (see below).

Although some of these late 3rd-century villa developments may have occurred before the establishment of *Britannia Prima*, it is quite likely that the creation of this province acted as a stimulus for change within the region, creating new impetus and opportunities for wealth creation and display.

Plate 17.1 Great Witcombe Roman villa, Gloucestershire

This seems to have continued into the 4th century, with further villas being built and/or embellished. At Barnsley Park, about 6 km east of Corinium, a winged corridor villa was built *c* AD 360 on a site that had (previously) been occupied by a more modest farmstead for about 200 years (Webster 1981, 27). The villa was enlarged with the addition of a new wing with two hypocaust rooms in *c* AD 375, but by AD 380 there were drastic alterations which suggested that all high status occupation had ceased and it had largely become an agricultural building (Webster and Smith 1982, 93). Although the site continued to be occupied and the surrounding land farmed well into the 5th century (see below), it would seem that the personal circumstances of those who lived at the site had changed considerably. A similar situation existed at Great Witcombe when at some point after AD 380 there was a marked change in continuity and use, which led the excavator to suggest that the estate owner was no longer in residence, with instead the estate being run by subordinates (Leach 1998, 129). At many other villa sites, there is evidence for high status occupation continuing right up until at least the end of the 4th century, with a number of improvements being made to the complexes. At Frocester, a new wing incorporating a workshop and bathhouse was added *c* AD 360, and it was only at the start of the 5th century that there appears to have begun a long period of decline in living standards. A Theodosian coin (AD 395) found underneath the latest mosaic floor at Hucclecote, 4 km south of Gloucester, also points to very late embellishments within some villas (Clifford 1961b).

Many Cotswold villa sites do not have the necessary chronological information to suggest anything other than a general late 3rd/4th-century date. However, of those with more refined chronologies there is evidence at some sites (eg Frocester and Hucclecote) for continuing opulence until at least the end of the 4th century, while at others (eg Barnsley Park and Great Witcombe) there were radical changes resulting in more low status occupation within the late 4th century. Such differentiation may reflect the changing financial and political circumstances of the time, with power being channelled through smaller numbers of higher status élite, occupying more centralised estates (see below).

Overall, the rise in villa numbers in the later 3rd and 4th century AD is often taken to imply a significant shift in power from urban to rural areas – a 'retreat to the countryside' (Faulkner 2000, 132). However, this does not appear the case in this region, as the increasing number of villas is largely matched by an increase in town houses within Corinium, although the situation in Gloucester is less clear (see above). It is likely that most landowning élite owned both urban and rural properties, with perhaps the greater amount of time spent at the villa estates.

As with the earlier Roman period, there is very little detailed evidence for non-villa sites in the Cotswolds during the 3rd-4th centuries AD, with the exception of a small number of major settlements (see above). A small agricultural settlement was excavated at Lower Slaughter alongside the Fosse Way, with an emphasis on later Roman activity, especially the second half of the 4th century

(Timby 1998, 389). However, by the start of the 5th century, it appears the site was abandoned, with the wells filled in with household debris (Timby 1998, 389). A small settlement at Birdlip Quarry on Ermin Street was established *c* AD 160-80 but was partially abandoned in the mid 3rd century (Mudd 1999, 239). There was a revival of occupation in the later 3rd century – at the same time as many of the surrounding villas – and there is also some evidence for the widespread development of Ermin Street road itself at this time, or possibly in the early 4th century AD (Mudd 1999, 241). Post-pad and timber sill-beam houses were constructed at Birdlip Quarry in the mid to late 4th century, although occupation does not seem to have lasted beyond *c* AD 400 (Mudd 1999, 241).

Of the other known or suggested low status Roman sites in the Cotswolds region, very little information is available and so any relationships between villa and non-villa sites are quite poorly understood.

Late Roman settlement in the Upper Thames Valley (Fig. 16.1)

When compared with the Cotswolds there is far better evidence for lower status settlement development in the Upper Thames Valley during the late Roman period, and despite the variety there are a number of significant patterns that emerge. In particular is the evidence for quite widespread landscape changes in the late 3rd – early 4th century AD, which mirrors in many ways the situation in the Cotswolds. Of the key sites in this volume, only Claydon Pike has evidence for a late Roman structural sequence (Chapter 6), although the finds from Somerford Keynes indicate late Roman activity of some kind in the vicinity of the site (Chapter 9). At Claydon Pike the site was radically altered in the late 3rd century with the demolition of the aisled building complex, which eventually led to the establishment of a modest villa in the early 4th century. Far less substantial changes occurred at the nearby Roughground Farm villa, but there were a number of significant embellishments made at this time, suggesting an increase in the centralisation of the villa's estate management (Allen *et al.* 1993, 81).

