Chapter 11

The Roman Period: Resource Assessment

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Introduction

The five English counties that make up the Solent-Thames sub-region form a distinctive territory, sub-rectangular in plan, which runs from towards the heart of England (and *Britannia*) south to the maritime landscape of the Solent, its estuaries and harbours and the Isle of Wight. It embraces a significant stretch of one of England's major rivers, the Thames and its watershed, involving the counties of Oxfordshire, Berkshire and Buckinghamshire, but also touches on the Ouse to the north and the rivers that drain the Hampshire basin to the south. It includes a range of distinctive geologies, of which, in spatial terms, the dominant is the chalk. As the largest island of south-east Britain, the Isle of Wight stands out as a highly distinct entity of the sub-region. Between the Island and the mainland, the sheltered waters of the Solent offer a number of natural harbours. Apart from the Hampshire coast-line (and the Isle of Wight), therefore, there are no natural boundaries to the sub-region.

Any assessment of archaeological research into the Roman period within the sub-region has to begin by taking account of its position within the larger entity of Roman Britain, since this will have an influence on the development of research agendas which might have impact beyond the sub-region. Once the context of the sub-region can be considered in relation to the larger entity of Roman Britain, assessments concerning the pre-Roman-to-Roman and Roman-to-post-Roman transitions can be developed. Culturally, Solent-Thames lies within 'Romanised' Britain, though within that generalising categorisation, there is considerable variation, whose further investigation and characterisation against the pre-Roman context is a major theme for Romano-British studies in general.

In regard to the political geography of Roman Britain (in so far as we can define boundaries), the sub-region embraces the probable entirety of one *civitas*, the Atrebates (Berkshire, Hampshire and Oxfordshire) with its *caput* at *Calleva Atrebatum* (Silchester, Hampshire). It also includes a significant proportion of a second, that of the Belgae (Hampshire) with its *caput* at *Venta Belgarum* (Winchester), a *civitas* which otherwise stretches north-west towards Bath, and smaller areas of the territories of the Catuvellauni (Buckinghamshire, Oxfordshire), the Dobunni (Oxfordshire) and the Regni (Hampshire).

Whether the Isle of Wight formed part of a mainland *civitas,* or was independently administered, we do not know.

A distinctive aspect of the *civitas* of the Atrebates is that its urban centre, along with its suburbs and cemeteries, remains a greenfield site, to be compared with other *civitas* capitals such as Aldborough (York-shire), Caistor St Edmunds (Norfolk) and Wroxeter (Shropshire). This degree of preservation and protection as a Scheduled Ancient Monument (SAM) adds a considerable premium to *Calleva*'s research value. Going back into the regnal period of the late Iron Age and earliest Roman period (1st century BC/1st century AD), the challenges of defining territorial boundaries, in themselves probably always fluid, are even greater. Nevertheless the sub-region contains a significant proportion of the Atrebatic kingdom with its primary centre (*oppidum*) at *Calleva*, as well as parts of the Catuvellaunian and Dobunnic territories. Although the densely populated and defended heart of the *oppidum* remains buried beneath the later, Roman town, the overall research value of this – in modern terms – undeveloped site and its environs is very considerable.

Going forward into the post-Roman period, the sub-region embraces a significant proportion of the Anglo-Saxon kingdom of Wessex, which had taken shape, with its associated ecclesiastical and political centres at Winchester and Dorchester-on-Thames (both flourishing settlements today) by the second quarter of the 7th century. Unlike for the immediate pre-Roman and Roman periods, the archaeological resource in respect of these two centres is constrained by virtue of the modern settlements that mask the underlying archaeology. To conclude, the Solent-Thames sub-region has excellent and appropriate archaeological capacity to support research agendas concerned with three, broadly-framed themes: the origins and development of complex societies in southern Britain at the end of the 1st millennium BC, the nature of Roman provincial society in 'lowland' Britain through the prism of town and its associated, rural hinterland or *civitas*, and, thirdly, the transition to post-Roman, complex society in southern England in the second half of the 1st millennium AD.

The archaeological resource of Solent-Thames has grown out of all recognition in the last 40-50 years through a huge volume of research, much of which has been published and is in the public domain (key sites are

Sites
Oxfordshire
1 - Abingdon
2 - Alchester
3 - Appleford
4 - Asthall
5 - Bablock Hythe
6 - Bampton
7 - Barton Court Farm
8 - Didcot
9 - Dorchester
10 - Frilford
11 - Gill Mill
12 - Lowbury Hill
13 - Oxford
14 - Queenford Farm
15 - Samson's Platt
16 - Shakenoak
17 - Stanford-in-the-Vale
18 - Stonesfield
19 - Wigginton
20 - Wilcote
21 - Woodeaton
Buckinghamshire
22 - Bancroft
23 - Denham
24 - Fleet Marston
25 - Latimer
26 - Magiovinium
27 - Stantonbury
28 - Cox Green, Maidenhead
29 - Thornborough
30 - Wymbush
31 - Yewden
Berkshire
32 - Caversham
33 - Maddle Farm
34 - Roden Down
35 - Thatcham
36 - Weycock Hill
Hampshire
37 - Alice Holt, Farnham
38 - Alton
39 - Appleshaw
40 - Avington
41 - Clausentum
42 - Danebury
43 - Hayling Island
44 - Hengistbury Head
45 - Lankhills
46 - Neatham
47 - New Forest
48 - Portchester
49 - Silchester
50 - Thruxton
51 - Winchester
Isle of Wight
52 - Brading
53 - Carisbrooke
54 - Fishbourne Creek

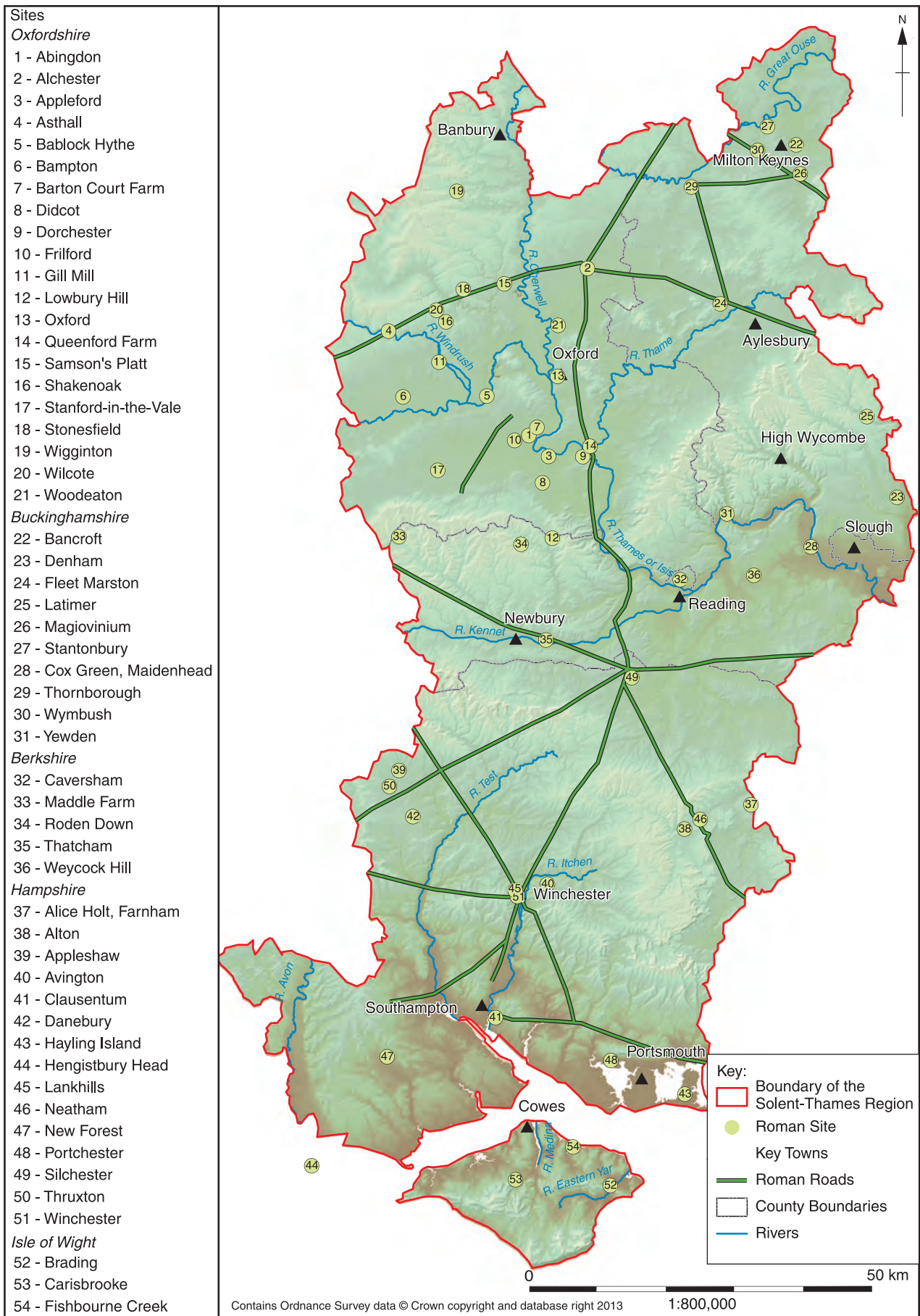Contains Ordnance Survey data © Crown copyright and database right 2013   1:800,000

Figure 11.1 Romano-British sites and roads mentioned in the text

shown on Figure 11.1). There still remain largely untapped reservoirs of knowledge from excavations either only reported in summary form or not published at all. This unpublished work is of crucial importance for two areas of the sub-region in particular, the archaeology of Winchester and of the Isle of Wight. The problem needs addressing urgently.

Environmental evidence

By the Roman period most of the main concerns about the openness of the landscape and extent of woodland are no longer the key issues that drove much of the earlier, prehistoric research agenda. Most of the palaeoenvironmental enquiry of the Romano-British period has traditionally been, and largely remains, focussed around economic issues (see Allen 1996), and on the expansion of agriculture (Van der Veen and O'Connor 1998). However, the review of recent data and current archaeological philosophies may allow the inclusion or reintroduction of some more landscape-based levels of enquiry. The resolution of interpretation required is higher than in previous periods and thus more-accurate data and better and more tightly chronologically controlled assemblages are required over space and time.

Farming

Defining the precise nature of the agricultural economy and the role of all elements in production, trade and exchange are key themes that palaeo-environmental science should address, using palynological sequences, geoarchaeology and land snails to provide a broad landscape background and charred, mineralised and waterlogged plant remains and animal bones to provide the evidence of specific produce. Farming in some parts of the region appears as a major and increasingly managed 'industry', while in others farmsteads appear to remain small and self-sufficient.

