Chapter 7: Artefactual evidence

THE STRUCK FLINT

By Theresa Durden

Trinity Farm

Introduction

A total of 490 pieces of flint was recovered from this site, including 389 chips retained from sieved soil samples. All of the flintwork apart from 2 broken flakes came from the fills of three pits (7, 9 and 11) which contained Beaker sherds.

Raw material and condition

Flint is not native to most of the area under discussion and so chalk flint would have been imported from the downland to the south or east (Darvill 1987, 48). Drift flint from the gravels of the Upper Thames valley may also have been used in small quantities. The flint is in fresh condition and corticated grey/white. A few pieces had lighter blue/white speckled cortication.

The assemblage

Assemblage composition is summarised in Table 7.1. Pit fills 7 and 9 contained most of the material (414 pieces). Broad flakes dominate the assemblage, with blades and blade-like flakes almost absent. In fill 7 flakes were almost exclusively inner flakes, with only two pieces retaining some cortex. No completely cortical pieces were found in this context. Fill 9 only contained a few flakes with cortex, and one cortical flake. Fill 11 contained mostly tiny chips recovered from sieving. Hammer mode on the flakes was a mixture of soft and hard, with plain butts. A few narrow butted flakes were noted. Flakes from 9 and 11 are broadly comparable, although those from 9 may be slightly more irregular in shape.

Four cores were found; a small multi-platform flake core (9 g) and a core on a thick flake (4 g) from fill 7, and a small blade core (7 g) and another core on a flake (7 g) from fill 9 (Fig. 7.2.15–17). The cores on flakes showed only a few broad, squat removals. The blade core is probably residual and datable to the Mesolithic/earlier Neolithic. It is notable that all of the cores are small and not ideal for working down, which suggests raw material was at a premium.

Retouched material consisted of 14 scrapers (Fig. 7.1.1–14), 2 retouched flakes and 1 fragmentary retouched piece. Fill 7 contained three scrapers, a side scraper, end scraper and horseshoe scraper. The end scraper was steep but quite finely flaked. A retouched flake was also recovered from this context. Fill 9 contained 10 scrapers; 2 end-, 3 side-, 3 end-and-side, 1 discoidal and 1 thumbnail scraper. Some of these scrapers were quite steep, with some step-flaking, while others, notably the end-and-side scrapers and the discoidal scraper, were shallower and more finely flaked (Fig. 7.1.1). The thumbnail scraper, a typical find in Beaker assemblages, was steep but finely flaked. This context also contained a retouched flake and a fragmentary unidentifiable retouched piece. Fill 11 contained one end-and-side scraper which appears to have been used as a core, some flakes having been removed from its ventral surface (Fig. 7.1.6).

Discussion

The technological attributes of the debitage in the pits, and the presence of the thumbnail scraper, would accord with the Beaker date assigned to these features on the basis of pottery. The considerable quantity of retouched pieces in fill 9 is reminiscent of the Beaker pit 1260 from Roughground Farm, Lechlade (Allen *et al.* 1993, 18). Non-funerary Beaker sites are rare in the region (cf. Darvill 1987, 82) so this discovery adds to their number. The large number of chips (228) might suggest flint was knapped into or close to the pit; about a dozen of the chips may be retouch chips. Considerable numbers of chips were also found in the other pits. The relative lack of large cores and cortical flakes taken with the presence of these chips might suggest the later stages of flint knapping and possibly artefact manufacture in the vicinity. It is possible that the contents of these pits, especially contexts 7 and 9, represent a ritual deposit.

Birdlip Quarry *(Fig. 7.4.25–27)*

Introduction

A total of 152 pieces of flint was recovered from this site, including one piece of burnt unworked flint, and 34 chips and small flakes retained from sieved soil samples from contexts 81 and 89. Although a fairly

Table 7.1 Flint from Trinity Farm.

flakes	blades	blade-like flakes	chips	cores	retouched	total
77	1	2	389	4	17	490

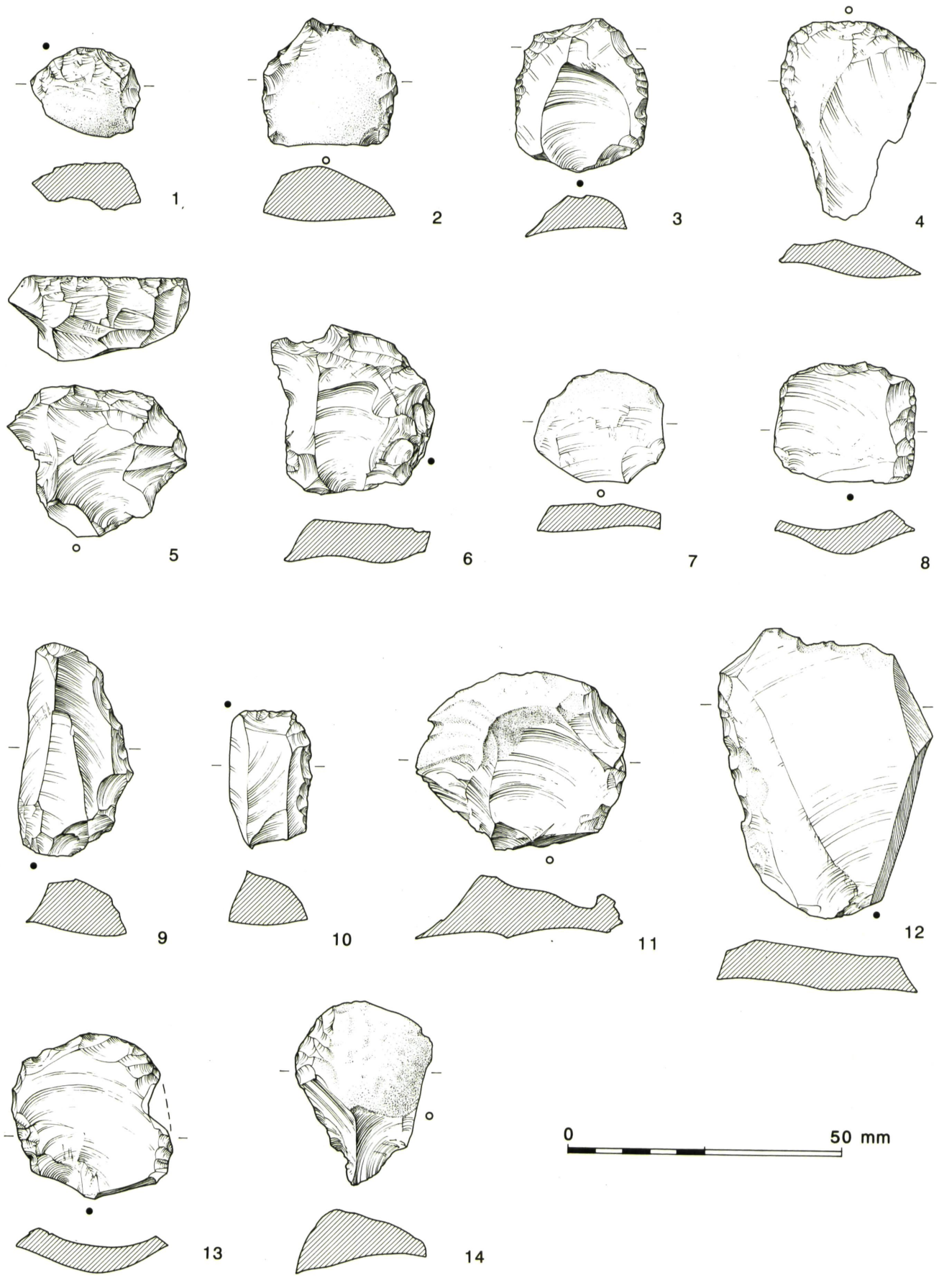


Figure 7.1 Worked flint from Trinity Farm, see catalogue for details.

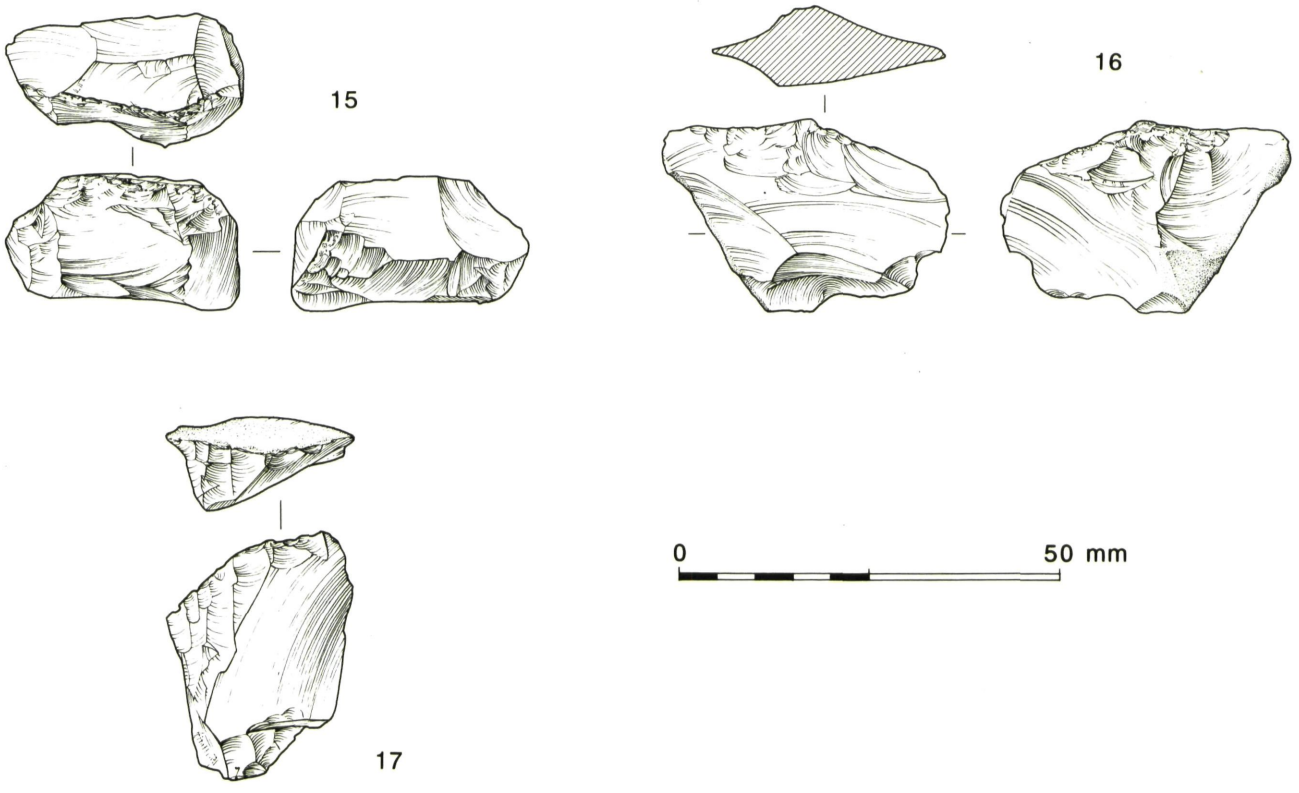


Figure 7.2 Worked flint from Trinity Farm, see catalogue for details.

large number of flints were recovered from this site, most contexts apart from 81 and 89 contained only a few pieces at most. There was no associated prehistoric pottery.

Raw material and condition

One flake of Bullhead flint was found in context 954. This is a distinctive flint recognisable by a thin orange band present under a dark grey or greenish cortex. This flint is often found in the London area, North Surrey and Kent (Shepherd 1972, 114), but it also occurs at the base of the Reading Beds (Dewey and Bromehead 1915, 2). It may also occur in a derived state in the river gravels of the Thames. Otherwise, the material was as at Trinity Farm (see above).

The assemblage

As no contexts stood out as containing a large assemblage of flintwork, the complete site assemblage is considered as a whole. The composition of the collection is shown in Table 7.2.

Broad flakes dominate the assemblage, though blade-like flakes and blades form 20% of all flake material (excluding chips). Morphologically the flakes are a mixture, some pieces being quite irregular in outline and thickness and others relatively thin and more regularly-shaped. A mixture of hard and soft hammers were used and the majority of butts were plain. One retouched flake with a faceted butt was recovered from context 729.

Six cores were collected; these consisted of two multi-platformed flake cores, a keeled flake core, a struck nodule, a bladelet core (Fig. 7.4.27) and a blade core fragment. All of the cores were small, weighing 4-20 g, either because cores were well worked-down or because the starting piece of raw material was small; this would suggest raw material was at a premium, probably because it was imported into the area. The small size of cores was also noted at Trinity Farm. The flake cores showed little control over knapping, with flakes often ending in hinge fractures and the cores being poorly-maintained. The blade cores, however, were more carefully flaked.

A total of 18 retouched pieces were recovered, comprising 12 scrapers, 3 retouched flakes, 1 leaf arrowhead from context 1510 (Fig. 7.4.25), 1 serrated flake from context 329 and 1 miscellaneous retouched piece. The scrapers were mostly end, end-and-side types, and often on thick or irregular flakes, forming a fairly steep scraping angle. A horseshoe scraper

Table 7.2 Flint from Birdlip Quarry.

flakes	blades	blade-like flakes	cores	chips	retouched	waste	rejuvenations	total	broken	burnt
88	1	21	6	13	18	3	1	151	84	3

(Fig. 7.4.26) from context 1149 was on a thinner, more regular piece and was finely flaked. The leaf arrowhead, datable to the earlier Neolithic, was a small example, measuring 25 x 19 mm.

Discussion

It is difficult to place a date on the assemblage as the flintwork is thinly spread over a large number of contexts and may well be residual in many cases. The relatively high percentage of blade-like material, the presence of blade cores, a possible core rejuvenation tablet and the leaf arrowhead would point to a level of earlier Neolithic activity on the site. Serrated flakes are found in assemblages from the Mesolithic through to the early Bronze Age. The broad flakes, poorly-worked flake cores and thick scrapers may also point to later Neolithic/earlier Bronze Age domestic activity.

Duntisbourne Grove

Introduction

A total of 506 pieces of flint was recovered from this site, forming the largest lithic assemblage from any of the excavated sites. This total includes 2 pieces/2 g of burnt unworked flint. The bulk of the flintwork came from three prehistoric pits: 94 (fills 95, 111 and 113); 142 (fills 143 and 168); 144 (fill 145). Indeterminate prehistoric pottery and one possible earlier Neolithic rim were recovered from another pit containing flint (63) and possible middle Iron Age sherds from 113 in pit 94.

Raw material and condition

See Trinity Farm (above)

The assemblage

Assemblage composition is summarised in Tables 7.3–4.

Debitage

Flakes dominated the assemblage and these consisted mostly of broad, regular flakes. These were generally quite thin and struck with a mixture of hard and soft hammers, although soft hammers tended to dominate, especially in the pit contexts. Flake butts were a mixture of narrow or punctiform butts and broad butted flakes, with occasional faceted butts occurring in pit 94 (typology after Tixier *et al.* 1980). Five rejuvenation flakes were recovered; these were all from pit contexts (63, 95, 113 and 145) and included two crested flakes from context 113 (Fig. 7.5.35) a type of debitage which is also produced in the initial preparation of cores as well as rejuvenation. Crested flakes are typical of Mesolithic and earlier Neolithic industries, and rejuvenation is generally more common in these earlier industries than in the later Neolithic or Bronze Age.

Only four cores were recovered from the site; these consisted of a flake core fragment from context 95, a possible burnt and broken tortoise core from the same context, a partly discoidal core from context 111 and a multi-platformed flake core from context 113. These core types, the tortoise core in particular, are typical of later Neolithic industries, although the core fragment from 95 showed signs of platform abrasion, a practice which removes projections resulting from flake removal and strengthens the platform edge (Barton 1992) and is more commonly found in earlier industries.

Retouched pieces

A total of 26 retouched pieces were recovered, forming 5.2% of the struck flint assemblage. Most of the retouched pieces were found in pit contexts. The different retouched categories are shown in Table 7.4. Simple retouched flakes were the most common, and these were mostly on broad regular flakes, although an example from 143 was made on a blade-like flake. A cortical piece from 113 was retouched around all the edges and may have been a rejected arrowhead blank or perhaps a representation of an arrowhead. Two simple awls, made on a blade and a blade-like flake, were recovered from pit fill 63 and one piercer was present in fill 113. Only two scrapers were found, these comprised a small, well-flaked end and side scraper from context 46 and a long end scraper on a blade-like flake from 203.

A complete chisel arrowhead (Fig. 7.5.31) and two probable leaf arrowhead tips were recovered (Fig. 7.5.30); both tips, one of which was burnt, were from context 113, and the chisel arrowhead, which was quite crude but probably of Clark's type D (Clark 1934), was found in context 95. All three arrowheads, therefore, came from pit 94.

Seven serrated flakes were found in a number of different contexts, all from pit fills bar one possible broken example from a probable Roman ditch (87). Pit 142 contained four examples, one of these bore edge gloss (Fig. 7.5.33) and another was made on a blade. A burnt, fragmentary example was found in pit 144 and another from pit fill 191.

Dating and discussion

A broad Neolithic date can be assigned to the flintwork from the pits, possibly middle to later Neolithic. Earlier Neolithic industries tended to favour the use of soft hammers for the production of blades and blade-like flakes, and the presence of broad, regular flakes struck with soft hammers alongside a small blade-like component may indicate a crossover between typically earlier and later Neolithic technologies. The traits of many of the simple retouched pieces would also support this date. The possible tortoise core is of later Neolithic date. The long scraper, although not from a pit, would not be out of place in an earlier Neolithic assemblage. Serrated flakes are present in assemblages from the Mesolithic through to the early Bronze Age, although the example from pit 142 which was made on a blade is more likely to date to the earlier part of this range. The leaf arrowheads are typically of earlier Neolithic date, while the

Table 7.3 Flint from Duntisbourne Grove

flakes	blades	blade-like flakes	cores	chips	retouched	waste	rejuvenations	total	broken	burnt
337	24	39	4	65	26	4	5	504	266	90

chisel arrowhead would date to the later Neolithic. The two types are from different fills, but little difference can be observed in the associated debitage, which might otherwise suggest that the chisel arrowhead is from a later fill. It is possible that this pit contained an assemblage of middle-later Neolithic date, in which leaf arrowheads may still have been current. It is notable that they are both fragmentary.

The assemblage from this site is interesting in that it derives mostly from a small number of pits, with very few other contexts containing struck flint. The pits contain a relatively high proportion of retouched material, a percentage that would be consistent with a domestic assemblage according to Wainwright (1972). There is, however, little other evidence for settlement and it may be that the contents of these pits formed a ritual deposit. There is little evidence for flint knapping in or around the pits, as cores were rare and relatively few chips were found in the sieved residue of samples from the pits. No obvious refits were found, although a flake which had been broken in two in antiquity (the break was slightly corticated) was found in pit 144. Interestingly, the flake was completely corticated, so the break may indicate later usage. This, together with the presence of the three arrowheads in pit 94, may suggest the deliberate selection of material for deposition in at least some of the pits rather than the haphazard dumping of rubbish. Evidence for similar acts of deliberate deposition is well documented for the whole country (Thomas 1991, 60–62).

Table 7.4 Retouched material from Duntisbourne Grove

retouched flake	arrowhead	serrated flake	scraper	awl	piercer	total
11	3	7	2	2	1	26

Early-middle Neolithic activity in the region appears to have concentrated on the Cotswold uplands (Darvill 1984a, 89, fig. 3; 1987, 46), most of the evidence in the form of long barrows. Apart from the causewayed enclosures of Crickley Hill and Peak Camp to the north-east of Duntisbourne, there is little documented settlement evidence for this period with which to compare the pits at Duntisbourne Grove. Evidence in the form of surface flint scatters has been found in the course of fieldwalking in the north Cotswolds (Marshall 1985) and finds are more abundant to the west in the Severn Valley (Darvill 1987, 46). The distribution of flint and stone axes concentrates on the Cotswold uplands (ibid. 47) in a similar pattern to the long barrows, suggesting that further survey of this area might reveal more evidence like that from Duntisbourne Grove.

All sites with small lithic assemblages

Introduction

A total of 22 sites possessed very small assemblages of struck flint, the largest being Norcote Farm with 39 pieces. Owing to this scarcity, there is little to be said about much of the material; instead a basic catalogue of material is presented for each site, with more detailed comments where appropriate.

Duntisbourne Leer

A total of 6 pieces; 2 flakes, 1 blade-like flake, 1 burnt core fragment, 1 steep end scraper and 1 barbed and tanged arrowhead (Fig. 7.3.18). The latter piece was found in the ploughsoil and is of Beaker/early Bronze Age date.

Preston Enclosure

Flake material consisted mostly of broad flakes, some struck with a soft hammer. These include a possible rejuvenation flake which removes part of a striking platform, and a flake with a faceted butt which may have been struck from a tortoise core. Retouched material consisted of a fabricator of Mesolithic or early Bronze Age date (Fig. 7.3.20), a barbed and tanged arrowhead of Beaker/early Bronze Age date (Fig. 7.3.19), an earlier Neolithic laurel leaf (Fig. 7.3.21), a serrated flake, a retouched blade, a notched flake and an end-and-side scraper and scraper fragment. The collection appears to be of mixed date, with a possible range from the Mesolithic through to the early Bronze Age.

Middle Duntisbourne

Flakes were all broad, but of varying thicknesses, struck mostly with soft hammers. Undiagnostic. The arrowhead, however, was a leaf type, possibly unfinished, and datable to the earlier Neolithic (Fig. 7.3.22). Most pieces corticated blue/white.

Cherry Tree Lane

A total of 11 pieces; 7 flakes, 1 discoidal core, 2 scraper fragments and 1 microlith (Fig. 7.3.23) (obliquely blunted point). The flakes are broad, soft-hammer

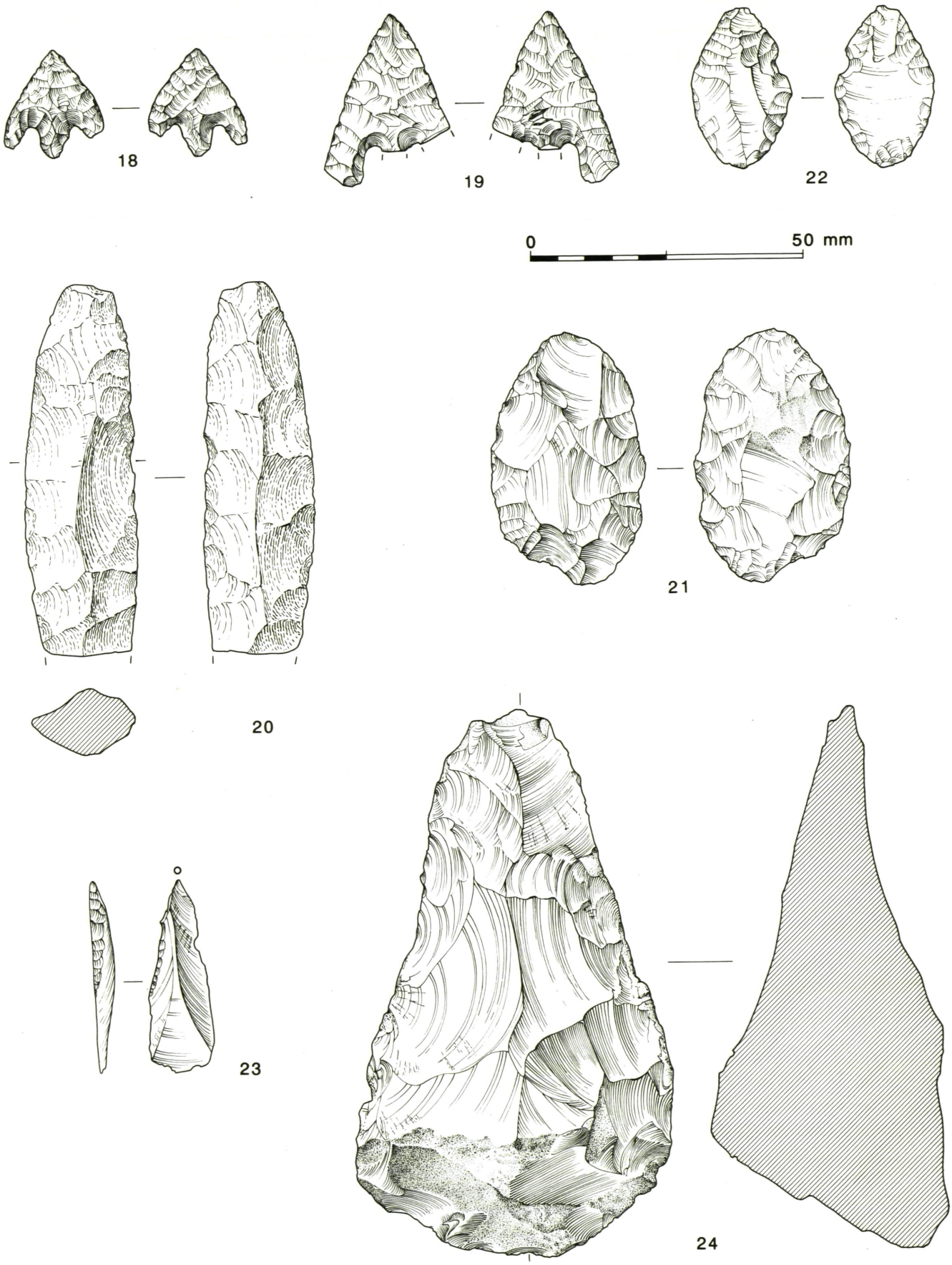


Figure 7.3 Worked flint from Duntisbourne Leer, Preston Enclosure, Middle Duntisbourne, Cherry Tree Lane Compound and Latton Watching Brief, see catalogue for details.

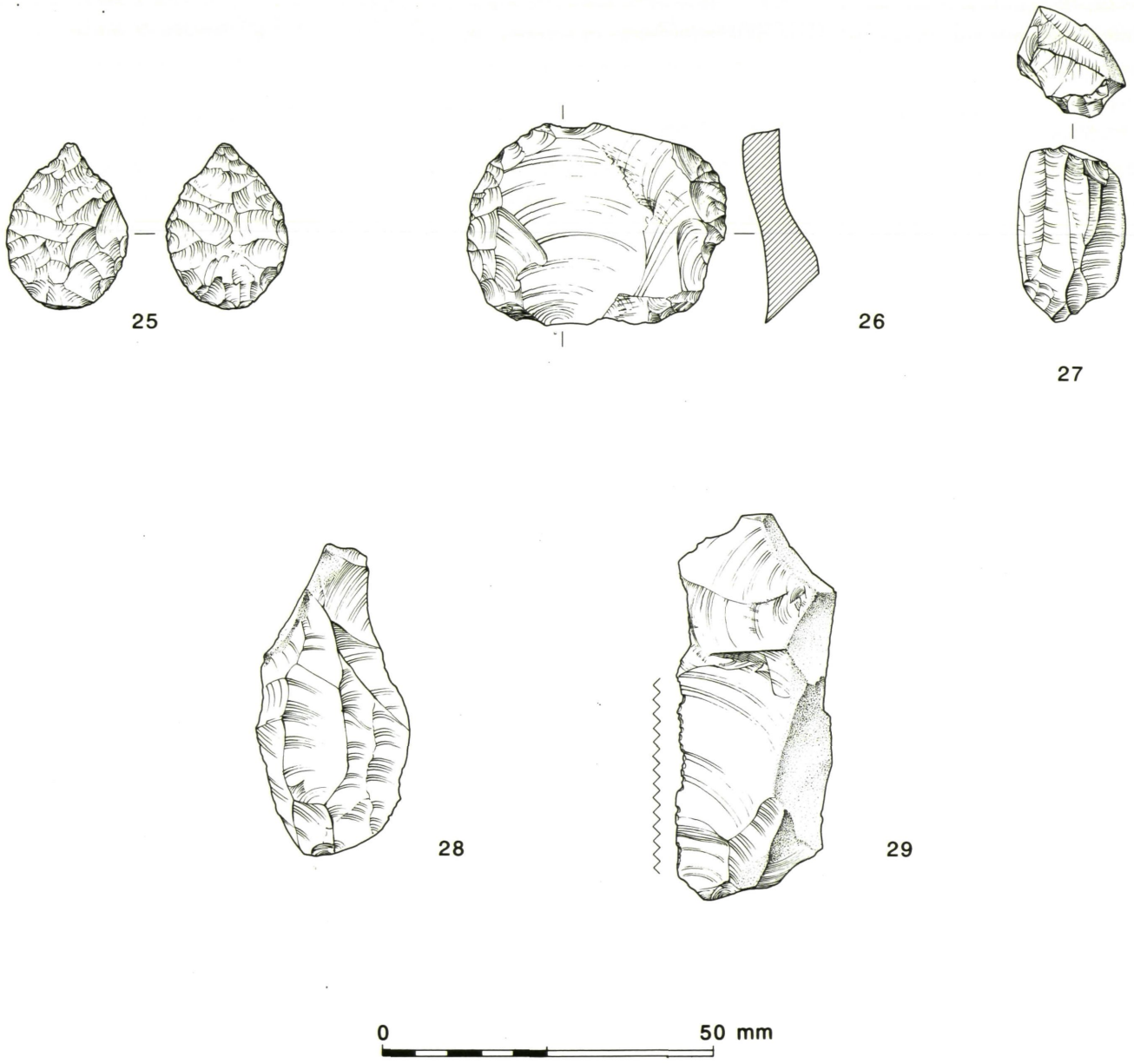


Figure 7.4 Worked flint from Hare Bushes North and Birdlip Quarry, see catalogue for details.

struck pieces; the discoidal core is quite small (19 g) with small, hinged flake removals and may be of later Neolithic date. The microlith is an earlier Mesolithic type.

Latton Watching Brief

A total of 7 pieces; 4 flakes, 1 retouched flake, a possible flake from a tortoise core and an Acheulian hand axe in rolled condition (Fig. 7.3.24), patinated orange-brown. The Acheulian tradition is thought to date broadly to the lower Palaeolithic period (Mellars 1974, 48–52; Saville 1984a, 61–66). Acheulian finds are very rare in the area and mostly confined to the river gravels (Darvill 1987; 18–20).The tortoise core flake is of later Neolithic date.

Hare Bushes North

A total of 17 pieces; 7 flakes, 1 blade-like flake, 2 pieces irregular waste, 1 retouched flake (Fig. 7.4.28), 1 multi-platformed flake core, 1 core fragment and 2 serrated flakes (Fig. 7.4.29) (plus 2 more dubious examples). The complete core is quite small (18 g) with small flake removals, some of which are hinged. Removals on the core fragment are similar. Two of the serrated flakes

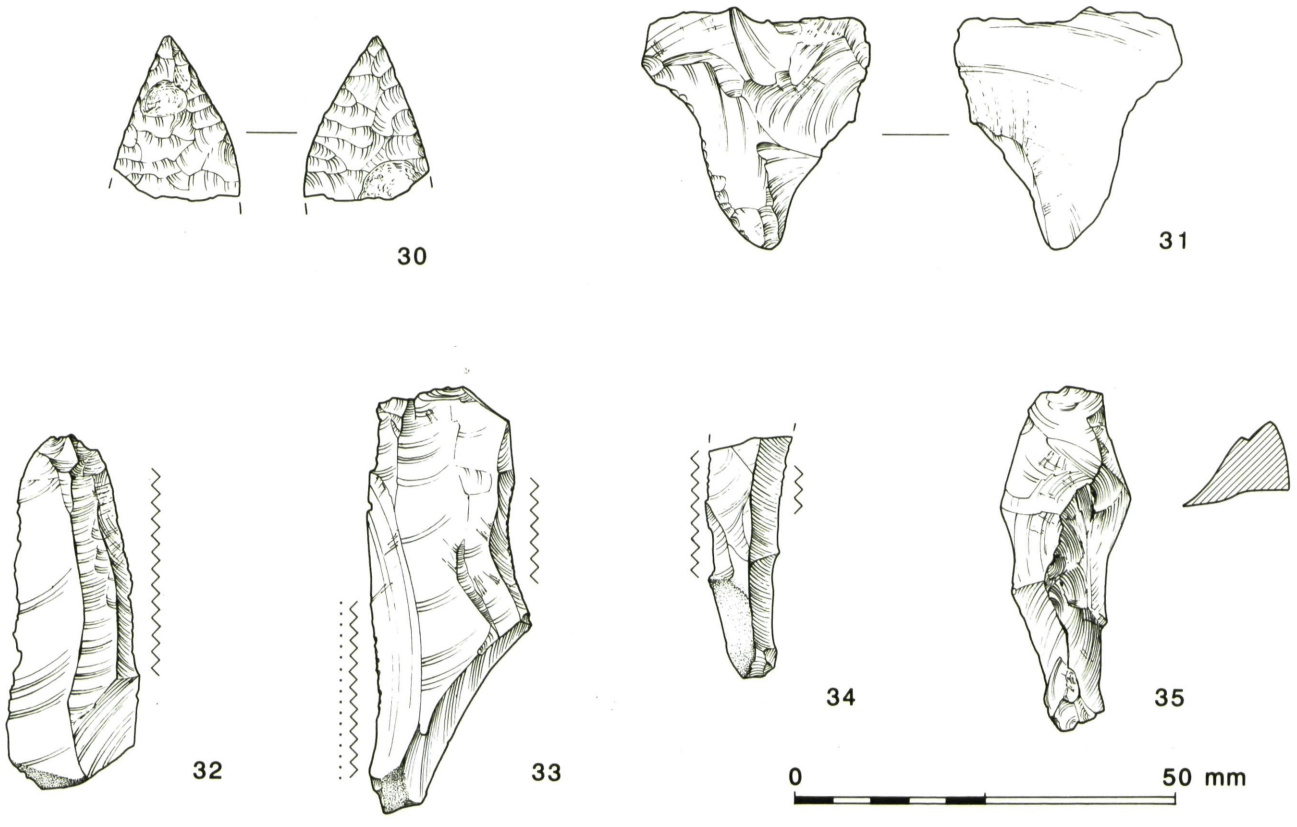


Figure 7.5 Worked flint from Duntisbourne Grove, see catalogue for details.

are dubious examples as the serrations are coarse but very small, and discontinuous along the flake edge. Serrated flakes have a date range from the Mesolithic to the early Bronze Age.

Street Farm

A total of seven pieces- four flakes (contexts 178, 252, 365, 737), one blade-like flake (context 220), 2 pieces burnt unworked flint (unstratified) weighing 24 g. Undiagnostic.

St Augustine's Farm South

Flakes were mostly broad, soft-hammer flakes. Of these, two were possible rejuvenation flakes, removing part of a platform edge. The core fragment was part of a broad flake core. The presence of rejuvenations, soft hammer struck flakes and blade-like pieces would suggest a Neolithic date, possibly middle Neolithic. Most pieces corticated blue/white.

Norcote Farm

Flakes were mostly broad and struck with soft hammers. Blade-like flakes were also struck with soft hammers and often had abraded platforms and dorsal blade scars. The cores comprised two flake core fragments, a single platformed blade core (broken), and a small keeled flake core (7 g) made on a piece of dark grey chert. The chert is similar in appearance to Portland chert from Dorset on the south coast though this may not necessarily be the source. The retouched material consisted of one end scraper and two end-and-side scrapers, a serrated flake and a truncated flake.

The mix of broad and narrow flakes, the dominance of soft hammer flaking and the presence of the blade core could point to earlier Neolithic activity. It is possible, however, that the material is of mixed date; the flake cores could be later Neolithic, and the blade core and the truncated flake could equally date to the Mesolithic period. Serrated flakes are found in assemblages from the Mesolithic through to the early Bronze Age. The presence of dorsal blade scars on this piece, however, might suggest it was Mesolithic or earlier Neolithic in date.

Witpit Lane

A total of 6 pieces; 3 flakes, 1 piece irregular waste, 1 horseshoe scraper, 1 possible burnt scraper fragment. The horseshoe scraper may be Neolithic.

Cirencester Watching Brief

A probable barbed and tanged arrowhead, barbs and tangs broken off. Beaker/early Bronze Age date.

Westfield Farm

A single flake and a core on a flake (10 g) with a few small hinged removals.

Sly's Wall South

One notched flake.

Exhibition Barn

1 miniature multi-platformed flake core (2 g). Tiny flake removals, some hinged.

Catalogue of illustrated flint *(Figs 7.1–7.5)*

Trinity Farm (Figs 7.1–2)

1 Thumbnail scraper. Ctx 9.
2 Discoidal scraper (incomplete). Ctx 9.
3 End-and-side scraper. Ctx 9.
4 End-and-side scraper. Ctx 9.
5 End scraper. Ctx 9.
6 End-and-side scraper. Ctx 11.
7 End scraper. Ctx 9.
8 Side scraper. Ctx 9.
9 Side scraper. Ctx 9.
10 End-and-side scraper. Ctx 9.
11 Side scraper. Ctx 9.
12 Side scraper. Ctx 7.
13 Horseshoe scraper. Ctx 7.
14 End scraper. Ctx 7.
15 Core on a flake. Ctx 7.
16 Core on a flake. Ctx 9.
17 Blade core. Ctx 9.

Duntisbourne Leer (Fig. 7.3)

18 Barbed and tanged arrowhead. Ctx 1, sf 3.

Preston Enclosure (Fig. 7.3)

19 Barbed and tanged arrowhead (broken). Ctx 145, sf 4.
20 Fabricator (broken). U/S.
21 Laurel leaf. Ctx 8, sf 3.

Middle Duntisbourne (Fig. 7.3)

22 Leaf-shaped arrowhead (unfinished). Ctx 142.

Cherry Tree Lane (Fig. 7.3)

23 Microlith: obliquely blunted point. Ctx 23.

Latton Watching Brief (Fig. 7.3)

24 Acheulian handaxe. Ctx 5, sf 1.

Birdlip Quarry (Fig. 7.4)

25 Leaf-shaped arrowhead. Ctx 1150, sf 1510.
26 Horseshoe scraper. Ctx 1149, sf 1507.
27 Bladelet core. Ctx 64, sf 332.

Hare Bushes North (Fig. 7.4)

28 Retouched flake with dorsal blade scars. Ctx 1010.
29 Serrated flake. Ctx 1010.

Duntisbourne Grove (Fig. 7.5)

30 Arrowhead tip. Ctx 113, sf 289.
31 Chisel arrowhead, type D? Ctx 95, sf 256.
32 Serrated flake. Ctx 143, sf 333.
33 Serrated flake with edge gloss. Ctx 143, sf 331.
34 Serrated blade (broken). Ctx 168, sf 345.
35 Crested flake. Ctx 113, sf 263.

EARLIER PREHISTORIC POTTERY

By Alistair Barclay

Introduction

Ten of the excavated sites and part of the watching brief produced a total of 329 sherds (592 g) of Neolithic and Bronze Age pottery and a further four sites produced relatively small quantities of indeterminate prehistoric pottery (Table 7.5). The overall assemblage has a Neolithic to late Bronze Age date range and is characterised by mostly small and often abraded body sherds with a relatively small average sherd weight (<2 g). The recovery of albeit small quantities of Neolithic pottery from four sites is of some importance. The recovery of Beaker pottery from four of the sites is of some significance for this region; one of these produced a relatively large assemblage of Wessex/Middle Rhine Beaker pottery from a series of pit deposits.

Methodology

All of the material was recorded and quantified by sherd count and weight (Table 7.5). In the absence of featured sherds, dates were assigned on the basis of fabric analysis. A record was made of diagnostic forms and decoration and a selection of material is given in the catalogue below. The sherds were analysed using a binocular microscope (x 20) and were divided into fabric groups by principal inclusion type using the OAU alpha-numeric fabric recording system. OAU standard codes are used to denote inclusion types: A = sand (quartz and other mineral matter), F = flint, G = grog, C = calcareous matter excluding shell, S = shell, P = clay pellets, Q = quartzite. Size range for inclusions: 1 = <1 mm fine; 2 = 1-3 mm fine-medium and 3 = 3 mm < medium-coarse.

Fabrics

In total 15 fabrics were identified of which four are Neolithic, seven are Beaker, one is early Bronze Age, one is middle Bronze Age and two are of indeterminate prehistoric date. None of the identified fabrics can be considered as unusual. The three earlier Neolithic fabrics are similar to other fabrics found in the Cotswolds and on the Thames gravels (cf. Smith and Darvill 1990; Williams 1982). The use of unmodified clay or clay without added temper to manufacture Peterborough Ware can be paralleled from elsewhere within the Upper Thames Valley (Barclay in prep. a). Of the six identified Beaker fabrics five typically have grog as their principal inclusion. However, the remaining fabric which is principally calcite tempered

is unusual. The single early Bronze Age fabric associated with a Collared Urn is typical. The shell fabric S2 is considered to be middle Bronze Age, although in the absence of featured sherds the date must remain uncertain.

Neolithic

F2/EN Hard fabric with medium angular flint. St Augustine's Lane, ctx 83.

FA2/EN Hard fabric with medium angular flint and sparse quartz sand. Court Farm, ctx 120; St Augustine's Farm South, ctx 3165.

S/L(S)2/EN Soft fabric with common, mostly leached, shell platelets. St Augustine's Farm South, context 3165.

VAP2/LN Soft fabric with sparse-common voids (?leached calcareous matter), rare quartz sand and rare clay pellets. Duntisbourne Grove, ctx 113.

Late Neolithic/early Bronze Age

GV2/LNEBA Soft slightly vesicular fabric with medium sized grog. Nettleton to Stratton Watching Brief, chainage 5200(2).

Beaker

Calcite-tempered: CVR2/EBA/BKR Soft fabric with common angular (rhombs) calcite inclusions, some lenticular voids and rare sub-rounded rock fragments. Trinity Farm, ctx 9.

Grog-tempered: G2/G?/EBA/BKR Soft fabric with medium sub-rounded grog. Preston Enclosure, ctxs 8 and 19; Trinity Farm, ctxs 7 and 9, St Augustine's Lane, ctx 6.

G3/EBA/BKR Soft fabric with large sub-angular grog. Trinity Farm, ctx 27.

GA2/EBA/BKR Soft fabric with medium subrounded grog and rare quartz sand. Court Farm, ctx 120.

Grog and calcareous-tempered: GC2/EBA/BKR Soft fabric with medium sub-rounded grog and sparse sub-rounded calcareous limestone fragments. Trinity Farm ctxs 7, 9 and 11.

GC3/EBA/BKR Soft fabric with medium sub-round grog and sparse small to large (over 3 mm) poorly sorted sub-rounded calcareous limestone fragments. Trinity Farm, ctxs 9 and 11.

Early Bronze Age

G2/EBA Soft fabric with medium sub-rounded grog. St Augustine's Lane, ctx 3017.

?Middle Bronze Age

L(S)2/- Soft fabric with moderate medium sized voids probably from leached shell. Cherry Tree Lane, ctxs 28 and 36; Highgate House, ctx 125; Court Farm, ctx 223; Latton 'Roman Pond' B1996/1 sf 72; St Augustine's Farm South, ctxs 3008 and 3121; St Augustine's Lane, ctxs 6, 12, 26, 47, 59 and 147.

Indeterminate and non-earlier prehistoric

L(S)/- and 2/- Soft fabric with moderate medium sized voids probably from leached shell, Birdlip Quarry, ctxs 89 and 253; St Augustine's Farm South, ctx 3102; Cherry Tree Lane Compound, ctx 36.

G?/- Soft fabric with grog inclusions St Augustine's Farm South, ctx 3102.

Discussion

Earlier Neolithic

Earlier Neolithic pottery was recovered from four of the excavated sites (see Table 7.5). This includes three rims and a small number of body sherds from simple Plain Bowls. A single context (63) from Duntisbourne Grove produced a rim and four body sherds (10 g) probably from a relatively small bowl (Fig. 7.6.36). Originally shell-tempered, this fabric is now vesicular with many lenticular voids. The simple and plain rim is thickened and out-turned. Similar rim forms are recorded from the Crickley Hill causewayed enclosure, some 11 km to the north-west (Dixon 1971, fig. 9.1 and 3). A body sherd from context 20 at Court Farm in a flint- and sand-tempered fabric may also be of this date. A fragment from a ?rolled rim in a sand and flint-tempered fabric was recovered from context 3165 at St Augustine's Farm South; and a shell-tempered body sherd from the same context could be of contemporary date. The rolled rim can also be paralleled amongst the pre-cairn pottery assemblage at Hazleton North (Smith and Darvill 1990, fig. 156. 1 and 7). Part of a simple rim from context 83 at St Augustine's Farm South is also likely to be of this date.

The earlier Neolithic pottery is likely to date to the middle centuries of the 4th millennium BC and is broadly contemporary with the use of both the causewayed enclosures and long cairns found in the adjacent areas of the Cotswolds (cf. Darvill 1987). Regionally these finds are important as very little of this material has been recovered from domestic rather than funerary or ceremonial contexts.

Later Neolithic and late Neolithic/early Bronze Age

Two sites produced material of this date (see Table 7.5). Context 113 (sf 117) from Duntisbourne Grove contained two refitting sherds that appear to come from the collar of a single small vessel (Fig. 7.6.37), most likely attributable to the Fengate Ware sub-style of the Peterborough Ware tradition (Smith 1976). The fabric (VAP2) is unusual and appears to contain no added temper. The short slightly convex collar appears to be plain and part of a possible neck-pit survives along the cavetto zone. In addition, a number

Table 7.5 A summary quantification and breakdown of the earlier prehistoric pottery assemblage by period and site.

Context	Earlier Neolithic	Later Neolithic (Peterborough Ware)	LNEBA	BKR	EBA	?MBA Preh	Indeter	Total
Watching brief (NOSNI)			4, 10 g					4, 10 g
Birdlip							34, 38 g	34, 38 g
Highgate House						1, 4 g		1, 4 g
Duntisbourne Grove	5, 10 g	2, 8 g						7, 18g
Trinity Farm				165, 255 g				165, 255 g
Cherry Tree Lane						36, 73 g		36, 73 g
Preston Enclosure				2, 3 g				2, 3 g
St Augustine's Lane	1, 3 g			1, 1 g		78, 104 g		80, 108 g
St Augustine's Farm South	2, 4 g				1, 5 g	12, 25 g	3, 2 g	18, 36 g
?Cirencester Road							2, 2 g	2, 2 g
Latton Roman Pond						5, 17 g		5, 17 g
Latton Court Farm	1, 1 g			1, 2 g		1, 12 g	2, 4 g	5, 19 g
Total	9, 18 g	2, 8 g	4, 10 g	169, 261 g	1, 5 g	133, 235 g	41, 46 g	359, 583 g

of indeterminate late Neolithic/early Bronze Age sherds including a simple rim were found during a watching brief of the north of Stratton to Nettleton improvement.

The possible collar from a Fengate Ware vessel from Duntisbourne Grove has a date range somewhere between the late 4th-early 3rd millennium BC (cf. Gibson and Kinnes 1997). Relatively little Peterborough Ware has been found in this region (Darvill 1987, 69) and the only significant find comes from Cam, some 20 km to the west (Smith 1968). Elsewhere within this region Peterborough Ware has sometimes been found in secondary deposits associated with the reuse or blocking of earlier Neolithic funerary monuments (Darvill 1987, 66–7).

Beaker

Beaker pottery was recovered from Trinity Farm, Preston Enclosure, St Augustine's Lane and Court Farm (see Table 7.6). However, only Trinity Farm produced a significant group of material.

A large assemblage of pottery was recovered from three pit deposits at Trinity Farm. In total these pits produced 164 sherds from a maximum of perhaps 14 vessels (Fig. 7.6.38–52) with a further sherd coming from context 27. Many of these vessels are represented by single sherds and in no case was it possible to reconstruct a complete vessel profile. The three pits (contexts 8, 10 and 12) occurred in a line and were spaced closely together. The pottery from the three pits is very similar and it is possible that some of the material recovered from the separate fills derives from the same vessels. It is interesting to note that the overall sherd size is relatively small which might indicate that the material was broken and collected in a midden-like deposit prior to burial. The total assemblage includes vessels with non-plastic finger-nail decoration and, to a lesser, extent, impressed combed lines. All of the vessels are relatively thin-walled and sherds from heavier 'domestic' Beakers are absent. The featured sherds indicate that the original profiles might have been slight and sinuous. Typologically the material can be considered to be early within the Beaker sequence and this is supported by the two radiocarbon determinations from pits 7 and 9 (2476–2142 cal BC, NZA 3673, R24151/17, 3876±57BP; 2462–2130 cal BC, NZA 8674, R24151/18, 3836±58BP). The closest affinities are perhaps with the Wessex/Middle Rhine group as defined by Clarke (1970).

At Preston Enclosure contexts 8 and 19 produced two small and abraded sherds of Beaker pottery (3 g). Both occurred with other larger Iron Age sherds and are assumed to be residual/redeposited (see Timby below). The sherds are relatively thin-walled (5 mm), decorated with impressed comb motifs (bands and ?chevrons) and are manufactured from grog-tempered fabrics (the other sherds from contexts 19, 64/65, 74 and 160 are not thought to be Beaker and are considered to be Iron Age or later. A single sherd was recovered from a context that also produced Iron Age pottery at Court Farm and, therefore, can be considered to be residual.

Very little Beaker material has been recovered from the immediate area of the Upper Thames Valley that is crossed by the route of the A417/A419 (cf. Darvill 1987, 81–8). A significant deposit of Beaker material was recovered from a single pit at Roughground Farm, Lechlade which is approximately 13 km east of Preston (Darvill 1993) and Beaker pottery has also been found at Shorncote, 5 km to the south (Morris 1994b, 34–5; Barclay and Glass 1995, 42). The assemblage from Preston Enclosure is too small to suggest affinities with particular styles, apart from stating that the sherds all derive from fine vessels. However, it can be suggested that the relatively large group of material from the pits at Trinity Farm has affinities with the Wessex/Middle Rhine style. Similar material was recovered from Roughground Farm, Lechlade and from the Marlborough Downs (Cleal 1992; Darvill 1993). Stray finds include part of a fine Beaker from Crickley Hill (Darvill 1987), while Beaker associated burials occur at Shorncote and Lechlade (Barclay and Glass 1995; Timby 1998b).

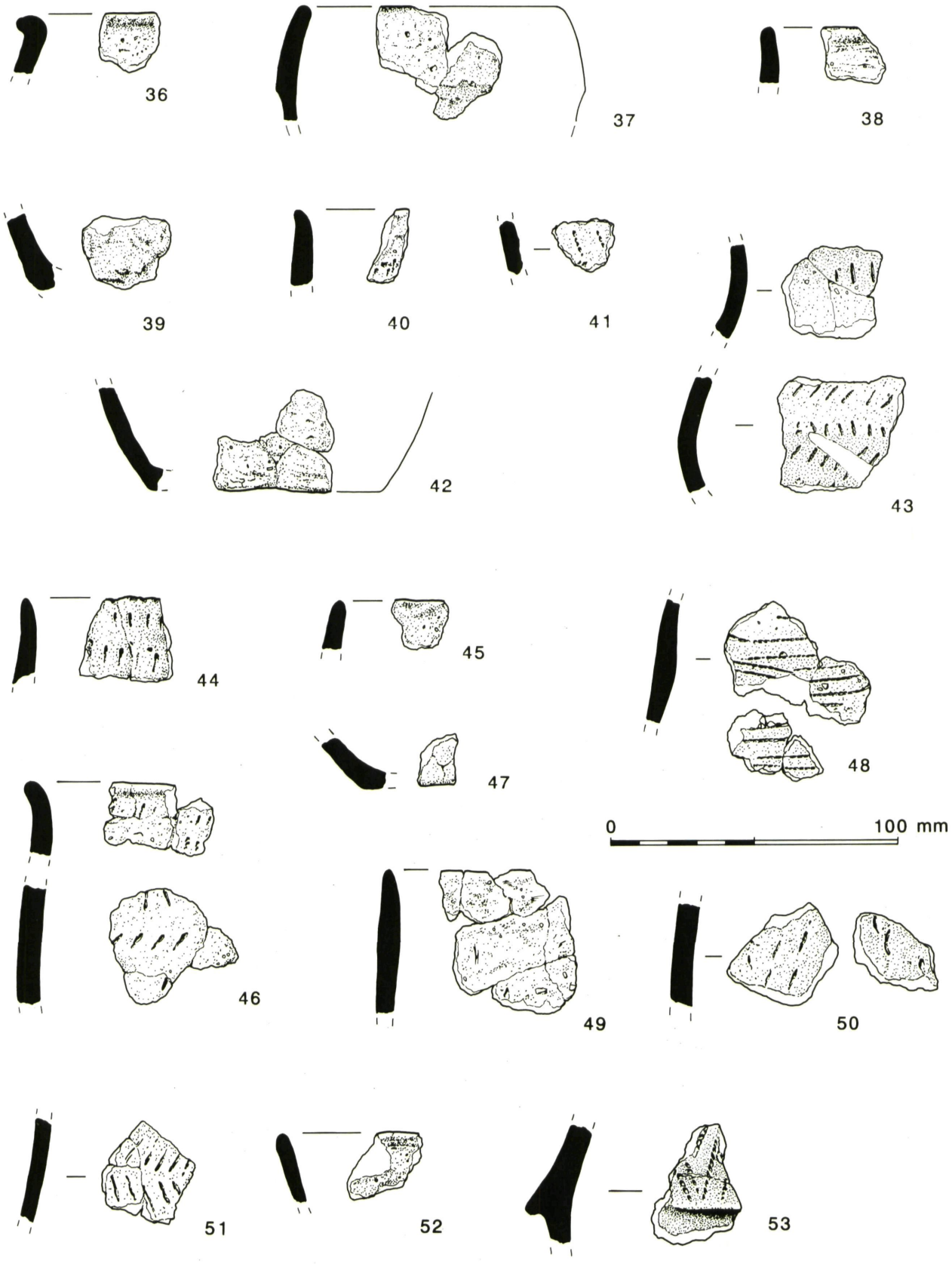


Figure 7.6 Neolithic and early Bronze Age pottery.

Table 7.6 Summary quantification (sherd number, weight) and breakdown of the Beaker assemblage from Trinity Farm by fabric and context.

Context	Fabric						Total
	C2/CVR2	G2	G3	GC2	GC3	GC + G -*	
7		4, 5 g	3, 8 g	11, 14 g		11, 9 g	29, 36 g
9	13, 10 g			19, 84 g	7, 36 g	83, 54g	122, 184 g
11	1, 1 g			6, 25 g		6, 2 g	13, 28 g
27			1, 8 g				1, 8 g
Total	14, 11 g	4, 5 g	4, 16 g	36, 123 g	7 ,36 g	100, 65 g	165, 256 g

* Sherds recovered mostly from sieving

However, none of these vessels have typologically affinities with the material from Trinity Farm. Only one funerary Beaker has affinities with this material from this region, the probable Wessex/Middle Rhine vessel from Sale's Lot, Withington (Darvill 1987, 86).

Early Bronze Age (excluding Beaker)

Early Bronze Age pottery was recovered from only one of the excavated sites (see Table 7.5), a single grog-tempered sherd from the fill of a ring ditch of an early Bronze Age barrow at St Augustine's Farm South. It probably derives from an early Bronze Age urn and is likely to be broadly contemporary with the construction and primary use of the monument. In addition, a rim fragment from a Collared Urn was found in the evaluation (1991.545, context 6, subsoil). The rim is grog-tempered and decorated with lines of impressed twisted cord (Fig. 7.6.53).

Longworth lists only seven Collared Urns from Gloucestershire, two of which are of uncertain provenance (1984, 199–200). The rim fragment is too small to place in either his Primary or Secondary series. However, the lack of an internal moulding and the concave collar form seem to favour Longworth's Secondary Series (1984, 5). Enough of the collar survives to suggest that the vessel was decorated with a zig-zag motif created from impressed twisted cord. This motif is not restricted to either Series and has no direct parallel within the small group of urns from Gloucestershire. However, more distant parallels can be found in the Oxfordshire part of the Upper Thames Valley, for example at Barrow Hills, Radley (Cleal 1999). In the Upper Thames region Collared Urns are almost exclusively from funerary deposits and, therefore, the sherd from context 6 (subsoil) at St Augustine's Farm South is more likely to derive from a disturbed funerary context.

?Middle Bronze Age

Possible middle Bronze Age pottery (133 sherds, 235 g) was recovered from six of the excavated sites (see Table 7.5). All of this material consisted of plain shell-tempered body sherds that, due to leaching, were in a generally poor condition. In the absence of featured sherds some doubt must remain regarding the attribution of the material to this period. Shell-tempered fabrics were also used in the Iron Age and it is certainly possible that at least some of this material could be of this date instead. Where possible, sherd thickness was measured and found to range between 5–12 mm. In general, the wall-thickness of middle Bronze Age pottery may be expected to fall within the range 10–20 mm. In contrast to these assemblages we might expect Iron Age pottery to include a significant proportion of thinner-walled vessels. Whilst this is a somewhat crude approach the suggestion is that the relatively low size range pottery would favour an Iron Age rather than a middle Bronze Age date for at least some of the material. In addition, the pottery from the evaluation at St Augustine's Farm South (Timby 1991) was re-examined and found to be of the same indeterminate later prehistoric character; again, wall thickness was measured and found not to exceed 10 mm.

Middle Bronze Age pottery is uncommon in this region and has only been found at a relatively small number of sites (Darvill 1987). Recent excavations at Shorncote have produced important assemblages from both funerary and domestic sites (Hearne and Heaton 1994; Barclay and Glass 1995), while an important group of Bucket Urns was recovered from a pit deposit at Roughground Farm, Lechlade (Hingley 1993). Whilst the material could be redeposited middle Bronze Age, the radiocarbon date of 409–193 cal BC (NZA 8766. R24151/13, 229±59BP, 95% confidence) could support an Iron Age date. This type of pottery can be found in association with early field systems and land divisions and, therefore, the association of possible middle Bronze Age sherds with the segmented ditches at St Augustine's Lane and St Augustine's Farm South is of significance.

Late Bronze Age

Late Bronze Age pottery was recovered from Court Farm. A single sherd manufactured in a flint, sand and grog tempered fabric is thought to be of this date, rather than early or middle Bronze Age. It is assumed to be residual within a later feature.

Indeterminate prehistoric

A total of 41 sherds (46 g) from Birdlip, St Augustine's Farm, Court Farm and Cirencester Road watching brief

could not be assigned to a particular ceramic style. Most of this material was small and abraded, although mainly though to be handmade and, therefore, probably prehistoric.

Conclusion

The total assemblage recovered is of some importance despite its relatively small size. Very little earlier prehistoric pottery has been recovered from non-funerary sites in this region, perhaps because of the ephemeral nature of the settlement record. However, this type of project with its off-site approach provides an opportunity to recover such traces. The discovery of both earlier and later Neolithic pottery within pit deposits at Duntisbourne Grove provides evidence for the wider domestic landscape during this period. The recovery of Beaker pottery from four of the sites, with a notable concentration in the vicinity of Preston is of interest, especially given the paucity of Beaker associated sites in this area and in the region generally. Similarly, the traces of later Bronze Age material from a small number of sites and in one case in association with a system of land boundaries at St Augustine's Farm South is of importance for studying the wider chronological developments within the landscape.

Catalogue of illustrated sherds *(Fig. 7.6)*

Duntisbourne Grove

36 Earlier Neolithic. Rim and four body sherds. Fabric: LS2/EN. Colour: ext. brown: core black : int. brown. Condition: average-worn. Ctx 63.

37 Later Neolithic Peterborough Ware ?Fengate sub-style. Two refitting rim sherds. Fabric: VAP2/LN. Colour: ext. reddish-brown: core and int. yellowish-brown. Condition: worn. Ctx 113.

Trinity Farm

38 Beaker. Rim. Fabric: GC2/EBA. Colour: ext. yellowish-brown: core yellowish-brown: int. yellowish-brown. Condition: average. Ctx 7.

39 Beaker. Base angle. Fabric: GC2/EBA. Colour: ext. Yellowish-brown: core yellowish-brown: int. yellowish-brown. Condition: average. Ctx 7.

40 Beaker. Rim. Fabric GC2/EBA. Colour: ext. yellowish-brown: core yellowish-brown: int. yellowish-brown. Condition: average. Ctx 7.

41 Beaker. Decorated body sherd with comb impressions. Fabric G2/EBA. Colour: ext. reddish-brown: core black: int. yellowish-brown. Condition average. Ctx 7.

42 Beaker. Three base sherds. Fabric GC3/EBA. Colour: ext. greyish brown: core and int. black. Condition average. Ctx 7.

43 Beaker. Neck, belly and base sherds with finger-nail decoration (10 sherds). Fabric GC2/EBA. Colour: ext. reddish-brown: core black : int. blackish brown. Condition average-worn. Ctx 9.

44 Beaker. Rim sherd with impressed finger-tip decoration possibly from the same vessel as 43. Fabric GC2/EBA. Colour: ext. reddish-brown: core black: int. brown. Condition average. Ctx 9.

45 Beaker. Rim sherd. Fabric GC3/EBA. Colour: ext. yellowish-brown: core black: int. yellowish-brown. Condition average. Ctx 9.

46 Beaker. Finger-nail decorated rim and body sherd possibly the same as 45. Fabric GC3/EBA. Colour: ext. yellowish-brown: core black: int.yellowish-brown. Condition average. Ctx 9.

47 Beaker. Base sherd (3 g). Fabric: GC2/EBA. Colour: ext. reddish-brown: core black: int. yellowish-brown. Condition: average. Ctx 9.

48 Beaker. Four body sherds with all-over comb decoration. Fabric: GC2/EBA. Colour: ext. reddish-brown: core black: int. black. Condition: average. Ctx 9.

49 ?Beaker. Two rim sherds with possible impressed finger-nail decoration (15 g). Fabric: GC3/EBA. Colour: ext. yellowish-brown: core and int. grey. Condition: worn. Ctx 9.

50 Beaker. Two body sherds with impressed finger-nail decoration. Fabric GC2/EBA. Colour: ext. reddish-brown: core black grey: int. yellowish-brown. Condition average. Ctx 11.

51 Beaker. Body sherd with incised lines possibly made with a finger-nail to form a herring bone pattern. Fabric: GC2/EBA. Colour: ext. reddish-brown: core black: int. yellowish-brown. Condition: average. Ctx 11.

52 Beaker. Rim sherd. Fabric: GC2/EBA. Colour: ext. yellowish-brown: core black: int. yellowish-brown. Condition: average. Ctx 11.

St Augustine's Farm South

53 Collared Urn. Fragment from lower half of collar with impressed twisted cord decoration that appears to form part of a zig-zag motif. Fabric grog. Colour ext. reddish brown core and int. black. Condition fair to worn. Evaluation Site R, ring ditch, ctx 6, subsoil.

LATER PREHISTORIC AND ROMAN POTTERY

By Jane Timby

Introduction

Work along the route has resulted in the recovery of several new collections of pottery dating to the Iron Age and Roman periods. In total, 16 sites have yielded pottery of later prehistoric date and 27 sites have produced Roman pottery. The quantities range from just single sherds through to 151 kg for Birdlip Quarry. Of the 30 or so sites, eight have been selected for more detailed summaries or reports: one site of early-mid Iron Age date (Preston Enclosure), two middle Iron Age sites (Ermin Farm, Highgate House), and three sites dating to the 1st century AD (Duntis-

bourne Grove, Middle Duntisbourne, Court Farm) considerably augmenting the existing regional pottery database. In addition there are two Roman sites (Birdlip Quarry, Weavers Bridge).

Iron Age and Roman fabric descriptions

The following fabric descriptions represent a single series for the Iron Age and Roman sites with the exception of the material from Birdlip Quarry which is described separately and reference to this can be made for some fabrics. Each fabric description is followed by the forms, date and a list of the sites and contexts from which it has been recorded.

Iron Age

Shell-tempered

H1 Generally with a brown or brownish-orange exterior and a black, brown or dark grey interior surface with a grey-brown core. The paste contains a sparse frequency of coarse fossil shell fragments up to 6–8 mm in size, and variable quantities of finer limestone and fossiliferous fragments.

Forms: Slack-sided or vertical-walled jars with simple rims (Ermin Farm, ctxs 5, 57, 83, Fig. 7.7.60); barrel jars, or globular-bodied jars with thickened rim (Ermin Farm, ctx 4, Fig. 7.7.58–59, 62).

Date: EIA-MIA

Sites: Ermin Farm, Highgate House, Preston Enclosure

H2 A brown or grey fabric usually with a grey core containing a common frequency of crushed fossil shell up to 3 mm across. The fabric is moderately hard with a laminar fracture. Variable amounts of other calcareous matter is often present including fragments of bryozoa, but the shell is dominant creating a striated effect in fracture.

Forms: Beaded rim jar (Court Farm, ctx 333, Fig. 7.11.120).

Date: MIA

Sites: Ermin Farm, Highgate House, Preston Enclosure, Court Farm, Duntisbourne Grove

Limestone-tempered

L1 A black ware containing a scatter of fossil shell/limestone up to 1 mm in size.

Forms: Simple undifferentiated rim jars with vertical walls (Court Farm, ctx 319).

Date: MIA

Sites: Court Farm, Ermin Farm, Highgate House, Preston Enclosure, Middle Duntisbourne, Duntisbourne Grove.

L2 Brown surfaces with a mid-grey core. The paste contains a moderate to common frequency of fine limestone including discrete ooliths and fossil shell fragments. Rare inclusions up to 3 mm but generally finer. There is quite a variety in texture between vessels.