Further east at Barton Court Farm a modest villa with associated corn-drier and well was probably constructed in the late 3rd century, on a site that had lain unoccupied for *c* 150 years (Miles 1986, 12). This new estate had expanded to incorporate low-lying land by the river which was presumably used for pasture, and included a series of well-ordered enclosures (Miles 1986, 46). At Old Shifford Farm also there was a small settlement established at the end of the 3rd century, on land that had been manured for most of the 2nd and 3rd centuries following the abandonment of the earlier site (Hey 1995, 170). The settlement was connected to an extensive late Roman drove and trackway system linking a number of sites along the north bank of the Thames, with associated paddocks and field ditches (Hey 1995, 170). The settlement at Farmoor which was established in the early 2nd century AD was further reorganised in the late 3rd century AD, although the extent and nature of this is not too clear (Lambrick and Robinson 1979, 72), As with Old Shifford Farm, it would seem that the surrounding landscape was still primarily grassland used for grazing animals, but that ditched and hedged field systems (paddocks), droveways and horticultural plots created a more defined and controlled landscape (see below). Even within sites that do show evidence of continued occupation throughout the Roman period, such as Yarnton (Hey and Timby forthcoming), there is evidence for comprehensive reorganisation at the start of the later Roman period, which in this case included the redevelopment of trackways, enclosures and field boundaries. An extensive Roman settlement at Cotswold Community south of Cirencester also demonstrates significant alterations at this time (OA 2004).

In addition to newly established and reorganised settlement during the late 3rd century AD, there are a number of sites which appeared to have been abandoned during or just prior to this period. All occupation had ceased at Watkins Farm before the late 3rd century AD, suggesting the land was now being managed from elsewhere (Allen, 1990, 83). A very similar situation existed at Whelford Bowmoor, Stubbs Farm, Kempsford and possibly Kempsford Multi-Agg Quarry (see Chapters 10 and 11 and Digital section 8.4). All of these sites were on low-lying ground, and the progressively wetter environment throughout the Roman period probably resulted in an increased flood risk, which may have been one factor in leading to their abandonment (see Chapter 14).

All of the evidence from the Upper Thames Valley is quite consistent in suggesting that there were widespread changes occurring in the landscape at the start of the late Roman period. A series of newly constructed agricultural settlements joined existing sites, many of which were remodelled, and formed part of a well-organised landscape with pastureland and areas of arable crops linked by trackways and field ditches lined by hedges. A combination of increasing flood risk and the centralisation of larger estates probably led to other settlements being abandoned. In nearly all cases the developments seem to have taken place over a period of about 30 to 40 years from the late 3rd to early 4th century, and thus appear strikingly consistent with changes in the Cotswold 'villa landscape' further north. It is difficult not to see many of these changes as being at least partly associated with the establishment of *Britannia Prima*, and possible accompanying developments in the system of land control (see below).

As with settlements in the Cotswolds, the late Roman sites within the Upper Thames Valley exhibited a wide variety of developmental trajectories

with some continuing well into the post-Roman period, and others being abandoned prior to the end of the 4th century. Late activity at Barton Court Farm is particularly pronounced, with a large group of Theodosian coins (most admittedly from a dispersed hoard), and occupation of some sort clearly continued into the 5th and 6th centuries, albeit with major changes (Miles 1986, 47; see below). At Old Shifford Farm occupation also continued until at least the end of the 4th century, although there is no evidence of significant post-Roman activity (Hey 1995, 174). The villa complex at Roughground Farm had a number of modifications and additions during the 4th century, but occupation is thought to have rapidly declined after AD 370 (Allen *et al*. 1993, 199). However, many of the latest villa deposits had been ploughed away and a clipped *siliqua* coin dating to at least AD 410 (King 1993, 142) suggests that occupation of some nature continued into the 5th century.

Many settlements, like Claydon Pike, have no clear evidence for the exact length of occupation, but in most cases it is unlikely that they would have been completely abandoned prior to the end of the 4th century AD (see Chapter 6). Much of the land probably continued to be farmed as before into the 5th century and later, although there would undoubtedly have been huge changes in most aspects of society (see below).

THE LATE ROMAN ECONOMY

The evidence from the Upper Thames Valley and Cotswolds suggests a vibrant and expanding economy in the region throughout much of the later Roman period. The wealth and resources required for the mass of villa constructions and renovations, urban regeneration, expansion of the 'small towns' and at least partial reorganisation of the Thames Valley settlement and landscape would have been quite considerable. This apparent general prosperity came despite the increasingly harsh burden of state taxes, specifically the *annona* (tax on land) which was usually paid in agricultural produce rather than coin. Substantial agricultural surpluses must have been generated in many settlements in order to pay taxes and generate enough wealth to invest in property construction and embellishment and land reorganisation. Even a modest villa such as at Claydon Pike for example would have required a not inconsiderable level of investment (see Chapter 6). It is quite possible that increased centralisation in the control of land (see below) led to more substantial agricultural estates with grand centres and numerous smaller satellite settlements, which could generate larger surpluses than had previously been the case.