Geoarchaeological issues

Challenging, but potentially rewarding, might be the possibility of distinguishing between fields prepared using a plough (ploughed) and using an ard (arded). Two quite different soil surface microhabitats are created by the ard and the plough. More complex is the potential variation of arded field surfaces between those where minor furrows are 'scratched' in the weedy field surface for a seed bed (more like the effect of a digging stick), and that created by a heavily-driven beam ard. The two microhabitats thus produced are physically and ecologically different, and thus the plant and mollusc communities should reflect this. In the former only a small proportion of the soil surface is broken, and weeds and vegetation provide more shady mesic microhabitats for catholic snails (*Trichia hispida, Cochlicopa* sp. etc) and some more shade-loving species (*Nesovitrea hammonis, Aegopinella* spp., *Punctum pygmaeum*). Deeper arding produces a more uniform broken soil surface, but does not eradicate weeds or surface vegetation, so it too provides locally less xerophile habitats than can be seen in modern fields.

The late Iron Age

The county assessments all recognise that there are no clear boundaries between Iron Age and Roman in southeastern Britain. Distinctive, Roman material culture, mostly imported from Gaul or the Mediterranean world, is particularly evident from the last quarter of the 1st century BC, when a variety of manufactured goods and other commodities, particularly ceramics and decorative metalwork, flows into the south-east from across the Channel. On the other hand distinctive, local fabrics and wares that are dated from the later 1st century BC continue to be manufactured well after the Roman conquest into the later 1st century AD. In material culture terms, therefore, there is little to distinguish a later 1st-century BC 'pre-Roman' settlement from a later-1st century AD, early 'Roman' settlement.

Equally, it is clear from most counties that the late Iron Age/early Roman period (approximately the 1st century BC and extending into the late-1st/early 2nd century AD) was a period of major change in the countryside. This saw the emergence of numerous new settlements and types of settlements, and the abandonment or transformation of others, such as the distinctive hillforts and banjo enclosures, notable features of southern chalk landscapes. It is against this background that the rise in contacts with Gaul and the wider Roman world, and the emergence of major, nucleated settlement takes place. In our region the *oppidum* at *Calleva* is preeminent (Fulford and Timby 2000; Plate 11.1), but there are also lesser centres with – in Romanising terms – precocious material culture assemblages, such as Abingdon, Oxfordshire (T Allen 1991).

The evidence for this period is particularly well represented on the chalk, firstly by the work at the hillfort of Danebury in northern Hampshire (see Fig. 9.1 for location) and on the later prehistoric settlements associated with the Danebury Environs (Iron Age and Roman) Programmes (eg Cunliffe and Poole 2000a-e; Cunliffe 2008; Cunliffe and Poole (2008a-g)). Important excavations have also been undertaken in advance of development around Andover (eg Davies 1981; Bellamy 1991; TVAS 1997; Stevens 2004), Basingstoke (eg Northamptonshire Archaeology 2001; 2002; Oliver 1992; Oliver and Applin 1979; Wessex Archaeology 1990; 1996) and of the M3 between Winchester and Basingstoke (Fasham 1983; 1985; Fasham and Whinny 1991). Substantial work on the gravels of the Upper and, to a lesser extent, the Middle Thames has also made a significant contribution towards understanding this period of major change (Booth *et al*. 2007).

In all the above areas of research concentration, our knowledge base has been built on a significant number

Plate 11.1 Excavations at Insula IX, Silchester, Hampshire, showing the Late Iron Age phase, *copyright M Fulford*

of complete, or very extensive, modern settlement excavations associated with high quality research on both the material culture, particularly ceramics, and the biological evidence, notably faunal and charred, plant remains. It remains to be seen, however, how change affected other environments where research has been less intensive, particularly settlement on the heavier, clay soils, such as in Buckinghamshire and Oxfordshire, and in the Hampshire Basin and the northern half of the Isle of Wight.

Where imported material culture is found, it offers the possibility of establishing relatively tight site chronologies. Much of the archaeological record for this period is however dominated by settlements where reliance has to be placed on the broader framework provided by radiocarbon chronologies or less narrowly

datable material culture. Eventually, out of the rural settlement pattern of the earliest Roman period emerge the villa estates of our sub-region from the late 1st /early 2nd century onwards.

While there has been a very substantial growth in our knowledge of rural settlements and their associated agricultural economies over the last 40 years or so, particularly on the chalk and in the river valleys, there is clearly much more work to be done to set this knowledge in its full, landscape context. The sampling strategies of the Danebury Environs Programmes indicate how much can be learnt within a relatively small area from sites imperfectly preserved, either through the degradation caused by generations of cultivation, or by previous archaeological intervention. Despite this, even now, it is hard to generalise from the evidence that has been

recovered. Nevertheless the model of intensive research within a limited, geographical area is one that invites further development in two respects. Firstly, for purposes of comparison, it is necessary to take research to the understudied landscapes of the sub-region, to clarify to what extent our present, limited sample is representative. Secondly, it is vital to take research in well-studied areas a stage further, in order to gain a better understanding of the 1st century BC/1st century AD, a period that sees both expansion in the number of settlements, but also, paradoxically, quite marked dislocation evident from the abandonment of settlements (cf Fulford 1992). The importance of this formative period in the history of the English landscape cannot be overstated; it provided the basis for supporting a complex pattern of urban settlement across the sub-region for over 400 years.

The Roman conquest of Southern Britain

The Roman military conquest of Britain remains of enduring interest and evidence recovered from any sub-region has, potentially, significant implications for the province at large. Until recently the sub-region has had little to contribute to a history which had little changed in half a century. However, recent, but not yet fully published excavations at Alchester (on the road leading due west from Colchester) have revealed evidence of a fort, arguably for legio ii, with dendrochronology providing a *terminus post quem* for its construction from AD 44 (Sauer 2000; 2005b). This represents a significant northwards shift in our understanding of the early work of this legion in Britain. Hitherto, on the basis of written sources, which associate this legion with the conquest of the Isle of Wight and with the capture of several *oppida*, it is assumed to have operated across the southern counties into Dorset, leading the sieges attested at hillforts (*oppida*) such as Hod Hill and Maiden Castle (eg Frere 1987, 58).

The major question of the nature of the military treatment of the Atrebates still remains. While it might seem inconceivable for there not to have been a military presence at *Calleva*, particularly as numismatic evidence suggests it was in the hands of Caratacus around the time of the invasion (Bean 2000, 205-10), the evidence so far rests on finds of military equipment and limited structural remains (cf Fulford 1993; Fulford and Timby 2000, 565-9). The Roman town otherwise seems to evolve from its pre-Roman counterpart through the pre-Flavian period with little significant change. Although the resource for understanding the Roman military presence in the sub-region during the conquest period is limited, it is difficult to see how a purposive research agenda could be developed to address this possible lacuna in our knowledge. The same is also true in relation to developing our limited understanding of the suppression of the Boudiccan revolt and the subsequent disposition of forces in the affected area. One major 'lesson' to be learned from the discoveries at Alchester is that it is not possible to predict with certainty the pattern and progress of the military conquest of the south.

The urban landscape

Large towns

The sub-region has two *civitas* capitals, both in Hampshire at Silchester (*Calleva Atrebatum*) and Winchester (*Venta Belgarum*). As it is a greenfield site, Silchester was extensively excavated in the later 19th and early 20th century, much of the work undertaken in the context of a clear research framework to determine the plan of the Roman town (eg Fox and St John Hope, 1891-1906). While plans of all the masonry-founded buildings within the walled area were indeed produced, field techniques at the time were not adequate to recover the remains of timber buildings systematically, or to address the chronology of settlement. The resultant plan appears as a single period (eg Boon 1974, foldout). Nevertheless, with its constituent public, religious and private buildings, Silchester has provided a benchmark for the interpretation of the larger towns of Roman Britain, not least of the fragmentary evidence derived from developer-led interventions in Roman towns, such as *Venta Belgarum*, now buried under medieval and modern counterparts.

Until the more recent excavations that began in the 1980s, the Victorian and Edwardian work at Silchester was assumed to have been very destructive of the archaeology within the walls. The more recent excavations have however shown that the early excavations were comparatively superficial, with extensive preservation of stratigraphy and the possibility of recovering complex histories of individual buildings and *insulae*. Research on the defences (Fulford 1984; 1997), amphitheatre (Fulford 1989; Plate 11.2) and the forum basilica (Fulford and Timby 2000) has been followed by research on the development of part of one insula from Iron Age origins through to abandonment between the 5th and the 7th century AD (Fulford *et al*. 2006; Fulford and Clarke 2011; Fulford 2012a & b). Unlike the antiquarian work modern research includes reporting of both material and biological culture. It has been estimated that at least 80 per cent of the archaeology within the walled area that was available to 19th century excavators at the start of their work still survives undamaged today. The comparable figure for the extent of preservation of the archaeology of the suburbs and cemeteries beyond the walls is surely well in excess of 90 per cent. While modern work, executed to the highest field standards, has provided the stratigraphic context lacking from the antiquarian work at Silchester, fundamental questions remain to be addressed about the origin, development and functions of the town, as well as the transition into the early medieval period. The town thus retains the capacity to address a rich variety of urban research themes of national and international interest.

Plate 11.2 Silchester amphitheatre, Hampshire, *copyright M Fulford*

In contrast, the scale and scope of excavation at Winchester has been very largely determined by opportunities offered through development work. While a considerable amount of work has been done, particularly since1960, both within the walls and in the suburbs, very little has been fully published, of which the most significant is of the late Roman inhumation cemetery at Lankhills (Clarke 1979; Booth *et al.* 2010). Even though the biological evidence from the earlier excavation has not been published, the character and diversity of the accompanying grave goods and their disposition in relation to the body provide important insights into the social organisation of late Roman Winchester, including the possible presence of migrant groups from elsewhere in Europe, particularly from Pannonia. However, recent research on stable isotopes from a sample of the human remains at Lankhills suggests that there are no clear correlations between the character of grave goods and funerary ritual and the isotopic evidence for the origin of individuals. Nevertheless, although only one individual might be of central Danubian or Pannonian origin, about a quarter of the sampled population (40) appear to have originated from outside of Britain (Eckardt *et al.* 2009).

In addition to more recent excavation of suburbs and cemetery there has also been some important work within the walls. Our understanding of the later Iron Age, Oram's Arbour enclosure has been significantly augmented by the discovery of several round houses at the base of a complex, but fragmented sequence of occupation of a largely artisanal character in the north-west of the Roman town (Ford *et al.* 2011, 37-72).

Closer to the centre excavation of more complex occupation, including town house developments, in Middle Brook Street has added important knowledge to our understanding of residential development within the town (Zant 1993).

While finds reporting is integral to the Northgate House report (Ford *et al.* 2011), there has been separate treatment of the 'small finds' and faunal remains from excavations on the defences and in the suburbs carried out in the 1970s and 80s (Rees *et al.* 2008; Maltby 2010).

Notwithstanding our limited knowledge, perhaps one of the most important aspects to stress for the archaeology of the sub-region is the major differences between its two *civitas* capitals with all the potential that has for generating contrasting and individual urban histories and geographies. As illustration we can point to the very different topographies, origins and later histories. Silchester was located on relatively high ground, some distance from a river and very largely dependent on wells for water, Winchester on the valley side with the River Itchen on its eastern side. Silchester apparently emerged very rapidly, perhaps as a planned town, in the last quarter of the 1st century BC. Winchester, on the other hand, is certainly established in the pre-Flavian period, but, given the lack of late Iron Age activity, notably at the Oram's Arbour (Iron Age) enclosure, without clear evidence of immediate pre-conquest origins (Qualmann *et al.* 2004; Ford *et al.* 2011, 37-72).

