

Chapter 10

Archaeological Investigations at Whelford Bowmoor, Gloucestershire, 1983, 1985 and 1988

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INTRODUCTION

Three archaeological investigations were undertaken at Whelford Bowmoor in the 1980s, prior to proposed gravel extraction by ARC/Kingston minerals (Figs 10.1 and 10.2). Brief salvage work took place in 1983 (WB 83), while trial trenching and selective excavation occurred in 1985 (WB 85). In 1988 an archaeological evaluation took place across an adjoining area to the south (WB 88, Fig. 10.2). Together, these enabled the examination of a large area of Roman settlement, previously known only from sporadic surface finds and tenuous cropmark features. Despite the investigations being quite limited in scope, they provided clear evidence for a Romano-British farmstead with associated paddocks, trackways and field systems.

Location and physical characteristics of the site

The site lies just to the north of Whelford and to the east of Bowmoor in the parish of Kempsford, Glos. (SO 172 996; Fig. 10.1). It is 200 m east of the River Coln which flows south past the site to join the Upper Thames near Lechlade. The area is part of the River Coln's immediate floodplain, with very slight relief varying between 77 m and 78.5 m OD. Detailed contouring of WB 83 and 85 showed that they were crossed by a shallow central depression running parallel to, and presumably part of, the immediate sub-surface drainage system of the Coln periphery. Geologically the site rests on part of an extensive first gravel terrace to the Upper Thames in an area in which it is overlain by a narrow band of alluvial clay flanking the River Coln.

The whole area had been permanent water-meadow pasture and subject to fairly frequent winter flooding until the early 1980s, when WB 83 and 85 were brought into cultivation after an extended period of fallow use. The effects of the subsequent ploughing could be gauged by contrasting the lack of surface relief in this field with the marked ridge and furrow in the field immediately to the south (WB 88), an area which continued as pasture. The site now forms part of the eastern Cotswold Water Park.

Archaeological background (Fig. 10.1)

The archaeological importance of this area was defined initially in terms of its proximity to the extensive Iron Age and Roman complexes at Claydon Pike and Thornhill Farm lying on the first gravel terrace to the east, principally as an element in the study of the wider archaeological landscape (see Chapter 1). In the more immediate vicinity, on the western side of the River Coln less than 100 m from Whelford Bowmoor, is a series of undated enclosures and linear ditches extending over 2 hectares, revealed as cropmarks on aerial photographs (SMR 2425). The nature and proximity of these features suggests that they were contemporary with the Roman settlement. A further 1.5 km to the west lay the extensive middle Iron Age and Roman settlement at Totterdown Lane, Horcott (Pine and Preston 2004). Ten middle Iron Age ring gullies were found, with an enclosure and associated field system. The late Iron Age/early Roman phase of activity comprised a number of circular enclosures and associated ditches. During the 2nd and 3rd centuries the landscape was parcelled into various fields and paddocks around a 'T'-shaped trackway. Burials and cremations were also found. Further excavations just the west revealed a 2nd- to 3rd-century field system and seven Roman cremations (Pine and Preston 2004). A hoard of middle or late Iron Age sword-shaped currency bars was also found.

Excavation methodology (Fig. 10.2)

WB 83

In 1983 the western edge of the Whelford field was stripped of its topsoil prior to gravel extraction. Although an earlier field survey did not suggest much activity a watching brief was kept and salvage recording undertaken. A complex of ditches was recorded with an apparent Roman trackway running NW-SE. Further ditches and gullies ran across this line (stratigraphic relationships were not recovered) but few finds were recovered. No actual excavation was undertaken.