Most if not all of the large number of late Roman villas in the region would have been centres of agricultural estates, although probably operating within a hierarchical system of land tenure (see above). The villa at Frocester Court seems to have been part of a chain of similar agriculturally based sites on the south-eastern escarpment of the Severn Valley, connected with a broad band of arable along the upper part of the terrace (Price 2000, 241). The higher ground above was probably used for sheep grazing and timber, while the lower valley and floodplain is likely to have been pastoral, possibly with some hay meadow (Price 2000, 242-5). This situation is quite similar to that of the Upper Thames Valley and appears to have been a continuation of the earlier Roman situation, albeit probably more intensified. Agricultural activity at Barnsley Park is particularly demonstrable, with over 40 ha of fields surrounding the site, most of those away from the main complex being enclosed by narrow earth banks (Webster and Smith 1982, 67). This points to a well organised agricultural estate, which was suggested as being possibly part of a larger holding (Webster and Smith 1982, 67). The number of ox-goads along with walled enclosures and stockades at this site has led to the suggestion that it was at least partially a stock collecting depot, for shearing and/or branding and preparation for market (Webster and Smith 1982, 68). This may be quite likely considering that the major urban market at Corinium was only *c* 6 km distant.

On the whole, the more detailed environmental evidence from late Roman sites in the Upper Thames Valley does not generally indicate radical changes in land use at this time, although there were a number of significant developments. The same general range of arable crops continue, with spelt wheat being the most common, although there are some indications that the cultivation of bread wheat – while still very limited – was increasing (Lambrick 1992, 97). Flax, which was primarily used for textiles, was also increasingly cultivated at a number of sites including Barton Court Farm (Miles 1986). Agricultural innovations such as the iron ploughshare and coulter appear to have been adopted at different times in different places (Henig and Booth 2000, 156), reflecting the general settlement diversity of the region (see Robinson, Chapter 14 for wider discussion).

The Claydon Pike villa complex appears to have developed a more mixed agricultural economy, with far less evidence for hay meadows (see Chapter 6). However, the discovery of late Roman scythes at Farmoor and Hardwick (Rees 1979) together with others at Barnsley Park (Webster 1981, 59) suggests hay was still an important commodity. Indeed, the continuation of on-site animal husbandry techniques and intensification of pastoral activity during the late Roman period (see Ingrem, Chapter 14) would have ensured that the need for hay fodder was greater than ever.

A number of settlements in the Upper Thames and Cotswold region exhibit greater economic diversity in the later Roman period, which was probably crucial to their success. At Claydon Pike there is not only evidence for pastoral (including horse breeding) and probably arable activity, but

also for bee keeping and possibly the production of cured beef and/or fish (see Chapter 6). The presence of three substantial fish ponds at Shakenoak villa (Brodribb *et al.* 1978) suggests that commercial fish-farming occurred at the site, and would have provided very useful additional income beyond the arable and pastoral activities. Despite the concentration on cereals at Barton Court Farm there is also evidence for considerable diversity, with production of domestic animal meat, dairy products, hides and wool, in addition to exploitation of game and fish (Miles 1986). The broadening of the dietary spectrum as shown in the faunal remains (eg range of domestic and wild fowl, fish etc) was also demonstrated by the increased cultivation and diversity of horticultural (coriander, fennel etc) crops at a number of sites such as Barton Court Farm and Farmoor. Robinson has indicated that the diet of the inhabitants of this region had become increasingly Romanised with the consumption of oily and spicy foods no later than the 3rd century AD (1992a, 58).

Faulkner has suggested that during the mid 4th century there was a widespread agricultural depression within Roman Britain, with abandoned settlements and large areas of disused land (2000, 144-7). In the Upper Thames and Cotswolds region studied here there is certainly no evidence for any depression at this time, and indeed it seems that more land than ever before was being exploited for its economic potential. Possible signs of insecurity could be inferred by the mid 4th-century enclosure ditches around Claydon Pike and Barton Court Farm (see below), but there is no reason to suppose that agricultural production was in decline at these sites.

As far as industrial economic activities are concerned, the Oxfordshire potteries were at their height of production in the 4th century, with products such as mortaria, parchment ware and red-brown colour-coated ware being distributed all across southern Britain and even on the continent (see Booth, Chapter 13). A 'semi-industrial' landscape existed in parts of the region between Dorchester and Woodeaton, and may been under a measure of centralised control by a small number of villa-based landowners (Henig and Booth 2000, 166-70). The industry certainly continued right up until the end of the Roman period, although the range of products appears much reduced towards the end of the 4th century. As the Oxford pottery industry must have been closely linked to the monetary economy it cannot have lasted much beyond the early 5th century.