Whether or not with continuous intramural occupation from the early 5th century AD, Winchester emerged as the principal ecclesiastical centre of the Anglo-Saxon kingdom of Wessex by about the mid-7th century

(Biddle and Kjolbye-Biddle 2007), whereas, by about that time, Silchester was abandoned (Fulford *et al.* 2006, 280-1; Fulford 2012b). For the future, Silchester and its environs have, for all practical purposes, unlimited potential for addressing carefully formulated research questions concerned with late Iron Age and Roman urbanism, unconstrained by a thriving, overlying city (cf Preston 2011). In contrast, Winchester's research agenda will be more adventitious, conditioned and constrained by the pattern of future development.

'Small towns'

The customary categorisation of towns in Roman Britain is to distinguish the larger *civitas* capitals and *coloniae* with their characteristic range of public buildings and, generally, large, defended areas from the rest which are grouped together as 'small towns', a category which includes both defended and undefended settlements. While the majority of these show some degree of planning, commonly streets or lanes offset at right angles from a single, major through route, the most conspicuous difference is in the typical absence of a forum basilica and monumental civic or religious architecture (except for the presence of *mansiones)*, and the size of the settlement. Bath is an obvious exception. In recent years there has been a tendency to contemplate the inclusion in the urban category of nucleated settlements, simply on the grounds of spatial extent, rather than on any analysis of function or social differentiation.

The sub-region boasts four typical, walled 'small towns': *Magiovinium* on Watling Street at Fenny Stratford in Buckinghamshire (Woodfield 1977; Neal 1987; Hunn *et al.*1997), Alchester in Oxfordshire (Hawkes 1927; Iliffe 1929; 1932; Booth *et al.* 2001), linked by the road coming south from Towcester with Dorchester-on-Thames (Frere 1962; 1984; Burnham and Wacher 1990, 117-122), and Neatham (*Onna*?), Hampshire (Millett and Graham 1986). The typicality of these 'small towns' is that they lie on major provincial roads. Limited research has been undertaken in and around them, influenced in the case of Dorchester by the overlying medieval and modern settlement. While the important, early military origins of Alchester have been touched on above, little modern work has been undertaken on the walled settlement to explore its character and history. Aerial photography reveals the potential of the site with a range of buildings, one at least of considerable size, but of uncertain function, flanking the main, east-west street (a spur road from Akeman Street; eg Burnham and Wacher 1990, 99-101; Booth *et al.* 2001, 3). Nationally, the character and function of the 'small' walled towns is very poorly understood, not least why certain settlements merited defence in comparison with others located along the principal roads of the province(s). With two, well preserved, greenfield examples, the sub-region has the potential to begin to address these fundamental questions.

Despite the modern settlement at Dorchester-on-Thames, there is also not only the potential to explore the relationship between the Roman town and the adjacent Iron Age settlement at Dyke Hills, but also to research further the transition into the early medieval period. Recent research, such as on the Queenford Farm cemetery, has focused on late Roman and early Anglo-Saxon period burials and cemeteries outside the town (Harman *et al.* 1978; Chambers 1987). Despite this, much remains to be done to understand the role of the town, which boasts a dedication by a relatively high status Roman official, a *beneficiarius consularis*, and which was also later, in the 7th century, the seat of Bishop Birinus (Blair 1994, 39-41, 58). The Oxford Institute of Archaeology/Oxford Archaeology 'Discovering Dorchester' project considers these issues and one of its foci is the late Roman/ post Roman transition within the walled town.

In addition to what have been described as 'typical' walled towns, there is a further, defended settlement to be considered in the sub-region. *Clausentum*, on the estuary of the Itchen in Hampshire, is an unusual case (Cotton and Gathercole 1958). With evidence of defences from the late 3rd century (contra Johnson 1979), it is regarded by some as a possible Saxon Shore fort, even though its name does not occur in the late 4th/early 5th century *Notitia Dignitatum*. However, with occupation dating from the pre-Flavian periods onwards, it is clearly of significance, presumably as a port (see below), strategically situated at the head of Southampton Water. Though at least partly buried beneath Bitterne, a suburb of Southampton, this remains a key site for research on the coastal communities of Roman Britain and their relations with other regions and provinces of the Empire.

There still remains the issue of the early (pre-Norman) fortification at Carisbrooke Castle and its date. For many years it has been conjectured as a possible component of the late Roman shore-fort system although there is no name in the *Notitia Dignitatum* that could reasonably be attributed to the Island location. Despite the lack of Roman material from Young's recent excavations at Carisbrooke Castle, the early enceinte still remains undated (Young 2000), but a quantity of Roman brick and tile has been recovered from other, earlier excavation at the Castle (Rigold 1969). The circuit is somewhat anomalous in a Saxon context but, against the background of the larger seascape/landscape of the Solent and the Isle of Wight, with late Roman defended sites at *Clausentum* at the head of Southampton Water and Portchester at the head of Portsmouth Harbour (and Chichester), the otherwise apparent absence of equivalent fortification on the Island is puzzling.

In addition to the walled towns, the sub-region boasts a number of undefended roadside settlements, of which only a couple, Asthall and Wilcote in Oxfordshire, have seen modern excavation of note (Booth 1997; Hands 1993; 1998; Hands and Cotswold Archaeology 2004). Given the apparent importance of the roads represented in the sub-region, not least Akeman Street and the Devil's Highway, which provide east-west communications, as well as Watling Street to the north, the incidence, extent and characterisation of the associated
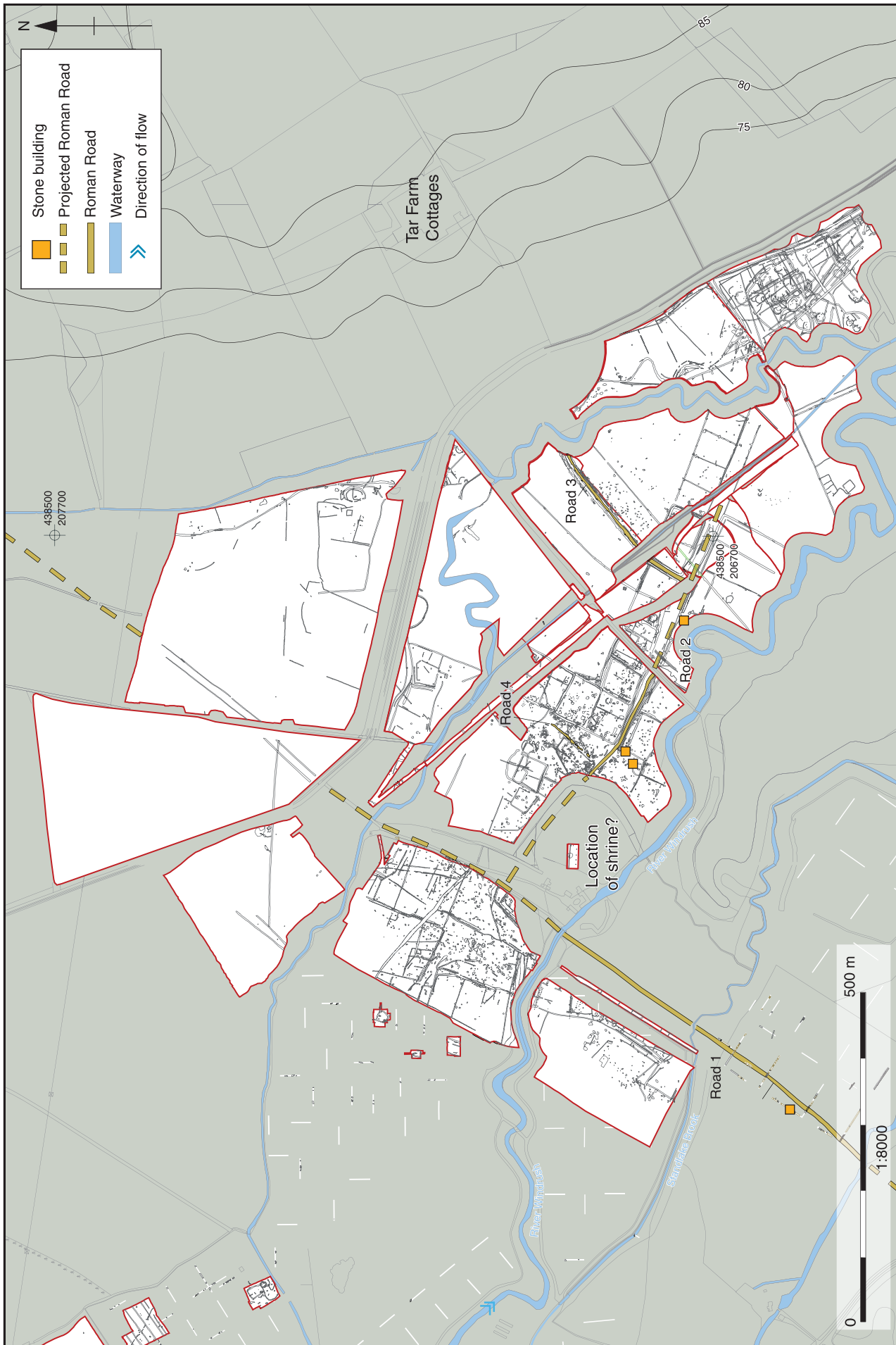
Figure 11.2 Plan of the Romano-British settlement at Gill Mill, Oxfordshire

roadside settlements offer the possibility of beginning to 'fingerprint' the character of different highways. A major question is how variable the settlements are that develop alongside such roads, and what light that variability throws on their relative importance as transport routes. The Oxfordshire research has not yet been matched by work on the comparable, roadside settlements repres - ented in Berkshire and Hampshire, which to a large extent remain undefined. Indeed our ignorance of these settlements, including even their precise location and extent, is highlighted by the difficulty of matching sites with names of settlements with presumed *mansiones* or relays (*mutationes*) for the *cursus publicus* listed in the Antonine Itinerary and Ravenna Cosmography.

Urban economies and industries

Urban centres contain subtly different evidence of food stuffs and activities from the rural sites, but perhaps some of the more conspicuous contrasts, apart from sheer quantities of faunal remains, can be seen in the butchery and processing of domestic animals (eg Maltby 1985; 1989). Significant contributions have been made to our understanding of the role of animals, both domestic and wild, in urban society in both Silchester and Winchester (Grant 2000; Ingrem 2006; 2011; 2012; Maltby 2010). At the same time, at Silchester, a greater understanding has been obtained of the role of plants and plant foods in urban diet and society, including the contribution of imported foods (eg Robinson 2006; 2011; 2012).

Lived-in environments

Urbanisation creates specific environments, which are rarely dealt with. Their appearance and the level of maintenance of buildings have been little explored and environmental evidence might shed some light on these issues as has been attempted using geochemistry and micromorphology at Silchester (eg Banerjea 2011; Cook 2011).

