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**Excavation of Iron-Age and Roman Occupation at Coln Gravel,
Thornhill Farm, Fairford, Gloucestershire, 2003 and 2004.**

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INTRODUCTION

The Coln Gravel site near Fairford in Gloucestershire was excavated by Oxford Archaeology (OA) in 2003 and 2004. It lies within the Cotswold Water Park, an area of the Upper Thames Valley that has been subject to widespread gravel extraction for over 50 years. This has in turn led to an ever increasing amount of excavation on the gravel terraces, resulting in the region becoming one of the most intensively studied archaeological landscapes in Britain (see below). The Fairford/Lechlade area in particular has been subject to extensive archaeological investigation from the late 1970s onwards, with excavations targeting the dense concentrations of Iron-Age and Roman cropmarks revealed by aerial photographs (Fig. 1). One such concentration was at Thornhill Farm, the main area of which was excavated by the Oxford Archaeological Unit (OAU: now Oxford Archaeology) between 1985 and 1989 (Jennings *et al.* 2004). The excavations at Coln Gravel encompassed the southern periphery of the Thornhill Farm site in addition to what were almost certainly the northern limits of a less well-known Roman settlement at Kempsford Bowmoor (OAU 1989) (Fig. 2).

Location, Geology and Topography

The Coln Gravel site lies near the confluence of the rivers Thames and Coln, immediately south of the A417 Lechlade to Fairford road (OS Nat. Grid SU 180998; Fig. 1). It straddles the First Gravel Terrace of the Upper Thames Valley, approximately 1 km to the north-east of the river Coln floodplain, at a height of 76 m above OD. In prehistory relict water courses and marshy areas dissected the terrace, but islands and tongues of gravel provided well drained sites that were dry enough for settlement. South of the site inliers of Oxford Clay and river gravels give way to the alluvium of the valley floor before rising up to the sand and limestones of the Corallian ridge in the direction of Swindon. To the north the gravel terraces rise to meet the clay and cornbrash of the Cotswold dip slope and limestone uplands.