The production of ceramic building material at kilns such as Minety in Wiltshire appears to have declined drastically by the later Roman period, with stone slates becoming more common as roofing materials (McWhirr 1981, 113). At Claydon Pike for instance, there is evidence that the tiles from the earlier building were reused, but supplemented (probably for the later extensions) by limestone roof slates (see Chapter 6). This period may have been expected to coincide with increased quarrying of Stonefield slate, a well-known roofing material, but unfortunately the extent of its use in the Roman period is unknown, and it was probably not well exploited until much later. The Cotswold limestone quarries must have continued into the later Roman period, as vast quantities of stone would have been needed for urban and rural building projects. The construction of lavish villas and townhouses in the later 3rd and 4th century AD ensured that mosaic making reached its height at this time, with products of the 'Corinium School' (workshops assumed to be based in Corinium) being found in houses throughout Dobunnic territory. Other skilled workers such as wall painters and furniture makers would also have been in high demand at this time, although they still represent a very small percentage of the active workforce. Metalworking was increasingly widespread, especially in 'small towns' such as Wanborough, and there is some evidence that it had a much more direct significance to the late Roman state, as at least some rooms within the basilica at Corinium were used for iron and bronze working in the later 4th century AD (Holbrook 1998, 121). Such a pattern can also be seen in other Romano-British cities such as Silchester and Caerwent.

Most of the above industries relied upon the success of the monetary economy to survive and thrive. The dramatic increase in coin circulation during the later 3rd and 4th century is well known (See King, Chapter 13), and the fact that this low value coinage was finding its way even to low status sites – often for the first time – is indicative that the use of money for everyday transactions had filtered through all levels of society. It is likely that markets using both coins and barter would have been thriving in the late Roman period, with most of the 'small towns' being at their most expansive at this time (see above). There is also evidence that at least some of the main roads were being improved, as most stretches of Ermin Street show evidence for systematic rebuilding, probably in the early 4th century (Mudd and Mortimer 1999, 267).

Of course most structural and fiscal developments in the region would have relied heavily on the continuation of central administration and in particular the supply of coins, which were not minted officially in Britain after AD 326 (and rarely before this). When both of these collapsed in the early 5th century, the general economy of the region must have declined rapidly.

POLITICS AND SOCIETY

Late Romano-British politics and society has been the subject of much contentious academic debate, as highlighted in the introduction to this chapter. Certainly the political environment of this period was quite different from that of earlier Roman times, with a marked increase in imperial bureau-

cracy within a wider system of increased regionality. Thus it would appear that the Upper Thames Valley and Cotswolds region lay within the province of Britannia Prima, which was part of the Diocese of Britain, which in turn was part of the Prefecture of the Gauls. The huge increase in administration led to the formation of a civil service and a division of power between the existing provincial governors, who now had a purely civil role, and new military commanders responsible for the army. The inscription on the Jupiter column at Corinium seems to record such a provincial civil governor, and although there is no epigraphic evidence for a high ranking late Roman military official in the region, the quantity of military finds at Corinium suggests that such a person may have resided there.

The division between the traditional civil senatorial families, who were the main land-owning class, and the new Imperial administrators, who were centred upon the army, the emperor and the court, seems to have become quite pronounced in the 4th century (Salway 1981, 347; Faulkner 2000). The power of the latter group was particularly strong in the eastern empire (Dodgeon and Lieu 1994), and such 'grandees' have been suggested by Faulkner as also occupying an increasingly isolated position at top end of late Romano-British society (2000, 135-7). The small number of exceptional villas in the region such as Woodchester and North Leigh may well be seen as the residences of such elite. However, both of these sites seemed to have developed from the earlier Roman period (their structural sequences are not well understood; see Ellis 1999), and are perhaps more likely to have been the residences of powerful traditional land-owning families rather than the new imperial aristocracy, who tended to be replaced regularly. In some past studies, the construction and/or embellishment of villas in the late Roman period has been linked with the arrival of Gallic landowners (Branigan 1976, 47; Webster and Smith 1982, 65). However, there is certainly no reason to suspect that this was the case, as the villas were part of wider developments in the region which included urban centres and lower status settlements.

In reality there is no way of knowing for sure who these villas may have belonged to, although in most cases a complete change in site ownership is perhaps unlikely. What the evidence does suggest is that most land was increasingly defined and controlled by the élite, operating from their villa estates. Furthermore, there was perhaps increasing centralisation with larger estates incorporating a number of smaller holdings, as has been suggested at Kingscote (Timby 1998, 288). It has also been suggested that the villas at Ditchley and Shakenoak were incorporated into the North Leigh estate in the middle of the Roman period (Booth 2000, 44). The comparative lack of villas in much of the Upper Thames Valley need not preclude at least parts of this region from being incorporated into larger agricultural estates, even if the main estate centre lay some distance away. By the later Roman period it appears that most of the workers on villa agricultural estates were *coloni*, rather than slaves, which were essentially subsistence farmers who lived on and managed their own small plots of land, as sharecroppers. Although there is no direct evidence from the region, it may have been the case that the people who lived and worked at sites such as Farmoor and Old Shifford Farm were *coloni*, half-free workers who were tied to the land, operating within the wider estates of certain villa owners. This is not to say that there would not have been any surpluses produced at these sites for use by the occupants, as the imported goods and coins indicate at least local trading. There could also have remained wholly independent agricultural communities within the Valley, although defining the difference between such sites in the archaeological record would be very difficult.