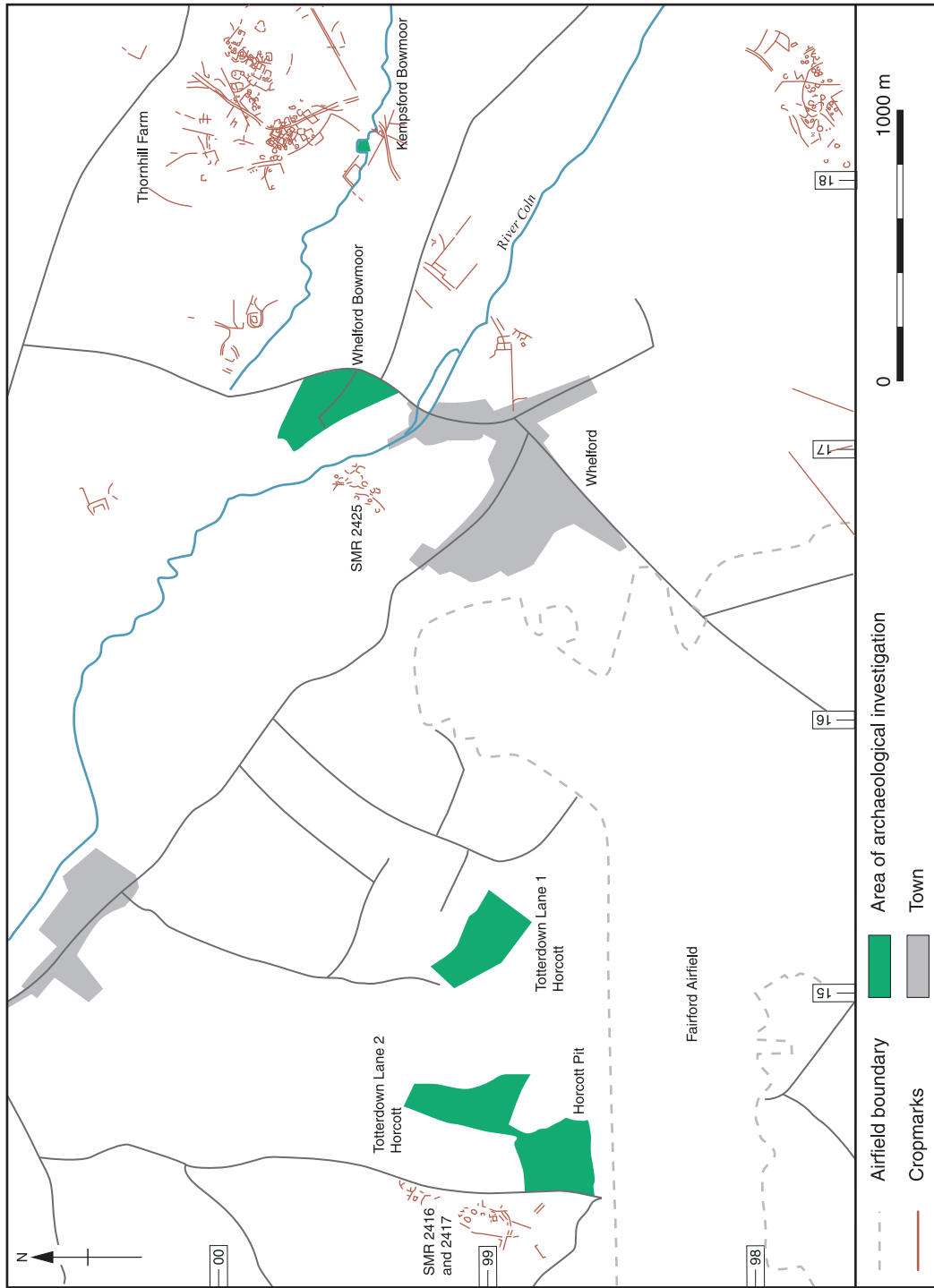


Fig. 10.1
Whelford
Bowmoor in
relation to local
archaeology

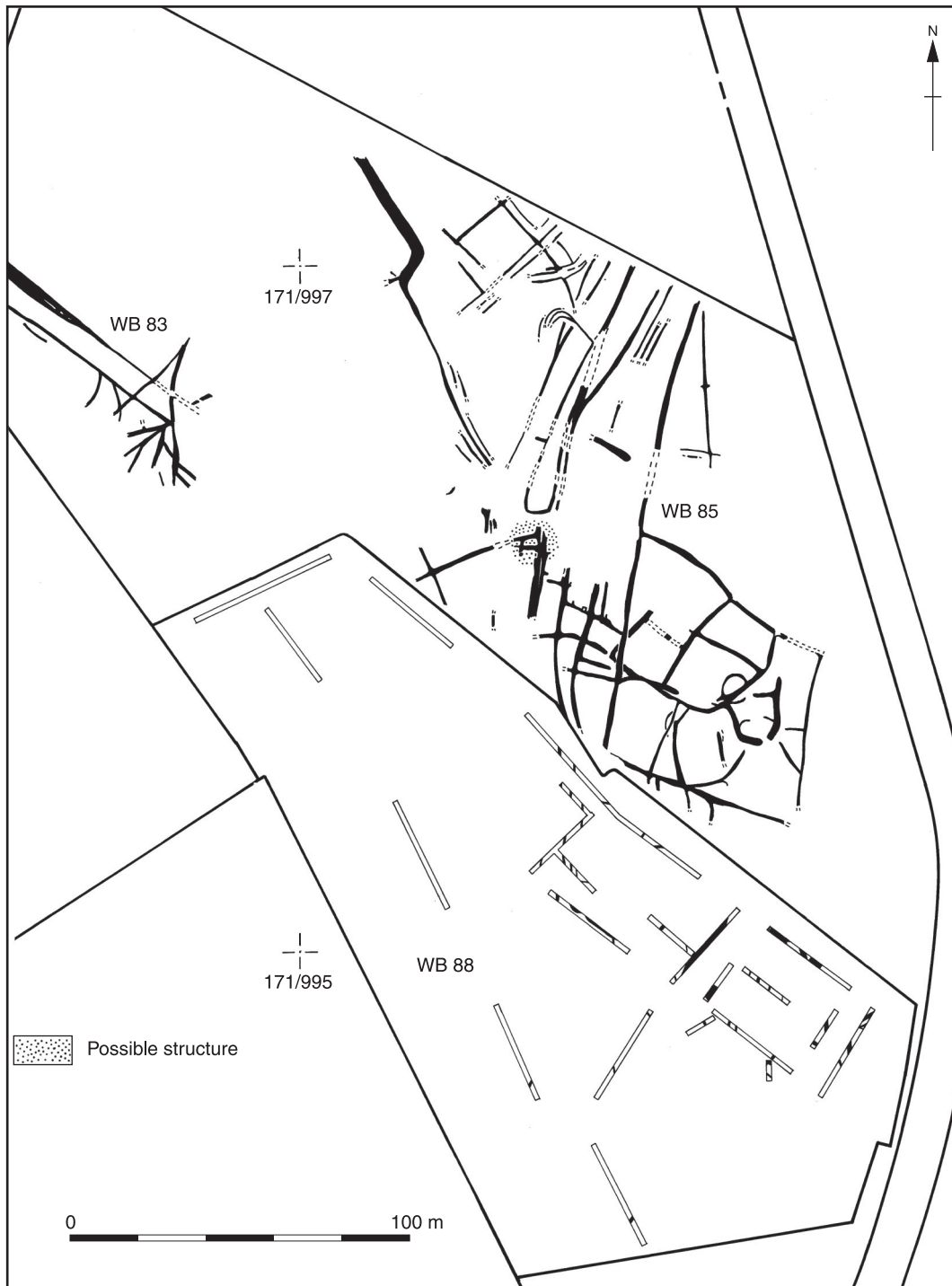


Fig. 10.2 Location of archaeological investigations



Fig. 10.3 Phase 1

WB 85

The southern and eastern parts of Whelford field (4.085 ha; Fig. 10.2) were proposed for gravel extraction in 1985. A metal detector survey of the field pinpointed areas of possible occupation and the incidence of general rubbish scatters. These seemed to correlate with the topography and suggested the presence of a structure on a slight platform on the gravel island in the central southern area of the field. Cropmarks also hinted at an enclosure on the south-east side. Initial work was thus aimed at elucidating these areas. A programme of trial-trenching by JCB followed by selective excavation was completed before the topsoil was stripped by ARC prior to gravel extraction. Further salvage work continued when the site was totally exposed but preservation of features and deposits was more variable due to the nature of topsoil removal.

WB 88

In 1988 an archaeological evaluation was conducted on behalf of ARC on a field to the south of WB 83/85 (Fig. 10.2). It was aimed at assessing the density, character and preservation of any archaeological remains, in particular those associated with the Romano-British farmstead to the north. An earthwork survey was followed by machine trenching, initially on a grid pattern, to provide a 2% sample of the site. These were designed to locate linear features and record the spread, if any, of

archaeological material. This sample size was increased on the north-east side of the field when archaeological features were encountered. These features were sampled to ascertain date and to assess environmental preservation.

THE ARCHAEOLOGICAL SEQUENCE

No explicit evidence for pre- or post-Roman occupation or activity on the site was obtained either in terms of structures or scatters of materials, although a series of small earthworks in WB 88 may have formed some kind of medieval water meadow arrangement. Aside from this, activity and settlement on the site appear to be entirely Roman and to date from the early 2nd to early 3rd centuries AD. Except for the later phase building, it appears to consist of agricultural enclosures, pens and paddocks presumably peripheral to associated areas of settlement. Phasing is based on stratigraphy (although little was recovered) and pottery dating. As the site developed in a gradual and amorphous fashion, it is quite possible that this imposed phasing masks continuity of activity on the site. Figures 10.3 and 10.4 show both those features that could be definitely phased on a chronological and/or stratigraphic basis, along with those unexcavated features that have been assigned a phase on spatial grounds.

Full stratigraphic descriptions can be found in Digital section 6.2.

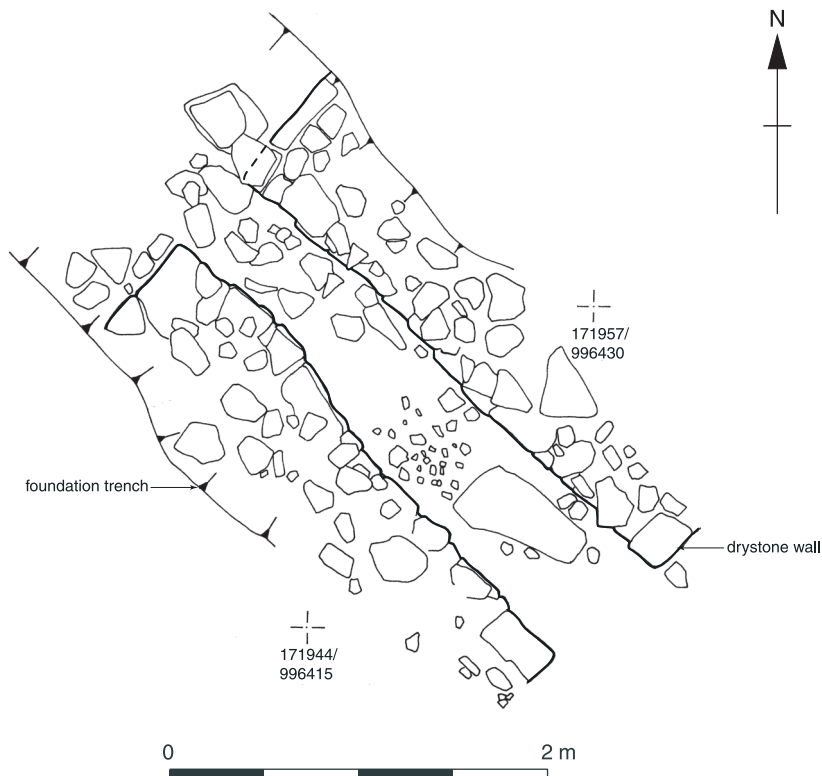


Fig. 10.4 Stone channel



Plate 10.1 Water channel at Whelford Bowmoor

Phase 1 (early 2nd to mid 2nd century AD) (Fig. 10.3)

The earliest activity at the site comprised a sequence of enclosures in the south-east side of the field, covering an area *c* 80 x 60 m and dating to the early 2nd century AD. Further smaller enclosures of early to mid 2nd-century date were located to the north-west, along with a series of long north-south linear ditched boundaries which may have been part of this phase. Very limited dating evidence from ditches in WB 88 to the south suggests that these also belonged to this phase. A stone-lined channel (Fig. 10.4, Pl. 10.1) to the north of the main enclosure groups could belong to Phase 1 and/or Phase 2.

Enclosures 1-6

Enclosures 1 to 6 in the south-eastern part of the site seemed to form a coherent group, although it is uncertain how many of these were contemporary as the plan suggests a gradual shift in various boundaries.

Sub-rectangular Enclosure 1 lay in the south-east corner of the field and measured 11 m x 12 m internally, with ditches *c* 0.45 m deep and from 1.2 to 1.8 m wide. Entrances were noted (*c* 2 m wide) to the south and north, with the southern terminals being recut on a number of occasions. Internally, the enclosure appears to have been sub-divided by two small shallow curving gullies (0.3-4 m wide, 0.1-2 m deep). A small quantity of Roman pottery, a Colchester Derivative brooch (Fig. 10.9, no. 4) and a piece of copper alloy binding came from the enclosure ditches.

A small (6.5 m x 4 m) semicircular enclosure (E 2) was formed by curving gully lying within Enclosure 3, and abutting its eastern ditch. The gully was 0.6 m wide and 0.3 m deep, and contained a small quantity of animal bone and a small piece of copper alloy sheet with traces of gilding. Enclosure 3 (*c* 18 m²) was situated centrally within the south-eastern group, and shared its boundaries with E 1, 2, 4, and 6. The ditches ranged from 1.2 m to 1.4 m wide and 0.45 to 0.6 m deep, and were generally V-shaped in section. The very small amount of pottery recovered dated from the late 1st to 2nd century AD, and the only other finds comprised an early 1st-century AD brooch (Fig. 10.9, no. 2) and a sling stone. Within its interior was a shallow peat filled depression (2) which may have been a midden, almost certainly belonging to Phase 2 (see below).

Just to the north of E 3, and sharing a boundary ditch, was Enclosure 4, measuring 18 m x 11 m. The northern ditch, 24, (1.3 m wide, 0.3 m deep) was traced running SE-NW for *c* 48 m along the southern margins of the marshy area through the middle of the site, and seems to have formed the northern limit to the south-eastern enclosure complex. Three small fragments of Roman coarseware pottery and two iron nails derived from the upper fills of this enclosure.