Nucleated settlements

Other nucleated settlements in the sub-region, particu- larly those whose role in the road network may have been subsidiary to other functions, deserve comment. Out - standing among these is that at Frilford, Oxfordshire where recent excavations have valuably strengthened our knowledge of the settlement, including important religious and ritual aspects (Lock *et al*. 2003; Lock and Gosden 2004; Gosden *et al*. 2005; Kamash *et al*. 2010). Probably not unconnected to the latter, this is one of a very small number of smaller, nucleated settlements in Britain, and the only one so far known in the sub-region, which boasts an amphitheatre. Of the vast majority of the smaller, nucleated settlements in the sub-region we know very little. The potential interest and significance of these sites is sometimes highlighted by metal detectorist finds, such as those of *siliquae* from the ill-understood settle- ment at Stanford in the Vale, Oxfordshire (Henig and

Booth 2000, 72). Gill Mill in the Windrush valley, how- ever, has provided the opportunity for extensive excava- tion of a nucleated settlement (Booth and Simmonds 2011; Fig. 11.2).

Unlike the well-preserved chalkland landscapes of the military training area of Salisbury Plain, where complex arrays of earthworks indicate numerous nucleated settle- ments (McOmish *et al*. 2002; Fulford *et al*. 2006), in our sub-region such sites have been ploughed out, whether on chalkland or other landscape environments. Add to the level of destruction the weakness of our knowledge- base of these sites, and it is not surprising that it is difficult to recognise that our sub-region – as, indeed the larger region as a whole – probably supported numerous nucleated settlements of this kind. This underlines how far we have to go to understand the lesser nucleated settlements of the sub-region and to characterise their social and functional differentiation.

Rural settlement

In contrast to the lesser nucleated settlements, a great deal more is known of single settlements or settlement complexes like villas (Plate 11.3). Partly this is a reflec- tion of the intensity of effort by antiquarians on masonry structures in the countryside which might yield spectac- ular examples of Roman civilisation, such as mosaics, and also of the effects of aerial photography, revealing the plans and interrelationships of villas and their surround- ings (Plate 11.4). It is also partly the result of extensive modern developments, which have required large-scale excavation of single sites. This is true in the context of major, modern urban and other settlement development, such as the development of Milton Keynes, Bucking- hamshire and of the expansion of small towns like Abingdon, Oxford. The former provided the context for the extensive excavation of the large villa complexes at Bancroft (Williams and Zeepvat 1994) and Stantonbury as well as smaller farms with Roman-style buildings such as Wymbush (Zeepvat 1988), while the latter led to the excavation and detailed publication of the small villa at Barton Court Farm (Miles 1986).

These development-led excavations associated with full publication have now been complemented by a major, research investment on villa and other settlements that formed the Roman phase of the Danebury Environs Programme on the heavily ploughed chalkland landscape of north-western Hampshire. In several cases this involved re-visiting and re-evaluating villas first investigated in the 19th or earlier 20th century (Cunliffe 1991; 1993; Cunliffe 2008; Cunliffe and Poole 2008a-g). Thus, in the sub-region we have good examples of well researched clusters of rural settlement in three contrasting land- scapes: the clay and drift soils of northern Bucking- hamshire around Milton Keynes, the gravels of the Upper Thames around Abingdon, Oxfordshire, and the chalk- lands of north-west Hampshire close to Andover, the latter complementing slightly earlier work undertaken on villas, such as Latimer, Buckinghamshire, in the Chilterns

Plate 11.3 Excavation at Cox Green Roman villa, Berkshire, *copyright M Fulford*

(Branigan 1971). In west Oxfordshire, close to Akeman Street and exploiting light and heavy soils, we also have the example of the extensively researched and published Shakenoak villa (Brodribb *et al*. 1968; 1971; 1972; 1973; 1978), the only site in the sub-region with possible evidence of fish-farming (ibid. 1978, 15-20). Building on the major landscape project at Heathrow in nearby Middlesex (Lewis *et al*. 2010), our knowledge of late Iron Age and Roman settlement in the Middle Thames Valley is also rapidly developing (eg Preston 2003). A recently published example is the settlement at All Souls Farm Quarry, Wexham, north-east of Slough in Buckinghamshire (Preston 2012).

In the first place, the above excavations have provided good chronologies which, for the most part, have shown trajectories of development which go back to the late 1st century BC/early 1st century AD, this really critical period in the expansion of rural settlement in the sub-region. Frequently late Iron Age buildings are found to underlie Roman-style constructions, although not in Oxfordshire. In addition this work has provided enormously important assemblages of both material culture and biological evidence, which, together, have provided the basis for reconstructing their respective agrarian regimes, particularly in the areas of animal and crop husbandry. An extremely valuable aspect of the work undertaken in the context of the development of Milton Keynes was the capture through excavation of a range of settlements (Mynard 1987). By no means comprehensive in its coverage of the landscape, this has nevertheless given a much clearer idea of the diversity of rural settlement across a limited area of the countryside and of the perpetuation from the Iron Age into the Roman period of traditional architectural forms, notably

round houses. Bearing in mind discoveries outside the sub-region, such as at Stansted in Essex (Cooke *et al*. 2008), the latter are clearly more common than has previously thought to be the case. They have also been found, for example, on the clay soils of East Berkshire (eg Roberts 1995).

While excavation of single sites has been the principal methodology of researching rural settlement, extensive landscape survey involving surface collection of material culture has also deployed in the sub-region, as in the East Berkshire and Kennet Valley Surveys (Ford 1987; Lobb and Rose 1996), or the Whittlewood Survey in north Buckinghamshire (R. Jones 2003). The latter have provided important information on the existence and density of settlement of different periods and on soil types where there had been no history of systematic work before. The primary concern of the Maddle Farm Survey (West Berkshire) was the characterisation of the agricultural exploitation of the chalk downland landscape during the Roman period through the systematic analysis of off-site sherd (manuring) scatters. However, sample excavation was also carried out on a limited number of sites to provide, principally, chronological control, as well as stratified samples of material culture and biological data (Gaffney and Tingle 1989). Further, complementary field survey involving surface collection (but without sample excavation) was undertaken below the chalk escarpment of the Berkshire Downs of a sample of the Vale of the White Horse, Oxfordshire (Tingle 1991).

Re-evaluation of surveys already undertaken in a variety of soil and landscape settings in combination with assessment of the evidence of excavated sites have the potential to lead to fresh insight into the question of

Plate 11.4 Aerial photograph of the Yewden villa, Buckinghamshire, *copyright National Monuments Record 4632/16*

population size during the Roman period. A range of figures, with considerable variation in magnitude, have been suggested in the past. Although there is scope for more, targeted survey in under-represented areas in the sub-region, there is the potential now for re-evaluating the data we have already collected for the insights it can provide on population dynamics and its role in economic growth and decline.

The sub-region thus has a formidable resource base upon which to extend the important work on rural settlement and the exploitation of the landscape, whether by extensive survey including geophysical survey and surface collection in those limited areas where considerable excavation has taken place, or by developing excavation (and geophysical survey) programmes to extend understanding of those areas where surveys by surface collection have been undertaken. With this approach two important questions can be addressed: first, the economic and social relationships between individual settlement components of a sample landscape; second, the larger question of the relationship between the rural settlements (including nucleated settlement) of a *civitas* and their *caput*. In this context the accumulation of small-scale work, as for example in the hinterland of Silchester, has provided invaluable data to shed light on town-country relations as reflected by ceramic and faunal assemblages (eg Ingrem 2012; Timby 2012).

If the emphasis up to now has been on the individual settlement, it should not be overlooked that the sub-region has a rich range of resources which provide the basis for understanding the look of the countryside in terms of the location of woodlands and the existence and spread of field systems, as, for example, those on the Berkshire Downs.

Woodland resources and woodland management

Woodland, though less predominant physically in the landscape, and in the level of archaeological enquiry in this period, is nevertheless, still a key resource. The nature and variety of potential woodlands are rarely addressed; though certainly evidence from old and unmanaged, and essentially unused woodlands will be more difficult to recover in the direct (i.e. charcoal and waterlogged wood) record. Nevertheless, woods are still required for pannage, as well as for fuel, for construction (fencing, buildings, bridges, harbours/jetties, boats) and for personal and other objects (bowls, furnishings etc). Thus charcoal and waterlogged wood records are important in the first instance in recognising the presence, if not the location, of managed, coppiced and pollarded woodlands. Analysis of charcoal assemblages from Silchester have contributed to the history of the changing exploitation of wood types and the role of coppicing (Straker 2000; Veal 2012). There is relatively little evidence to date on where the main woodlands were located, although some informed guesses have been made, such as on the steeper slopes of the Chalk and the Chilterns, as well as the Tertiary clays of southern Hampshire and the Isle of Wight.

Field systems and paddocks

The distribution of field systems seems to indicate areas and topographies or geologies that were under less cultivation pressure. Field systems seem to extend from the higher slopes and onto the footslopes, indicating that they may extent into footslope and dry valley locations that have been sealed by hillwash, as at Aston Clinton and Pitstone, Buckinghamshire (Masefield 2008; Wainwright *et al.* 2010; see also Fig. 11.1). Fields for animal husbandry are less likely to have such pronounced lynchets and banks, as pasture does not result in as much erosion as cultivation. Paddocks have been recorded at, for instance Broughton, Milton Keynes (Petchey 1978), and long narrow rectangular fields located elsewhere (eg Berryfield, Aylesbury, Weedon Hill and Pitstone in Buckinghamshire (Dodds 2002; Wakeham *et al.* 2013; Wainwright *et al.* 2010)).

Field systems were studied as part of the Maddle Farm survey (Gaffney and Tingle 1989) and were shown to be both Roman in date and integral to understanding the role of stock-raising in the agricultural economy of that landscape (see also Ford *et al.* 1988). Ideally, if we are going to characterise the totality of settlement and its diversity within a small sample area, we need to know the location and layout of fields and field systems as well as the role of more significant, linear boundaries. The latter include the North and South Oxfordshire Grim's Ditch systems (Copeland 1988; Cromarty *et al.* 2006, 157-200), the linear earthworks around *Calleva* (Silchester), and the earthwork complexes to the east of Winchester around Avington (Crawford 1951). Away from the chalk we still have very little idea of the extent to which the land was parcelled out into fields in the late

Iron Age and Roman periods, rather than given over to woodland or common grazing areas. The writing tablet from London which records the sale of a wood in Kent (Tomlin 1996) reminds us of the detailed mapping and recording of the landscape on the part of the provincial authorities. We are still a very long way from recovering such details of the late Iron Age and Roman landscape of the sub-region.

Specialisation and regionality

In some areas such as the Thames valley hay meadows have been specifically defined, and this has been argued to represent specialisation and supply for the Roman army (Lambrick 1992a, 101-2). Other examples of specialisation may also be identified from environmental assemblages. It is important to examine variation between farmstead types in order to explore the relationship between meat and cereal or dairy and meat production and thereby explore the existence and extent of regional specialisation. We have good insights for the Chalk, for example from the Danebury Environs' settlements (Hammon 2008), and from Maddle Farm, near Lambourn, Berkshire, where there seems to have been a large and flourishing estate combining intensive cereal cultivation with stock-raising (Gaffney & Tingle 1989). Equally, and reflecting the work carried out on settlements on the gravel, important insights have been gained in our understanding of the development of animal husbandry in the Thames Valley from the later Iron Age and through the Roman period (Hesse 2011; but see also Hambleton 1999; Hambleton 2008).