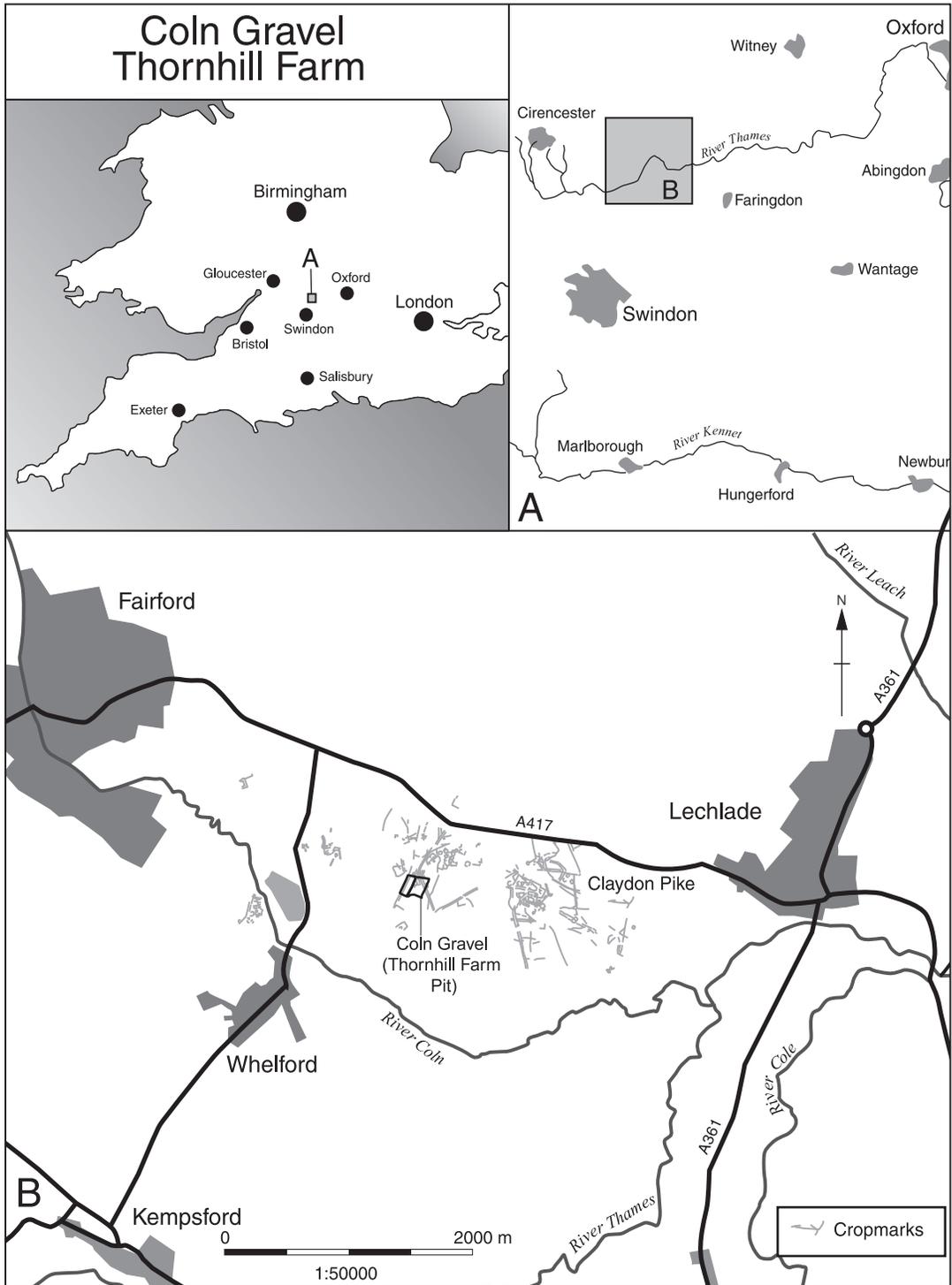


Fig. 1. Site location.

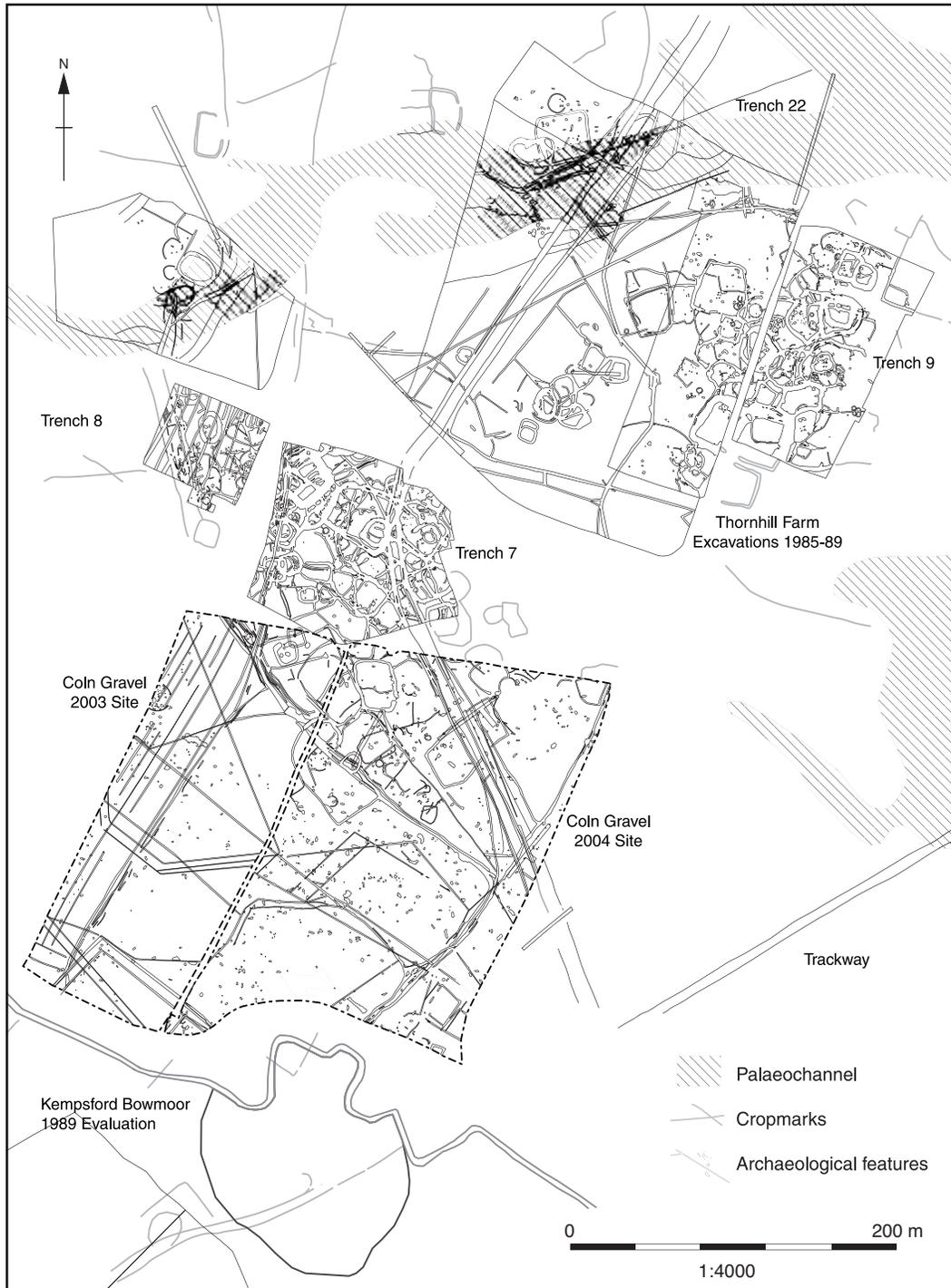


Fig. 2. The excavations of 2003 and 2004 in relation to the earlier archaeological investigations at Thornhill Farm.

Archaeological Background

The archaeological background to the Upper Thames region has been well documented (e.g. Fulford and Nichols 1992; Miles 1997; Jennings *et al.* 2004; Miles *et al.* 2006). Only a very brief summary of the Iron-Age and Roman landscape as it relates to the features around Coln Gravel is given here.