Enclosure 5 (*c* 20 m x 12 m) lay to the west of E 4 and north of E 6, and appears to have been open on its north-western side. The southern ditch, which divided E 5 from E 6, was quite shallow (0.25 m deep) and difficult to fully trace, but did contain a small amount of animal bone and 2nd-century Roman pottery in its upper fill. Enclosure 6 (15 m x 13 m) formed the south-western limit of this enclosure group. The western ditch (1.3 m wide, 0.5 m deep) was cut by Phase 2 ditch 8, and contained a small quantity of 2nd-century pottery in its upper fill. The only internal feature was a small unexcavated section of gully (*c* 0.4 m wide), which may well have been contemporary as it was on the same alignment as the enclosure ditches. This gully may have sub-divided the enclosure.

Enclosures 7-12

Enclosures 7 to 12 further west were generally smaller and lay on a different alignment than enclosures 1 to 6. They may have been associated with the long linear ditch 8/13, although very few excavated sections ensured that stratigraphic relationships were often unknown.

Enclosure 7 (*c* 10 m x 4 m) lay to the south-west of E 6, and only one part of its western boundary was sectioned. This was 1.5 m wide and 0.4 m deep and contained a single fragment of 2nd-century pottery. The northern boundary appeared to curve southwards, and the southern boundary terminated 1.8 m short of linear ditch 8/13 (see below). It is uncertain if they were contemporary, but if so, this gap may have formed an entranceway. A parallel gully lying 4 m south of the southern E 7 boundary

was located during salvage operations, and may have formed part of a larger enclosure.

To the north of E 7 lay another small enclosure (E 8; 10 m x 6 m) none of which was excavated. Its eastern boundary may well have been linear ditch 8/13, as this shared the same alignment as that to the west. To the west of E 8 was a small enclosure (c 7 m²) with shallow and irregular ditches (c 1.5 m wide, 0.3 m deep). During later salvage work, both of the north-south ditches were found to continue southwards, though curving slightly to the east.

Just to the south-east of, and partially overlain by, the Phase 2 rubble building platform was enclosure 10 (c 7 m²). Its southern entrance was formed by two short gullies, the positions of which created a short angled passage. The western boundary was part of a triple ditch system overlain by the rubble platform (see below).

The southern parts of two enclosures were located to the north of E 8/9. E 11 was c 7 m across and traced northwards for 10 m, while further east, E 12 was sub-divided by a narrow ditch/gully, and probably used ditch 8/13 as its eastern boundary. Within an excavated section of this ditch was found part of a triple vase. No other parts of these enclosures were excavated.

Wider enclosure group

Further elements of the enclosure groups were found to the south and east in salvage operations, but not excavated. These features included two long linear boundaries, that together with ditch 24 and 8/13, seemed to form a large (c 75 x 60 m) rectilinear enclosure that encompassed many of the smaller enclosures in the south-east. On spatial grounds, this enclosure is likely to belong to Phase 1, although it could have continued in use into Phase 2.

Ditch 8/13

Ditch 8/13 was traced for 75 m aligned north-south through the central part of the site, although most of this was located only within salvage areas and therefore not excavated. Three sections were dug in the area of the enclosures, where it cut through E 6, with dimensions approximately 1.7 m in width and 0.3 m in depth. It is likely that this ditch formed the eastern boundary of the group of small rectilinear enclosures (E 7-12) with which it shared a common alignment, although it seems to have still been in use into Phase 2. It may also have formed the western boundary of a large rectilinear enclosure (see above). Finds included iron nails, fired clay daub and oven fragments and 29 sherds of pottery dating from the 2nd to early 3rd century AD.

Other linear boundaries

On the western edge of the main enclosure group were three parallel ditches (100-2), one of which

(100) formed the western side of E 10 (Fig. 10.6). They were not substantial features, ranging from 0.7 to 1.3 m wide and 0.1 to 0.3 m in depth, although a reasonable quantity of 2nd-century pottery came from their fills. The only other find comprised a copper alloy ligula. Ditch 102 was connected to a 'mesh' of probable drainage channels to the west, all lying under the later Phase 2 rubble platform (see below; Fig. 10.5). Water would thus have been drained from the area of the gravel island towards a waterlogged peaty sump in the area of the probable Phase 2 midden (54; Fig. 10.5). A single piece of fired clay daub was the only find recovered from the channels.

To the north of the rubble spread was a U-shaped ditch (16; 0.8-1.05 m wide, 0.4 m deep) which seems to have formed part of an elongated sub-rectangular enclosure (Fig. 10.3). A small amount of pottery (possibly 2nd century AD), an iron plate and a number of iron nails were the only finds recovered. A substantial ditch/gully ran north from this group parallel to the enclosure, and could well be contemporary. It may well have continued northwards to become the westernmost of four parallel linear ditches (41-4), which were traced for a short distance in the north-eastern part of the site (Fig. 10.3). No finds were recovered from these features and their function is uncertain, although they were on the same general alignment as the other ditches in the area and therefore presumably contemporary.

Stone-lined channel (Fig. 10.4, Pl.10.1)

Aligned east-west through the central depression of the field was a well constructed stone-faced channel (1.5 m long, 0.25 m wide, 0.3 m deep) made up of five levels of drystone walling and a roughly cobbled floor sloping north-west. It was set within the eastern end of a purpose-built trench, and ran away from a sunken feature which may have functioned as a pond (7 m across, 0.5 m deep). This may suggest that the stone structure acted as a sluice mechanism to control the overflow of water away from this hollow depression. No finds were directly associated with the stone channel, but a small amount of 2nd-century pottery came from black peaty clay of the ponded area. The structure could therefore belong to Phase 1 and/or Phase 2.

Features from WB 88

A number of evaluation trenches in the north-eastern side of the WB 88 field revealed Roman ditches and gullies sealed beneath alluvial material that were undoubtedly a continuation of the enclosure system from WB 85 to the north (Fig. 10.2). This, along with the recovery of eight sherds of 1st to 2nd-century pottery, suggests that they belonged to Phase 1.

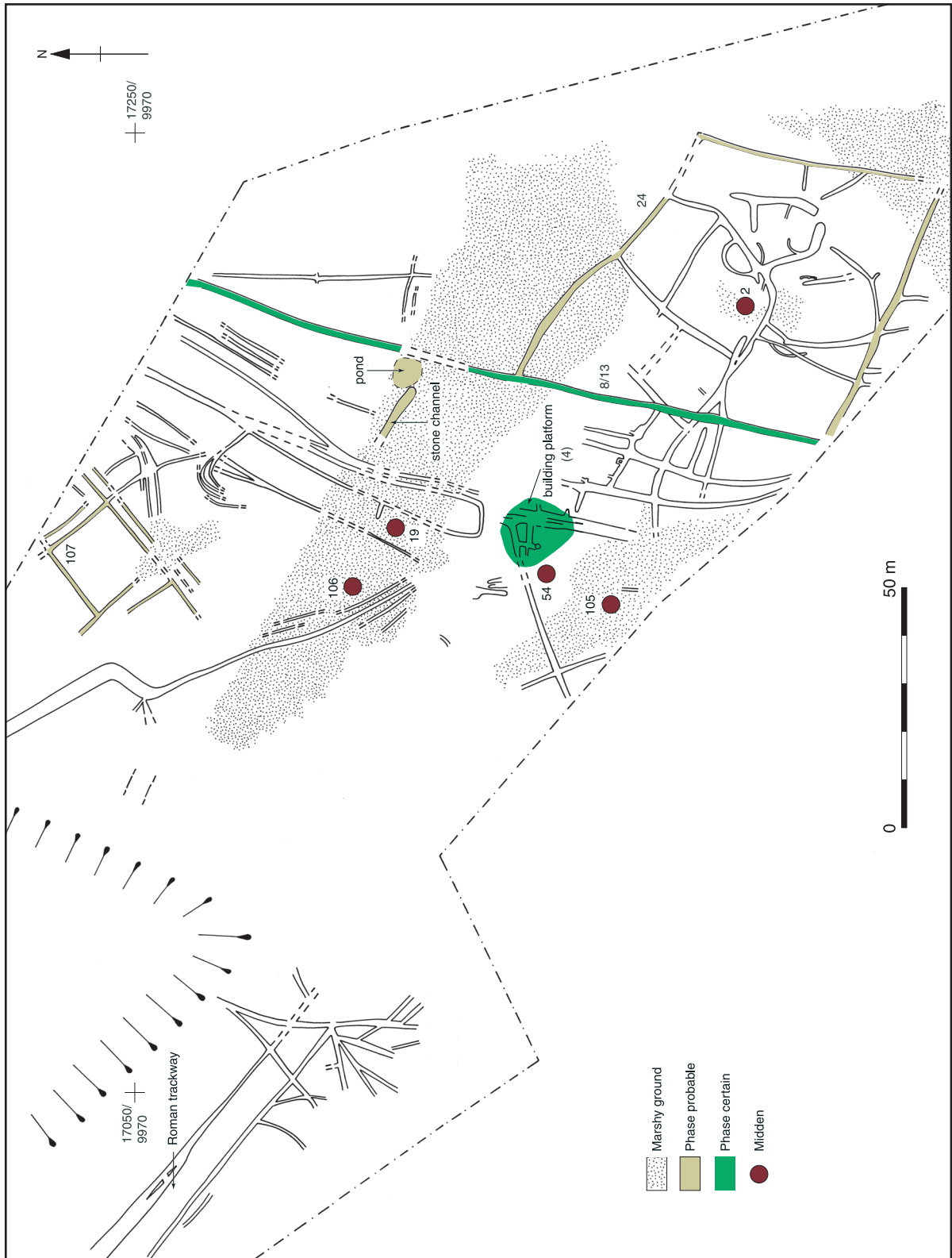


Fig. 10.5
Phase 2

Phase 2 (c mid/late 2nd to early 3rd century AD)
(Fig. 10.5)

The final development consisted of a small rubble platform (4) established over the top of the highest area of the site, which would have formed a relatively well-drained island of gravel (Figs 10.5 and 10.6). This platform presumably served as the base for an essentially timber-framed building resting on stone footings, and was associated with large quantities of Roman fine and coarseware pottery, dating primarily from the late 2nd to early 3rd centuries AD. The other probable Phase 2 features comprised a number of likely middens (2, 54, 105, 106). Linear ditch 8/13 was also probably still in use at this time, as may have been the stone-lined channel in the centre of the site. It is uncertain if there was any chronological gap between Phase 1 and Phase 2 occupation.