TEMPLES AND BURIAL IN THE LATER ROMAN PERIOD

In line with other parts of the north-western empire (Pearce 2000, 3), inhumation rites became firmly established in the region in the 4th century AD, and all of the known Roman cemeteries belong to this period. Booth (2001) has recently analysed the 18 known late Roman cemeteries in Oxfordshire (and one in Berkshire), and while it is beyond the scope of this work to conduct such an analysis of Gloucestershire sites, it is quite likely that many of the conclusions would be similar, especially in the Upper Thames Valley area. The first point of note is that inhumation was not the sole rite to be practised at this time, as some cremation also occurs, undoubtedly along with less visible means of disposal (Booth 2001, 37). Even within the inhumation rite there was much variety, including the treatment of the body, the amount and types of grave goods and the layout of the cemetery.

Extramural urban cemeteries have been located around Alchester, Dorchester, Corinium and Gloucester, all of which would seem to continue into the post-Roman period. At Corinium, three cemeteries have so far been discovered, with the largest and best known outside Bath Gate to the west, where 453 burials were recorded (McWhirr *et al.* 1982). These burials date from the early 4th century and a *siliqua* of Honorius from beneath one burial points to the cemetery continuing in use into the 5th century. Many burials were north-south and later graves inter-cut, which may suggests that there was no large Christian population in the town, although this must be regarded as a very small sample of the total burials. A Christian presence is suggested for some of the burials around Dorchester-on-Thames (see below).

Most rural cemeteries contained higher proportions of decapitations and grave goods than those in urban contexts and had no evidence for formal defined enclosures (Booth 2001, 38). Many are what

have been termed 'backland burials' (Esmonde Cleary 2000), in that they are positioned in relation to existing boundary alignments on the peripheries of settlements, rather than in specifically designed cemetery enclosures such at Asthall (Booth 1997). However, some rural sites like Claydon Pike did contain enclosures around certain burials (see Chapter 6, Fig. 6.13). Prehistoric monuments were often utilised as foci for Roman burials (Williams 1998), and the cemeteries at White Horse Hill (Miles *et al.* 2003) and Cotswold Community (OA 2004) clearly demonstrate this.

As far as age structure is concerned, the status of neonatal and infant burials ensures that they are often buried within the settlement, with the best example of this being at Barton Court Farm, where there is an infant cemetery *c* 50 m east of the villa building (Miles 1986, 15). It was suggested that the adult cemetery lay 800 m away at Barrow Hills, Radley (Miles 1986, 16). With a number of exceptions such as at another cemetery discovered at Radley (Radley II: Boyle and Chambers in prep.), child burials within rural cemeteries are in a small minority. Grave orientation is usually dictated by existing boundaries, although in some of the larger cemeteries such as Frilford there is a change noted from north-south to east-west burial, which is presumably related to ritual and belief, though not necessarily to conversion to Christianity (Booth 2001, 39).

It is highly likely that there was a growing Christian population in the Upper Thames Valley and Cotswolds region during the late Roman period, although the difficulties of differentiating between Christian and pagan burials are well understood (eg Watts 1991; 1998; Booth 2001; Petts 2003). This is made worse by the fact that they were not generally separated in exclusive areas. The best examples of probable Christian elements within cemeteries have been given as Radley II near Barton Court Farm (Watts 1998, 22) and Queenford Farm on the outskirts of Dorchester-on-Thames (Chambers 1987), and even these are quite tentative. The Dorchester cemetery appears to have continued well into the post-Roman period (see below).

Other signs of Christianity in the region are scarce. At Chedworth villa there was a possible Christianised nymphaeum (Pl. 17.2) along with *chi-rho* symbols on a small number of objects (Petts, 2003, 95), while at Bourton there is a lead tank which may have been a baptismal font (Herdman 1933). Perhaps the most famous object was a copper alloy plaque from a bucket in child's grave at Long Wittenham, upon which were depicted biblical scenes. This may have been produced for the probable Christian community in nearby Dorchester-on-Thames (Henig and Booth 2000, 185-6 fig. 7.4; Petts 2003, 17).

The Christian Church was closely bound up with the late Roman state and as a probable provincial capital, Corinium is bound to have had a Church building of some kind, along with a resident Bishop. Urban centres were traditionally the primary hotbeds of Christianity across the late Roman empire, although the evidence from the major Romano-British towns is generally quite poor (Petts

Plate 17.2 Nymphaeum at Chedworth Roman villa

2003, 162). It has been suggested that it was in the small towns and among rural communities that Christianity was strongest (Petts 2003, 170), although there is little evidence for this in our region except perhaps for the Dorchester cemetery. The strength of Christianity among the élite classes is difficult to assess, although the evidence from Chedworth and a few other villas further away in the south-west would indicate that it was certainly practised amongst some. As the imperial 'grandees' were so closely tied with the Roman state, it is natural to assume that similar close ties existed with the Christian Church. However, these would have formed only a very small though undoubtedly influential group, and it is quite likely that the majority of the élite remained pagan. If it is accepted as belonging to the later Roman period, which seems most likely, the dedication by the Provincial governor to Jupiter at Corinium clearly demonstrates the strength of paganism among the élite, even in urban society.