Forms: A large jar with an expanded rim in a coarser version of this fabric came from ditch 59 at Preston Enclosure (Fig. 7.7.54). Vessels in slightly finer fabric include slightly curved wall jars with simple undifferentiated rims (eg. Preston Enclosure, Fig. 7.7. 55–56). Globular bodied jars with slightly beaded rims (Court Farm, ctx 436; Highgate House, ctx 210, Fig 7.8.64). Some sherds show a smoothed finish whilst others are left matt.

Date range: EIA-MIA

Sites: Court Farm, Ermin Farm, Highgate House, Preston Enclosure, Middle Duntisbourne

L3(= MALVL2)

L4 A brown or black fabric predominantly tempered with a common to moderate density of crushed, angular crystalline calcite, fragments mainly less than 2 mm, occasionally larger.

Forms: No featured sherds, but mainly handmade jars.

Sites: Court Farm, Preston Enclosure, Duntisbourne Grove

L5 A brown ware containing a sparse/common/moderate frequency of fine limestone, discrete oolites, oolitic conglomerates, and fossil fragments up to 2.5 mm across. Some pieces are very friable as a result of a high density of temper.

Forms: A slightly beaded rim jar in a thin-walled fineware version of the fabric (Preston Enclosure, ctx 8, Fig. 7.7.57), bevelled rim jar (Court Farm, ctx 333, Fig. 7.11.120; Duntisbourne Grove, ditch group 9, Fig. 7.10.110).

Date: ?MIA-LIA

Sites: Court Farm, Ermin Farm, Preston Enclosure, Middle Duntisbourne, Duntisbourne Grove

L6 A reddish-brown ware with a mid-brown core. The paste contains a moderate to common frequency of fine limestone, shell, calcite and oolites. Particularly distinctive are fragments of bryozoa.

Forms: Simple undifferentiated jars with vertical sides (Court Farm, ctx 235, Fig. 7.11.119).

Date: MIA

Sites: Court Farm

L00 Variants of Jurassic limestone-tempered wares but not distinctive or frequent enough to warrant further classification.

Sites: Highgate House, Duntisbourne Grove

Limestone and iron

LI A reddish brown ware with a dark brown core. The sandy texture shows at x20 magnification a sparse scatter of fossil shell and limestone fragments up to 3 mm accompanied by a scatter of rounded grains of quartz sand, less than 1 mm. Most distinctive, however,

is a scatter of dark reddish-brown shiny, rounded or oval iron oolites 1–2 mm in size.

Forms: Flat base sherd from a jar (Ermin Farm, ctx 4).

Date: ?MIA

Sites: Ermin Farm, Highgate House

LSI A fabric showing a red-brown exterior and outer core and a black interior and inner core. The sandy texture contains sparse limestone/fossil shell up to 3 mm in size with a moderate frequency of rounded quartz (more than fabric LI). Some of the sand grains have fallen out from the surfaces leaving pock marks. Also present is a scatter of sub-angular to rounded, matt reddish-brown iron 1-2 mm across and finer.

Forms: No featured sherds.

Date: ?MIA

Sites: Ermin Farm, Highgate House

Sand and limestone

SL1 A hard reddish-brown ware with a fine sandy texture and a black core. At x20 a sparse scatter of rounded quartz grains are visible along with a few fragments of fossil shell and limestone up to 4 mm across.

Forms: Bodysherds with incised line decoration (Court Farm, ctx 223 and 242, Fig. 7.11.117–8).

Date: EIA

Sites: Court Farm, Highgate House

SL2 Other sand and limestone-tempered wares occasionally with distinctive iron grains.

Forms: Handmade and wheelmade everted rim jars (Court Farm, ctx 263).

Date: LIA

Sites: Court Farm, Highgate House

Sandy wares

S1 A black or brownish-black ware with a common to dense frequency of sub-angular, well-sorted, fine grained quartz sand, sparse iron and occasional grey rounded argillaceous inclusions (?clay pellets) up to 3 mm in size.

Forms: Unfeatured sherds, probably from bowls/jars. Saucepan pot (Ermin Farm, ctx 57, Fig. 7.7.61).

Date: ?MIA - ?LIA

Sites: Ermin Farm, Highgate House, Preston Enclosure, Court Farm

S2 A mid-brown ware with a reddish-orange core. The fabric contains a common to high frequency of fine quartz sand and fine mica.

Form: No featured sherds.
Date: ?MIA

Site: Preston Enclosure

SI A fine to medium sandy ware with distinctive grains of red-brown iron present.

Sites: Highgate House

Grog-tempered

GI Greyish-brown, slightly vesicular fabric containing fine grog, dark brown argillaceous fragments, red-brown iron and ?fine limestone/shell.

Form: Jar/bowl with an externally ribbed rim (Highgate House, ctx 229, Fig. 7.8.68).

Date: ?LIA

Sites: Highgate House

Flint-tempered

FL A black ware with a reddish-brown core containing a sparse to moderate frequency of angular calcined flint up to 2 mm in size. Sparse grains of red-brown iron are also visible in the fine sandy matrix.

Form: Handmade everted rim jar (Court Farm, ctx 288, Fig. 7.11.123).

Date: ?LIA

Site: Court Farm

Malvernian rock-tempered

MALVREA: GL TF18. Peacock (1968) fabric group A.

Form: No featured sherds.

Date: MIA-Roman

Site: Highgate House

Roman

Cross references are given where applicable to the Gloucester City Unit fabric series (GL) (cf Ireland 1983) and the Cirencester (CIR) fabric series (Rigby 1982). The codes are based on those developed for the national Roman fabric reference collection (Tomber and Dore 1996, 368–82).

Native wares

MALVL1: Malvernian limestone-tempered (GL TF33), Peacock (1968) group B1.

Forms: Handmade jars usually with everted rims and a burnished finish (Court Farm, ctx 325, Fig. 7.11.122; Highgate House, ctx 211, Fig. 7.8.66; Duntisbourne Grove, ctxs 215 and 83, Fig. 7.10.108-9), simple vertical undifferentiated rims (Court Farm, ctx 325; Highgate House, ctx 211), globular-bodied jar with short vertical rim (Highgate House, ctx 109, Fig. 7.8.63; Middle Duntisbourne, ctx 41 Fig. 7.9.88) and beaded-rim jars (Duntisbourne Grove, ctxs 83 and 9, Fig. 7.10.110). A sherd from Highgate House, ctx 211 (Fig. 7.8.67) is decorated with horizontal parallel tooled lines.

Date: M-LIA/early Roman

Sites: Court Farm, Highgate House, Middle Duntisbourne, Duntisbourne Grove

MALVL2: Malvernian limestone-tempered ware (GL TF216) (Spencer 1983).

Form: Large storage jars with hammer-head rims (Duntisbourne Grove, ctx 181).

Date: 1st century BC-1st century AD

Sites: Middle Duntisbourne, Duntisbourne Grove

GROG: Grog-tempered ware (GL TF2A–C).

Forms: Handmade and wheelmade everted rim jars, (eg. Court Farm, ctxs 110 and 363, platters (eg. Middle Duntisbourne, ctx 208, Fig. 7.9.91).

Date: 1st century AD

Sites: Court Farm, Middle Duntisbourne, Duntisbourne Grove

Local wares

SVWOX2: Severn Valley ware (GL TF11B) (Webster 1976).

Forms: Carinated bowl/cup (Middle Duntisbourne, ctx 288), jars (Weavers Bridge).

Sites: Court Farm, Preston Enclosure, Weavers Bridge, Middle Duntisbourne, Duntisbourne Grove, Birdlip Quarry

SVWEA1: Early SVW variant (grog).
A moderately soft, smooth soapy fabric containing sparse organic material, fine rounded to sub-angular grog/clay pellets, iron and very rarely, limestone fragments.

Forms: Mainly handmade but some wheel-turned/wheelmade vessels, occasionally with a burnished finish. Carinated cups/bowls and necked bowls (Duntisbourne Grove, ctxs 64, 50 and 9, Fig. 7.10. 111–113).

Sites: Court Farm, Middle Duntisbourne, Duntisbourne Grove

SVWEA2: Early Severn Valley ware (GL TF11D) (Timby 1990).

Forms: Wheelmade carinated cups/bowls (Court Farm, ctx 287; Duntisbourne Grove, ctx 43); bevelled rim beaker (Duntisbourne Grove, ctx 9, Fig. 7.10.114); necked bowls (eg. Duntisbourne Grove, ctx 73).

Sites: Court Farm, Middle Duntisbourne, Duntisbourne Grove

SVWEA3: Early Severn Valley ware (charcoal tempered) (GL TF17).

Forms: Carinated bowls (Middle Duntisbourne ctx 12), wheelmade necked bowl (Duntisbourne Grove, ctx 9, Fig. 7.10.115).

Sites: Middle Duntisbourne, Duntisbourne Grove

WMBBW: wheelmade black burnished ware (GL TF201; CIR TF5) (Rigby 1982, 152).

Forms: Wheelmade vessels including small jars with beaded or everted rims (Court Farm, ctxs 10, 288 and 486), bowls (Court Farm, ctx 10, Fig.7.11.124–125).

Date: Neronian-mid 2nd century

Sites: Court Farm, Middle Duntisbourne, Duntisbourne Grove

SWOX- South-west oxidised ware (GL TF15).

Sites: Court Farm, Birdlip Quarry

Foreign imports

Arretine (probably Lyons) (LYOSA).

Form: Cup, Haltern type 8 (Middle Duntisbourne, ctx 1, Fig. 7.9.69).

Site: Middle Duntisbourne

LGFSA: South Gaulish samian (La Graufesenque)

Forms: Drag 18 (Court Farm, ctx 176); ?24/5 (Court Farm, ctx 259); 27 (Duntisbourne Grove, ctx 15), 29 (Duntisbourne Grove, ctx 162, Fig. 7.10.96).

Sites: Court Farm, Preston Enclosure, Middle Duntisbourne, Duntisbourne Grove

LEZSA: Lezoux, Central Gaulish samian

Form: Drag 27 (early type) (Middle Duntisbourne ctx 154, Fig.7.9.71).

Site: Middle Duntisbourne

LMVSA/LEZSA: Central Gaulish samian.

Site: Weavers Bridge

GABTN1: Gallia Belgica *terra nigra*

Forms: Cups Cam type 56 (Middle Duntisbourne, ctxs 289, 56, 57, Fig.7.9.77); platters Cam type 12 (Middle Duntisbourne, ctx 7/246, Fig.7.9.78), Cam 12/13 (Middle Duntisbourne, ctx 210) and Cam 8 (Duntisbourne Grove, ctx 49, Fig. 7.10.98).

GABTR1A: Gallia Belgica *terra rubra* 1A

Form: Platter.

Site: Duntisbourne Grove, ctx 118.
GABTR3: Gallia Belgica *terra rubra* 3

Forms: Girth beaker (Middle Duntisbourne, ctx 55, Fig. 7.9.73) with combed decoration (Middle Duntisbourne, ctx 4).

NOGWH: North Gaulish fine whiteware

Form: Butt beaker, Cam. type 113 (Middle Duntisbourne, ctx 69, Fig. 7.9.79).

Sites: Middle Duntisbourne, Duntisbourne Grove

CGWSOX: ?Central Gaulish white-slipped oxidised ware (see petrological report by Williams below).

Form: ?Flagon (Duntisbourne Grove, ctxs 69 and 77).

MOSBS: Moselkeramick black-slip red ware (GL TF 12J)

Sites: Weavers Bridge, Birdlip Quarry

FWBLMI: Fine, black micaceous ware with no obvious inclusions. Probably a Gaulish import from its early date.

Forms: Small jar/beaker (Duntisbourne Grove, ctx 25, Fig. 7.10.100; Middle Duntisbourne, ctx 39, not illustrated).

Site: Middle Duntisbourne, Duntisbourne Grove

FWBUFF: Thin-walled buff, fine sandy ware. Probably beaker. ?North Gaulish.

Site: Middle Duntisbourne, ditch group 4, cat. 82, not illustrated.

FWOX/FWSLOX: Oxidised fine sandy wares/slipped oxidised fine sandy ware. Source unknown.

Site: Middle Duntisbourne.

Amphorae

BATAM1: Baetican amphorae (early). Cam 185A/ Haltern 70 (Peacock and Williams 1986, class 15). (for petrological report see Williams below).

Sites: Middle Duntisbourne, Duntisbourne Grove

BATAM2: Baetican amphorae, Dressel 20 (Peacock and Williams 1986, class 25) (GL TF 10A).

Sites: Court Farm, Weavers Bridge

CAMAM1: Campanian black sand amphora, Dressel 2–4, (Peacock and Williams 1986, Class 10).

Site: Duntisbourne Grove

CAMAM2: Campanian volcanic amphora, Dressel 2–4, (Peacock and Williams 1986, Class 10).

Site: Middle Duntisbourne

Regional imports

SAVGT: Savernake ware (GL/CIR TF6) (Annable 1962; Swan 1975).

Forms: Beaded rim jars (Middle Duntisbourne, ctx 218) and large storage jars (Duntisbourne Grove, ctx 99, Fig. 7.10.116 and Middle Duntisbourne, ctx 218, Fig. 7.9.87), the latter with lightly incised diagonal line decoration.

Date: ?mid 1st–2nd century

Sites: Court Farm, Weavers Bridge, Middle Duntisbourne, Duntisbourne Grove, Birdlip Quarry

DORBB1 - Dorset black-burnished ware (GL TF4, CIR TF74) (Gillam 1976; Holbrook and Bidwell 1991).

Forms: Jars (eg. Weavers Bridge, ctx 57, Fig. 7.12.127), flanged conical bowls (Weavers Bridge, ctx 51), grooved rim bowls (Weavers Bridge, ctx 51), straight-sided dishes (Weavers Bridge, ctx 51).

Sites: Court Farm, Weavers Bridge, Duntisbourne Grove, Birdlip Quarry

MICGW: Micaceous greyware.
Forms: Jars imitating DORBB1 forms (Weavers Bridge, ctx 57, Fig. 7.12.128).

Date: Late 2nd–4th century

Sites: Weavers Bridge, Birdlip Quarry

LNVCC: Nene Valley colour-coated ware.

Forms: Straight-sided dish (Weavers Bridge, ctx 57, Fig. 7.12.136).

Date: Later 2nd–4th century

Site: Weavers Bridge

OXFRC: Oxfordshire colour-coated wares (GL TF12A, 9X; CIR

Forms: Beaker (Weavers Bridge ctx 57, Fig. 7.12.137), mortaria, dish Young type C45 (Weavers Bridge, ctxs 57 and 71), types C47, C83 (Weavers Bridge, ctx 51).

Sites: Weavers Bridge, Birdlip Quarry.

OXFWH: Oxfordshire whitewares (GL TF13, 9A)

Forms: Mortaria (Young 1977 forms M18, M20, M22) (Weavers Bridge, ctx 57, Fig. 7.12.133–134).

Sites: Weavers Bridge, Birdlip Quarry.

PNKGT: Midlands pink grog-tempered ware (Booth and Green 1989, 77–84).

Site: Weavers Bridge, Birdlip Quarry

Coarsewares, source unknown

GREY 1 (OXFORD R10): Miscellaneous fine, reduced sandy wares, probably mainly north Wiltshire products.

Forms: Jars, everted rim beakers (Court Farm, ctx 132), everted and expanded rim jars (Weavers Bridge, ctx 57).

Sites: Preston Enclosure, Court Farm, Weavers Bridge, Birdlip Quarry

GREY 2 (OXFORD R20): Miscellaneous medium grade, reduced sandy wares.

Forms: Wheelmade everted, expanded rim jars (Court Farm, ctx 132; Weavers Bridge, ctx 112), straight-sided dishes (Weavers Bridge, ctx 57), flanged bowls (Weavers Bridge, ctx 57), imitation moulded platter (Middle Duntisbourne, ctx 12).

Sites: Court Farm, Middle Duntisbourne, Birdlip Quarry

LOCGW3: A medium to fine, hard, grey sandy ware distinguished by a scatter of dark grey argillaceous rounded inclusions.

Forms: Wheelmade jars.

Sites: Court Farm, Birdlip Quarry

LOCGW8: A hard, black medium grade sandy ware (ie. macroscopically visible quartz grains) with a distinctive red core.

Date: ?LIA/early Roman

Sites: Court Farm

LOCOX1 (OXFORD 010): Miscellaneous fine, oxidised sandy wares.

Forms: Ring-necked flagon (Court Farm, Fig. 7.11.126),

rouletted sherds from a butt beaker (Court Farm, ctx 10).

Sites: Court Farm, Weavers Bridge, Duntisbourne Grove

LOCOX2 (OXFORD 015): Medium sandy ware.

Form: Rimsherd imitating imported cup form Cam. 56 (Middle Duntisbourne ctx 56).

Date: Pre-Flavian

Site: Middle Duntisbourne

Preston Enclosure

An assemblage of 477 sherds weighing 1988 g dating to the Iron Age and Roman periods was recovered from 26 contexts. Most of the sherds appear to date to the early-middle Iron Age with just 23 very small abraded sherds of Roman date.

Most of the later prehistoric sherds are in shell or limestone-tempered fabrics typical of the middle Iron Age. Although featured sherds are sparse, several pieces showed elements of form and/or decoration suggestive of an early Iron Age element to the site, for example, the earliest cut of the external gully 175, fill 176, produced both a carinated bodysherd, possibly a shouldered jar, in a coarse shell-tempered ware (fabric H1) and a sherd in a similar fabric with incised line decoration.

The main enclosure (1), comprising ditches 3, 59, 66, and 86 produced a total of 88 sherds, weighing 880 g. The group is dominated by limestone-tempered sherds, mainly fabric L2 with small amounts of L4 and L5 (Table 7.7). The pieces are relatively well-preserved with an average size of 10 g. Featured sherds were limited to a large, expanded rim jar (Fig. 7.7.54), in a limestone and shelly fabric (L2), from ditch 59, fill 64/5. Similar vessels were present in the early-middle Iron Age assemblage from Uley Bury (Saville 1983a, fig. 10). Three intrusive sherds in the form of one scrap of samian and two tiny pieces of Severn Valley ware were present amongst the material from ditch 3, fill 6.

Pottery from the internal features was sparse, the only fills to produce more than 10 sherds being the two rectangular pits 130 and 283 (Table 7.7). Again fabric L2 was dominant along with sherds of L5 in 130. Pit 283 was the only feature to produce the sandy fabric S2. The sherds from the latter two pits were particularly small, averaging around 2 g. Of the internal gullies, only gully 145, cuts 32 and 92, produced pottery, a total of 25 sherds of mainly fabric L2 with some fabric H2, some of the latter showing traces of internal carbonised residue.

One of the largest groups from the site came from tree-throw hole or pit 14 with 229 sherds although many of these were very fragmented, the average sherd size for the group being just 3 g. The fabrics are again dominated by fabric L2 although a greater range of other wares are present in the group, notably the very coarse shell-tempered ware H1 and a sandy ware (fabric S1) (see Table 7.7). Most of the material can be assigned to the middle Iron Age where rims are either plain undifferentiated (Fig. 7.7.55–56) or slightly beaded (Fig. 7.7.57).

The only pit from outside the enclosure to contain pottery was 280, which produced 65 sherds. Whilst fabric L2 was again dominant a significant number of coarser shell-tempered wares were present which might argue for a slightly earlier date. Of the four superimposed gullies to the west of the main enclosure, cut 175 (176) produced 10 sherds including the two with early Iron Age affinities mentioned above, all in coarse shell-tempered wares (H1). If the gully post-dates the enclosure all this material may be redeposited.

A few sherds of Roman date were recovered from surface cleaning, plough furrows and context 160, which also contained later material. The sherds are small and abraded, commensurate with material that has been in the ploughsoil for some time, and are not sufficiently common to indicate Roman occupation in the very immediate vicinity.

Catalogue of illustrated sherds *(Fig. 7.7)*

54 Large vessel with an expanded rim, red-brown in colour with a dark grey inner core. The paste contains moderate fossil shell and limestone, including discrete ooliths and bryozoa (fabric L2). Some fragments are very coarse, up to 18 mm in size. Ditch 59, fill 64/5.

55 Rim and bodysherd from a slightly curved wall jar with a simple undifferentiated rim. Dark grey mottled with red-brown patches with a red-brown core. The paste contains moderate shell and limestone, fragments up to 4 mm and finer. Fabric L2. Tree-throw hole/pit 14, fill 8.

56 Rim similar to 55. Dark grey-brown in colour with slightly denser shell and limestone. Fabric L2. Tree-throw hole/pit 14, fill 8.

57 Slightly beaded rim jar in a mid-brown, thin-walled, very friable, fabric containing common oolitic limestone. Fabric L5. Tree-throw hole/pit 14, fill 8.

Ermin Farm

An assemblage of 236 sherds of Iron Age pottery (1391 g) was recovered from ten contexts. The sherds were relatively poorly preserved with an average sherd weight of 6 g. The group appears to date to the middle Iron Age period. The fabrics were restricted to fossil shell (H1, H2), limestone (L1, L2, L5, LI) and sandy wares (S1). Looking at the assemblage as a whole (cf. Table 7.8), the shelly wares account for 21% by count (48% by weight), the limestone fabrics for 17% (21.5% by weight) and the sandy wares for 37% (26%). The remainder comprised unidentifiable crumbs.

Approximately one third of the pottery, some 80 sherds, came from the fill of ditch 6 with further material from ditches 10 and 54 which form part of the same enclosure (structure 49). Additional groups were recovered from the adjacent enclosure ditches 63 and 68 (structure 48), from the antenna ditch 85

Table 7.7 Preston Enclosure, distribution of fabrics in main features by sherd count and weight.

	Enclosure 1		Gully 14		Tree-throw hole 14		Pit 130		Pit 280		Pit 283	
FABRICS	no	wt	no	wt	no	wt	no	wt	no	wt	no	wt
H1	1	2			10	80			14	51		
H2	14	71	10	27			1	1			3	20
L1					6	28						
L2	60	788	15	70	94	381	11	56	50	58	9	10
L4	1	3										
L5	1	6			29	85	5	34	1	4		
S1					1	4						
S2											3	4
SVWOX	2	3										
Samian	1	2										
Unclass	7	2			88	60	1	12			4	3
E PREH	1	2			1	1						
TOTAL	88	880	25	97	229	639	18	103	65	113	19	37

and pit 59. Table 7.8 summarises the fabrics from each of these groups.

The pottery from enclosure 49 includes a number of sherds from coarseware jars with several sherds from a single vessel in fabric H1 (Fig. 7.7.58). A slightly more slack-sided vessel with a thickened rim (Fig. 7.7.59) also came from this ditch.

The pottery from enclosure 48 also includes a number of coarseware jars with simple rims (eg. Fig. 7.7.60) but of particular note are several sherds from a sandy vertical-sided vessel in the style of a saucepan pot from fill 57. The upper zone is decorated with simple incised curvilinear decoration in the form of arcs (Fig. 7.7.61). A further sherd from the same or a similar vessel and showing part of a curvilinear line came from 64, enclosure 49. The saucepan pot tradition is considered to cover a wide territory during the 4th-2nd centuries BC (Cunliffe 1991, 79), although the profile of this vessel is more typical of the Wessex region (cf. vessels from the Yarnbury-Highfield or St Catharine's Hill-Worthy Down style (Cunliffe 1991, figs A:15-6)). In fact Preston lies in a blank zone on the simplified distribution map of pottery styles in southern Britain (Cunliffe 1991, fig. 4.6) falling between the Croft Ambrey-Bredon Hill style to the north-west and the less coherent Southcote-Blewburton style to the south. The Preston example shows little similarity typologically with vessels from the Herefordshire-Cotswold region (Croft Ambrey-Bredon Hill style) which have slightly more curved profiles, stamped decoration and a distinct fabric reflecting their production sources in the Malvern hills.

Antennae ditch 85 produced a group of 18 sherds, mainly coarse shell or sandy wares with an absence of limestone-tempered ware. Pit 59 contained just four bodysherds in fabric L2.

A comparison of the assemblages between enclosures 48 and 49 do show some differences in terms of overall composition. Enclosure 49 has a higher proportion of limestone-tempered wares and less sandy ware, whereas enclosure 48 has negligible limestone-tempered ware and a higher proportion of sandy ware. Since most of the latter derives from a single vessel the figures may not have much significance and a larger sample may show a similar range between the two enclosures.

Catalogue of illustrated sherds (Fig. 7.7)

58 Rim, and joining bodysherds and a base (not directly joined) from a globular-sided simple rim jar. A dark brown fabric with a pale brown interior containing sparse coarse, fossil shell and other fragments of limestone detritus (fabric H1). Structure 49, ditch 6, (5).

59 Slightly slack-sided jar in a matt red-brown to brown fabric with a grey inner core. The fabric contains sparse, coarse, fossil shell and finer lime-stone/fossil detritus (fabric H1). Structure 49, ditch 6, (4).

60 A simple rim jar in a brownish-black ware with sparse coarse fossil shell in a sandy matrix (fabric H1). The interior surface has traces of blackened residue. Enclosure 48, ditch 63, (57).

61 Several fragmentary sherds from a saucepan pot with a slightly beaded rim marked with a tooled line just below the outer rim and incised curvilinear decoration. Black in colour with a burnished finish. The paste contains dense, fine, sand with occasional rounded argillaceous inclusions up to 3 mm in size (fabric S1). Enclosure 48, ditch 63, (57).

62 A simple rim probably from a more globular-bodied jar in a dark brown ware with a darker core containing sparse, coarse shell and mixed limestone/fossil detritus (fabric H1). Ditch 85, (83).

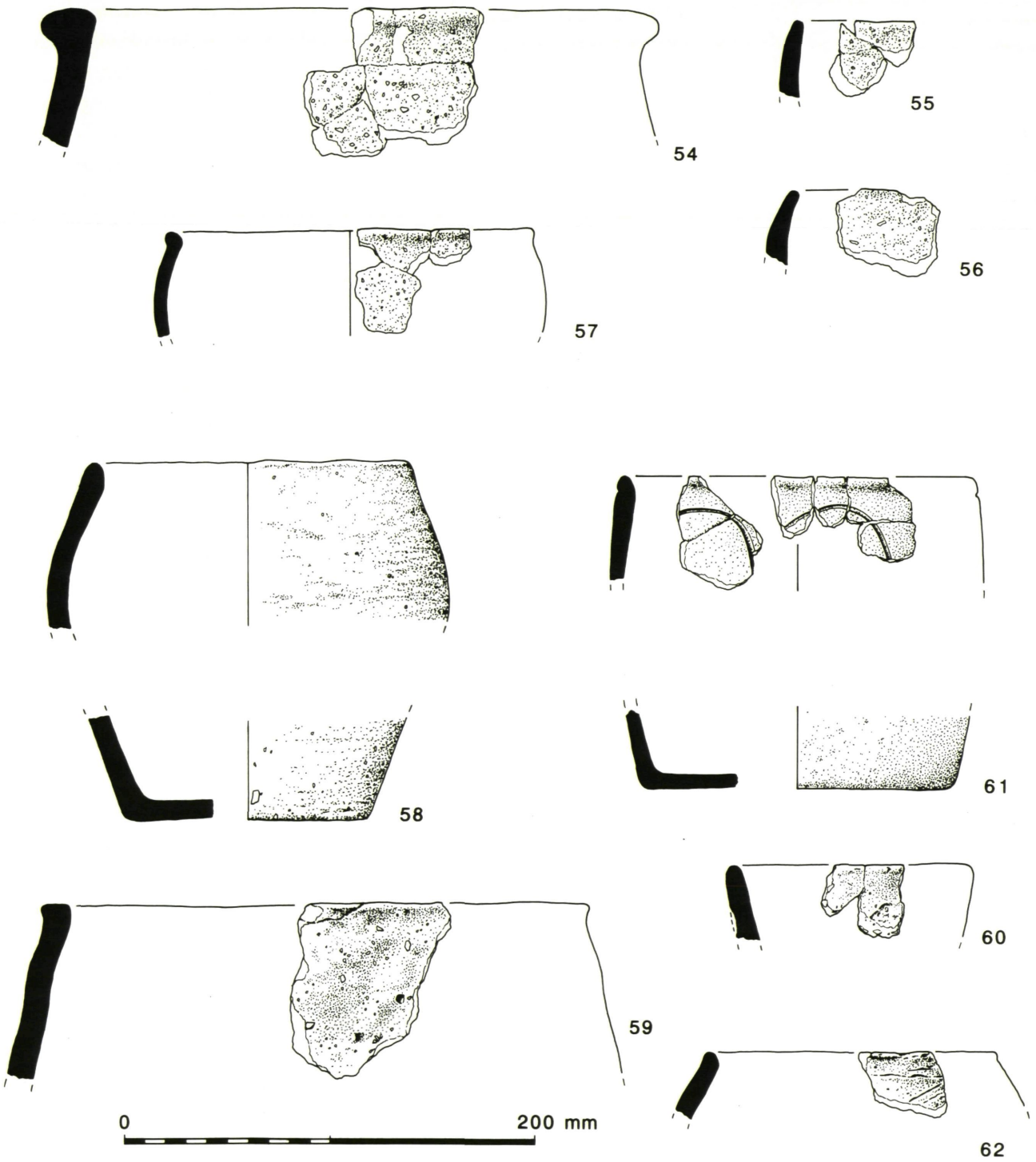


Figure 7.7 Pottery from Preston Enclosure and Ermin Farm.

Highgate House

A small assemblage of 293 sherds (1132 g) from 25 individual contexts was recovered. The pottery mainly dates to the later prehistoric period, in particular the mid-late Iron Age, with just two or three Roman sherds. The material was generally in poor condition with particularly small fragmentary sherds, the average weight being just 2.3 g. Featured sherds were rare and thus close dating is based on the fabric composition. The majority of the fabrics were fossil shell and/or limestone-tempered. Two main calcareous wares could be distinguished, those with Jurassic limestone, and therefore, of likely Cotswold origin (fabrics L2, LS, LI, LSI), and those with inclusions more typical of the Palaeozoic outcrops and

Table 7.8 Ermin Farm, distribution of fabrics by sherd count and weight across main features.

	Structure 49		Structure 48		Ditch 85		Pit 59	
FABRIC	No	wt	no	wt	no	wt	no	wt
H1	18	532	27	104	11	29		
H2	1	9						
L1	1	4						
L2	13	87					4	24
L5	20	168	3	4				
LI	1	20	0	0	2	5		
S1	4	12	85	311	5	42		
crumbs	41	40						
TOTAL	99	872	115	419	18	76	4	24

thus likely to come from the Malvern area (MALVL1). Decorated Malvernian limestone-tempered wares as defined by Peacock (1968) probably date from the 3rd-2nd century BC, the plain burnished wares typified by much of the material from Highgate House having a potentially longer timespan. The presence of at least one decorated sherd suggests this site may have been acquiring a small proportion of Malvernian material in the middle Iron Age, corresponding with the perceived chronology of the shell- and limestone-tempered wares. Other fabrics present include a small amount of sandy ware (fabric S1, SI) also typical of the middle Iron Age, Malvernian rock-tempered ware (MALVREA) (Peacock 1968, group A), and grog-tempered ware. The absence of early variants of the Severn Valley industry (SVWEA1–3) and the tiny proportion of grog-tempered ware (ie. one sherd) might suggest abandonment of the site by the 1st century BC.

Pottery was recovered from three ditch sections in Trench 1, ditch 144 (cuts 103, 112 and 131), and two from Trench 2, ditch 265 (cuts 212 and 223). Table 7.9 quantifies the fabrics from these two ditches. The sections belonging to the single enclosure 144/265 all produced Malvernian limestone-tempered ware mixed with various other sherds (fabrics H1, H2, L2, LSI, SI, LI, MALVREA, GLQ and GI). Of the 213 sherds from Ditches, Malvernian limestone wares account for 59% by sherd number. Vessels include burnished Malvernian jars (Fig. 7.8.66) and a sherd decorated with horizontal parallel tooled lines (Fig. 7.8.67). A single unusual rim sherd from (229) in a grog-tempered fabric (Fig. 7.8.68) may well be late Iron Age in date, although it is not typical of the area.

Small groups of pottery were recovered from five of the six pits in Trench 1 (116, 120, 122, ?133, 142) and two pits from Trench 2 (203 and 230). Of the pit assemblages, 120, 132, and 142 all include sherds

Table 7.9 Highgate House, distribution of pottery fabrics across main features.

	Ditch 144		Ditch 265		Pits		Colluvium	
FABRIC	no	wt	no	Wt	No	wt	no	wt
H1	1	2						
H2	1	21			6	8		
L2	8	43	5	54	5	36	14	12
LI	40	178			1	8		
LSI	22	205						
L00					1	2		
LS					1	3	1	2
S1							1	2
SI	1	15						
GI			1	29				
GLQ			3	15				
MALVREA	4	14						
MALVL1	42	147	83	232	13	34	31	53
SVWOX	2	11						
MISC OXID					2	6		
UNCLASS					3	7		
TOTAL	121	636	92	330	32	104	47	69

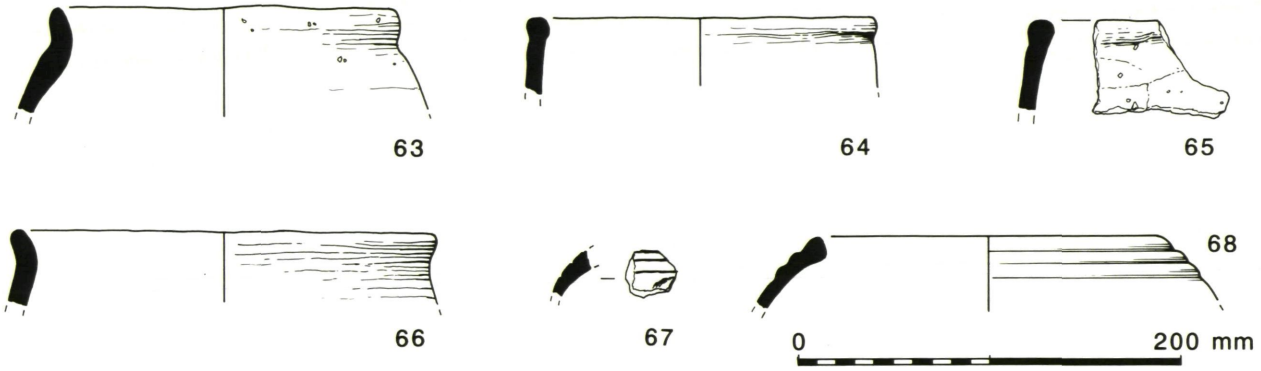


Figure 7.8 Pottery from Highgate House.

of Malvernian limestone-tempered ware and would thus appear to be contemporary with the enclosure. Pits 116 and 122 produced fabrics L2, H2 and SL only and could possibly be slightly earlier but the numbers are very low. Pits 203 and 230 both contained a single oxidised sherd each, that from 233, at less than 1 g in weight, could not be confidently assigned a date, although the piece from 203 would definitely appear to be Roman.

A single Roman sherd belonging to the Severn Valley ware tradition was recovered from the subsoil (101). In addition a few sherds came from the subsoil in Trench 1 and from the colluvial layers in Trench 3. The latter produced further mid-late Iron Age sherds and also one possible Roman or later scrap. Malvernian sherds came from 307 and 308, whilst 309 yielded sherds in fabric L2 only.

Catalogue of illustrated sherds *(Fig. 7.8)*

63 Handmade jar, fabric MALVL1, with a burnished finish. Ditch 112 (109).

64 Handmade jar with a slightly beaded rim, fabric L2. Ditch 212 (210).

65 Rim and joining bodysherds from a vertical walled, simple rim jar, fabric L2. Ditch 212 (211).

66 Everted rim and joining bodysherds from a handmade jar, fabric MALVL1. Burnished exterior. Ditch 212 (211).

67 Bodysherd from a jar, fabric MALVL1, decorated with horizontal parallel tooled lines. Ditch 212 (211).

68 Rim from a jar/bowl in a greyish-brown, slightly vesicular fabric containing fine grog, dark brown argillaceous fragments and fine ?limestone/shell. Fabric GI. Ditch 223 (229).

Middle Duntisbourne

The site at Middle Duntisbourne yielded a total of 888 sherds, 7511 g from *c.* 60 contexts from both the evaluation and subsequent excavation (Table 7.10). With the exception of four sherds (24 g) of post-medieval/modern date from the topsoil and trackway 130, the assemblage appears to date to a single relatively short phase of occupation in the 1st century AD. Although the average sherd weight is rather low at 8.6 g, there are several sherds present from individual vessels, with the substantial parts of complete vessels from ditches 40 and 51.

The assemblage comprises a mixture of local native handmade and wheelmade wares along with several exotic imports dating to the Tiberio-Claudian period. To date, such a complement of wares has only been recorded from the Bagendon complex (Clifford 1961) including the site at Ditches (Trow 1988) (cf. Duntisbourne Grove below). A full breakdown of the fabrics can be found in Table 7.10.

Imports

The imports to the site include fine tablewares from Gaul and amphora from Italy and Spain. The sigillata includes sherds of Arretine, South Gaulish and early Central Gaulish (Lezoux) wares. There are also several vessels from the North Gaulish industries, notably *terra nigra, terra rubra* and fine whitewares. In addition, there are sherds of a slipped fine orange ware (possibly Central Gaulish), a fine buff ware, and a black micaceous ware which, although of unknown origin, are also clearly Roman products and, as such, imports to the site at such an early date.

The Samian by G B Dannell (Fig. 7.9)

69 Arretine cup, Haltern 8. Tiberian? The rouletting is fairly coarse and paste a little pink possibly suggesting a Lyons source? (Fig. 7.9.69). Topsoil (1)

70 South Gaulish cup, Drag 24/5. Claudian? Ditch group 4.

71 An early example of a Lezoux cup Drag 27. Claudian? (Fig. 7.9.71). Ditch 260, fill 154.

Gallo-Belgic wares by Jane Timby (Fig. 7.9)

Nine sherds from a *terra nigra* (TN) platter were recovered from the evaluation (SMR 4678). The excavations produced a further six sherds of TN and three small pieces of terra rubra (TR3), along with 21 sherds of whiteware butt beaker, Camulodunum type 113 (Hawkes and Hull 1947, 238). Other possible

Table 7.10 Middle Duntisbourne: distribution of fabrics across main ditch groups.

	group 4		group 310		group 121		other	
FABRIC	No	wt	No	wt	no	wt	no	wt
Imports								
Arretine							1	4
CG sam	1	1						
SG sam	1	3						
GABTN	4	19	11	51				
GABTR3	3	4						
NOGWH	21	163						
FWBLMIC	24	262					2	7
FWSLOX	4	40						
FWOX	3	19					1	4
FWBUFF	5	10						
AMP	2	15					3	10
Native wares								
L1	1	10						
L2	1	1						
L5	1	6						
H2	2	12						
GROG	10	70			6	12	6	40
MALVL1	88	358	30	58			3	2
MALVL2	24	113						
Severn Valley wares								
SVWOX	46	297						
SVWEA1	14	70	2	14			12	34
SVWEA2	257	1291	9	33	17	23	28	43
SVWEA3	25	146					4	20
Wiltshire wares								
SAVGT	130	3874	3	31	1	18	21	191
WMBBW	6	18					5	13
Other								
reduced sandy	24	45					4	8
oxidised sandy	1	2					3	7
Unclassif	9	12			1	3		
TOTAL	707	6861	55	187	25	56	93	383

imports include a fine oxidised, slipped ware, probably a flagon, a fine buff sandy ware and a black micaceous ware. All of the group is likely to have arrived at the site in the Claudian period.

72 Two very small bodysherds from a TR3 beaker with combed decoration. Unstratified (4).

73 One small rimsherd from a TR3 girth beaker, Cam. type 82–4 (Fig. 7.9.73). Ditch 145, (55).

74–75 Two bodysherds from a TN cup, probably a Cam. type 56. Ditch 144, (56) and (57).

76 Platter rimsherd in TN, Cam. type 12/13. Ditch 139, (210).

77 Rim and basesherd from a TN cup, Cam. type 56 (Fig. 7.9.77). Ditch 254, (289).

78 Two rimsherds and seven bodysherds from a TN platter Cam. type 14 (Fig. 7.9.78). Glos. 4678 (7)= ditch 141, (246)

79 Three rimsherds and 15 bodysherds from a whiteware butt beaker with rouletted decoration, Camulodunum type 113. Ditch 40 (69). Further single bodysherds were recovered from ditch 40 (41), ditch 46 (45) and ditch 260 (154) (Fig. 7.9.79).

80 Base sherd in a fine orange ware with a white slip. (157) Two further small bodysherds from (69).

81 Black micaceous fineware. Represented by 24 bodysherds probably from a beaker or carinated jar. Ditch 40 (39)

82 A fine, buff sandy ware, probably from a beaker. Five sherds from ditch 18, (62) and (64).

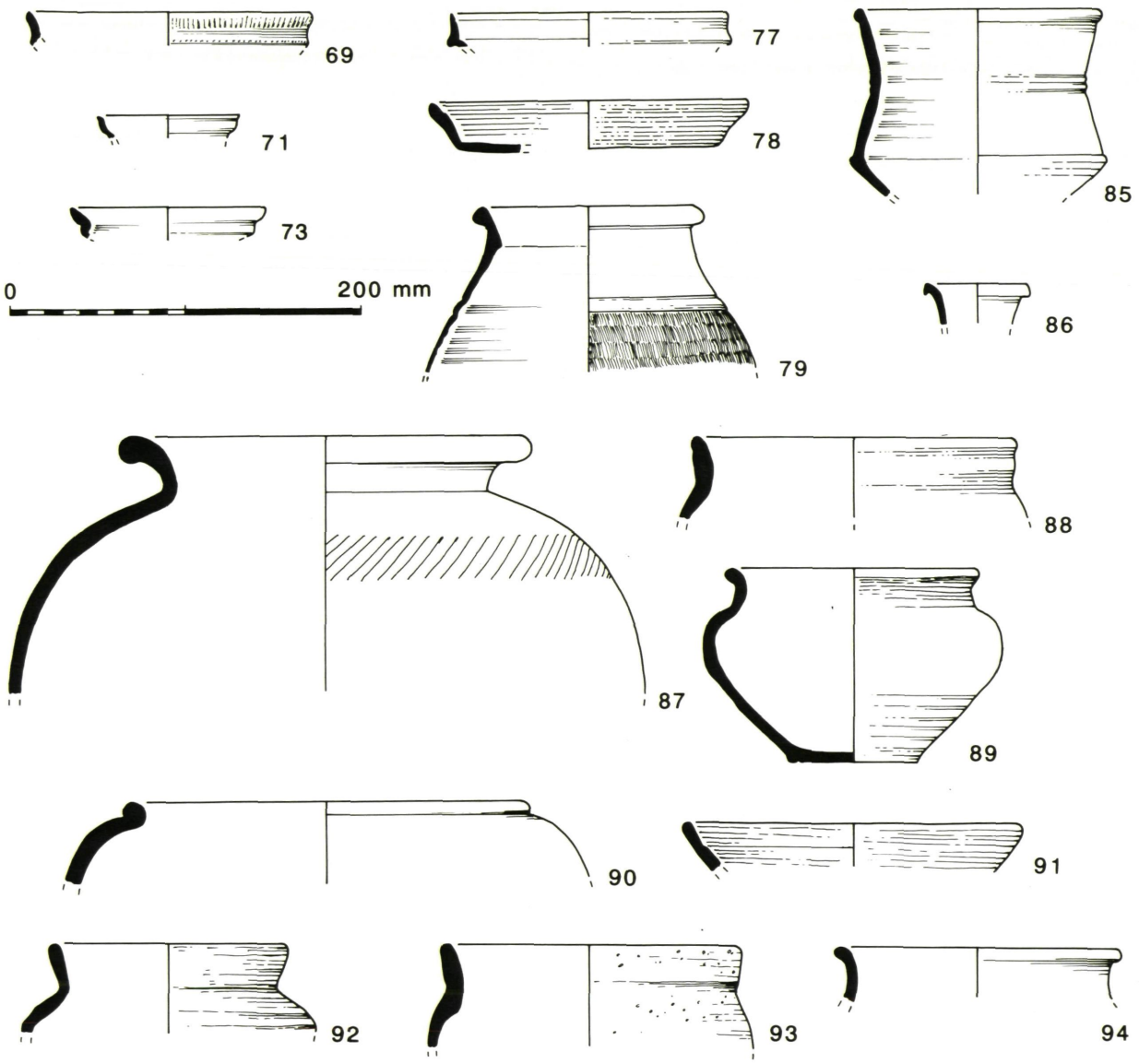


Figure 7.9 Pottery from Middle Duntisbourne.

The amphorae by David Williams

83 Two small friable bodysherds from a Camulodunum 185A/Haltern 70. Ditch 254, (256) and (288).

84 Three small bodysherds. Thin sectioning shows an assemblage which is dominated by small pieces of volcanic rock, potash felspar and green clinopyroxene. This fabric strongly suggests an origin somewhere along the volcanic tract of Italy. In all probability, the vessel represented here is a Dressel 2–4 amphora.U/S

Discussion

The bulk of the assemblage, 80.5% by count (92% by weight) came from ditch group 4 (see Table 7.10). The remaining material came from ditch groups 310, 121 and from quarry pits 167, 213, 237, ditch 111 and topsoil or unstratified finds.

The pottery from ditch 4 was dominated by sherds of early Severn Valley ware (SVWEA1–3) (42% by count) in both handmade and wheelmade forms, and Savernake ware jars (18.5%). Malvernian limestone-tempered wares were also quite well represented accounting for 12.5%. This ditch also produced the bulk of the imported wares. Although several of the fabrics could potentially date to the immediate pre- and post-conquest, the almost ubiquitous presence of Savernake ware, traditionally regarded as a post-conquest industry (cf. Swan 1975), would suggest that the main focus of activity dates to the post-conquest period. There is nothing, however, that indicates a date beyond the Flavian period, suggesting abandonment around AD 60/65. Many of the wares are typical of late Iron Age traditions in this area, in particular the Malvernian limestone-tempered handmade black jars (MALVL1), the large hammer-

rim bowls (MALVL2), which were circulating from the 1st century BC until well into the 1st century AD, and a small number of shell- and limestone-tempered wares. The presence of imports of this calibre is rare in Gloucestershire as a whole but well-known from both Bagendon (Clifford 1961) and Ditches, North Cerney (Trow 1988).

Ditch group 121 produced far less material with only 25 sherds of largely early Severn Valley or grog-tempered ware. Only a single Savernake sherd was present and imported wares were absent. Although the low proportion of Savernake ware might be taken as an indication of a possibly earlier date of abandonment, perhaps around the mid 1st century AD, the absence of imports cannot be regarded as significant in such a small sample.

Ditch group 310 yielded slightly more material (55 sherds) which generally mirrors, on a smaller scale, the assemblage from ditch group 4. Imports in this case were limited to 11 sherds of TN.

None of the other features produced any imports, with the remaining sherds all coming from the topsoil or unstratified contexts. Of the other small groups, ditch 111 produced a single sherd of SVWEA3, quarry pit 213, 13 sherds, mainly SVWEA1–2, quarry pit 167, a single sherd of SAVGT and pit 281 six sherds of MALVL1 and SVWEA2.

Catalogue of illustrated sherds (coarsewares) *(Fig.7.9.85–94)*

85 Several joining sherds from a cordoned, carinated bowl in wheel-turned Severn Valley ware (SVW EA2). Ditch 219 (218).

86 A small necked beaker in a fine oxidised, sandy ware (fabric LOCOX1). Ditch 219 (218).

87 Savernake ware (SAVGT) storage jar decorated with a zone of lightly incised diagonal lines. Ditch 219 (218).

88 Handmade jar, MALVLI. Ditch 40 (43).

89 Wheelmade necked bowl, dark brown to black in colour with a mid brown interior and dark grey core. Fine sandy paste with moderate oolitic limestone, fine mica and rare iron (SVW variant). Ditch 51 (84)

90 Bead-rimmed jar. Savernake ware (SAVGT). Ditch 254 (255).

91 Handmade platter/shallow dish with burnished surfaces. Grog-tempered, GROG1. Quarry pit 213 (208).

92 Wheelmade jar with a burnished exterior surface. Dark brown-black with a dark grey core, grog-tempered, GROG1. Ditch 18 (24).

93 Handmade limestone-tempered jar, MALVL1. Ditch 40, (41).

94 Wheelmade necked bowl, SVWEA3. Ditch 40, (41).

Duntisbourne Grove

Duntisbourne Grove produced an assemblage of some 1890 sherds (10, 255g) from both the evaluation and subsequent excavation (Table 7.11). The material was well fragmented with a generally low overall average sherd weight of 5.4 g. In total, 81 contexts yielded pottery. The assemblage appears to belong to one relatively short period of occupation dating to the mid-1st century AD.

Imports

The Samian by G B Dannell

95 South Gaulish cup ?Drag 27. Pre-Flavian. Ditch 13, (15).

96 South Gaulish bowl, Drag 29. *c.* AD 60–75. Perhaps by a mould-maker to Medillus; he stamped a very similar design to the upper zone on another Drag 29 (Walters M 308). From a relatively new mould, very neat. Ditch 152, (162). Fig. 7.10.96.

Gallo-Belgic wares and other fineware imports by Jane Timby

97 A very small bodysherd from a TR1A platter. Ditch 117, (118).

98 Rim from a TN platter Cam. type 8. Ditch 48, (49). Fig. 7.10.98.

99 White ware butt beaker Cam. type 113. A total of 30 sherds mainly from ditch 45 (47, 64) with further pieces from ditch 13 (15), ditch 24 (25), and ditch 152 (162). Fig. 7.11.99.

100 Fine black micaceous ware. One rim from a jar, ditch 24 (25) and five plain bodysherds from ditch 51 (52) and ditch 55 (56). Fig. 7.11.100.

The amphorae by David Williams

Camulodunum 185A/Haltern 70 (not illustrated)

101 Small bodysherd and a sherd belonging to part of the neck. Ditch fill 13 (15).

102 Five small bodysherds and a handle stub with the beginnings of a median groove. Ditch fill 45 (47).

103 Small friable bodysherd. Ditch fill 45 (64).

104 Three bodysherds. Subsoil (46).

All of these sherds, along with two small friable pieces from Middle Duntisbourne, are in a very similar gritty fabric. Thin sectioning and petrological analysis show a heterogenous arrangement of rock and mineral inclusions which are commonly associated with the Dressel 20 amphora form (Peacock and Williams 1986, class 25). However, the handle stub with the beginnings of a median groove and the general thinness of the walls of the bodysherds, suggest that these particular amphorae (one or more from each site) are more likely to be a Camulodunum 185A/Haltern form (Peacock and Williams 1986, class 15).

This late Republican/early Imperial amphora type was made in the region of the River Guadalquivir in

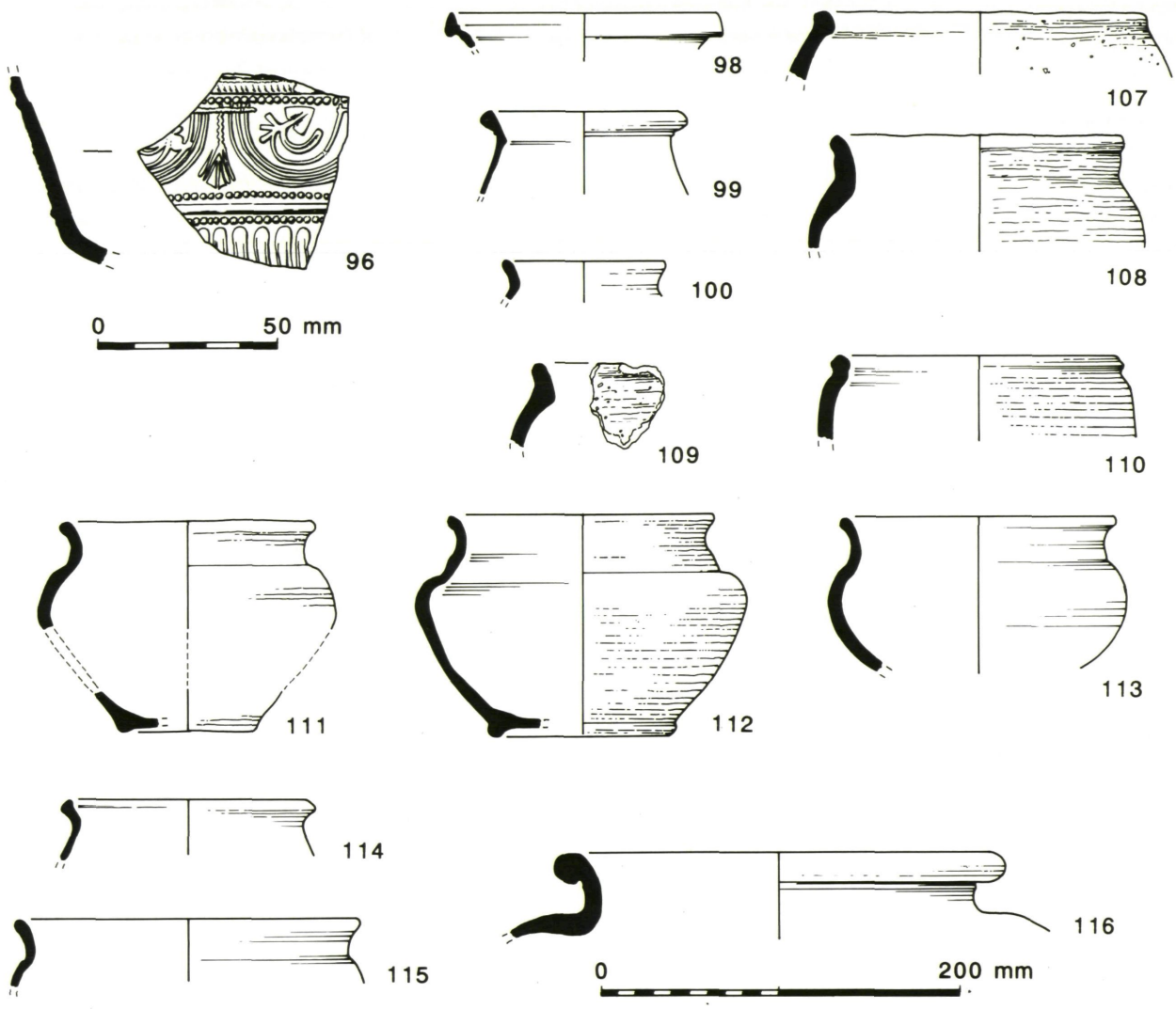


Figure 7.10 Pottery from Duntisbourne Grove

Baetica, southern Spain, and shares an identical fabric to the more commonly found olive-oil container Dressel 20. At times, amphorae of Camulodunum 185A/Haltern 70 seem to have carried olives, judging by the large quantity of olive stones discovered in a vessel of this form recovered from the Sud-Lavezzi II shipwreck (Liou 1982). However, inscriptions suggest that the main contents carried may have been *defrutum.* This has been interpreted by van der Werff (1984) as a liquid belonging to the *vins cuits,* while Sealey (1985) believes it was a non-alcoholic syrup used for sweetening or as a preservative. The date range is from about the middle of the 1st century BC to the Flavian period (Colls *et al.* 1977; Tchernia 1980; van der Werff 1984). Camulodunum 185A is found in late Iron Age contexts in the Wessex region and surrounding area (Williams and Peacock 1994) and also in the east of the country (Wickenden 1986).

Dressel 2–4

105 Two small 'black sand' bodysherds. Ditch 13 (15).

These two sherds are in the distinctive 'black sand` fabric that is normally associated with production within the Bay of Naples region of Campania (Peacock and Williams 1986, class 10). In all probability they belong to the bifid-handled Dressel 2-4 amphora, which was commonly used to transport wine (Peacock and Williams 1986, class 10). Italian forms of this type are well-known in the British late Iron Age as well as in Roman contexts (Williams 1986; Williams and Peacock 1994).

Flagon/Amphora

106 Sixteen bodysherds from a white-slipped, very micaceous orange ware, probably a flagon. Ditch 68 (69, 77).

Table 7.11 Duntisbourne Grove, distribution of fabrics across main feature groups.

	Group 8		Group 9		Group 10		Group 11		Group 114		Other	
FABRIC	no	wt	no	wt	no	wt	no	wt	no	wt	no	wt
Imports												
Samian	2	16	1	2								
GABTR1A									1	2		
GABTN			1	6								
NOGWH	2	2	28	124	1	4						
CGWSOX									16	63		
FWBLMI	2	3			1	6	3	4				
AMP			16	446							2	84
Native												
H2	1	6										
L1									1	9		
L5	4	45			2	33			1	4	10	37
L00	2	16			6	28					6	12
MALVL1	56	268	388	850	20	128			15	175	44	479
MALVL2	35	260									37	249
GROG	25	44	1	8	10	120			2	25	25	138
CALC	2	7	7	78								
Severn Valley wares												
SVWEA1	64	135	92	672	73	651			15	102	50	159
SVWEA2	36	183	148	562	2	16			2	18	14	67
SVWEA3	19	39	33	263	4	76					1	3
SVWOX	32	163	5	23							6	26
SVWvar	0	0	2	4								
Wiltshire wares												
SAVGT	210	861	46	774	18	575	1	12	15	175	38	479
WMBBW	24	46	11	38							11	36
Other												
LOCFGW	49	150	15	83					2	3	13	52
LOCOX	49	106										
DORBB1	1	1									3	10
unclass.	8	17	26	43					2	3	19	62
TOTAL	623	2368	820	3976	137	1637	4	16	72	579	279	1893

Due to the comparatively thin walls of this sherd, it is difficult to be certain whether it represents an amphora, in which case another Dressel 2–4, or a flagon. However, taking into account the petrology, it is more likely to be a flagon. In thin section biotite mica is common (clearly seen in hand specimen), together with pieces of volcanic rock, clinopyroxene, felspar, polycrystalline quartz and some argillaceous material. This assemblage is close to that of the fabric attributed to the Central Gaulish flagon from the late Iron Age burial at Dorton, Bucks., and a similar source (and ?type of vessel) appears possible for the Duntisbourne vessel (Rigby and Freestone 1983).

Discussion

The assemblage from Duntisbourne Grove shows a similar profile to that from Middle Duntisbourne with several native wares accompanied by early Roman wares, notably Savernake ware and Severn Valley ware and a small group of exotic imports of pre-Flavian date.

The largest groups of wares came from ditches 8 and 9 with 623 and 820 sherds respectively. The material from ditch group 8 included a small number of imported finewares; samian, whiteware and black micaceous ware. The samian sherds, the only examples from the site, apart from one core chip from context 15, are both of pre-Flavian date although one dated AD 60–75, is amongst the latest of any of the imports from either of the Duntisbourne sites. Savernake ware, early Severn Valley wares, wheel-made black burnished ware, various Roman reduced wares and Malvernian limestone wares are all well-represented. The increased number of greywares also emphasises the comparatively late date of abandonment for this group. At least one, possibly

two sherds, of early DORBB1 is also present. Products of the Durotrigian industries have been documented from other sites in Gloucestershire in 1st-century contexts (Timby forthcoming c; unpub. a) .

Ditch group 9 shows a slightly different complement of wares to that from ditch group 8. Imports are represented by TN, whiteware and amphora sherds. Malvernian wares account for 48% of the group compared to just 14% in ditch group 8, Severn Valley wares for 35% compared to 27% and Savernake wares for just 6% whereas they formed 32% of the ditch group 8 assemblage. This suggests an earlier date for ditch group 9, perhaps in the immediate post-conquest period.

Ditch group 10 produced 147 sherds, but this total includes imported finewares, with Savernake wares accounting for 12% by count emphasising a post-conquest terminus post quem. Ditch group 11 only produced four sherds and ditch group 114, a further 72 sherds including imports, this time GABTR1A and a Central Gaulish flagon, both potentially of pre-conquest date. However, Savernake wares at 21% indicate a similar post-conquest date of abandonment for group 114.

Other features to produce pottery include quarry pits 31, 121, 136, 150 and 151; pits 62 and 66, cobbled layer 181 and the subsoil. The only imports from this group of contexts were two amphorae sherds from the subsoil.

In contrast to Middle Duntisbourne, this assemblage contains a much higher proportion of later Iron Age fabrics, in particular Malvernian limestone-tempered wares (MALVL1-2) and proto- and early Severn Valley wares (SVWEA1-3) which might argue for a slightly earlier starting date of activity, or a distinctly different but broadly contemporary form of occupation. The samian from ditch group 8 implies a similar date of abandonment for the two sites. The differences between the two sites may therefore be the result of social, economic or functional factors.

Catalogue of illustrated sherds *(Fig. 7.10)*

107 Handmade jar in an oolitic limestone-tempered fabric (L5). Ditch 16, (19).

108 Handmade jar with a burnished exterior, MALVL1. Ditch 55 (215).

109 Handmade jar with a burnished exterior, MALVL1. Ditch 81 (83).

110 Beaded rim jar with a burnished exterior, MALVL1. Ditch group 9.

111 Wheel-turned necked bowl, SVWEA1. Ditch 45, (64).

112 Necked bowl, probably originally burnished. SVWEA1. Ditch 48, (50).

113 Several joining sherds from a necked bowl. SVWEA1. Ditch group 9.

114 Bevelled rim beaker. SVWEA2. Ditch group 9.

115 Wheelmade necked bowl, grey in colour. (SVWEA3). Ditch group 9.

116 Necked storage jar, Savernake ware (SAVGT). Ditch 55, (99).

Court Farm

A moderately small assemblage of 475 sherds (2558 g) mainly of Iron Age and Roman date was recovered from 72 contexts. Also present were a few sherds of earlier prehistoric date, many redeposited in later contexts (see Barclay above) and 25 sherds dating to the medieval and post-medieval periods (see Blinkhorn below). Although the pottery indicates a relatively long period of activity the extensive quarrying in the early Roman period has considerably mixed the artefact assemblage.

The later prehistoric and Roman pottery was sorted by fabric type and quantified by sherd count and weight for each excavated context. The data summarised on an Excel spreadsheet forms part of the site archive. Details of fabrics can be found above with a summary quantification in Table 7.12.

Iron Age

Approximately 109 sherds, (24% by count), weighing 578 g, date to the later prehistoric period, although most are redeposited in later contexts. The fabrics include flint-, grog-, limestone- and sand-tempered wares with several mixed temper types. The group also appears to contain a sherd of later Bronze Age/ early Iron Age date (see Barclay above). Typical middle Iron Age forms include vertical-sided (Fig. 7.11.119), and beaded rim jars (Fig. 7.11.120). A collection of oolitic limestone-tempered sherds (fabric L5) from a large jar in 428 (Fig. 7.11.121) suggest a middle-late Iron Age date. Other contexts containing sherds of comparable date, both limestone- and sand-tempered examples, include 22 (pit 24), 83 (pit 82), 149 (furrow 167), 235 (ditch 232) and 436 (pit 467). The only features to exclusively contain middle Iron Age pottery are quarry pits 52, 141, and 262, and gully 427.

Roman

Most of the features contained pottery characteristic of the 1st century AD with a mixture of handmade native wares and more Romanised wheelmade types. Although wares typical of the later Iron Age are present in small quantities from the site, these could equally well date to the post-conquest period and there may have been a hiatus in activity at the site in the first half of the 1st century AD. Both trackway ditches (490 and 489) yielded small groups of pottery from their recuts. Several of the fabrics appear to be early / middle Iron Age or, in one case, of earlier prehistoric date, but the presence of several sherds from a well fragmented wheelmade black sandy ware jar (LOCGW8) from 218 (segment 217), and single sherds of Savernake ware (SAVGT) and wheelmade black burnished ware (WMBBW) from 242 (segment 243) indicate filling in the later 1st century or even early 2nd century AD. Pottery from the fills (234 and 235) of the recut feature

Table 7.12 Court Farm, distribution of pottery in the pits.

Pit	Fabric codes	Total no	Total wt
11	SAVGT,WMBBW,LOCOX,FL,L6,L00	17	53
24	L2	3	13
35	DORBB1,WMBBW,LOCGW	12	23
37	SVWEA2,LOCGW,LOCWSOX,L2,	9	14
39	SAVGT	1	13
52	GS, L2	6	25
82	GROG, SAVGT, LOCGW, L2	4	34
106	SAVGT,SAM,LOCGW	5	23
109	GROG	1	8
119	SAM, WMBBW, GROG, SF	4	5
141	L6	1	5
163	LOCOX	1	2
174	SAVGT,SAM,GROG,LOCGW,DORBB1,SVWOX	36	161
247	GROG, L6, SLG	3	16
259	SAM	1	1
262	SL	5	8
265	MALVL1, SVWEA2, LOCGW	5	29
285	MALVL1,SVWEA2,WMBBW,SAVGT,LOCGW,GROG,LOCOX,FL,L2,GS	54	265
312	SAVGT,BATAM,SVW,LOCGW,L1,L2,L5	29	243
315	LOCGW8,FL,L5	4	32
318	SVWEA2, SAVGT, LOCGW, GROG, L1, L5	11	66
326	MALVL1	1	10
328	GROG, WMBBW, SAVGT	41	208
332	GROG	1	10
334	FL, GROG, SL, H2	7	72
339	SVWOX	5	26
364	GROG	1	7
427	L5	22	120
437	WMBBW, SAVGT, GS, L2	5	38
440	SVWEA2, SL	5	46
467	GROG, LOCGW	3	31
TOTAL		303	1607

(segment 232) comprised two redeposited Iron Age sherds. Fill 402 (segment 401) produced four sherds including one scrap of South Gaulish samian and two fragments of probable intrusive medieval pottery, whilst 223 (segment 225) yielded two Iron Age sherds. The only fill to produce pottery from the trackway ditches 488 and 491 was 135 (segment 136), with four early Severn Valley ware sherds. The surface of the trackway produced a single Savernake ware sherd from repair 304.