Building platform (Fig. 10.6)

An area of ditches (100-2, 18, 52) approximately 10 m² was surfaced by rough limestone rubble paving and light stone footings (4). This building platform seems to have served as the base for a timber-framed unit resting on, rather than cutting into, the gravel. Two pits (50, 53) cutting through the earlier Phase 1 ditches were also covered by the rubble, and one of them (50) contained a stone-packed posthole (51; 0.5 m wide, 0.2 m deep). Large sherds of a late 2nd-century pottery vessel were recovered from the base packing of the posthole suggesting that it was part of the building structure, although no other postholes were identified. Four areas (55-8) of limestone paving were located within the rubble spread, which may have formed part of the foundations for the building, or its interior. Three of these paved areas (55, 56, 58) had definite



Fig. 10.6 Rubble platform

evidence for faced edges, though the exact shape and dimensions of any building remain unknown. Another area of more rough paving to the north-west (30; not on plan) may well have been part of an external courtyard.

A prolific quantity of pottery, tile and other domestic debris was recovered from layers above, below and within the rubble platform, thereby helping to confirm the presence of a domestic building. These finds included anomalously high levels of fine wares, both of British and of continental origin (see Brown below), along with quern fragments, iron structural fittings and two coins (late 2nd and early 4th century AD). Most diagnostic metalwork and pottery date the occupation clearly to the late 2nd/early 3rd century AD.

Middens (Fig. 10.5)

A number of waterlogged depressions were located across the site that seem to have served as middens for the disposal of domestic waste, mostly dating from the 2nd to the early 3rd century AD. Feature 2 within E3 was a shallow peat filled depression (c 2.6 m wide, 0.15 m deep) within which was a small gully. The depression contained large quantities of 2nd- to 3rd-century pottery in its upper fill, along with an iron snaffle bit (Fig. 10.9, no. 8) and smaller amounts of flint and animal bone. The large unabraded sherds were similar in nature to those from other probable midden deposits. A much larger shallow depression (19; 8 m across, 0.35 m deep) was located within the central marshy area to the west of ditch 16, and contained 2nd-century pottery, two coins (2nd and late 3rd century AD), a stone roofing slate, animal bone and a copper alloy ring with intaglio.

The most extensive midden deposits came from feature 54, a large area of peaty black gravel just to the south-west of the rubble building platform (Fig. 10.5). Finds included large volumes of 2nd- and 3rd-century pottery, whetstones, quern fragments and an array of metalwork, mostly miscellaneous iron fragments. Many animal bones were also recovered and it is clear that this represented the main dumping area of domestic refuse for the inhabitants of the central building. Two other middens (105, 106) were located during salvage work to the south and north-west of the main domestic area (Fig. 10.5). Both produced quantities of 2nd- and 3rd-century pottery along with a range of metalwork, recovered by metal detecting. Midden 106 contained eight lead weights, representing nearly all such objects found at the site.

There is nothing intrinsic about any of these deposits which suggests that they may have been structured in any way, although the possibility must remain that some kind of 'ritual discard' may have been performed, especially given the unusually large quantity of fine ware pottery within them (see Discussion below).

Other probable Phase 2 features

A small amount of late 2nd- to early 3rd-century pottery from the upper fills of ditch 8/13 suggested that this linear boundary may still have been in use during Phase 2, perhaps representing the eastern limit of the main area of occupation, and forming the western boundary of a large rectilinear enclosure (see above; Fig. 10.5). It is possible that parts of the western enclosure group (E 7-12) may also belong to this period, although none of the minimal amount of pottery recovered can be confidently dated beyond the 2nd century AD.

During salvage operations to the north-west, a square enclosure (107; 16 m²) was located just south of the field boundary. The north-eastern side produced most of a 2nd- to 3rd-century pot, suggesting that it was in use during Phase 2. Other unexcavated ditches surrounding this feature were on a similar alignment and have therefore been tentatively assigned to the same phase.

Unphased features from salvage work

During salvage work in 1983 and 1985, there were many features which although apparently Roman in date, could not be assigned to a specific phase. A trackway (7 m wide) running NW-SE was traced for over 60 m in the far west of the site, along with a number of ditches, some of which were clearly not contemporary (Figs 10.3 and 10.5). A further series of linear ditches were found in 1985 about 75 m to the east of the trackway, running NE-SW into the depression in the middle of the field contemporary (Figs 10.3 and 10.5). These features were not excavated.

THE FINDS

Full finds reports can be found in Digital section 6.3.

Pottery (Figs 10.7-8) *by Kayt Brown (with contribution from Brenda Dickinson on the samian)*

The excavations produced a total of 3551 sherds of pottery, weighing 35.1 kg (Table 10.1). The ceramics display a tight chronological range from the early 2nd century to early-mid 3rd century, with a few sherds in a late Roman shelly fabric, probably of 4th-century date.

Fine and specialist wares account for over 15% of the assemblage by sherd count and 25% by weight. Within this, amphora and samian are particularly well represented. Amphora comprised body sherds of southern Spanish amphorae, most probably form Dressel 20, while a sizeable samian assemblage was predominately Central Gaulish (Lezoux) and Antonine in date. British finewares were restricted to a single sherd of Oxfordshire colour-coat. Sources for mortaria are Oxfordshire white-ware and white-slipped ware, and a South-west white-slipped fabric. Of the coarsewares, it is noticeable that the

Table 10.1: Quantification of pottery fabrics from Whelford Bowmoor

Group	Ware Code	Description	No. Sherds	%	Weight (g)	%
Fine/ Specialist wares						
Amphora	A10	Unsourced buff fabrics	182	5.1	3199	9.1
	A11	South Spanish (Dressel 20)	5	0.1	362	1.0
Samian	S	Unidentified samian (sherds <2 g)	55	1.5	74	0.2
	S20	South Gaulish Samian	3	0.1	14	0.0
	S30	Central Gaulish Samian	250	7.0	2080	5.9
	S32	Les Martres de Veyre	3	0.1	22	0.1
	S40	East Gaulish Samian	20	0.6	337	1.0
Mortaria	M20	White fabrics (unsourced)	4	0.1	388	1.1
	M22	Oxfordshire	29	0.8	683	1.9
	M30	Oxidised with white slip (unsourced)	4	0.1	216	0.6
	M31	Oxfordshire white slipped	3	0.1	359	1.0
	M32	Cirencester	6	0.2	218	0.6
	M50	Oxidised (unsourced)	2	0.1	87	0.2
British finewares	F50	Unsourced colour-coat ware	1	0.0	1	0.0
	F51	Oxfordshire colour-coat ware	1	0.0	25	0.1
White wares	W21	Verulamium region white ware	1	0.0	29	0.1
White-slipped wares	Q20	Oxidised fabrics (unsourced)	3	0.1	65	0.2
Sub-total			572	16.1	8159	23.3
Coursewares (Local and unsourced)						
Grog-tempered wares	G	Grog-tempered coarse ware fabrics	10	0.3	157	0.4
Oxidised sandy wares	O	Romanised oxidised coarse ware fabrics	46	1.3	527	1.5
	O10	Fine fabrics	5	0.1	57	0.2
	O20	Medium sandy fabrics (includes Oxfordshire)	270	7.6	1335	3.8
	O30	Wiltshire wares	263	7.4	1468	4.2
	O32	Fine, iron inclusions (cf.FCP10.7)	15	0.4	75	0.2
	O40	Severn Valley wares	89	2.5	473	1.3
	O50	Miscellaneous fabrics	22	0.6	230	0.7
	O80	Coarse tempered fabrics	117	3.3	4290	12.2
	O84	Lumpy, Savernake type ware	6	0.2	276	0.8
Reduced sandy wares	R	Romanised reduced 'coarse' ware fabrics	180	5.1	1371	3.9
	R10	Fine fabrics (Oxfordshire)	1	0.0	25	0.1
	R20	Coarse sandy fabrics	6	0.2	172	0.5
	R30	Medium sandy fabrics (includes Oxfordshire)	1085	30.6	6230	17.8
	R31	Organic and sand inclusions	1	0.0	12	0.0
	R35	North Wiltshire	416	11.7	3872	11.0
	R38	Fine, sandy, occasional black iron and organic inclusions, grog inclusions	44	1.2	1067	3.0
	R90	Coarse tempered fabrics	21	0.6	679	1.9
	R94	cf Savernake	75	2.1	2150	6.1
	B30	Black-burnished imitation fabric	272	7.7	2267	6.5
	B31	Black-burnished imitation fabric	26	0.7	123	0.4
Coursewares (Regional)	B10	Dorset black-burnished ware	9	0.3	77	0.2
Sub-total			2979	83.9	26933	76.7
Total			3551	100.0	35092	100.0

'Belgic' type (E ware) and other grog-tempered coarse wares, characteristic of the late Iron age/early Roman period at other sites within the region, are virtually absent within this assemblage. There was a small number of later, Romanised, grog-tempered coarse ware fabrics (O80, O84); such

coarse sandy and grog-tempered fabrics were being produced at Purton, west of Swindon from the late 2nd century (Anderson 1979). Regional, presumably local, coarse wares accounted for over 50% of the assemblage (by sherd count, 44% by weight). Within this group of wares, unsourced fabrics,

which probably include sherds of Oxfordshire and north Wiltshire fabrics (the identification of which was obscured due to the poor preservation conditions), are the predominant ware groups. Such material generally dates from the early 2nd to 4th centuries AD. Also particularly well represented within the Whelford Bowmoor assemblage are sherds of black-burnished ware imitation fabrics (9% by sherd count), whereas Dorset black-burnished wares are comparatively poorly represented (only 9 sherds).