Cattle generally predominate in most faunal assemblages followed by sheep and pig with some domestic fowl present on many sites. However pig are more common than sheep in the third century AD at Latimer in the Chilterns, Buckinghamshire and this may be due to assemblage or site/context biases, or it might indicate some regional variation (Maltby 1985; 2002). The proportion of animals and their age profiles, as represented in the faunal assemblages from rural sites, can assist in characterising and mapping Roman farming in the Thames-Solent corridor. In the Thames Valley research has shed important light on several important issues, such as the influence of major and minor urban centres, the changing – and increasing – exploitation of cattle over time, the extent of dairying and the role of cattle for traction (Hesse 2011; cf Ingrem 2012).

In contrast from the coastal zone, and from a late Roman military context, we have, to date, one important faunal assemblage, that from Portchester Castle (Grant 1975).

In general spelt wheat (*Triticum spelta*) dominated, while other cereals such a free-threshing wheat (*Triticum* sp.) and emmer (*Triticum dicoccum)* and barley (*Hordeum*) are present. Campbell provides an important synthesis of the evidence from the Danebury Environs' sites located on chalk soils (Campbell 2008). The proportions of the different cereals according to site

type, geology/soil and over time would also contribute to the mapping of different agricultural regimes. In addition the cultivation of other food plants can also be demonstrated. Fruit and vegetables are less common because the chances of pips and stones becoming charred are less than those of cereal crops. Nevertheless, the preservation of soft fruit and vegetable remains by waterlogging has been recorded in Buckinghamshire at Bancroft (Pearson & Robinson 1994), indicating the high potential value of such deposits. Mineralised, waterlogged and charred assemblages, as well as pollen, have also contributed to the record of fruits and vegetables in an urban environment, as at Silchester, Hampshire (Dark 2011; Robinson 2006; 2011; 2012). This direct palaeo-environmental evidence corroborates field evidence of ditched fields or enclosures, such as at Mantles Green, Buckinghamshire, for instance (Yeoman & Stewart 1992), which may relate to vegetable or herb gardens. Celtic bean, pea and lentil are present on a number of sites. Bean is more evident than cereal remains at Brading Roman villa on the Isle of Wight (Scaife in Trott 1999) possibly indicating specialisation. Flax has been recorded at a number of sites, in particular in Buckinghamshire, Oxfordshire and Berkshire, and a number of other specialised crops are also recorded from the Roman-British period.

Foodstuffs, trade, presence and consumption

The definition of a Romano-British diet should be within the grasp of palaeo-environmental analyses and interpretations. Aiming towards defining this as well as the broader economy would considerably enhance our comprehension of Roman life-styles. Here the presence of table foodstuffs may be provided by charred and waterlogged remains, but also in faecal remains and mineralisation. Interestingly, palaeo-environmental archaeologists have not attempted to recreate, via their accumulated data any menus or meals, yet the potential is there, particularly from mineralised deposits.

Luxury and prestige foods, some meats and fruits became socially exclusive. The range and variety of foodstuffs in the Roman diet increased with the import of foods from Europe and the Mediterranean regions and the presence of imported foods such as figs, olives, walnuts (*Junglans*), grapes (*Vitis*) and vines is recorded (eg Booth *et* al. 2007, 280-3; Robinson 2012).

Processing, parching and butchery

The types of crop processing wastes are often indicative of the use of the grain, that is, whether it is processed to store in spikelet form, as corn, or processed for consumption. The evidence of processing waste provides interpretation to suggest, not only specific activities, but also possibly the role and function of specific features or even sites (cf. Stevens 2003). Corn drying ovens/kilns are widely distributed and common throughout the period, and yet their function still remains enigmatic or multifunctional, including their serving as malting ovens for the brewing of beer, despite van der Veen's work (1991; cf Campbell 2008, 69-70). *Triticum spelta* (spelt) has also been recorded in corn drying ovens, while other ovens may have been used for parching beans as suggested at Brading Roman villa, Isle of Wight.

The processing of animal carcasses and butchery patterns and practices vary between urban and rural assemblages (eg Maltby 1985; 1989; 2010; Hammon 2008; Ingrem 2012), and similar analytical approaches across sites need to be adopted to enable full inter and intra-site comparisons. These data can feed into many of the broader themes such as native vs villa estates, regional specialisation (see above) and urban and lived-in environments (see below).

The built environment

Much of our knowledge of the architecture of the sub-region is based on antiquarian excavations of rural and urban settlement. Thus our knowledge of the urban, built environment is heavily influenced by the plans of buildings recovered by the Society of Antiquaries' excavations at Silchester. So, too, our knowledge of villa and other buildings in the countryside is still very dependent on early work, which was not sensitive to the chronological development of individual structures (particularly of timber) or of groups of buildings. New work across the sub-region is leading to major changes in perception of the rural built environment, including increasing recognition of the continuation of traditions of later prehistoric roundhouse architecture into the late Roman period. At the same time, as in the very recently published Roman Danebury Environs Programme, re-examination of previously excavated villa buildings, as at Brading on the Isle of Wight (Plate 11.5) has provided important new information on other distinctive building types, such as the aisled hall (Cunliffe 2008).

Equally, excavation in towns like Silchester is beginning to show the complexity of the architectural development underlying both public buildings, such as the amphitheatre and forum basilica, and domestic buildings which make up the Antiquaries' 'Great Plan' completed in 1909 (Plate 11.6). The small sample (<0.3 ha) of late 1st/early 2nd-century (timber) built environment revealed by the continuing excavation of *INSULA IX*, Silchester has no parallel elsewhere, not least because of the dearth of research on the early Roman towns in Britain (Booth 2009, 399-401, Figs 15-16). The extent of our ignorance is reinforced when we look across to the 'small towns' and the evidence of their built environment, as tantalisingly revealed by aerial photography at Alchester and at Sansom's Platt (Winton 2001), Oxfordshire, but not researched through modern excavation. In sum, the sub-region has much to contribute to our knowledge of the architecture and built environment of Roman Britain. To date, however, lower status rural settlements have failed almost totally to provide evidence for structures.

Plate 11.5 Brading Villa, the aisled barn, Isle of Wight 2008, *copyright Isle of Wight Council*

Plate 11.6 Late Roman building on Insula IX at Silchester, Hampshire, *copyright M Fulford*

Industrial settlement and landscape

The sub-region is distinctive in having the major Romano-British pottery industries of the New Forest and Oxfordshire, both of national importance (see below), entirely located within it, while a third, the Alice Holt/-Farnham industry, extends across the county boundary into Surrey (Booth et al. 2007, 308-11; Fulford 1975; Lyne and Jefferies 1979; Young 1977). Much of our knowledge of these industries derives from the kilns themselves while their larger, landscape context, extending in each case over tens of square kilometres, remains poorly studied, partly for reasons of modern urban development (Oxfordshire) and partly because of managed afforestation (Alice Holt and New Forest, Hampshire). Nevertheless, just as the impact of urban communities on rural settlement and the landscape requires further evaluation, so, too, does the impact of rural-based industries in terms of the character and location of the settlements of the pottery manufacturers, the supply of fuel and clay, the degree of specialisation of potting communities, particularly in relation to other agricultural activities, and the extent of take-up of potting among settlements as a whole in the respective areas, and so on. For the impact of the Oxfordshire industry on the woodland environment see Day 1993.

Island settlement and landscape/coastscape

The question of urban-rural relationships is not, of course, relevant to the Isle of Wight, where there is no
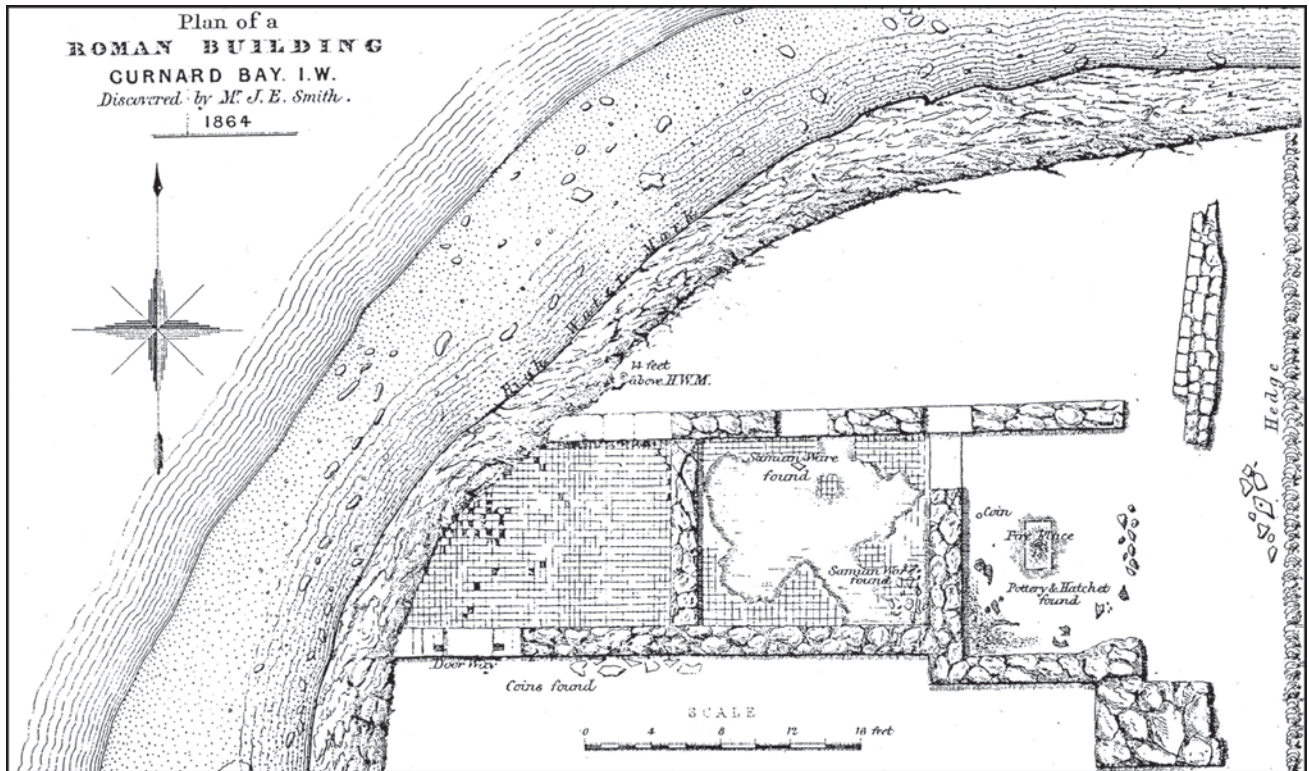
Plate 11.7 Plan of Building at Gurnard Fort, Isle of Wight (19th century excavation)

evidence of *civitas* organisation. This begs the question whether the settlement pattern and agricultural economy of the Island were otherwise significantly different from that of the mainland. The absence of roads has obviously discouraged the development of nucleated settlement. However, the possibility that such settlement did develop needs urgent investigation. In particular, the context of the historic discoveries of the Carisbrooke villa (Spickernell 1859) and other reported Roman buildings in its vicinity towards the centre of the Island requires evaluation to determine whether they represent individual elements of a nucleated settlement.