Early Roman pottery was recovered from 19 of the quarry pits (Table 7.12), with pottery dating to the first half of the 1st century AD from seven pits (109, 247, 326, 332, 334, 364, 440) and exclusively Iron Age pottery from a further five pits (24, 52, 141, 262, 427) and ditch 427. Finds were generally sparse and only 8 pits yielded more than 10 sherds. The Roman pottery was relatively consistent across the pits, mainly types current from the late Neronian/Flavian period through to the early 2nd century AD, for example black wheelmade sandy wares (WMBBW), various local grey wares and Savernake ware. A number of sherds more typical of the later Iron Age, mainly limestone and grog-tempered wares, occurred alongside the Roman sherds, and may be residual, although they are a common feature on rural sites, and may still have been in use. The grog-tempered sherds probably first appeared in the first half of the 1st century AD but the limestone-tempered pieces could potentially date back to the 1st century BC. Continuation into the 2nd century is indicated by the material from pit 312 which includes Severn Valley wares, Dressel 20 amphora and south-west oxidised sandy ware. The same date could be given to pits 35 and 174, as both contained DORBB1 and grey sandy wares mixed in with earlier material. Several pits contained sherds of samian, of particular note a cup Drag 24/5 of pre-Flavian date from 259 and a dish Drag 18 from pit 176. Pit 11 contained a rouletted sherd from an orange sandy ware butt beaker. Other imports were restricted to Dressel 20 amphorae and Malvernian limestone-tempered jars. Whether the pits yielding pre-Roman wares can be regarded as earlier in the sequence, or simply a distortion due to the small assemblage sizes is difficult

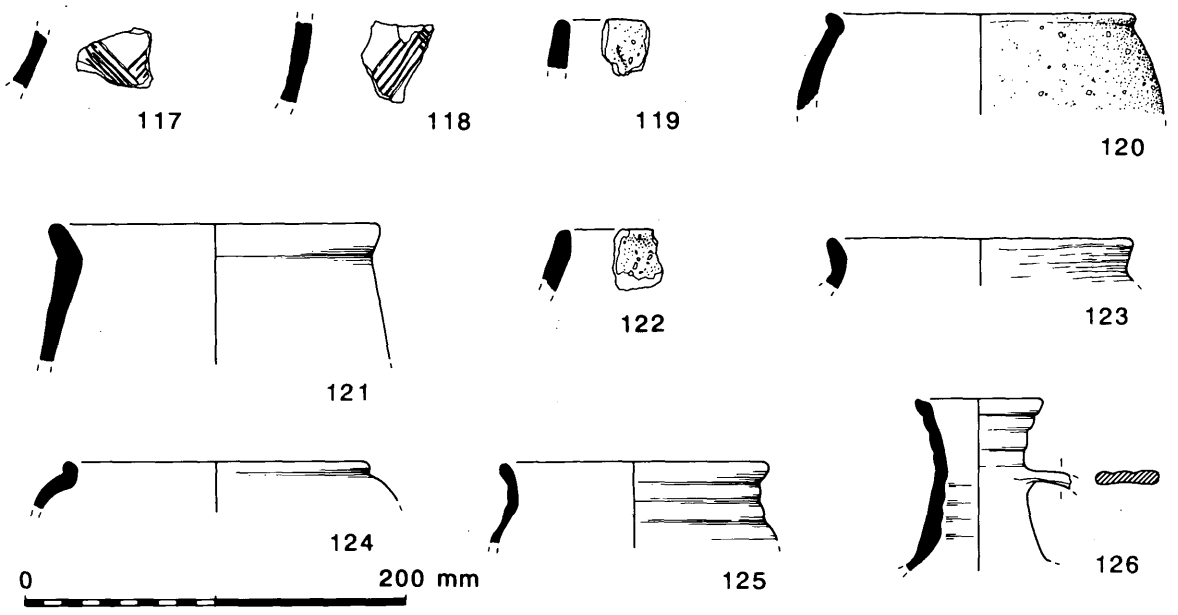


Figure 7.11 Pottery from Court Farm.

to determine. If the pitting is exclusively Roman it would imply the almost complete obliteration of an earlier phase of occupation.

Other features with early Roman pottery include ditches 341, 477, 480 and 483, gully 168, a post-medieval field-drain 49 and tree-throw hole 113. Pre-Roman pottery (ie. handmade ware of 1st century AD date) was associated with ditch 136 and pits 326, 332, 334, and 364 whilst middle Iron Age sherds were residual in the post-medieval field-drain (context 83) and ditches 225, 232 and 342.

Catalogue of illustrated sherds *(Fig. 7.11.117-126)*

117 Bodysherd decorated with incised lines. Hard fabric, red-brown in colour with a black core. Sandy texture with a sparse scatter of fossil shell and limestone. Fabric LS. Residual in ditch 243 (242).

118 Bodysherd similar to 1. Ditch 225 (223).

119 Rim sherd of vertical-sided jar with a simple rim. Reddish-brown in colour with a brown core. Fabric L6. Ditch 232 (235).

120 Beaded rim jar. Fine, shell-tempered ware, fabric H2. Quarry pit 334 (333).

121 Bevelled rim jar in oolitic limestone-tempered ware (L5). Ditch terminal 427 (428).

122 Rim from a Malvernian limestone-tempered jar, (MALVL1). Quarry pit 326 (325).

123 Handmade everted rim jar in a dark brown, flint-tempered fabric with a red-brown core, Fabric FL. Ditch 285 (288).

124 Wheel-turned beaded rim jar in a sandy ware (WMBBW). Quarry pit 285 (288). Quarry pit 285 (288).

125 Everted rim, wheelmade jar/bowl (WMBBW). Pit 11=123 (10).

126 Ring-necked flagon. Fine oxidised ware with dark orange, rounded, clay pellets. Fabric LOCOX. Ditch 477 (479).

Weavers Bridge

The assemblage from Weavers Bridge comprises 796 sherds, 7416 g from 11 contexts (Table 7.13). Particularly large groups of material were associated with buried soil 51 and midden 57, accounting for 95% of the total assemblage by weight. With the exception of a group of medieval material from the fill of the river channel 45, all the pottery dates to the later Roman period.

The range of Roman fabrics present are common for this locality in the later 2nd-4th centuries, namely samian (CGSAM), Dressel 20 amphora (BATAM); Dorset black burnished ware (DORBB1), products of the Oxfordshire industries, in particular colour-coated forms (Young 1977, forms C22, C83, C47, C45) and white ware mortaria (Young 1977, forms M18, M20, M22), grey micaceous ware (MICGW), Nene Valley colour-coated ware (LNVCC) and late grog-tempered storage jar (PNKGT). Various local grey wares are also present including vessels imitating DORBB1 forms. A summary of the different wares present can be found in Table 7.13.

Most of the pottery was recovered from the midden 57, accounting for some 68% by count, (65% by weight),

of the total recovered assemblage. The average sherd weight, 9 g, is quite low for Roman material although typical of rubbish deposits. One might expect to find larger, better preserved sherds in an in-situ midden deposit, suggesting that this material has either been deliberately broken up or has been redeposited.

The midden contained a variety of wares and forms including cooking, storage, serving and drinking vessels; the sort of range to be expected from a typical domestic household. Cooking vessels include DORBB1 jars, grey ware jars and mortaria (OXFWH; OXFRS). Storage vessels are represented by Midlands grog-tempered large storage jars (PNKGT) and Savernake ware (SAVGT). Serving vessels might include the numerous straight-sided dishes/bowls in DORBB1 and local grey ware copies, alongside dishes and bowls in Oxfordshire red-slipped wares and samian, while drinking vessels are represented by beakers (OXFRS; MOSBS). Seven fragments of roofing tile (tegulae) also came from context 57 (see Allen below).

The presence of the small amount of samian and Savernake ware in the midden deposit could suggest occupation dating back to at least the later 2nd century although this might represent redeposited or curated material as it is in association with later vessels. Both tablewares and storage vessels tend to have longer survival rates than other domestic wares and the samian in particular is very worn and abraded. The DORBB1 and the Oxfordshire colour-coated wares both indicate a date from the second half of the 3rd century. The absence of certain forms and fabrics, such as flanged bowls, parchment wares or late shelly wares, might suggest that the midden was abandoned in the later 3rd century.

Soil horizon 51 overlying the midden produced the second largest collection of wares, some 216 sherds (27% by count, 29% by weight). Again, the average sherd size is quite low at 10 g. Although many of the same wares are present as in the midden, for example, DORBB1, PNKGT, OXFRS, MICGW and local grey wares, the forms, in particular conical flanged bowls in DORBB1 and a stamped bowl (OXFRS) (Young 1977, form C83) indicate a *terminus post quem* well into the 4th century. The absence of any late Roman shell-tempered wares might suggest a mid-4th century *terminus ante quem.*

Catalogue of illustrated sherds from midden 57 (Fig. 7.12)

127 Jar, DORBB1 (Gillam 1976, type 11).

128 Jar, MICGW imitating DORBB1.

129 Necked jar, in a local grey, medium sandy ware (LOCGW).

130 Jar in a very fine, grey ware (LOCGW).

Table 7.13 Incidence of fabrics from Weavers Bridge.

Fabric common name	Code	Wt	%	No	%	EVE	%
FOREIGN IMPORTS							
Samian	SAMCG	27	*	6	*		
Moselkeramic	MOSBS	3	*	1	*		
Dressel 20 amphora	BATAM	127	2	3	*		
REGIONAL IMPORTS							
Savernake	SAVGT	120	1.5	1	*		
Dorset BB1	DORBB1	1156	15.5	102	13	217	32.5
Oxon white ware mortaria	OXFWH	198	2.5	7	*	50	7.5
Oxon white wares	OXFWH	106	1.5	14	2		
Oxon red-slip mortaria	OXFRS	18	*	3	*		
Oxon colour-coat	OXFRS	751	10	161	20.5	68	10
Midlands grog-tempered	PNKGT	674	9	21	2.5		
Nene Valley colour-coat	LNVCC	24	*	2	*	9	1
LOCAL/SOURCE UNKNOWN							
Severn Valley ware	SVWOX	14	*	1	*		
micaceous grey ware	MICGW	142	2	6	*	11	1.5
fine grey ware	LOCGW	929	12.5	105	13.5	94	14
medium sandy grey ware	LOCGW	375	5	7	*	35	5
coarse sandy grey ware	LOCGW	2398	32	239	30.5	178	26.5
fine oxidised ware	LOCOX	54	*	14	2		
sandy oxidised ware	LOCOX	4	*	1	*	6	1
Unclassified	OO	259	3.5	87	11		
TOTAL		7379	100	781	100	668	100

* = less than 1%

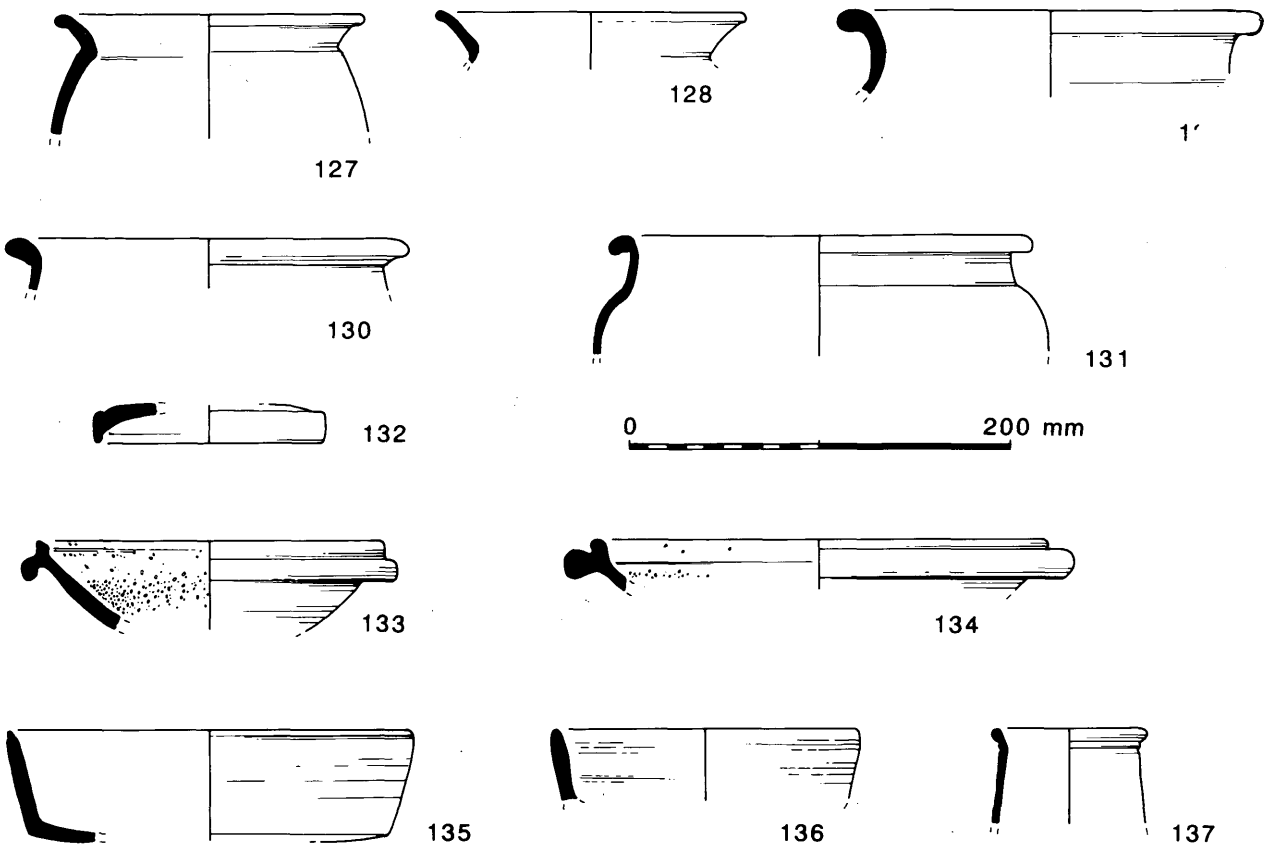


Figure 7.12 Pottery from Weavers Bridge.

131 Necked jar in fine sandy ware with blue-grey surfaces and a brick-red core (LOCGW).

132 Lid in a partially burnt, black, medium sandy ware (LOCGW).

133 Oxfordshire white ware mortarium (Young 1977, type M18) (OXFWH).

134 Oxfordshire white ware mortarium (Young 1977, type M22) (OXFWH).

135 Straight-sided dish in local grey sandy ware (LOCGW).

136 Straight-sided dish in Nene Valley black colour-coated ware (LNVCC).

137 Oxfordshire beaker, black colour-coat on buff fabric (OXFRS).

ROMAN POTTERY FROM BIRDLIP QUARRY, COWLEY

By Jane Timby with a report on the samian by Brenda Dickinson

Introduction

The excavations yielded *c.* 16,700 sherds of pottery, 151 kg by weight, 104.19 estimated vessel equivalents (eve). With the exception of a very small number of prehistoric, medieval and post-medieval wares, the assemblage dated to the Roman period, in particular the later 2nd through to the later 4th centuries. No sub-Roman material was recovered.

The following report is divided into three sections: the first presents a fabric and form description, the second a discussion of the pottery in relation to the site and the third an appraisal of the assemblage in its regional context. As a result of the character of the assemblage, in particular its lack of diversity and its poor preservation, only a small number of pieces were selected for illustration. The illustrated vessels reflect in essence the character of the assemblage depicting most of the most common types, as well as several pieces with graffiti.

Methodology

The pottery was sorted into fabrics and quantified by sherd count, weight and eve for each recorded context. The fabric codes originally designated were those of the Gloucester type fabric series (cf. Ireland 1983), although several wares were not represented. For the purposes of publication the wares have been coded according to the nomenclature proposed for National Roman Fabric Reference Collection (NRFRC) (Tomber and Dore 1996). As this at present only relates to regional types, the local wares have been coded using

the same system, but are unique to this report. A concordance of the new codes with the Gloucester fabric series can be found in Table 7.14. Collections of very small sherds (less than 10 mm square) were allocated a miscellaneous code (OO) and merely counted and weighed.

Rim sherds were coded where possible according to vessel type: jar, bowl, dish, cup, tankard, beaker, flagon, jug, lid, mortarium and amphora, indicated by Roman numerals. Within each basic type, sub-types were created on the basis of rim/vessel morphology.

Condition

Although the quantity of pottery recovered was quite large, the sherds are in relatively poor condition and there are few reconstructible profiles. Much of the material is fairly abraded, with a low mean sherd weight of 9 g. Many of the colour-coated wares have lost their surfaces making identification difficult, especially in discriminating them from oxidised Severn Valley ware. The condition of the pottery is very typical of assemblages from Roman sites located on the Cotswolds, such as Uley (Leach 1993, 219), Frocester (Timby forthcoming) and Kingscote (Timby 1998a). The problem is exacerbated on other Roman Cotswold sites due to modern ploughing, a long history of disturbance and redeposition through successive periods of occupation, and the soft nature of many of the fabrics.

Fabrics and forms

Table 7.14 summarises the overall quantities of individual pottery fabrics from the site. From this it is immediately apparent that the assemblage is dominated by two coarseware fabrics, Severn Valley wares (SVWOX2) and Dorset black burnished ware (DORBB1). The former account for *c.* 30% of the assemblage by weight, 27% by sherd count, compared to 29% DORBB1 by weight, 39% by count. Continental imports to the site are limited to samian, Gaulish black-slipped ware and amphorae, mainly Dressel 20. Other regional imports include a few colour-coated vessels from the Nene Valley and New Forest industries, at least one vessel from the Alice Holt kilns, Mancetter-Hartshill mortaria, Midlands grog-tempered ware and Midlands late Roman shell-tempered ware. Products from both the North Wiltshire and Oxfordshire industries are well-represented. The general paucity of continental imports may to a certain extent be a reflection of the date of occupation. The samian, although generally of rather poor quality (see Dickinson below) comprises 2.5% by sherd count of the assemblage. Similarly the very presence of olive oil and wine amphorae suggest a certain modest level of sophistication.

Jars dominate the form types accounting for 58% of the assemblage by eve, with storage jar rims accounting for less than 1% of the overall jar assemblage, a relatively low proportion in view of the rural character of the site. The proportion of storage jars appears to be higher on other rural sites such as, for example, Frocester Court (Timby forthcoming). The commonest rim forms are downward hooked triangular shapes which are common 3rd-4th century SVWOX2 types and simple everted flaring types reflecting the DORBB1 range. Bowls/dishes account for 27% of the assemblage by eve with the straight-sided dish being the commonest type (40% of the group) followed by flanged rim forms at 22%. Flat rim forms accounted for 4% and grooved rim bowls, 13.7%. The remaining 15% of the eves are made up of flagons (5%), mortaria (4%), tankards (2.4%), beakers (2%); with colanders, amphorae, lids and cups all contributing less than 1% each. Flagons and drinking vessels (beakers/tankards) are surprisingly low, and a paucity of cups was also noted in the samian assemblage (see Dickinson below).

Common names are followed by the NRFRC codes and the Gloucester type fabric (TF) codes (see Table 7.14 for overall quantities of individual fabrics).

Samian
By Brenda Dickinson

The excavation produced 397 sherds of samian, almost all of them unstratified or residual. The material represents a maximum of 314 vessels, of which 275 sherds, or a maximum of 199 vessels, are attributable to specific forms or vessel types (dishes, cups, etc.). Calculation by sherd and vessel count produces almost identical ratios of Central to East Gaulish ware, with 76% (sherd count) and 77% (vessel count) from Central Gaul and 24% and 23% respectively from East Gaul. Only three samian factories seem to have supplied the site, Lezoux in Central Gaul to *c.* AD 200, and the two large East Gaulish manufacturers of the late 2nd and 3rd centuries, Rheinzabern and Trier. As is normal in Britain, Rheinzabern ware pre-dominates, accounting for approximately 75% of the East Gaulish material.

The samian ranges from *c.* AD 125 to the 3rd century (before AD 260), but only three (decorated) vessels, two from Area A, the other without precise provenance, suggest activity on the site in the Hadrianic or early Antonine periods. Contemporary plain forms, such as Dr. 18/31, 27 and 42 are conspicuous by their absence. Typologically, the rest of the assignable samian forms date from after *c.* AD 160, the best represented vessels being Dr. 31 and 31R. There are twice as many examples of the latter, revealing a preference for bowls of wider diameter, in the later 2nd century at least. It is also worth noting that dishes and bowls account for 90% of the material, which highlights the relative unimportance of samian cups on the site. Drinking vessels of other materials must therefore have been used, presumably for drinks other than wine.

Although dating evidence for East Gaulish ware is still lamentably scarce, there are a few vessels here which can be assigned to the 3rd century on analogy with examples in dated contexts elsewhere. This, combined with the noticeably high proportion of East Gaulish ware, 24%, indicates that samian

Table 7.14 Overall quantities of individual pottery fabrics from Birdlip Quarry.

Fabrics: common name	Code/TF	Wt	%	No	%	eve	%
FOREIGN IMPORTS							
Samian	8	2504	1.5	397	2.5	351	3
Gaulish black-slipped ware	MOSBS, 12K	45	*	20	*	1	*
Dressel 20 amphora	BATAM, 10A	15027	10	149	1	64	*
Gallic	GALAM, 10B	680	*	72	*		
S Spanish	10E	304	*	6	*		
LOCAL WARES							
grog-tempered	GROG, 2	459	*	92	*	6	*
SVW	SVWOX2, 11B	44635	29.5	4018	24	2172	21
SVW variants	SVWOX2, 11v	209	*	41	*	23	*
SVW handmade	SVWOX2, 23	528	*	20	*		
Micaceous ware	5	3362	2	413	2.5	244	2
REGIONAL IMPORTS							
Savernake	SAVGT, 6	5344	3.5	110	*	56	*
Black-burnished	201	199	*	24	*	47	*
Wilts orange sandy	231	1765	*	231	1	147	1.5
Wilts grey sandy	232	1398	1	204	1	50	*
?Wilts colour-coat	12D	89	*	6	*	15	*
?Wilts/SW wslip	15A	557	*	91	*	425	4
?Wilts/SW no slip	15	290	*	73	*	32	*
REGIONAL IMPORTS							
Malvernian ware	MALREA, 18	10	*	1	*		
BB1	DORBB1, 4	43954	29	6541	39	4527	43
Oxon whiteware	OXFWH, 13	172	*	28	*		
Oxon ww mortaria	OXFWH, 9A	2870	2	110	*	290	*
Oxon wslip mortaria	OXFWS, 9W	39	*	2	*		
Oxon parchment ware	OXFPA, 1A	224	*	12	*	41	*
Oxon colour-coat	OXFRS, 12A	6021	4	1084	6.5	284	3
Oxon cc mortaria	OXFRS, 9X	980	*	75	*	142	*
Nene Valley cc	LNVCC, 12B	80	*	20	*	14	*
Nene Valley mortaria	LNVCC, 9E	107	*	2	*	10	*
New Forest cc	NFOCC, 12C	107	*	16	*	6	*
Mancetter-Hartshill	MAHWH, 9D	343	*	3	*	48	*
Late shelly ware	ROBSH, 22	332	*	62	*	86	*
late grog-tempered ware	PNKGT, 241	1190	*	32	*	28	*
Alice Holt greyware	ALHRE, 212	55	*	2	*	5	*
SOURCE UNKNOWN							
Misc colour-coats	12	138	*	20	*	10	*
Unknown mortaria	9	29	*	2	*		*
Greyware	LOCGW1	2418	1.5	280	1.5	309	3
Greyware	LOCGW2	121	*	6	*	2	*
Greyware	LOCGW3	6025	4	626	4	494	5
Greyware	LOCGW4	1709	1	301	2	174	*
Greyware	LOCGW5	289	*	22	*	33	*
Greyware	LOCGW6	430	*	65	*	13	*
Greyware	LOCGW7	218	*	13	*		
shell-tempered ware	SHEL	150	*	22	*		
Misc whiteware	WW	105	*	35	*		
misc limestone	LIME	8	*	4	*		
misc oxidised	OXID	894	*	249	1.5	37	*
misc reduced	GREY	3922	2.5	764	4.5	233	2.5
Less than 10 mm	00	539	*	275	1.5		
Prehistoric	PREH	33	*	34	*		
Medieval	MED	12	*	2	*		
Post-medieval	PMED	48	*	30	*		
TOTAL		150967	100	16707	100	10 419	100

* = less than 1%

continued to hold its own against other types of domestic pottery into the 3rd century. The range of forms is neither extensive nor unusual, and this, combined with the scarcity of moulded decorated bowls in the assemblage, suggests that this was a site of only modest status.

Decorated ware (not illustrated)

138 Form 37, Central Gaulish. A double-bordered medallion includes a scarf-dancer (O.361A). The figure-type was used at Lezoux in the Hadrianic-Antonine period. *c.* AD 130–160. U/S

139 Form 37, Central Gaulish. The double-bordered ovolo with rosette tongue (Rogers B18) and the wavy-line border below it (Rogers A23) are both on an unprovenanced bowl with a mould-signature of Drusus ii, in the Colchester and Essex Museum. *c.* AD 125–145. Ctx 731.

140 Form 37, Central Gaulish, featuring a small horse (D.908 = O.1976) and a zig-zag panel border. The latter was used by Servus iv and a few other Lezoux potters working in the period *c.* AD 160–200. Ctx 840.

Potters' stamps. Ligatured letters are underlined

141 BELSA(ARVE[F] on form 31R: Belsa Arve(rnicus?) of Lezoux, Die 1a (Dickinson 1986, 187, fig. 3.19). This stamp occurs in a group of late-Antonine wasters in a kiln at Lezoux and in another group of (plain) samian of the same date, recovered off Pudding Pan Rock, Kent. *c.* AD 170–200. Ctx 41.

142 NVMIDIMA on form 79 (R?) or Tg (R?): Iulius Numidus of Lezoux, Die 4a (Dickinson 1986, 190, fig. 3.68). Stamps from several of this potter's dies have been found at forts on Hadrian's Wall; this particular one is known from Benwell. His forms include some which were not introduced before the later 2nd century, such as Dr.31R, W.79 and W.80. *c.* AD 160–190. Ctx 867.

143 Form 31, Central Gaulish, stamped AT[. Mid- to late-Antonine. Burnt. Ctx 1229.

144 Form 31, stamped]VLIANVSF. The piece is slightly burnt, but the fabric seems most likely to belong to the Central Gaulish range. Although the form of the vessel appears to be Dr. 31, there is a circle round the stamp, as on rouletted dishes; there is perhaps also a faint band of rouletting on the base, close to its junction with the wall. The potter's name is beyond conjecture. Mid- to late-Antonine. Ctx 1335.

Imported wares

Gaulish (Moselle) black slipped ware (MOSBS, TF 12k)

Only twenty sherds of Gaulish colour-coated beaker were noted, probably all from the East Gaulish industry. This is generally dated to the period AD 180/90–250 in Britain (Richardson 1986, 119).

Amphorae

Amphora sherds accounted for 10.5% by weight of the total assemblage (1% by sherd count). Most of the sherds came from Dressel 20s; additional sherds came from Gallic and undesignated South Spanish types.

Dressel 20 (BATAM, TF10A) (Peacock and Williams 1986, class 25, 136–40).

The globular olive-oil amphora, Dressel 20 originating from the south Spanish province of Baetica is one of the commonest types to be found in Britain and is the most frequent amphora at Birdlip Quarry. Production commenced during the Tiberian period, and continued until at least the late 3rd century. Only one rim was present (ctx 318 (296) Area B, Phase 2) which approximated type 19 dating to the later 1st-early 2nd century (Peacock and Williams 1986, fig. 66, after Martin-Kilcher).

Gallic (GALAM, TF10B) (Peacock and Williams 1986, class 27)

Quite a high number of sherds of Gallic amphora, (72 in total) were present. The fabric is fine and buff in colour and is probably from the Gauloise 4 (Pélichet 47) flat-bottomed wine amphora, although no featured sherds are present. This is another long-lived form, predominantly made in southern France, where several kilns have been found in recent years (Laubenheimer 1985). It was the commonest wine amphora to be imported into Britain in the 2nd century. Sherds first occur in Area C, Phase 1 which produced the highest concentration of 28 sherds.

South Spanish (TF10E)

Six sherds, probably of south Spanish origin but types uncertain.

Coarsewares

A: Native wares
Grog-tempered ware (GROG, TF2)

Fabric: Moderately soft, slightly soapy ware of variable character but containing sparse to moderate sub-rounded grog fragments along with sand, iron and organic material.

Forms: Handmade vessels, mainly jars.

Date: The sherds are quite fragmentary and are possibly residual from 1st/early 2nd-century occupation in the general locality.

B: Local industries

B1 Severn Valley Ware (SVW) (SVWOX2; Glos TF11B, 11V and 23)

Severn Valley wares collectively account for 30% by weight (24% by sherd count) of the assemblage and is the commonest fabric by weight, second by sherd count. Sherds are present throughout the site.

SVWOX2, TF11B

Fabric: (*cf.* Webster 1976; Rawes 1982). Both oxidised and grey wares have been subsumed into this group within which there are a number of minor fabric variations. These were deemed insufficiently distinctive to redefine the group, but would suggest more than one production site or source of clay was being used.

Forms: A diverse range of mainly jar, bowl and tankard forms occurs. Rim forms include bifid, hooked, everted and triangular pendant, mainly types current in the 3rd and 4th centuries.

Date: The industry is a long-lived one dating from the 1st–4th centuries.

TF11

Fabric: Used for probable SVW ware variants.

TF23

Fabric: A coarse handmade SVW almost exclusively used for large storage-type jars. The fabric generally contains a large number of impurities in the clay body in the form of clay pellets and organic material.

B2: Highly Micaceous Wares (MICGW, TF5)

This fabric is very common in Gloucestershire, particularly on sites south of the Severn dating from the mid/late 2nd through to the 4th century. At Birdlip it accounts for just 2% by weight which may suggest the site is on the limit of the market for this product whose source is currently unknown (for further discussion see below).

Fabric: A generally light-textured, well-fired sandy ware, usually grey or black in colour, occasionally orange-brown. The sandy texture of the fabric varies considerably from moderately coarse to fine, but is always characterised by the prominent presence of fine white mica (muscovite). Sparse dark grey rounded clay pellets are also usually present. The group undoubtedly contains a number of sub-types but at present it is not possible to make any meaningful distinctions.

Forms: A particularly wide range of forms were made in this fabric including wheelmade copies of BB1 and SVW types, for example jars, plain-rimmed dishes, flat-rimmed dishes and flanged bowls. The imitation also extends to the use of burnished lattice decoration.

B3: Wiltshire Region (Fabrics SAVGT, TF6; WMBBW, TF201; WILCC, TF12D; WILRE, TF 231; WILOX, TF232)

Savernake ware (SAVGT, TF6)

Fabric: (*cf.* Annable 1962; Rigby 1982, 153).

Forms: Large handmade storage jars, mainly with everted, rounded rims and finer wheelmade vessels. The industry, thought to date from around the mid-1st century AD, continues well into the 2nd century. The wheelmade wares are likely to date from the early 2nd century. Storage jars tend to be relatively long survivors and thus much of the material from the site may be curated from the later 1st- early 2nd century.

Wiltshire black-burnished ware (WMBBW, TF201)

Fabric: A fine grained, sandy ware with a black-burnished exterior. The core is usually brown, grey or black.

Forms: Wheelmade vessels including beakers, flat-rimmed dishes, small carinated jars, and lids. Burnished lattice decoration or barbotine dot decoration is frequently employed. The substantial part of a flat-rimmed bowl was recovered from well 891 (Fig. 7.15.193).

This ware is particularly well known on sites with 1st-century occupation, for example Kingsholm, Gloucester (Timby unpub.), Cirencester (Rigby 1982, fabric 5) and Bagendon (Fell 1961b, fig. 65, 116d). It is well represented at Frocester (Timby forthcoming) and Uley (Leach 1993). Whilst a specific source has yet to be identified for the ware, the character of the fabric and the pattern of occurrence would suggest a source in north Wiltshire. At Birdlip it is quite rare with just 24 sherds which is probably a reflection of the later chronology of the site.

Orange sandy ware (WILOX, TF231)

Fabric: A hard, pale orange ware, often with a grey inner core. The matrix contains abundant fine quartz sand and occasional iron.

Forms: Wheelmade jars and flagons.

This ware undoubtedly originates from one of the many north Wiltshire kiln sites in production from the early 2nd century (Anderson 1979). The fabrics closely resemble those from the Whitehill Farm kilns situated west of Swindon. It is well represented in assemblages both from Gloucester (cf. Ireland 1983, fig. 73, 278–85) and more particularly Cirencester (Cooper 1998, 329ff) in 2nd- and 3rd-century contexts.

Grey sandy ware (WILRE, TF232)

Fabric: Reduced version of above.

Forms: The form repertoire is slightly less varied than the oxidised forms and includes mainly jars.

North Wiltshire colour-coated ware (WILCC, TF12D) (Anderson 1978; 1979)

Fabric: A fine, orange, sandy ware with a grey core, and a red to light brown colour-coating. The entire colour range can extend from orange to black, and occasionally even plum-coloured resembling that found on later New Forest products. The colour-coat

is invariably matt and thin.

Forms: Almost exclusively used for making beakers.

Production of this ware dates from the 2nd century, well before the other regional colour-coated industries. Where material has become very abraded it is frequently difficult to distinguish from other colour-coated ware and for this reason may well be under-represented. Only six sherds were identified.

C: Possible Wiltshire or Avon

South-west plain and white-slipped ware (SOWWS, TF15, 15a)

Fabric: A hard, generally oxidised, but frequently mottled grey-orange ware with a dense granular texture. The matrix contains a common frequency of medium to fine quartz sand and rare iron grains. Some vessels have a thin white slip (=15a). Occasionally vessels show a red burnished finish (SOWRB).

Forms: Mainly used for tablewares, in particular flagons and beakers. The white-slipped version mainly occurs as small flagons (cf. Fig. 7.13.157 and 162).

Production would appear to date from the 2nd into the 3rd century. The distribution points to a source in the south-west region and the north Wiltshire area is a possibility. However, a moderately heavy presence on sites in Avon could also suggest a source in this area. The fabric occurs on most sites of Roman date in the region and has been identified locally at Gloucester, Uley (Leach 1993, fabric 13), Frocester (Timby forth-coming, fabric 34) and Cirencester (Cooper 1998, fabric 88/95).

D: Regional Wares

D1: Dorset Black-Burnished Ware (DORBB1, TF4)

Fabric: (Williams 1977; Holbrook and Bidwell 1991, 88–138)

Black-burnished ware is the second commonest fabric by weight at 29% but the commonest by count at 39%. The wares are present throughout, from Phases 1 to 6. Of particular note are two semi-complete vessels, one a flanged bowl from the corn dryer (Fig. 7.15.192); the other a jar from context 943. The former is likely to date from *c.* AD 270 onwards, the latter on the basis of its obtuse lattice from *c.* AD 220+. The jar which may well have been a foundation deposit no longer has its rim and is sooted. The vessel repertoire is dominated by jars, accounting for 58.5% of the total BB1 assemblage on eves. Decoration is exclusively of the burnished lattice type. The second commonest form type present is the plain-rimmed dish (Holbrook and Bidwell 1991, types 56, 57 and 59) accounting for 21% by eve. The flanged-rim bowl (Holbrook and Bidwell 1991, type 45) was also popular accounting for 11% by eve. This vessel form is more typical of the later stages of the industry dating from *c.* AD 270 onwards. Flat grooved-rim bowls (Holbrook and Bidwell 1991, type 43) dating from *c.* AD 180/210–270 are slightly less common but considering their shorter duration well represented at 7.5%. The remaining vessels include examples of flat-rimmed dishes (Holbrook and Bidwell 1991, types 38–40, 49). Types 38 and 49 date from the early 2nd century, the other types from the late Antonine to the mid-3rd century. Together these vessels account for less than 1% by eve, again reflective of their earlier chronology. Other minority types present in small quantities include beaded-rim bowls, and oval, handled fish dishes. No lids or jugs were present.

At least nine DORBB1 vessels were recovered with simple graffito scratched into the vessel surfaces after firing Fig. 7.13.147, 150, 152, 153; Fig. 7.14.170; Fig. 7.15.190–191). These were mainly crosses found both on the rims and on the underside of the bases. One vessel had three parallel lines on the upper body, a dish has three parallel marks on the rim. No pattern could be determined for the occurrence of these vessels on the site and no similar graffiti were found on any other wares.

The emphasis is on types belonging to the later part of the industry, although wares are relatively well represented amongst the Phase 1 material.

D2: Oxfordshire Industry

Vessels from the Oxfordshire industries are moderately well represented in the assemblage with examples of all the main products. In total these account for 7% by weight (8% by sherd count).

Whitewares (OXFWH, TF13) (Young 1977, 93–112)

Apart from a probable candlestick base with square rouletted decoration (Fig. 7.13.156) there were no featured sherds in this ware.

Whiteware mortaria (OXFWH, TF9A) (Young 1977, 56–79)

Types present include Young 1977, types M13, M17, M18, M20 and M22. The commonest forms were M17 dating to AD 240–300 and the later M22 produced AD 240–400+.

White-slipped mortaria (OXFWS, TF9W) (Young 1977, 117–22)

Flanged mortaria Young 1977 type WC7 were present in contexts 34 and 128.

Parchment ware (OXFPA, TF1A) (Young 1977, 80–92)

Mainly represented by bowls with red painted decoration, Young 1977, type P24, dating to AD 240–400. A single rim from a less common globular jar or bowl (Fig. 7.14.174) (Young 1977, form P34) came from context 128.

Red-slipped wares (OXFRS) (TF12A) (Young 1977, 123–84)

A diverse range of wares with beakers and dishes of Young type C45 particularly well represented. Owing to the poor condition of much of the material in this category, it is quite likely that products of other colour-coated industries may have been subsumed into the group or abraded OXFRS have been placed in the miscellaneous oxidised or SVWOX2 groups. Other forms present include various beakers, bowls (Young 1977, ?C48, C51, C81 and ?C89) and flasks (C8).

Colour-coated mortaria (TF9X) (Young 1977, 174–6)

Both the common forms Young types C97 and C100 are present, in production from AD 240 and AD 300 respectively.

D3: Nene Valley Industry

Colour-coated ware (LNVCC, TF12B) (Howe *et al.* 1980)

Forms: Vessels present mainly comprised beakers.

Date: Late 2nd-4th century.

D4: New Forest

Colour-coated ware (NFOCC/NFORS, TF12C) (Fulford 1975)

Forms: Sherds mainly from indented beakers including one with white painted decoration and one sherd with applied barbotine scales.

Date: Late 3rd/4th century.

D5: Mancetter Hartshill

Two sherds of mortaria (MAHWH, TF9D) were recorded including a vessel with a hammer-head rim Fig. 7.14.169.

D7: West Midlands

Shell-tempered ware (ROBSH, TF22)

Fabric: A fairly hard, mostly wheelmade ware with a smooth, soapy feel. The paste contains a moderate to common frequency of fossil shell up to 3 mm in size and sparse black shale/mudstone. Vessels are usually a pale reddish-brown to dark grey in colour. A much coarser shell-tempered fabric was also recorded (see SHEL below). It is unclear whether the two fabrics are related.

Forms: Mainly jars with triangular rims (Fig. 7.14.171), usually with characteristic rilling on the exterior surface.

The ware has a wide distribution across the Midlands from the later part of the 4th century.

Grog-tempered ware (PNKGT, TF241)

Fabric: (Booth and Green 1989, 77–84)

Forms: Large handmade storage jars.

This vessel type is being increasingly recognised over quite a wide area with a possible concentration in the south Northants./north Bucks. area. The large jars appear to be amongst the wider traded products and have been found at Uley (Leach 1993, 232), Frocester (Timby forthcoming), Barnsley Park (Webster and Smith 1982, fig. 50.76) and Gloucester (Timby unpub.). The vessels appear to date to the later 3rd/4th century.

D8: Alice Holt, Surrey

Grey ware (ALHRE, TF 212) (Lyne and Jefferies 1979)

Form: Two sherds from a large storage jar were present in context 34, Phase 6.

Date: 4th century.

E: Unclassified. Probably local, sources unknown

Miscellaneous: A substantial quantity of unclassified grey and black wares were present. The more distinctive examples were allocated codes as described below; the remainder were subsumed into a general reduced ware (GREY) category. Unclassified oxidised wares are labelled OXID; colour-coated wares CC, whitewares (WW), limestone-tempered wares (LIME).

LOCGW1

Fabric: A hard grey ware with a dark brick-red core. A moderately fine sandy fabric with no macroscopically visible inclusions but a rough feel.

Forms: Mainly jars with bifid or simple everted rims, more rarely flanged bowls.

LOCGW2

Fabric: A hard grey sandy ware. The matrix contains sparse fine macroscopically visible, rounded, quartz grains set within a finer background scatter. Rare, black iron grains.

Forms: Everted rim jars.

LOCGW3

Fabric: A pale grey, very hard, ware characterised by a scatter of dark grey-black fine inclusion of iron, some of which have caused fine streaking to the vessel surface. The inner core is occasionally orange-brown in colour. Possibly a north Wiltshire product. A fine sandy texture with no visible grains.

Forms: Jars with triangular or everted rims. Other less common forms include beakers, flanged bowls and a flagon. The substantial part of a jar in this fabric was recovered from ctx 989 (987). One sherd from ctx 251 was decorated with impressed crescent-shaped motifs.

LOCGW4

Fabric: A black, medium sandy ware with a distinctive sandwich-effect core which is grey with red-brown margins. At x20 the matrix shows moderate to common frequency of well-sorted rounded quartz accompanied by sparse fine white specks, ?limestone.

Forms: Several vessels imitate BB1 forms, particularly everted rim jars some with burnished lattice decoration, straight-sided dishes, beaded rim dishes and flanged bowls.

LOCGW5

Fabric: A moderately hard, pale grey ware, with a white and dark grey speckled appearance. The fine textured paste contains fine sand and sparse fine, dark grey-black, iron and rounded discrete grains of oolitic limestone.

Forms: A small group which includes jars, a flanged bowl and a straight-sided dish.

LOCGW6

Fabric: A hard, medium grey sandy ware with a sparse scatter of sub-angular, white, limestone inclusions and a scatter of rounded dark grey ?clay pellets. The surfaces of some sherds have a pocked appearance where the latter have shrunk more than the surrounding clay body and fallen out.

Forms: The only two featured vessels in this fabric are a storage jar (1500) and a straight-sided dish (7).

LOCGW7

Fabric: A hard, very fine, compact grey fabric with distinctive dark grey streaking on the exterior surface. Apart from fine dark grey-black iron there are no other macroscopically visible inclusions.

Forms: Only represented by 13 sherds from closed forms, no featured sherds.

SHEL

Fabric: A slightly friable dark grey fabric with a red-brown surface. The paste contains a common frequency of fossil shell fragments up to 2–3 mm in size.

Forms: Handmade closed forms. No featured sherds.

Discussion

This is the first large quantified Roman assemblage to have been recovered from a site located between Cirencester and Gloucester. The group shows quite a short timespan in comparison to many other sites in the locality spanning just two centuries of occupation. The objective of the pottery analysis was threefold: to attempt to unravel the chronological history of the site, to look at the composition of the assemblage for any functional patterns which might give an insight into status and to place the assemblage in its regional context.

The pottery was dispersed over a large number of contexts across the site. This combined with the condition of the material and the high level of redeposition limits the feasibility of identifying functional changes across the excavated area. Because of the piecemeal nature of the archaeology and the necessity to individually phase the separate areas, it is not proposed to discuss every phase group, but to highlight the more significant assemblages. Table 7.15 summarises the quantities of pottery associated with each main area by phase to provide some insight into how the pottery was distributed across the site and how much reliance can be placed on material from individual phases. It is clear that Area A produced most material, 50% of the total site assemblage, followed by Area B (11%). Most of the other areas produced moderately small assemblages.

The main period of occupation of the site appears to lie in the later 2nd-mid/late 4th century, a period notoriously difficult to define with any great precision in the ceramic record. There are four problems with the assemblage here. First, it is dominated by products of long-lived industries, in particular SVW and DORBB1. Second, closely dateable diagnostic sherds are rare. Third, a high proportion of the contexts only contain a low number of sherds; the later dark soil accumulations produced the highest concentrations of wares. Finally, it is clear from the samian and other wares that there has been considerable redeposition.

Many of the contexts have been arranged into family groups and the contexts forming these are discussed as such. Any other useful or significant groups are briefly discussed by Area and phase. Further detailed information for specific contexts has been integrated into the stratigraphic narrative. A full breakdown can be found in the site archive. Table 7.16 summarises fabric types by phase across the site.

Area A (including Areas 2B and 2C)

Phase 1: occupation pre-dating structures

There are no cut features containing pottery allocated to this phase, the only sherds in Area A coming from 3 layers: 1139 with 10 sherds, 994 with 38 sherds and the colluvium 1140 with 55 sherds. The sherds from layer 994 are very scrappy with an average weight of just 4 g. The assemblage contained samian of late 2nd-mid 3rd-century date but the coarsewares were essentially the same as the overlying phase 2 material. Material from the colluvium was slightly better preserved at 8 g and contained several wares which potentially date to the first half of the 2nd century, such as Wiltshire grey and oxidised wares, Savernake ware and SVW. Layer 1283 above the colluvium produced seven sherds which were not closely dateable.

Phase 2: structures 1450 and 1451

Contexts associated with structure 1450 produced a total of 173 sherds (1302 g) (Table 7.17). Upcast from

Table 7.15 Summary of pottery associated with each main area by phase, Birdlip Quarry.

	Phase											
Area	1	1	2	2	3	3	4	4	5	5	6	6
	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.	No.	Wt.
A	179	1111	995	7709	757	13500	1369	11063	479	3532	2045	19518
B	9	72	120	851	164	1532	79	718	55	347	1288	9359
C	166	1228	30	188	1113	8305						
D	87	309	224	2098	113	843						
E	27	119	137	573	233	2084						
2A	4	5	126	2095	143	1017	185	1085				
2B	48	354	39	546	278	2587	506	4979	308	3933		
2C	0	0	97	467	560	4459						
3	156	1581	562	7813	201	1561	27	131				
5.1			18	459	1	1						
5.2			12	85	1	20						
5.3					4	27						
5.4					1	100						

the cutting of the ditch (807, 1128) produced very abraded small sherds. Pottery from stone surface 1128 produced several unfeatured sherds in fabrics probably dating to the 2nd century and very similar to the underlying 1139. Layer 1149, associated with the early building, contained sherds from a miscellaneous greyware jar which had joining sherds in the terminal of the penannular ditch 1002. There were few sherds associated with the primary fills of ditch 1067. The lowest fill 953, along with 851–2, all contained a small number of sherds, probably of mid-late 2nd-century currency. Layer 915 above 953 contained a grooved rim DORBB1 bowl indicating a date after AD 180/210. An equivalent layer 995 contained a straight-sided DORBB1 dish and a SVWOX2 tankard again suggesting a date from the later 2nd century. Layers 1050 and 929 on the other hand seem to contain very abraded fragments of OXFRS which must date after AD 240 along with a 4th-century coin perhaps indicating later disturbance (cat. 436).

Only one internal posthole, 1147, contained pottery and this included Antonine samian and a grooved rim DORBB1 bowl, which has to date after AD 180/210. Of the features at the entrance to 1450, only one context (819) contained more than ten sherds, which again included Antonine samian and a DORBB1 grooved rim bowl. This together with late 2nd/mid 3rd-century samian from pit 862 and gully 866 and a Mancetter-Hartshill mortarium from pit 820 confirm a late 2nd-/early 3rd-century *terminus post quem* for this phase.

Structure 1451 produced a broadly similar quantity of pottery although there are some subtle changes. The proportion of both DORBB1 and SVWOX2 increased (Table 7.17). The entrance postholes of the new structure contain sherds of an OXFWH mortarium, (Young 1977, type M17) dated to the period AD 240-300. Pottery from the ditch terminals (955 and 987) suggests a date of early-mid 3rd-century with DORBB1 jars (Gillam 1970, type G144), grooved rim bowls and straight-sided dishes and Gaulish black-slipped ware. The stone floor 802 of the structure produced similar material to the gully 866=819 with a mid 2nd to mid 3rd-century range of wares.

Generally speaking, the internal layers and features yielded little pottery and most of this seems to date to the later 2nd to mid 3rd century. The presence of a later 3rd/4th-century flanged bowl may be due to later disturbance.

Other phase 2 contexts

Ditch group 1453 produced 18 sherds of SVWOX2 and DORBB1 indicative of a mid-late 3rd-century abandonment. Other features placed into Phase 2 include a cremation jar from pit 978 in a well-fragmented greyware (LOCGW3) decorated with lightly tooled wavy lines. The rim and neck zone were missing and dating cannot be precise. A second partially complete but again very fragmented vessel was recovered from pit 942. This was a DORBB1 jar decorated with an obtuse burnished line lattice indicating a date of manufacture after AD 220. The sherds were sooted and the rim missing.

A substantial quantity of material was recovered from the three layers (984, 803 and 780) which are thought to comprise midden deposits on floor 802. In total 331 sherds were recovered although the condition varies greatly. In 984, the average sherd weight was quite high, at 19.5 g, and perhaps suggestive of relatively *in situ* rubbish. This decreased to 15.5 g in 803 and to 8.5 g in 780 overlying 984, although all three layers contained essentially the same repertoire of wares. Possibly the upper layers of the midden had been exposed for some time causing degradation of material. The pottery includes mid-late Antonine samian, DORBB1 grooved rim bowls (AD 180/210–270) and Gaulish black-slipped ware suggesting perhaps a mid-later 3rd century *terminus post quem.*

The sequence of three ditches 1256 (group 698), 1258 (group 700) and 1255 all produced small collections of pottery. Ditch 1258, probably the earliest, produced three unfeatured sherds of SVWOX.

Table 7.16 Summary of fabric types by phase, Birdlip Quarry.

PHASE	1	1	1	2	2	2	3	3	3	4	4
FABRIC	No.	Wt.	Eve	No.	Wt.	Eve	No.	Wt.	Eve	No.	Wt.
IMPORTS											
SAMIAN	3	5		24	180	21	16	130	13	27	99
MOSBS				4	6					1	1
BATAM				12	1907		25	4354			
GALAM							1	80			
REGIONAL											
MALREA											
DORBBI	45	199	8	339	1659	144	286	1890	195	475	2305
OXFWH	1	3		1	20						
OXFWHMO				7	141	9	4	127	16	10	326
OXFRS				2	16		3	16		74	281
OXFRSMO										1	7
OXFPA				1	22						
OXFWS											
LNVCC							2	25		3	4
NFOCC											
MAHWH				2	75	12					
ROBSH											
PNKGT											
ALHRE											
WILTSHIRE											
SAVGT	2	14	7	13	43		3	95	5	11	365
WILBBW				3	42	10					
WILRE	21	71		4	33					12	29
WILOX	10	138		14	69	6	3	51	5	7	26
WILCC							3	22			
SOWWS/OX	10	50		8	27		16	107	100	15	103
LOCAL											
GROG											
SVWOX2	75	579	31	256	2448	90	115	922	35	179	2114
MICGW				21	112	3	28	142	11	82	484
LOCGW1				39	311	32	19	118	30	43	341
LOCGW2											
LOCGW3	1	2	5	108	1053	10	40	340	24	27	170
LOCGW4	2	9		7	23		44	152	7	11	60
LOCGW6							4	30		1	5
MISC.											
GREY	11	46	12	48	192	14	5	28	10	42	223
OXID				3	8		9	36		3	34
MORT	1	19									
CC										4	21
TOTAL	182	1135	63	916	8387	351	626	8665	451	1028	6998

Ditch 1255 contained mid-later Antonine samian, a DORBB1 early flanged rim dish and a DORBB1 jar with an incised X on the rim (*cf.* Fig. 7.13.152). Ditch 1256 had a smaller assemblage but it is essentially the same date suggesting that the ditches had fallen out of use by the end of the 3rd century. These were then followed by an accumulation of soil (1235–6 and 1253) which also contained wares of mainly 3rd-century date. Of note was another DORBB1 jar (Gillam 1970, type G144) with a graffito scratched onto the rim (*cf.* Fig. 7.13.153) from 1236.

Phase 3

Ditch group 1454 produced 102 sherds (2040 g) including much the same repertoire as seen above, for example, OXFWH mortarium (Young 1977, type M17), DORBB1 and SVWOX2. A slightly later date is intimated by the presence of a small number of DORBB1 flanged rim conical bowls of late 3rd/4th-century date. One DORBB1 jar from 738 had a scratched graffito (Fig. 7.13.150).

Ditch 1229/233 produced an assemblage amount-

4	5	5	5	6	6	6
Eve	No.	Wt.	Eve	No.	Wt.	Eve
23	15	66	3	29	207	8
	1	2		3	5	
	2	147		11	615	
				1	11	
				1	10	
173	188	886	55	597	5080	456
				1	1	
26	1	24		14	399	42
	24	153	9	248	1414	44
	6	63	5	19	395	53
				2	39	
	1	1		1	3	
	5	33		2	16	
	1	9		29	187	71
				5	265	10
				2	55	5
	2	69		14	273	11
				77	820	19
	1	3				
108	8	28		5	9	
	1	9		11	85	
55	137	1338	14	420	5338	273
40	10	49		64	605	52
16	7	36		67	752	108
				1	68	
10	20	255	13	83	1115	98
	2	4		61	422	72
	3	20		56	368	8
11	10	135		119	516	9
8	2	28		9	79	
	50	46		62	92	
5						
475	497	3404	99	2014	19244	1339

ing to some 97 sherds, although with a long diachronic range from the mid/late 2nd century (1230=primary fill) through to the later 3rd century for material from the upper layer (211) which includes an OXFRS flagon (Young 1977, type C8).

Soils 188, 840 and 848–9 collectively yielded 580 sherds of pottery. It is noticeable that material from 188 and 840 is better preserved with almost double the average sherd weight compared to 848–9. The presence of DORBB1 forms grooved rim bowls and flanged rim conical bowls (Gillam 1970, G145) along with OXFWH mortaria type M17 (Young 1977), and SVWOX2 bifid rim jars suggest these soils developed in the second half of the 3rd century. Colour-coated wares were limited to six or so sherds from 84. Of particular note were 22 large sherds of Dressel 20 oil amphora from 840.

Phase 4

Contexts allocated to Phase 4 yielded a total of 1032 sherds, of which 46% are DORBB1 and 17% SVWOX2 (by count). A marked increase of OXFRS to 7% suggests activity well into the 4th century. A single sherd of late Roman shell-tempered ware (ROBSH) dating to after *c.* AD 360 from 736 may well be intrusive.

The interior features of structure 1452 produced very little pottery with the exception of 729 which produced 99 sherds. These included Nene Valley colour-coated ware (LNVCC), and DORBB1 flanged rim conical bowls dating to the later 3rd/early 4th century.

Occupation layers from outside the structure were ceramically much richer with layers 735-6, 778 and 798 collectively producing 250 sherds. Layer 778 mainly contained mid-late 3rd-century sherds but nothing diagnostically 4th century. By contrast layer 736 with a very small average sherd weight and a coin of AD 388–95 (cat. 483) contained OXFRS, ROBSH and later DORBB1 types (nb. coin and late shell-tempered ware may be intrusive). Pit 1263, Area 2B, produced a good group of 77 sherds including a DORBB1 jar (Gillam 1970, type G145) and a OXFWH mortarium (Young 1977, type M18).

Phase 5

The general soil layer (704) associated with this phase produced 224 sherds, 1243 g including a SVWOX2 jar sherd with a scratched interior surface, presumably from use. The assemblage is again diverse with sherds ranging from the mid-late Antonine period through to the second half of the 4th century. A further reflection of its disturbed nature is indicated by the low average sherd weight of 5.5 g. Layer 815, the rubble collapse of structure 1452, produced the same range of 4th-century wares with, in addition, sherds of New Forest colour-coated ware (NFOCC) beaker and Midlands late grogged storage jar (PNKGT).

Occupation soil 1225, Area 2B, sealing pit 1263, also produced a good 3rd-century group, some 229 sherds with an average sherd weight of 12 g. Both flanged bowls and colour-coated wares were absent. A partly complete 3rd-century DORBB1 jar (1274) was associated with this layer.

Phase 6: groups 985, 713, 1460

Stake-wall structure 985 produced just seven sherds, probably 3rd-century types. The overlying stone structure 713 produced 4th-century pottery from 717 and 1224, apparently contemporary with the two 4th-century coins from the latter (cat. 439 and 464).

Table 7.17 Birdlip Quarry, pottery from structures 1450 and 1451.

	1450						1451					
FABRIC	NO	%	WT	%	EVE	%	NO	%	WT	%	EVE	%
IMPORTS												
Samian	12	7	59	4.5	8	9	11	5	41	2.5	6	5
MOSBS							1	*	2	*		
BATAM	5	3	266	20.5			1	*	125	7.5		
REGIONAL IMPORTS												
DORBB1	63	36	306	23.5	26	30	93	45	514	30.5	69	56.5
LNVCC	2	1	3	*	8	9						
OXFWHMO							6	3	138	8	7	6
OXFRS	2	1	13	1			2	1	10	*		
WILTSHIRE WARES												
WMBBW							1	*	3	*		
WILOX/RE	2	1	6	*								
SAVGT	2	1	26	2			1	*	8	*		
SOWWS/OX	2	1	9	*								
LOCAL WARES												
SVWOX2	28	16	400	31	10	11.5	59	28	756	45	40	33
MICGW	3	1.5	43	3			1	*	8	*		
LOCGW1	7	4	37	3			3	1.5	7	*		
LOCGW2	1	*	9	*								
LOCGW3	12	7	38	3	5	6	9	4	28	1.5		
LOCGW4	7	4	13	1			2	1	4	*		
misc greyware	23	13	71	5.5	29	34	12	6	30	2		
misc oxidised	2	1	3	*	0	0	5	2.5	16	1	0	0
TOTAL	173	100	1302	100	86	100	207	100	1690	100	122	100

* = less than 1%

Layer 34, abutting structure 713, produced one of the larger assemblages of pottery from the site from a single context with 766 sherds, 7980 g. This predominantly dates to the 4th century with all the common late Oxfordshire mortaria types (Young 1977, types M20, M22, WC7, C97, C100), the only vessel of Alice Holt ware from the site, a storage jar and sherds of wheelmade late Roman shell-tempered ware all suggesting that the layer was still accumulating after AD 360/70. Layer 7, a general cleaning context from the same locality, also produced a large assemblage of some 719 sherds, 6966 g with a very similar composition but with 20 sherds of shelly ware, one of the highest concentrations from the site (see also Area D, Phase 3, layer 14 below).

Structure 1460 produced 25 sherds which included a mid-late 3rd century OXFWH mortarium and an OXFRS mortarium probably also of later 3rd-century date, associated with redeposited material. A late 3rd-century date might also be applicable to material associated with structure 1462 (Area A/2B).

A group of 4th-century pottery (205 sherds) was associated with soil layer 1244, Area 2B, and has an average sherd size of 15.5 g. Several colour-coated wares were present including both New Forest and OXFRS vessels.

Area B

Phase 1

Very little pottery came from deposits predating the main ditches, and none from sealed deposits that would provide reliable dating.

Phase 2

Ditch 701 only produced 10 sherds, none closely datable, and ditch 701 had no pottery. More material was recovered from the recut ditch 698, some 96 sherds suggesting abandonment by the 3rd century. Parallel ditch 699, with slightly less pottery, would appear to be contemporary.

Phases 3 and 4

The cobbled surface 307 creating the hollow way sealing ditch 699 contained sherds dating to the 3rd century. An absence of colour-coated wares might suggest it falls into the earlier part of the century, but surface 251, if part of the same episode of activity, pushes the date well into the later 3rd century with OXFRS beaker and dish sherds, a parchment ware

bowl (Young 1977, P24) and a coin struck AD 270–84 (cat. 379). Accumulations 230 and 260 (Phase 4) above 307 only produced moderate quantities of pottery but with OXFRS suggesting a date after *c.* AD 250.

Phase 6

The final soil accumulations 128 and 31 both produced very large assemblages of pottery, 534 and 745 sherds respectively. Layer 128 with an average sherd weight of 9.4 g contained all the late Oxfordshire products but no late shell-tempered ware suggesting a *terminus ante quem* of AD 350/60. Layer 31 with a more fragmented assemblage (average 6 g) contained a similar repertoire and a single sherd of late shell-tempered ware. Oxfordshire industry forms include beakers and Young (1977) types C45, C89, C97, C100, WC7 and P24. The DORBB1 includes oval fish dishes, conical flanged rim bowls, straight-sided dishes and jars (Gillam 1970, G147/8). Sherds of New Forest colour-coated ware are also present.

Area C

Phase 1: oven structure 643 and associated gullies 696 and 697

The only oven structure to produce pottery was 643, with 19 sherds, probably all datable to the 2nd century, with DORBB1, SVWOX2 and local greyware. Sherds from gully 696 are probably of similar currency but again nothing very distinctive is present. Gully 697 produced a good group of 111 sherds from 228, 258 and 386, with a further 712 sherds from 18. Material from the former group suggests a late 2nd- to mid-3rd-century date whilst the latter indicates accumulation well into the mid-4th century. A sherd from a DORBB1 jar, (Gillam 1970, type G142), from 258 joins with a sherd in 18. Context 258 also produced the substantial part of a DORBB1 grooved rim dish. Ditch 1229/233, which cut the ovens, contained material dating to the 2nd/3rd centuries (see above).

Area D

Phase 1: structure 1456 (Table 7.18)

Ditch 269 contained several 2nd/3rd century wares including an unusual rouletted OXFWH candlestick base (Fig. 7.13.156). Material appears to have still been accumulating or disturbed in the later 3rd/4th century as indicated by a single DORBB1 conical flanged rim bowl from 270. The upper ditch fill 369 also contained a number of later 3rd/4th century sherds with a barbotine scale decorated OXFRS beaker (AD 270–400), flagon and mortarium.

The floor surface 268 produced part of a DORBB1 conical flanged bowl and sherds from a DORBB1 jar decorated with an oblique lattice (AD 220+) and with calcareous deposits on the interior surface from holding water.

Phase 2: structure 1457 (Table 7.18)

Ditch 271 only produced pottery finds from the upper fills which would indicate a mid to late 3rd-century date for abandonment. The two postholes, 434 and 275 both produced pottery. The material from 434 (435) includes an OXFRS flanged bowl (Young 1977, type C51) and 17 sherds of shell-tempered ware. At present the latter is difficult to identify closely. It is slightly coarser then the usual late Roman shell-tempered ware, but association of the colour-coat suggests it should also be of late Roman date. Further sherds of OXFRS (AD 240–400) were recovered from 275.

Phase 3

The spread of dark earth 14 produced 113 sherds (843 g) which included 20 sherds of ROBSH, one of the two highest concentrations on the site.

Area 3

Rectangular building

A single jar (1536) was found near the threshold stone. Unfortunately the rim and neck zone were missing but the vessel, in a North Wiltshire oxidised sandy fabric, could date from the mid/late 2nd century. Pottery from the fill of 1548 with sherds of DORBB1, SVWOX2, Savernake ware and micaceous greyware suggests a later 2nd century date. Pottery sealed by the pitched stone floor 1504 includes OXFRS and PNKGT which has to date to the second half of the 3rd century.

Pottery from the late floors 1512 and 1521 includes late 3rd/4th century colour-coated wares including a fragment of burnt OXFRS mortarium.

Corn dryer 42 (Table 7.19)

The corn dryer (33, 43, 81, 190) produced 233 sherds of pottery (1946 g). Of particular note is an almost complete DORBB1 conical flanged bowl from 190 (Fig. 7.15.192). The pottery suggests the structure was abandoned in the 4th century. The rubble backfill of the stokehole (81) contained later 2nd/3rd century samian, and a DORBB1 jar (Gillam 1970, type G142) perhaps suggesting deliberate infill with midden material reflected in a relatively low average sherd size of 8.4 g.

Wells 277, 299 and 891 (Table 7.20)

Well 277 contained a modest assemblage of 107 sherds mainly from the infill (368). This is dominated by sherds of SVWOX2 with a small amount of DORBB1 none of which need be later than the late 2nd-mid 3rd century.

Well 299 produced 209 sherds. Pottery associated with the Period 1 construction, use and collapse (335) includes one sherd of OXFRS (AD 240–400) possibly intrusive, SVWOX2 and LOCGW1. Similar sherds came from 366 whilst both 606 and 597 produced

Table 7.18 Birdlip Quarry, pottery from structures 1456 and 1457.

	1456						1457					
FABRIC	NO	%	WT	%	EVE	%	NO	%	WT	%	EVE	%
IMPORTS												
Samian	2	2	13	3								
MOSBS							1	*	2	*		
BATAM							5	3	53	3		
REGIONAL IMPORTS												
DORBB1	90	80	392	86	35	100	46	29	346	18	29	24
OXFWH	1	*	19	4								
OXFWHMO							3	2	83	4	10	8
OXFRSMO							1	*	15	*	2	1.5
OXFRS							1	*	2			
PNKGT							1	*	39	2		
ROBSH							1	*	6	*		
WILTSHIRE WARES												
WILOX/WILRE	1	*	1	*								
LOCAL WARES												
SVWOX	15	13	22	5			60	38	990	52	41	34
MICGW							4	2.5	87	4.5	29	24
LOCGW2							1	*	28	1.5		
LOCGW3	2	2	6	1			5	3	55	3	9	8
LOCGW4							5	3	45	2		
SHEL							17	10.5	117	6		
misc greyware							8	5	33	2		
misc oxidised	1	*	4	*								
TOTAL	112	100	457	100	35	100	159	100	1901	100	120	100

* = less than 1%

sherds of mid-late Antonine samian and Dressel 20 amphora. Apart from the single OXFRS none of the material need be later than AD 200/250. More material recovered from the Period 2 contexts represents rubbish accumulation in the weathering cone. This includes a number of typical 4th-century wares, notably colour-coats OXFRS, LNVCC, late DORBB1 forms such as G146 and late Roman shell-tempered ware, alongside sherds of later 2nd–3rd century date.