Although they are the principal form, jars comprise only c 58% of the assemblage by estimated vessel equivalents (Table 10.2). Jar forms are also quite restricted in range, with everted rim jars and medium mouthed jars being the principal forms noted. No early jar forms such as bead rim, carinated or high shouldered 'necked' jars, common vessel types in 1st-century groups within surrounding assemblages, are present within this material. Bowls are the next significant form group represented (15.5% by estimated vessel equivalents), with a number of these forms comprising curving sided bowls. This is a reflection of the large proportion of samian wares within the assemblage as most of these vessels are Dragendorff forms 31, 31R and 37. This high proportion of bowls to jars is very significant, as most assemblages in the region that span the same period tend to show a much higher proportion of jars to bowls, which decrease over time as the proportion of bowls increase. The third best-represented class are cups at over 8% of the assemblage as a percentage of estimated vessel equivalents. This figure again reflects the large number of samian vessels, comprising forms Dr. 33 and Dr. 27. Other forms represented to a lesser extent include plates, dishes, mortaria and flagons, each class forming less than 5% of the assemblage by vessel equivalents. The only miscellaneous form present was the base of a triple vase occurring in Phase 2 (Fig. 10.7, no.5).

Table 10.2: Main pottery forms (EVEs) from Whelford Bowmoor

Form group	EVEs	%
B Flagons	0.42	1.43
C Jars	17.13	58.27
D Jar/bowl	0.27	0.92
E Beakers	0.35	1.19
F Cups	2.47	8.40
H Bowls	4.56	15.51
I Bowls/dishes	0.39	1.33
J Dishes/platters	0.66	2.24
K Mortaria	1.33	4.52
L Lids	0.87	2.96
Z Uncertain/unknown types	0.95	3.23
Total	29.4	100.00

Just over 20% (by weight) of the pottery that could be phased was assigned to Phase 1 contexts, and this material was generally in a poor condition, restricted to jars, bowls and lids in local and regional coarseware fabrics. By far the bulk of the assemblage, including all the imported material that could be phased, was recovered from the building platform and associated layer (Phase 2), dated to the mid 2nd century AD. This material was much more diverse in nature in terms of vessel forms and fabrics represented, and together with the large sherd size, supports the theory that this is domestic material from the site. The assemblage does contrast with other domestic assemblages in the region, notably in the proportion of bowls to jars. The unusually large quantity of imports is also not characteristic of a low-status rural assemblage. As a proportion of the assemblage, the fine and specialist ware is much higher than would perhaps be expected of a typical 'rural' site in the region (see Booth, Chapter 13). The combination, therefore of the high proportion of fine and specialist wares, and the variety of forms such as cups, plates and mortaria, would suggest either a high status site or a highly 'Romanised' lifestyle of the inhabitants. Rural sites in the vicinity with continuous occupation from the Iron Age into the roman period generally maintain a strong 'native' element within the ceramic assemblages until well into the 2nd century. The Whelford Bowmoor assemblage provides a good contrast to such a pattern. The assemblage displays a relatively tight chronological range, restricted in the main to the 2nd century AD, with a small quantity of early-mid 3rd-century material.

Figures 10.7-8 present a selection of illustrated vessels from Phase 1 and Phase 2.

Illustrated catalogue: Phase 1 pottery (Fig. 10.7)

1. Coarse ware jar, fabric R38, FT37/SCA/LR3
2. Small bowl/dish, fabric R35, FT37/SCA/LR3
3. Flagon, fabric O32, 40/A
4. Jar with burnished zone on shoulder and burnished lattice decoration, fabric R10, 36/A/3
5. Part of triple vase, fabric O32, 13/A/2

Illustrated catalogue: Phase 2 pottery (Fig. 10.8)

6. Cooking jar, fabric B30, 4/1
7. Large jar with groove on upper shoulder, fabric R38, 4/1
8. Necked, cordoned jar/bowl, fabric O30, 4/1
9. Bowl with flat rim, fabric R30, 4/1
10. Mortaria with spout and groove along inner rim surface, fabric M32, 4/1
11. Lid, fabric R35, 54/B
12. Medium mouthed jar/bowl, fabric R30, 106
13. Coarse ware jar, fabric O80, 106
14. Complete profile of bowl with burnished lattice decoration, fabric B30, 106
15. Flanged bowl, fabric O30, 106
16. Mortaria, fabric M30, 106