The construction and/or embellishment of Roman temples in the West Country during the later Roman period has been well documented, as has been their close connection with villas (Lewis 1966; Woodward 1992; Smith 2001). It is clear that temples and villas were part of the same trend of regional landscape reorganisation in the late 3rd and 4th century AD, and it implies that pagan belief and practice, albeit in many different forms, continued to be dominant within the countryside. The temple at Frilford underwent significant alterations in the early 4th century AD, with the addition of annexes (Harding 1987, 14), and the coin series went on until the end of the 4th century, suggesting activity continued into the post-Roman period. A late Roman and early Saxon cemetery to the north also indicates the site's longevity, although the relationship between the two remains uncertain (Blair 1994, 194). At Woodeaton the temple was also flourishing in the 4th century, with activity certainly continuing into at least the early post-Roman period (Milne 1931, 108). In the Cotswolds, the temple complex at Uley was extensively modified in the early 4th century, with the temple itself having a large entrance portico added in the mid 4th century, making it appear more classical in appearance (Woodward and Leach 1993, 39). The final structural phase, dating *c* AD 380, came in response to the collapse of the cella and south-eastern ambulatory, and resulted in an L-shaped structure. The fact that the temple was not restored to its former state may say more about the financial situation of the surrounding villa patrons than a change in religious beliefs, as the temple deity clearly continued to be venerated into the early 5th century (Woodward and Leach 1993, 60). Further north-east, dating of the temple at Chedworth is very insecure, but it seems that there were few coins after the early 4th century (Baddeley 1930), which may correspond with the appearance of Christian symbolism within the main Chedworth site (see above).

New pagan temples were also being constructed in the later Roman period, with the circular shrine at Claydon Pike a prime example. This structure, which was probably built after AD 364, may have been patronised by the villa retainers and perhaps the local population into the early 5th century judging from the coin series (see Chapter 6).

In total the evidence from across the region suggests that while Christianity was certainly practised in the region, it is unlikely to have been anything more than a relatively minor religion in the later Roman period. Most of the major pagan temples continued to thrive while new smaller shrines were constructed. Although the Chedworth temple may well have declined in response to the changing beliefs of the nearby élite patrons, it would seem that the increased economic stresses of the very late 4th and early 5th century were more to blame for the eventual decline of most temple structures. The cults themselves of course could well have continued in one form or another for some time.

THE POST-ROMAN LANDSCAPE

Analysis of late Roman landscape and settlement patterns in the Upper Thames Valley and Cotswolds has indicated that no widespread changes of any real magnitude took place within the 4th century. Although some settlements were showing signs of physical decline during the late 4th century, most it seems continued until the end, with the land continuing to be farmed. So was there a total and utter collapse at the start of the 5th century as some such as Blair (1994, 3) have proposed? Certainly the coin supply to Britain completely ceases after AD 402, and the ending of the monetary economy must have had widespread and terminal effects upon centralised industries such as the Oxford potteries. There is no doubt that such changes must have resulted in a deep economic crisis, especially among the élite classes, who would no longer have been able to maintain the buildings and lifestyles of the previous centuries. However, there is no sign of any sudden and dramatic decline in population or lifestyle at this time, and even when the final vestiges of direct imperial control were lost in *c* AD 410 there is no reason to suspect that the majority of the population did not believe that Britain would eventually be subsumed back into the empire, as had been the case on many occasions before. All freeborn had been Roman citizens since the 3rd century, and it is quite likely that many local and regional Roman polities continued in some form well into the 5th century and probably longer, as has recently been argued by Ken Dark (2000).

It is the lack of coins and diagnostic pottery that has caused the great problems of dating this 'sub-Roman' period, and this has led Faulkner for instance to state that the '*Roman town of Cirencester had completely collapsed by the early-fifth century AD*' (1998, 285). However, when settlements such as

Corinium have demonstrable evidence for continued – and in this case relatively thriving – occupation right up until the end of the period for which there is reliable dating evidence, great caution must be used when suggesting subsequent total collapse based upon lack of evidence. Theodosian coins (AD 388-402) on the latest floor surfaces of the Basilica suggest activity into the 5th century (Holbrook 1998, 121), and it is quite possible the élite classes continued to govern the surrounding region from here for some time. Evidence for timber buildings very late in the structural sequences within parts of the town may point to further buildings being erected in the 5th century, and the probable extra-mural market place in the amphitheatre certainly seems to have continued to function (Holbrook 1998, 140, 174). A substantial post-built structure within the arena could belong to the post-Roman period, but dating is uncertain (Holbrook 1998). The overall evidence from Corinium is slight, but does suggest that not inconsiderable levels of occupation may have continued well into the post-Roman period, although how far any final urban civic functions remained is debatable. The town certainly seems to have been a base for the late Roman military, and it is possible that elements of the army remained into the post-Roman period under the rulers based at Corinium, although how they would have been supported in a non-monetary economy is uncertain. The town at Gloucester may also have had a late Roman military presence (see Urban centres above), and occupation of some kind certainly seems to have continued well into the post-Roman period (Heighway and Garrod 1980, 84).