Early work has shown that villas and Romanised settlement forms have been discovered across the Island, giving the appearance of a landscape little different to that on the mainland (Plate 11.7). There is however a great deal of unpublished research from recent excavations and evaluations of late Iron Age and Roman settlements in a variety of landscape contexts across a range of site types on the Island. Bringing to publication recent work is undoubtedly a priority and would be a very helpful contribution to our knowledge of settlement patterns and diversity on the Island. There is also a strong argument for integrating it with a focused study of a sample of the Island's landscape that combines survey and excavation methodologies. This would provide an enormously valuable comparison with similar mainland projects of the kind described above and, thereby, a powerful contribution to the debate about the nature of urban-rural relations. It would also address the question whether the pattern of Island settlement and acculturation mirrors that of the mainland throughout the late Iron Age and Roman period, or whether there are periods of greater or lesser integration with the mainland.

The Isle of Wight draws attention to a distinctive aspect of the sub-region's landscape – the Hampshire and Isle of Wight coasts – and the extent to which they supported distinctive, maritime settlements and economy. At present there seem to be two very contrasting types of settlement evidence. On the one hand there is the major settlement at *Clausentum*, defended from the late 3rd century onwards, but about which little is known; on the other there is the material – pottery, coins, animal bone – collected from the intertidal zone at Fishbourne Creek on the Isle of Wight and interpreted as a small emporium (Lyne 2012 a, b, c and d; Tomalin *et al.* 2012). This invaluable collection of material invites us to consider to what extent it might be representative, as a minor and informal trading point, of small ports and harbours more generally along the Solent shores and estuaries of the sub-region. Thus far there is no evidence of more formal port facilities along both Island and mainland coastlines, even though they might reasonably be expected at *Clausentum* and at the late Roman fort at Portchester.

In general, our resources are not particularly helpful in determining the role of the coast and maritime relations in the life of the sub-region during the Roman period. In the later pre-Roman Iron Age imported amphorae, notably the Dressel 1 types of the Roman Republican period, and other imported pottery from Brittany have been recorded from central southern Britain, including the Isle of Wight (eg Fitzpatrick and

Timby 2002; Tomalin 2012a). In contrast, Roman-period artefact distributions do not help us to define either a role for ports in general of the Hampshire and Isle of Wight coast, or of specific ports such as *Clausentum* beyond the notion of the Solent as Ptolemy's *Magnus Portus* (Tomalin 2012b). Biological data, such as oysters suggestive of a south coast origin from Lowbury Hill, Oxon (Somerville 1994), or the presence of marine fish on inland sites such as Silchester (eg Hamilton-Dyer 2000, 482-4; Ingrem 2006, 183), merely beg the question as to their relationship with coastal settlement and the degree of intensity in the exploitation of marine resources. Even where distinctive evidence is recovered, as with the settlements associated with shell middens in the Ventnor area of the south coast of the Isle of Wight (Poole 1929), this may simply reflect local consumption rather than any engagement with mainland markets.

In regard to cross-Channel or Atlantic trade, the evidence from the Isle of Wight is, by comparison, particularly helpful for the late Iron Age/earliest Roman period when distinctive imports of amphorae of Dressel 1 and 2-4 types have been recorded from a large number of island sites. The assumption is that this material derives from direct contact between overseas traders and island communities, rather than through redistribution from mainland ports such as Hengistbury Head (Dorset), which was particularly active in the later Iron Age (Cunliffe 1987; Fitzpatrick 2001; Tomalin 2012a).

Ceremony, ritual and religion

Evidence of temples, shrines and of religious activity more generally is represented in a variety of forms among the settlements of the sub-region. The distribution of built (temple) sites is uneven, with an emphasis to the north of the sub-region with examples in Buckinghamshire (Plate 11.8), Oxfordshire and (east) Berkshire, but fewer known sites in west Berkshire, Hampshire and the Isle of Wight. Albeit poorly understood, temples and shrines represent one component of the urban fabric and are integral with it, while in rural situations they may appear as a distinct element of the landscape, even if, in some cases, settlement may have developed around them. This may be the case with the development of the settlement at Frilford, Oxfordshire from the Iron Age, discussed in the context of nucleated settlement above (but cf Harding 1987, 12-16). Other, nationally important temple sites such as Weycock Hill at Waltham St Lawrence, Berkshire and Woodeaton, Oxfordshire have undergone some modern work, but the discovery, on the one hand, of the great Iron Age coin hoard attributed to Weycock Hill (Burnett 1990; Bean 2000, 253-62) and, on the other, through aerial survey, of further temple buildings at Woodeaton (eg Henig and Booth 2000, 89), remind us how little is known of these two sites and how they relate to local settlement from the late Iron Age onwards. Context is also an important question in relation to the Hayling

Plate 11.8 Reconstruction of the temple at Thornborough, Buckinghamshire, *copyright Buckinghamshire County Council*

Island (Hampshire) temple (Downey *et al.* 1979; King and Soffe 1998), where completion of the publication of this important late Iron Age and Romano-British site would make an important contribution to the archaeology of the sub-region.

While the process of classification draws attention to 'Romano-Celtic' temples and shrines as distinct types of site, deserving of further research in their own right, they should not be divorced from their landscape context. In this context they may be seen, alongside rural settlement with a similar chronology, as part of the appropriation of estates and the development of new patterns of land ownership from the late Iron Age/earliest Roman period. At the same time, the unevenness of distribution noted above suggests that, as with the enigmatic rectangular enclosure – very probably a rural shrine – at Lowbury Hill, Oxfordshire (Fulford and Rippon 1994), the expression of cult and religion in built form takes on different, physical identities in different parts of the sub-region. Chance discoveries of single finds, such as of the altars from Bampton and Bablock Hythe, Oxfordshire (Henig 1993, nos 28, 35) and of the Christian, lead tanks from a well at Caversham, Berkshire (Booth *et al.* 2007, 223) and from close to the villa at Wigginton, Oxfordshire, remind us how little we know, not least of their relationship with settlement and religious practice.

The discovery of single finds, such as the lead tanks, from secondary contexts, draws attention to the potential breadth of ritual behaviour and the increase in recognition of special or structured deposits. These can range from major deposits of metalwork, represented in the sub-region by the celebrated pewter hoards from Appleshaw, Hampshire, Appleford, Oxfordshire and Thatcham, Berkshire (Poulton and Scott 1993), to those of articulated animal remains placed in pits or wells. The work of Hill (1995) for Wessex and of Grant (1984) for the hillfort of Danebury, Hampshire, has shown that structured deposition in the Iron Age of animal remains is well represented in the sub-region, particularly among settlements on the Hampshire chalk. For the Roman period, however, variability in practice across different environments of the sub-region and the landscape at large is not well researched, but the evidence is indicative of strong continuity of practices, particularly in relation to structured deposition, from the Iron Age throughout the Roman period in urban and rural contexts (Fulford 2001; Eckardt 2006; 2011; Maltby 1994; Morris 2011, 66-98; Oliver 1993). A votive explanation for prehistoric finds of metalwork associated with watery contexts is widely invoked and generally accepted, but the equivalent has not been systematically researched for the Roman period. For example, there has been no survey of Roman finds from the Thames (or from any river in the sub-region) in the way that there has been for later prehistoric materials.

Other evidence for religious activity can be found particularly in rural areas; for example, a Taranis shrine was identified at Wavendon Gate, Milton Keynes (Williams *et al.* 1996) and a possible late shrine at Thruxton, Hampshire (Cunliffe and Poole 2008d).

Concentrations of particular types of artefact, identified through PAS records, may also help locate sites.

Cemeteries

Patchiness of the record in regard to the structured deposition of material culture and animal bones corresponds with the uneven quality of the record for the burial of human remains which become archaeologically visible again from the later Iron Age. With cremation the predominant mode of disposal in the 1st and 2nd centuries AD, there have been no extensive excavations of cemeteries, particularly urban, in the sub-region. On the other hand there has been recognition of what seems a regionally important early Roman burial tradition at Alton in Hampshire, one of richly furnished, single and multiple cremation-burials (Millett 1986; 1987). However, there have been modern investigations and publications of one large late Roman inhumation cemetery, that of the extramural cemetery of Lankhills at Winchester, Hampshire in the sub-region (Clarke 1979; Booth *et al.* 2010). The earlier publication did not include a report upon the human remains, but even without this the information upon the disposition of the graves, their cuts, fills and the associated grave goods has proved of immense value in defining late Roman burial practice, and has initiated debate about group identity within and around the late Roman city (eg Baldwin 1985; Evans *et al.* 2006). The more recent excavation of the Lankhills cemetery and analysis of the human remains are adding valuable new perspectives on the earlier work, particularly through isotopic analysis (Eckardt *et al.* 2009; Booth *et al.* 2010, 411-28). Other urban cemeteries are less well researched, though the potential for 'small' towns, as indicated by the Queenford Farm cemetery outside of Dorchester-on-Thames, Oxfordshire (Chambers 1987) and finds of burials outside *Magiovinium*, Buckinghamshire (Neal 1987), all hint at the unrealised potential that more extensive research would generate.

For the countryside the picture is quite limited with very few modern investigations. However, the late Roman inhumation cemetery of some 57 individuals at Radley, near to Barton Court Farm, Oxon and the smaller, late or sub-Roman cemetery at the Thruxton villa provide valuable examples (Chambers and McAdam 2007; Cunliffe and Poole 2008d).

A major question, relevant as much for Roman Britain as a whole as for the sub-region, is how far, if at all, there was significant variation in the demographics – gender, age structure, pathology, etc – between town and country, and in burial traditions? For example, the presence of inhumations among early Roman cemeteries (where cremation is the norm) and the presence of cremations among late Roman burials (where inhumation is the norm) require investigation (eg Chambers and Boyle 2007). The role of distinctive, rectangular enclosure of early Roman cremation cemeteries in the sub-region, as, for example, at Roden Down, Berkshire (Hood and Walton 1948), and as indicated elsewhere through aerial photography, also requires further investigation. Two

examples of *bustum* burials have been noted in the region, one at Didcot, Oxfordshire (Cotswold Archaeology 2003) and the other at Denham, Buckinghamshire (Coleman *et al.* 2004; Barber 2011), and this type of practice would merit closer study. In general, and crucial to addressing all these questions is the need for the identification, excavation and full publication of rural cemeteries across the sub-region. Isotopic research on rural populations is needed to compare with that carried out on Roman urban communities.

Communications

In the Solent-Thames area natural communication routes include not only rivers but also the south coast harbours and access to the sea, which also offer the possibility of considering relations with regions beyond the Roman province(s). The sub-region also contains Roman roads that played a significant, strategic role in provincial life, linking the it to the province(s) beyond. One major road led westwards from London to Silchester, then, variously, to the south-west to Dorchester (Dorset) via East Anton (Andover, Hampshire), to the west to Bath, and to the north-west to Cirencester from London through Berkshire and Hampshire. A second, major route ran east-west in the north of our region, probably originating in Colchester and then running westwards through *Verulamium* to Alchester and on to Cirencester. Together with the west-to-east- flow of the Thames, the sub-region thus has a major sample of routes linking east and west, and in particular linking London with the west of Britain, including Wales. The north-south configuration of the counties of our region however also invites us to consider the importance of north-south communications. One such was represented by roads leading south from Towcester, through Alchester and Dorchester to Silchester, and thereafter to Chichester and Winchester. A second north-south road linked Cirencester with Winchester (via, amongst other small towns, East Anton) and beyond, although the onward road connections to ports at *Clausentum* and, later, Portchester are far from clear.