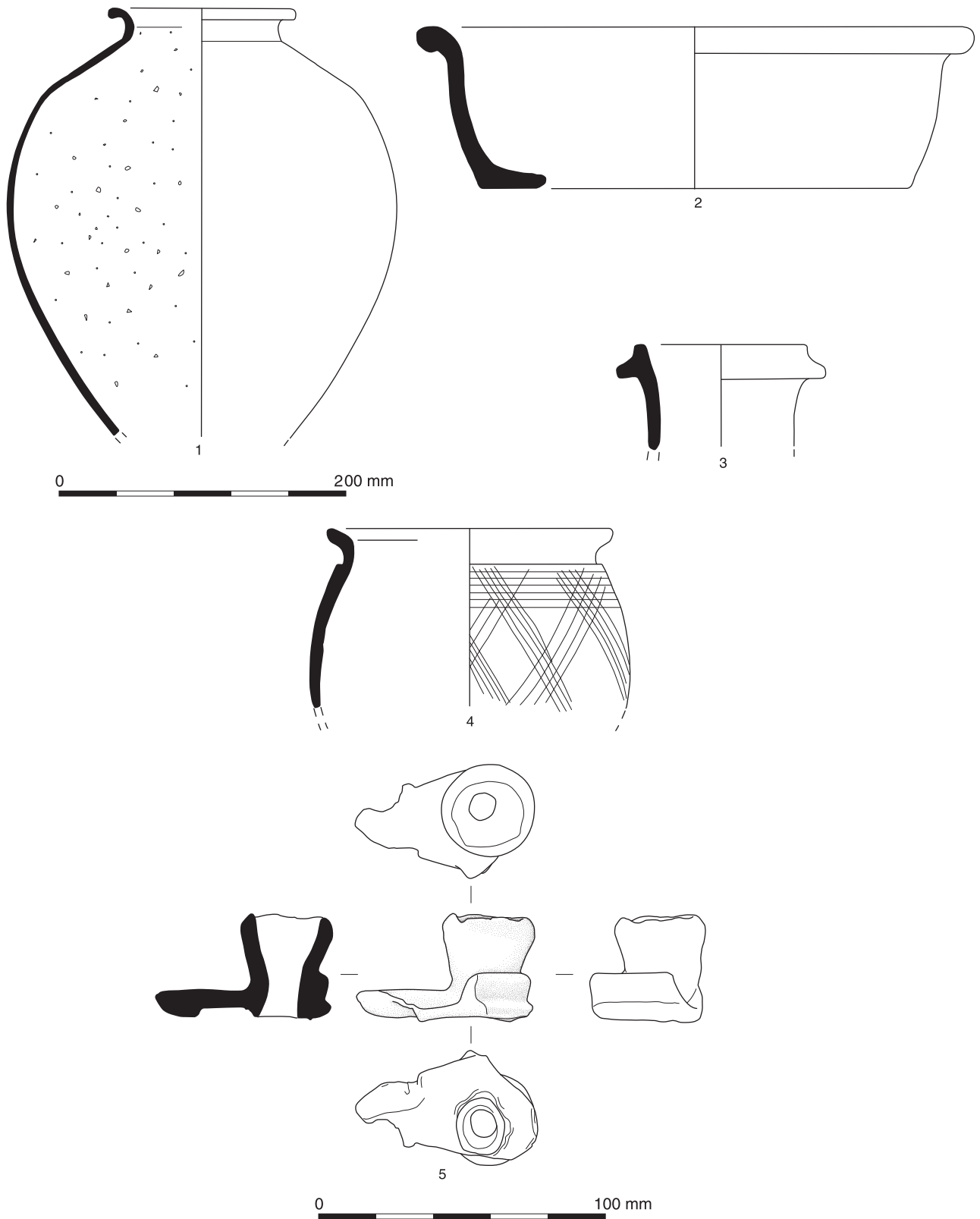


Fig. 10.7 Phase 1 pottery

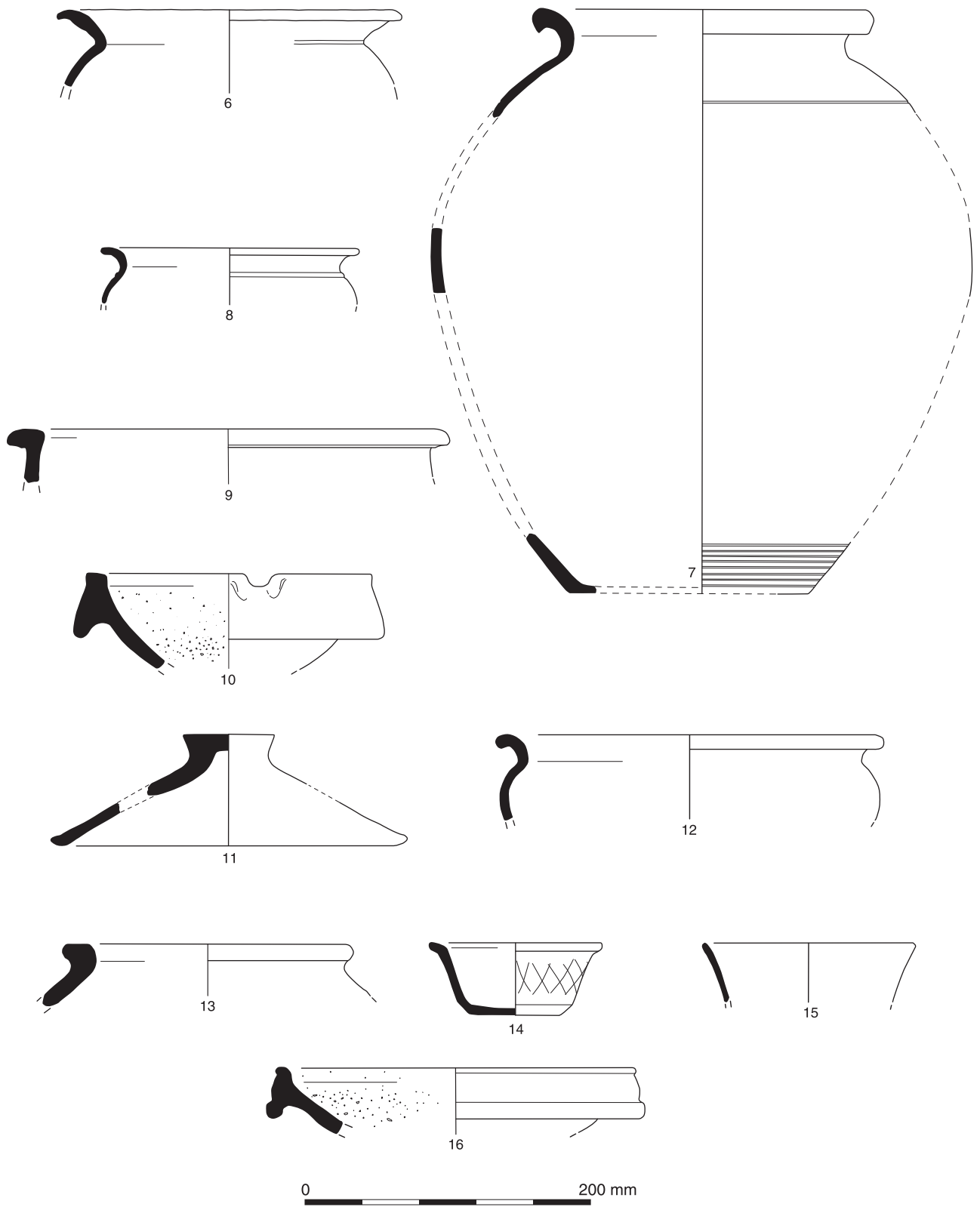


Fig. 10.8 Phase 2 pottery

Table 10.3: Coins from Whelford Bowmoor

	Genuine		Imitation		Total	
	No.	%	No.	%	No.	%
2nd C.	4	100	-	-	4	16.7
200-260	2	66.6	1	33	3	12.5
260-284	4	80	1	20	5	20.8
286-293	1	100	-	-	1	4.2
293-310	-	-	-	-	-	-
310-330	3	100	-	-	3	12.5
330-348	1	50	1	50	2	8.3
348-364	-	-	2	100	2	8.3
3rd-4th C illegible	4	100	-	-	4	16.7
Total	19	79	5	21	24	100

Coins by Cathy King

The 24 coins recovered from the site at Whelford Bowmoor were scattered over an area of *c* 0.5 hectare (Table 10.3). Two of the three silver coins are denarii of Severus Alexander and there is also a plated core of a denarius of Caracalla; they all belong in the years AD 193 to AD 260 and the single bronze coin of the earlier empire was produced in the late second century AD. The only period of peak loss that is well represented is AD 260-96 with six coins or 25% of the total for the site (Table 10.3). The apparent under-representation of coins from the later 3rd and 4th centuries is due in part to the illegible coins of these years (4 coins, 16.7%) and the small size of the group as a whole but it may be worth noting that there are no coins from the years AD 364 to AD 378 which figure so prominently at Claydon Pike and Leaze Farm (see Chapters 6 and 12). Although the coins from Whelford Bowmoor were recovered from a small area, their rather wide chronological distribution does not support their being a hoard.

Small finds (Fig. 10.9) by Hilary Cool

A total of 149 small finds were recovered from archaeological investigations at Whelford Bowmoor, excluding coins, worked stone, obviously modern items and the featureless fragments of metal from the topsoil (Table 10.4). Of the material considered, one item came from the 1988 season and two from that of 1983. All of the rest of the material was recovered in 1985. The assemblage is biased in that no worked bone artefacts are present presumably because bone does not survive well at the site. As noted when discussing Somerford Keynes (see Chapter 9), such a lack is a serious loss.

The assemblage is small compared to those from Somerford Keynes and Claydon Pike, but despite this it does cast some interesting light on the site activity. The first thing to note is that the brooch assemblage does indicate some activity in the area prior to the suggested early 2nd century start date for

Table 10.4: Small finds by phase from Whelford Bowmoor

Function	1	2	Unstratified	Total
Personal	2	8	11	21
Toilet	1	1	-	2
Transport	-	1	1	2
Building	5	26	1	32
Tools	-	3	1	4
Fasteners	1	11	15	27
Agriculture	-	1	-	1
Miscellaneous	2	55	3	60
Total	11	106	32	149

Phase 1. The earliest brooch was an example of a La Tène III brooch from an unstratified context (Fig. 10.9, no. 1). This form was certainly in use in the 1st century BC and into the 1st century AD, and although they are occasionally found in post-Conquest assemblages, this brooch would, on balance, probably indicate pre-Conquest activity. Another early brooch from a Phase 1 context belongs to the Nauheim Derivative family (Fig. 10.9, no. 2) and seems related to the expanded bow form (Olivier 1988, 37 no 15) found in the south-west. A date early in the floruit of Nauheim Derivatives (ie mid 1st century AD), would seem most likely. These two brooches predate the suggested start date of activity on the site, and it is difficult to imagine that they would still have been in use by the early 2nd century. There are also two other unstratified brooches which suggest occupation prior to the 2nd century AD. The remaining brooches and other items that can be assigned typological dates confirm the 2nd- to 3rd-century date suggested by the pottery. There is no evidence that occupation or even casual use of the area continued into the later 3rd or 4th centuries.

Aside from brooches, other personal items included two finger rings (Fig. 10.9, no. 7), which belonged to the simple expanded type typical of the 1st to 3rd centuries (Henig 1978, types II and III). Both of these finger rings may be dated to the later 2nd/3rd century AD, a period when other aspects of the material culture such as the fine ware pottery are suggesting that the inhabitants had greater access to more expensive items. Wearing a ring with an intaglio device, no matter how crude, suggests aspirations towards a Romanised lifestyle and this may be another strand of evidence to suggest that occupation in Phase 2 was of a different nature than that of Phase 1. It may also be noted that the only stratified hobnails (12) were also recovered from a Phase 2 context. The implications for changes in lifestyles that the adoption of Romanised footwear implies have been discussed in the Claydon Pike report (see Chapter 5). It is possible that here too the adoption of such footwear was a late choice.

The structural items from buildings were dominated by nails, with a slightly more diverse

range of finds associated with the Phase 2 activity. The poor quality of the preservation of ironwork on the site probably means that the tools category is under-represented, although identifiable objects included two knives (Manning types 13 and 11; Manning 1985, 114), a possible smiths set and a triangular blade probably coming from a small adze.

As has been noted in the other Cotswold Water Park sites, lead pottery repairs form a major part of the assemblage in the fittings and fasteners category. Both the types of repairs used and the relative rate of recovery of the different forms are similar to those found at Somerford Keynes and Claydon Pike. As noted in the case of those two sites, where the repairs retain pottery sherds, it is clear that coarse pottery is being riveted. The high curation rate of coarse pottery here seems at odds with the proportions of finewares, amphorae etc which has led Brown (see above) to conclude that the site was either high status or highly Romanised. Whether there were things on the site that their owners wanted to lock up is a matter of debate. There is one latch lifter from a Phase 2 context, but these are more designed to close doors rather than secure them. It may be noted that there is a notable paucity of studs, rivets, miscellaneous bindings etc that normally make an appreciable part of a Roman small find assemblage.