Well 891, again divided into two periods, produced a total of 366 sherds. A total of 242 sherds of pottery was recovered from the lower fills 1047, 895–7 and 880. The presence of OXFRS from 880 and a DORBB1 jar G143 suggests a date in the second half of the 3rd century. The material from the other contexts has more of an early to mid 3rd-century flavour with DORBB1 jars G133, G138, straight-sided dishes and grooved rim bowls. A balance might suggest AD 260/80. The upper fills produced less material but with OXFWH mortaria (Young 1977, type M17), OXFRS (type C45) and DORBB1 flanged rim conical bowls indicates a date in the later 3rd/early 4th century.

Boundary ditches

The three main boundary ditches associated with Area 3, namely 1680 Phase 1, 1681 Phase 2 and 1682 Phase 3, all produced pottery although the last-named only contained three sherds. The wares from 1680 and 1681 are summarised in Table 7.21. Ditch 1680, with a total of 64 sherds, included mid-late samian and 3rd century DORBB1. Ditch 1681 also with 64 sherds, but in a much better state of preservation, produced a number of 4th-century forms, for example a jar G147, OXFWH mortarium M22, OXFRS forms C51, C45 and shell-tempered ware (SHEL). The material from 1682 is redeposited, the dating deriving from the coins.

The Phase 1 ditches, group 690, gully 65 did not produce enough pottery to suggest a date other than Roman. Ditch group 683 (Table 7.21), Phase 1/2, yielded a total of 182 sherds which included several DORBB1 jars of G142–3 indicating a 3rd-century date. Colour-coated wares were absent. Of the phase, 2 ditches, group 689 with 96 sherds includes later 3rd/4th century OXFRS beakers, DORBB1 flanged rim conical bowls and PNKGT alongside 4th-century coins. An OXFWH mortarium (Young 1977, type M13) (?AD 180–240) was also present. Group 688 with 72 sherds contained several SAVGT sherds but a later Roman date is indicated by the presence of OXFRS mortaria and DORBB1 flanged rim conical bowl. Approximately two-thirds of a straight-sided DORBB1 dish with a slightly beaded rim marked with three small notches came from 73 (Fig. 7.15.191).

Table 7.19 Birdlip Quarry, pottery from corn dryer and associated boundary ditches.

Fabric	No	No%	WT	WT%	EVE	EVE%
IMPORT						
Samian	4	1	52	1.5		
REGIONAL IMPORTS						
DORBB1	226	69	1690	56	164	86
WILTSHIRE WARES						
WMBBW	13	4	32	1		
SOWOX	2	*	5	*		
LOCAL WARES						
SVWOX2	40	12	970	32	7	3.5
MICGW	5	1.5	22	*		
LOCGW3	16	5	128	4	19	10
LOCGW4	10	3	54	2		
MISCELLANEOUS						
Oxidised	5	1.5	18	*		
Reduced	6	2	43	1.5		
TOTAL	327	100	3014	100	190	100

Of the gullies, only 85 and 684 produced viable collections of pottery both of which indicate a late 3rd/4th-century date of abandonment.

The Birdlip Quarry pottery in its regional context

To summarise, the Birdlip pottery assemblage dates from around the middle of the 2nd century through to the later 4th century. Much of the earlier material appears as redeposited sherds in later contexts. Apart from the samian, earlier wares include products of the Wiltshire industries, in particular fabrics SAVGT, WILRE, WILOX and WMBBW, all of which were current in the 2nd century. The coarseware assemblage throughout is dominated by products of the Severn Valley industry and vessels from the Dorset black burnished industry. In the later 3rd–4th centuries samian tablewares are replaced by products of the large regional colour-coated industries, mainly Oxfordshire, but also a few New Forest and Nene Valley beakers. In the later 4th century, sherds of late Roman shell-tempered ware appear. There is no ceramic evidence to suggest the site continued beyond the later 4th century.

A number of Roman sites in the immediate locality that have recently been published or analysed are useful for comparison with this site. Birdlip Quarry is of particular interest with regard to ceramics as it lies on top of the Cotswold ridge between Cirencester and Gloucester. In the past the topographic divide between these two important Roman towns has been regarded as something of a ceramic watershed in that the character of the assemblages from the two centres, although similar in general composition, shows very different biases towards certain fabrics. It has been assumed that this is a simple product of market forces and the added difficulties of transporting goods up and down the escarpment. Birdlip however, demonstrates that this might not have been the case.

In addition, there has been recent work on three other large assemblages from the general locality and these can be compared with the Birdlip group (Table 7.22). These include Uley, the site of a Roman temple (Leach 1993); Frocester, a Roman villa with earlier settlement (Timby forthcoming), and Kingscote, a villa-like house with a mosaic and a wall painting set within what is provisionally interpreted as a villa estate (Timby 1998a). The same table includes data from an urban site in Gloucester. The site selected is Berkeley Street (site code 77/69) which has one of the largest assemblages from within the colonia and is one of the few sites where the entire Roman sequence has been excavated. Although the group is useful in terms of demonstrating a typical range from Gloucester, it is also unfortunately heavily biased by the presence of a pottery kiln on the site, whose concomitant debris dominates the pottery totals. To date there are no fully quantified assemblages available from Cirencester but work by Nicholas Cooper (1998) on Admiral's Walk illustrates the pattern of supply to the town.

Chronologically, Kingscote is closest to Birdlip in that occupation from the excavated site appears to date back to the early 2nd century. Both Uley and Frocester have pre-Roman occupation. All three rural sites were occupied in the 3rd and 4th centuries.

Urban centres such as Gloucester, and, to a much lesser extent, Cirencester, show more diverse assemblages compared to the rural sites, in that both were receiving a wider range of fineware imports, mortaria and amphorae. Samian ware at Gloucester accounted

Table 7.20 Birdlip Quarry, pottery from wells 277, 299 and 891.

	Well 277						Well 299						Well 891					
FABRIC	No.	%	Wt.	%	Eve	%	No.	%	Wt.	%	Eve	%	No.	%	Wt.	%	Eve	%
IMPORTS																		
samian							18	8.5	62	4			2	0.5	33	1		
BATAM	3	3	1667	38			6	3	280	17			1	*	23	0.5		
GALAM							10	5	9	0.5								
REGIONAL IMPORTS																		
DORBBI	7	6	40	1	15	12	80	38	549	33	77	55	179	49	1294	30.5	220	67
OXFRS							2	1	13	0.5			8	2	48	1	17	5
OXFRS MO													2	0.5	26	0.5		
OXFWH							2	1	13	0.5			1	*	3			
LNVCC							1	0.5	7	*								
ROBSH							1	0.5	15	1								
WILTSHIRE WARES																		
WMBBW													1	*	87	2	19	6
SAVGT							1	0.5	17	1			3	1	221	5	8	2
WILOX											1	*	5					
SWOX							2	1	2	*			10	3	84	2		
LOCAL WARES																		
SVWOX	95	89	2649	60	103	83	47	22.5	424	26	31	22	75	20	1386	33.5	39	12
micaceous gyware	2	2	39	1	6	5							6	1.5	106	2.5		
LOCGW1							15	7	128	8	32	23						
LOCGW2							1	0.5	6	*								
LOCGW3							11	5	54	3			36	10	339	8	23	7
LOCGW4							1	0.5	18	1			19	5	247	6	3	1
LOCGW7													10	3	160	4		
MISC.																		
GREY							10	5	45	3			12	3	62	1.5		
OXID							1	0.5	4									
TOTAL	107	100	4395	100	124	100	209	100	1646	100	140	100	366	100	4124	100	329	100

Table 7.21 Birdlip Quarry, total quantities of individual fabrics from ditches 1680, 1681, 683, 684, 688, 689 and 85.

DITCHES	1680			1681			683			684			688			689			85		
FABRIC	No.	Wt.	Eve	No.	Wt.	Eve	No.	Wt.	Eve	No.	Wt.	Eve	No.	Wt.	Eve	No.	Wt.	Eve	No.	Wt.	Eve
IMPORT																					
SAMIAN	1	10		1	70	5	1	1								1	4		1	4	
BATAM	2	40					2	293					1	370		5	227		4	521	22
REGIONAL																					
DORBBI	33	91	22	23	254	37	116	447	64	6	18		44	604	77	33	192	12	18	192	17
OXFWHMO				1	69	5	1	7	5	14	194	12				1	84	10			
OXFRS	1	5		3	67	5				7	15		4	10		10	24	1	10	36	
OXFRSMO													4	53	8						
PNKGT				2	39											1	20				
WILTSHIRE																					
SAVGT							1	29					12	144		5	58				
WILRE				2	15		2	8													
WILOX							2	2													
SOWWS										1	11										
LOCAL																					
SVWOX2	19	211	14	22	433	18	45	170	5				3	14		33	376	16	11	224	15
LOCGW1																2	20				
LOCGW3	3	98		5	75	20	3	18								5	30	12	1	44	
LOCGW4							6	18		1	1										
LOCGW7	3	58																			
MISC.																					
GREY				1	10		1	4		3	4		4	10					5	64	10
OXID	2	22					1	2		8	27										
CC							1	5													
SHEL				4	32																
TOTAL	64	535	36	64	1064	90	182	1004	74	40	270	12	72	1205	85	96	1035	51	50	1085	64

Table 7.22 Comparison of pottery fabrics from Birdlip Quarry, Kingscote, Uley, Gloucester and Frocester.

Fabrics	Birdlip		Kingscote		Uley		Gloucester[1]		Frocester	
	% WT	% EVE	% WT	% EVE	% WT	% EVE	% WT	% EVE	% WT	% EVE
pre-Roman native ware	np	np	np	np	13.8	8	1	*	17.6	9.4
IMPORTS										
Samian	2	3	1.2	2.4	*	5	6	10	*	1.8
Cologne colour-coat	np	np	*	*	np	np	*	*	np	np
Gaulish black-slipped ware	*	*	*	*	*	*	*	*	*	*
amphora (Dressel 20)	10	*	8.2	*	1	*	9.5	10	4.6	*
amphora (other)	*	*	*	*	np	np	7	*	*	*
mortaria (imported)	np	np	np	np	np	np	6	1.5	np	np
WILTSHIRE WARES										
wm black-burnished (201)	*	*	4.7	7.8	2	2.8	*	*	1.4	3.6
Savernake	3.5	*	4.7	*	5.6	1.5	*	*	5	1.4
Wilts oxid/reduc (231/231)	2	1.5	1.6	2.5	ni	ni	*	*	*	*
SW sandy/slipped (15/15a)	*	4	2.3	6	5.5	5.5	*	*	*	*
SW colour-coated ware	*	*	*	*	1.5	5	*	*	*	*
REGIONAL IMPORTS										
Dorset BB1	29	43	16.8	24.5	13.3	15	10	13.5	15	23
late shelly ware (22)	*	*	*	*	2	3.5	*	*	*	*
late grogged ware (241)	*	*	*	*	*	*	np	np	*	*
Nene Valley colour-coats	*	*	*	*	*	*	*	*	*	*
mortaria (various)	*	*	*	*	ni	ni	1	*	*	*
OXFORDSHIRE WARES										
whiteware incl mortaria	2	8	1.4	1	1	*	1	1	*	*
colour-coats incl mortaria	5	4	4.3	6.2	4.1	6.5	*	1	1.8	3
white-slipped mortaria	*	*	*	*	ni	ni	*	*	*	*
parchment ware	*	*	*	*	ni	ni	*	*	*	*
LOCAL WARES										
micaceous greyware (5)	2	2	35.6	24.5	32.8	32	1	*	21.8	26.5
Severn Valley wares	30	21	9.8	6.3	14.9	13.5	19.5	10.5	26.9	26.9
Gloucester kiln wares	np	np	np	np	np	np	30	41	np	np
OTHER WARES	9	15	4.5	12	0	0	5	6.5	1	1
SUB/POST ROMAN WARES	np	np	np	np	*	*	np	np	*	*
TOTAL EVES/WEIGHT	150967	10426	497406	46865	467000	ni	251 357	43669	479920	40186

Notes: The figures for Uley have been reworked from the published piecharts (Leach 1993, fig. 163); those for Frocester are based on Timby (forthcoming); Gloucester figures are based on assemblage from Berkeley Street (site code 77/69) stratified Roman levels only.

* = less than one percent; ni = not identified; np = not present

for 6% by weight, 10% by count compared to the 3% at Birdlip. Leaving aside the Gloucester kiln wares which account for 30% by weight of the Berkeley Street group, the commonest wares by far are Severn Valley ware followed by Dressel 20 amphorae and Dorset black burnished ware. There are nearly twice as many SVWOXs by weight reflecting the availability of these wares from the Severn Plain. Severn Valley wares are by contrast relatively rare at Cirencester where the assemblages tend to be dominated by products of the Wiltshire industries and DORBB1. The dominance of SVWOX at Birdlip therefore implies that it was drawing a considerable part of its pottery from the west. In terms of DORBB1, Birdlip would appear to be more comparable with Cirencester where in the later Roman period DORBB1 tended to dominate most assemblages. For example, in a typical early 3rd-century group (Admiral's Walk), it accounted for 25% by eve, whereas in mid-late 3rd- and early-mid 4th-century groups it accounted for between 41–5%, and in the later 4th century it dropped away to 25–8% (data taken from Cooper 1998). A recent survey by Allen and Fulford (1996) highlighted the Fosse Way as one route by which DORBB1 was distributed. It would seem that Cirencester may well have been drawing its supplies directly from the Poole harbour region rather than perhaps via any coastal routes through Gloucester.

Turning to the three 'rural' sites, one significant difference between Birdlip and Kingscote on the one hand and Uley and Frocester on the other is the almost complete absence of pre-Roman native ware reflecting a probable absence of any 1st-century occupation at the former two localities. The level of imported finewares is very similar at all the sites, the highest coming from Uley (5% by eve). Birdlip has a slightly higher proportion of amphora closely followed by Kingscote. Differences start to emerge for the Wiltshire products which are better represented at Kingscote and Uley, with both Frocester and Birdlip falling into the Gloucester pattern. Although DORBB1 is well represented at all the sites it does not reach the proportions seen at Birdlip. One of the greatest differences is seen in the proportions of SVWOX and micaceous greywares (TF5). Severn Valley wares form the commonest fabric type at Frocester accounting for some 27%, very close to the pattern at Birdlip. The proportions are considerably less at Kingscote and Uley where the commonest single fabric is micaceous greyware accounting for 35.6% and 32.8% by sherd count and weight respectively. Micaceous greyware is also well represented at Frocester where it is the second commonest ware at 22% (weight). At Birdlip, however, it only represents 2% of the total assemblage, and it is similarly poorly represented at both Gloucester and Cirencester. This strongly supports a southern source for this particular micaceous greyware fabric and a production centre in the general locality of Kingscote is a strong possibility. This is reinforced by an apparent absence of the ware from sites in the south Cotswolds/Avon area. The micaceous greyware found in Gloucester and other sites north of the Severn, particularly in the Forest of Dean/Chepstow area, although visually very similar, often appears slightly later in the 3rd–4th centuries, and may represent a separate industry.

Another site which shares many common features with Birdlip is Brockworth, situated in the Severn Valley between Gloucester and the Cotswold escarpment (Rawes 1981). The site, mainly comprising ditched paddocks associated with two roundhouses, produced a good assemblage of pottery. Although not quantified in detail this was dominated by sherds of SVWOX and DORBB1, with samian and products of the Oxfordshire industry also well in evidence.

In conclusion, therefore, it would appear that although the Birdlip Quarry assemblage shares features in common with Cirencester to the south-east and Gloucester to the north-west, it appears to be most similar to sites on the Severn Plain, reflected by the popularity of SVWOX2 at the site. Although the percentage of samian appears low, it is consistent with that from the other rural sites which superficially might appear to represent higher status establishments. It should be noted, however, that Birdlip Quarry was only part of what is clearly a much larger site and there may well be a higher status element elsewhere in the complex. The low proportion of large storage jars is also surprising as these tend to be better represented on rural sites; Frocester for example, has a large number. Although the level of other Roman finewares also appears to be consistent across all these sites, the proportion of drinking vessels at Birdlip is markedly low compared with Kingscote, for example. The reason for this is not clear especially since the presence of Gallic amphora might be taken to indicate some wine consumption. Is a low number of drinking vessels and flagons, for example, a reflection of a lower status establishment?

The samian perhaps mitigates against this and one possibility is that the assemblage at Birdlip, much of which comprises midden material, partially derives from a higher status establishment in the immediate locality, the excavated structures being peripheral to the wider picture. It has been observed elsewhere that surface debris becomes much more frequent in the 3rd century with midden areas adjacent to buildings (Plouviez 1995, 73). Alternatively, this assemblage might be typical of any modest Roman settlement in the Cotswolds, the composition reflecting availability of wares and market forces rather than status. Assessment against other finds from the site may help clarify this

Catalogue of illustrated pottery *(Figs 7.13–15)*
Drawn by Lesley Collett

Period 1, Area A

Phase 1

145 Base from an oxidised sandy ware beaker, with circular hole drilled through. Fabric WILOX. Layer 1140.

Phase 2

146 Fine grey ware necked jar, fabric LOCGW. Ditch 1450, segment 1003, fill 1002.

147 Base from a DORBB1 jar with an X incised into the base. Ditch 1451, segment 955, fill 954.

148 SVWOX2 tankard with hole, ?accidental, through base. Ditch 1451, segment 987, fill 986.

Phase 3

149 DORBB1 flanged rim conical bowl. Ditch 1454, segment 737, fill 738.

150 DORBB1 jar with oblique burnished line lattice decoration. Three parallel, vertical lines have been incised on upper body after firing. Ditch 1453, segment 737, fill 738.

Period 1, Area 2C

Phase 2

151 DORBB1 flanged rim bowl. Ditch 1255, fill 1250.

152 DORBB1 jar with incised cross on inner rim face. Ditch 1255, fill 1250.

153 DORBB1 jar with oblique lattice decoration. Edge of incised graffito on inner rim face. Layer 1236.

Period 1, Area C

Phase 1

154 DORBB1 jar with oblique lattice decoration. Ditch 697, segment 259, fill 258. Joining sherd in layer 18.

155 DORBB1 flanged rim bowl. Ditch 697, segment 259, fill 258.

Period 1, Area D

Phase 1

156 Whiteware base with square rouletted decoration, possibly a candlestick. Fabric OXFWH. Ditch 697, fill 270.

Period 1, Area E

157 Disc-necked flagon. Fabric SOWWS. Ditch 322, fill 323.

Period 2, Area A and 2B

Phase 3

158 Disc-necked flagon. Fabric SOWRB. Area A, layer 849.

159 Fine greyware jar. Fabric LOCGW. Area A, layer 849.

160 Wheelmade black jar. Fabric SAVGT. Area A, layer 849.

161 Foot or handle. Fabric WILOX. Area A, layer 731.

Phase 3–4

162 Disc-necked flagon. Fabric SOWWS. Area 2B, layer 1277.

Phase 4

163 Bowl-shaped object with a notched rim. Soft, red-orange tile-like fabric. Area A, feature 755, fill 1022.

Phase 5

164 Wide-mouthed jar. SVWOX2. Area 2B, layer 1225.

165 Large hook-rimmed jar. SVWOX2. Area 2B, layer 1225.

166 Large hook-rimmed jar. SVWOX2. Area 2B, layer 1225.

167 Tankard. SVWOX2. Area 2B, layer 1225.

168 Everted rim jar. Fabric WILRE. Area 2B, ditch 1252, fill 1264.

Phase 6

169 Mancetter-Hartshill hammer-head mortarium, with a slightly worn interior surface (MAHWH). Area A, wall 1460, segment 904, fill 905.

170 Base sherd from a straight-sided DORBB1 dish, with an incised X on the upper surface. Area A, layer 34.

171 Late shelly ware jar. Fabric ROBSH. Area A, layer 53.

Period 2, Area B

Phase 4

172 Large storage jar. Midlands grog-tempered ware PNKGT. Layer 260.

173 Flanged hemispherical bowl. SVWOX2. Layer 260.

Phase 6

174 Oxfordshire parchment ware (OXFPA) globular bowl or jar with traces of red paint (Young 1977, type P34), layer 128.

175 Everted rim jar. LOCGW. Layer 128.

176 Flanged rim bowl. LOCGW. Layer 128.

177 Straight-sided dish. MICGW. Layer 128.

178 Jar. SVWOX2. Layer 128.

179 Bifid rim jar. SVWOX2. Layer 128.

180 Wide-mouthed jar. SVWOX2. Layer 128.

181 Polygonal bowl-shaped object with stabbed dot decoration on the upper surface. Soft, orange tile-like fabric. Layer 250.

Period 2, Area C

Phase 3

182 Flanged, moulded rim jar. SVWOX2. Layer 18.

183 Flat-rimmed bowl. SVWOX2. Layer 18.

184 Wide-mouthed jar. SVWOX2. Layer 18.

Period 2, Area D

Phase 2

185 Rimsherd from an OXFRS cup/small bowl. Posthole 275, fill 411.

Period 2, Area 3

Phase 2

186 DORBB1 jar. Ditch 1502, fill 1501.

187 DORBB1 jar with oblique burnished lattice. Ditch 1502, fill 1501.

188 Tankard. SVWOX2. Ditch 1502, fill 1501.

189 Greyware jar. LOCGW. Ditch 1502, fill 1501.

Period 2, Area 2A

Phase 2

190 Base from a DORBB1 jar with an incised X on the base. Ditch 1330, fill 1328.

Other features

191 DORBB1 straight-sided dish with slight beading of the rim. Three equidistant small knicks have been incised into the rim edge after firing. Ditch 688, segment 67, fill 73.

192 DORBB1 flanged rim bowl with intersecting burnished line arc decoration. Corn dryer 44, fill 190.

193 DORBB1 Flat-rimmed bowl. Wheelmade black burnished ware, WMBBW. Well 891, fill 896.

194 DORBB1 straight-sided dish with a burnished wavy line. Well 891, fill 896.

195 DORBB1 straight-sided dish with beaded rim and intersecting arc decoration. Well 891, fill 896.

196 DORBB1 grooved rim bowl with intersecting arc decoration. Well 891, fill 896.

197 DORBB1 jar. Well 891, fill 896.

Discussion of the Iron Age and Roman pottery

Although pottery is one of the most abundant finds from sites dating to the Iron Age and early Roman periods in Gloucestershire, many of them were dug some years ago, for example, Bagendon (Clifford 1961), Salmonsbury (Dunning 1976) and Shenberrow (Fell 1961a). Others remain unpublished, for example the farmstead at Winson, the lower lying settlements at Claydon Pike and Coppice Corner, Kingsholm, Glos., and Beckford, Hereford and Worcester, or comprise moderately small groups such as those from Uley Bury and Norbury (Saville 1983a). Work on some of the more recently investigated sites is still in progress, for example Naunton (Timby in prep. b); Guiting Power (Marshall 1995) and Sherbourne House, Lechlade (Timby in prep. c.). The only sites to be published where large-scale modern excavations have taken place are Crickley Hill (Dixon 1994) and Birdlip Bypass, Cowley (Parry 1998). Other more recent smaller scale excavations with relevant pottery groups include Ditches, North Cerney (Trow 1988) and Roughground Farm, Lechlade (Darvill *et al.* 1986; Allen *et al.* 1993).

In the case of the Roadscheme, a number of similarly dated small assemblages were recovered from other sites along the road corridor. Although not warranting full publication, owing to its limited nature or poor preservation, this material may prove of greater significance in the future. These sites are therefore noted below.

Early-middle Iron Age

The earliest Iron Age assemblages recovered are probably those from Ermin Farm and Preston Enclosure with further odd sherds from other sites. Of note are several mainly residual early Iron Age sherds from Trinity Farm. Here, a notched rim in limestone-tempered ware (fabric L1) was associated with sherds in fabric L2 and H2. Two multiple-line incised decorated sherds also of early Iron Age date were recovered from Court Farm.

Most known assemblages of early Iron Age date from Gloucestershire come from the numerous hillforts to be found on the Cotswold ridge, such as Crickley Hill (Elsdon 1994), Burhill (Marshall 1989) and Shenberrow (Fell 1961a). Non-hillfort settlements are less common and few have been investigated. Amongst these are Ireley Farm, Stanway and Sandy Lane, Cheltenham (Saville 1984b, 154), and of particular note the extensive early and middle Iron Age occupation in and around Lechlade (Darvill *et al.* 1986; Allen *et al.* 1993; Bateman 1997). The absence of decorated wares, both of the finger-tipped and incised line varieties from both Ermin Farm and Preston Enclosure analogous with those from Lechlade, Crickley Hill or Sandy Lane (Purnell and Webb 1950), and an almost complete absence of carinated vessels would indicate that both the sites are later in date belonging to the early-middle Iron Age phase.

A comparison of the material from Ermin Farm and Preston Enclosure shows similarities in terms of fabric types but significant differences in terms of the proportions of the different wares present (Table 7.23). This mainly manifests itself in the percentage of limestone-tempered wares which is much lower at Ermin Farm being compensated for by a higher percentage of sandy wares. Coarse shelly wares are also slightly more common. Most of the sandy sherds belong to a vessel in the saucepan-pot tradition with curvilinear decoration that is likely to be of middle Iron Age date. The lack of any parallel for such a vessel in this region would strongly suggest it is imported. The moderately high proportion of shelly ware might imply a longer period of use at Ermin Farm, as such wares are common in the later Bronze and early Iron Ages. Alternatively the very different types of settlement represented by the two sites may be similarly manifested in the pottery assemblage.

Assemblages belonging to the middle Iron Age are better represented in Gloucestershire with significant groups known from the hillforts at Salmonsbury (Dunning 1976) and Uley Bury (Saville and Ellison 1983), the upland sites at Guiting Power (Saville 1979b), Birdlip Bypass (Parry 1998) and Huntsman Quarry, Naunton (Timby in prep. b) and the lowland domestic settlements at Claydon Pike in the Thames Valley and Frocester (Price forthcoming) and Eastington, near Stroud (Gardiner 1932) in the Severn Valley. Again many of the groups are small, inadequately published or unpublished. The large prehistoric assemblage recently excavated from Naunton spanned the later Bronze Age through to the middle Iron Age, and has a similar range of material to the Preston sites, with a high proportion of Jurassic limestone-tempered fabrics (64%) in the later period (Table 7.23). Shelly wares, well-represented at 25%, have been confirmed by radiocarbon dating to extend back into the 8th century BC (Foster pers. comm.).

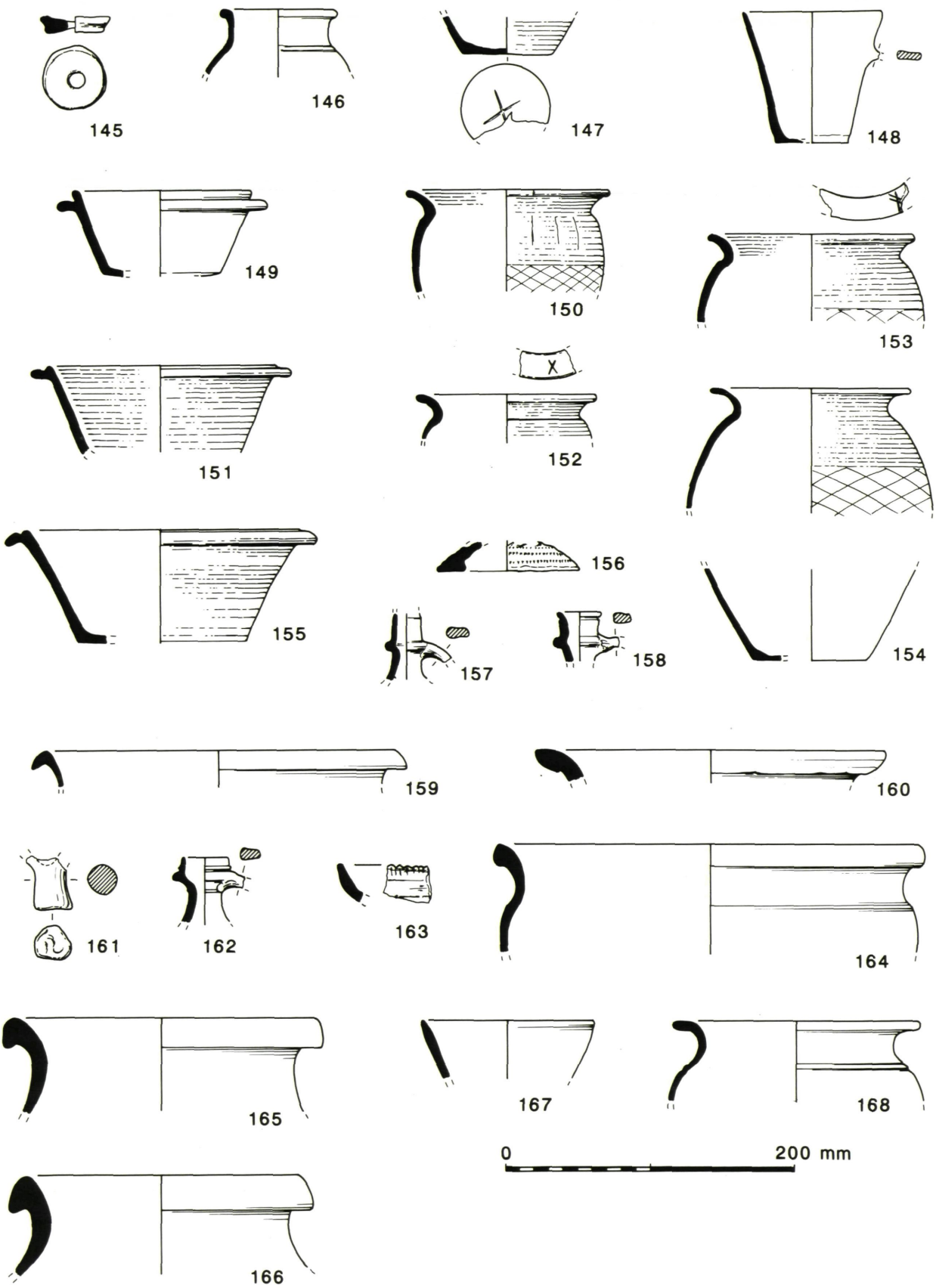


Figure 7.13 Pottery from Birdlip Quarry.

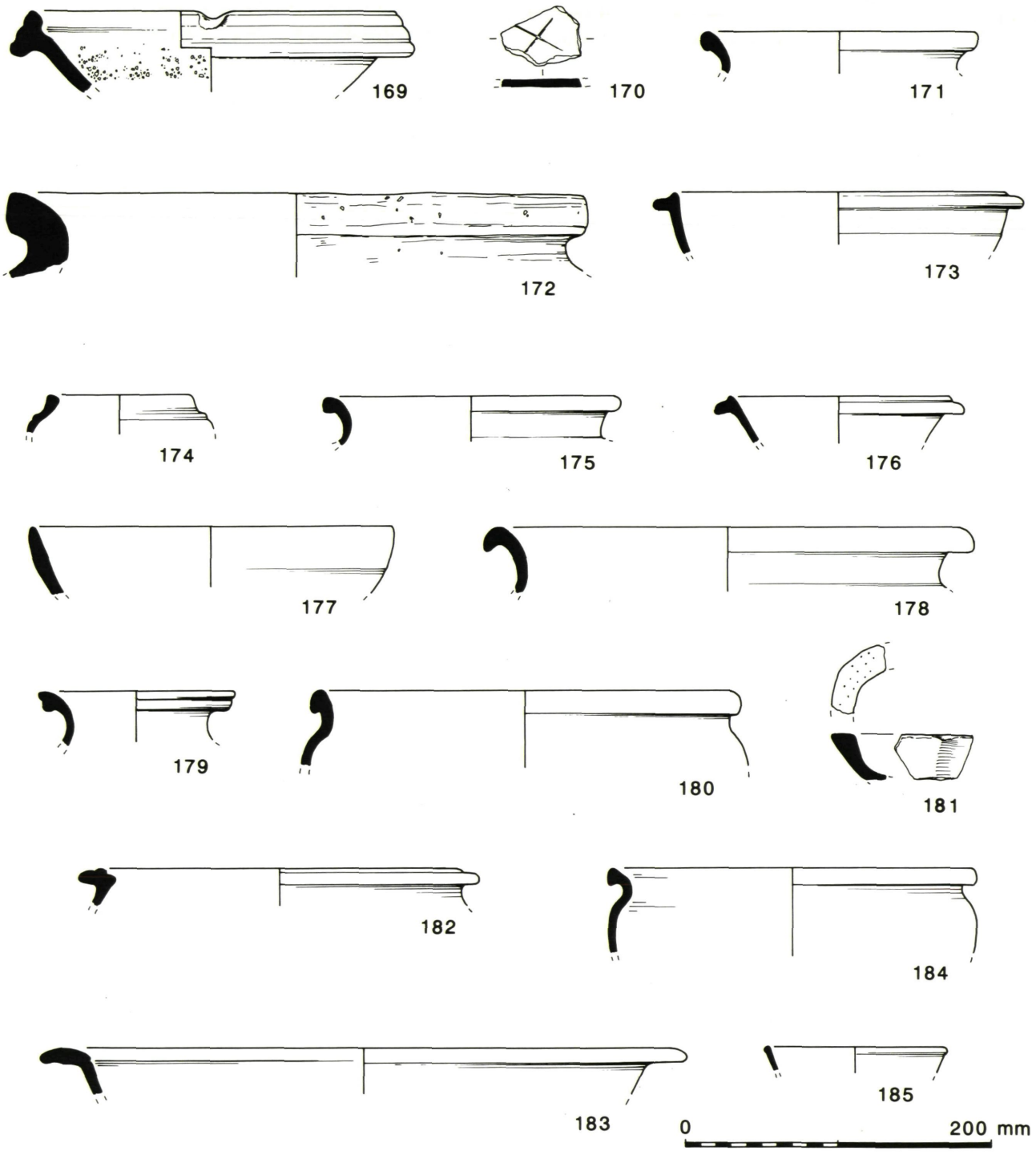


Figure 7.14 Pottery from Birdlip Quarry.

The assemblage from Highgate House would also appear to belong to the middle Iron Age but unlike the Preston sites, the fabric types appear to indicate that occupation may extend into the later Iron Age period (3rd–1st century BC). A comparison of the fabric range (Table 7.23) shows a much lower percentage of fossil shell-tempered ware, and a significant percentage of Jurassic limestone-tempered wares, but the commonest fabric is Malvernian limestone-tempered ware accounting for 59% of the group. This contrasts with the recently published middle Iron Age assemblage from Birdlip which was mainly composed of wares of Jurassic limestone type with only 10% (by weight) of Malvernian limestone origin and no other types (Parry 1998, 74). This might point to a slightly later date of occupation at Highgate House.

Morris (1996), in reassessing pottery from western Britain, suggested that during the early Iron Age, most

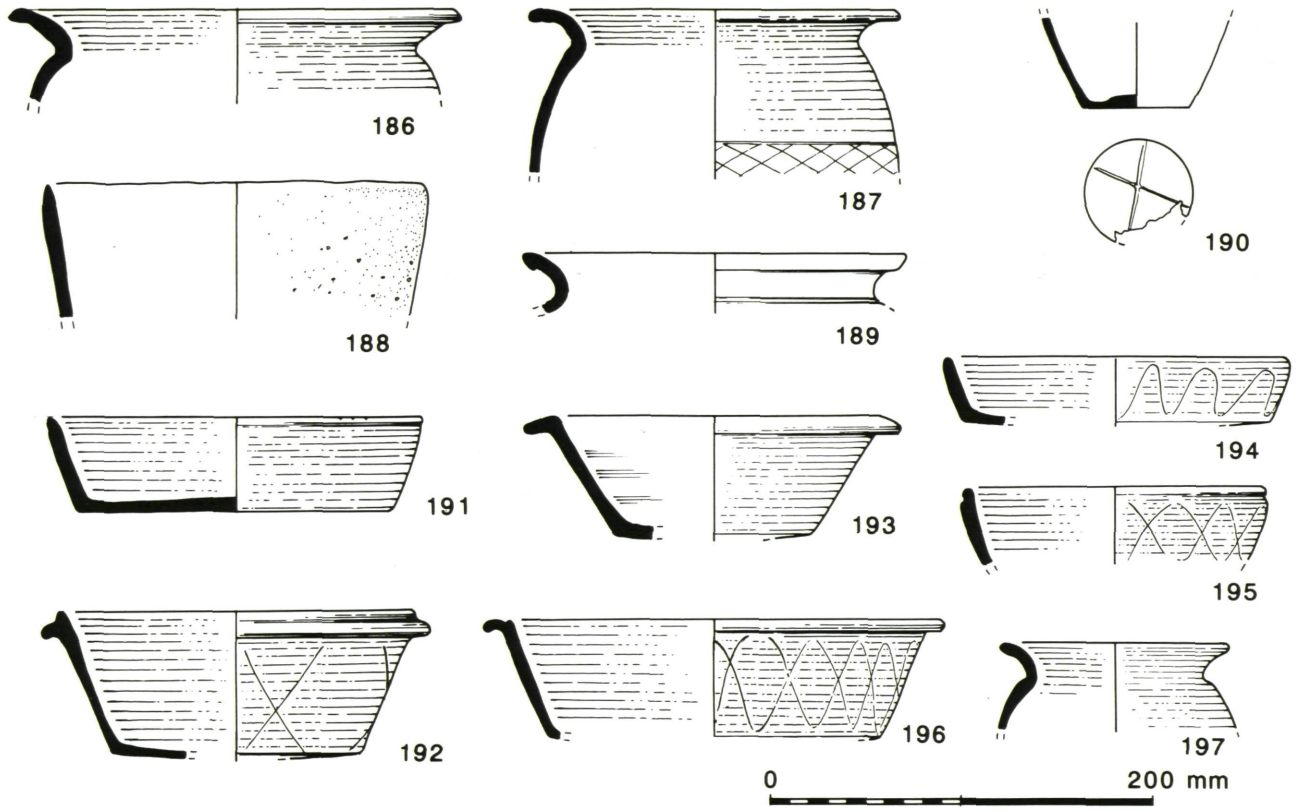


Figure 7.15 Pottery from Birdlip Quarry.

pottery tended to be made from clays local to the sites. Such a conclusion would be supported by the mainly limestone and fossil shell-tempered pottery from Preston, which is located on cornbrash, a hard fossiliferous limestone (Torrens 1982, 77). Detailed petrological analysis, however, would be required to determine whether the 'Jurassic limestone-tempered' group of wares can be provenanced more specifically. The group is a relatively large one, and occurs across quite a wide area of the Cotswolds. The presence of Malvernian rock-tempered ware dating to the mid-later Bronze Age from sites both in Herefordshire and a middle-late Bronze Age metalworking site at Sandy Lane, Cheltenham (Timby 1999), might indicate exchange/trade networks in operation at quite an early date and thus by implication the presence of semi-specialist potters. The Malvernian wares have the advantage in that the fabrics are particularly distinctive (*cf.* Peacock 1968). The more ubiquitous Jurassic limestone/fossil shell-tempered wares are less easy to provenance to a specific source.

Although comparative data is sparse, the assemblage from The Loders, Lechlade appears to have a particularly high proportion of finewares (Hingley 1986), suggesting marked differences in the assemblages. This is reinforced by the pottery recovered from Salmonsbury, which contains a complement of material unparalleled elsewhere in the region (Dunning 1976).

In the middle Iron Age, regionally distributed pottery became increasingly common, notably products from the Malvern region. These wares, first highlighted by Peacock (1968), have been taken to be products of semi-specialist manufacture. Around this time, briquetage (salt containers) from Droitwich begin to appear in assemblages, indicating the existence of exchange/trade networks, the two commodities presumably using the same routes. Briquetage has been found at a number of sites in the area, notably Naunton (Morris forthcoming), Salmonsbury, Oxenton, Lechlade, Uley Bury (Morris archive reports 1981–2, cited in Saville 1984b, 157) and Thornhill Farm (Timby in prep. a). The only site from the road scheme to produce sherds of Malvernian group A pottery was Highgate House which was also the only site to produce a piece of briquetage. No sites produced any of the classic stamped wares highlighted by Peacock (1968), although a sherd with tooled lines from Highgate House may belong to his B1 group.

Later Iron Age/early Roman

Three sites date to the later Iron Age-early Roman period; Duntisbourne Grove, Middle Duntisbourne and Court Farm. Street Farm produced a very small group of *c.* 10 sherds of 1st-century AD date including fabrics MALVL1, MALVRA and SVWEA.

Table 7.24 compares the individual fabrics from

Table 7.23 Comparison of sites with later prehistoric pottery expressed as a percentage by sherd number and weight of total later prehistoric assemblage.

	Preston Enclosure		Ermin Farm		Highgate House		Court Farm		Middle Duntisbourne		Duntisbourne Grove		Naunton	
FABRIC	no	wt	no	wt	No	wt	no	wt	No	wt	no	Wt	no	wt
Shell	14.7	15	24	48.5	3	2.4	2	7	1.6	2.5	0.1	0.25	25.4	32
Limestone	65.0	78.6	18.6	22.4	33.2	49	56	58.5	3	10.8	4.3	7.8	64.3	63.6
Sand	0.9	0.4	40	26.2	0.7	1.5	2.8	1.2					8.7	0.7
Unclass	19.4	5.9	17	3	1	0.6	12	2.8	1.6	1	10.8	5.1	5.9	0.9
MALVL1					59	41	7	5.1	93.7	85.6	83.6	83.3	1.3	0.8
MALVREA					1.4	1.2							0.4	0.5
Calcite	0.2	0.15					0.7	0.4					0.3	0.25
Grog					1.4	4.0	15.6	21.5			1.2	3.6	1.5	1.1
Total LP sherds	448	1959	236	1391	286	1108	141	685	127	471	750	2367	3058	36976
ROMAN	23	21			7	24	306	1851	640	6136	1060	7427	3207	26624
TOTAL	471	1980	236	1391	293	1132	447	2536	767	6607	1810	9794	6265	63600

these three sites. Court Farm has quite a different fabric composition compared with the Duntisbournes. Firstly, occupation appears to extend back into the middle Iron Age whereas the Duntisbourne sites only appear in the later part of the late Iron Age. Secondly, Court Farm was not receiving the same range of pre-conquest imports, the main imports being post-conquest samian and Dressel 20 amphora. The range of late Iron Age native wares seen at Middle Duntisbourne and Duntisbourne Grove are only poorly represented at Court Farm which may have been temporarily abandoned in the early 1st century AD or shifted in focus. A new phase of activity during the Flavian period is characterised by a more 'Romanised' assemblage. Wheelmade wares such as WMBBW and various grey and oxidised wares probably from the north Wiltshire industries are present. Unlike Middle Duntisbourne and Duntisbourne Grove the site was not abandoned in the pre-Flavian period but continued into the early 2nd century.

Material dating to the later Iron Age/early Roman period is rare in the county and for this reason defining the later Iron Age phase on ceramic grounds is extremely problematic. These groups considerably augment the database but again do not offer any independent dating evidence for the adduced ceramic sequence. Only three reasonably large groups of pottery dating to the later Iron Age and early Roman periods have been published from Gloucestershire: Salmonsbury (Dunning 1976), Bagendon (Fell 1961b) and Ditches (Trow 1988). Several smaller groups have been noted, for example, Roughground Farm, Lechlade (Green and Booth 1993) and Duntisbourne Abbots (Fell 1964) and Birdlip Bypass, Cowley (Parry 1998). To this material can be added Frocester Court on the Severn Plain (Timby forthcoming), Abbeydale and Saintbridge on the outskirts of Gloucester (Timby unpub. b), Thornhill Farm, near Fairford (Timby in prep), Wycomb, and Coppice Corner, Kingsholm, Gloucester (Timby unpub. b) and Claydon Pike.

The pottery from both Bagendon and Salmonsbury, although quite different in certain respects, includes a significant number of necked bowls and carinated, cordoned bowls in wheel-turned fabrics. Conventional dating would place such pottery in the second quarter of the 1st century AD (Saville 1984b, 159) although some authorities would prefer to see local wheelmade pottery as a post-conquest phenomenon in the west linked with the arrival of the Roman army (Rigby 1982, 199). At Ashville, near Abingdon similar 'Belgic' wheelmade wares from the Period 3 ditches were considered to date from the late 1st century BC (De Roche 1978, 73). A recent reappraisal of the associated finewares from these ditches suggests that this dating may be a little early and that the ditches fell out of use in the pre- or early Flavian periods (Timby, Booth and Allen 1997). The date of the appearance of wheelthrown pottery in the region is thus still not certain, although the fact that both handmade and wheelthrown vessels occur in the Severn Valley ware tradition implies an indigenous development dating to around the mid 1st century AD. A similar problem exists with the presence of Savernake ware which occurs on several of the sites and accounts for a significant percentage of the Bagendon assemblage. This was originally dated by Clifford (1961b) to AD 10–60. If Savernake ware is largely a post-conquest industry whose distribution is mainly due to the military supply system (Swan 1975, 46), it is difficult to understand how it appears to have achieved such a widespread distribution on sites of immediate post-conquest date throughout south and east Gloucestershire. Both the Severn Valley and Savernake industries may represent local native developments in the 1st century AD which continued to flourish into the Roman period.

The two Duntisbourne sites are of particular interest in view of their proximity to the Bagendon complex and the fact that both sites produced Savernake wares, handmade and wheelmade SVWEA

Table 7.24 Comparison of fabrics from Middle Duntisbourne, Duntisbourne Grove and Court Farm.

SITE	Middle Duntisbourne				Duntisbourne Grove				Court Farm			
Fabric	no	%	wt	%	no	%	wt	%	no	%	wt	%
MIA									109	24.4	578	22.8
H2	2	0.2	12	0.2	1	0.05	6	0.06	3	0.06	48	1.9
L00	4	0.5	51	0.7	32	1.7	184	1.8	1	0.2	2	0.08
L4					11	0.6	88	0.9	1	0.2	3	0.1
Native wares												
MALVL2	24	2.7	113	0.15	73	3.9	508	5				
MALVL1	126	14.2	428	5.7	563	29.8	1548	15.1	10	2.2	35	1.4
GROG	22	2.4	104	1.4	68	3.6	450	4.4	14	3	121	4.8
Imports												
ARRETINE	3	0.3	8	0.1								
SAMIAN					2	0.1	16	0.2	7	1.6	10	0.4
CGWSOX					16	0.8	63	0.6				
GABTR1A					1	0.05	2	0.02				
GABTR3	3	0.3	4	0.05								
GABTN	15	1.7	70	1	1	0.05	6	0.06				
NOGWH	21	2.4	163	2.2	31	1.6	130	1.3				
FWBUFF	6	0.7	11	0.15								
FWOX/WS	4	0.5	40	0.5					2	0.5	2	0.07
AMP	5	0.6	40	0.5	18	1	530	5.2	6	1.3	119	4.7
Local/Regional												
SVWEA1	67	7.6	534	7	305	16.1	1781	17.4				
SVWEA2	320	36	1321	17.5	281	14.9	1266	12.3				
SVWEA3	30	3.4	175	2.3	15	0.8	132	1.3	41	9.2	251	9.9
SAVGT	154	17.4	4080	54.2	195	10.3	2892	28.2	30	6.7	764	30
WMBBW	12	1.4	32	0.4	44	2.3	117	1.1	58	13	176	7
DORBB1					3	0.2	10	0.1	9	2	14	0.6
SWWSOX									1	0.2	10	0.4
LOCGOX	3	0.3	5	0.07	59	3.1	96	0.9	12	2.7	140	5.5
LOCGW8	26	2.9	269	3.6	14	0.7	58	0.6	79	17.7	111	4.4
LOCGW	32	3.6	55	0.7	74	3.9	247	2.4	47	10.5	133	5.2
CRUMBS	6	0.2	15	0.2	83	4.4	125	1.2	17	3.8	19	0.7
TOTAL	885	100	7530	100	1890	100	10255	100	447	100	2536	100

and imported finewares and amphora. The range of imports, comprising early sigillata, Gallo-Belgic wares and Spanish and Italian amphora, is directly comparable to material already recorded from Bagendon and Ditches (Trow 1988) and are so far unique to this locality. No other imports of this range and date have been recorded from elsewhere in Gloucestershire. Other sites with Gallo-Belgic imports are limited to Birdlip, Cowley with TN, probably post-conquest (Parry 1998, 76), to Frocester, with post-conquest TN and a single sherd of TR1A, and Cirencester, with post-conquest TN only. The existence of such early prestigious wares at satellite sites apparently beyond the Bagendon earthwork complex is unexpected, as such wares are traditionally seen as the preserves of the inhabitants of the large territorial 'oppida'. There is little evidence at comparable sites, such as Silchester, of further redistribution into the hinterlands. This could suggest a different social organisation in the West, perhaps more polyfocal with the existence of a number of wealthy elites concentrated in one district. A further addition to the three foci already highlighted, namely Ditches, Middle Duntisbourne and Duntisbourne Grove, is the small number of less well-provenanced but contemporary wares from Duntisbourne Abbots reported on by Fell (1964), which included a native copy of an imported butt beaker.

A comparison of the fabric groups from Ditches, Middle Duntisbourne and Duntisbourne Grove (Table 7.25) using the categories defined by Trow (1988, 64) shows quite a good degree of consistency between Ditches and Duntisbourne Grove. Middle Duntisbourne by contrast shows a much higher proportion of early SVW by sherd count and more Savernake ware by weight. The percentage of imports by sherd count is closest between Ditches and Middle Duntisbourne with slightly less from Duntisbourne Grove, although with the much bigger assemblage from Ditches has a greater range of forms. Imports from Middle Duntisbourne and Duntisbourne Grove closely mirror those from both Bagendon and Ditches which range in date

Table 7.25 Comparison of fabric groups from Middle Duntisbourne, Duntisbourne Grove and Ditches.

	Ditches				Middle Duntisbourne				Duntisbourne Grove			
FABRICS	WT	%	NO	%	WT	%	NO	%	WT	%	NO	%
GROUP A Limestone-temp	12112	21.6	944	24.5	604	8	156	17.6	2334	22.8	680	36
GROUP B Grog-tempered	6525	11.6	501	13	638	8.5	89	10	2225	21.7	370	19.6
GROUP C Inclusion free	3925	7	400	10.4								
GROUP D Wt early SVW	11252	20	753	19.5	1496	19.9	350	39.6	1401	13.7	297	15.7
GROUP E Savernake	10493	18.7	323	8.4	4080	54.2	154	17.4	2892	28.2	195	10.3
GROUP F Imports, fw/amp	1847	3.3	292	7.6	605	8	83	9.4	805	7.8	83	4.4
OTHER	9973	17.8	645	16.6	107	1.4	53	6	598	5.8	265	14
TOTAL	56127	100	3858	100	7530	100	885	100	10255	100	1890	100

from the late Augustan to AD 40–60. The group from the latter site includes Arretine, South Gaulish samian, Gallo-Belgic wares (TR1A platter, TR1C platter Cam. 7 variant, TR2 cup Cam 56, TR3 girth beaker and butt beaker; TN Cam. platter forms 5, 7, 8 and 14), North Gaulish butt beaker and whiteware flagon and Spanish amphorae. Many of these occur in the backfill of the inner enclosure ditch, and are thought to have been deposited in the Claudian or Claudio-Neronian periods (Trow 1988, 73). This would exactly parallel the abandonment of the main ditches at both Middle Duntisbourne and Duntisbourne Grove.

Roman

The largest Roman assemblage, from Birdlip Quarry dating from the later 2nd–4th centuries, has been reported on separately. A smaller but significant group of later Roman wares from Weavers Bridge is of a similar date.

In addition to these two assemblages, a number of early and later Roman assemblages were present at other sites. Amongst the earlier material are single sherds of Savernake ware from St Augustine's Lane and St Augustine's Farm South, with four sherds from Daglingworth Quarry. Further possible early Roman material came from Duntisbourne Abbotts-Duntisbourne Leer, Trinity Farm and Lynches Trackway. The last-named produced some 140 sherds of 1st–2nd century date mixed with a few early Iron Age pieces. Approximately half the sherds came from a very fragmented, fine oxidised white-slipped flagon. Also present were sherds of DORBB1 including a flat-rimmed bowl of 2nd-century type, a carinated, cordoned bowl in a grey, sandy ware, SAVGT and SVWEA2. Finally a pre-Flavian SG samian cup, Drag 24/5, along with Savernake ware and MALVL2 was recovered from chainage 9652 on the Stratton to Nettleton improvement.

Later Roman sherds from Sly's Wall South comprised six sherds including OXFRS mortaria. The Cirencester-Burford Road produced 55 badly abraded sherds of 2nd–4th date range, Witpit Lane just two residual sherds. The assemblage from Latton 'Roman Pond' was very poorly preserved, with discoloured, abraded sherds, mainly bodysherds. Several fabrics were present, including OXFWH mortaria, OXFRS, DORBB1, SAVGT, SVWOX, SWWSOX, Central Gaulish samian and various greywares indicating a date range from the later 2nd to 4th centuries. Further poorly preserved Roman sherds (*c.* 50 in total) were recovered from north of the Stratton to Nettleton improvement, including eight sherds from a very worn 2nd century samian dish (Drag 36). Other sherds, DORBB1, SVWOX, OXFRS and local greywares suggest a later Roman date. Another very fragmentary, poorly preserved assemblage of some 300 sherds with an average sherd weight of just 3 g came from Field's Farm. The majority of the sherds (67%) came from just three vessels: an everted rim black-burnished jar with an acute lattice in a sandy ware imitating DORBB1, a grey sandy, handled flagon and a SVWOX type jar all suggestive of a late 2nd–3rd century date.

EARLY/MIDDLE SAXON POTTERY

By Paul Blinkhorn

Duntisbourne Leer

The assemblage comprised a single sherd weighing 3 g from context 229. It is an organic tempered fabric, with moderate chaff voids and a single, rounded grain of quartz *c.* 0.5 mm (not illustrated).

Latton Watching Brief

The assemblage comprised three sherds, with a total weight of 14 g. Two, a rim sherd from a jar (Fig. 7.16.199) and a small body sherd, were from context 5900 (22), and the other, a rim sherd or foot-ring base fragment, from context 5900 (24) (Fig. 7.16.198). The rim sherd from 5900 (22) is in a fine, slightly micaceous fabric with sparse fine chaff voids and has a lightly burnished outer surface. It has a simple, slightly everted profile. The bodysherd contains a greater amount of chaff, and sparse angular limestone fragments *c.* 2 mm. The third sherd is in a similar fabric, although the limestone is considerably finer, less than *c.* 0.5 mm.

Catalogue of illustrated sherds

198 Rim sherd or foot-ring base fragment. Ctx 5900 (chainage 24).
199 Rim sherd, fine slightly micaceous fabric, sparse fine chaff voids, lightly burnished outer surface, simple slightly everted profile. Ctx 5900 (chainage 22).

Discussion

The four sherds are generally unremarkable, although their recovery is of interest, as such pottery is scarce in the region. The size, form and fabric of the sherds makes it impossible to date them closely, other than to place them in the early/middle Saxon period (c. AD 450–850).

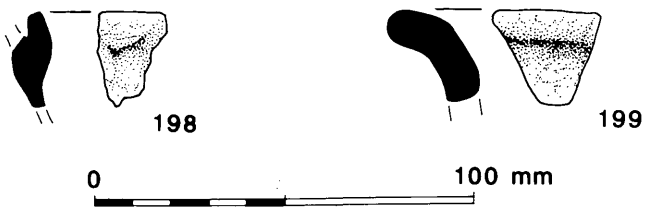


Figure 7.16 Saxon pottery from Duntisbourne Leer and Latton.

THE POST-ROMAN POTTERY

By Paul Blinkhorn and Nigel Jeffries

Street Farm

Introduction

The post-Roman pottery assemblage from Street Farm comprised 1216 sherds with a total weight of 22,784 g. Despite being small the assemblage is considered worthy of detailed analysis as there is a general paucity of published material of this period from the region, with the medieval and post-medieval assemblages from the East and North Gate sites in Gloucester (Vince 1983) providing one of the few comparanda.

Fabric descriptions and chronologies

The pottery occurrence per fabric type by number and weight of sherds is shown in Table 7.26. Fabric codes appear in brackets.

Oolitic limestone wares (F200/F355)

Oolitic-limestone gritted wares of the Cotswolds tradition. Some of the sherds are fragments of tripod pitchers (eg. Fig. 7.17.202) which can be stylistically paralleled with vessels from Gloucester and Selsey Common (McCarthy and Brooks 1988, fig. 219, nos 1491 and 1497). Such fabrics are present in the Gloucestershire type series (Vince 1983, 126, fabric TF44). One of the known production centres for the ware is the village of Minety, some 7.5 km to the south-west of Latton, which produced pottery from the 12th to the late 15th centuries (Vince 1983; Mellor 1994). The unglazed jar from Latton (Fig. 7.17.200) has form parallels with vessels from Great Somerford and Old Sarum in Wiltshire (McCarthy and Brooks 1988, fig. 102, nos 404 and 406).

Brill/Boarstall ware (F352)

Sandy buff- to red-coloured ware produced at kilns in south-west Buckinghamshire (Mellor 1994). It was mainly produced from the 13th century until around the Dissolution, although some kilns continued into the 17th century (Mellor 1994, 111).

Tudor green ware (F403)

Fine, white fabric with bright green glazes. The likely source for these vessels is the Farnham area of Hampshire (Pearce 1992, 1). The tradition has been given a broad date range of c. AD 1380–1550 (Orton 1988, 298).

Cistercian ware (F404)

Smooth red fabric with a dark brown/black glaze. The main vessel forms are wheel-thrown, thin-bodied cups and posset pots. Numerous known production centres around England, with the greatest concentration in Yorkshire. The general date-range for the tradition is c. AD 1475–1550 (McCarthy and Brooks 1988, 402).

Red earthenwares (F427, 432, 439, 440 and 441)

Wares of this type form the bulk of the post-medieval assemblage (Table 7.26), as is the case with other contemporary sites in the region (eg. Mellor 1984, fiche II E9). All the fabrics at this site have varying quantities of red or black ironstone inclusions, up to 0.5 mm in a poorly sorted matrix (F432, F439, F440), although there is a sandier fabric which also has moderate white quartz sand, and calcareous inclusions (F441). It is highly likely that the Street Farm pots are the products of local, as yet undiscovered kilns, as wares such as these were produced at numerous sources throughout England and usually had a localised distribution (Jennings 1981, 157). The one exception to this is F427, which could be from a different source, possibly the Wiltshire/Oxfordshire border. The same fabric has been found at Eynsham Abbey, Oxfordshire (Blinkhorn and Jeffries forth-coming). The Street Farm assemblage entirely comprises sherds from medium- to large-bodied forms such as jugs and pancheon bowls. The date for these wares is variable, but usually spans the period *c.* AD 1500–1750 (Mayes 1968, 55; Orton and Pearce 1984, 36).

Frechen stoneware (F405)

Distinctive grey German stoneware with a speckled brown 'tiger' or 'orange-peel' salt glaze, generally imported into England from the second half of the 16th

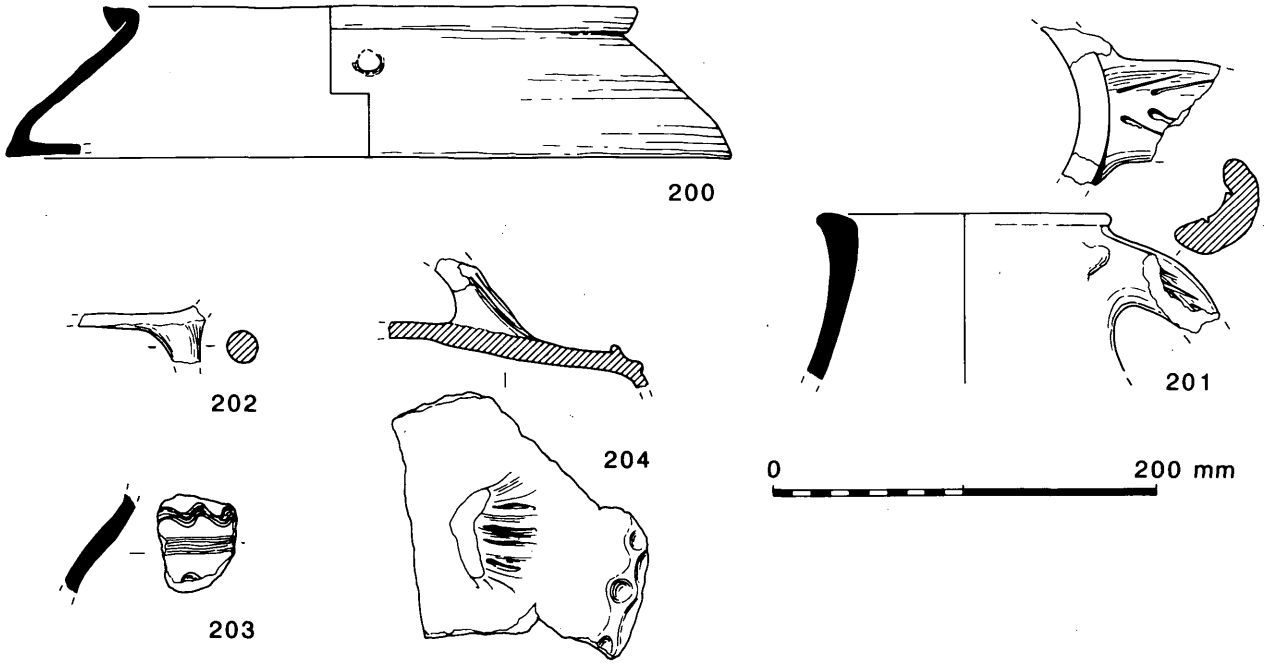


Figure 7.17 Medieval and post-medieval pottery from Street Farm.

Table 7.26 Street Farm, quantification of post-Roman pottery fabrics by number of sherds and weight (in grammes) per fabric.

Ware	Fabric code	No. of sherds	Weight
Oolitic wares	F202	134	2631
Brill/Boarstall	F352	2	12
Tudor Green	F403	2	68
Cistercian wares	F404	21	157
Red Earthenwares	F427, 432, 439, 440, 441	398	11938
Frechen Stoneware	F405	2	13
Tin-Glazed Earthenwares	F417	1	13
Staffs wares	F414, 417	20	293
Westerwald Stoneware	F413	4	45
Staffs Stoneware	F444	6	87
Staffs Salt-glazed Stoneware	F443	17	82
Nottingham Stoneware	F445	8	202
Jackfield Wares	F550	1	3
Early Porcelain	F428	12	30
Creamwares	F418	27	258
Pearlwares	F447	22	201
Transfer-printed Earthenwares	F448	9	45
Mocha/ Yellow wares	F442	103	1243
Basalt Wares	F449	2	41
Miscellaneous c. 19th/20thC wares	F437, 438	436	4800
Total		1216	22,784

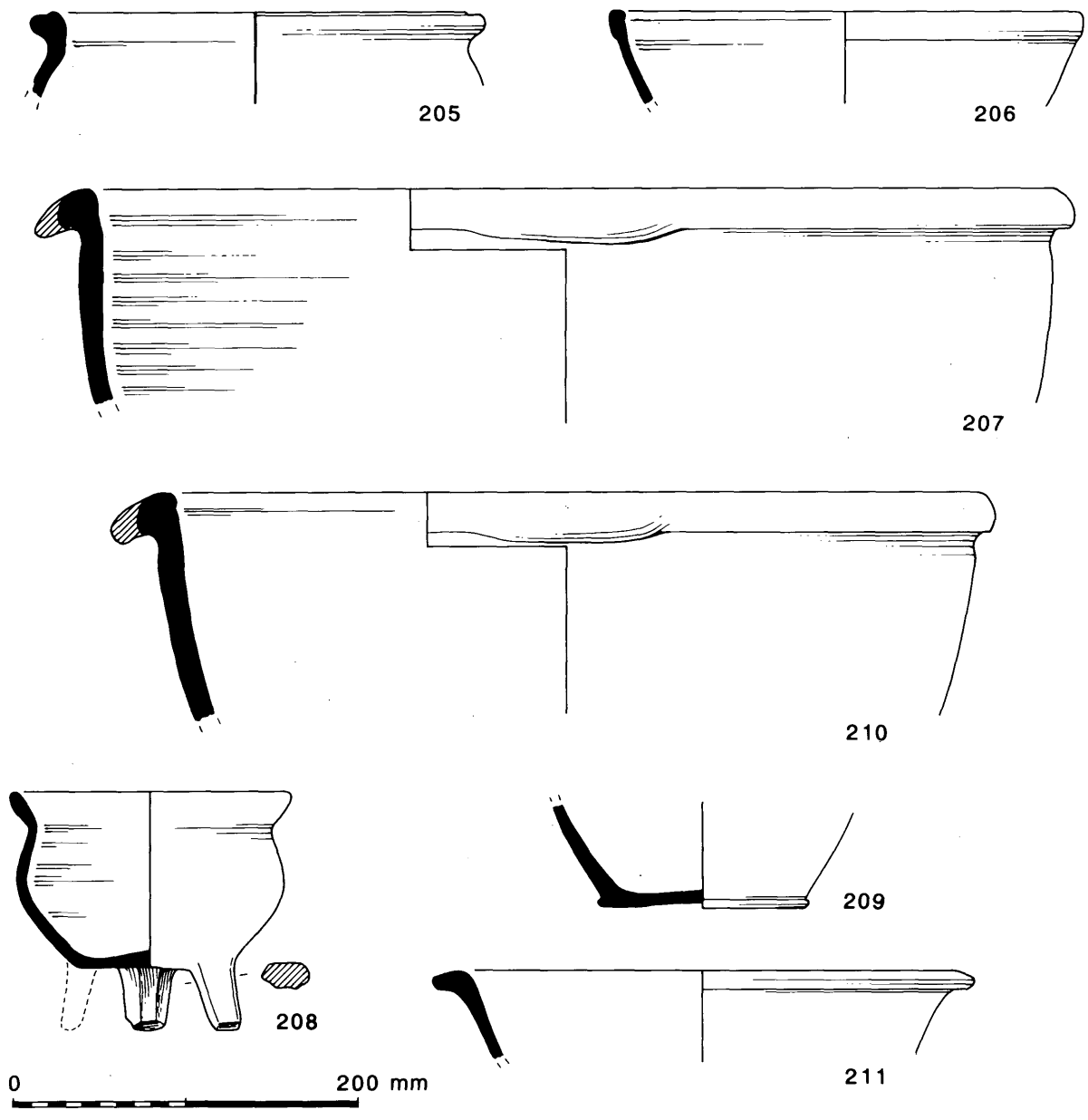


Figure 7.18 Medieval and post medieval pottery from Street Farm.

century. It occurs on most contemporary sites until the late 17th century (Jennings 1981, 117–8).