The existence of ports such as Bitterne (*Clausentum*) and Portchester, together with Chichester (West Sussex) to the east, raises the issue of the role that the harbours of the Solent played in facilitating trade and traffic from the south coast to the north and vice versa. There is also the question of how such maritime trade differed from that handled by London and the Thames Estuary? Examining the role and relative importance of different roads and, in particular the relative importance of east-west as opposed to north-south communication, is an issue of provincial-wide import - ance and one which is appropriate to the resources of the sub-region. As already suggested above, this can be approached through consideration of the size and material contents of the numerous settlements that developed along them (see also above). From the perspective of the written sources, while *Calleva* is listed in a number of itineraries in the Antonine Itinerary, none of these include settlements on the road north to Alchester, perhaps indicating that by the late 2nd century that road was of less importance.

Consideration of the role of the rivers of the sub-region and, particularly, of the role of the Thames and its major tributaries is also of considerable importance. That the Thames was probably of major significance in the late Iron Age and earliest Roman period is indicated by the emergence of centres, such as Abingdon and Dyke Hills, Dorchester-on-Thames, Oxfordshire (eg Allen 2000, 22-27), along its length. Equally, even if its location is not right beside the Loddon, a significant tributary of the Thames, it is hard to account for the rise of *Calleva* unless communication linking to the Thames played a major role in its development (Fulford and Timby 2000, 557-8; Cunliffe 2012). The closest parallels for its late Iron Age and earliest Roman material culture certainly lie to the east, to Essex, Hertfordshire and Kent. By the same token, and paralleling the situation in the Iron Age, the role of the Thames needs to be considered in the context of the early emergence of Anglo-Saxon settlement at and around Dorchester-on-Thames in the 5th century.

It is always assumed that the relatively cheaper water transport offered by seas and rivers would have taken priority over that carried overland, but objective data are seriously lacking. Similarly, fording places, bridges and pontoons must have existed across a number of rivers, streams and brooks which would considerably aid our understanding of the Roman built environment, but also provide us with stratified palaeo-environmental (pollen, sediment and snail) sequences. While the question of the sacred nature of rivers and watery places has been commented upon above, there still remains considerable scope to examine the role of the rivers as a means of communication and as a source of food. While study of Oxfordshire pottery suggested that the Thames may have provided a major role in its distribution, this is hard to prove definitively (Fulford and Hodder 1974; cf Booth *et al.* 2007, 314-5). Much more quantitative data derived from the study of pottery and other types of material culture are required before we can discriminate confidently between the roles of river as opposed to road in the distribution of food, raw materials and manufactured goods. However, preliminary study of the distribution of SE Dorset BB1 into the sub-region strongly suggests that the road network played a leading role (Allen and Fulford 1996).

Riverside settlements are known at several locations along the Thames, but they tend to be obscured by medieval and later development, as at Dorchester, Reading or Henley, for example. Research on Roman material dredged from the Thames might be helpful both in regard to locating further riverside settlement, as well as material transported along it. The question of the extent and scale of river transport is by no means confined to the Thames, but is relevant to other rivers of the sub-region, ranging from the Ouse in Buckingham-

shire to the Kennet (Berkshire) and the rivers of the south Hampshire basin.

Like the Zwammerdam craft from the lower Rhine region, the small, Barland's Farm craft recovered from the Wentlooge Level of south-east Wales (Nayling and McGrail 2004) reminds us of the kind of vessel which could have navigated the rivers of the sub-region and the size of cargo that it might have carried. Indeed, Roman material recovered from the Solent is also a reminder of the possibility of recovering the remains of Roman sea-going craft from that part of the sub-region. There is clear evidence of cross-channel links in terms of the Roman population itself and continued trade and the import of food stuffs and wine etc, but little physical evidence of the ports, harbours, quays, jetties or even boats. Examination of coastal and intertidal areas along the Hampshire and Wight margins of the Solent may find evidence of these. Waterlogged timbers should therefore be examined and routinely radiocarbon dated. Furthermore, water-logged, intertidal, fluvial and alluvial deposits may contain evidence of boat fragments and jetties. Detailed excavations and surveys have to date recovered wooden structures of prehistoric and Saxon date, for example at Testwood Lakes and at Langstone harbour, but not yet any of Roman date. In part little effort has been expended in this direction, and detailed geoarchaeological survey may be required to aid location of eroded, or even *in situ* finds and evidence.

0 ────────────── 50 mm

1:1

Plate 11.9 Shale bracelet from Grave 1070 at Lankhills, Winchester, *copyright OA*

Material culture

Roads, rivers and the sea were critical to the distribution of foodstuffs and consumer goods. While tracking the former is relatively hard except when it is carried in distinctive containers such as amphorae or barrels, distinctive categories of material culture offer the possibility of tracking the production of particular industries, such as shale from the south coast, or partic-ular kinds of object (Plate 11.9). More importantly, and led by provincial-wide studies of lamps and lighting equipment (Eckardt 2002), toilet instruments (Crummy and Eckardt 2003), etc, the study of material culture in general has considerable, untapped potential for addressing questions of acculturation and social identity at a regional and sub- or micro-regional level. Contrib-uting to this debate, well-contextualised assemblages of material culture have been reported from a variety of rural and urban locations in the sub-region (eg Rees *et al.* 2008). The significant level of material recorded by the Portable Antiquities Scheme (PAS) undoubtedly has an important role to play in this area. For example, case studies of the coin finds recorded by the PAS from Hampshire and the Isle of Wight show the potential of this material, not least in establishing local identities of coin circulation and loss (Walton 2012).

Solent-Thames is well placed to examine the relationship between new, Roman or Gallo-Roman material culture and native traditions in the critical period of change during the later 1st century BC and 1st century AD. Much of that direction of change was from the east, the counties bordering the Thames Estuary, but there is also the contribution of the ports of entry of the south coast to be explored (cf Fulford 2007). Beyond that and into the Roman period proper, the 2nd to 4th century, the study of the spread of Roman coinage alongside that of manufactured Roman consumer goods through the *civitates* of the sub-region has much to contribute to our knowledge of the development of urban and rural markets.

Timby's recent study (2012) of late Iron Age and Roman pottery supply to the hinterland of Calleva is very illuminating in this respect. It also demonstrates the value of the contribution that small-scale, development-led interventions can make to the period. Gaining greater insights into differential and changing access to the various types and categories of material culture will contribute to a better understanding of the variable social role that it played through the settlement hierarchy of the sub-region.

Industry

Pottery industries

Reference has already been made to the landscape and settlement context of the larger industries of the sub-region, in particular the potteries of the New Forest (Fulford 1975) and Oxfordshire (Young 1977).

Plate 11.10 Kiln from the Oxfordshire pottery industry, *copyright OA*

Surprisingly little is known about the various components of the process of pottery making other than the final stage of firing, represented by the kilns themselves (Plate 11.10). So, clay extraction and preparation, the acquisition of the fuel (and the management of woodland resources), the workshops and drying sheds are all poorly understood. While the sub-region is dominated by these two industries, and by that of the Alice Holt/Farnham region (Surrey) right on its boundary (Lyne and Jefferies 1979), very little is known about the relationships between them. There is also the Poole Harbour industry (SE Dorset BB1), situated just beyond the south-western boundary of the sub-region, to conside Its wares are well represented in the sub-region (Allen and Fulford 1996). The earliest to begin production, possibly even before the Roman conquest of AD 43, and to make an impact in the sub-region is the Alice Holt industry and its products are well represented in assemblages in London and Silchester by the third quarter of the 1st century AD. The origins of the Oxfordshire industry are less clear, but it was making a significant contribution to pottery assemblages at Silchester by the mid-2nd century AD (Timby 2011). It overtakes the Verulamium-region industries by the later 2nd century and, along with the Alice Holt and New Forest industries, dominates consumption in the sub-region in the 3rd and 4th centuries (Timby 2011; Young 1977).

Unlike the Verulamium-region industry, which was located close to *Verulamium*, and with kilns stretching along Watling Street towards London, where very similar production is also now attested (Seeley and Drummond-Murray 2005), the Oxfordshire kilns are situated alongside the Alchester-Silchester (north-south) route, relatively remote from a major urban agglomeration. This location gives us the basis for exploring the significance of the north-south line of communication in the sub-region, and perhaps also the link with a potential river port at Dorchester-on-Thames giving access to the east-west lines of communication described above.

The origins of the New Forest industry, even more remotely located, are also unclear, but the full repertoire of table and grey wares was certainly established by the late 3rd century (Fulford 1975). There are two major issues to be explored here: one is the possibility of earlier production of grey wares in the 2nd and earlier 3rd centuries, where analysis of independently dated assemblages from Winchester will be of crucial importance. The second is the relationship with the production of BB1 at Poole Harbour nearby, which was supplying distant markets such as the northern frontier and London by the early-to-mid 2nd century. Although the industries did complement each other's repertoires to some extent in the later 3rd and 4th centuries, with colour-coated and parchment/white wares reserved to the New Forest, the manufacture of cooking and domestic wares is common to both industries. How did this relationship work, given that Poole Harbour BB1 remains a major component of pottery assemblages in the sub-region into the first half of the 5th century?

While there has been considerable progress in mapping the distribution of the late colour-coated and 'parchment' wares of the New Forest and Oxfordshire industries, much less is known about the grey and white wares, the former being common to these and the Alice Holt industry. The sub-region offers the possibility of significantly enhancing our understanding of the inter-relationships of these three major industries, not least with regard to the wares and types of vessels all three of them produced. If furthering our knowledge of these three industries addresses topics of national importance, we should not overlook other pottery production in the sub-region, whose study will help inform us both about the movement of ideas, but also of minor networks of marketing and distribution. The late Roman grog-tempered production, for example, thought to be located in the south Hampshire basin, was a significant supplier in the sub-region with a presence as far north as Silchester and south Wiltshire (Lyne 1994). Its relationship with similar, but earlier established production in the nearby Isle of Wight (Vectis Ware; Tomalin 1987, 30-40) demands investigation. Indeed ceramics offers a valuable medium for exploring the relationship between the Island and the mainland (and, across the Channel, to northern France). On the whole it would seem that Vectis ware consumption was very much confined to the Island. The fact of insular production hints at inadequate or irregular supplies of cooking/domestic

wares from mainland sources, and the lack of off-Island movement of Vectis Ware reinforces that perception. Nevertheless Island sites still have good representation of the major traded wares represented on settlements across the Solent.