A remarkable find is the billhook found in the Phase 2 platform. It appears complete, though now broken in two, allowing for post-excavation flaking. Typologically it belongs to Manning's Type 2 billhooks, though lacking the spike on the back (Manning 1985, 58), a form that was in use throughout the Roman period. It seems likely that the break may have occurred before deposition, and it is not consistent with accidental damage. The presence of such a large, complete and probably deliberately broken item is of considerable interest, and raises the possibility that this was not casual rubbish disposal but a form of deliberate structured deposition.

Overall, the range of finds recovered is curiously limited. If Table 10.4 is inspected it can be seen that only seven different functional categories are present. This may be compared to the 14 at Somerford Keynes and 16 at Claydon Pike. Although this is a much smaller assemblage and suffers from bone not surviving well, this paucity of functional categories is probably more a result of the nature of the occupation on the site rather a collection problem. The site was metal detected and whilst this can lead to a bias in what is found, it does not lead to systematic under-representation of particular categories with the possible exception of toilet equipment.

A category that is conspicuous by its absence here is that of household equipment. The paucity of the normal stud etc element of the fastener and fitting range has already been noted, and many of those items would have come from objects found in a domestic environment. The small find evidence would thus appear to be at variance with that of the

pottery where the level of samian and amphorae recovered hints at a site with aspirations above that of a basic level farmstead. Only the finger ring (Fig. 10.9, no. 7) hints at similar aspirations amongst the finds considered here.

Illustrated catalogue: small finds from Whelford Bowmoor (Fig. 10.9)

1. *U/S SF 98. La Tène III brooch.* Copper alloy. C1 BC-early (to mid) C1. Present length 46 mm
2. *14 SF 67. Nauheim derivative brooch.* Copper alloy. Type Hull 11. Mid C1. Length 57 mm. Trench 7, Phase 1
3. *15 SF 69. Penannular brooch.* Copper alloy. Pin missing. Fowler (1960) Type D5 – this notched sort is known in a pre-Flavian context at Usk (Manning *et al.* 1995, 94 no. 76, fig. 28). Diameter 30 mm, section 2.5 mm. Trench 5
4. *20 SF 95. Colchester Derivative brooch.* Copper alloy. Type Hull 93. Mid C1 into C2. Length 46 mm, width 18 mm. Phase 1
5. *U/S SF 224. T-shaped brooch.* Copper alloy. Type Hull 111. Later C1 – C2. Present length 15 mm, width of hinge 19 mm
6. *U/S SF 225. Penannular bracelet.* Copper alloy. C2. Present length c 70 mm, section 3 x 2 mm
7. *U/S SF 97. Finger ring.* Translucent deep blue moulded glass intaglio. Impression shows standing figure, possibly helmeted, with left arm bent vertically at elbow and right arm bent downwards, possibly holding a sword. Henig Type II. C3. Diameter 22 x 19 mm, hoop section 2 mm, width of bezel 12 mm, intaglio dimensions 11 x 10 mm
8. *2 SF 99. Snaffle bit.* Iron. Two link snaffle bit. Diameter of side ring 58 mm, length of link 70 mm. Trench 8, Phase 1-2

Roman glass by Jennifer Price and Hilary Cool

Twelve pieces of Roman glass were found; four fragments of vessel glass, one window glass and seven melted lumps. In addition one piece of post-medieval flat glass, probably from a window pane, was recorded. The vessel glass fragments come from four square bottles of 1st- or 2nd-century date. The window glass fragment came from a cast matt-glossy pane, also probably of 1st- or 2nd-century date. The melted lumps of glass are not closely identifiable; they probably come from a vessel or a window pane badly affected by heat.

Ceramic building material by Leigh Allen

A total of 28 fragments of tile weighing a total of 1 kg were recovered from the Whelford Bowmoor excavations. The fabrics present were in general the same as those found at Claydon Pike. Unfortunately the sample is so small and the fragments so abraded that it is not possible to distinguish the types of tile present nor is it conclusive evidence for the existence of a tiled building. These fragments are more likely to have been amongst rubble brought on to the site for use in the construction of a pavement or building foundation.

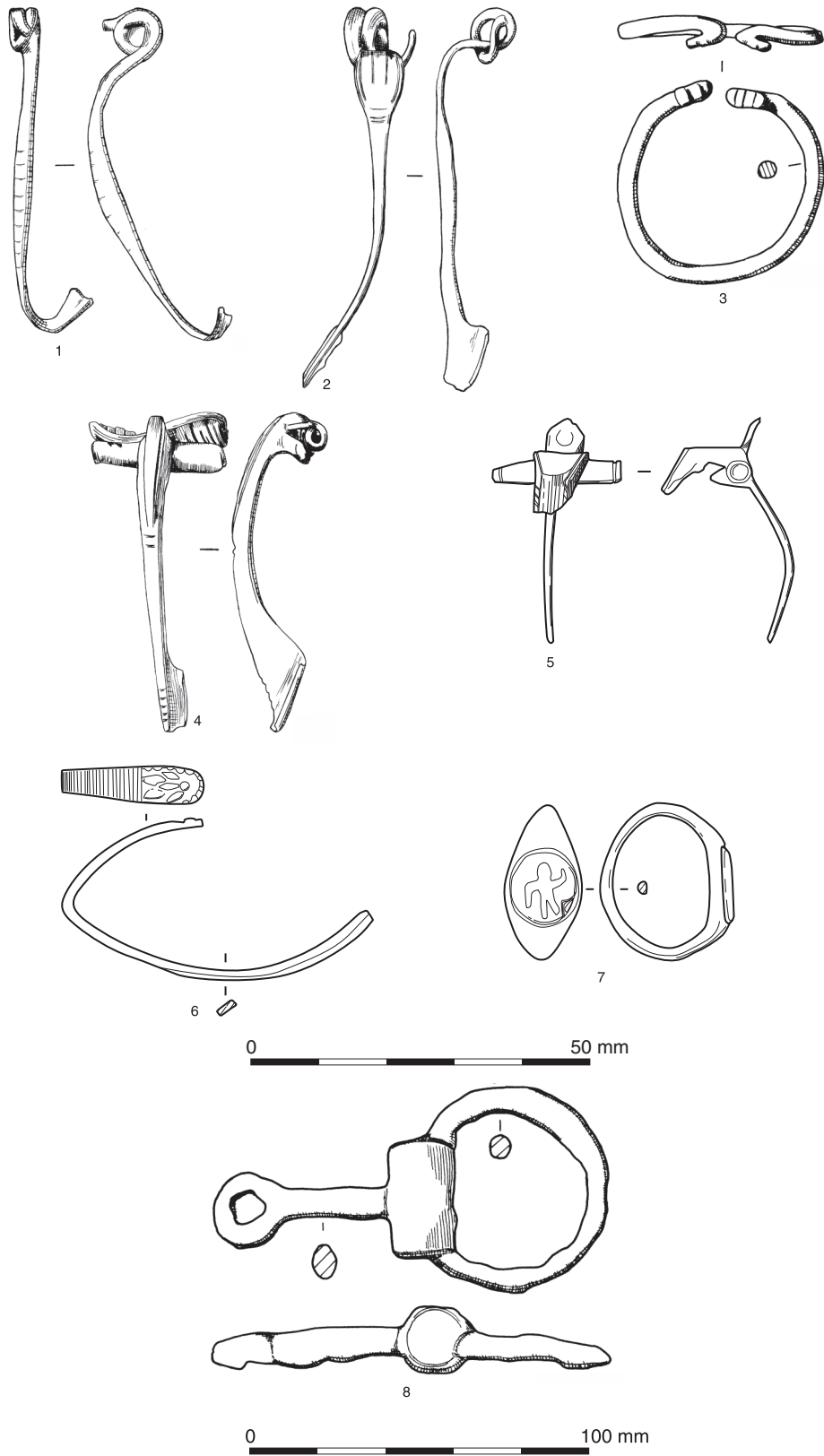


Fig. 10.9 Small finds

Fired clay by Ian Scott

A total of 34 pieces of fired clay was recovered from excavations at Whelford Bowmoor, of which 14 are featureless fragments. The range of types of material is limited, comprising daub, oven plates and oven pieces. The daub is all stratified with two pieces coming from the rubble spread (context 4) which formed the building platform in the second phase of occupation (see Fig. 10.6). The oven plates and oven pieces (14 fragments) include 5 unstratified pieces and 5 from context 4. The unidentified fired clay is predominantly from context 4.

THE ENVIRONMENT

Faunal remains by Mary Harman

A total of 217 animal bone fragments were recovered from Whelford Bowmoor (Table 10.5). Cattle heavily dominated the assemblage, followed by sheep, and with very small quantities of horse, pig

Table 10.5: Faunal remains by phase from Whelford Bowmoor

Species	Phase			Un-stratified	Total	%
	1	1/2	2			
Cattle	41	13	90	21	165	76.04
Sheep	5	9	15	5	34	15.67
Pig	0	0	2	1	3	1.38
Horse	3	0	5	0	8	3.69
Dog	0	0	1	0	1	0.46
Indeterminate	5	0	1	0	6	2.76
Total	54	22	114	27	217	100.00

and dog. The bones are in poor condition due to the acidity of the soil on this site. Most of the long bone shafts were split with eroded surfaces and there are several groups of teeth which belong together but lack the alveolar bone. The bones of sheep and pig are more likely to have decayed beyond recovery or recognition than the larger bones of cattle and horse and thus the numbers of fragments from each species are unlikely to reflect the situation on the site. Bones from immature animals would also be more likely to decay.