Tin-glazed earthenwares (F417)

Red-buff fabric with occasional 0.5 mm rounded black ironstone and sparse 0.2 mm sub-rounded red ironstone. Only one sherd, from a plate, occurred at Latton. It is decorated with an 'arc and chain' pattern, which is paralleled by two unstratified sherds from a waster dump at the Limekiln Potteries in Bristol (Jackson and Beckey 1991, figs 9 and 10, nos 82 and 95). Tin-glazed earthenwares were produced on a large scale in London, from *c.* 1613 onwards (Orton 1988, 298) and Bristol from *c.* 1630. The paucity of tin-glazed earthenwares at this site is paralleled in the smaller assemblage from the nearby pipeline trench excavations at Street Farm.

Staffordshire type wares (F414 and F446)

This group includes both manganese (F414) and slip-decorated wares (F446). Both types have a date range of 1690 until 1760 (Barton 1961, 160–8). They have been discussed at length in many publications (eg. Celeria and Kelly 1973; Kelly and Greaves 1974). Wares of this type, despite being called Staffordshire-types, were also made in Bristol. The fabric of the Street Farm sherds suggest that they were all from a Bristol source (Barton 1961, 160–8).

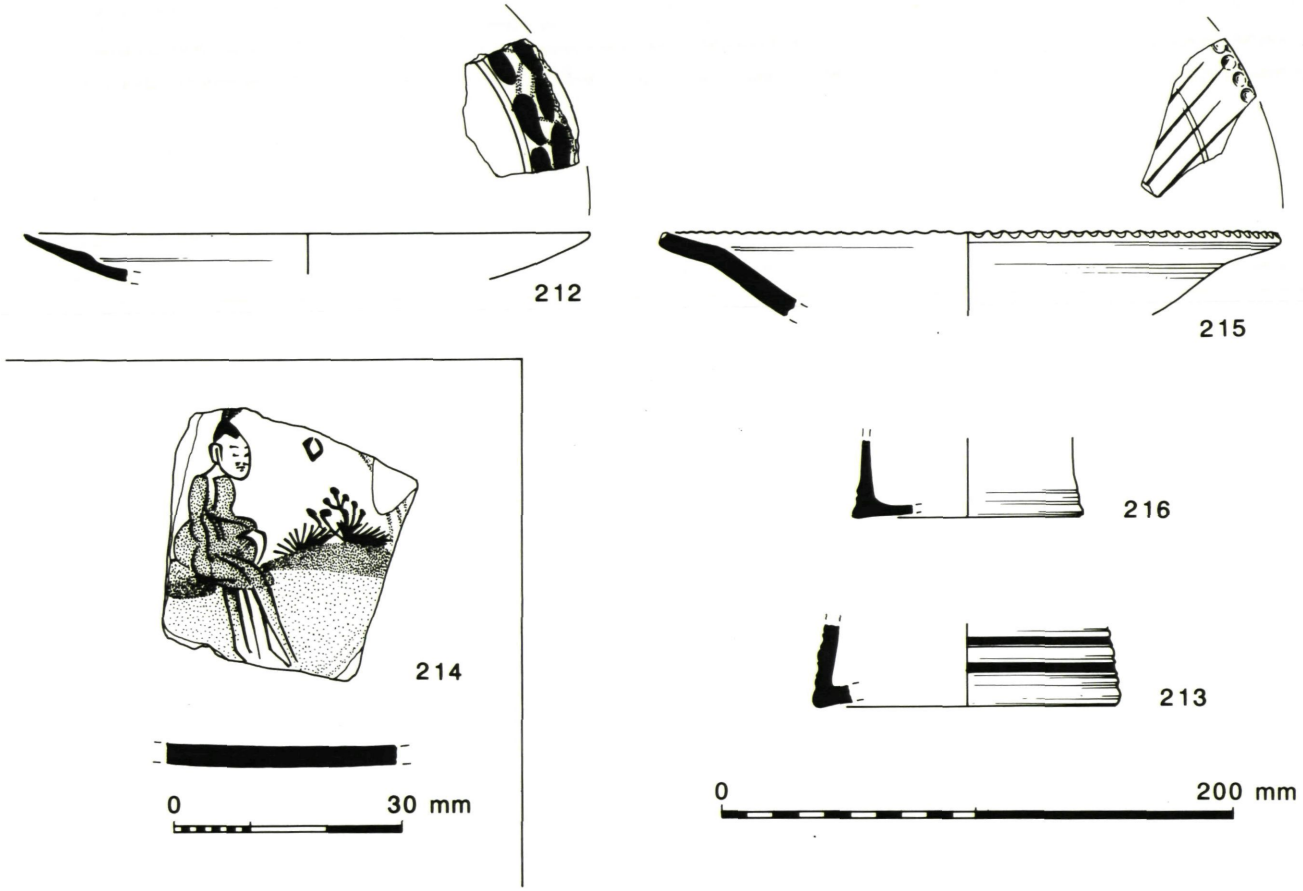


Figure 7.19 Medieval and post-medieval pottery from Street Farm.

Westerwald stoneware (F413)

German import. Uniform light grey stoneware fabric decorated with cobalt blue and/or manganese purple slip. The predominant forms are mugs, chamber pots and jugs, although the only form-diagnostic sherd from Street Farm site is a mug base (Fig. 7.19.213). The sherds in the assemblage date from the early 18th century, suggested by incised border lines and coloured motifs with combed stems and leaves (Jennings 1981, 123).

Staffordshire brown salt-glazed stoneware (F444)

Stoneware of this type was being made in Staffordshire from *c.* 1675 onwards (Jennings 1981, 219). It has a uniform light grey fabric with occasional black ironstone inclusions. The vessels were usually partially dipped in a white engobe and a ferruginous wash, and then salt-glazed. The rim forms from this assemblage all appear to be from tankards or mugs.

Staffordshire salt-glazed stoneware (F443)

White-bodied stoneware, produced in a large range of both ornamental and utilitarian forms. The sherds in this assemblage are the cheaper mug and bowl forms. The material was made in large quantities in Staffordshire from *c.* 1675 until *c.* 1780/1800 (Jennings 1981, 222).

Nottingham stoneware (F445)

Fine, lustrous brown glazed stoneware with a buff to grey coloured uniform fabric. A common feature of this ware is a thin white or grey margin between the fabric and the glaze. The majority of this assemblage comprises mugs, with the occasional base sherd of a bowl occurring. The date range for this pottery is *c.* 1700–1800 (Jennings 1981, 219).

Table 7.27 Witpit Lane, post-Roman pottery.

Context	Cotswolds-type Oolitic ware	Brill/ Boarstall	Red Earthenwares ware
5	24 (202)	1 (3)	1 (8)
7	2 (42)		
13			1 (7)
15			1 (8)
19			2 (31)
24	15 (171)		

Table 7.28 Burford Road, post-Roman pottery.

Context	Frechen Stonewares	Red Earthenwares	Metropolitan Slipware	Staffordshire Slip-trailed Ware	Misc 19/20thC wares
105		1 (5)			
206		2 (37)		1 (3)	8 (13)
209		1 (1)			1 (1)
310	1 (4)				
401		1 (1)			
406		2 (257)			
419		4 (51)			
523			2 (19)		
540		4 (39)			
661		4 (23)			

Table 7.29 Westfield Farm, post-Roman pottery.

Context	Medieval Shelly-Limestone Coarseware	Red Earthenwares	Misc. 19/20thC Wares
9		1 (280)	
10			1 (3)
21	1 (26)		
29		1 (5)	

Jackfield wares (F550)

Compact uniform dark brown/black fabric with a thick lustrous black glaze. Made in Staffordshire from *c.* 1750 (Jennings 1981, 230). Only one example was found in the Street Farm assemblage.

Basalt ware (F449)

Black stoneware used mainly for coffee- and tea-pots. It was produced in Staffordshire, from 1750 until the 19th century (Mellor 1984, fiche II, A3).

Porcelain (F428)

The earlier imported and English porcelain at Street Farm is classified separately from the miscellaneous *c.* 19th century types (F437), as London polychrome, European and 'Chinaman in the grass' porcelain from China (Fig. 7.19.214) can be stylistically dated. The non-English material probably came to the site from the port of Bristol, which imported such wares in massive quantities. Broadly speaking, this group has a date range of *c.* 1750+.

Creamwares (F418)

Cream-coloured buff earthenware made with the same calcined flint clay as Staffordshire white salt-glazed stonewares (Jennings 1981, 227). However, creamwares were fired at a different temperature and coated with a lead glaze, resulting in a rich cream colour. They were first produced in the 1760s (Mellor 1984, 217).

Pearlwares and transfer printed pearlwares (F447)

Pearlwares represent a progression from creamwares. The same clay was utilised, but the vessels were fired at a different temperature, resulting in an improved surface which was ideal for applied decoration. Much of this assemblage comprises blue-stained, painted shell-edged plates. These were an early 19th-century development (Mellor 1984, fiche II, D1).

Transfer-printed white earthenwares (F448)

This ware has an off-white to buff uniform fabric. The transfer-printing of earthenwares was a common form of decoration for tablewares from the early 19th century onwards. It is likely that the source for this pottery was Staffordshire.

Mocha/Yellow wares (F442)

By the 1830s, transfer-printed earthenwares had all been replaced by black, green, pink, grey and brown transfer prints. Both wares had the same hard, white, slightly sandy fabric and thick yellow glaze, although the Mocha wares, made in Staffordshire, were usually tea-pots, with a brown fern-like transfer decoration made from a mixture of tobacco and urine (Mellor 1984, fiche II, A3).

Miscellaneous c. 19th-century wares (F437, F438)

This broad group encompasses 19th-century Victorian 'Willow pattern' and a few Victorian stonewares (F438). However, the prominent type within this group

Table 7.30 Daglingworth Quarry, post-Roman pottery.

Context	Cotswolds-type Oolitic Ware	Red Earthenwares	Misc 19/ 20thC Wares
107	1 (12)	4 (395)	
116		1 (5)	1 (16)
120			10 (80)

is white-glazed earthenwares which were mass-produced in Staffordshire from the mid 19th century onwards (Mellor 1984, 209).

Discussion

The overwhelming majority of the medieval sherds are oolitic limestone-tempered wares of the Cotswolds tradition (McCarthy and Brooks 1988, fig. 219). The assemblage, despite being small in size, contains virtually the full range of domestic vessel types, include a curfew, or fire-cover, from context 559 (Fig. 7.17.204). The only other medieval wares present at the site are two sherds of Brill/Boarstall ware, which are worthy of note, as the products of this industry are rarely found to the west of Oxfordshire or Buckinghamshire (Mellor 1994, 117).

Table 7.31 Court Farm, post-Roman pottery.

Context	Red Earthenwares	Staffs Stoneware
16	1 (35)	
290	1 (49)	
345	1 (45)	
486	6 (101)	1 (16)

The late-medieval transitional and post-medieval wares are largely unremarkable. However, the presence of large quantities of such wares, along with fragments of medieval coarsewares, followed chronologically by Cistercian, red earthenware and Tudor Green vessels, suggests that the site was occupied continuously from the 12th/13th century until the post-medieval period.

The range of fabrics and forms on the site increased during the later post-medieval period. The social pastimes of the 18th and 19th centuries mainly centred around the consumption of ale and tea within the household and the Street Farm pottery assemblage reflects this general trend. A range of stone- and manganese-ware mugs and tankards were present, as were exotic, sometimes ornamental, tablewares such as pearlwares, porcelain and creamwares. The earthenwares, the pottery used for food preparation and storage, include a range of bowls (storage/mixing vessels), dishes, pancheons (Fig. 7.18.207) and a dripping dish. The exact start date of these wares is uncertain, although they were thought to be in general use in the region from *c.* 1500 onwards (see above). At this site, they occur in sealed contexts (such as 119 and 440) with medieval coarsewares, and also in other contexts (eg. 173 and 262) containing Cistercian wares. Whilst these facts could be taken to imply that the earthenwares pre-date 1500, the small assemblage sizes and the real possibility of redeposition of pottery means that this cannot be suggested with confidence, as residuality may be a factor.

Table 7.32 Exhibition Barn, post-Roman pottery.

Context	Cotswolds-type Oolitic Ware	Red Earthenwares
2		1 (2)
8	1 (1)	
13	1 (5)	

There were no post-medieval North Devon gravel-tempered or Donyatt wares in the assemblage. These were produced in the same range of utilitarian forms as the red earthenwares, and, in the later 17th century, comprised some 17% of the non-local assemblage from Gloucester (Vince 1983, 139). An explanation for the absence of these wares at Street Farm may be that Gloucester received them directly from sources via the River Severn. However, the products of the 17th-century kilns at Ashton Keynes, only 4 km to the south-west of Latton, are also absent from the site. Such wares comprise between 10% and 50% percent of the pottery from 17th-century contexts in Gloucester (Vince 1983, 139). Their absence at Street Farm suggests that there was a hiatus in the occupation of the site at that time. The date ranges of the later wares, which include Mocha wares, Victorian 'Willow Pattern' and white glazed earthenwares suggest that occupation continued until the mid-19th century.

Catalogue of illustrated sherds *(Figs 7.17–7.19)*

200 CO1: F200, ctx 446. Grey fabric with brown surfaces, basepad scorched to a pale orange-brown. Single hole pierced, pre-firing, just below the rim.

201 CO2: F200, ctx 409. Grey fabric with brown outer surface.

202 CO3: F200, ctx 462. Grey fabric with buff-brown surfaces.

203 CO4: F200, ctx 458. Grey fabric with brown surfaces. Outer surface has a thin, dull, sage-green glaze.

204 CO5: F200, ctx 559. Uniform dark grey fabric. Inner surface is heavily smoked and has a patchy, thin sage-green glaze.

205 RE1: F401, ctx 589. Uniform dark reddish-brown fabric. Inner surface has a black glaze extending up to the lip of the rim.

206 RE2: F401, ctx 267. Uniform brick-red fabric. Inner surface has a brown manganese glaze up to the edge of the rim.

207 RE3: F439, ctx 305. Uniform brick-red fabric.

Inner surface has a patchy, light green glaze up to the edge of the rim.

208 RE4: F439, ctx 276. Uniform light brick-red fabric. Inner surface has a light brown glaze extending just over the lip of the rim.

209 RE5: F440, ctx 551. Uniform brick-red fabric. Inner surface has a dark brown manganese glaze.

210 RE6: F441, ctx 305. Uniform brick-red fabric. Inner surface has a brown manganese glaze up to the edge of the rim.

211 RE7: F441, ctx 196. Uniform, brick-red, sandy fabric. Rim and inner surface has a light green glaze up to the lip of the rim.

212 TG1: F417, ctx 276. Uniform buff fabric. Decorated with a hand-painted brown and blue 'chain and arc' pattern and a white glaze.

213 WEST1: F413, ctx 227. Uniform grey coloured fabric. External surface has cobalt blue bands beneath a grey salt-glaze.

214 PO1: F428, ctx 255. Hard paste fabric. Internally blue-enamelled Chinese Porcelain.

215 SW1: F444, ctx 198. Uniform buff fabric. Internally decorated with a combed brown slip beneath a lemon coloured glaze.

216 SW2: F444, ctx 786. Uniform buff fabric. Decorated internally and externally with a brown manganese glaze with a single cordon of rilling at the foot of the base.

Pottery from the other sites

Tables 7.27–7.32 list the number and weight of sherds per context by fabric type for the remainder of the sites. The fabrics are as described for the Street Farm assemblage except for two wares which were not present at that site, as follows:

Frechen stoneware (F405)

A uniform grey stoneware fabric with grey/brown salt-glaze. The main forms are mugs and tankards, although there are no form-diagnostic sherds in the assemblage. Produced in Frechen, Germany, and imported into England from *c.* 1550 onwards.

Metropolitan Slipware (F416)

Well-sorted matrix with occasional sub-rounded red ironstone/mica inclusions. The main forms are flat and hollow wares, although there are no form-diagnostic sherds in the assemblage. The ware is characterised by decorative trails of white pipe-clay over an iron-rich body clay, which varies in colour from a light brown through to a reddish-brown, with a brown or black glaze. Produced in Harlow, Essex, from *c.* 1615 onwards (Jennings 1981, 97).

The majority of sherds from context 24 at Witpit Lane were leached and abraded.

THE COINS

By John A. Davies

Introduction

A total of 291 coins from seven sites were examined. Each site-specific assemblage was analysed individually, and is summarised in Table 7.33. The entries are organised as follows: small find number, context number, identification, date range, obverse, reverse, diameter, mint.

Field's Farm

Two coins were recovered from Field's Farm. They are both Roman, dating from the mid- to late 4th century.

217 SF1, ctx 13, Constantine I, follis AD 330–1. Obv. CONSTANTINVS MAX AVG. Rev. GLORIA EXERCITVS, 2 standards

218 SF10, ctx 2, House of Theodosius, AE4, AD 388–402. Obv. Ill. Rev. [VICTORIA AVGGG]

Daglingworth Quarry

Two Roman coins of late 4th-century date were recovered.

219 SF1, Gratian, AE3, AD 367–75. Obv. Ill. Rev [GLORIA NOVI SAECVLI]

220 A gold solidus in good condition was recovered from the line of the new road by a labourer near Dowers Lane Underpass, Daglingworth, not associated with any archaeological site. It was presented by the Highways Agency to Cirencester City Council and is now in the Corinium Museum. The coin of Honorius is of the common VICTORI AAVGGG type, minted in Milan from AD 395–402 (as RIC X, 1206, Kent 1994)). The mintmark is M / D COMOB in which the lower M is close to an N, as often seen in this type. This type is a very rare find on settlement sites and it may therefore be a survivor from a hoard. This coin was examined by Paul Booth of the Oxford Archaeological Unit.

Burford Road

The Burford Road group numbers four coins. Two are very worn Roman examples which can only be broadly dated. The earlier example is a sestertius of the Antonine period of the middle 2nd century. The other is an irregular minim, which would have been struck between the late 3rd and mid-4th century.

There are two post-Roman coins, both farthings of Charles II (1660–85), from context 620.

221 SF 5, ctx 310, Antonine emperor Sestertius (incomplete) 138–80. Obv and Rev Ill.

222 SF 1, ctx 208, Illegible AE4 275–364 10 mm diam.

223–4 SF 8, ctx 620, Charles II Farthing 1660–85

Street Farm

225 SF10, ctx 281, a French 10 centimes piece of the Emperor Napoleon III (1852–70).

St Augustine's Lane

226 SF1, u/s, Constantine I, a follis, AD 307. Obv FL VAL CONSTANTINVS NOB C. Rev GENIO POP ROM. Trier RIC 6: 720b.

Weavers Bridge

The second largest coin group came from Weavers Bridge. The 51 coins are all Roman and all are base metal issues. A chronological summary employing Reece's Issue Periods (1972) is provided in Table 7.34. The assemblage is sufficiently large to allow meaningful comparison with other Romano-British sites. They comprise a tight chronological group which is restricted to the late Roman period. There are no issues of the Augustan System present. The normally ubiquitous antoniniani of the years from AD 260 to 275 are also completely absent. The earliest examples are two irregular antoniniani (barbarous radiates) of the late-3rd century, both of which are the later types of reduced size, or minims. Two other late antoniniani, of the British Empire, are also present.

Coin loss for the period AD 294–330 is always lighter than for the preceding and succeeding periods. A presence is attested during that time at Weavers Bridge by three issues. However, the major episode of coin deposition was between AD 330–48. The coins in question are the most commonly encountered mid-Constantinian folles, in particular the GLORIA EXERCITVS, 1 standard type. The mints of origin of these coins is summarised in Table 7.35, which shows Trier to have been the principal supplier during the years in question. The coin list subsequently drops away sharply. There are just two irregular 'falling horseman' minims. The assemblage ends prior to the Valentinianic period, whose coins tend to be relatively numerous on sites occupied after AD 364.

The very tight chronological grouping of the Weavers Bridge coins can be emphasised by separating them into the four main chronological phases (Table 7.36). Those from Phase D dominate the assemblage, accounting for 85.1% of the total.

Despite this predominance of coins belonging to the period AD 330–348, their condition and distribution suggests that they do not belong to a hoard. They are associated with a midden deposit (57) and appear to represent evidence for an episode of occupation at this site.

Table 7.33 Summary of the coin assemblages, all sites.

Site	Roman	Later	Total
Field's Farm	2		2
Daglingworth Quarry	2		2
Burford Road	2	2	4
Street Farm		1	1
St Augustine's Lane	1		1
Weavers Bridge	51		51
Birdlip Quarry	230		230
Total	288	3	291

227 SF 28, ctx 57, Barbarous radiate, Minim, 275–84, No legend, Pin figure, 13.

228 SF 52, ctx 57, Barbarous radiate, Minim, 275–84, Figure holding shield, 11.

229 SF 47, ctx 57, Carausius, Antoninianus, 287–93, Illegible, [PAX AVG], vertical sceptre, 20.

230 SF 24, ctx 57, Allectus, Antoninianus, 293–6, IMP C ALLECTVS PF AVG, PA[X A]VG.

231 SF 42, ctx 57, Illegible, Antoninianus, Illegible, Illegible.

232 SF 2, ctx 51, Maximian, Follis, 307, DN MAXIMIANO PFS AVG, ROMAE AETER, London, RIC6: 100.

233 SF 15, ctx 71, House of Constantine, Follis, 319–20, Illegible, [VICTORIAE LAETAE] PRINC PERP.

234 SF 43, ctx 51, Crispus, Follis, 322, [IVL] CRISPVS NOB CAES, BEATA TRANQVILLITAS, Trier, RIC 7: 347.

Table 7.34 Chronological summary of the coins from Weavers Bridge.

Period	Date	Number	%
11	(275–94)	4	8.5
12	(294–317)	1	2.1
13a	(317–30)	2	4.3
13b	(330–48)	38	80.9
14	(348–64)	2	4.3
Total		47	
Unphasable			
3rd– 4th C		4	
Total Roman		51	

235 SF 46, ctx 57, Constantius II, Follis, 330–1, FL IVL CONSTANTIVS NOB C, GLOR[IA EXE]RC[ITVS], 2 standards, Trier, RIC 7: 521.

236 SF 66, ctx 57, Constantine I, Follis, 332–3, VRBS ROMA, Wolf and twins, Trier, RIC 7: 542.

237 SF 8, ctx 51, Constantine I, Follis, 332–3, CONSTANTINOPOLIS, Victory on prow, Trier, RIC 7: 548.

238 SF 30, Constantine I, Follis, 333–4, VRBS ROMA, Wolf and twins, Trier, RIC 7: 553.

239 SF 57, ctx 57, Constantine I, Follis, 333–4, CONSTANTINOPOLIS, Victory on prow, Trier, RIC 7: 554.

240 SF 48, ctx 57, House of Constantine, Follis, 335–7, Illegible, GLOR[IA EXERC]ITVS, 1 standard, Trier, RIC 7: 586.

241 SF 29, ctx 57, House of Constantine, Follis, 330–1, Illegible, GLORIA EXERC[ITVS], 2 standards, Lyons, RIC 7: 236.

Table 7.35 Weavers Bridge, 4th-century mint distribution.

Period	12		13a		13b	
	No.	%	No.	%	No.	%
London	1	100.0				
Trier			1	100.0	13	76.5
Lyons					2	11.8
Arles					1	5.9
Aquileia					1	5.9
Total	1		1		17	
Irregular					3	

242 SF 40, ctx 51, Constantius II, Follis, 330–1, CONSTANTINVS IVN NOB C, GLORIA EXERCITVS, 2 standards, Lyons, RIC 7: 238.

243 SF 12, ctx 57, House of Constantine, Follis, 330–5, Illegible, [GLORIA EXERCITVS], 2 standards.

244 SF 51, ctx 57, House of Constantine, Follis, 330–5, Illegible, [GLORIA EXERCITVS], 2 standards.

245 SF 25, ctx 57, Constantine I, Follis, 3305, [VR]BS [R]O[MA], Wolf and twins.

246 SF 36, ctx 57, Constantine I, Follis, 330–5, [CONSTAN]TI[NOPOLIS], Victory on prow.

247 SF 38, ctx 51, Constantine I, Follis, 330–5, CONSTANTINOPOLIS, Victory on prow

248 SF 10, ctx 51, Helena, Follis, 337–40, FL IVL HE[LENAE AVG], P[AX] PV[BLICA], Trier, RIC 8: 47.

249 SF 55, ctx 57, House of Constantine, Follis, 337–40, —STANTI—, VIRTVS AVGG NN, Trier, RIC 8: 53

250 SF 37, ctx 57, Constantine I, Follis, 335–7, CONSTANTI—, GLORIA [EXERCITVS], 1 standard.

251 SF 9, ctx 51, House of Constantine, Follis, 335–40, Illegible, [GLORIA EXERCITVS], 1 standard.

252 SF 3, ctx 57, Constantius II, Follis, 337–40, FL IVL CONSTANTIVS AVG, GLOR[IA EXERCITVS], 1 standard.

253 SF 11, ctx 57, House of Constantine, Follis, 335–40, Illegible, GLORIA EXER]CITVS, 1 standard.

254 SF 49, ctx 57, House of Constantine, Follis, 335-40, Illegible, [GLORIA EXERCITVS], 1 standard.

255 SF 50, ctx 57, House of Constantine, Follis, 335–40, —PF—, [GLORIA] EXER[CITVS], 1 standard.

256 SF 53, ctx 57, House of Constantine, Follis, 335–40, Illegible, [GLORIA EXERCITVS], 1 standard.

257 SF 6, ctx 57, Helena, Follis, 337–40, Illegible, [PAX PV]BLICA.

258 SF 68, ctx 57, Theodora, Follis, 337–40, Illegible, PIETAS [ROMANA].

259 SF 45, ctx 57, Constantine I, Irregular follis, 341–6, CONSTANTINOPOLIS, Victory on prow, 11.

260 SF 5, ctx 57, House of Constantine, Irregular follis, 341–6, Illegible, [GLORIA EXERCITVS], 1 standard, 12.

261 SF 64, ctx 57, Constans, Irregular follis, 341–6, CONSTANS PF AVG, GLORIA EXERC[ITVS], 1 standard, Trier, 14.

262 SF 67, ctx 57, Constans, Follis, 347–8, CONSTANS PF AVG, VICTORIAE DD AVGG Q NN, Trier, RIC 8: 186.

263 SF 54, ctx 57, Constantius II, Follis, 347–8, [CONSTANTI]VS PF AVG, [VICTORIAE DD AVGG Q] NN, Trier, RIC 7: 193.

264 SF 41, ctx 57, House of Constantine, Follis, 347–8, CO—, [VICTORIAE DD AVGG Q NN], Trier, RIC 8: 193.

265 SF 7, ctx 57, Constans, Follis, 347–8, CONSTANS PF AVG, VICTORIAE DD AVGG Q NN, Trier, RIC 8: 195

266 SF 22, ctx 57, Constans, Follis, 347–8, CONSTANS PF AVG, [VICTORIAE DD AVGG Q NN], Trier, RIC 8: 196.

267 SF 17, ctx 57, House of Constantine, Follis, 347–8, [CONSTANTI]VS PF AVG, [VICTORIAE DD AVGG Q] NN, Arles, RIC 8: 95.

268 SF 35, ctx 57, House of Constantine, Follis, 347–8, Illegible, [VICTORIAE DD AV]GG Q [NN], Aquileia, RIC 8: 82/83.

269 SF 34, ctx 57, House of Constantine, Follis, 347–8, Illegible, [VICTORIAE DD AVGG Q NN].

270 SF 44, ctx 57, House of Constantine, Follis, 347–8, Illegible, VICTORIAE DD AVGG Q NN.

271 SF 27, ctx 57, Illegible, Follis, 330–48, Illegible, Illegible.

272 SF 13, ctx 51, House of Constantine, Irregular AE4, 354–64, No legend, FEL TEMP REPERATIO], falling horseman, 11.

273 SF 62, ctx 57, House of Constantine, Irregular AE4, 354–64, No legend, [FEL TEMP REPARATIO], falling horseman, 11.

274 SF 19, ctx 57, Illegible, AE4, 275–364, Illegible, Illegible, 9.

275 SF 60, ctx 57, Illegible, AE3, 260–402, Illegible, Illegible.

Table 7.36 Weavers Bridge, relative numbers of coins, separated into four phases.

	No.	%
Phase A (To AD 259)	-	-
Phase B (259–96)	4	8.5
Phase C (296–330)	3	6.4
Phase D (330–402)	40	85.1

276–7 SF 31 and SF 33, ctx 57, bronze fragments. Possibly originally two 3rd–4th century coins. No diagnostic elements remain, to be certain..

Birdlip Quarry

This is the largest of the individual site groups, with 230 coins. All are Roman and they are essentially common issues. All but five are base metal. The silver types are four denarii and an antoninianus, all of the late 2nd-/early 3rd-century. The whole assemblage has a date-range from the mid 1st century to the end of the 4th century. A chronological summary is shown in Table 7.37. The 21 Issue Periods referred to are those established by Reece (1972). The percentages for each period are also shown, for comparative purposes.

The chronological range of the coins runs from a single 1st-century coin, a Vespasian issue of AD 71–9, through to the House of Theodosius, representing the final years of Roman Britain. There is a sizeable group of aes belonging to the 2nd century, especially to the reigns of Antoninus Pius and Marcus Aurelius. The degree of wear on these coins indicates a prolonged period of circulation. It is known from hoard evidence that such aes could have stayed in circulation for decades. It is likely that these particular coins belonged to an initial period of occupation at the site sometime between AD 160–180/90. The as of Vespasian would also have been deposited during that period of activity. The denominations of these coins of the Augustan System are summarised in Table 7.38.

Sestertii are the most prolific type prior to the end of the 2nd century, when denarii became more common. The denarii are the only silver coins to be recovered from the site. Two of these (cat. 292–3) are, however, base metal examples.

The assemblage exhibits steady coin loss through the 3rd century but the total escalates profoundly after AD 250. Coin numbers increase on all Romano-British sites after AD 259, which represents the widespread adoption of base metal antoniniani across the province. However, the proportion of finds from Birdlip which date from Reece's Periods 10 and 11 is within the high range for Britain. In particular, there are groups of antoniniani of the emperors Gallienus and Claudius II, which are accompanied by rarer issues of Valerian I and II, Postumus, Marius and Aurelian. Irregular antoniniani, or barbarous radiates, also comprise a sizeable component. There are 38 examples, of which half are minims (14 mm or less). This may be evidence for increased activity at the site from the final third of the 3rd century.

The assemblage continues steadily through the 4th century, with especially strong loss between AD 317–348. After this, deposition falls away sharply and remains much lighter through to the end of the century. Mintmarks are legible on most of the 4th-century coins and allow an analysis of the mints supplying coin to the site.

A small group of eight folles, dated to AD 320–5, were found within a metre of each other on the surface of Ermin Street. All but one are in clear, fully legible, condition. Four were struck at London, two at Trier and one at Lyons. They appear to represent a purse group, which can be dated to shortly after AD 325 (Table 7.39).

The overall chronological distribution of the Birdlip coins can be analysed by dividing them into four phases (Table 7.40), as employed by Reece (1987). When shown in such a manner, some notable features become apparent. The early coinage (Phase A) comprises a significant presence but represents the lightest phase. Late 3rd-century coinage (Phase B) is remarkably high and dominates the assemblage. The coins from the early 4th century (Phase C) are also well-represented. This period is usually much lighter on all categories of Romano-British site. Later 4th-century coinage (Phase D) usually dominates site assemblages. Although well represented here, it is significantly lighter than Phase B and approximately equal to Phase C. A floruit at the site between the late 3rd and mid 4th century is apparent. This high ratio of Phase B: Phase D coins is a feature associated with urban sites in Britain (Reece 1987). Rural settlements tend to have a higher ratio of Phase D coins.

Table 7.37 Chronological summary of the coins from Birdlip Quarry.

Period	Date	Number	%
1	(To AD 41)	-	
2a	(41–54)	-	
2b	(54–69)	-	
3	(69–96)	1	0.5
4	(96–117)	-	
5	(117–38)	1	0.5
6	(138–61)	7	3.4
7a	(161–80)	2	1.0
7b	(180–93)	1	0.5
8	(193–222)	5	2.4
9a	(222–83)	2	1.0
9b	(238–59)	2	1.0
10	(259–75)	48	23.3
11	(275–94)	45	21.8
12	(294–317)	8	3.9
13a	(317–30)	36	17.5
13b	(330–48)	37	18.0
14	(348–64)	3	1.5
15a	(364–78)	7	3.4
15b	(378–88)	-	
16	(388–402)	1	0.5
Unphasable			
1st –2nd C		1	
3rd –4th C		23	
Total Roman		230	
Non-coin		1	
GRAND TOTAL		231	

Table 7.38 Birdlip Quarry, denominations of the Augustan System coins.

Issue Period	Denarius	Sestertius	Dupondius	As	Dupondius/As
3				1	
4					
5				1	
6		6			1
7a		2			
7b			1		
8	5				
9a	1			1	
Total	6	8	1	3	1

277 SF 431, ctx 34, Vespasian, As, 71–9, SC; eagle on globe.

278 SF 762, ctx 270, Hadrian, As, 117–38, Illegible, Illegible.

279 SF 1099, ctx 71, Illegible, As, 69–138, Illegible, Illegible

280 SF 1655, ctx 1500, Antoninus Pius, Sestertius, 138–61, —VS—, Ill. Salus stg. l. by altar.

281 SF 1565, ctx 1266, Antoninus Pius, Sestertius, 138–61, ANTONINVS AVG PI—, Ill; SC. Fem. fig. l., holding sceptre r.

282 SF 1728, ctx 1509, Antonine emperor, Sestertius, 138–61, Illegible, Illegible.

283 SF 1533, ctx 1210, Faustina I, Sestertius, 141–61, DIVA FAVSTINA, AVGVSTA; SC, Rome, RIC 3: 1127.

284 SF 763, ctx 270, Faustina I, Dupondius/as, 141–61, DIVA FAVSTINA, [AVGV]STA; SC, Rome, RIC 3: 1172.

285 SF 162, ctx 18, Faustina I, Sestertius, 138–61, Illegible, Illegible.

286 SF 3, ctx 7, Marcus Aurelius, Sestertius, 164–5, [M AVR]EL ANTONINVS AVG ARMENIACVS IMP, TR POT [XIX] IMP II COS III; SC, Rome, RIC 3: 902.

287 SF 539, ctx 265, Marcus Aurelius, Sestertius, 173–4, M ANTONINVS AVG TR P XXVIII, Ill. Fig. seated l. (Jupiter or Roma).

288 SF 1528, ctx 1217, Faustina II, Sestertius, 145–6, FAVSTINAE AVG PII AVG FIL, P[VDI]CITIA; SC, Rome, RIC 3: 1381.

289 SF 148, ctx 18, Commodus, Dupondius, 180, —MODVS ANTONI—, LIB AVG TR P—, Rome, Robertson 2: 73.

290 SF 1572, ctx 1266, Septimius Severus, Denarius, 197–8, —AVG IMP X, Ill. Salus seated l.

291 SF 904, ctx 29, Septimius Severus, Denarius frag., 193–211, —VERVS—, —OR—; arm holding staff?

292 SF 1563, ctx 1268, Septimius Severus, Base Denarius, 193–211, Illegible, —IC—; Victoria stg. l.

293 SF 1569, ctx 1266, Julia Domna, Base Denarius, 193–6, Illegible, PI[ETAS A]VG.

294 SF 1710, ctx 1503, Elagabalus, Denarius, 218–22, [IMP] ANTONINVS PIVS AVG, SVMMVS SACERDOS AVG, Rome, RIC 4: 146.

295 SF 24, ,u/s, Severus Alexander, Denarius frag., 222–35, Illegible, [AEQVI]TAS AVG, , RIC 4: 127.

296 SF 1519, ctx 1198, Severus Alexander, As, 222–35, —SEV ALEXANDER AVG, LIBER[ALITAS —]; SC.

297 SF 430, ctx 128, Valerian I, Antoninianus, 253–9, IMP C P LIC VALERIANVS AVG, Illegible.

298 SF 1180, ctx 829, Valerian II, Silver antoninianus, 253–60, PCL VALERIANVS NOB CAES, PIETAS AVGG, Rome, RIC 5: 20.

299 SF 26, ctx 7, Gallienus, Antoninianus, 260–8, Illegible, [DIANAE CONS AVG] antelope walking l, RIC 5: 180.

300 SF 205, ctx 18, Gallienus, Antoninianus, 260–8, —LIENVS A—, MARTI PACIFERO, Rome, RIC 5: 236.

301 SF 83, ctx 7, Gallienus, Antoninianus, 260–8, G———VG, FORTVNA REDVX, Siscia, RIC 5: 572.

Table 7.39 Birdlip Quarry, 4th-century mint distribution.

Period	12		13a		13b		14		15a	
	No.	%	No.	%	No.	%	No.	%	No.	%
London	4	66.7	7	30.4						
Trier	2	33.3	11	50.0	17	73.9				
Lyons			3	13.6						
Arles					6	26.1			1	50.0
Heraclea			1	4.5						
Aquileia									1	50.0
Total	6		22		23		-		2	
Irregular					5		2			

Table 7.40 Birdlip Quarry, relative numbers of coins, separated into four phases.

	Total	%
Phase A (to AD 259)	21	10.2
Phase B (259–96)	93	45.1
Phase C (296–330)	44	21.4
Phase D (330–402)	48	23.3

302 SF 1582, ctx 1311, Gallienus, Antoninianus, 260–8, [GALLI]ENVS AVG, Ill. (Blurred striking). Fem. fig. stg. l..

303 SF 36, ctx 7, Gallienus, Antoninianus, 260–8, Illegible, Ill. Fortuna stg. L.

304 SF 564, ctx 128, Gallienus, Antoninianus, 260–8, Illegible, Ill., Fides stg. l..

305 SF 154, ctx 7, Claudius II, Antoninianus, 268–70, IM- — AVG, [PROVID] AVG, Rome, RIC 5: 87.

306 SF 1547, ctx 1244, Claudius II, Antoninianus, 268–70, IMP C CLAVDIVS AVG, FIDES EXERCI.

307 SF 31, ctx 7, Claudius II, Antoninianus, 268–70, Illegible, Ill. Genius stg. l.

308 SF 145, ctx 18, Claudius II, Antoninianus, 268–70, Illegible, Illegible.

309 SF 150, ctx 18, Claudius II, Antoninianus, 268–70, Illegible, Illegible.

310 SF 749, ctx 230, Claudius II, Antoninianus, 268–70, Illegible, Illegible.

311 SF 270, ctx 31, Claudius II, Antoninianus, 270, DIVO CLAVD[IO], [CO]NSEC[RATIO], altar, , RIC 5: 261.

312 SF 40, ctx 7, Claudius II, Antoninianus, 270, DIVO CL[AVDIO], [CONSECRATIO]; eagle, , RIC 5: 266.

313 SF 662, ctx 272, Postumus, Silver Antoninianus, 259–68, IMP C POSTVMVS PF AVG, [HE]RC PACIF[ERO], Principal mint, Elmer 299.

314 SF 1578, ctx 1313, Postumus, Antoninianus, 259–68, IMP C POST[VMVS PF AVG], MONE[TA A]VG, Principal mint, Elmer 336

315 SF 613, , ctx 268, Postumus, Antoninianus, 259–68, Illegible, [PAX AVG], Principal mint, Elmer 566.

316 SF 44, ctx 7, Postumus, Antoninianus, 259–68, IMP C POSTVMVS PF AVG, ORIENS AVG, Principal mint, Elmer 568.

317 SF 761, ctx 272, Postumus, Silver antoninianus, 259–68, IMP C POSTVMVS PF AVG, ORIENS AVG, Principal mint, Elmer 568.

318 SF 111, ctx 7, Marius, Antoninianus, 268, IMP C M [AVR MARIVS AVG], VICTORIA AVG, Cologne, RIC 5: 18

319 SF 160, ctx 34, Victorinus, Antoninianus, 268–70, Illegible, {PROVIDENTIA AVG], Trier, Elmer 743.

320 SF 15, ctx 2, Victorinus, Antoninianus, 268–70, Illegible, [VICTORIA] A[VG], Trier, Elmer 744.

321 SF 113, ctx 14, Victorinus, Antoninianus, 270–4, Illegible, [SALVS AVG].

322 SF 1661, ctx 1500, Tetricus I, Antoninianus, 270–4, Illegible, [PAX] A[VG], Cologne, Elmer 771.

323 SF 743, ctx 230, Tetricus II, Antoninianus, 270–4, —TET—, [PIET]AS AV[GG], Cologne, Elmer 773.

324 SF 29, ctx 7, Tetricus I, Antoninianus, 270–4, IMP TETRIC[VS PF AVG], [HILA]RITAS AVGG, Trier, Elmer 789.

325 SF 1698, ctx 1518, Tetricus I, Antoninianus, 270–4, Illegible, [SPES PVBLICA], Cologne.

326 SF 118, ctx 14, Tetricus I, Antoninianus, 270–4, Illegible, [SPES PVBLICA], Cologne.

327 SF 95, ctx 2, Tetricus I, Antoninianus, 270–4, Illegible, [SPES PVBLICA], Cologne.

328 SF 144, ctx 18, Tetricus I, Antoninianus, 270–4, Illegible, [SPES PVBLICA], Cologne.

329 SF 840, ctx 276, Tetricus I, Antoninianus, 270–4, Illegible, [SPES PVBLICA].

330 SF 279, ctx 2, Tetricus I, Antoninianus, 270–4, Illegible, LAETI[TIA —], Trier.

331 SF 245, ctx 31, Tetricus I, Antoninianus, 270–4, Illegible, [SPES —].

332 SF 1518, ctx 1198, Tetricus I, Antoninianus, 270–4, Illegible, LAE[TITIA—], Trier.

333 SF 343, ctx 34, Tetricus I, Antoninianus, 270–4, Illegible, Illegible.

334 SF 630, ctx 14, Tetricus I, Antoninianus, 270–4, Illegible, Illegible.

335 SF 115, ctx 14, Tetricus I, Antoninianus, 270–4, —VS C—, PI[ETAS] —, Cologne.

336 SF 7, ctx 7, Tetricus I, Antoninianus, 270–4, Illegible, [PIETAS —], Cologne.

337 SF 59, ctx 7, Tetricus II, Antoninianus, 270–4, Illegible, [SPES —].

338 SF 275, ctx 34, Tetricus II, Antoninianus, 270–4, Illegible, SPES —.

339 SF 458, ctx 34, Tetricus II, Antoninianus, 270–4, Illegible, [C]OME[S AVG].

340 SF 17, Tetricus II, Antoninianus, 270–4, Illegible, Illegible.

341 SF 835, ctx 230, Tetricus I/II, Antoninianus, 270–4, Illegible, Illegible, ewer.

342 SF 139, u/s, Gallic Empire, Antoninianus, 259–74, Illegible, Ill. Fem. fig. stg. l.

343 SF 143, ctx 18, Illegible, Antoninianus, 268–74, Illegible, Illegible.

344 SF 94, ctx 2, Aurelian, Antoninianus, 270–5, Illegible, CONCORDIA MILITVM.

345 SF 1529, ctx 1224, Illegible, Antoninianus, 260–74, Illegible, Illegible.

346 SF 452, ctx 182, Tetricus II, Irregular Antoninianus, 270–4, —ESP TETRICVS CA—(irregular lettering), PAX [AVG].

347 SF 1541, ctx 1225, Barbarous radiate, 270–84, Gallienus, Hilaritas.

348 SF 116, ctx 14, Barbarous radiate, 70–84, [CO]NSECR[ATIO], [CO]NSECR[ATIO].

349 SF 153, ctx 7, Barbarous radiate, 270–84, Claudius II, Altar.

350 SF 227, ctx 31, Barbarous radiate, 270–84, [DIVO CL]AVD[IO], Altar.

351 SF 1531, ctx 1224, Barbarous radiate, 270–84, Tetricus I, PAX AVG; vertical sceptre.

352 SF 105, ctx 7, Barbarous radiate, 270–84, Tetricus I, Pax Aug.

353 SF 75, ctx 7, Barbarous radiate, 270–84, No leg. Tetricus I, S—— AVG; Pax, vertical sceptre.

354 SF 210, ctx 1, Barbarous radiate, 270–84, Tetricus I, —CO—.

355 SF 760, ctx 14, Barbarous radiate, 270–84, Tetricus I, —VS—.

356 SF 1730, ctx 1509, Barbarous radiate, 270–84, , Female figure standing right.

357 SF 1690, ctx 1501, Barbarous radiate, 270–84, —TRICVS CA— (Tetricus II), No legend. Pin figure.

358 SF 1689, ctx 1508, Barbarous radiate, 270–84, Tetricus II, Female figure standing left.

359 SF 1552, ctx 1228, Barbarous radiate, 270–84, Tetricus II, Female figure with cornucopiae standing l.

360 SF 1554, ctx 1227, Barbarous radiate, 270–84, —TETRICV— (Tetricus II), Female figure.

361 SF 1525, ctx 1211, Barbarous radiate, 270–84.

362 SF 124, ctx 14, Barbarous radiate, 270–84, Pin figure.

363 SF 880, ctx 223, Barbarous radiate, 270–84.

364 SF 973, ctx 7, Barbarous radiate, 270–84, Pin figure.

365 SF 1113, ctx 704, Barbarous radiate, 270–84, Tetricus II.

366 SF 634, ctx 128, Barbarous radiate, 270–84.

367 SF 1526, ctx 1211, Barbarous radiate, Minim, 275–84, Pin figure.

368 SF 1527, ctx 1211, Barbarous radiate, Minim, 275–84, Altar derivative.

369 SF 375, ctx 34, Barbarous radiate, Minim, 275–84, Tetricus I, Pax.

370 SF 624, ctx 128, Barbarous radiate, Minim, 275–84, Tetricus I, Sacrificial implements.

371 SF 1540, ctx 1225, Barbarous radiate, Minim, 275–84, Tetricus II.

372 SF 27, ctx 7, Barbarous radiate, Minim, 275–84, Invictus to r.

373 SF 147, ctx 18, Barbarous radiate, Minim, 275–84.

374 SF 272, ctx 31, Barbarous radiate, Minim, 275–84.

375 SF 759, ctx 272, Barbarous radiate, Minim, 275–84, No legend, Border only.

376 SF 766, ctx 272, Barbarous radiate, Minim, 275–84, Tetricus II, Salus.

377 SF 815, ctx 272, Barbarous radiate, Minim, 275–84.

378 SF 831, ctx 278, Barbarous radiate, Minim, 275–84, No leg, No leg, ewer.

379 SF 850, ctx 251, Barbarous radiate, Minim, 275–84.

380 SF 893, ctx 454, Barbarous radiate, Minim, 275–84, No leg, No leg.

381 SF 927, ctx 431, Barbarous radiate, Minim, 275–84.

382 SF 1086, ctx 122, Barbarous radiate, Minim, 275–84.

383 SF 1538, ctx 1225, Barbarous radiate, Minim fragment, 275–84.

384 SF 1024, ctx 721, Barbarous radiate, Fragment, 270–84.

385 SF 469, ctx 34, Carausius, Antoninianus, 287–93, Illegible, MARS VLTOR, RIC 5: 89.

386 SF 86, ctx 7, Carausius, Antoninianus, 287–93, IMP CA[RAVSIV]S PF AVG, PAX AVG; vertical sceptre, London, RIC 5: 101.

387 SF 30, ctx 7, Carausius, Antoninianus, 287–93, —C CARAVSIVS PF AVG, PAX AVG; trans. sceptre, Illegible.

388 SF 60, ctx 7, Allectus, Antoninianus, 293–6, [IMP] C ALLECTVS PF AVG, LAETITIA AVG, London, RIC 5: 22.

389 SF 43, ctx 7, Allectus, Quinarius, 293–6, IMP C ALLECTVS PF AVG, VIRTVS AVG, London, RIC 5: 55.

390 SF 321, ctx 31, Allectus, Quinarius, 293–6, IMP C ALLECTVS PF AVG, VIRTVS AVG, 'C' mint, RIC 5: 128.

391 SF 468, ctx 14, Illegible, Antoninianus, 260–96, Illegible, Illegible.

392 SF 61, ctx 7, Licinius, Follis, 310–12, IMP LICINIVS PF AVG, GENIO POP ROM, London, RIC 6: 209c.

393 SF 103, ctx 7, Constantine I, Follis, 316,

CONSTANTINVS P AVG, SOLI INVICTO COMITI, London, RIC 7: 75.

394 SF 10, ctx 2, Constantine II, Follis, 317, FL CL CONSTANTINVS IVN NC, SOLI INVICTO COMITI, London, RIC 7: 117.

395 SF 626, ctx 72, Constantine I, Follis, 313–17, IMP CONSTANTINVS AVG, SOLI INVICTO COMITI, London.

396 SF 345, ctx 53, Constantine I, Follis, 320, CONSTANTINVS MAX AVG, VICTORIAE LAETAE PRINC PERP, London, RIC 7: 170.

397 SF 1686, ctx 2012, Crispus, Follis, 320–1, CRISPVS [NO]BIL C, VIR[TVS EXERCIT], London, RIC 7: 194.

398 SF 1685, ctx 2012, Crispus, Follis, 323–4, CRISPVS NOBIL C, BEAT TRANQLITAS, London, RIC 7: 274.

399 SF 1697, ctx 2012, Crispus, Follis, 323–4, CRISPVS NOBIL C, BEAT TRANQLITAS, London, RIC 7: 275.

400 SF 1696, ctx 2012, Constantine II, Follis, 323–4, [CONSTANT]INVS IVN NC, BEAT TRAN]QLITAS, London, RIC 7: 287.

401 SF 837, ctx 30, Constantine II, Follis, 323–4, CONSTANTINVS IVN NC, BEAT TRAN]QLITAS, London, RIC 7: 287.

402 1514, ctx 1179, Crispus, Follis, 324–5, FL IVL CRISPVS, PROVIDENTIAE CAESS, London, RIC 7: 295.

403 SF 21, ctx 2, Constantine I, Follis, 313–15, IMP CONSTANTINVS AVG, SOLI INVICTO COMITI, Trier, RIC 7: 40.

404 SF 14, ctx 2, Licinius, Follis, 313–15, IMP LICINIVS PF AVG, GENIO POP ROM, Trier, RIC 7: 57.

405 SF 1523, ctx 1211, Crispus, Follis, 320, CRISPVS NOB CAES, VIRTVS EXERCIT, Trier, RIC 7: 260.

406 SF 238, ctx 31, Constantine I, Follis, 321, CONSTANTINVS AVG, BEATA TRANQVILLITAS, VO/TIS/XX, Trier, RIC 7: 303.

407 SF 1719, ctx 1519, Constantine I, Follis, 322, CONSTA—, [BEATA TRA]NQVILLITAS, Trier, RIC 7: 341.

408 SF 48, ctx 7, Constantine I, Follis, 322, CONSTANTINVS AVG, BEATA TRANQVILLITAS, VO/TIS/XX, Trier, RIC 7: 341.

409 SF 42, ctx 7, Crispus, Follis, 322, [IVL] CRISPVS NOB CAES, BEATA TRANQVILLITAS, Trier, RIC 7: 347.

410 SF 261, ctx 31, Crispus, Follis, 322–3, IVL CRISPVS NOB CAES, BEATA TRANQVILLITAS, Trier, RIC 7: 376.

411 SF 337, ctx 136, Constantine I, Follis, 323, CONSTANTINVS AVG, BEATA TRAN[QVILLITAS], VO/TIS/XX, Trier, RIC 7: 390.

412 SF 164, ctx 31, Crispus, Follis, 321–3, IVL CRISPVS NOB CAES, BEATA TRANQVILLITAS, VO/TIS/XX, Trier, RIC 7: 426.

413 SF 1684, ctx 2012, Constantine I, Follis, 323–4, CONST[AN]TIN[VS AVG], SARMAT[IA DEVICTA], Trier, RIC 7: 429.

414 SF 1687, ctx 2012, Fausta, Follis, 324-5, Illegible, SPE]S REIPVBLICAE, Trier, RIC 7: 460.

415 SF 330, ctx 31, Helena, Follis, 327–8, FL HELENA AVGVSTA, SECVRITAS REIPVBLICE, Trier, RIC 7: 508.

416 SF 1, ctx 7, Constantine I, Follis, 330–1, [VRBS ROMA], Wolf and twins, Trier, RIC 7: 522.

417 SF 1560, ctx 1313, Constantine I, Follis, 332–3, CONST[ANTINOPOLIS], Victory on prow, Trier, RIC 7: 543.

418 SF 141, ctx 72, Constantine I, Follis, 332–3, CONSTANTINOPOLIS, Victory on prow, Trier, RIC 7: 543.

419 SF 1208, ctx 760, Constantine I, Follis, 332–3, CONST[ANTINOPOLIS], Victory on prow, Trier, RIC 7: 543.

420 SF 872, ctx 246, Constantine II, Follis, 333–4, CONSTANTINVS IVN, GLORI]A EXERC[ITVS], 2 standards, Trier, RIC 7: 550.

421 SF 280, ctx 2, Theodora, Follis, 337–40, Illegible, P[IETAS] ROMANA, Trier, RIC 8: 65.

422 SF 1694, ctx 2012, House of Constantine, Follis, 321, Illegible, BEAT[A TRANQV]ILLITAS, Lyons, RIC 7: 125.

423 SF 237, ctx 31, Constantine I, Follis, 321, CONSTANTINVS AVG, BEATA TRANQVILLITAS,, Lyons, RIC 7: 129.

424 SF 464, ctx 128, Constantine I, Follis, 323–4, CONSTANTINVS AVG, SARMATIA DEVICTA, Lyons, RIC 7: 222.

425 SF 33, ctx 7, Constantine I, Follis (incomplete), 330, [CON]STANTIN[VS AVG], [GLORIA E] XERCITVS, 2 standards, Arles, RIC 7: 341.

426 SF 1521, ctx 1210, House of Constantine, Follis, 330–1, Illegible, [GLORIA EXERCITVS], 2 standards, Arles, RIC 7: 345.

427 SF 1576, ctx 1313, Constantine II, Follis, 333, CONSTANTINVS IVN NC, GLORIA EXERCITVS, 2 standards, Arles, RIC 7: 371.

428 SF 1561, ctx 1313, Constantine I, Follis, 333–4, CONSTANT[INVS] MAX AUG, GLORIA EXERCITVS, 2 standards, Arles, RIC 7: 375.

429 SF 200, ctx 53, Delmatius, Follis, 336, FL DELMATIVS [NOB C], GLORIA EXERC[ITVS], 1 standard, Arles, RIC 7: 399.

430 SF 4, ctx 7, Constantine I, Silvered Follis, 324–5, CONSTANTINVS AVG, PROVIDENTIAE AVGG,

Siscia, RIC 7: 183.

431 SF 267, ctx 31, Constantine II, Follis, 325–6, FL IVL CONSTANTIVS NOB C, PROVIDENTIAE CAESS, Heraclea, RIC 7: 78.

432 SF 660, u/s, House of Constantine, Follis, 310–13, Illegible, SOLI INVICTO COMITI.

433 SF 620, ctx 128, Licinius, Follis, 313–7, IMP LICIMIVS PF AVG, GENIO POP ROM.

434 SF 31, ctx 7, House of Constantine, Follis, 310–13, CON—, VICTORIAE LAETAE PRINC [PERP].

435 SF 240, ctx 31, Constantine I, Follis, 316–20, CONSTANTINVS AVG, VICTORIAE LAETAE PRINC PERP.

436 SF 1387, ctx 929, Constantine I, Follis, 316–20, CONSTANTINVS AVG, VICTORIAE LAETAE PRINC PERP.

437 SF 260, ctx 31, Licinius, Follis, 319–24, IMP LICINIVS AVG, VOT/XX.

438 SF 1695, ctx 2012, Crispus, Follis, 320–1, CRISPVS NOB CAES, VIR[TVS] EXERC[IT].

439 SF 1558, ctx 1224, Licinius, Follis, 320, LICINIVS IVN NOB C, [VIRTVS] EXERCIT.

440 SF 92, ctx 2, Crispus, Follis, 320-1, NOB CAES, VIRTVS EXERCIT.

441 SF 266, ctx 31, Crispus, Follis, 320–3, PVS NOB CAES, [BEATA TRANQVILLITAS].

442 SF 93, ctx 2, House of Constantine, Follis, 321–4, Illegible, [CAESARVM NOSTRORVM], VOT/X.

443 SF 635, ctx 128, House of Constantine, Follis, 321–4, Illegible, [CAESARVM NOSTRORVM], VOT/X.

444 SF 134, ctx 18, House of Constantine, Follis, 321–4, Illegible, [CAESARVM NOSTRORVM], VOT/X.

445 SF 395, ctx 34, Constantine I, Follis, 323–4, —TINVS AVG, DN CONSTANTINI MAX AVG; VOT/XX.

446 SF 96, ctx 2, Helena, Follis, 324–5, Illegible, [SECVRITAS REIPVBLICE].

447 SF 18, ctx 2, House of Constantine, Follis, 317–20, Illegible..Helemted bust r., Illegible.

448 SF 79, ctx 136, Constantine II, Follis, 330–5, FL IVL CO[NSTAN]TIVS NOB C, GLORIA EXERCITVS, 2 standards.

449 SF 9, ctx 7, House of Constantine, Follis, 330–5, CONSTANT—, [GLORI]A EXE[RCITVS], 2 standards.

450 SF 1517, ctx 1198, Constantine I, Follis, 330–5, [CONSTANTINOPOLIS], Victory on prow.

451 SF 1573, ctx 1313, Constans, Follis, 337–40, [FL IVL CONST]ANS AVG, GLORIA EXER[CITVS], 1 standard, Trier, RIC 8: 85.

452 SF 1592, ctx 1311, House of Constantine, Follis, 340, Illegible, [GLORIA EXERCITVS], 1 standard, Arles, RIC 8: 56.

453 SF 325, ctx 31, Constantine I, Follis, 330–5, [VRBS ROMA], Wolf and twins.

454 SF 225, ctx 1, Constantine I, Follis, 330–5, [CONSTAN]TINOPOLIS, Victory on prow.

455 SF 1664, ctx 1500, House of Constantine, Follis (frag.), 335–40, Illegible, [GLORIA EXERCITVS], 1 standard.

456 SF 1556, ctx 1309, House of Constantine, Follis (frag.), 335–40, Illegible, [GLORIA EX]ERC[ITVS], 1 standard.

457 SF 1610, ctx 1311, House of Constantine, Follis, 335–40, Illegible, [GLORIA EXERCITVS], 1 standard.

458 SF 89, ctx 7, House of Constantine, Follis, 335–40, Illegible, [GLORIA EXERCITVS], 1 standard.

459 SF 70, ctx 7, House of Constantine, Follis, 335–40, Border missing, [GLORIA EXERCITVS], 1 standard.

460 SF 28, ctx 7, House of Constantine, Follis, 335–40, Illegible, [GLORIA EXERCITVS], 1 standard.

461 SF 25, ctx 7, Constantius II, Follis, 335–40, [FL IVL CONST]ANTIUS NOB [C], [GLORIA EXERCITVS], 1 standard.

462 SF 6, ctx 7, Constans, Follis, 337–40, —STANS AVG, [GLORIA] EXERCITVS, 1 standard.

463 SF 278, ctx 2, House of Constantine, Follis, 335–40, CONSTANTI—, GLORIA [EXERCITVS], 1 standard.

464 SF 1532, ctx 1224, Helena, Follis, 337–40, [FL IVL H]ELENAE AVG, [PAX PV]BLICA.

465 SF 1666, ctx 1500, House of Constantine, Irregular Follis, 341–6, Illegible, [GLORIA EXERCITVS], 2 standards.

466 SF 1575, ctx 1313, Constantine I, Irregular Follis, 341–6, VRBS ROMA, Wolf and twins.

467 SF 2, ctx 7, Constantine I, Irregular Follis, 341–6, [CONSTANTINOPOLIS], Victory on prow.

468 SF 667, ctx 136, Constantine I, Irregular Follis, 341–6, CONSTANTINOPOLIS, Victory on prow.

469 SF 1244, ctx 760, Constantine I, Irregular Follis, 341–6, CONSTANTINOPOLIS, Victory on prow, As Lyons.

470 SF 22, ctx 7, House of Constantine, Follis, 347–8, Illegible, VICTORIAE DD AVGG Q NN], Trier, RIC 8: 207.

471 SF 1571, ctx 1313, House of Constantine, Follis, 347–8, Illegible, [VICTORIAE DD AVGG Q NN]].

472 SF 254, ctx 91, Constans, Follis, 347–8, CONSTANS PF AVG, [VICTORIAE DD AVGG Q NN].

473 SF 110, ctx 7, House of Constantine, Irregular AE4, 354–64, Illegible, [FEL TEMP REPARATIO]; falling horseman.

474 SF 448, ctx 128, House of Constantine, Irregular AE4, 354–64, Illegible, [FEL TEMP REPARATIO]; falling horseman.

475 SF 12, ctx 7, , Illegible minim, 340–64, Illegible, Illegible.

476 SF 370, ctx 34, Valens, AE3, 367–75, —S PF AVG, SECVRITAS REIPVBLICAE, Arles, RIC 9: 17b.

477 SF 130, ctx 7, Valentinian I, AE3, 364–7, DN VALENTINIANVS PF AVG, GLORIA R[OMAN-ORVM], Aquileia, RIC 9: 7a.

478 SF 32, ctx 7, House of Valentinian, AE3, 364–78, Illegible, [GLORIA ROMANORVM].

479 SF 91, ctx 7, Valens, AE3, 364-78, DN VALEN—, SECVRITAS REIP[VBLICAE].

480 SF 8, ctx 7, House of Valentinian, AE3, 364-78, Illegible, [SECVRITAS REIPVBLICAE].

481 SF 274, ctx 34, Valens, AE3, 364-78, DN VALEN—, SECVRITAS REIPVBLICAE.

482 SF 246, ctx 34, House of Valentinian, AE3, 364–78, Illegible, [SECVRITAS REIPVBLICAE].

483 SF 1048, ctx 736, House of Theodosius, AE4, 388–95, Illegible, SALVS REIPVBLICAE.

484 SF 1682, ctx 1534, Illegible, AE4, 320–78, Illegible, Illegible.

485 SF 11, ctx 7, Illegible, AE3, 320–78, Illegible, Illegible.

486 SF 165, ctx 40, Illegible, AE4, 341–402, Illegible, Illegible.

487 SF 166, ctx 1, Illegible, AE4, 275–364, Illegible, Illegible.

488 SF 170, ctx 31, Illegible, AE4, 275–364, Illegible, Illegible.

489 SF 1736, ctx 1624, Illegible, AE3, 260–378, Illegible, Illegible.

490 SF 1656, ctx 1500, Illegible, AE3, 260–378, Illegible, Illegible.

491 SF 1650, ctx 1500, Illegible, AE3, 260–378, Illegible, Illegible.

492 SF 88, ctx 7, Illegible, AE3, 260–378, Illegible, Illegible.

493 SF 132, ctx 18, Illegible, AE3, 260–378, Illegible, Illegible.

494 SF 1702, ctx 1501, Illegible, AE3/4, 260–402, Illegible, Illegible.

495 SF 1703, ctx 1501, Illegible, AE4 frag., 260–402, Illegible, Illegible.

496 SF 1678, ctx 2002, Illegible, AE3/4 frag., 260–402, Illegible, Illegible.

497 SF 1551, ctx 1244, Illegible, AE indet frags, 260–402, Illegible, Illegible.

498 SF 201, ctx 18, Illegible, AE3, 260–402, Illegible, Illegible.

499 SF 1190, ctx 815, Illegible, AE3, 260–402, Illegible, Illegible.

500 SF 1520, ctx 1210, Illegible, AE3, 270–402, Illegible, Illegible.

501 SF 336, ctx 38, Illegible, AE4, 270–402, Illegible, Illegible.

502 SF 128, ctx 7, Illegible, AE4, 275–402, Illegible, Illegible.

503 SF 133, ctx 18, Illegible, AE4, 275–402, Illegible, Illegible.

504 SF 290, ctx 90, Illegible, AE4, 275–402, Illegible, Illegible.

505 SF 1557, ctx 1235, Fragment, 3rd/4th century.

506 SF 129, ctx 7, Fragments, 3rd/4th century.

BROOCHES

By D. F. Mackreth

A total assemblage of 18 brooches was recovered from 4 sites: 6 from Duntisbourne Grove, 6 from Middle Duntisbourne, 5 from Birdlip Quarry and 1 from Court Farm. All were examined, and attributed, where possible, to one of the following typological categories: Colchesters, Colchester Derivatives, Late La Tène, Aucissa and Related, Trumpet and Penannular. All are copper alloy, unless otherwise stated.