Perhaps the best evidence for post-Roman activity come from another much smaller urban centre, at Dorchester-on-Thames. Very late 4th-century buildings are known, and there are some of the highest proportions of Theodosian coins in Roman Britain. Two well ordered late Roman cemeteries are associated with the town, and a series of radiocarbon dates from one indicated that it was used throughout the 5th and probably well into the 6th century, thereby providing clear evidence for the continuation of the late Roman population of the town (Chambers 1987, 58). Also of great importance were three inhumation burials near to the town, which had evidence for early 5th-century continental military belt fittings, Germanic brooches and iron weapons (Kirk and Leeds 1953). It has been suggested that they may have been associated initially with the late Roman army, and either have remained at Dorchester after the end of 'official' Roman involvement, or else actually arrived there at that point (Henig and Booth 2000, 192). In either case it points to the probable use of military personnel by the 5th-century élite at or near Dorchester, possibly in an effort to maintain their security, position and lifestyle.

Other objects of very late Roman (up to first half of 5th century) military metalwork have been found across the region in a number of rural sites, such as Shakenoak, Woodeaton, Frocester and Somerford Keynes (see Henig and Booth 2000, fig 7.1 for distribution of such metalwork in Oxfordshire). Although such objects do not automatically indicate a late Roman military presence in these places (Swift 2000, 213), they at least indicate the presence of an élite who may have taken on late military trappings as part of their costume (see Cool, Chapter 13).

The spread of early Anglo-Saxon culture is indicated by number of cemeteries and small settlements within the Oxfordshire Upper Thames Valley, some of which, such as Saxton Road, Abingdon, began in the early 5th century (Hawkes 1986). Many others, such as Frilford start from the mid to late 5th century (Dickinson 1976). The close proximity of such sites to the known 5th-century settlement at Dorchester suggests that Germanic groups may have been established at the behest of the British authorities, at least for a short while, although the numbers of people involved are unlikely to have been very large at this time (Hawkes 1986, 58; Henig and Booth 2000, 193).

Throughout most of the 5th and early 6th centuries at least, it is likely there were communities of Britons and small localised groups of Saxons in this eastern part of the Upper Thames Valley, with varying levels of interaction (Blair 1994, 6). Therefore although some British communities may have continued largely unchanged for a time, others such as Barton Court Farm underwent dramatic transformation (Miles 1986, 51). The main farmhouse/villa building at this site seems to have been abandoned in the early 5th century, and it seems that an Anglo-Saxon settlement was established soon after, with a number of sunken featured buildings, and pottery dating from the early 5th century in the still open Roman ditches (Miles 1986, 17). Interestingly the surrounding landscape does not seem to have changed so dramatically, with an open environment containing arable and pastoral land still predominating, and flax continuing to be cultivated. A group of burials cut the late Roman villa building and was tentatively dated to the 6th century (Miles 1986, 19), although they could be later (see Chapter 7). Another Saxon settlement lay 400 m to the north-east at Barrow Hills, Radley dating from 5th to 7th century (Avery and Brown 1972).

Further west in Gloucestershire there was little evidence for any Anglo-Saxon occupation until the later 5th century AD, when cemeteries were established at Butler's Field, Lechlade and Fairford. At Claydon Pike itself, late Roman occupation cannot be pushed far beyond the end of the 4th century and the burials cutting through the villa – originally believed to be 'sub-Roman' – have now proven to be mid-late Saxon in date (see Chapter 7). Many sites in this region, however, such as Frocester do show evidence for continuity of occupation well into the 5th and 6th centuries (Price 2000, 111). At Barnsley Park, despite the site being supposedly abandoned

in about the mid 5th century, the fields continued to be cultivated long afterwards as indicated by scatters of grass-tempered pottery (Webster and Smith 1982, 93). Grass-tempered pottery has also been found at other villa sites in Gloucestershire, including Chedworth, and the overriding impression is one of general continuity of occupation.

During the 6th century there is evidence for increasing Anglo-Saxon settlement up the Thames valley and into the Cotswolds (Heighway 1987, 18), and there may well have been conflicts with regional British authorities, some of whom may still have been operating from Corinium (see above). Corinium is mentioned in the Anglo-Saxon Chronicles for the year AD 577 as one of the three British cities captured by Cuthwine and Caewlin of Wessex, and although there is much academic controversy surrounding the reliability of the Chronicles (see Blair 1994, 37), an episode of this nature must remain a distinct possibility.