Waterlogged plant remains by Mark Robinson

Macroscopic plant remains were absent from the bottoms of the Roman ditches, either because the contemporaneous permanent water table was below the ditch bottoms or because the recent lowering of the water table, associated with gravel extraction in the area, caused their decay. Very degraded seeds of plants of wet grassland, such as *Ranunculus repens* (creeping buttercup) were noted in the late Roman peat which survived in a desiccated state above some of the early Roman ditches. This suggested the development of fen grassland over some of the lowest-lying areas of the site.

Carbonised plant remains by Julie Jones

Four samples from the Roman archaeological features were floated onto a 0.5 mm mesh to recover charred plant remains, which were found in low concentrations. The results are given in Table 10.6. They showed evidence for the use of *Triticum* sp. (wheat) and *Hordeum* sp. (barley), although it was not possible to identify the cereals to species. The chaff suggested some processing of the grain was occurring on the site. One of the weeds, *Anthemis cotula* (stinking mayweed), occurs amongst arable

Table 10.6: Charred plant remains from Whelford Bowmoor (four 10 litre samples)

Context	20	10	8	37		
Cereal grain						
<i>Triticum</i> sp.		Wheat	-	-	1	1
<i>Hordeum</i> sp.		Barley	1	-	2	1
cereal indet.			4	1	1	-
Cereal chaff						
<i>Triticum</i> sp.	- rachis	Wheat	1	-	1	-
<i>Hordeum</i> sp.	- rachis	barley	1	-	1	-
<i>Avena</i> sp.	- awn	oats				
cereal indet.	- culm node	straw				
Weed seeds						
<i>Rubus</i> sp.		blackberry etc	1	-	-	-
<i>Potentilla</i> sp.		cinquefoil	-	-	1	1
<i>Anthemis cotula</i> L.		stinking mayweed	-	1	-	-
<i>Luzula</i> sp.		woodrush	-	-	-	2

crops on base-rich, heavy soils and it is possible that the crops were grown nearby. The other weed seeds, however, were from plants of grassland and scrub. The carbonised remains may be interpreted as general agricultural debris typical of a Roman rural settlement.

DISCUSSION *by Alex Smith*

The archaeological features and associated finds from Whelford Bowmoor do not always provide a coherent picture of the nature of activity at the site, which may in part be because of the limited excavation strategy. Nevertheless, there are clearly two discernible phases of occupation, spanning the 2nd to early/mid 3rd century AD, and there are some noticeable differences in the material culture between them (see Figs 10.3 and 10.5).

Settlement organisation

The earliest features revealed during excavations (Phase 1; Fig. 10.3) comprised a regular system of sub-rectangular enclosures in the south-east (E 1-6), which undoubtedly continued south into the north-eastern area of WB 88 (Fig. 10.2). These can be dated by ceramic evidence to the early-mid 2nd century AD, although there are a number of brooches from the site which point to earlier activity, in the 1st century AD (see Cool above). The enclosures do not seem immediately associated with habitation, as little material was recovered from excavated sections, and they were probably used for livestock management (see below). Two features contrasted with this regular pattern of ditches. E 2 was a small penannular gully attached to the internal side of E 3, and its size, paucity of debris and lack of structural features argue against a building. It is perhaps best seen as a small pen or stack stand. The other feature, E 1, formed a more irregular enclosure with a small causeway on the south side, possibly for use in the control of livestock movement.

A group of smaller enclosures (E 7-12) lay further to the west, possibly with ditch 8/13 forming an eastern boundary. They were on a slightly different alignment to the south-eastern enclosures, and although the dating evidence suggests a general 2nd-century date, they were probably a later development. There is no real evidence for function, as they have very little associated occupation material, but they clearly differed in size and form from the south-eastern enclosures. Nevertheless they were possibly still used in some aspect of livestock management. A comparable example of such a tightly knit enclosure system can be found in the nearby, but slightly earlier site at Thornhill Farm (Jennings *et al.* 2004).

It seems likely that many of these enclosure ditches went out of use by the latter part of the 2nd century AD (Phase 2). It was during this period that there was the only convincing evidence for domestic activity within the site, in the form of a

rubble building platform (4) and associated 'midden' deposits, dating from the later 2nd to early/mid 3rd century AD (Fig. 10.5; see below). Evidence for low-status rural domestic structures from the Romano-British period is quite scarce within the Upper Thames Valley and surrounding regions, as such structures seem to leave little archaeological trace (Henig and Booth 2000, 95; see Chapter 16). The Whelford Bowmoor building, which stood upon the highest gravel island, was undoubtedly made more ephemeral because of damage by ploughing and probable stone robbing in an area where building stone was scarce. Nevertheless, there is certainly enough evidence to suggest that a timber-framed building did exist, resting upon stone footings above a hard-packed rubble platform. Furthermore there is some evidence that this structure was associated with a roughly paved yard area.

The other main feature that may have been contemporary with the building (possibly spanning both phases) was the stone drainage channel (33), lying *c* 40 m to the north-east (Fig. 10.4, Pl. 10.1). It appeared to be of much better construction than the stone platform structure, although this may well have been because of its sheltered position within a trench, which saved it from plough damage. The ponded depression which it appeared to drain water from lay in the lowest part of the site, and would probably have contained water for much of the year (Fig. 10.3). The channel may therefore have ensured a steady water supply for the occupants of the site. The north-south ditch (8/13) just to the east of the pond feature, appears to have defined the eastern limit of the main area of activity during this phase, as all but one of the 'middens' lie to the west of it.

Most of the features to the north and west of the site, including the NW-SE orientated trackway, cannot be assigned to either phase, but are assumed to have been contemporary with the Roman activity. The trackway was *c* 8 m in width, and may have functioned in part as a droveway for the movement of animals to and from the site.

Site economy and material culture

The scant environmental evidence ensures that very little can be said about the economy and environment of the Roman settlement. On the basis of morphological similarities with the enclosures at Thornhill Farm, 1 km to the east, it may be suggested that pastoralism was the primary economic activity, with the surrounding floodplain and lower gravel terraces being largely grassland. This is even more likely given that much of this area may have been prone to seasonal flooding (see below), making large scale arable activity less likely. Nevertheless, it is possible that some arable crops may have been grown on the higher ground in the vicinity, and there is some evidence, in the form of quernstones, for limited crop processing on site. The

billhook found within the rubble platform also points to possible arable production.

The finds assemblage on the whole suggests that the two major phases of occupation at the site were of quite different character. During Phase 1 in the early to mid 2nd century AD, the pottery largely comprised coarseware jars and bowls, while the limited number of small finds consisted mostly of iron nails. The stone platform and 'middens' of Phase 2 produced an altogether different assemblage, with relatively high quantities of imported fine and specialist wares (cups, plates and mortaria), in addition to finger rings, bracelets and evidence for hobnail shoes. This certainly indicates a change in the nature of activity on the site, seemingly associated with more conspicuous acts of consumption and display (see below).

The nature of activity at the site

It is difficult to be certain as to the nature of the activities occurring at Whelford Bowmoor, although a mixed economy is most likely, with particular emphasis on pastoralism (see above). As the site lies upon the immediate floodplain of the river Coln, it is likely that flooding occurred on a regular basis, although there is little direct environmental evidence for this. There is, however, some reason to believe that incidences of flooding were slowly increasing throughout the 2nd and 3rd centuries AD (see below). In response to this, there is a possibility that the site became occupied only on a seasonal basis, as has been suggested for the Iron Age and Roman settlement at Farmoor on the Thames floodplain in Oxfordshire (Lambrick and Robinson 1979, 136). If such was the case, then the quantities of fine ceramics associated with eating and drinking together with the much higher number of animal bones from Phase 2, may be explained in terms of seasonal feasting associated with the re-occupation of the site. There was still probably a very low actual resident population on site, with limited increases at very brief intervals during the year. The 'midden' deposits, and even the mass of finds within the rubble platform

itself, could all have been associated with such seasonal activity. Furthermore, the deliberately broken billhook (see Cool above) may suggest that at least some of these deposits had ritual associations.

The end of activity at the site

The general absence of later 3rd or 4th-century AD material from the site suggests that settlement and structurally defined agricultural activity may have shifted from the area entirely, towards drier locations further up the gravel terrace, which were less prone to flooding and waterlogging. This could indicate progressive development of a shallower water table and increased frequency of flooding from the 1st to the 3rd centuries AD. Although there was no clear evidence for very extensive alluvial deposition before or during the early Roman period, there were certainly extensive areas of waterlogging which survived as layers of organic peaty clays with mainly 2nd- to early 3rd-century AD occupation material. This waterlogging was also apparent as desiccated peaty layers in and over the top of silted Phase 1 ditches. Together, this does provide clear evidence that some flooding did occur during occupation of the site.

At some time after the abandonment and destruction of the Phase 2 building, a layer of mid brown alluvial clay built up over its rubble, along with the totally silted-up ditches of the earlier enclosures. This may have been part of the increased deposition of flood silts in the Upper Thames Valley dated on other evidence to the medieval period. However, at Whelford Bowmoor at least, there is no reason why this alluvial material could not have been deposited during the later Roman period (for wider discussion see Robinson, Chapter 14).

An extreme and unitary deposition of alluvial silt occurred some considerable time after the Phase 2 building was rubble. The shallowness of this alluvial clay layer, lying immediately underneath approximately 0.2 m of ploughsoil, suggests on purely subjective grounds a medieval or post-medieval date.