Colchesters *(Fig. 7.20)*

507 Middle Duntisbourne, sf 29, ctx 288. The spring is covered with corrosion including a considerable quantity of iron possibly pointing to an ancient repair. The wings cannot be seen. The relatively short hook has a pointed end. The bow profile was forged and there are facets down each rear corner, the evidence for others down the front edges is equivocal. The bow is plain apart from three stamped circles arranged 2 and 1. The catch-plate was pierced, but it is impossible to tell whether it was fretted.

508 Middle Duntisbourne, sf 28, ctx 256. The wings are plain and the hook short. The plain bow had an octagonal section, its profile being forged. The catch-plate has largely gone but enough remains to show that it had been pierced with square-cornered openings.

509 Duntisbourne Grove, sf 136, ctx 135. In very poor condition, the type is assured, and the hook was short.

The only reliable guide to what is likely to have been common in most of southern England in the late pre-Roman Iron Age is the King Harry Lane cemetery (Stead and Rigby 1989) where brooches such as these Colchesters are common. Because the condition of the present examples is poor, detailed analysis of parallels

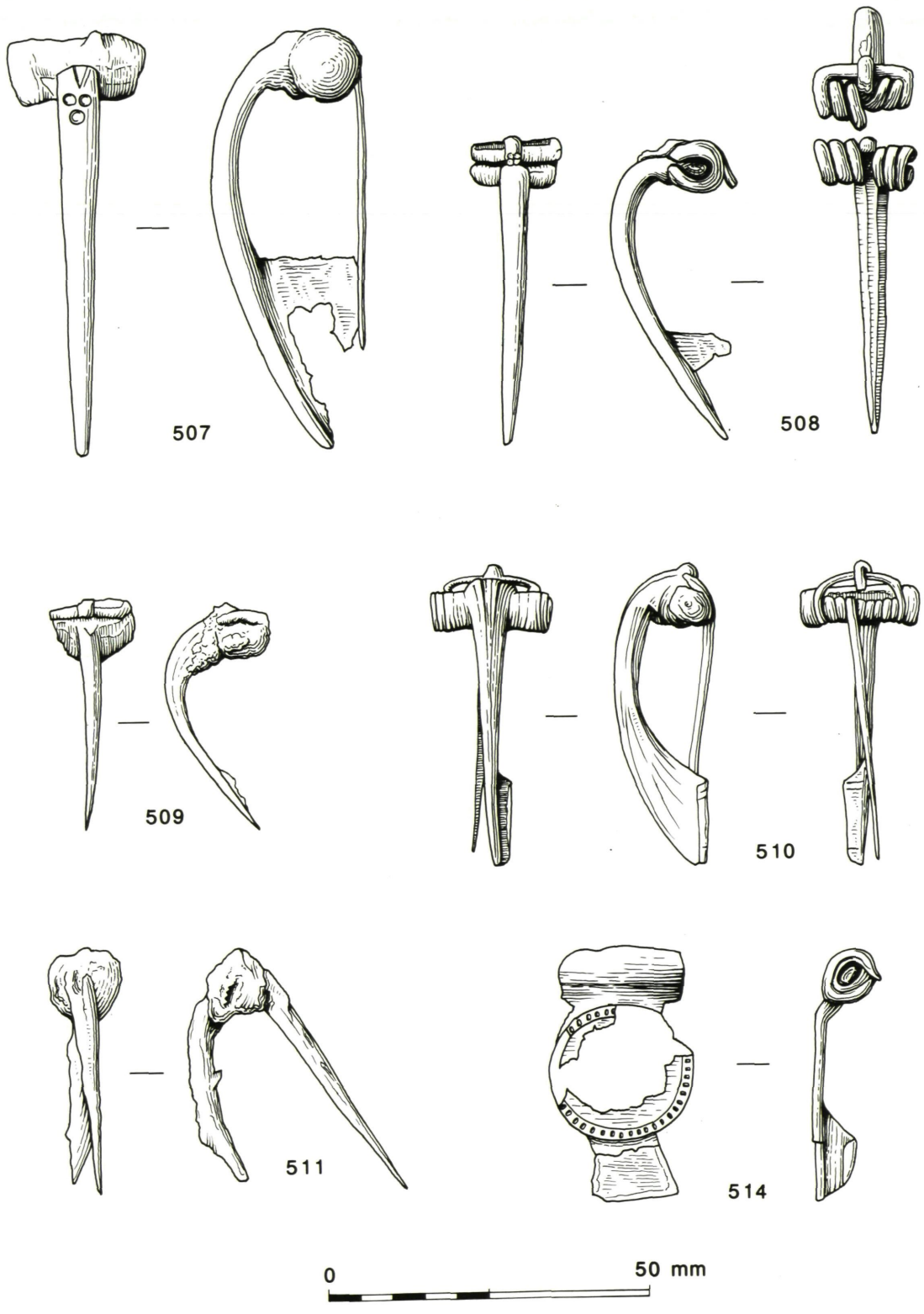


Figure 7.20 Brooches.

in the four phases is not really possible. However, all three here had their profiles forged, none is particularly small or has any feature pointing specifically to a late date in the development of the type. In this they match the bulk of those in the cemetery, excluding obviously early and late ones. The former are defined by their almost straight bows and the marked kick at the top of the profile, the latter are small and are cast with minimal finishing. The dating of the cemetery is therefore important.

The King Harry Lane report (ibid., 84) assigns the following dates to each phase: Phase 1 - AD 1–40, Phase 2 - AD 30–55, Phase 3 - AD 40–60, Phase 4 - AD 60+. The cemetery could have begun as early as *c.* 15 BC (ibid., 83), but a conservative view was taken and it was suggested that the cemetery lasted significantly beyond the Roman conquest. Therefore, all Phase 1, half of Phase 2 and practically nothing of Phase 3 would be pre-conquest, while Phase 4 can be ignored. However, there is a striking absence of well-known post-conquest types which flooded the market in the first 10–15 years after the arrival of the Roman army, there being only one Colchester Derivative (grave 316.4), and no standard Hod Hill. However, these types were being used in quantity a few hundred metres away, and there is also a commensurate lack of samian at a time when it was being imported in vast quantities (ibid., 113) and was abundant in the developing town. If, however, a possible start-date of 15 BC is used, and the phasing adjusted appropriately, then virtually all of the imbalance disappears. Consequently, the following dating is proposed: Phase 1 - 15 BC-AD 30; Phase 2 - AD 20–40; Phase 3 - AD 35–50; Phase 4 - AD 45+. What should be revealed, whatever the dating, is what was the common floruit of the main types in use at the time.

This argument covers brooches from a well-furnished cemetery, in which ordinary residuality, a common condition of standard occupation sites is not a factor, and it shows that the Colchester is frequently found on sites with Claudian deposits. Those brooches, which occur in contexts dating to the first 10–15 years after AD 43 are clearly devolving rapidly and it is very much a moot point as to whether they are actually only survivors in use. However, brooches such as nos 507–509 were made from about AD 10/20 and their manufacture had ceased by the conquest. The difficulty is establishing the point at which they become purely residual. The writer's opinion is that these three must have been residual by AD 60 and possibly not by AD 50 and, in default of better evidence, they should have passed out of use by AD 50/55.

Only brooch 507, with its stamped circles, has a distinctive feature. Brooches with such stamps are almost invariably larger than average, often have moulded wings and occasionally have grooves across the foot. The most extreme example comes from Cheriton, Kent, which has stamps down each side of the bow sweeping out along the top of the catch-plate (Tester and Bing 1949, 33, fig. 6, 3). The frequency of stamps in the King Harry Lane cemetery is unequivocal: Phase 2, G53, G152, G399, G433; Phase 3, G23; unphased D170, G177. Both G399 and D170 have the almost straight bows which mark the earliest strand of British Colchesters. In other words, if the cemetery is treated as an ordinary site, such brooches were going out of use in Phase 3 and most should have ceased to be used by the conquest, which suits the general tenor of the main series as a whole.

Colchester Derivative *(Fig. 7.20)*

510 Duntisbourne Grove, sf 6, ctx 27. The spring is held by the Polden Hill method: an axis bar through the coils is lodged in pierced plates at the ends of the wings, the chord being secured by a rearward-facing hook. Each wing has a buried moulding at its end. The hook is part of a skeuomorph of the Colchester's hook, otherwise the bow is plain. The return of the solid catch-plate has a buried moulding across its top.

Most Polden Hills can be assigned to a major group without difficulty, and, had the present piece had a moulding rising from the wings on each side of the head, the same would be true here. However, despite this, the overall proportions, the minimal decoration on the wings, coupled with the skeuomorph of the hook, show that the brooch belongs to the second half of the 1st century. A determining feature in placing the brooch more exactly would have been the style of any piercing in the catch-plate, but the catch-plate here is too small to have been so treated. Bearing in mind that the chief variety of Polden Hill had developed by the end of the 1st century (Mackreth 1996, 301), and that brooch 510 betrays no sign of that development, it may date to before AD 75.

Late La Tène *(Fig. 7.20)*

511 Middle Duntisbourne, sf 7, ctx 45. Iron. The integral spring has four coils and an internal chord. The bow is a circular-sectioned rod, the lower bow with the catch-plate is missing.

512 Middle Duntisbourne, sf 21, ctx 41. Half the spring and internal chord from a brooch of Nauheim or Drahtfibel Derivative type. (not illustrated).

513 Birdlip Quarry, sf 363, ctx 34. As 6. (not illustrated).

Without the bows, very little can be said about brooches 512 and 513. Both are almost certainly 1st century AD, and may have lasted to near the end of the century. However, brooch 511 is recognisably related to the *Drahtfibel*. Without the framed catch-plate, one cannot be sure that this example is one, but its proportions would not be out of place (cf. Mackreth 1992, 123, fig. 113, 21). The type developed in as much as it sometimes has a fretted catch-plate, and examples occur in Phases 1 and 2 burials at King Harry Lane showing that this feature belongs to pre-conquest times (Stead and Rigby 1989, 342, fig. 141, 270.5; 310, fig. 113, 143.5). The dating available for examples with or without catch-plates, some of the latter possibly

having been genuine Drahtfibeln, is as follows: Ower, Dorset, before AD 25 (Woodward 1987, 97, fig. 52, 217, 219); Kelvedon, Essex, 1st century BC-AD 43, and Tiberian- AD 40 (Rodwell 1988, 67, fig. 53, 3, 5); Werrington, Peterborough, 2nd/1st century BC - AD 50/60 (Mackreth 1988, 90, fig. 20,1); Station Road, Puckeridge, Herts, two examples, *c.* AD 25?-Claudius (Partridge 1979, 35, fig. 6.1–2); Gussage All Saints, mid 1st century, two examples (Wainwright 1979, 108, fig. 82, 3, 1056); Thetford, *c.* AD 45–61 (Mackreth 1992, 123, fig. 113, 24); Bagendon, AD 50–60 (Clifford 1961b, 167, fig. 29,4). Apart from excluding all brooches dating after AD 100, all those in iron with dates recorded by the writer are gathered here. The emphasis is on the first half of the 1st century or earlier. By AD 60 all were either residual or very long-lived survivors in use.

Rosette *(Fig. 7.20)*

514 Duntisbourne Grove, sf 8, ctx 43. The separate spring is housed in a case formed by folding two flaps round it at the top of the bow. This is a single plate shaped as a disc and fantail and was once covered by an applied repoussé plate, the remains of which preserve part of a beaded border on the disc.

This Rosette stands almost at the very end of a development which began in the middle of the 1st century BC, the last stage was to substitute a hinged pin for the sprung one. Beginning again with the King Harry Lane cemetery, two brooches of this variety occurred in Phase 2 (Stead and Rigby 1989, 290, fig. 99, 67.2,3) showing that, on the revised dating offered, it had arrived before the Roman conquest. Other dated examples are: Bagendon, AD 20/25–43/5 (Clifford 1961b, 175, fig. 32,2); Bancroft, pre-conquest-late 1st century (Mackreth 1994a, 291, fig. 132, 17); Colchester, AD 43/44–48, and AD 49–60 (Hawkes and Hull 1947, 83, pl. 94, 81, 83); Bagendon, AD 43/45–47/52 and AD 50/60 (Clifford 1961, 175, fig. 32, 3, 4); Colchester, AD 44–60 and AD 54–60 (Niblett 1985, 116, fig. 74, 22, 24); Baldock, AD 50–70 (Stead and Rigby 1986, 113, fig. 46, 100); Colchester, AD 60–80? (Crummy 1983, 8, fig. 3, 17). Again, any context later than AD 100 has been omitted. What is striking about these examples is that there is only one example dating after AD 60, and that should be residual, as the terminal date for pieces still in use should be hardly later than AD 50/55.

Langton Down *(Fig. 7.21)*

515 Duntisbourne Grove, ctx 5. The spring is housed like that in brooch 514. The condition is very poor and all that can be said is that the brooch was a reeded Langton Down, without any beading.

The King Harry Lane cemetery is again the chief source of information on the chronology of the Langton Down. The condition of this brooch is so poor that all that need be noted is that it appears to have been reeded and to have had no beading. The latter means that the brooch probably belongs to the first half of the overall floruit. The type lasted a little longer than the Colchester and could still be seen in use in AD 55, but probably not by AD 60.

Aucissa and related types *(Fig. 7.21)*

516 Duntisbourne Grove, sf 3, ctx 6. Apparently a standard uninscribed Aucissa, the beading to be expected down the bow cannot be seen, but the surface is in poor condition.

517 Birdlip Quarry, sf 792, ctx 308. The same as the last, but in very poor condition.

518 Duntisbourne Grove, sf 15, ctx 64. The moulded head-plate had been reduced to a minimum, the bow is now an almost flat straight-sided strip with a flute down each side and a sunken moulding down the middle. The foot tapers in quickly from a slight triple cross-moulding.

These have rolled-over heads to house the axis bar of the hinged pin, and have separately made foot-knobs sweated on. The first two show no signs of having any early features such as rolled-under heads, extra ridges or punched dot decoration down the bow, or stamps or eyes on the head-plates. Both should be standard uninscribed Aucissas. The Aucissa lies at the very end of a development which started with the Alesia sometime in the middle of the 1st century BC (Duval 1974). The end of the Aucissa itself comes when it develops through examples like brooch 517 to the Hod Hill. As the Hod Hill in all its manifestations had fully developed by the time of the conquest, the parent had patently passed out of manufacture and so those found in Roman contexts in this country should be survivors in use. The Hod Hill, apart from one element, can be shown to be passing out of use in the period AD 60-70, therefore, the terminal date of the Aucissa should be considered to be at least 10–15 years earlier. The actual transition to the Hod Hill, represented by brooch 518, was very short and examples should perhaps have the same dating as the Aucissa proper.

Trumpet *(Fig. 7.21)*

519 Birdlip Quarry, sf 1200, ctx 837. The spring had been mounted in a pierced lug behind the head of the bow which is very narrow. On top is an unpierced tab. The trumpet head is minimal and most of it is straight-sided down to the knop. This has a triple cross-moulding in the middle separated from a single one top and bottom by a flute. The lower bow has a rounded front and a projecting foot.

A definite variety of the Trumpet found mainly in the south-west, hardly east of Wiltshire/Dorset and hardly north of the Avon in Warwickshire. There are obviously sub-groups, but these have yet to be fully

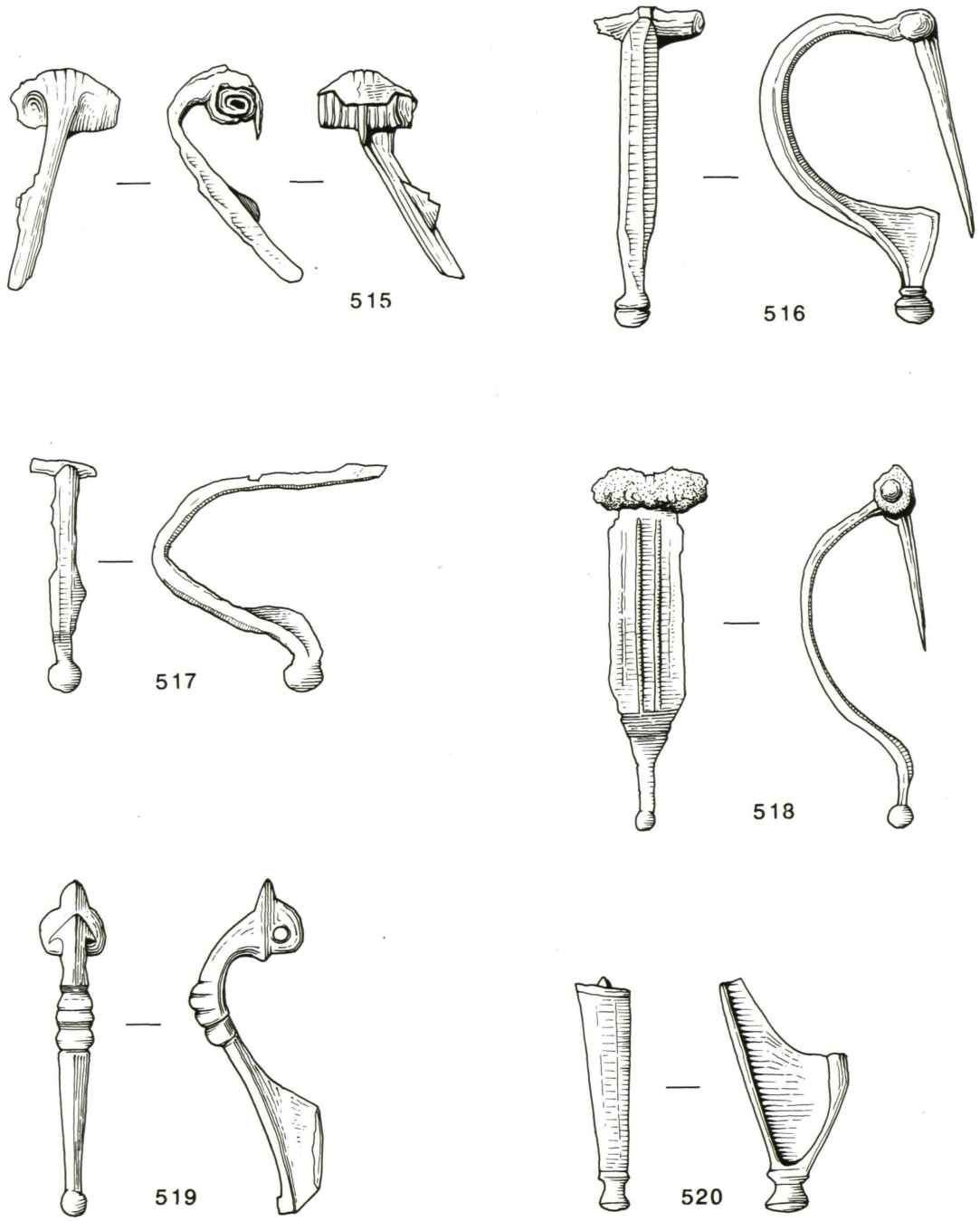


Figure 7.21 Brooches.

distinguished. The chief features which define the general variety are the narrow head springing from a head-plate, generally slim lines, almost exclusive use of cross-mouldings for the knop and use of the single lug for holding the spring. Few are dated: Nettleton, AD 69–117 (Wedlake 1982, 127, fig. 53, 54); Caerleon, AD 80–100 (Brewer 1986b, 170, fig. 54, 3); Leicester, late 1st century (Clay and Pollard 1994, 145, fig. 74, 24); Alcester, Warks., Hadrianic-Antonine (Mackreth 1994b, 167, fig. 79, 57). These few indicate that they date to the general floruit of the Trumpet type at large.

Unclassified *(Fig. 7.21)*

520 Birdlip Quarry, sf 98, ctx 2. Only the lower bow survives. It is broad at the fracture, flat in front, and tapers down to a foot which is suspended below the

catch-plate and is made up of two discs separated by a flute.

The writer has isolated three other catch-plates with the same style of foot-knob, but none has the upper bow, therefore the type is largely unidentified. All belong to the south-west and may be related to a widespread and poorly dated group which all have the same basic lower bow and prominent base moulding, but none close to the present example (cf. Hawkes 1947, 54, fig. 9, 12; Farwell and Molleson 1993, 87, fig. 67, 2), unless one from Bristol is acceptable (Hattatt 1985, 96, fig. 40, 408). Precise dating is rare, considering the numbers known: Dorchester, late 1st into the 2nd century (Green 1981, fig. 66); Camerton, AD 90-200 (Wedlake 1958, 225, fig. 52, 23); Chew, 2nd century (Rahtz and Greenfield 1977, fig. 114, 12).

Penannulars *(Fig. 7.22)*

All have circular-sectioned rings and straight pins, and all were forged.

521 Middle Duntisbourne, sf 12, ctx 39. Each terminal is turned back along the ring and has a groove across each end with a deep flute between.

522 Middle Duntisbourne, sf 36, ctx 288. Here the same style of terminal has five grooves across it.

In discussing the dating of these two brooches, only examples with the same characteristics have been chosen. These are, for brooch 521, the deep flute between a groove across each end, and for brooch 522, three or more equal value grooves. Brooch 521 before AD 60/65: Bagendon, AD 20/25–43/45 (Clifford 1961b, 184, fig. 36, 10); Hod Hill, before AD 50 (Brailsford 1962, 13, fig. 11, E17: Richmond 1968, 117–9); Longthorpe, Peterborough, *c.* AD 45–60/65 (Frere and St Joseph 1974, 46, fig. 24, 13); Waddon Hill, Stoke Abbot, *c.* AD 50–60 (Webster 1981b, 62, fig. 25, 11); Prestatyn, AD 70s–160 (Mackreth 1989, 98, fig. 40–27). Brooch 522, probably always before AD 60/65: Longthorpe, Peterborough, *c.* AD 45–60/65 (Frere and St Joseph 1974, 46, fig. 24, 14), and Claudian-Neronian (Dannell and Wild 1987, 87, fig. 21, 12); Tewkesbury, AD 140–160 (Hannan 1993, 68–70, fig. 19, 12).

523 Court Farm. Sf 2, ctx 132. Each terminal consists of two close-set discs which, although very worn, still preserve evidence of having been knurled. The wrap-round of the pin has two grooves round it, stopped at the top of the pin by two more.

The dating recorded by the writer is: Cirencester, AD 49–70/5 (Wacher and McWhirr 1982, 92, fig. 25, 17); Leicester, AD 90-100 (Kenyon 1948, 252, fig. 82, 10); Bancroft, late 1st-late 2nd century (Mackreth 1994a, 302, fig. 137, 54); Baldock, AD 120–150 (Stead and Rigby 1986, 122, fig. 49, 157); Ravenglass, AD 200–350/70 (Potter 1979, 69, fig. 26, 11). The range runs from the latter part of the 1st century to the 3rd century, it is possible that any after AD 200/225 should be regarded as having been residual in its context.

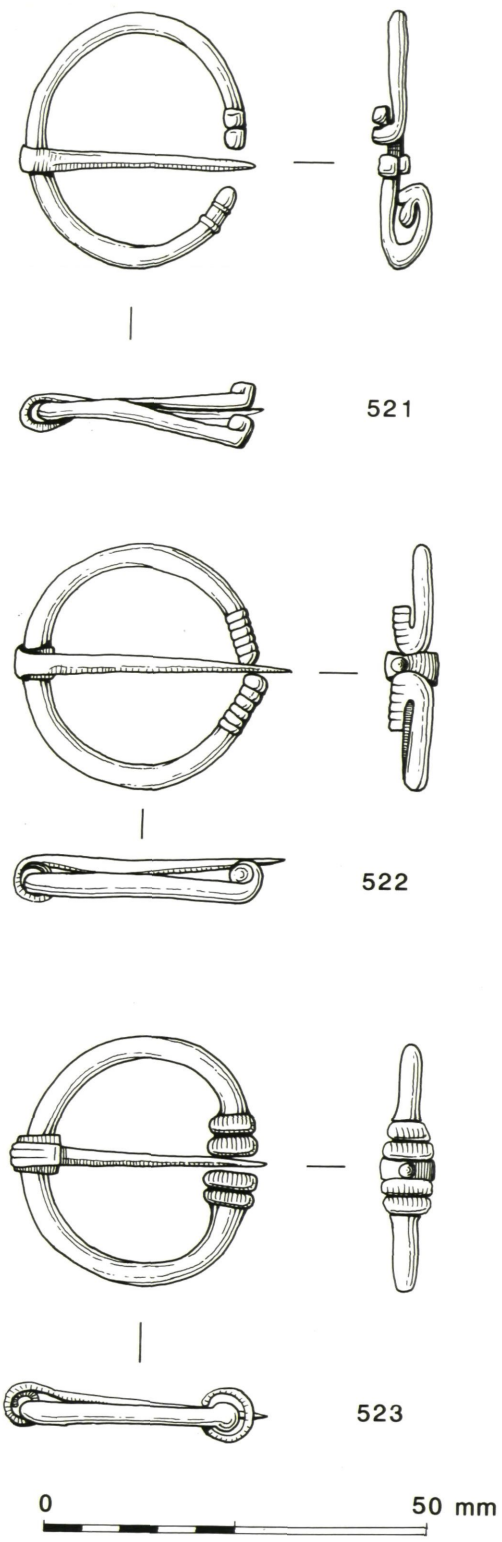


Figure 7.22 Brooches.

Fragment

524 Birdlip Quarry, sf 1581, ctx 1268. The pin and half of a bilateral spring, very probably from a Colchester Derivative. If so, it would date to before AD 150/175 by which date the bulk of British bow brooches had ceased to be made and used. (not illustrated).

COPPER ALLOY OBJECTS

By Ian R. Scott

Birdlip Quarry

Introduction

The assemblage of copper alloy objects is small, but contains a few interesting pieces. The total assemblage of copper alloy, excluding brooches and coins, comprises approximately 92 items. This is the number of copper alloy objects from all contexts and includes possible casting waste and scrap. Ident-ifiable objects comprise 62 pieces, the remainder is miscellaneous scrap, melted waste or unidentifiable fragments. There are a number of more recent pieces including a lower leg and foot from a hollow cast figure and a button. Thirty two objects have been included in the published catalogue.

The assemblage is small and as such provided only limited information regarding the occupation and use of the site. Personal ornaments (cat. 525–535) and military items (cat. 538–543) are well represented. Amongst the other finds a well preserved spoon is notable (cat. 536).

The military finds are interesting, because they repeat a pattern noted elsewhere in towns and on civilian sites in Roman Britain in the 2nd and 3rd centuries (Bishop 1991). A number of sites have produced small numbers of items of military equipment. On any one site, they would not be significant in themselves, but the recurring pattern of occurrence makes for greater interest. The range of items found comprises predominantly sword fittings (chapes and sword belt holders) and belt or baldric fittings (decorative plates and terminals). It is notable that there are pieces of military metalwork of 2nd-century and later date from Cirencester, which was abandoned as a military post before the end of the 1st century. Many of the civilian sites where military items occur are on major roads and it may be that the archaeological evidence points to the presence of small numbers of soldiers guarding way points. The pattern is too regular to be accounted for by casual loss alone, and is much more likely to represent some form of military presence. We know from surviving strength reports for Roman garrisons (Thomas and Davies 1977; Bowman and Thomas 1983, 154) that many soldiers were on detached duties away from their notional base. Sometimes they were on detachment as small garrisons at distant locations, sometimes they were acting as escorts.

In addition to the identifiable pieces, a quantity of casting waste and possible scrap metal was recovered (Table 7.41) as well as miscellaneous pieces of wire, sheet, strip, sheet, etc, which cannot be identified to function (Table 7.42).

Table 7.41 Copper alloy casting waste and possible scrap materials from Birdlip Quarry.

Context	Sf No.	Description
7	80	melted waste or scrap
7	80	melted waste or scrap
34	232	waste or scrap ? from casting
86	269	waste, ? casting
128	536	sheet, fragts
415	888	sheet fragts
519	921	sheet fragts, could be scrap
519	960	sheet fragts
893	1333	waste or scrap
1235	1543	plate fragts, irregular, possibly with cut edges
1244	1548	sheet, folded, ? scrap

Table 7.42 Miscellaneous fragments of strip, sheet, bar, wire and rings from Birdlip Quarry.

Context	Sf No.	Description
1210	1522	rod/bar fragment, square section
14	426	sheet fragment, slightly curved
31	257	sheet, thin
31	292	sheet, small fragment, could be piece of small collar
34	276	sheet, cast, fragment, poor surfaces
142	339	plate/sheet fragment, 1 straight edge
278	821	sheet fragment, bent
1210	1539	sheet, tinned surface, very thin
1501	1729	plate or sheet fragment, scored
7	72	strip, tapering
31	168	wire, twisted length
128	455	wire loop
1283	1586	Wire
u/s	152	wire, twisted
u/s	1237	? wire or very thin strip, curved
u/s	1327	wire or pin, tapered and bent
128	715	wire, twisted, within heavy encrustation, ? could be organic material

Catalogue

Personal (Fig. 7.23)

525 Bracelet fragment. The object is formed from a tapering thin strip decorated with fish-scale like pattern. L 56 mm; sf 198, ctx 18.

526 Bracelet fragment, D-shaped cross-section with cast cable decoration on the external face, and plain squared terminals with slightly raised edge. L 56 mm; sf 1583, ctx 1297.

527 (not illustrated) Bracelet fragment, D-shaped cross-section, with cast cable pattern on outer face. L 13 mm; sf 1419, ctx 986.

528 (not illustrated) Possible bracelet fragment of lentoidal cross-section, rolled into a tight loop. L 19 mm; sf 1567, ctx 1266.

529 Finger ring with cast cable decoration on outer face. D 21 mm; sf 1313, ctx 880.

530 Finger ring, plain and heavy with small oval setting for a stone or a glass inset, which is missing. L 24 mm; sf 816, ctx 270.

531 (not illustrated) Finger ring, small fragment including plain oval setting and small section of plain band. L 11 mm; sf 149, ctx 18.

532 Chain links formed from lengths of wire looped at each end. L 92 mm; sf 455, ctx 128.

533 Hair pin, large circular slightly domed head with fine lines around the edge. L 82 mm; sf 73, ctx 7. Although not common, flat-headed Roman hairpins do occur and include pins decorated in similar fashion to this example (Cool 1990, 154-7, figs 3, 8 and 4, 1)

534 (not illustrated) Pin, much corroded with no details of any head or eye, bent. L 33 mm; sf 52, ctx 7.

535 (not illustrated) Pin or needle with traces of casting lines along the tapering stem. The end away from the point also tapers slightly and is incomplete or unfinished. L 88 mm; sf 1029, ctx 774.

Household (Fig. 7.23)

536 Spoon, well-preserved, with complete bowl and handle. The bowl narrows slightly towards the handle. The handle tapers to a point and is of circular cross-section. It is attached to the bowl by means of a cranked junction. There is no sign of tinning which might be expected. L 110 mm; sf 1660, ctx 1501. Typical later Roman spoon, comparable to examples from Colchester (Crummy 1983, 69, no. 2014) and Verulamium (Goodburn 1984, 41, no. 19).

537 Cast bell-shaped terminal on an iron stem of circular cross-section. D 17 mm; sf 1535, ctx 1210. Possibly a lock pin (Birley 1997, 30–34). This object type has also been discussed by Allason-Jones (1985) and she has adduced evidence for a number of related uses including as terminals for knife handles (ibid. pl. II) and decorative heads for rivets pivot bars on hinging sheaths for dolabra and axes (ibid. pl. III).

Military (Fig. 7.23)

538 Sword belt holder fragment, comprising the lower decorative portion of a belt fitting. The heart-shaped terminal is decorated with a fine incised cross. L 45 mm; sf 741, ctx 34. This is a 2nd-3rd-century type. (For the type see Oldenstein 1976, 95–101, Taff. 12–3).

539 Sword chape fragment. The object has been flattened. L 49 mm; sf 1566, ctx 1266. A 2nd- or 3rd-century type (see Oldenstein 1976, 110-14, Taf. 18).

540 Cast open-work plate fragment. The surface is tinned. L 33 mm; sf 1394, ctx 880. Possibly part of a belt plate or of a pendant heart-shaped belt terminal (eg. Oldenstein 1976, Taf 31).

541 Cast girdle plate tie-ring for segmented armour. There is no burring of the short stem which would indicate that the loop had not been used. L 26 mm; sf 1536, ctx 1210. Fastening for lacing together the so-called lorica segmentata. This particular form of attachment dates to the late 1st and 2nd century and conforms to Webster's type 1 (Webster 1992, 116–8, nos 45–51).

542 Acorn terminal attached to a length of curved bar. L 25 mm; sf 1546, ctx 1236.

543 (not illustrated) Roundel fragment formed from thin sheet. L 25 mm; sf 512, ctx 128.

Fastenings (Fig. 7.23)

544 (not illustrated) Tack, slightly domed circular head. D 27 mm; sf 19, ctx 2.

545 (not illustrated) Tack, slightly domed circular head. D 20 mm; sf 526, ctx 14.

546 (not illustrated) Tack, with damaged flat head. D 16 mm; sf 969, ctx 270.

547 Domed stud, formed from beaten sheet copper alloy and packed at the back. D 26 mm; sf 574, ctx 140.

548 (not illustrated) Domed stud, formed from beaten sheet copper alloy with traces of packing material, probably lead, but no trace of attachment. D 17 mm; sf 746, ctx 253.

549 (not illustrated) Domed stud, formed from beaten sheet copper alloy with traces of whitish packing material probably lead. D 16 mm; sf 814, ctx 206.

550 (not illustrated) Domed stud, formed from beaten sheet copper alloy with traces of whitish packing material, probably lead; possible scar at the back in the centre. D 14 mm; sf 436, ctx 181.

551 (not illustrated) Large domed stud, with scar for attachment loop. D 44 mm; sf 1052, ctx 780. It is possible that this item is from a military baldric of 2nd-century date or later.

552 (not illustrated) Washer, circular formed from thin sheet. It has a central perforation and very slight traces of an edge or border. D 28 mm; sf 735, ctx 253.

553 (not illustrated) Washer, circular formed from thin sheet. Its central perforation is oval. D 29 mm; sf 5, ctx 7.

Miscellaneous

554 (not illustrated) Ring, of circular cross-section. D 42 mm; sf 1612, ctx 1262.

555 (not illustrated) Ring, incomplete, of circular cross-section. D 20 mm; sf 1564, ctx 1313.

Unidentified

556 (not illustrated) Small cast fragment, not identifiable. L 23 mm; sf 78, ctx 447.

Burford Road *(Fig. 7.24)*

557 Shield-shaped mount of copper alloy. The top of the shield is slightly convex and the sides gently curve

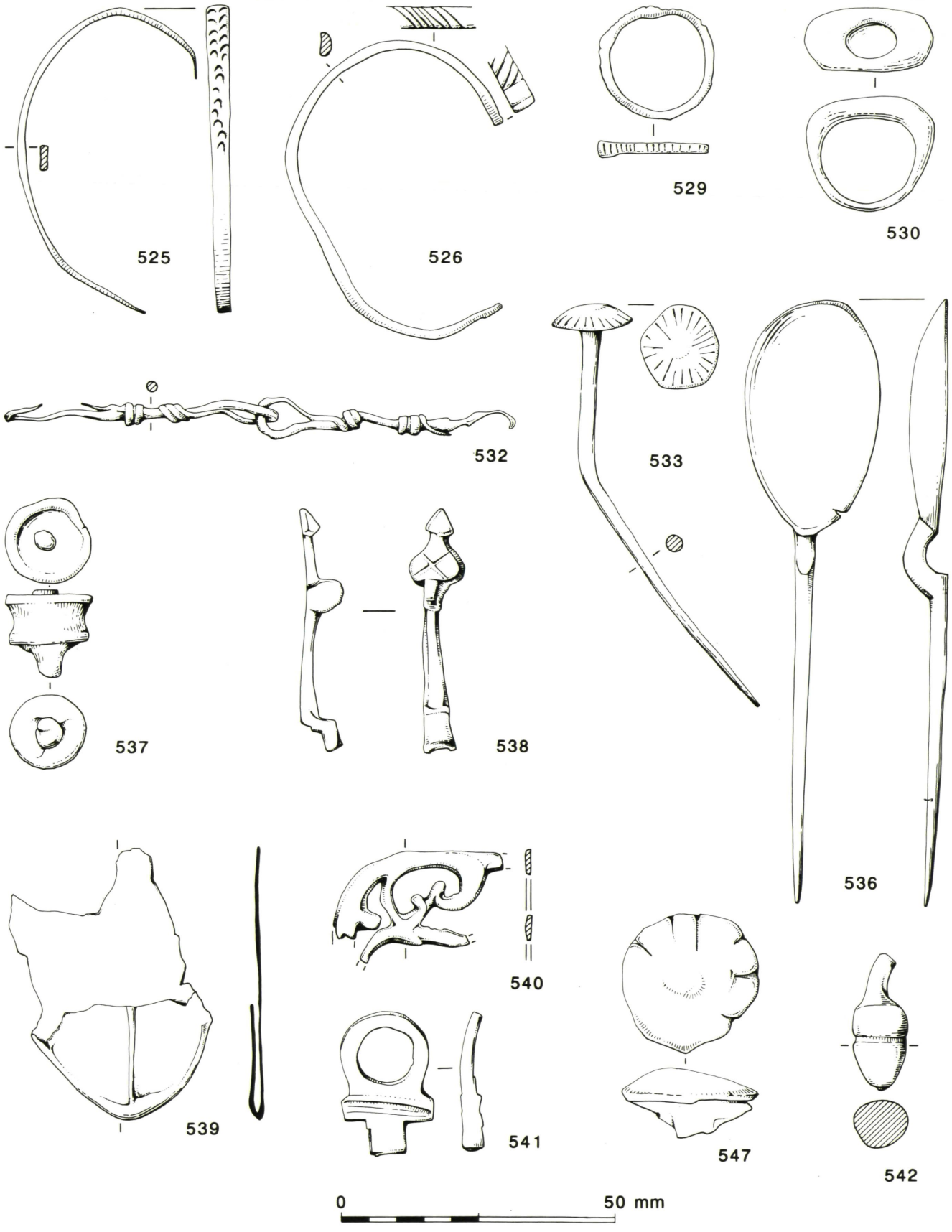


Figure 7.23 Copper alloy objects from Birdlip Quarry.

from the top to the point. The face of the shield is very slightly convex and decorated with what is probably a unicorn or possibly a dragon, although lacking wings. In heraldic terms the beast is passant. The dragon is inlaid with enamel, but the enamel is too decayed to be certain of its original colour. The mount was attached by means of a stout stem of circular section on the back of the shield. The stem has a hammered end and the remains of a thin washer are still attached. L 19 mm; sf 3, ctx 306.

Both pendants and studs, or mounts, decorated with heraldic motifs are well known. Many are shield-shaped and similar in appearance and size to this example (Griffiths 1986; Griffiths 1989; Goodall and Woodcock 1991). Pendants are more common than studs, but there are comparable examples of shield-shaped studs from London and elsewhere (Goodall and Woodcock 1991, fig. 13, nos 12, 14 and 20–26; Griffiths 1995, 69–71, fig. 53, esp. nos 77–78). They could be used as harness mounts, but other uses are attested, including to decorate dog collars, the straps of spurs and the varvels of hawks (Goodall and Woodcock 1991, 240). Griffiths (1986, figs 2a–2c) has classified the mounts and pendants according to form and the Burford Road mount with its shield with curving sides conforms to his Type 1a. The object can only be dated on typological grounds, but generally shield-shaped mounts and pendants are dated to the late 13th or 14th century after the emergence of a fully developed system of heraldry. The use of heraldry for decorative purposes on harness, dress and furnishings grew in popularity during the 13th century (Cherry 1991).

Street Farm

There are only 12 copper alloy objects, four of which are buttons of post-medieval or modern date (Table 7.43). In addition there is a pin with a round wound wire head, the cast handle from a key, and an embossed stud. These are all post-medieval in date. There is decorative plate, which may be the escutcheon for the handle of a drawer and which is probably 19th- or 20th-century in date. Finally, there is a tiny irregular quatrefoil plate from context 889.

Table 7.43 Street Farm, the copper alloy objects by context.

Ctxt	Sf no	Identification
metal detector	13	button, flat circular with loop
173		key handle, detached from shank
268		button, flat circular, tinned, with single attachment loop
305		strip with 2 holes
446		sheet with folded edges
458	9	pin with round head formed from wire, plated
611		button, large flat
730		button, flat circular, small
768	25	disc, ?coin
768	26	plate, decorative, possibly from furniture
784	24	stud, embossed sheet, incomplete, probably cu alloy
889	32	plate, quatrefoil, decorative, v small

IRON OBJECTS

By Ian R. Scott

Birdlip Quarry

Introduction and methodology

Recording at the analytical stage was intended to provide a basic record of the complete assemblage. The archive comprises pro forma record sheets on which the following data is entered: Context and small find number, x-ray plate number, object identification, written description often with a sketch, and measurement(s). Of the 425 objects comprising the assemblage, 217 were recorded in some detail on pro forma record sheets. For the remaining 208 objects a summary record sufficed.

The assemblage is medium-sized and contains a small number of interesting pieces. The total assemblage comprises between 950 and 1100 nails, *c.* 1200 hobnails and approximately 425 other items from all contexts. The latter include 217 objects which were recorded in detail. The published report contains details of 146 objects.

Boot cleats

A number of small boot cleats were recovered. All are of similar size varying between 15 mm to 20 mm long in the body and are summarised in Table 7.44.

Catalogue

Personal (Fig. 7.25)

558 D-shaped single loop buckle. The loop is of square cross-section. The pin is attached by a rolled over loop. L 29 mm; sf 1202, ctx 759.

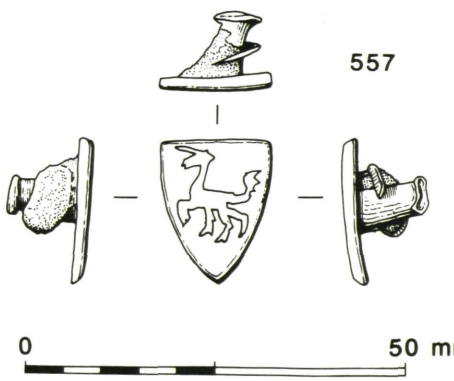


Figure 7.24 Medieval harness mount from Burford Road.

559 (not illustrated) Pin from a brooch with a sprung pin. L 56 mm; sf 1400, ctx 880.

560 Folding knife with short blade with strongly curved back. The blade pivots on an iron pin which passes through the wooden handle and is secured by a sheet iron ferrule. Part of the wooden handle survives. L 65 mm; sf 1559, ctx 1225.

Writing *(Fig. 7.25)*

561 Stylus, fragment, with moulding at junction of scriber and stem. The eraser is missing. L 54 mm; sf 161, ctx 40.

Household (Fig. 7.25)

562 Knife with deep blade and curved edge. It has a thin solid handle. L 156 mm; sf 1737, ctx 1529.

563 (not illustrated) Socketed blade, possibly from knife. L 76 mm; sf 258, ctx 31.

564 (not illustrated) Spoon handle of subrectangular cross-section, with a small piece of the round bowl surviving. The handle is broken. L 78 mm; ctx 1290.

565 (not illustrated) Vessel fragment. From a shallow pan with sloping sides. Formed from sheet. L 110 mm; sf 1548, ctx 1225.

Buckets (Fig. 7.25)

566 (not illustrated) Bucket hoop, two fragments, from a wooden bucket. The diameter of the hoop is *c.* 330 mm. L 245 mm and 131 mm; sf 820, ctx 348.

567 (not illustrated) Bucket hoop, four fragments. The diameter of the hoop is c. 310- 320 mm. L 140 mm, 139 mm, 103 mm and 100 mm; sf 830, ctx 348.

568 Bucket handle fragment of rectangular section with U-section grip. L 200 mm; sf 707, ctx 246.

569 (not illustrated). Bucket handle mount with well-formed eye of round cross-section. The att-achment plate is incomplete and bent. L 45 mm; ctx 7, Sf 63.

570 Bucket handle mount, well-made, similar to 569, but with more of attachment plate extant. L 55 mm; sf 868, ctx 431.

Locks, keys and door furniture (Figs 7.25–6)

571 Bar spring padlock bolt with two loops, from a padlock with a straight hasp, which would have passed through the loops. It comprises two bars each of which originally terminated in a loop. L 172 mm; sf 46, ctx 7.

572 (not illustrated) Barb-spring padlock key, formed from tapering strip, with rolled-over loop at the narrower end with part of a suspension ring in situ. The bit at the wider end is broken. L 190 mm; sf 408, ctx 34.

573 (not illustrated) Barb-spring padlock key, similar to 572. L 190 mm; sf 1699, ctx 1543.

Table 7.44 Boot cleats by context from Birdlip Quarry.

Context	Sf No.	Description	No.	Size (mm)
2		boot cleat	1	L 26
29	940	boot cleat	1	L 28
90	248	boot cleat	1	L 26
128	663	boot cleat	1	L 25
128	706	? boot cleat	1	L 30
136	379	boot cleat	1	L 17
206	640	boot cleat	1	L 16
276	481	boot cleat	1	L 25
291	916	boot cleats, heavily encrusted	13	n/a
347	828	boot cleat	1	L 27
372	833	boot cleat	1	L 20
377	842	boot cleat		L 29
421	859	boot cleats	2	L 15 L 22
421	866	boot cleat	1	L 19
421	873	boot cleats	2	L 15 L 16
746	1026	boot cleat	1	L 20
778	1063	boot cleat	1	L 25
780	1057	boot cleat	1	L 22
1500	1651	boot cleat	1	L 39

574 Lever lock key, with square bit with horizontal slots. The handle is pierced for suspension and decorated. L 91 mm; sf 1549, ctx 1244.

575 Hinge strap from a loop hinge. Found with an incomplete second strap. L 243 mm; sf 13, ctx 7.

576 (not illustrated) Hinge plate, fragmentary from a loop hinge. L 86 mm; sf 513, ctx 14.

577 (not illustrated) Chain link, oval. L 48 mm; sf 674.

Horse gear and cart fittings (Fig. 7.27)

A number of horseshoes and fragments have been recovered although only a few can be dated on typological grounds. Fullering is a post-medieval feature which is found on only two shoes.

There continues to be debate in some quarters about whether or not there were Romano-British horseshoes. There are six shoes which have narrow webs with lobate expansions (cat. 579, SFs, 1680, 1738, 1722 and 1734 and the horseshoe from context 2013, Table 7.45) for which a Roman date has been claimed. John Clark in the recent Museum of London volume *The Medieval Horse and its Equipment* (Clark 1995, 95–6) is more sceptical. He is reluctant to accept a Romano-British date while adducing the evidence for a medieval date. The evidence from Birdlip would seem to support a sceptical view since the two horseshoes from putative Roman contexts (cat. 579 and 1734) were embedded in the heavily rutted 4th-century road surface. The other examples are from post-Roman contexts in the same area.

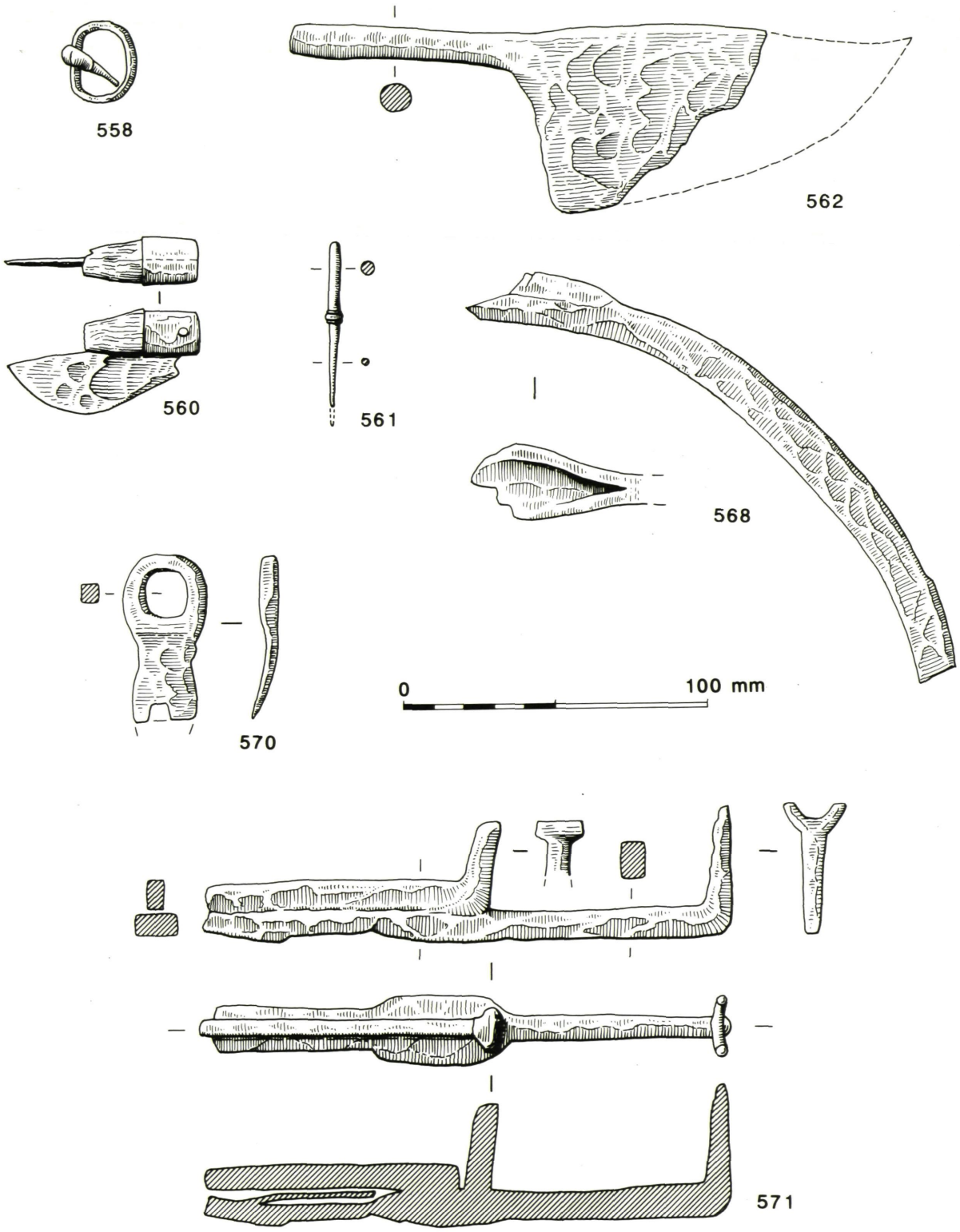


Figure 7.25 Ironwork from Birdlip Quarry.

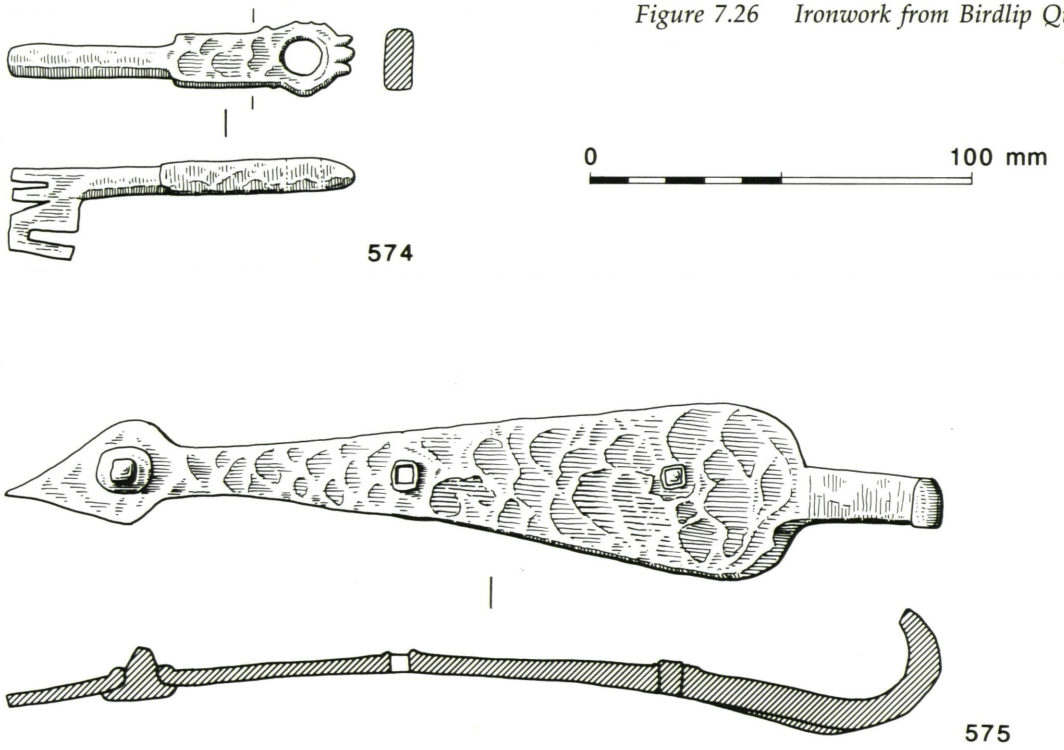


Figure 7.26 Ironwork from Birdlip Quarry.

578 Ctx 1533, horseshoe, complete, fullering, L 130 mm, post-medieval.

579 Ctx 1589, SF 1727, horseshoe complete, with 6 nail holes, narrow web with expansions, very large calkins and in situ fiddle key nail, L 116 mm, Romano-British or early medieval.

580 Ctx 2012, SF 1700, horseshoe, almost complete, no calkins rounded heel, 6 nail holes, thin web, L 100 mm.
581 Ctx 2017, SF 1701, horseshoe complete, with heavy web, large calkins and 6 nails, L 119 mm.

Hipposandals (Fig. 7.28)

Hipposandals are a distinctive feature of Romano-British finds assemblages and a number of examples have been found at Birdlip Quarry (Table 7.46). Most of these comprise side wings. The best piece is the complete section of a Type II sandal from context 33. The side wings were joined together and forged into a loop which fitted over the front of the hoof. Hipposandals were classified by Aubert in 1929 and his typology is summarised and expanded in Manning's British Museum catalogue (1985, 63–6).

582 SF 757, Hipposandal front loop, 1, L 135 mm, II, sf 757, ctx 272.

Bridle bits

583 (not illustrated) Jointed mouth bar from a bit, one end was formed by folding and forging the bar to make a loop, the other end by simple rolling-over. L 83 mm; ctx 10.

584 (not illustrated) Jointed mouth bar from a bit, similar to cat. 583, but smaller. L 59; sf 82, ctx 7.

Cart fittings

585 (not illustrated) Linch pin with spatulate head and rolled- over loop. L 158 mm; sf 262, ctx 90.
586 Linch pin with spatulate head and rolled- over loop. L 175 mm; sf 1670, ctx 1505.

587 (not illustrated) Linch pin. Spatulate head with rolled-over loop from a linch pin. L 48 mm; sf 962, ctx 276.

Tools

Leatherworking tools *(Fig. 7.28)*

588 Blade fragment with a sinuous back, much corroded. Possibly a leatherworking knife. L 84 mm; sf 341, ctx 34.

Carpenter's tools *(Fig. 7.28)*

589 Gouge blade, pointed at one end and broken at the other. The cross-section is a half circular. L 63 mm; sf 366, ctx 34.

Agricultural tools and equipment *(Fig. 7.28–9)*

590 Reaping hook, socketed. It has a small strongly curved blade. L 113 mm; sf 1448, ctx 993.

591 Spud. L 137 mm; sf 1040, ctx 745.

592 Ox-goad. D 14 mm; sf 480, ctx 34.

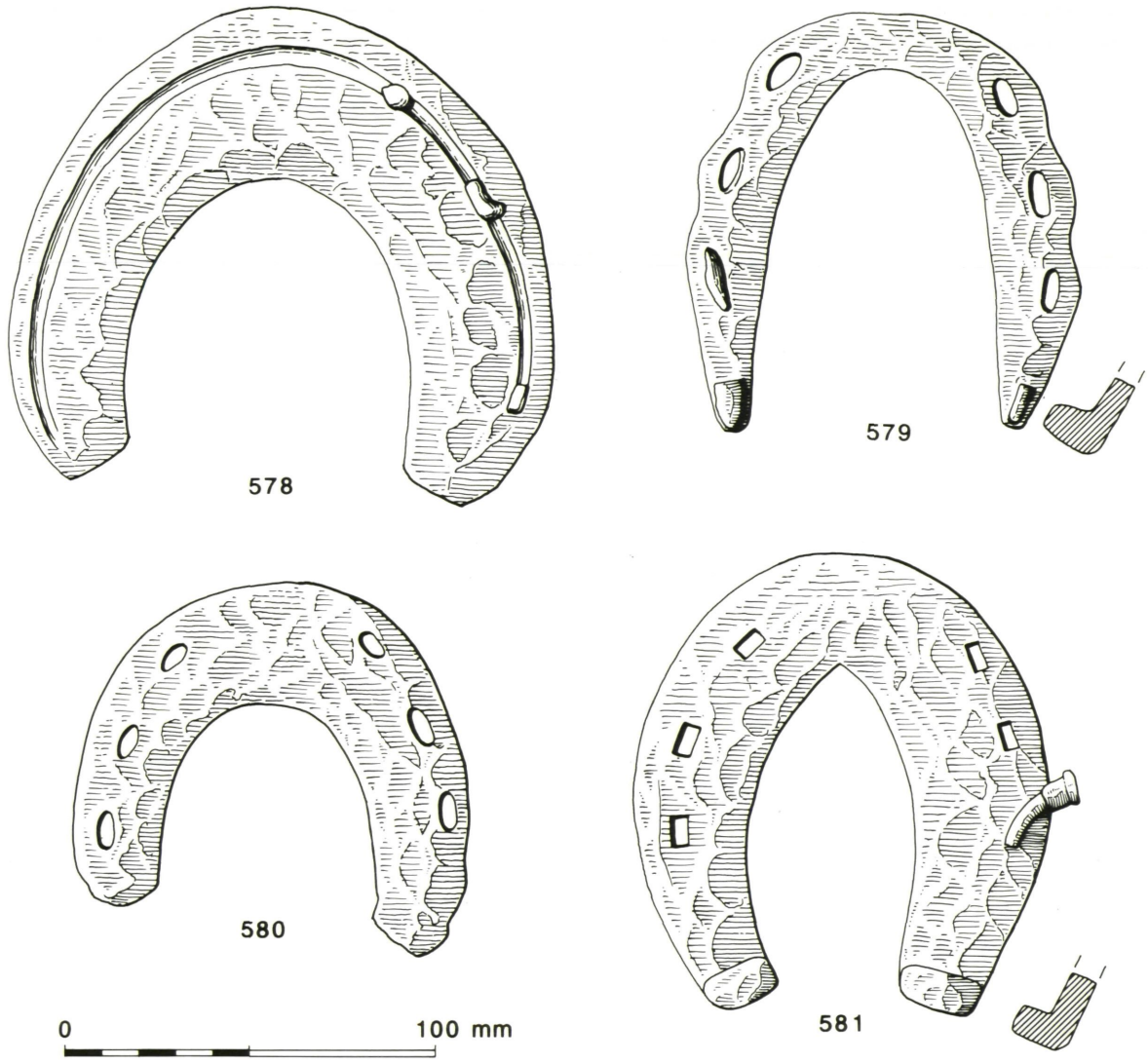


Figure 7.27 Horseshoes from Birdlip Quarry.

Table 7.45 Horseshoes by context from Birdlip Quarry.

Context	Sf No.	Description	Size (mm)	Object date
1307		horseshoe, complete, slight traces of fullering, no calkins	L108	post-med
1538		horseshoe, 3/4, toe portion	W103	
2002	1680	horseshoe fragment, heel from narrow branch with expansion	L 65	R-B or early-med
2012	1683	horseshoe, 1/2, no calkin, 3 possible nails, broad thin web	L 89	
2012	1683	horseshoe fragment, heel with calkin, no nail hole	L 65	
2012	1693	? horseshoe fragment, heel with no calkin, 1 possible nail	L 50	
2012	1704	horseshoe 1/2, thin web, no calkins, square heel	L 111	
2012	1738	horseshoe, 1/2, 3 nail holes, narrow web expansions and folded -over calkin	L 105	R-B or early-med
2012	1738	horseshoe 1/2, no calkin, 2 probable nail holes	L 112	
2013		horseshoe, 3/4, thin web with expansions		R-B or early-med
2029	1707	horseshoe, 3/4, heavy web, no calkins and square heel	L 116	
2029	1717	? horseshoe fragment, heel from narrow branch with ? expansion		
2029	1722	horseshoe fragment, heel with no calkin and 1 nail hole		R-B or early-med
2036	1711	horseshoe 3/4, thin web, no calkins and square heels	L 96	
2046	1739	horseshoe fragment, heel with no calkin, possible nail hole		
2048	1734	horseshoe, 4 extant nails, narrow web with expansions, no calkins		R-B or early-med
2048	1735	horseshoe fragment, heel with calkin		

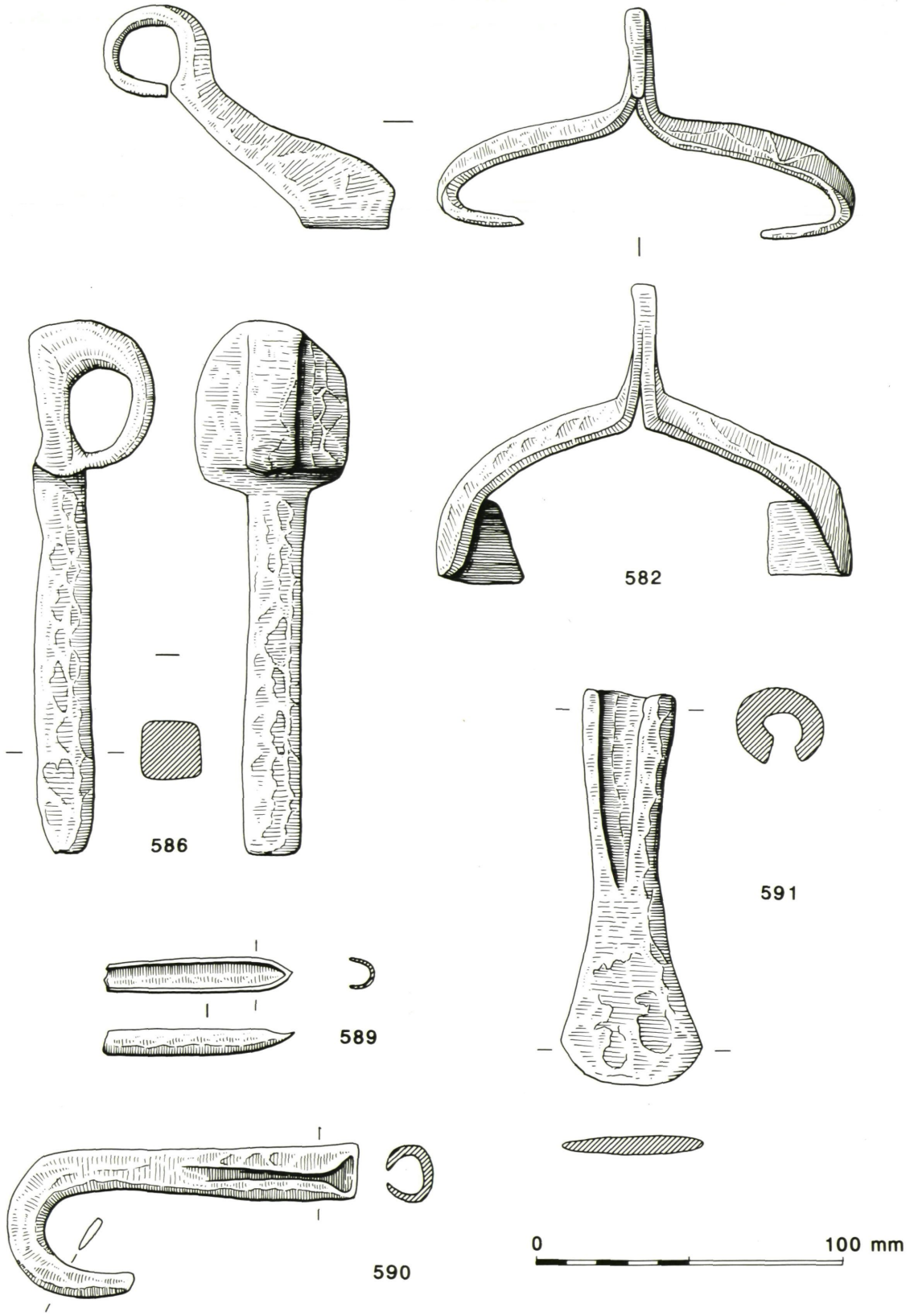


Figure 7.28 Ironwork from Birdlip Quarry.