Brick and tile

While pottery industries remain a very important and distinctive resource of the sub-region, we should not overlook brick and tile. On the basis of its bulk, and of the quantities required in any building project, whether urban or rural, it is generally assumed that most production is located close to the point of consumption. Study of fabrics and the dies used to produce relief-patterned flue-tile (Betts *et al.* 1997) has indicated that brick and tile could travel considerable distances (see also Betts and Foot 1994). Indeed, the sub-region is towards the edge of the distribution of tile stamped with distinctive dies produced in the south-eastern counties of Surrey, Sussex and Kent. However, whereas we can assume major tileries were established to serve the major towns like Silchester and Winchester, and possibly also for each of the 'small' towns, we know very little about them, never mind their impact with and beyond the major centres (cf Warry 2012 on the tile production required to serve Silchester). To address this, there needs to be systematic characterisation and comparison of assemblages from different centres and analysis of change over time. It has been suggested, for example, that the production of brick and tile significantly declined in the later Roman period.

Stone exploitation

If production of brick and tile was not exclusive to the sub-region, the exploitation of certain other resources used in building was more regionally focused. Limestone slabs, either from the Purbeck beds just outside the region in south-east Dorset, or from Oxfordshire Jurassic sources such as those around Stonesfield, Oxfordshire were used for roofing slates, typically in the 3rd and 4th centuries. Researching the relative importance within the sub-region of these two sources would make a significant contribution to our knowledge of the development of regional traditions in the building industry through the Roman period. Remoter sources of roofing slate, such as from the Forest of Dean, Gloucestershire, also make a significant contribution to the sub-region, as at Silchester (eg Shaffrey 2006a, 337-8). But how widespread in the sub-region was the consumption of this relatively exotic material?

Freestone from the Jurassic limestone quarries of Bath and the Cotswolds (including those in Oxfordshire) was also used in the sub-region for general building and other specialist, architectural stonework. The dominant lithology of the sub-region was, however, undoubtedly flint quarried from the chalk and used in all the counties on the sub-region. In both cases important work needs to be undertaken to characterise the extent of the use of these materials, particularly in locations away from the

source areas, and thus build on Hayward's recent characterisation of freestones and their use in southern England (Hayward 2009). Freestone, like roller-stamp-decorated flue-tile, could travel long distances to be used for architectural or funerary purposes, but (as with ceramic building material) the bulk use of these materials at a distance from the likely source area, needs to be further investigated (eg for Silchester, cf Sellwood 1984; Hayward 2011).

Material from distant sources was also used in the manufacture of mosaic pavements in villas and town houses in southern Britain. To this end in the early Roman period a variety of coloured stone was exported from sources on the Isle of Purbeck in south-east Dorset (Allen and Fulford 2004; Allen *et al.* 2007; Allen and Todd 2010). Certain types of Chalk were also used selectively in mosaic making (Wilkinson *et al.* 2008).

The material requirements to produce querns and millstones were very different to those needed for roofing slate or mosaic materials. In the south of the sub-region a major source of querns in the late Iron Age and early Roman period was Lodsworth, West Sussex (Peacock 1987). Other sources, including of Upper and Lower Greensand, were exploited in the sub-region but have not been researched. In addition, and from outside the sub-region, Old Red Sandstone from the west of England, Millstone Grit from the north and Niedermendig lava imported from Germany were also used, but only the first has received serious study (Shaffrey 2006b). Alongside the provenancing of materials, consideration also needs to be given to change over time. There is certainly evidence for watermills in the sub-region in the later Roman period (Booth *et al.* 2007, 298-9; Cunliffe 2001; Cunliffe and Poole 2008c), but the extent of the use of this technology and other mechanised forms of milling demands further research.

Shale from just west of the region was also an important regional resource for personal adornment in the Roman period, as in the later Iron Age, and would repay study both as an indicator of trade and of cultural affiliations within and beyond the region (see Plate 11.9 above).

Iron-making

Several county contributions also mention iron-making as well as iron-working at a variety of site types. Though we are accustomed to thinking that the major sources of iron in the Roman period, such as the Weald, the Forest of Dean and Northamptonshire, accounted for consumption in the south of Britain, there is increasing evidence for further, localised manufacture of bloomery iron in both urban (eg Silchester: J Allen (2012)) and, potentially, rural contexts. The slag masses point to the continuation of prehistoric techniques using bowl-shaped hearths alongside shaft furnaces. The extent to which the making of iron, as opposed to that of iron artefacts, existed through the settlement hierarchy of the sub-region requires urgent investigation, as does the extent to which local sources provided the ore.

Food production

There is an increasing body of evidence for malting and corn drying on a large scale (eg from the Danebury Environs' sites, summarised in Campbell 2008, 69-70). At Weedon Hill (in Buckinghamshire) an unusually complete malting oven has been excavated (Wakeham, *et al.*2013) and there is also evidence for barley malting associated with corn driers at Bancroft Villa, Milton Keynes (Williams and Zeepvat 1994, 83-6). There are also sites with multiple corn driers, eg among the Danebury Environs sites (Cunliffe and Poole 2008a-g) and at Yewden Villa, Buckinghamshire (Cocks 1921; Eyers 2011; Plate 11.11). This larger scale production may have been linked to supplying particular markets, including overseas, as is evidenced from written sources of the supply of corn to the Rhineland in the mid-fourth century.

The later Roman period

Although there is considerable continuity of settlement between the late 1st/early 2nd century AD and, in some cases certainly, the early 5th century, it is important to consider certain developments that are peculiar to the 3rd – 5th century. The most obvious of these is the provision of new coastal forts in east and south-east Britain. In the case of Solent-Thames, the construction of the fort at Portchester, at the head of Portsmouth Harbour on the Hampshire coast, in the late 3rd century (Cunliffe 1975; Plate 11.12). Although its identification with *Portus Adurni*, one of the forts listed in the late 4th century *Notitia Dignitatum*, is uncertain, it does appear to be a military establishment in origin, even if it did not continue to be garrisoned continuously thereafter. Indeed distinguishing between civil and military occupation in general in the 4th century remains difficult (cf Gardiner 2007). The construction of a new fort at Portchester may be linked programmatically with the building of defences around the existing settlement at *Clausentum* (see above) and there is the still unresolved question of late Roman fortification of Carisbrooke Castle on the Isle of Wight (see above). While not far from the head waters of the tidal River Medina, the location of the fortification is more central to the Island than close to the coast. Portchester seems to be the only completely 'new' foundation, but little is known of its immediate context and impact on surrounding settlement. The, as yet unlocated, cemetery would have enormous potential in advancing our understanding of the inhabitants of this site and change over time.

The question whether or not there is a Roman phase at Carisbrooke reminds us, that while there is some

Plate 11.11 Tuning fork kiln corndrying oven from Yewden villa, *Society of Antiquaries, reproduced courtesy of Surrey Archaeological Society (Rref:PD1/14/4) fig. 1.6*

Plate 11.12 Portchester Castle, Hampshire, *copyright P Booth*

knowledge of the mid and late Roman fortification of the larger towns of Silchester (Fulford 1984) and Winchester, and of some of the smaller, such as Alchester (Young 1975), Dorchester-on-Thames (Hogg and Stevens 1937; Frere 1962), and *Magiovinium* on Watling Street, little is otherwise known of the defence of *mansiones* and other stations along the major roads of the sub-region, never mind their character and function in the late Roman period. The evidence from Neatham, Hampshire is important here, providing not only evidence of the nature of occupation from the early 2nd century onwards, but also of defence, in this case apparently short-lived and confined to the 3rd century (Millett and Graham 1986). The extent to which stations along the roads were defended, as they were, for example, along Watling Street, has considerable implications for understanding the strategic organisation of the south of Britain in the 4th century.

There has become increasing interest in the subject of identity and social mobility in Roman Britain and late Roman cemeteries are, potentially, a critically important resource (cf Eckardt 2010). With inhumation burial, the predominant rite in late Roman Britain, the potential for analysing assemblages of grave goods in association with individuals for whom there is information on age and sex is very great. This has been argued in relation to the Lankhills, Winchester, cemetery, where incomers from the upper Danube region have been postulated on the basis of distinctive groups of grave goods (see above). While burials with accompanying grave goods are, perhaps, the exception in southern Britain in the 4th century, techniques of analysis of the bone and teeth can also be of assistance in identifying individuals or groups differentiated by diet or by probable region of origin. Indeed these techniques are important resources for testing hypotheses based, as is the case with Lankhills, principally on the analysis of associated material culture

and its disposition within the grave. As we have seen above, isotopic analysis of human remains from Lankhills does indicate diversity in the Winchester population with an overseas component, but it does question how far reliable conclusions can be drawn on the basis of the study of material culture and grave ritual alone.

Roman to Anglo-Saxon transition

The period of the 5th to 7th century continues to remain a very challenging one for southern Britain in general, as much as for Solent-Thames in particular. With the demise of the widespread introduction of new coin into circulation after the first years of the 5th century and of the production of mass-produced manufactured goods, notably pottery, there is almost no material culture to be associated with the 5th to 7th centuries, other than Anglo-Saxon. On the other hand, there is no evidence for rapid loss of population through noticeable increases in burial beyond the end of the 4th century. If anything, as in the Lankhills (urban) context, the case for population loss could be argued on the basis of a sharp decline in burial in the early 5th century, but our sample size is very small. The assumption is that population levels remained unchanged, but essentially invisible, but more data are needed to confirm or refute this. Only large-scale excavation in both rural and urban contexts, and of both settlements and cemeteries, has the potential of showing change beyond the beginning of the 5th century, as has been demonstrated at Barton Court Farm, Oxfordshire with a history extending to the 6th century (Miles 1986). Sequences can be established either through horizontal or vertical stratigraphy that extend beyond the end of the 4th/beginning of the 5th and include contexts associated with the latest material culture, among which the closely dated coins of the

House of Theodosius are among the most helpful (cf Silchester, Fulford *et al.* 2006, 273-8).

In the absence of datable material culture, testing of postulated post-400 chronologies must rely more on radiocarbon dating (cf Fulford 2000), though this is not without its problems (cf Booth, *et al.* 2010, 448-56). This is not to suggest that we can expect close dating within this time span of two to three centuries, rather a greater or lesser probability of a date belonging before or after the beginning of the fifth century. The application of radiocarbon dating should become routine in the appropriate (Roman to Saxon) context (cf Pollard 2012, 182-5).

With Dorchester-on-Thames and Winchester the sub-region is distinguished in having two urban centres, one a 'small' Roman town, the other a civitas capital, which both play a prominent role in the emergence of Anglo-Saxon Wessex in the seventh century. While our knowledge of the 5th to the 7th centuries in these two centres is still limited, it is clear that both, with their immediate rural hinterlands, have much to contribute to our understanding of the transition from Roman to Saxon. At the same time there is much to learn from the negative – from those urban settlements and their hinterlands, both major and minor, such as Silchester and Alchester, which do not re-emerge as significant centres in Anglo-Saxon England (cf Fulford 2012b). What determined continuity or not; and what do we understand by continuity? We have probably attached too much importance to the rapid demise of Roman material culture without giving sufficient consideration either to the evidence of settlement histories as revealed through vertical and horizontal stratigraphy or to environmental sequences which do not, for example, point to a rapid or widespread regeneration of woodland in the early post-Roman period (Dark 2000b, 140-2; Day 1993).