CONCLUSION

Certain aspects of the late Roman landscape in the Upper Thames Valley and Cotswolds had changed significantly from that of earlier periods, although in most cases the general character of the land remained quite similar. The probable establishment of *Britannia Prima* with Corinium as its capital towards the end of the 3rd century AD must have been associated in some way with the large-scale construction and/or embellishment of villas at this time, in addition to the widespread changes in lower status sites witnessed within the Upper Thames Valley. Corinium itself exhibited signs of renewed growth in public and private buildings within the 4th century, which continued right until the end of the Roman period. A significant late Roman military presence is suggested within the town, as was also the case at Gloucester further north. In fact the presence of late Roman military metalwork from many urban and rural sites in Gloucestershire – while not all necessarily demonstrating a direct military presence – points to a strong official administrative structure in this region at the very end of the 4th century AD. The other large walled towns in the region, Alchester and especially Dorchester, also have evidence for continued activity during the very latest Roman period, while many of the smaller 'urban' settlements in the region such as Wanborough were at their height in the 4th century.

The growth of villas in the late 3rd and 4th century ensured that the Cotswolds had one of the highest concentrations of such buildings in the country. Although many Cotswold villa sites can only be ascribed a general late Roman date, some have evidence for continuing high status living until at least the end of the 4th century, while at others there were radical changes resulting in more low status occupation within the late 4th century. Such differentiation probably reflect the changing financial and political circumstances of the time, with power being channelled through smaller numbers of higher status élite, occupying more centralised estates. Such estates probably had grand villas at their centre and numerous smaller satellite settlements, and would have been capable of generating large economic surpluses. Overall, there is little evidence for widespread decline in the region during the later 4th century, only further reorganisation of land on a largely piecemeal basis.

The late Roman settlement pattern of the Upper Thames Valley was altered significantly with the establishment of a number of new low status agricultural sites and modest villas (eg Claydon Pike), and the redevelopment or abandonment of existing sites. These formed part of a well-organised and increasingly controlled landscape with pastureland and areas of arable crops linked by trackways and field ditches lined by hedges. As with settlements in the Cotswolds, the late Roman sites within the Upper Thames Valley exhibited a wide variety of developmental trajectories with some continuing well into the post-Roman period, and others being abandoned prior to the end of the 4th century.

The general economic environment of the region would appear to have been very strong, with agricultural intensification and increased diversity, and a thriving pottery industry in Oxfordshire. Other industries relating to the large increase in high status building construction (stone quarrying/masonry, mosaic making, wall painting etc) would also have been flourishing at this time. Most of these activities would have relied heavily on the continuation of the monetary economy, and when this collapsed in the early 5th century through lack of newly imported coinage, many industries in the region must have declined quite rapidly.

The landscape and economic changes of the later Roman period, were matched – and surely dictated by – changes in official administration, such as the division between the traditional civil curial families, who were the main land-owning class, and the new Imperial administrators, who were centred upon the army, the emperor and the court. Although the new 'grandees' are likely to have exerted considerable influence beyond their numbers, there is no reason to suppose they had total power in this region. Instead, it is likely that the traditional land-owning élite still maintained considerable power, probably into the post-Roman period.

Other 4th-century changes in the region include the widespread adoption of inhumation burial rites, although other practices were still used. There were only a few well organised and defined cemeteries, some of which provide a certain amount of evidence for Christian elements in the population. The strength of Christianity in the region is difficult to assess, although evidence from certain villas suggests that it was practised by some of the élite. However, Christianity is unlikely to have been anything more than a relatively minor religion in the later Roman period, as most of the major pagan

temples continued to thrive while new smaller shrines were constructed, such as that seen at Claydon Pike. The ultimate decline of the pagan temple structures themselves is linked to that of other Roman style buildings, and there is evidence that the cults themselves may have continued long after the physical remains of the sanctuaries had deteriorated.

During the early years of the 5th century, the collapse of the monetary economy and eventual breakdown of centralised authority would have created a deep economic crisis, especially among the élite classes, who would no longer have been able to maintain the buildings and lifestyles of the previous centuries. However, there is no sign of any sudden and dramatic collapse in settlement occupation at this time, and many probably continued in some nature well into the 5th century and sometimes beyond. The land also appears to have continued to be farmed much as before. Early Anglo-Saxon settlement in the east of the region may have been under some kind of treaty arrangement with local British rulers but they eventually spread further west up the Thames Valley and into the Cotswolds by the later 5th and 6th centuries. The British rulers of this region are likely to have been direct descendants of the later Roman-British elite, and probably maintained some level of Romanitas, even to the point of continued administrative functions, although by this time most aspects of late Roman society are unlikely to have survived except in a very altered state.

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