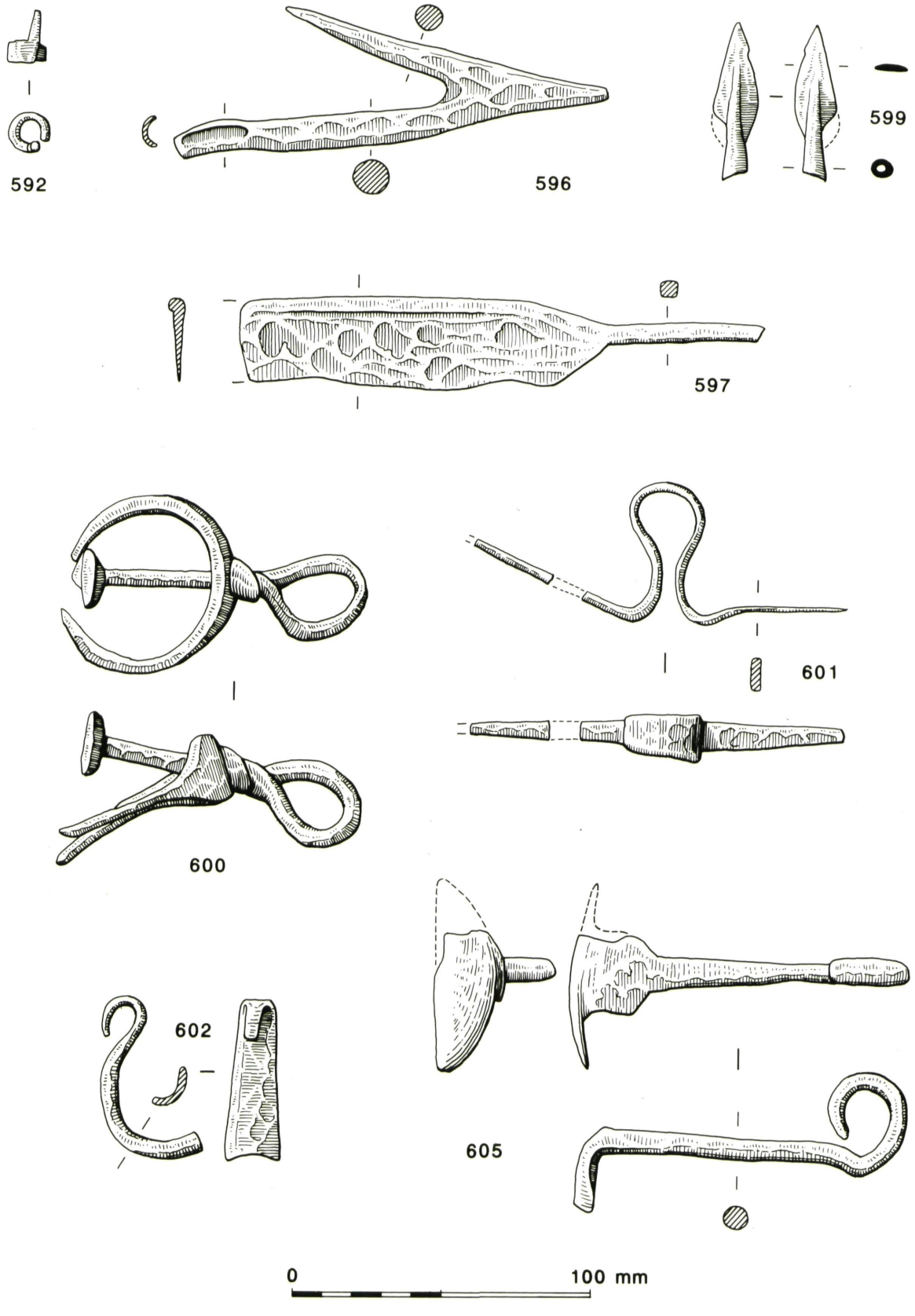


Figure 7.29 Ironwork from Birdlip Quarry.

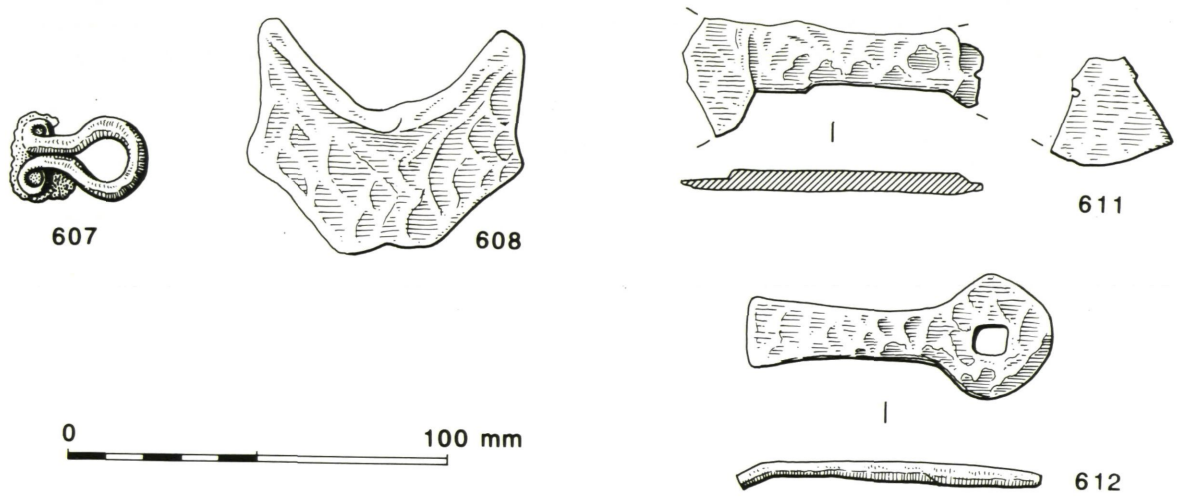


Figure 7.30 Ironwork from Birdlip Quarry.

593 (not illustrated) Ox-goad. D 19 mm; sf 114, ctx 745.

594 (not illustrated) Ox-goad. D 21 mm; sf 466, ctx 128.

595 (not illustrated) Ox-goad. D 21 mm; sf 805, ctx 270.

596 Barbed hook, with remains of a socket for attachment. L 146 mm; sf 231, ctx 84. Possibly a thatch hook.

597 Tanged blade with reinforced back, similar in section to a scythe blade but straight. L 176 mm; sf 65, ctx 7.

Weapons (Fig. 7.29)

598 Possible spearhead. A slim head with a much corroded slim ?leaf-shaped blade. The identification is not certain. L 133 mm; sf 1363, u/s.

599 Arrowhead, socketed, with leaf-shaped blade. L 51 mm; sf 1721, ctx 2029. Probably medieval.

Structural fixtures and fittings (Fig. 7.29)

600 Swivel comprising bar with looped eye and flattened head passing through a hole on an expansion in a ring. L 105 mm; sf 555, ctx 128.

Bindings

These comprise for the most part pieces of iron strip with nail holes and nails visible. In some instances they also have pierced expansions or terminals. Bindings can be parts of chests, applied to furniture or used structurally (Table 7.47).

Clamps, staples and other fastenings (Fig. 7.29)

These are defined as objects used for fastening together timberwork whether as parts of buildings, boxes and chests, or furniture. There are no clamps for use with stonework from Birdlip. Nails have not been listed simply because of their number. They were found in large numbers. The majority consisted of hand made wood nails. Smaller numbers of horseshoe nails and hobnails were also identified and are separately considered (Table 7.48).

601 Split spike loop, 1, L 123 mm, sf 1217, ctx 760.

Rings Table 7.49

A total of eight rings from a variety of contexts were recovered and these are summarised in table 7.49.

Table 7.46 Birdlip Quarry, hipposandals by context.

Context	Sf No.	Description	No.	Size (mm)	Type
7	77	hipposandal heel	1	L 79	I or II
14	123	hipposandal wing	1	L 84	I or III
33	214	hipposandal wing	1	L 95	I or III
272	757	hipposandal front loop	1	L 135	II
392	847	hipposandal wing point bent over	1	L 44	I or III
431	881	hipposandal wing	1	L 65	I or III
1266	1568	hipposandal wing	1	L 80	I or III
1287	1593	hipposandal wing	1	L 95	I or III

Table 7.47 Birdlip Quarry, bindings by context.

Context	Sf No.	Description	No.	Size (mm)
2	282	binding, fragment	1	n/a
4		binding, narrow rectangular strip with expansion at one end	1	L 64
7	37	binding, narrow strip	1	L 123
7	51	binding, with pierced expansion	1	L 104
7	106	binding, half round strip	1	L 126
7	112	binding, strip with eye at one end	1	L 89
15	47	? binding, curved strip	1	N/a
31	264	binding, terminal pierced by a nail hole	1	L 65
41	163	tapering bar, terminal expansion pierced	1	L 80
296	775	strip with large nail hole	1	L 82
383	670	binding, thin rectangular section, nail holes at each end	1	L 86
395	870	binding fragment, nail hole or notch	1	L 62
729	1272	strip, curved	1	L 62
849	1318	binding fragments, 1 with nail	3	L 70 L 55 N/a
1198		binding, 1 extant nail	1	L 37
1213		binding, thin cross-section, 1 extant nail hole	1	L 63
1318	1584	binding with 2 nail holes and small lug or tongue	1	N/a
1500	1653	? binding, strip, with 2 nail holes	1	L 55
1500	1658	? binding with circular expansion pierced with a nail hole	1	L 129
u/s	822	? binding, strip with pierced ? expansion	1	L 88

Table 7.48 Birdlip Quarry, clamps, staples, and other fastenings by context.

Context	Sf No.	Description	No	Size (mm)
7	56	U-shaped staple	1	L 44
14	677	clamp or large cleat	1	L 61
14	678	clamp or large cleat	1	L 70
33	215	rectangular washer	1	L 39
34	417	looped spike	1	L 65
53	220	split spike loop? formed from strip	1	L 40
72	606	split spike loop	1	L 80
86	252	dog fragment	1	L 82
108	299	L-shaped staple or nail	1	n/a
188	571	washer, square	1	L 32
206	910	U-shaped staple	1	n/a
840	1316	collar or ring formed from thin strip	1	D 19
1210	1534	clamp or collar of square section rod	1	L 44
1250	1550	clamp or dog	1	L 60
1500		clamp, formed of rectangular section strip	1	L 42
2004	1675	clamp or dog	1	L 127

Table 7.49 Birdlip Quarry, rings.

Context	Sf no	Description	No.	Size (mm)
2		ring, circular section	1	D 37
41	204	ring, or collar of sub-rectangular section	1	D 39
136	359	ring, circular-sectioned, large	1	D 62
392	843	ring, circular section	1	D 30
840	1390	ring, circular section	1	D 40
840	1396	ring of circular cross-section	1	D 50
848	1245	ring, fragmentary, circular section	1	D 70
1500	1659	ring, penannular rather than complete circle, sub-rectangular section	1	D 33

Miscellaneous objects of unidentified function (Figs 7.29–30)

602 Strongly curved object with rolled over loop or eye at one end. It is curved in cross-section. Uncertain function, possibly some form of handle. L 58 mm; sf 1505, ctx 34.

603 Ring attached by a rolled over loop to a sheet fragment. L 56 mm; sf 126, ctx 14. Possibly from a hipposandal of the rare Type 4 with rings attached to the side wings (Manning 1985, 65, fig. 16.4).

604 Handle or suspension loop. Slightly curved, it has a rolled loop or eye at one end and expands into a flange at the other. L 114 mm; sf 1270, ctx 729. Possibly the front loop from a hipposandal.

605 Handle or suspension loop. It has a rolled loop or eye at one end and expands into a flange at the other. The flange is sinuous in outline and joined to a larger object. L 115 mm; sf 1555, ctx 1227. Similar to 604.

606 Handle or suspension loop. It has a rolled loop or eye at one end and expands at the other. L 101 mm; sf 1731, ctx 1614. Possibly the front loop from a hipposandal.

607 Loop formed from rod or wire. L 37 mm; sf 171, ctx 19.

608 Plate fragment, very slightly curved, with a hole or cut-out with raised lip on one edge. Apparently regular outline. Function uncertain. L 72 mm; sf 357, ctx 34.

609 Plate fragment, very slightly curved, with a hole or cut-out on one edge. The hole has a raised lip. Function uncertain. L 59 mm; sf 1132, ctx 781.

610 Spiral ferrule or collar. D 18 mm; sf 1070, ctx 768.

611 Handle of sub-rectangular cross-section with the remains of circular flanges at each end. L 79 mm; sf 758, ctx 270.

612 Tapering strip or bar with expansion at one end, pierced by a square hole. L 80 mm; sf 163. ctx 41.

613 Hooked object formed from circular section rod with an eye at the other end. Function uncertain. L 117 mm; sf 467, ctx 276.

614 Peg or pin of rectangular cross-section with a eye or loop at one end. L 93 mm; sf 1537, ctx 1210.

615 Junction plate fragment, formed from sheet with rolled over loop at one end. L 19 mm; sf 545. ctx 1305.

Street Farm

Introduction

The ironwork comprises a small collection of exclusively post-medieval material. Much is undistinguished and most not worthy of further analysis or publication. There are 99 iron objects and 174 nails. The sample of nails is small and they have not been recorded in detail. The nails are tabulated by context and can be consulted in the archive.

Composition of the ironwork assemblage

The total number of objects of all types is 273. This comprises 174 nails and 99 other objects. The latter included 44 pieces, which can be described as miscellaneous pieces of rod, bar or sheet (Table 7.50). These cannot be identified to function.

Of the remaining 55 objects, 3 can be discounted because they are too small to identify and 3 are modern. The other 49 objects are made up as follows: 14 domestic objects, 15 pieces of structural metalwork, and 8 tools. In addition there are 3 pieces of chain, 2 items from footwear, a single horseshoe fragment and a sword chape. There are 5 items of uncertain identification.

The structural metalwork includes in addition to the usual collection of L-shaped and U-shaped, two H-hinges and two L-shaped drop hinge pintles. The tools include three balanced sickles of similar form but slightly different sizes. These are not closely datable. Other tools include part of a saw blade and as many as three chisels. The identification of two of these is not certain. The third is probably a smith's chisel or set. The assemblage is very small, but very much what might be expected from a small rural site of post-medieval date. A small number of pieces has been selected for illustration.

Date of the assemblage

Much of the metalwork is not closely datable. The nails cannot be closely dated, but all, with one modern exception from context 706, are hand-made. The domestic items include part of a kettle and keys and locks, which can be assigned a post-medieval date. The kettle is probably 18th- or 19th-century in date, possibly later. The locks and keys are of post-medieval form. None of the tools can be closely dated. Amongst the structural ironwork the H-hinges are almost certainly of 18th-century date. The two items of footwear - a patten (cat. 621) and a heel iron - can be dated. The patten is of 17th- or 18th-century date and the heel iron is probably of 19th- or 20th-century date. The date range of the metalwork seems to be 18th and 19th century rather than earlier, but with some possible 17th-century material.

Catalogue *(Figs 7.31–2)*

616 Smith's chisel of stout rectangular cross-section. L 127 mm; ctx 305.

617 Possible chisel, of rectangular section, with sub-rectangular head. L 85 mm; ctx 190.

618 Sickle, tanged; with triangular section blade. L 355 mm; ctx 611.

Not illustrated are two further sickles of similar form but larger size:
Sickle, similar to, but larger than, no. 618. L 411 mm; sf 6, ctx 319.

Sickle, similar to, but larger than, no. 618. L 444 mm; u/s

Table 7.50 Quantification of bar, block, plate, rod, sheet and wire by context from Street Farm.

Ctx	Description	No.
191	bar fragment, tapering	1
304	Bar/rod fragment	1
305	bar/rod cut at one end	1
328	Bar/ spike of rectangular section, tapering	1
438	bar/rod	1
605	bar fragment	1
611	bar/rod fragment	1
870	bar/rod	1
357	block, trapezoid section, dense	1
281	plate fragment, folded up at one end	1
717	plate fragment fused to stone	1
762	plate, pierced by 1 rectangular hole flanked by 2 smaller holes	1
889	plate fragment, curved	1
591	Rod	1
721	rod/nail fragment	1
199	sheet/plate fragment, small	1
304	sheet, thin folded	1
328	sheet, pierced by 1 nail hole and slightly curved	1
458	sheet/strip fragment, thin	1
589	sheet, curved	1
589	sheet, thin with lip	1
611	sheet, fragment, square	1
119	strip, thin slightly tapered and curved	1
197	strip, no extant nail holes	1
198	strip, no nail holes	1
262	strip, tapering, no nail holes	1
336	strip, irregular fragment, bent	1
357	strip/sheet fragments, 1 pierced by hole	1
389	strip, thin section, straight- sided, no nail holes	1
390	strip fragment, thin section, no nail holes	1
589	strip, no nail holes	1
589	strip, tapering	1
702	Strip	3
730	Strip	1
737	Strip	1
227	wire and other fragments	3
281	wire fragments	4

619 Sword chape, formed from thin sheet. L 91 mm; sf 31, ctx 878.

620 Clasp knife handle, with bone handle plates. No blade. L 106 mm; ctx 262.

621 Patten, comprising oval hoop with raised brackets at each end pierced for nails. L 175 mm, ctx 611.

622 Lever lock key, with broken bow. L 76 mm; sf 5, ctx 118.

623 Barb spring padlock bolt, with three springs. Two are formed by a single strip folded over the end of the bolt and secured by a pin or rivet. The bolt ends with a circular plate with raised edge. L 90 mm; ctx 262.

624 Bolt, with from a large stock lock. L 178 mm; ctx 305.

625 Latch, with small plate, formed from thick wire. L 114 mm; ctx 281.

626 H-hinge, broken with decorative terminals to one plate. L 165 mm; ctx 268.

627 H-hinge, half, with plain plate. L 152 mm; ctx 436.

628 Strap hinge with tapering strap pierced with 3 nail holes. L 90 mm; ctx 413.

629 L-shape staple for drop hinge. L 87 mm; ctx 470.

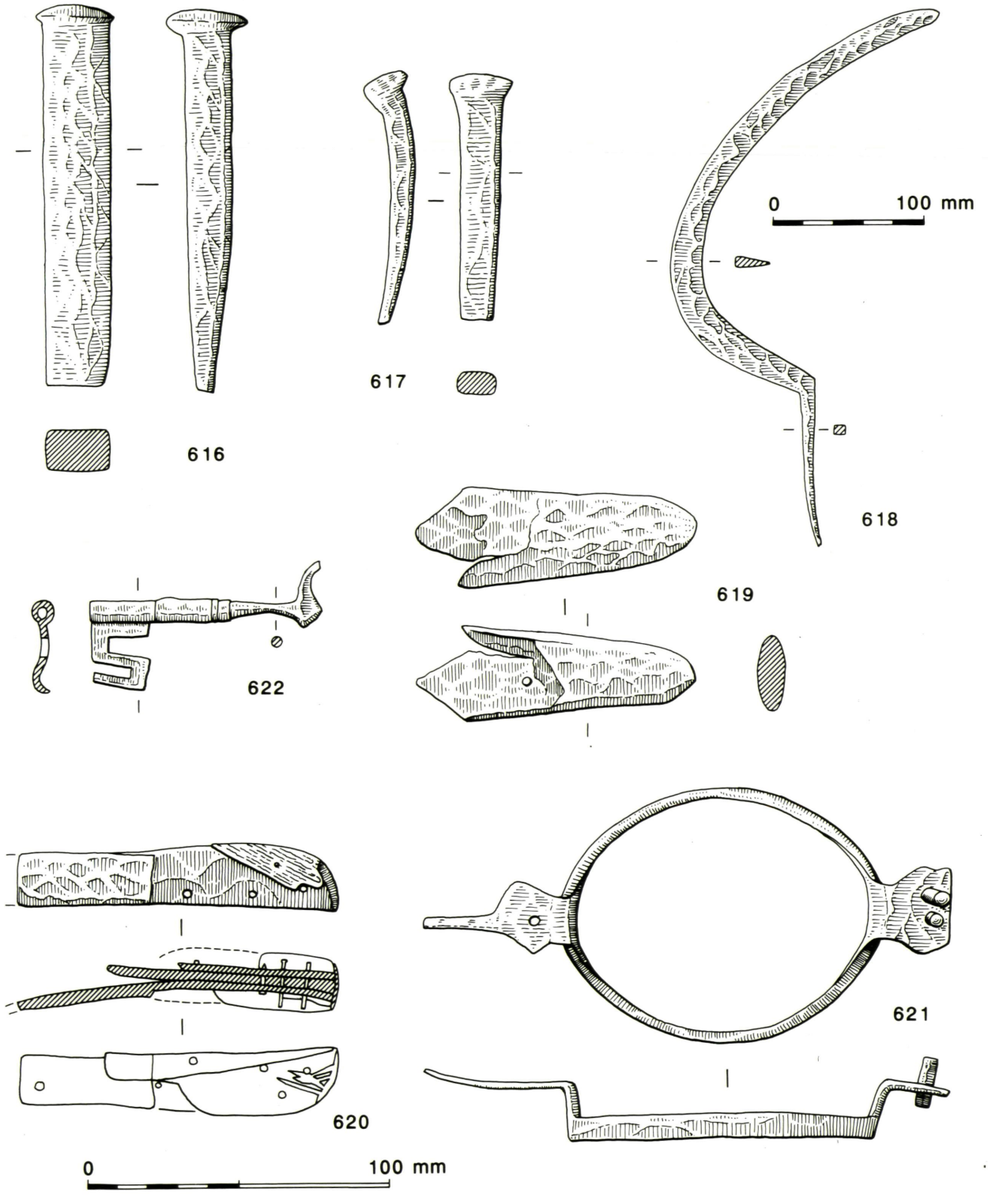


Figure 7.31 Ironwork from Street Farm.

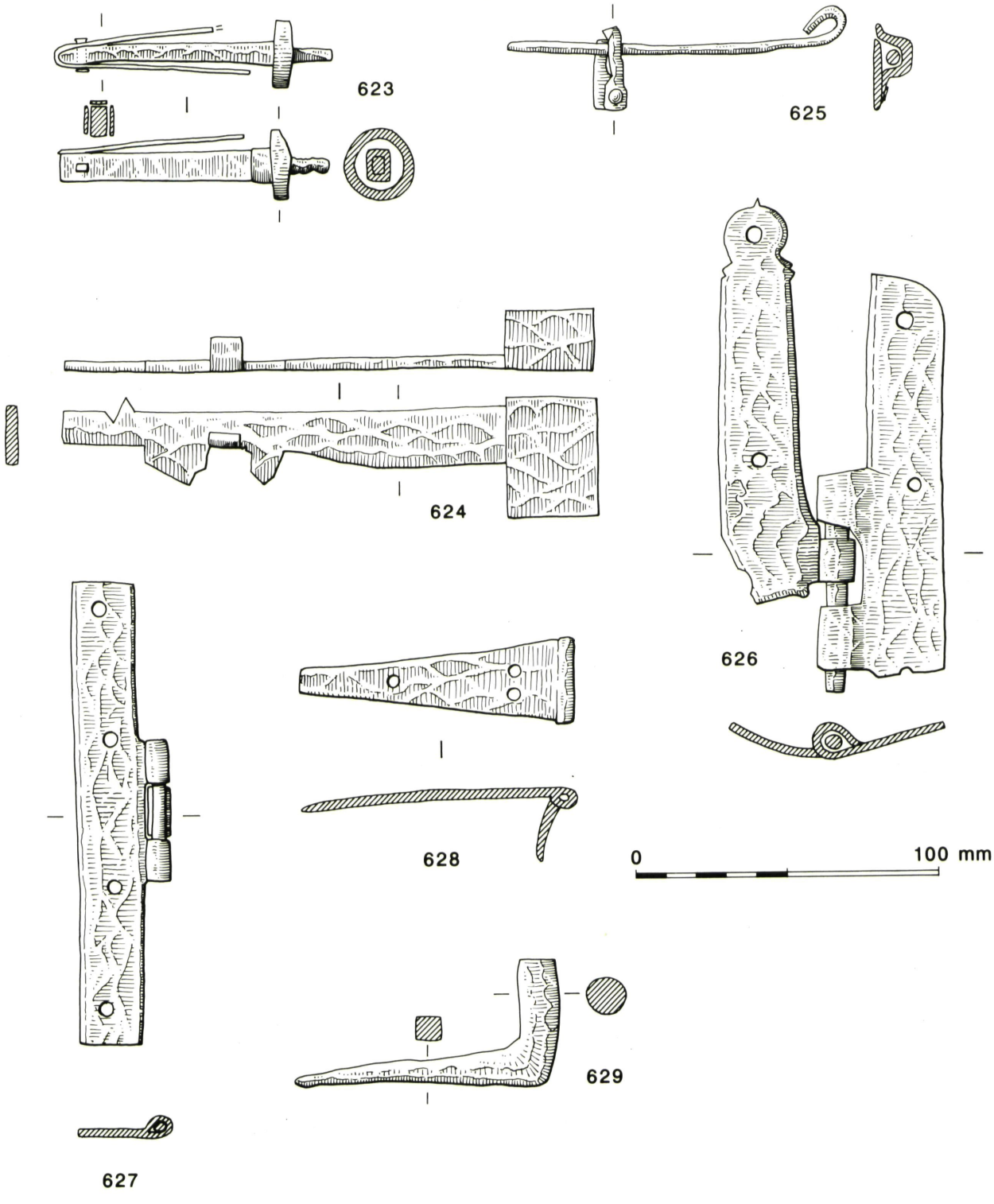


Figure 7.32 Ironwork from Street Farm.

Horse gear from other sites

The assemblage

Horse gear, including horseshoes and horseshoe nails, hipposandals and linchpins, were found in small numbers from a number of the sites along the line of the road (Table 7.51). The table exclude the items of horse gear from Birdlip Quarry which are reported on separately, and a single horseshoe fragment from Street Farm. Including watching briefs and 5 sections through Ermin Street, 17 sites have produced horsegear and/or horseshoe nails. Ten sites have produced horseshoe nails and 12 sites have produced horsegear other than horseshoe nails.

Horseshoes and hipposandals

The bulk of the finds comprise horseshoes. Most are characterised by broad heavy branches and rectangular countersunk nail holes and are probably of post-medieval date. A small number have fullering (eg. Table 7.51, nos 1, 4, 11–2, 20–23), which is a distinct post-medieval feature. A selection have been illustrated.

The most interesting finds are perhaps the hipposandals, three complete examples of which were recovered (cat. 630–1, Table 7.51, no. 29). The three complete examples are of two different forms. The side wings of cat. 630 originally met at the front and were formed into a rolled-over loop. The heel was hooked. This form was classified by Aubert as his form 2 (Manning 1972, 171). Cat 631 and 29 (Table 7.51) are two examples of Aubert's type 1 with side wings and a separate front loop. Again the heel is hooked.

The precise function of these items is a matter of debate. They were undoubtedly worn by horses, but under what circumstances is less clear. Given the lack of evidence for the shoeing of Roman horses (*pace* Manning 1976, 31), it has been suggested that the hipposandals were temporary shoes used when riding on metalled roads (Manning 1985, 63). There are two problems with this interpretation. First the number of hipposandals found is perhaps fewer than might be expected if they were regularly used. Secondly, and more pertinently, it would not have been possible to ride at any speed on a horse wearing hipposandals because the shoes would quickly work loose. A related problem was the probability that the shoes would chafe against the horse's legs. It is most probable that hipposandals were worn to protect damaged and injured hooves. Hipposandals which only cover half the hoof are known although they are rare. The existence of these half-shoes which would provide protection to only one side of the hoof is further evidence for the veterinary use of these pieces. A small selection of hipposandals have been illustrated and appear in the catalogue below.

Catalogue

Duntisbourne Grove (Fig 7.33)

630 Hipposandal, complete, Aubert Type 2 (Manning 1985, 63–6, fig. 16), sf 233, ctx 7.

Ermin Street (Figs 7.34–5)

631 Hipposandal, complete, Aubert type I, with wings, rear hook and front loop, 1, L 245 mm, sf 301, ctx 309.

632 Horseshoe, complete, quite broad heavy web; 7 rectangular nail holes arranged 3 and 4; no fullering or calkins; 3 in situ nails, L 115 mm; W 116 mm, sf 601, ctx 623.

633 Horseshoe, complete, quite broad heavy web; 7 rectangular nail holes arranged 3 and 4; no fullering or calkins, L 120 mm; W 120 mm, sf 602, ctx 624.

634 Horseshoe, complete, with broad heavy web; 8 rectangular nail holes arranged 4 and 4; no fullering or calkins, L 120 mm; W 120 mm, sf 603, ctx 624.

635 Horseshoe, complete, with broad heavy web; 8 rectangular nail holes arranged 4 and 4; no fullering or calkins, 1, L 115 mm; W 115 mm, sf 604.

Linch pins

The only cart or wagon fittings which could be identified were linch pins used to secure wheels on their axles. A single linch pin was recovered from Ermin Street section 6, but three further examples were found at Birdlip Quarry (cat nos 585–587). All four linch pins are of similar type with spatulate heads and rolled-over loops. This is one of the typical Romano-British linch pin forms (Manning 1972, 172–4).

Ermin Street (Fig. 7.35)

636 Linchpin, of Manning type 2b, with spatulate head and rolled over loop; rebate in stem, 1, L 170, sf 609, ctx 651.

LEAD OBJECTS

By Leigh Allen

A total of 36 lead objects were recovered: 24 from Birdlip Quarry, 7 from Street Farm, 4 from Weavers Bridge and 1 from Latton 'Roman Pond'.

Latton 'Roman Pond'

One miscellaneous fragment, recovered from context 228.

Weavers Bridge

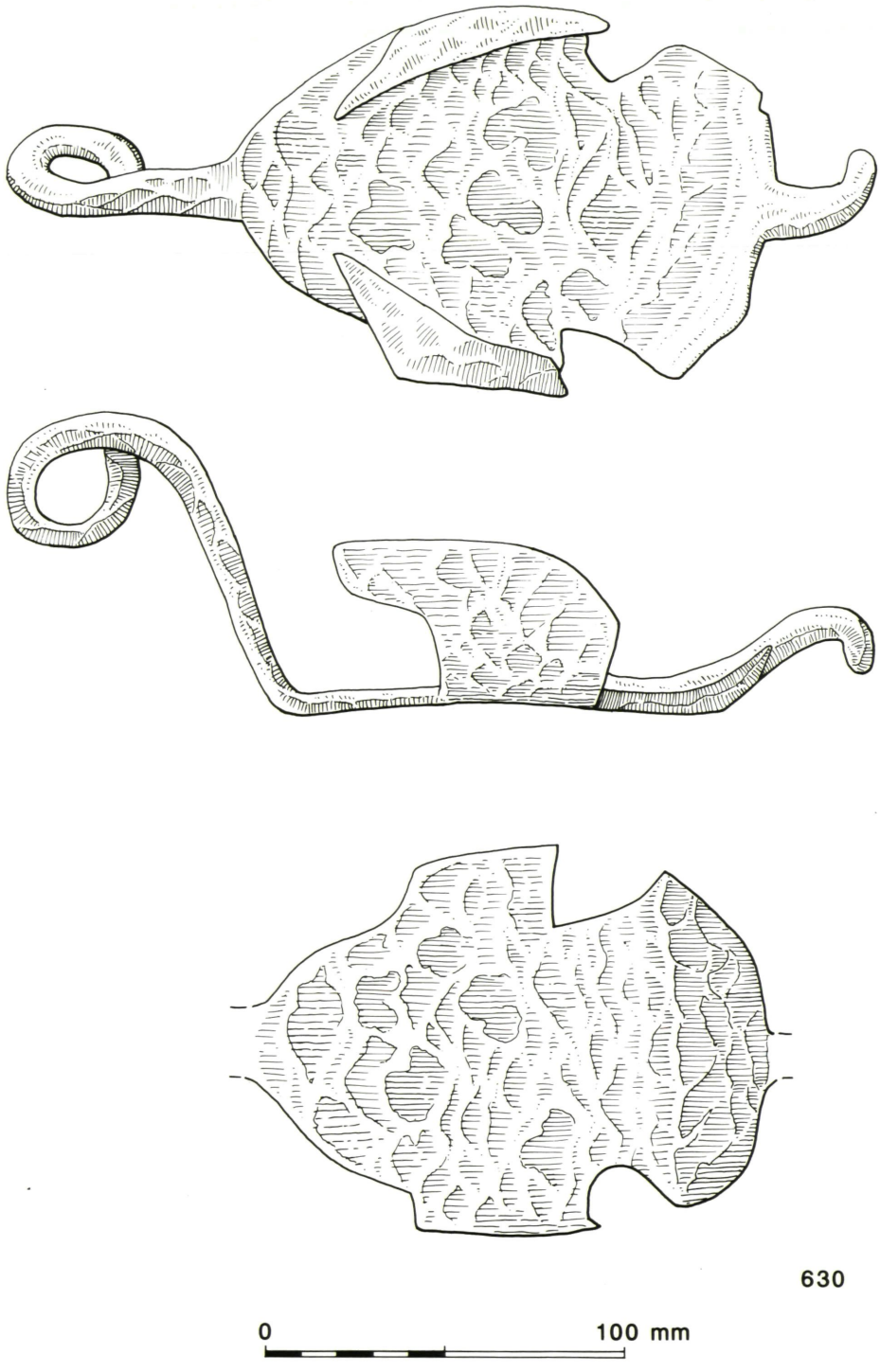
The four fragments of lead consist of a fragment of casting waste from an unstratified context (cat. 640), a fragment of sheet from context 57 (cat. 638), a miscellaneous fragment from context 26 (cat. 641) and a pear-shaped spoon bowl without the handle from context 57 (cat. 639). Spoons with this shape of bowl appear to have been in production by the first half of the 2nd century (Crummy 1983, 69–70, fig. 73, nos 2012 and 2014).

Birdlip Quarry

The 24 objects comprise 3 weights (cat. 642–4), a trapezoidal fragment (cat. 645), a bung or plug

Table 7.51 Horseshoes and other horse gear (excluding horseshoe nails) by site and context.

Cat. No.	Context	Sf no	Identification	Nos	Size (mm)
Burford Road					
1	309		horseshoe, half, no calkin, 4 nail holes with fullering and 1 extant nail	1	
2	320		?horseshoe fragment	1	
3	323		horseshoe fragment, small, one part nail hole and rolled over calkin	1	
4	409		horseshoe fragment, 4 nail holes and fullering, no calkin	1	
5	573		horseshoe, half, wide side bar with 4 extant nail holes	1	
6	661	9	horseshoe, almost complete, 5 nail holes to each side	1	
Duntisbourne Leer					
7	214	4	?hipposandal fragments; curved plates	2	
Field's Farm					
8	50	9	horse or pony shoe, 1 extant calkin, 5 nail holes and 3 in situ nails	1	
11	310		horseshoe, half, no calkins but possible traces of fullering	1	L 119 mm
12	329		horseshoe, complete, with web of average width, and clear traces of fullering, no calkins; heavily worn at the toe; no nail holes visible to the naked eye.	1	L 108 mm; W 128 mm
Ermin Street					
18	720	701	horseshoe, half, no distinctive features	1	L 128 mm
19	769	703	horseshoe, half, possible fullering otherwise no distinctive features	1	L 136 mm
20	834	814	horseshoe, half, with 4 rectangular nail holes and fullering; no calkins	1	L 132 mm
21	836	810	horseshoe, complete, clear fullering, and right angle calkins; 8 nail holes	1	L 137mm; W 133 mm
22	836	811	horseshoe, complete, clear fullering, broad web, no calkins; 8 nail holes	1	L 135 mm; W 135 mm
23	839	813	horseshoe, complete, clear fullering, broad web, no calkins; 8 nail holes	1	L 118 mm; W 123 mm
Weavers Bridge					
24	13		horseshoe, 6 nail holes, some nails in situ	1	
25	13		horseshoe, 6 nail holes, some nails in situ	1	
26	2		horseshoe, 8 nail holes, fullering, no calkins	1	
27	4		horseshoe, small, 6 extant nail holes, no calkins	1	
28	4		horseshoe, small, fragment, 2 extant nail holes	1	
NOSNI					
29	Ch. 2500	2	hipposandal, complete, Aubert type I, with wings, rear hook and front loop	1	
Preston Enclosure					
30	160		horseshoe fragment, small	1	
31	surface cleaning		horseshoe fragment, no calkin, 3 extant nail holes	1	
Witpit Lane					
32	24		horseshoe fragment, no calkin, no fullering, 3 extant nail holes	1	



Figures 7.33 Hipposandals from Duntisbourne Grove.

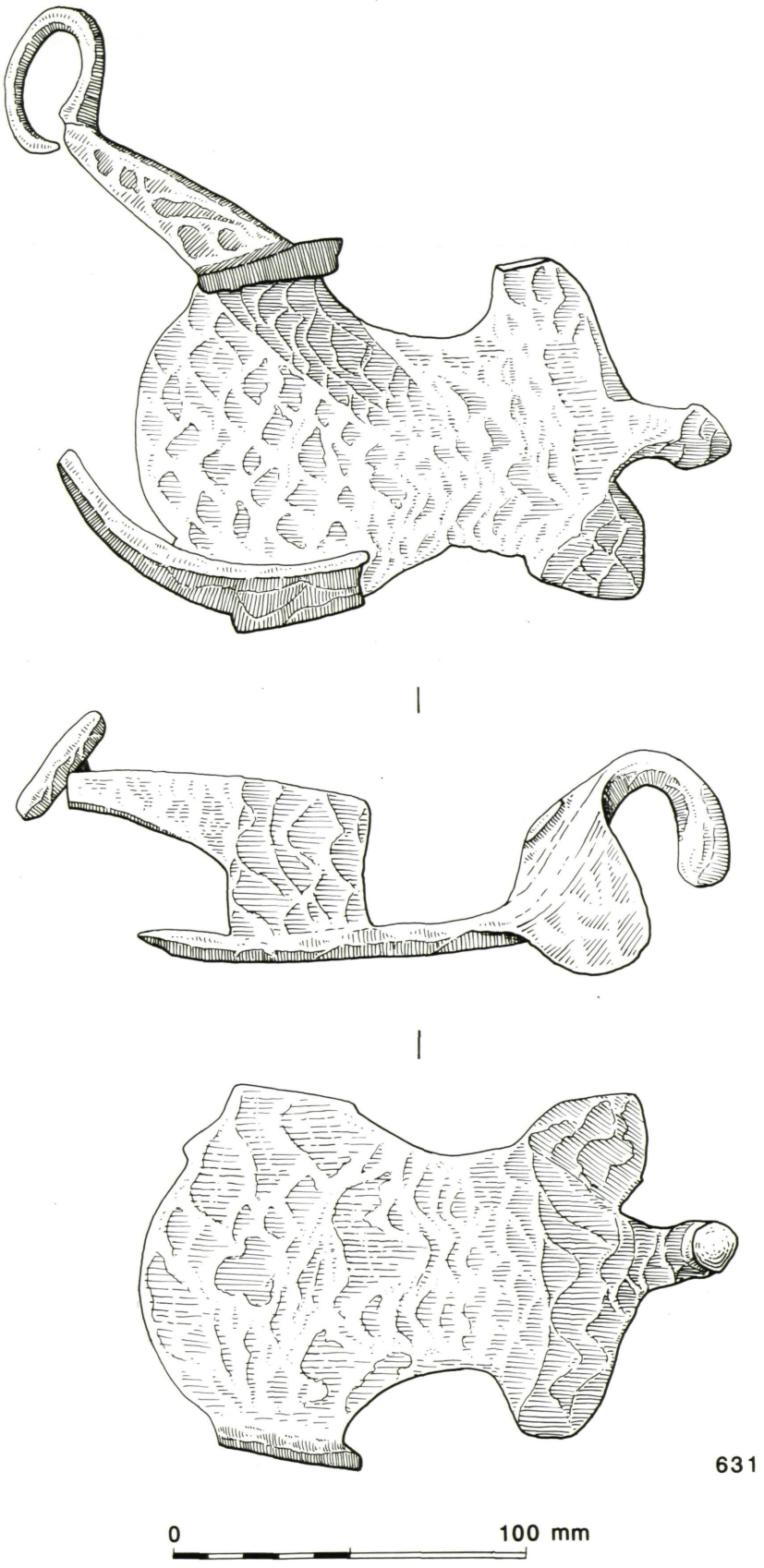


Figure 7.34 Hipposandals from Ermin Street.

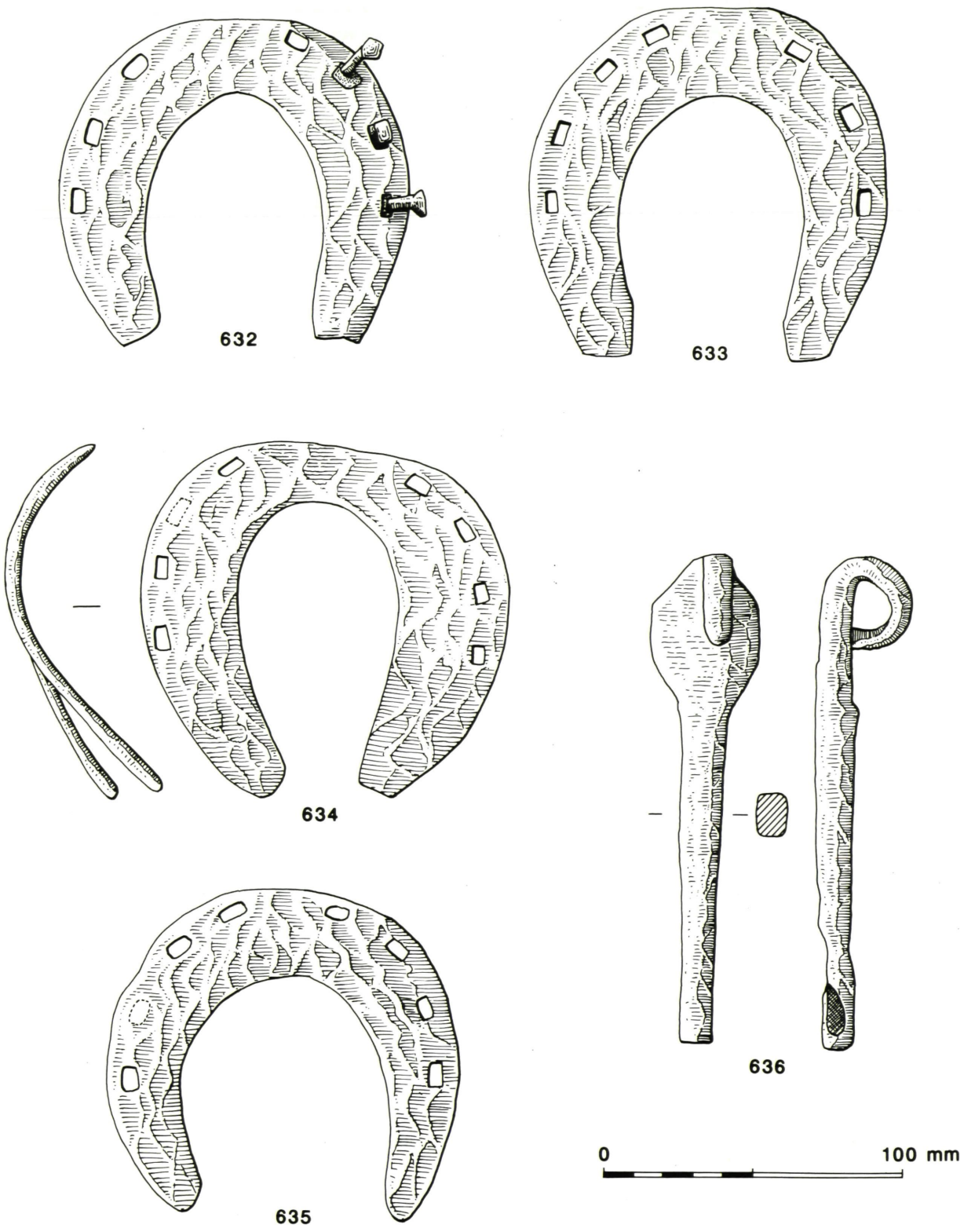


Figure 7.35 Horseshoes and linch pin from Ermin Street.

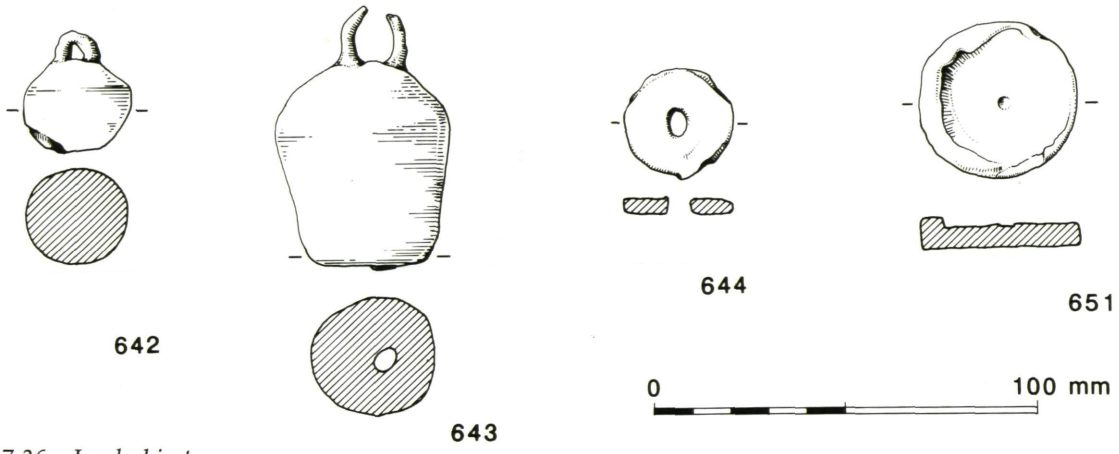


Figure 7.36 Lead objects.

(cat. 646), a sheet fragment (cat. 647), miscellaneous fragments and manufacturing waste. Two of the weights are hanging or steelyard weights (cat 642–643). The first of these, cat. 642, is a small globular weight with an iron loop attachment; a similar example was recovered from Bancroft, Buckinghamshire (Bird 1994b, 347, fig. 174, no. 308). The second (cat. 643), is a larger pear-shaped hanging type with an iron rod through the centre and a broken loop attachment. The other weight (cat. 646) is discoidal, with a central perforation (this object could feasibly have been used as a spindlewhorl) and similar examples have again been recovered from Bancroft (Bird 1994b, 347, fig. 174, no. 306). There is a large solid trapezoidal shaped fragment (cat. 645), a small mis-shapen plug or bung (cat. 646) with a domed head and a short shank, a fragment of irregularly shaped sheet (cat. 647) and five miscellaneous fragments.

The remaining objects are fragments of casting or cutting waste. The eight fragments of casting waste include small drips, droplets and spills produced during the working of lead, they also include a fragment of casting sprue (the metal that solidifies in the in-gate of a mould) which was recovered from occupation layer 227 (cat. 648). The four fragments of cutting waste were fragments of sheet, three with scored lines along one edge the fourth has a roughly scalloped edge.

Street Farm

The seven fragments consist of two window came fragments (identified by C Cropper), a weight, sheet fragments and cutting waste. One of the fragments of window came (cat. 649) is early post-medieval in date, and was extruded through a toothless mill, unlike the second fragment (cat. 650) which has widely spaced mill marks and probably dates to the 17th century or later. The weight is unstratified (cat. 651). It is circular, discoidal and has a raised lip around the circumference. There is a shallow indentation at the centre, and a similar example is noted at Fishbourne, Sussex (Cunliffe 1971, 145, fig. 66, no. 10). The remaining objects consist of two fragments of fine lead sheet and two fragments of cutting waste, all of which are unstratified.

Catalogue of lead objects (Fig. 7.36)

Latton 'Roman Pond'

637 A miscellaneous fragment, ctx 228.

Weavers Bridge

638 Sheet, incomplete. Irregularly shaped fragment. L 27 mm, ctx 57.

639 Spoon, incomplete, lead. A pear-shaped spoon bowl, handle missing. L 37 mm. sf 32, ctx 57.

640 A fragment of casting waste, unstratified.

641 A miscellaneous fragment, ctx 26.

Birdlip Quarry

642 Weight, incomplete. Small globular hanging weight with an iron loop attachment. D 30 mm. sf 138, ctx 131.

643 Weight, incomplete. Large pear-shaped hanging weight with an iron rod through the centre and a broken loop attachment. L 68 mm. sf 55, ctx 31.

644 Weight, complete. Circular, discoidal weight with a central perforation. D 28 mm. sf 1662, ctx 1500.

645 Ingot fragment, incomplete. Solid trapezoidal fragment possibly from a lead pig or ingot. L 42 mm. sf 876, ctx 278.

646 Plug, incomplete. Small distorted dome headed plug with a short roughly circular sectioned shank. L:17 mm. sf 1663, ctx 1500.

647 Sheet fragment, incomplete. Fragment of lead sheet with one curved outside edge. L 52 mm. sf 125, ctx 14.

648 Casting sprue, incomplete. Fragment of cast lead from the in-gate of the mould. L 46 mm. sf 688, ctx 227. Casting waste was also recovered from contexts 2, 7, 31 and 72. Cutting waste was recovered from contexts 7, 41, 14 and 61. Miscellaneous fragments were recovered from contexts 2, 7, 10, 14 and 31.

Street Farm

649 Window came, incomplete. Short distorted fragment, extruded through a toothless comb. L 51 mm. ctx 749.

650 Window came, incomplete. Small distorted fragment bearing traces of widely spaced mill marks. L 34 mm, ctx 356.

651 Weight, complete. Circular discoidal weight with a raised lip around the circumference and a shallow indentation at the very centre. D: 40 mm, Sf 28, ctx 750.

Two fragments of cutting waste and two sheet fragments were recovered from unstratified contexts.

BONE OBJECTS

By Leigh Allen

There were eight objects of bone and one of horn. Six bone objects came from Birdlip Quarry, one from Ermin Farm and one from Weavers Bridge.

Birdlip Quarry

All six of the bone objects were pin fragments. Cat. 654 context 1236 is a highly polished headless pin, the top of the pin is flat and the shaft tapers smoothly from the head to the tip. It has been suggested that this type of pin belongs to the earlier part of the Roman period, losing popularity in the first half of the 3rd century (Crummy 1979, 157–158). Cat. 653 from context 798 and cat. 652 from context 278 are both examples of pins with hand cut globular heads with shanks that swell at the centre, they are both highly polished and have the tips of the points missing. This type of pin has a postulated date range of *c.* AD 200–late 4th/early 5th century (Crummy 1979, 158–161, fig. 1, no. 3). Similar examples have been recovered from sites A and B at Shakenoak, Oxfordshire (Brodribb et al. 1971, 110–11, fig. 37, no. 2), at Fishbourne, Sussex (Cunliffe 1971, 147–148, fig. 68, no. 23) and at Colchester (Crummy 1983, 21–22, fig.19). Cat. 655 from floor layer 729 is a roughly cut pin rectangular in section with a head delineated from the shank by slightly notched shoulders, there is some degree of polish over the whole length of the pin. Cat 656 and 657 are fragments of highly polished pin shafts.

Ermin Farm

A highly polished drilled boar's tooth of a type commonly referred to as amulets was recovered from context 3 (cat. 658). Their use can be traced back to the Roman period where they were favoured by Germanic mercenaries and were worn hung from necklaces or mounted in metal sheaths (MacGregor 1985, 109). A similar example was recovered from Shakenoak, Oxfordshire in a late 3rd-4th context (Brodribb et al. 1971, 110–111, fig. 37, no. 2).

Weavers Bridge

Nine fragments from a decorated handle were recovered from context 57 (cat. 659), it is square in section with a circular longitudinal perforation for the insertion of a tang from a whittle tanged implement. The handle is decorated with irregularly spaced (sometimes overlapping) ring and dot motif. A similar object was recovered from Shakenoak, Oxfordshire and is late Roman or Saxon in date (Brodribb et al. 1971, 110–111, fig. 37, no. 3).

Ermin Street

A damaged and fragmentary object of horn was recovered from context 623 (cat. 660), it consisted of two fragments from a vessel. A circular disc of *c.* 51 mm would have formed the base of the vessel. It was found together with a curved fragment from the cylindrical body. The object is most probably a horn beaker, a conventional form of drinking vessels from the 17th century onwards (Hardwick 1981, 37–40). It is however worth noting that horn vessels were also used as medicine measures. During the Crimean war they were used in preference to glass vessels which often smashed whilst in transit. Traces of a green powdery substance were present at the base of the vessel (this substance has not been identified for this report).

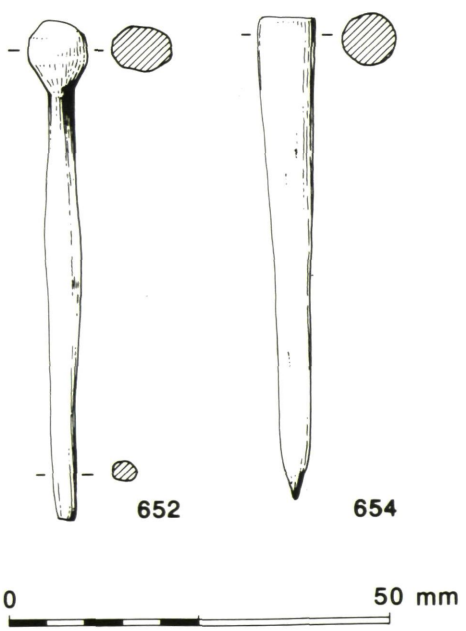


Figure 7.37 Bone objects.

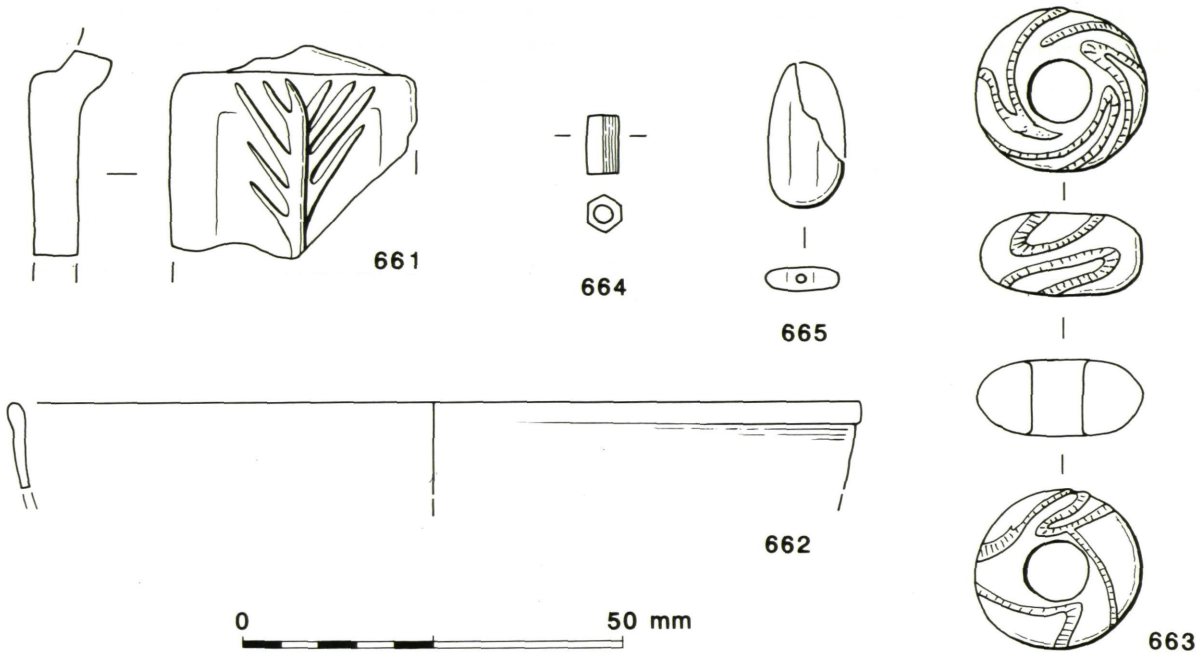


Figure 7.38 Roman glass from Birdlip Quarry.

Catalogue *(Fig. 7.37)*

Birdlip Quarry

652 Pin, incomplete, roughly worked with a hand-cut globular head, the shank has a slight swelling at the centre, the tip is missing, there are traces of polish on the head and shank. L 66 mm. sf 883, ctx 278.

653 Pin, incomplete, with a hand-cut globular head, the shank has a slight swelling at the centre, the tip is missing, highly polished. L 50 mm. sf 1087, ctx 798.

654 Pin, complete, headless pin, the top of the head is flat and the shaft tapers smoothly from the head to the tip. The whole pin is highly polished. L 64 mm. sf 1562, ctx 1236.

655 Pin, complete, roughly cut, rectangular in section and curved along its length, the head is delineated from the shank by slightly notched shoulders. L 91 mm. sf 1253, ctx 729.

656 Pin, incomplete, shank fragment, broken at both ends, circular section, tapers smoothly along its length and is highly polished. L 42 mm. sf 1291, ctx 848.

657 Pin, incomplete. Tip and a fragment of the shank of a pin. The fragment has a circular section, tapers smoothly along its length and is highly polished. L 30 mm. sf 1588, ctx 1412.

Ermin Farm

658 Boars tusk, incomplete, broken at upper edge, highly polished and perforated with a circular hole at the upper edge for suspension. L 86 mm. sf 1, ctx 3.

Weavers Bridge

659 Handle, incomplete, nine fragments from a decorated handle for a whittle tanged implement. The handle is square in section with a circular longitudinal perforation for the tang. The decoration consists of irregularly spaced (sometimes overlapping) ring and dot motif. L 103 mm. sf 4, ctx 57.

Cowley Underbridge Trench 6

660 Two fragments from a horn vessel. A circular disc *c.* 51 mm which forms the base of the vessel and a curved strip from the cylindrical body of the vessel. There are traces of a green powdery substance (unidentified) at the base of the vessel, sf 606, ctx 623.

ROMAN GLASS FROM BIRDLIP QUARRY *(Fig. 7.38)*
By Denise Allen

The excavations produced 34 fragments of Roman vessel glass and 3 beads. Most of the vessel glass fragments are very small and completely featureless, and therefore defy further identification. Twenty-two are blue-green in colour, and of these, 9 can be recognised as representing large, thick-walled vessels, almost certainly bottles of common 1st-2nd century types.

Vessels

Thirteen fragments are from colourless vessels, of which two are sufficiently diagnostic to identify their forms.

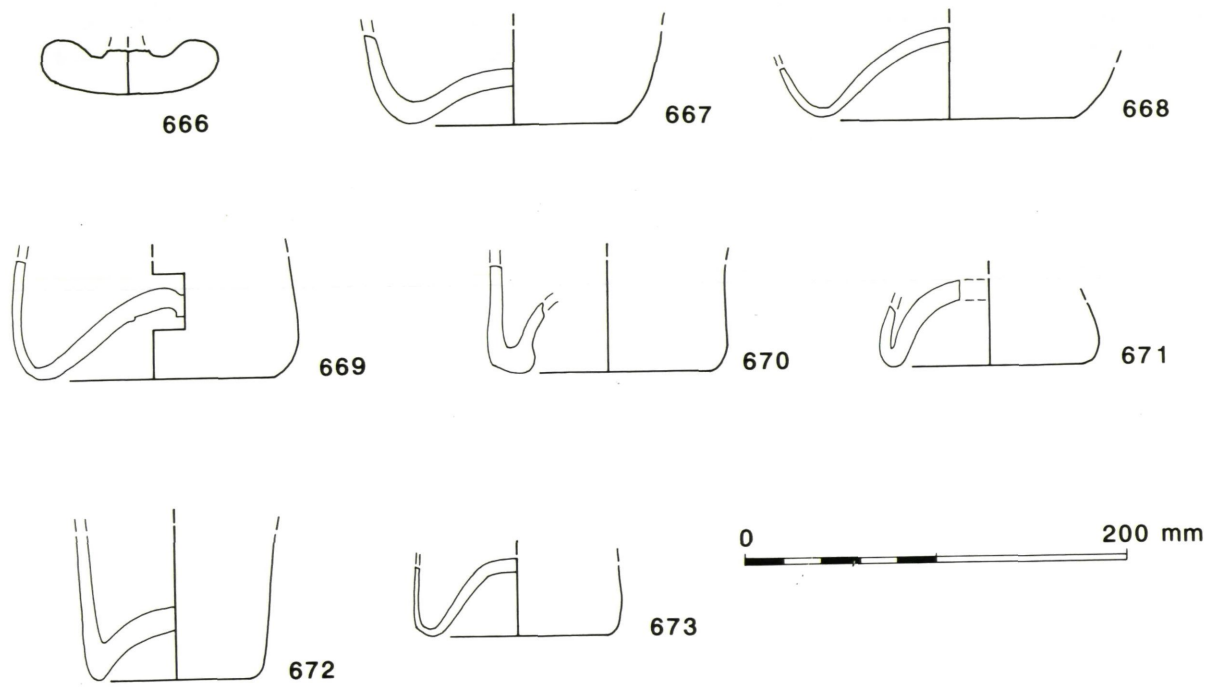


Figure 7.39 Post-medieval bottle glass.

661 Sf 319, ctx 125. Shoulder fragments of an unguent bottle of greenish-colourless glass. Blown in a square-section body mould; part of a moulded vertical palm leaf extant on one side, and apparently part of another just visible. Width of sides *c.* 32 mm.

This decorated shoulder fragment represents a rare form of unguent bottle, dating to the late 2nd or 3rd century. They often have moulded designs on their bases, with the figure of Mercury or some other deity, together with letters in each corner. The vessels are often called Mercury flasks for this reason. A rare variant has moulded designs on the sides. This almost always takes the form of a pattern resembling a palm branch, as here, or sometimes a thunderbolt. A complete example of the former was found in a 4th-century grave from Trier in Germany (Goethert-Polaschek 1977, 183, 1141, taf. 24.260b). The form has recently been discussed with reference to a similar fragment found during excavations at Colchester (Cool and Price 1995, 152–3, nos 1182–1183, fig. 9.6).

662 Sf 284, ctx 31. Rim fragment of a cup of colourless glass. Rim fire-rounded and thickened and turned slightly inward, diameter *c.* 110 mm. The form most likely to be represented here is a cylindrical cup with slightly inturned rim and two concentric base-rings. They were the most popular glass drinking vessel during the period *c.* AD 170–240. Thirty-nine examples were represented amongst finds from recent excavations at Colchester (Cool and Price 1995, 83–5, nos 476–533, fig. 5.12).

Beads

663 SF 1570, ctx 1281. Annular bead of pale green glass, with snaking twisted cable of blue and white. Diameter 20 mm, height 10 mm. Translucent greenish annular beads with two-colour twisted cables have been classified by Guido as Class 9A, and dated to the 1st century BC-1st century AD (1978, 77, plate II.14).

664 Ctx 16, Small hexagonal-sectioned green bead, length 8 mm, diam. 4 mm. This is a very common Roman type, which cannot be closely dated (Guido 1978, 96, fig. 37.9).

665 SF 1185, ctx 140. Fragment of an oval, flat-sectioned bead of blue-green glass, with single longitudinal perforation. Length c. 19 mm, width c. 6 mm. Another bead of common Roman type, in use throughout the period (Guido 1978, 99, fig. 37.17).

POST-MEDIEVAL GLASS

By Cecily Cropper

Summary *(Fig. 7.39)*

Fragments of post-medieval and modern glass were recovered from a selection of sites along the route. A small number of earlier fragments are from bottles dating to the 17th and early to mid-18th centuries (Exhibition Barn, Burford Road, Middle Duntisbourne). Later 18th-century bottle fragments were present at Court Farm and Latton 'Roman Pond'. Modern glass (19th and 20th century fragments) came

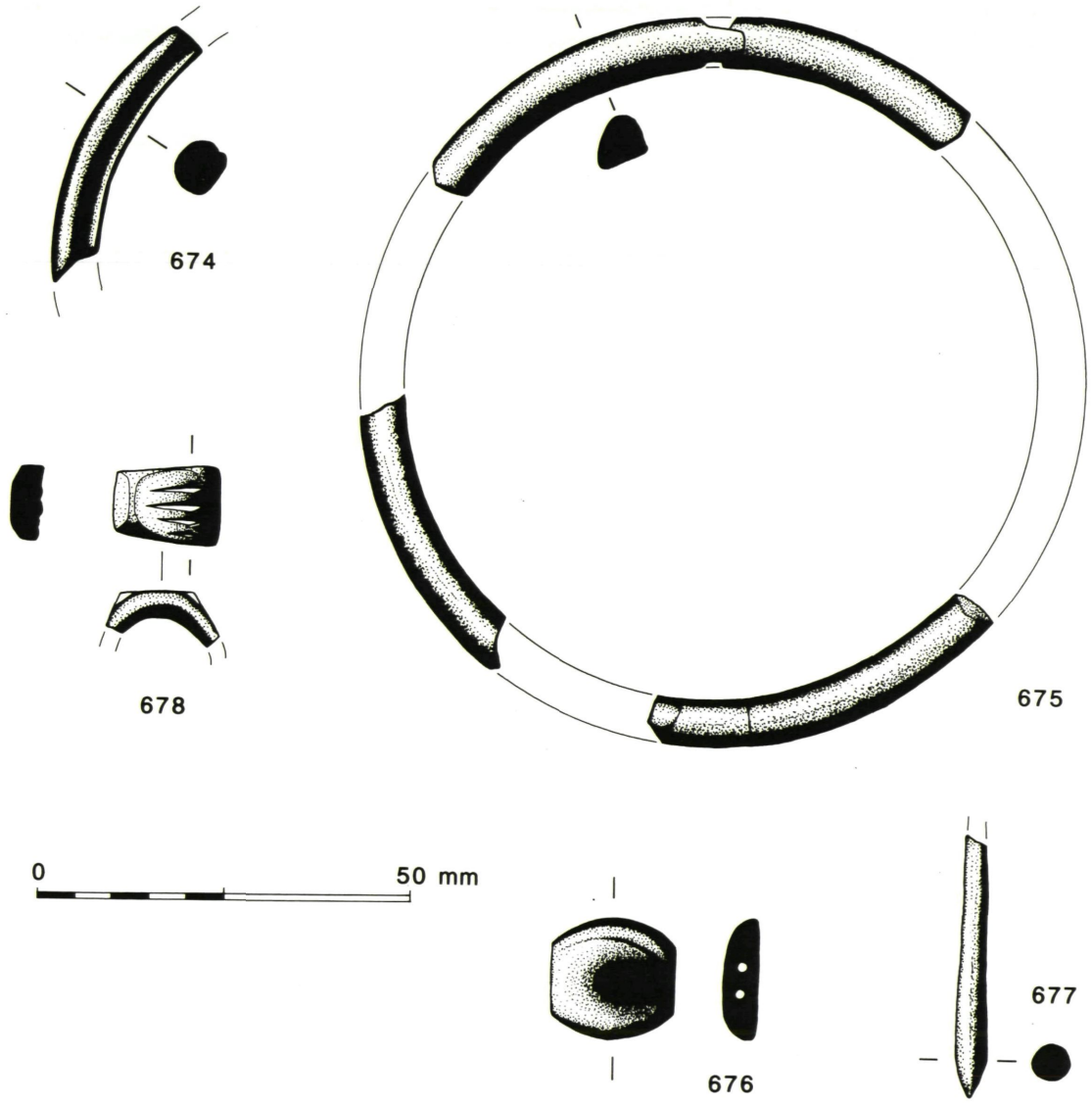


Figure 7.40 Shale objects.

illustrated). This would indicate the long-lived nature of occupation at Street Farm. No medieval or early post-medieval glass was found.

SHALE OBJECTS *(Fig. 7.40)*
By Philippa Bradley

Shale bracelets are relatively common in Iron Age and Roman contexts (eg. Lawson 1976; Cunliffe 1984c, 396; Bird 1994a). Both bracelets are well finished and were probably lathe-turned. The Kimmeridge area of Dorset is the likely source for the shale (Calkin 1953). The example from Birdlip Quarry, with its internal groove, can be paralleled at Bancroft (Bird 1994, 368–9, fig. 191, no. 419). Although they are conventionally described as bracelets they may also have been armlets or anklets (*cf.* Laws 1991, 234).

674 Birdlip Quarry, ctx 1 (topsoil). Fragment from a simple shale bracelet with a grooved line on the inside. Circular section, slightly flattened on one side. Original diameter *c.* 75 mm. Width 6 mm, height 7 mm. Condition good.

675 Preston Enclosure, ctx 132. Eleven fragments from a simple undecorated shale bracelet, very finely worked. Eight fragments conjoin, the remaining three probably belong to the same object. Probably circular section originally but now incomplete. Original diameter *c.* 85 mm. Width 6 mm (max.), height 8 mm (max. surviving). Condition fair but laminating.

Table 7.52 Summary of worked stone objects, all sites.

Site	Rotary Querns	Saddle Querns	Whetstones	? Slingstones	Other	Total
Hare Bushes North					1 pebble-hammer	1
Cherry Tree Lane Compound					1 point sharpener	1
Highgate House					1 spindle whorl	1
Birdlip Quarry	6	1	2	5	1 disc; 1 polisher	16
Middle Duntisbourne					1 quern fragment	1
Duntisbourne Grove		2 rubbers		1	2 quern fragments	5
Street Farm			2		1 millstone fragment	3
Ermin Farm				1		1
Preston Enclosure		2				2
Norcote Farm		1				1
Total	6	6	4	7	9	32

JET OBJECTS

By Martin Henig

Three jet objects were recovered from Birdlip Quarry comprising a spacer bead (cat. no. 676), a broken pin (cat. no. 677) and a broken finger-ring (cat. no. 678). The bead has been perforated twice and has been polished. A slightly larger example comes from a Period 2 grave at Butt Road, Colchester (c. AD 320–450; Crummy 1983, 34 fig. 36, 1447). The pin has a swollen waist and has a re-sharpened and polished point. Jet pins are relatively common and can be paralleled at a number of sites including Colchester (Crummy 1983, 27, fig. 24), Silchester (Lawson 1976, 257–8, fig. 7) and an almost identical example was found at Dalton Parlours (Clarke 1990, 122, fig. 90, 1). The finger-ring (349) is less easy to parallel but a plain rectangular bezel was found at Caerleon (Brewer 1986a, 144, fig. 145, 18) and a similar ring was found at Dalton Parlours (Clarke 1990, 122, fig. 90, 9).

676 Sf 273, ctx 31. Ovoid plano-convex spacer bead with two piercings. Length 17 mm, width 14 mm.

677 Sf 598, ctx 128. Shank of hairpin, expanding towards point, which appears to have been reshaped after breakage. The head is missing. Length 33 mm (max. surviving). Compare with Crummy 1983, 34, no. 1447; Allason-Jones 1996, 29, no. 50 (York).

678 Sf 829, ctx 349. Finger-ring, with externally faceted hoop and angled shoulders ornamented with four grooves. Less than half of the ring remains. The external diameter is no more than *c.* 16 mm, internal 12 mm. The width varies from 7–10 mm towards the bezel. Like much jet jewellery, it was probably designed to be worn by a woman, perhaps in this case a girl. The form of ring is related to the keeled ring (Johns 1996, 48–9), characteristic of the 3rd century, but rarely made from jet. There are, however, examples of jet rings of this type from York (Allason-Jones 1996, 36, no. 161) and the Rhineland, from Cologne and probably Wiesbaden (Hagen 1937, 106, no. A6 and 108, no. A16). Sf 829, ctx 349.

Allason-Jones emphasises the importance of the jet outcrops around Whitby, Yorkshire, and the importance of the York jet industry (1996, 11–14), but other materials were used (ibid. 6–7) and the relationship between the Rhineland jet industry and that in Britain and the sources of its raw material await further study. In this case, it is assumed that the three objects originated in Whitby.

THE WORKED STONE

By Fiona Roe

Introduction

The worked stone demonstrates how different varieties of hard stone were imported into Gloucestershire from the Neolithic until the medieval period or later. Ten of the excavated sites produced stone artefacts, amounting to 32 objects in total (Table 7.52). Twenty one pieces of local stone used in building were collected from Birdlip Quarry, six of which showed evidence of working. The objects include 1 piece of millstone, 15 quern fragments and 4 whetstones, all of which have proved to be of value for supplementing previously available information about the use of imported stone in central Gloucestershire and north Wiltshire, an area previously barely surveyed. Examination of further finds of worked stone in local museums has helped to fill out the picture. There have also been some unusual finds from the Neolithic period (Duntisbourne Grove), the Neolithic/Bronze Age (Norcote Farm) and the Roman period (Birdlip Quarry), all of which have wider implications.

Hare Bushes North

An early prehistoric pebble-hammer (Fig. 7.41.679, ctx 1010), made from a quartzite pebble was recovered, together with flint debitage, from a tree-throw hole. Pebble-hammers of this type are relatively common nationally (Roe 1979, 36), although only two others have previously been recorded from Gloucestershire (Davis *et al.* 1988, 152, no. 910, 153, no. 87).

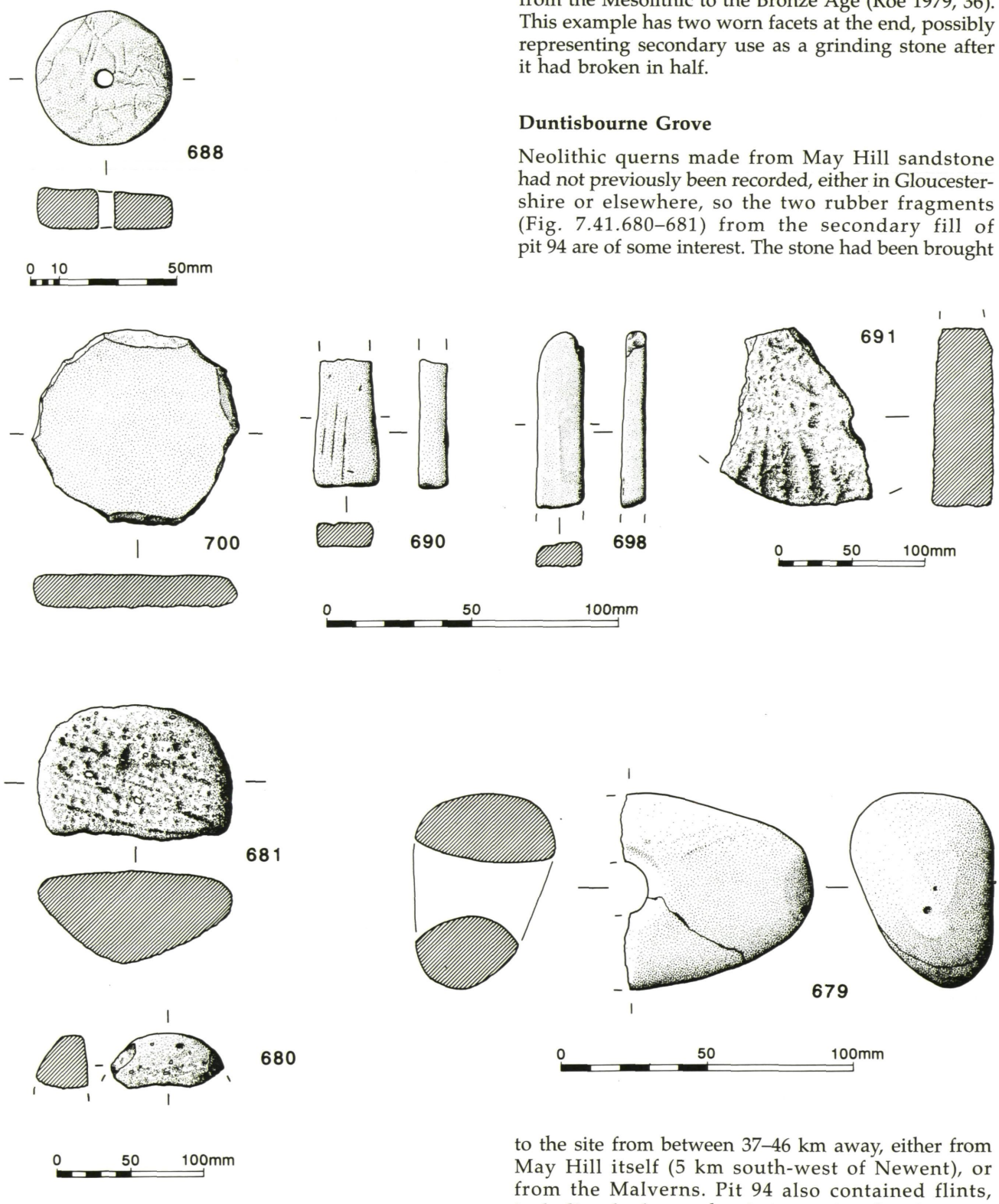


Figure 7.41 Stone objects.

They appear to have had a long period of use, mainly from the Mesolithic to the Bronze Age (Roe 1979, 36). This example has two worn facets at the end, possibly representing secondary use as a grinding stone after it had broken in half.

Duntisbourne Grove

Neolithic querns made from May Hill sandstone had not previously been recorded, either in Gloucestershire or elsewhere, so the two rubber fragments (Fig. 7.41.680–681) from the secondary fill of pit 94 are of some interest. The stone had been brought to the site from between 37–46 km away, either from May Hill itself (5 km south-west of Newent), or from the Malverns. Pit 94 also contained flints, including leaf arrowhead tips and a chisel arrowhead, and it was one of a group of earlier prehistoric features in the south-west corner of the site.

Two further sites with worked May Hill sandstone from Neolithic contexts are now known from the area. Both are chambered Cotswold-Severn long barrows near Northleach, Glos. The Hazleton long cairn was

constructed over a spread of domestic rubbish which included securely stratified quern and rubber fragments made from May Hill sandstone (Saville 1990, 176, 231, fig. 176). At The Burn Ground, Hampnett, half of a small saddle quern was found built into the cairn material (Grimes 1960, 75, fig. 32), and this too was made from May Hill sandstone (Gloucester Museum).

A small chip (cat. 682) of Forest of Dean Upper Old Red Sandstone came from the upper fill (ctx 168) of pit 142, a feature which also contained worked flints (cat. 34). The fragment originates from *c.* 41–48 km away. The pit again belonged to the group of early features in the south-west corner of the site. This variety of quernstone had not previously been recorded from an early prehistoric context, but there is also a further find from Norcote Farm, described below. The same pit at Duntisbourne Rouse also produced a small quartzite pebble from the upper fill, and this, like similar finds from Birdlip Quarry described below, could have been used as a slingstone.

Another quern fragment, of Upper Old Red Sandstone, came from context 53, the fill of ditch 44 (cat. 683) and could be Roman or earlier.

Middle Duntisbourne

A quern fragment of Upper Old Red Sandstone (cat. 684) was found in gully 194, beside trackway 137. The long period of use for this type of sandstone means that it could date to any time from the late Iron Age to the medieval period.

Norcote Farm

At Norcote Farm, a probable saddle quern fragment made from quartz conglomerate (cat. 685) was recovered from an evaluation area which had produced a lithics scatter although the quern fragment was unstratified. It had been brought some 45–50 km to the site.

Preston Enclosure

A worn fragment of saddle quern (cat. 687), made from May Hill sandstone, came from the fill of middle Iron Age enclosure ditch 59. May Hill sandstone saddle querns are common on early and middle Iron Age sites in the region. A second piece of saddle quern (cat. 686), of Upper Old Red Sandstone, came from a rubbish deposit in a tree-throw hole. This material occurs less frequently on earlier Iron Age sites, but there was a small proportion of Upper Old Red Sandstone at Salmonsbury, including a complete large saddle quern (Dunning 1976).

Ermin Farm

Small quartzite pebbles, collected locally, could have been used as slingstones, and an Iron Age example came from context 83.

Highgate House

The main fill of the Iron Age enclosure ditch produced a complete spindlewhorl (ctx 210, cat. 688, Fig. 7.41). It is made from a fine-grained Jurassic limestone which is likely to have been obtained locally (Richardson 1972). A somewhat similar spindlewhorl of late Iron Age/early Roman date came from Ditches hillfort at North Cerney (Trow 1988, 55, fig. 28, no. 6).

Cherry Tree Lane

Point sharpeners are ubiquitous, and the example from Cherry Tree Lane could be of any date from prehistoric onwards. It is weathered, including the single groove, and made from Pennant sandstone, brought to the site from the Bristol Coalfield some 48 km away. This was a versatile material, and was used during the Roman period for whetstones (cf. Hunter 1985, 71, fig. 8.2) and roofing tiles (cf. Timby 1998a).

Birdlip Quarry

The largest collection of stone artefacts comes from the Roman site at Birdlip Quarry and comprises seven quern fragments, two whetstones and seven other pieces. It is the only site from which building stone was recovered. Not all of the objects are typical of other Roman sites in Gloucestershire, while others appear to belong to earlier occupation in the area.

Standard materials

There are four rotary quern fragments made from Upper Old Red Sandstone quartz conglomerate, obtained from the Forest of Dean or the Wye Valley. This variety of stone was widely used for querns, and finds are known from a further 27 Roman sites in Gloucestershire alone. At Birdlip Quarry, one quern (cat. 697, ctx 368) came from a context dating to before AD 250, while three others (cat. 693 and 696, ctx 31, ctx 190) are from contexts dating to after AD 350.

Niedermendig lava was less widely used in the area, and only seven previous finds from Roman sites in Gloucestershire have been recorded to date. The single rotary quern fragment from Birdlip Quarry (cat. 699, ctx 1198) was unstratified, but it has a raised rim on the upper circumference, which suggests an early date. Similar querns were found at Usk (Welfare 1995). There is one Kentish Rag whetstone, which is of the typical cigar shape (cat. 690, Fig. 7.41). It was also unstratified, but similar whetstones are known from 13 Roman sites in Gloucestershire. Two other objects which are fairly common on Roman sites in the area are a polisher of quartzite (cat. 694, ctx 34) and a disc made from Jurassic limestone (Fig. 7.41.700, ctx 1325). Quartzite pebbles could have been picked up locally, and similar polishers are known from Bishop's Cleeve (Roe 1998, 130) and Kingscote (Gutierrez and Roe 1998, 176). Stone discs, possibly used for gaming, have been

recorded from various local sites, including Kingscote (Gutierrez and Roe 1998, 176) and Frocester (Price forthcoming). These objects were often made from broken roofing tiles of various materials, and tiles at Birdlip were made from local Jurassic limestone.

Non-standard materials

Two objects, a quern and a whetstone, stand out as different from the general range of Roman finds in this area. The rotary quern (Fig. 7.41.691) is made from igneous rock which could not have been obtained locally. A thin-section (R 290) has shown that the rock is an altered gabbro, the main components of which are lathes of altered plagioclase (probably andesine) set in plates of altered pyroxene which are now nearly all altered to chlorite. Gabbro is found most abundantly in areas such as northern England, north Wales and Scotland (Sutherland 1982) but is uncommon further south. The Birdlip gabbro is not comparable to either the hornblende gabbro from the Mount Sorrel complex in Leicestershire (Le Bas 1968, 48) or the Coverack gabbro from the Lizard in Cornwall. Evidence from fieldwork has confirmed that a match can be made with the Squilver gabbro (formerly referred to as the Pitchold intrusion) which occurs in the Shelve area just north of Bishops Castle in south Shropshire (Blythe 1943), 105 km from Birdlip Quarry.

Another mineral resource found in the Shelve area is lead, and this is known to have been used by the Romans (Haverfield 1908, 263). Thus, the quern might have been brought to Birdlip together with supplies of lead. Shelve is only 27 km from Wroxeter, and from there, the easiest route would have been by boat down the Severn to Gloucester, and then down the Ermin Way to Birdlip. This would perhaps have involved a less arduous journey than if lead had been obtained from the Mendips.

A whetstone (cat. 698, Fig. 7.41) is made from a fine-grained, very slightly micaceous, black sedimentary rock, clearly foreign to Gloucestershire. This could have come from Ordovician rocks in Wales, perhaps even from the Hope shale, which occurs in the same locality as the Squilver gabbro (Blythe 1943, 169). A somewhat similar whetstone came from the Bishop's Cleeve Roman site (Roe 1998, 128).

Objects that may relate to earlier occupation

A fragment of a May Hill sandstone saddle quern (cat. 695) from colluvium or hillwash seems likely to belong to earlier occupation in the area, and is perhaps related to the scatter of prehistoric pits. The five small quartzite pebbles, which were probably utilised as slingstones, are also of likely prehistoric date.

Street Farm

This site serves to demonstrate the long timespan during which Upper Old Red Sandstone. was utilised. Quartz conglomerate was used for a millstone, a fragment of which came from a medieval/post-medieval context (329). Another medieval example came from Tewkesbury Abbey Meadow (Hoyle 1993, 231). Coal Measures Sandstone was widely used for whetstones from at least the Roman period (Moore 1978), and there are examples of Roman date from Gloucestershire (Gutierrez and Roe 1998) while a medieval example is known from Holm Hill, Tewkesbury (Hannan 1997, 131). A medieval/post-medieval example was recovered from Street Farm (cat. 703) and a whetstone made from Norwegian Eidsborg schist cam from the same context. This Norwegian Rag is common on medieval sites in England, and there are further examples from post-medieval and later contexts at Southgate Street, Gloucester (Roe in prep.).

Discussion

The materials

Jurassic limestones are unsuitable for use as grinding materials, and it was always necessary to import hard, quartzose sandstones for querns, millstones and whetstones into this area of Gloucestershire. Only two objects from the excavations are made from local limestone, a late Iron Age spindlewhorl from Highgate House, Cowley (Fig. 7.41.688), and a Roman gaming disc, made from a piece of broken roofing tile or flat stone from Birdlip Quarry (Fig. 7.41.700).

The other type of stone which occurred naturally in the area was quartzite or quartzitic sandstone, in the form of pebbles in scattered Pleistocene Drift (Richardson 1933). It is possible that small quartz pebbles were used as slingstones; and the seven examples range from Neolithic to Iron Age or Roman in date. Quartzite pebbles were also used as polishers during the Roman period (Birdlip Quarry, cat. 694) and as early prehistoric pebble-hammers (Hare Bushes North, cat. 679). There are limitations to the ways in which a smooth, hard material such as quartzite can be utilised, and it is unsuitable for whetting, so the number of quartzite artefacts other than slingstones is small.

Most of the worked stone consists of varieties of stone that were brought to Gloucestershire from some distance. There are nine different kinds of imported stone, seven of which came from England and Wales, while the other two, Niedermendig lava and Norwegian Rag, came from overseas. These imported materials were used for 21 objects, consisting of 15 querns, 1 millstone, 4 whetstones and a point sharpener.

Upper Old Red Sandstone was the most frequently used quern material. Duntisbourne Grove is the first site at which Upper Old Red Sandstone has been recorded from early prehistoric contexts, and so it is now possible to show that this use of quartz conglomerate and pebbly sandstone for grinding extended over nearly six millennia, from the Neolithic period until the early 20th century. During the early and middle Iron Age it was apparently less popular

than May Hill sandstone, but it was utilised for rotary querns in some quantity during the Roman period, as demonstrated by finds from Birdlip Quarry and numerous other sites in Gloucestershire. It appears to have been used continuously until about 1914 (Tucker 1971, 238). Millstones, as from Street Farm (cat. 701), were an important later product.

The excavation at Duntisbourne Grove has also shown that May Hill sandstone was first brought into the Cirencester area in the Neolithic period, and was used for saddle querns until rotary querns became current in the region. At that point, Upper Old Red Sandstone seems to have become the preferred grinding material, both in Gloucestershire and the surrounding areas. During the Roman period May Hill sandstone seems temporarily to have been ignored, but it was used again for querns, although perhaps sporadically, during the Anglo-Saxon and medieval periods.

The Roman period saw some innovations in quern materials, with new types of stone being traded into the area, although always in smaller quantities than Old Red Sandstone. Querns of Niedermendig lava were brought to many sites in Britain from the Roman period onwards. Millstone Grit was also widely traded, and is now known from ten Roman sites in Gloucestershire, although there have been no finds from these excavations. The rotary of Squilver gabbro, however, stands out as being the only known quern made from this type of stone, either in Gloucestershire or elsewhere, although further research may well produce more examples.

The four whetstones are all from Roman or later contexts, and all were brought into Gloucestershire over considerable distances. The whetstone of black shale from Birdlip Quarry (cat. 698) is unusual, but the find may be accounted for because of the gabbro quern, as both types of stone, and indeed lead ore, occur in the same area of Shropshire near the Welsh borderland. It may have been convenient to transport these commodities together within the same trading network. At Maiden Castle, the Iron Age whetstones were probably being brought to the site through a distribution network of metalworking ores (Laws et al. 1991, 232). By contrast, Kentish Rag (cat. 690, Birdlip Quarry) was generally used for whetstones throughout the Roman period, but the trade seems to have died out afterwards. This seems to be the only variety of stone among those considered here that was very widely utilised, but for a relatively short period only. Whetstones of Coal Measures sandstone had a much longer period of use, from at least Roman times until the 19th century (Moore 1978), and there is a probable connection with the distribution of Millstone Grit. It is therefore no surprise to find a Coal Measures sandstone whetstone from a medieval/post-medieval context at Street Farm (cat. 702). The same context produced another long lived whetstone material, Norwegian Rag or Eidsborg schist which was a Saxon innovation but had a long history of subsequent use (Crosby and Mitchell 1987). Pennant sandstone also had a long useful life, and fits into the general picture of conservative use of specific types of stone.

Chronological overview

The worked stone is a good representative collection for Gloucestershire, covering a lengthy timespan from Neolithic to medieval/post-medieval times, with gaps only in the early Iron Age and Saxon periods. The early prehistoric period shows the beginning of a long tradition in the use of both Upper Old Red Sandstone and May Hill sandstone, with subsidiary use of quartzite pebbles. The excavations at Duntisbourne Grove and Norcote Farm have provided the first evidence in the area for Neolithic trade in quern materials. This was probably a different distribution network for that of Neolithic stone axes, since the querns were a good deal heavier, and were transported over shorter distances, perhaps only up to 37–50 km.

The same two quern materials were still in use during the later prehistoric period. These excavations have shown that, far from being an Iron Age innovation, the use of Old Red Sandstone and May Hill sandstone was already well-established by that time. By the earlier part of the Iron Age, however, May Hill sandstone seems to have been the preferred material for saddle querns. At Salmonsbury hillfort, for example, there was a considerably higher proportion of May Hill Sandstone saddle querns (Cheltenham Museum). The use of locally collected quartzite pebbles also lasted until at least the Roman period.

From medieval times onwards, traditional lithic materials still continued to be used. The Old Red Sandstone and Coal Measures sandstone from Street Farm were far from being innovations, while Eidsborg schist had first been brought in from Norway in the 9th century. Millstone Grit and Niedermendig lava were also still being used, although they are not represented among the finds of later date from these excavations. All these traditional materials did not go out of use until the 20th century.

Catalogue *(Fig. 7.41)*

Hare Bushes North

679 Two fragments of pebble-hammer, burnt, hour-glass perforation, made from unevenly shaped pebble, two worn facets at end; B 82 mm, max D 50 mm, quartzite, fill of tree-throw hole 1011, Neolithic? Sf 1, ctx 1010.

Duntisbourne Grove

680 Small fragment from rubber for saddle quern, hog backed, slightly convex grinding surface, worn, B now 75 mm, max D now 33.5, May Hill sandstone, fill of prehistoric pit 94, middle Neolithic. Sf 257, ctx 111.

681 Fragment of rubber for saddle quern, hog backed, slightly convex grinding surface, worn, B 126.5 mm,

max D 61 mm, May Hill sandstone, fill of prehistoric pit 94, middle Neolithic. Sf 258, ctx 111.

682 Small chip with no clear evidence of working, but a quern material, Upper Old Red Sandstone, fill of pit 142, Neolithic. Sf 210, ctx 168

683 Quern fragment, Upper Old Red Sandstone, quartz conglomerate, upper fill of quarry ditch 44, Roman? Sf 10, ctx 53.

Middle Duntisbourne

684 Quern fragment with one worked surface, Upper Old Red Sandstone fill of gully 194, beside trackway 137, medieval? Ctx 138.

Norcote Farm

685 Part of quern, probable saddle type, Upper Old Red Sandstone quartz conglomerate, in area of Neolithic/Bronze Age occupation. Sf 3, ctx 146.

Preston Enclosure

686 Fragment saddle quern with concave grinding surface; Upper Old Red Sandstone, fill of tree-throw hole 14, middle Iron Age. Sf 8, ctx 8.

687 Small fragment saddle quern, worn thin, concave grinding surface, May Hill sandstone, fill of enclosure ditch 59, middle Iron Age. Ctx 64/65.

Highgate House

688 Spindlewhorl, disc type with straight bored hole, diam 45 mm, th 13.5 mm, diam of hole 6.5 mm, Jurassic limestone, fine-grained micaceous, main backfill of enclosure ditch 212, late Iron Age. Sf 1, ctx 210.

Cherry Tree Lane

689 Small slab used as point sharpener, roughly weathered, one fairly coarse groove, L 93 mm, B 61 mm, D 23.5 mm, Pennant sandstone within colluvium, undated. Ctx 6.

Birdlip Quarry

690 Fragment small, slender whetstone, rectangular cross section, worn sides, L 43 mm, B max 22mm D max 10 mm, Kentish Rag. Sf 1490, ctx u/s.

691 Fragment of rotary quern, disc type, traces of grooved grinding surface, thin section, R290, Th 47 mm, roughly trimmed edge, igneous, fairly coarse-grained gabbro from Squilver Hill, Shropshire, upper part of midden, Period 2B, phase 6. Sf 263, ctx 31, Area B.

692 Fragment rotary quern, upper stone with part of central hole, worn shiny around outer edge, Upper Old Red Sandstone, quartz conglomerate, upper part of midden, Period 2B, phase 6, AD 350+. Sf 287, ctx 31, Area B.

693 Fragment rotary quern, lower stone, good grooving of grinding surface; Upper Old Red Sandstone quartz conglomerate, upper part of midden, Period 2B, phase 6. Sf 296, ctx 31, Area B.

694 Pebble with slight traces of use as polisher on three sides; quartzitic sandstone, floor/rubble layer possibly associated with late building, Period 2B, phase 6. Sf 1200, ctx 34, Area A.

695 Quern fragment, probably from saddle quern, May Hill sandstone, colluvium over wall 35, residual from Iron Age? Period 2B, phase 6. Sf 281, ctx 90, Area A.

696 Fragment rotary quern with part of central hole, neatly trimmed circumference and trace of small hopper, Upper Old Red Sandstone quartz conglomerate, within corn dryer 42, probably backfill, Period 2A, phase 2. Sf 496, ctx 190, Area B/D.

697 Fragment rotary quern, upper stone, top surface pecked into shape, possibly a small hopper, Upper Old Red Sandstone quartz conglomerate, rubble backfill of well 277. Sf 836, ctx 368.

698 Small whetstone with wear on two edges, split off larger slab; L 60 mm, B 16 mm, D 9 mm, black, fine-grained shale, probably Ordovician from Shropshire, material from around hearth 756, includes early and late material. Sf 1283, ctx 875, area A.

699 Fragment rotary quern, upper stone, possible traces of raised rim around circumference on upper side, Niedermendig lava, unstratified. Sf 1542, ctx 1198, area 2.

700 Disc, unevenly worked edge; diam 67 mm, Th 11 mm, Jurassic limestone fine-grained, soil accumulation over stone surface. Sf 1604, ctx 1325, Area 2A.

Street Farm

701 Fragment from large millstone with part of central hole and keyhole shaped socket for rhynd fittings; Upper Old Red Sandstone, quartz conglomerate, posthole associated with surface 382, medieval/post-medieval. Sf 17, ctx 329.

702 Whetstone, rectangular slab type with two grooves from use as sharpening stone, grey sandstone probably Coal Measures sandstone, charcoal layer associated with oven 516, medieval/post-medieval. Sf 18, ctx 500.

703 Whetstone, long and slender, weathered; Eidsborg schist, charcoal layer associated with oven 516, medieval/post-medieval. Sf 19, ctx 500.

Building stone from Birdlip Quarry

Three different varieties of Jurassic limestone were used for the building stone, and the probability is that they were all collected locally. A light coloured oolitic limestone was used for the three earliest pieces only,

a broken block of dressed building stone from part of an oven (cat. 713, structure 646, ctx 199), and two large post-pads (cat. 716–717, ctx 297, 298) consisting of rectangular blocks of limestone with square-socketed holes. They date to before AD 250. Such limestone can be found in the Inferior Oolite of Leckhampton Hill, but also occurs in the Lower Freestone at Cowley itself (Richardson 1972, 79, 85). It can be worked as a freestone, which facilitates any shaping that might be needed.

The later building stone, dated to after AD 250–300, is all, with one exception, made from fine-grained Jurassic limestone. A coarse-grained, shelly and oolitic limestone, perhaps from Cowley Wood or nearby (Richardson 1972, 112), was used for a suggested entrance marker or threshold stone (cat. 721, ctx 841) found in the drystone wall of structure 1452 but this was probably not its original purpose. The finer-grained limestone, which again could have come from Cowley, or else from only a few km away, was used for 17 pieces. There are three blocks of building stone (cat. 706, 719, 724, contexts 34, 730, 1323), one of which (cat. 719) has a groove of unknown purpose crudely pecked round three sides. Another large piece is a post-pad (cat. 715, ctx 353), which has a square socket in a partly shaped rectangular block, the bottom half of which was left rough. It had been re-used as post-packing. No definite pieces of roofing tile survived, although of the remaining 13 small fragments of fine-grained limestone, the three thinnest (cat. 704, 714, 722, contexts 7, 223, 848) may be pieces of roofing tile. Another ten somewhat thicker, but still small fragments have been interpreted, on the basis of worn surfaces, as paving slabs.

Catalogue

704 Fragment roofing tile or more probably paving stone, Jurassic limestone, fine-grained, occupation layer general cleaning, Period 2B, phase 6. Ctx 7, Area A.

705 Fragment possible paving stone, burnt, Jurassic limestone, fine-grained, modern drain. Ctx 12, Area A.

706 Block of burnt stone, probably building stone, Jurassic limestone, fine-grained, floor/rubble layer possibly associated with building, Period 2B, phase 6. Ctx 34, Area A.

707 Fragment possible paving stone, burnt, Jurassic limestone fine-grained, medieval lynchet. Ctx 38

708 Weathered slab, possible paving stone, burnt, Jurassic limestone fine-grained, fill of pit 39. Ctx 40, Area B/D.

709 Fragment possible paving stone, burnt, Jurassic limestone fine-grained, occupation layer, Period 2B, phase 3. Ctx 72, Area E.

710 Fragment possible paving stone, burnt, Jurassic limestone, fine-grained, modern topsoil. Ctx 95.

711 Fragment possible paving stone, Jurassic limestone, fine-grained, upper part of midden, Period 2B, phase 6. Sf 668, ctx 128, Area B.

712 Fragment possible paving stone, weathered, slightly burnt, Jurassic limestone, fine-grained, upper part of midden, Period 2B, phase 6. Sf 676, ctx 128, Area B.

713 Part of rectangular block of dressed building stone, burnt, Jurassic limestone, oolitic, light coloured, part of oven, structure 646, Period 1, phase 1. Ctx 199, Area C.

714 Fragment roofing tile or paving stone, Jurassic limestone fine-grained, rough stone surface or path, Period 2A, phase 5. Ctx 223, Area B.

715 Large post pad with square socket, top part of pad partly shaped into a rectangular block, bottom half left rough, Jurassic limestone fine-grained, reused as post packing Period 2A, phase 2. Sf 353, ctx 276, Area D.

716 Large post pad; nearly square block with a square socket, Jurassic limestone, oolitic, light coloured, probable post setting, paired with 298, Period 1, phase 1. Sf 722, ctx 297, Area C.

717 Large post pad, rectangular block with square socket, Jurassic limestone, oolitic, light coloured, paired with 297, Period 1, phase 1. Sf 774, ctx 298, Area C.

718 Fragment possible paving stone, burnt Jurassic limestone, fine-grained, occupation layer next to wall 775, Period 2A, phase 5. Ctx 705, Area A.

719 Approximately rectangular grooved block with crudely pecked out groove running round three sides, Jurassic limestone, fine-grained, drystone wall of structure 1452, Period 2A, phase 4. Sf 1335, ctx 730, Area A.

720 Fragment with worn surface, possible paving stone, Jurassic limestone fine-grained, occupation layer, Period 2A, phase 3–5. Ctx 825, Area A.

721 Very large elongated block, about the size for a threshold stone, one side weathered, especially in centre where it may first have been worn down, other side is crudely grooved, Jurassic limestone, coarse, shelly and oolitic, drystone wall of structure 1452, Period 2A, phase 4. Sf 1502, ctx 841, Area A.

722 Fragment from burnt slab, possible tile or paving stone, Jurassic limestone, fine-grained, mixed accumulation including material from oven/hearth 1035, Period 2A, phase 4. Ctx 848, Area A.

723 Fragment from slab, possible paving stone, Jurassic limestone, fine-grained, debris from hearth 1035, Period 2A, phase 3. Ctx 914, Area A.

724 Block of possible building stone, Jurassic limestone, fine-grained, stone surface over roadside ditch, Period 2A, phase 2. Sf 1603, ctx 1323, Area 2A.

Burnt Stone

Burnt Jurassic limestone, changed in colour to either pink or grey, was recovered from 11 of the sites. The largest amount came from Birdlip Quarry (11 fragments) and the impression gained was of burnt building stone, probably including paving stones. This material could be the result of an unintentional fire. Five sites produced negligible amounts of burnt stone: Burford Road (6 fragments), Preston Enclosure (2), Street Farm (2), Weavers Bridge (2) and Hare Bushes North (1). At five other sites, all of which had some prehistoric occupation, burnt stone was present in noteworthy amounts. At Trinity Farm, pits of late Neolithic/Beaker date contained pottery, flint and burnt stone amounting to 47 fragments, although there was no worked stone. Other sites where prehistoric activity correlates with finds of burnt stone are Middle Duntisbourne (47 fragments), Duntisbourne Grove (32 fragments), Highgate House (19 fragments) and Court Farm (13 fragments). More work is needed on the possible uses for this burnt stone, which is of frequent occurrence on prehistoric sites in the region.

THE FIRED CLAY

By Alistair Barclay

Introduction

The overall assemblage is relatively small and consists of 249 fragments weighing a total of 1.081 kg from 14 of the excavated sites. The fired clay was recovered from a variety of feature types including pits, ditches, a midden and hillwash deposits. The total assemblage includes only a few object fragments (loomweights (19, 125 g) and briquetage containers (2, 31 g)), while most of the fired clay consists of amorphous fragments. The assemblage includes some evidence for textile production in the form of loomweight fragments from Court Farm and Weavers Bridge, a few fragments of Droitwich briquetage from Highgate House that indicate inter-regional exchange and an important group of fired clay from a Neolithic pit at Duntisbourne Grove. There was no evidence for structural clay (with timber impressions) or for metalworking debris (eg. moulds or crucibles).

Methodology

The material was quantified by number of fragments and weight. The fired clay occurs in a range of fabrics. It was examined for evidence of wattle or other impressions, possible objects and structural pieces.

Fabrics

Nat:	No added temper or inclusions.
Sand:	Sandy clay matrix with no other inclusions.
Coarse sand:	Coarse quartz sand.
Shell:	Coarse shell platelets.
Sandy:	(Briquetage) coarse quartz sand with occasional voids from burnt out organics and rare quartzite grit.

Quantification

Table 7.53 gives a breakdown of the quantity (number of fragments, weight) of material from each site and context. In, general, the overall quantity of fired clay was low with relatively few sites producing more than 10 fragments.

Loomweights

The only identifiable objects relating to textile production were the possible loomweight fragments from Court Farm and Weavers Bridge. These were identified by their flat edges and in two cases by perforations. It is assumed that they derive from triangular loomweights. Neither of these fragments were very large with the heaviest piece weighing only 37 g. Triangular loomweights can be of either Iron Age or early Roman date. At Court Farm four fragments from contexts 286 and 317 were found with either Iron Age or Roman pottery, while a further two fragments from context 402 were possibly residual. At Weavers Bridge the 13 identifiable fragments were found with later Roman pottery in context 57. If this date is accepted at face value then it could be suggested that either the fragments are redeposited residual material or that they actually belong to objects other than loomweights.

Briquetage salt containers

Two fragments of possible briquetage salt containers from contexts 111 and 228 were recovered from late Iron Age features at Highgate House (identified by E Morris). Both fragments are small with the larger weighing only 25 g. They are manufactured from sandy fabrics, although one (context 111) also has larger quartzite grits and burnt out organics, that would approximate to so-called Droitwich briquetage from the West Midlands (cf. Hurst and Rees 1992, 200–1). If the identification of these pieces as Droitwich briquetage is correct, then this indicates that the site was involved in specialised exchange on an inter-regional basis as outlined by Morris for the Iron Age (1994a, 384–6).

Amorphous fired clay

The majority of the fired clay consists of oxidised amorphous fragments. This material no doubt derives from ovens and hearths used for domestic and industrial activities. Most but not all of this material is fired a reddish-brown colour. In addition, a significant quantity (11, 230 g) of unburnt clay was recovered from the lower fill of well 277 (context 368) at Birdlip Quarry. Of interest is the quantity of fired clay from the Neolithic pit (fill 168) at Duntisbourne

Table 7.53 Fired clay, all sites.

Context	No.	Weight (g)	Fabric	Comment
Highgate House				
111	1	25	? Briquetage	Droitwich briquetage
128	1	15	Shelly	One oxidised surface
228	1	6	? Briquetage	Droitwich briquetage
Middle Duntisbourne				
216	1	2	Shelly	Amorphous
256	1	4	Nat.	Amorphous
330	13	5	Sandy	Amorphous
Duntisbourne Grove				
108	1	2	Sandy	Amorphous
113 <13>	4	6	Nat.	Amorphous
168 <15>	29	110	Nat.	Amorphous
168 <10>	86	278	Nat.	Amorphous
168 Sf 199	31	76	Nat.	Amorphous
228	2	3	Coarse sand	Amorphous
Trinity Farm				
57	10	64	Nat.	Amorphous
Burford Road				
309	1	1	Nat.	Amorphous
Cherry Tree Lane				
6	8	15	Sandy	Amorphous
Witpit Lane				
7	1	1	Nat.	Amorphous
Preston Enclosure				
87	2	12	Nat.	Finger moulded amorphous lump
285	1	5	Clay pellets	Amorphous
St Augustine's Farm South				
3127	1	<1	Nat.	Amorphous
Lower Street Furlong				
31	2	27	Calc. gravel	Amorphous
Court Farm				
286	1	37	Nat.	Flat side. Probable loomweight fragment
317	3	13	Nat.	As above.
402	2	48	Nat.	Two fragments with broken perforations. Probable loomweight fragments.
Weavers Bridge				
57	12	23	Nat.	Loomweight fragment ?
57	1	4	Calc. gravel	Loomweight fragment ?
NOSNI96				
CH6300(2)	13	14	Organic	Amorphous
Birdlip Quarry				
81	1	10	Shelly	Amorphous
368 <48>	11	230	Nat.	Amorphous unburnt clay
619	3	1	Nat.	Amorphous
1225	1	20		Amorphous
1313	4	14	Nat.	Amorphous
Total	249	1081		

Table 7.54 Ceramic building material, all sites.

Site Code	Total weight (g)	Roman tile weight (g)	Medieval and later tile weight (g)	Misc tile weight (g)
Cirencester Watching Brief	125	75	-	50
Weavers Bridge	1635	950	675	10
Court Farm	575	525	-	50
Preston Enclosure	375	-	375	-
Westfield Farm	325	-	325	-
Middle Duntisbourne	10	-	-	10
Lynches Trackway	45	-	-	45
Burford Road	1795	1375	50	370
Exhibition Barn	250	250	-	-
Norcote Farm	395	-	300	95
Street Farm	8300	150	5575	2575
Cherry Tree Lane	585	300	-	285
NOSNI	275	50	225	-
Birdlip Quarry	12490	11350	-	1140
TOTAL	27180	15025	7525	4630
Percentage of total	100%	55%	28%	17%

Table 7.55 Summary of Roman tile types, all sites.

Site Code	Total weight of Roman tile (g)	Tegulae A		Imbrices B		Tubuli C		Plain tiles D		Bricks	
		No.	(g)	No.	(g)	No.	(g)	No.	(g)	No.	(g)
Cirencester Watching Brief	75					1	75				
Weavers Bridge	950	2	300					3	650		
Court Farm	525	1	350					2	175		
Burford Road	1375	1	200			1	50	4	1125		
Exhibition Barn	250	1	250								
Street Farm	150					2	150				
Cherry Tree Lane	300	1	75			2	225				
NOSNI	50							1	50		
Birdlip Quarry	11350	19	5950	4	475	7	250	33	4525	1	150
Total	15025	25	7125	4	475	13	750	43	6525	1	150
%	100%		47%		3%		6%		43%		1 %

Table 7.56 Summary of Roman fabric types, all sites.

	Fabric 1	Fabric 2	Fabric 3	Fabric 4	Fabric 5	Fabric 6	Fabric 7
Weight (g)	8125	700	2200	300	275	200	322
%	54	4.7	14.7	2	1.8	1.3	21.5

Grove. Fired clay is a rare find from Neolithic contexts and when it does occur it tends to be in rather small quantities. The relatively high quantity of, albeit amorphous fired clay, from a Neolithic pit in association with pottery, worked flint and charred plant remains is of some importance as a probable indicator of domestic activity. Small quantities of fired clay were found in a pit deposit associated with later Neolithic Peterborough Ware at Cam, Glos. (Smith 1968, 24–5) and from Stanton Harcourt, Oxon (Hamlin 1963).

CERAMIC BUILDING MATERIAL

By Leigh Allen

Introduction

A total assemblage of ceramic building material weighing 27, 180 kg was recovered from 15 of the excavated sites (Table 7.54).

Methodology

The whole assemblage was initially scanned and divided into either Roman or medieval material. The medieval material was weighed but no further analysis of type or fabric was undertaken. The Roman tile fragments were weighed, measured (where a complete dimension existed) and assigned to one of the following tile type categories: tegula (A), imbrex (B), tubulus (C), plain tile (D) or brick (E). Fragments without distinguishing characteristics or measurable thicknesses were assigned to the miscellaneous category. The fragments within the five recognisable tile type categories were examined macroscopically with a x20 hand lens and seven distinct fabric types were identified.

Summary

The results of the analysis are tabulated below (Table 7.54), giving the total weight in grammes of the Roman, medieval and miscellaneous fragments recovered from each of the individual sites.

Roman tile

The tile types are summarised in table 7.55. Tegulae were identified by the existence of a flange, a groove at the base of the flange or traces of an incised semi-circular design or signature at one end of the tegula. There were 25 fragments of tegulae in the assemblage weighing 7125 g (47% of the total Roman material).

Imbrices are the curved tiles which cover the tegulae flanges on a roof, they taper along their length. There were only four fragments from imbrices identified in the assemblage weighing 475 g (3% of the total).

Tubuli were identified by the presence of a key for plaster or remains of the perforation in the side through which the air would have passed. There were 13 fragments weighing 750 g (6% of the total Roman material).

The plain tile category includes fragments of tile with thicknesses that range from 17–39 mm (fragments with a thickness greater than 40 mm have been classified as bricks (see below). These fragments could originate from tile types A–C although they have none of the distinguishing features mentioned above. Alternatively they may be from any one of the great variety of floor tiles or pilae. There were 43 fragments of plain tile weighing 6525 g (43% of the total).

There was one fragment of brick recovered weighing 150 g (1% of the total Roman material). It may have originated from a floor or bonding tiles such as a Lydion, pedalis or sesquipedalis.

Tile Fabrics (Table 7.56)

Seven distinct fabric types were identified. Fabric 1 was predominant comprising 8125 g of tile (54% of the total assemblage). This fabric has a soft, soapy matrix, reddish-pink in colour with a variable degree of streaks and swirls of badly mixed lighter coloured clay. The inclusions comprise abundant very fine quartz, abundant fragments of grog and frequent fine mica particles. Tile fragments of this fabric have been recovered from other excavations in Gloucestershire notably at Fairford, Claydon Pike (Palmer *et al.* in preparation) and Somerford Keynes. Its source is probably the nearby tile kilns of Minety in Gloucestershire.

Medieval tile

The total assemblage includes 7525 g of medieval tile, no further analysis of tile type or fabric has been carried out.

Conclusions

The total quantity of tile recovered was very small and the fragments were very abraded. There were only 15, 025 g of tile identifiable as Roman, nearly 50% of which came from fragments classified as plain tiles which could originate from a wide variety of floor tile types. The other large group consists of roof tiles, predominantly tegulae with very few examples of imbrices.

WATERLOGGED WOOD

By N Mitchell

Introduction

An assemblage comprising the remains of 14 water-logged wooden posts and/or stakes, largely of oak, were recovered from Lynches Trackway, Latton 'Roman Pond' and Weavers Bridge.

Lynches Trackway

A single well-preserved oak stake was recovered. It had been cut to a point on three faces by a broad flat axe leaving one third of the point untooled. Measuring 950 mm long and 85 mm in diameter it is roundwood with heartwood, sapwood and bark intact.

Table 7.57 Slag identification, all sites.

Site	Context	Sf no.	Identification	Mass	Comment
Birdlip Quarry	33	156	HB or Slag Cake	1480.0	130*120*50mm
	781	1146	SSL/CIN	6.5	
Duntisbourne Grove	26		CIN?	4.0	
Burford Road	206		Clinker	17.0	
Cherry Tree Lane	6		HB	133.5	55*50*25mm
Preston Enclosure	202		SSL?	35.0	
St Augustine's Lane	143		Clinker?	14.0	
Westfield Farm	12		SSL	130.0	
Street Farm	17		SSL/CIN	3.0	
	119		Clinker	29.0	
	199		Clinker?	110.0	
	304		Coal/Shale?	293.0	
	719		Clay Lining	82.0	
	870		Slag/Clinker?	200.0	
	888		SSL	85.0	
	889		Clinker	3.5	
Court Farm	286	4	SSL	67.0	
	33		CIN	19.0	
	43		SSL	48.5	
Weavers Bridge	57		Limestone?	23.0	Ca DETECTED
NOSNI 96	9	2590	Clinker	744.0	
Trinity Farm	9	1	Limestone?	41.0	Ca DETECTED
Ermin Farm	5	8	Crucible		Cu, Sn minor Pb

Latton 'Roman Pond'

One willow or poplar stake, sf 99, and the remnants of five oak posts were recovered. The willow/poplar stake is the only well preserved wood from the site and was recovered from ditch fill 316. It is the tip of a small roundwood stake measuring 106 x 36 mm and has been cut to a point with four long axe marks. Its function is unknown.

The remnants of three oak posts, sfs 114–116 were retrieved from an alignment of ten postholes orientated north-south (postholes 288, 300 and 315). They appear to have been roundwood but only the tough heartwood survives and there is no evidence for tooling or even shaping to a point. Although they only survive to between 150 and 210 mm in length they are estimated to have been at least 180 mm in diameter. A fourth posthole, fill 319, similarly produced a badly decayed remnant of an oak post, sf 132 with no evidence of tooling. Two other oak stakes, approximately 300 x 45 mm have been radially split but are too poorly preserved to show tool-marks.

Weavers Bridge

The five stakes, (sfs 105, 106, 107, 108 and 139) are of oak heartwood and are well preserved only at their points with sapwood surviving in patches. They are all characterised by their long, slender points resulting from very regular axing. They have numerous axe marks creating seven or eight faces of tooling on the point of each stake. Only 108 differs in having four major faces of tooling with the edges finely chamfered to create four smaller faces. Their slightly flattened tips show that the stakes were, at least in part, driven into the ground.

SLAG AND RESIDUE

By G. McDonnell

Introduction

The material classed as slags and other residues recovered from the excavations are described and listed in Table 7.57. Sieved residues from soil samples were examined using magnetic susceptibility to assess the presence of (iron) metalworking debris. These results are given in Table 7.58.

Slag classification

The slags were visually examined and the classification is solely based on morphology. In general slags and residues are divided into two broad groups; diagnostic and non-diagnostic slags. The diagnostic slags, can be attributed to a particular industrial process. These comprise the ironworking slags, ie. smelting or smithing slags, and the non-ferrous residues, eg. crucibles. The non-diagnostic residues cannot be directly ascribed to a process, but may be identified with a process by association with diagnostic residues, eg. clay furnace lining with smelting slag.

Table 7.58 Magnetic Susceptibility Results (Units x 10^{-8} m^3/kg).

Context	S.S. No	Mass (g)	Mag Sus	Corrected
198	15	148	123	42
204	26	92	107	58
266	93	42	150	179
267	98	68	268	197
532	58	169	125	37
532	59	97	165	85
532	60	76	120	79
885	125	61	37	30
1127	131	74	98	66
Standard	HS	18	1200	3333

Ferrous diagnostic slags and residues

Hearth bottom (HB) - a plano-convex accumulation of fayalitic slag formed in the smithing hearth. The dimensions (major diameter*minor diameter*depth in mm) are given in the Comment column (Table 7.57).

Smithing slag (SSL) - randomly shaped pieces of fayalitic slag generated by the smithing process.

Hammer scale (HS) - it occurs in two forms, flake and spheroidal. The former is believed to derive from scaling (oxidation) of the surface of the iron being worked, and would be removed from the metal during hammering and deliberately knocked from the surface prior to insertion in the fire. Spheroidal scale is formed during fire welding. Slag is trapped between the two pieces of iron being welded and is ejected during hammering of the weld which form droplets that freeze in flight.

Cinder (CIN) - high silica smithing debris, often formed at the reaction zone between the smithing slag and the hearth lining.

Non-ferrous diagnostic residues

Crucible - fragments or complete ceramic vessels used to melt non-ferrous metals.

Non-diagnostic slags and residues

Cinder (Cin) - a high silica slag that can be formed by high temperature reaction between silica and ferruginous material. It can be ascribed to either the non-diagnostic slags or the diagnostic slags depending on its iron content and morphology.

Furnace/hearth lining (FL or HL) - the clay lining of an industrial hearth, furnace or kiln which has been subjected to high temperature oxidising conditions. It is characterised by a vitrified surface inner face. In some cases the tuyere mouth may be preserved. Furnace Lining is considered non-diagnostic, since it cannot be ascribed to a process on grounds other than archaeological association, i.e. there is as yet no diagnostic feature which will distinguish vitrified lining from a smithing hearth from that from an iron smelting furnace.

Clinker - clinker or ash probably derived from steam boilers.

Other Material (Other) - which normally comprises fragments of fuel etc., and in this instance includes coal/shale

Discussion of slag types

The identification of the slags is given in Table 7.57. The majority of fragments were either smithing slags (SSL or SSL/CIN) or of modern derivation, probably clinkers from fireboxes (notably Street Farm). The quantity of smithing debris recovered was small and it can all be considered as 'background' noise. The modern material probably derives from steam powered engines. The clay lining (Street Farm, context 719) and the slag/clinker lining (Street Farm, context 870) probably could have derived from some (modern) industrial process. The following discussion relates to individual pieces that require specific attention.

Birdlip Quarry

This large pieces of slag (1480 g) from context 33 is either a large hearth bottom derived from smithing or a slag cake formed by tapping the slag from a smelting furnace into a small pit in front of the furnace. The slag lacks the vesicular appearance of hearth bottoms, and has clearly been fully liquated.

Soil samples from an oven (context 199) were sieved and the residues sent for examination to assess the presence of metalworking residues. The samples were weighed and their magnetic susceptibility measured. It would be expected that if the oven/hearth had been used for ironworking then hammerscale, other micro-slags and metal fragments would be present in the samples. These residues have very high magnetic susceptibility and their presence could be readily detected without recourse to microscopic study. The results are given in Table 7.58. They have been corrected to a standard mass of 50 g, and the values obtained from a sample of hammerscale are also provided. These results demonstrate that there is no enhanced magnetic susceptibility due to iron-working, but that there may be some enhancement due to burning.

Weavers Bridge

This piece from context 57 is not a slag, but probably altered limestone or other sedimentary rock. XRF analysis detected calcium as the major element.

Ermin Farm

Fragments of crucible were recovered from enclosure ditch 49 (segment 6, fill 5). XRF analysis detected copper, tin and a low level of lead, indicating the melting and casting of tin bronze.

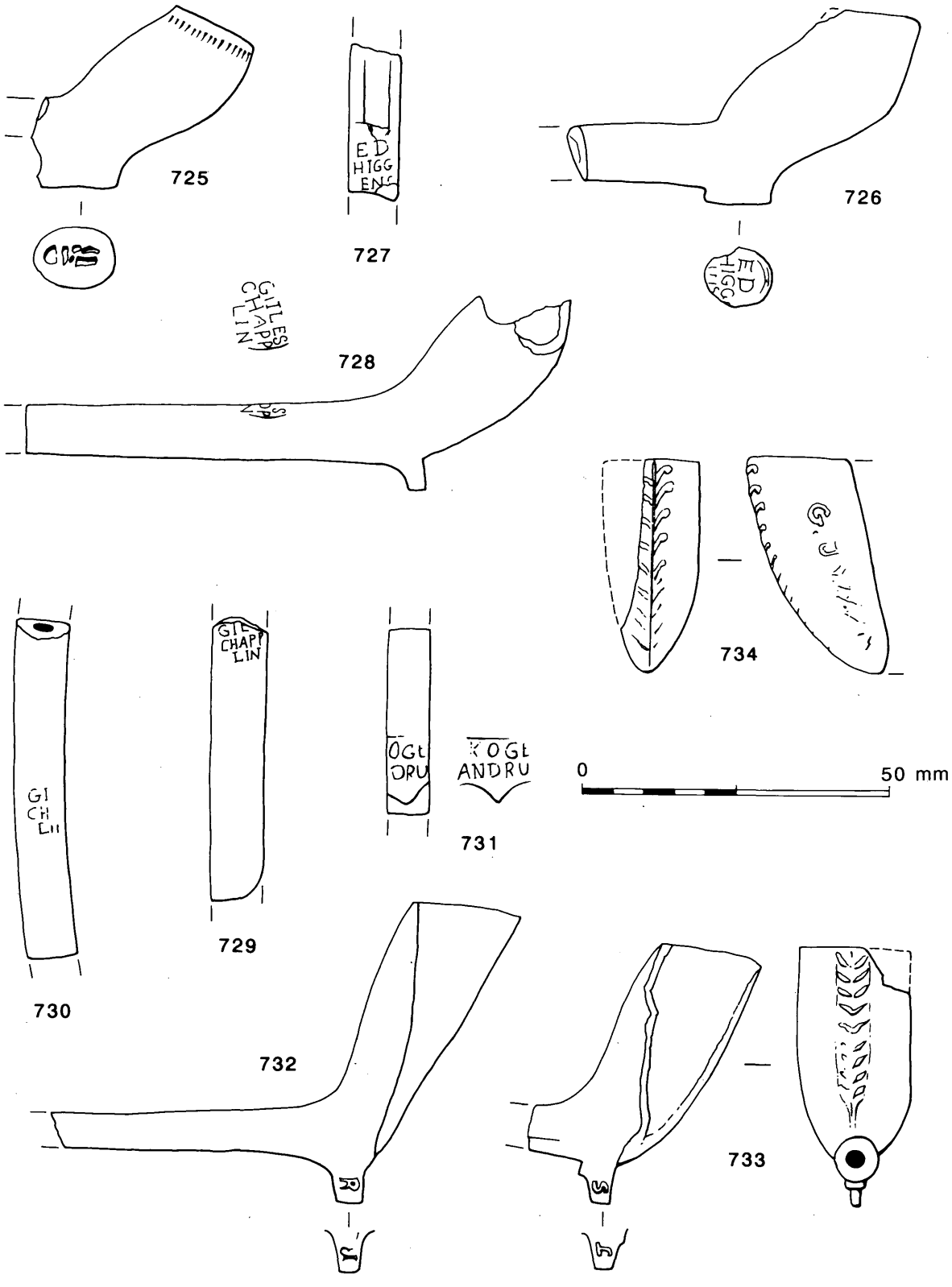


Figure 7.42 Clay pipes.

Table 7.59 Stem-bore diameters.

Context	Wide	Medium	Narrow	Date	Bowl dates
749 (3)	18	0	0	-1680	1670–1700
258 (1)	0	7	8	1720+	*c.* 1725–50
611	2	3	6	1725+	18th–19th
227 (3)	0	0	14	1720+	*c.* 1830–65

Conclusions

Identification of the slags has shown no evidence for metalworking in the areas excavated. The presence of ironworking debris at Birdlip Quarry, Cherry Tree Lane Compound, Preston Enclosure, Westfield Farm, Street Farm and Court Farm should be noted for future excavations in adjacent areas. It should be noted that all the evidence points to the slags deriving from smithing, but with such small samples it is not possible to be completely certain that some of the slags may be smelting slags. In particular the large piece from Birdlip Quarry could be a smelting slag, but if there was further evidence for smelting 10–100s kg of slag would be expected.

CLAY PIPES

By W R G Moore

Street Farm

An assemblage of 149 fragments of clay tobacco-pipes was recovered. This report provides an illustrated study of the makers' marks and the bowl forms (Fig. 7.42). The bowls have been classified and dated by reference to the Gloucester typology (Peacey 1979, 45-9) and that published for southern England (Oswald 1975, 54–5).

The assemblage forms a small group of marked pipes that can be compared with other similar finds from the Wiltshire/Gloucestershire border, such as those from the nearby village of Brinkworth (Oak-Rhind 1980).

Makers' marks

725 Gauntlet incuse on the base of a bowl similar in form to Gloucester type 2b (1630–60). The well-known gauntlet mark is thought to have been used by the Gauntlet family working in Amesbury during the 17th century. However, it was widely copied both in the south-west and elsewhere (Atkinson 1970, 212–13). In Wiltshire and Somerset the incuse gauntlet mark has been dated to the period *c.* 1640–60 (Oswald 1975, 63). Ctx 812.

726–7 ED/HIGG/ENS One unstratified example occurs as an incuse mark on the base of a bowl similar to Gloucester type 7 (1690–1710). A second example from context 232 occurs as an incuse mark on a thick stem. Edward Higgens was working at Salisbury 1698–1710 and perhaps also worked at Cirencester (Atkinson 1980, 69). Many examples of his pipes have been found both in Wiltshire and Gloucestershire (Peacey 1979, 63; Atkinson 1980, 69). In the latter county, pipes by this maker are much more numerous than those of any other maker (Peacey, ibid).

728–730 GILES/CHAPP/LIN Three examples occur as incuse marks on thick stems. The first and clearest example, from context 749, retains the lower part of a bowl with a small, well-defined spur, comparable with Southern England type 11 (*c.*1690–1700). The other examples are from contexts 285 and 773. Giles Chaplin (ob. 1714) was a potter and pipemaker living at nearby Ashton Keynes (Atkinson 1980, 73; Oak-Rhind 1980, 356). Examples of his pipes are known from Wiltshire and Gloucestershire (Peacey 1979, 63; Atkinson 1980, 73; Oak-Rhind 1980).

731 ROGE/ANDRU Occurs as an incuse mark across a stem from context 258. Roger Andrews was apprenticed at Marlborough in 1718. His pipes can therefore be dated *c.* 1725–50 (Oak-Rhind 1980, 354). Further examples of his marked stems have been noted from Brinkworth, Brimscombe and Marlborough (Peacey 1979, 63; Oak-Rhind 1980, 354).

732 I/R Small serif initials in relief on the sides of a slightly pointed spur. The letter 'I' appears to have been recut over a letter 'R'. From context 227. The incomplete bowl is large, plain and upright in form and can be dated *c.* 1830–60. Possibly associated with the Ring family of Bristol (Price and Jackson 1984).

733 J/S Small serif initials in relief on the sides of a pointed spur. From context 269. The bowl is decorated along the back seam (and probably the front one as well though it is largely missing) with simple oak-leaf decoration. The bowl shape resembles Gloucester type 16 (1830–70). Such J/S marks have been found in quantity all over Wiltshire (Atkinson 1970, 215). The most likely maker is John Skeanes who was working in Salisbury 1858–75 (Oswald 1975, 198).

734 G.J(AME?)... Serif letters in relief with only the first letter clear, reading down the side of an incomplete bowl from context 119. The bowl was decorated along the front seam with a simple leaf design and dates from *c.* 1820–60. Makers' marks of this sort are rare particularly in the 19th century (Oswald 1975, 70). No parallel has been found for this particular mark, though the maker was possibly George James, working in Bristol 1817–48 (Oswald 1975,154).

Unmarked bowls

735–6 Two bowls, one of them complete, from context 749 are similar to Gloucester type 4 (1670–1700).

737 A bowl with most of the upper part missing, from context 358, has a small well defined forward spur, similar to cat. 729. The bowl shape is southern England type II (*c.* 1690–1714).

Decorated bowls

Four 19th-century decorated bowls without maker's marks were recovered. Two of these, a fluted bowl from context 227 and a bowl showing footballers from context 936, are post-1850.

738 A 19th-century bowl, from context 227, has a distinctive feature that suggests it was made in Bristol - a large splayed foot with a tail joined to the stem. The bowl itself has simple oak-leaf decoration along both front and back seams. Similar examples have been found in Bristol in deposits dated 1850–65 (Price and Jackson 1984, 284, fig. 6, 13 and 14).

There is a fragment from another similar pipe with a tailed foot from context 267.

Plain stem fragments (Table 7.59)

Williams (1997) has pointed out that the small numbers of stem fragments available are not sufficient for stem bore dating by statistical methods to be carried out. Nevertheless, the four largest groups of stem fragments, each with 11–18 stems, were examined to gain some general impression of date. The results, it must be admitted, are not very informative and add little to the dating gained from the bowls. The bore diameters referred to are wide (7/64" or greater), medium (6/64") or narrow (5/64" or less). The general tendency is for stem bores to decrease: widen in the mid 17th century, then become medium, and by the mid 18th century, narrow (Walker 1967; Oswald 1975, 92–5).

Two marked clay pipe fragments from Cirencester

Context 1 produced 10 stem fragments among which were two pieces bearing maker's marks.

739 ...ODEN/ELY The incomplete mark is incuse, with serif letters impressed along a thin stem. Maker's mark type (4) of Noah Roden (II), Working 1824–55 at Broseley, Shropshire (Atkinson 1975, 77).

740 W SO.../BRO... The incomplete and worn mark shows small serif letters in relief along a thin stem. William Southern was in business at Broseley using such marks from 1829 to 1850 (Atkinson 1975, 83).

It is interesting to note that very few Broseley pipes dating from the period *c.*1720–1850 have been recorded in Gloucestershire (Peacey 1979, 68).