The earliest evidence for occupation on the lower gravel terraces of the Upper Thames Valley can generally be dated to the early–middle Iron Age, and it is throughout the middle Iron Age that activity became most widespread. There are known sites of this period on the river gravels to the west at Cotswold Community (OA 2003), Shorncote Quarry (Hearne and Adam 1999), Latton Lands (Powell and Laws forthcoming), and Cleveland Farm near Ashton Keynes (Coe *et al.* 1991). Closer to Coln Gravel, middle Iron-Age settlements have been excavated at Horcott (Pine and Preston 2004; Lamdin-Whymark *et al.* forthcoming), Claydon Pike (Miles *et al.* 2006) and within Lechlade itself (CAT 1996; OAU 2001). Further down the Thames Valley in Oxfordshire is a particular concentration of middle Iron-Age settlement, including Farmoor (Lambrick and Robinson 1979), Abingdon (Allen 1991; 1997), Watkins Farm (Allen 1990) and Mingies Ditch (Allen and Robinson 1993).

The late Iron Age saw relatively widespread settlement disruption in the region with some of the sites listed above being abandoned, and others shifting in location and form. Along the lower gravel terraces there was also an apparent increase in specialist pastoral activity, which, along with other developments such as changes in house types, was characteristic of the region during the late Iron Age (Allen 2000, 21).

After the Roman conquest there was little noticeable difference in settlement form or location, with sites like Claydon Pike and Horcott continuing as before. However, in the early 2nd century AD, there is evidence for widespread settlement disruption across the region, with many sites either being abandoned or spatially transformed. This must have been the result of large-scale landscape reorganisation, which included the apparent introduction of a system of defined trackways linking settlements along the gravel terraces and beyond.

Further settlement and economic changes occurred from the later 3rd century AD. This seems generally to have been a period of considerable prosperity in at least part of the region, especially to the north and west of Cirencester in the Cotswolds. Even in the Thames Valley itself there is some evidence for increasingly centralised control of the land, possibly from a smaller number of rural villa estates.

Excavation Methodology: the ‘iterative’ approach

Oxford Archaeology was requested by Hanson Aggregates Ltd to carry out the mitigation works for a phase of sand and gravel extraction at Coln Gravel. The quarry encompasses a Scheduled Ancient Monument (Gloucestershire SMR no. 459) much of which was open area excavated by the OAU in the 1980s (see above). The parts of the monument where excavation had taken place were subsequently quarried. In 1999 the remainder of the site became subject to the ‘Review of Old Minerals Planning Permissions’ (ROMP) and in 2003 and 2004, following an announcement by Hanson Aggregates of its desire to continue mineral extraction from the site, it was excavated by OA.

The excavations utilised an ‘iterative’ research-led approach, which relied upon a constant flow of information between excavators and analysts. After the whole area had been stripped of soil cover and the exposed gravel hand cleaned, the subsequent excavation strategy was designed around a set of research questions. Those questions, agreed by archaeological contractor, developer and

archaeological curators, were developed explicitly from extensive knowledge of the site (from e.g. aerial photographs, previous excavations, strip map plan and other excavations in the local area) and were an amalgam of specific queries for interpreting the development of the site, such as relationships between structures and functions, and the landscape. A Written Scheme of Investigation (WSI) was prepared to address these questions, and a continuous review of the process through regular site meetings (of research staff, local and national curators and excavators) assessed research progress and where necessary amended the excavation strategy.

The excavated material was assessed on a daily and weekly basis to a sufficient extent (e.g. spot dating of pottery, examination of soil samples) to allow on-site sampling procedures to focus only on the retrieval of data relevant to the research questions. The sampling strategy was then sufficient to enable an understanding of the character and date of the archaeology, without unnecessary replication of redundant data and information.

The 'iterative' approach allowed the excavation to be carried out in a way that optimised its research potential in a practical, flexible and cost-efficient way, both during excavation and also during subsequent stages of assessment and analysis.

ARCHAEOLOGICAL DESCRIPTION

Period 1: early Iron Age

No features can be assigned to the early Iron Age. A sherd from the shoulder of a carinated bowl was unstratified.

Period 2: early to middle Iron Age (Fig. 3)

Early to middle Iron-Age activity comprised scatters of isolated features. These included a large ring-gully (Structure 1) situated in the north-west corner of the site and four pits.

Roundhouse

Structure 1, represented by curvilinear gully 213 in the north-eastern corner of the site, extended north-eastwards beyond the limit of the excavation. The roundhouse defined by the gully was approximately 15.90 m in diameter and had a south-west-facing entrance 5.60 m wide. An apparent terminal at the north-eastern end of the gully's northernmost section may indicate that there was also a north-facing entrance. The gully was 0.40 m wide and 0.14 m deep on average and therefore relatively slight given its large diameter, a fact that indicates a significant degree of truncation. A number of pits and postholes present within the ring-gully did not form any coherent plan.

Pits

The pits (214, 217, 393 and 2558) contained early to middle Iron-Age pottery and were sub-circular in plan. They ranged from 0.50 to 2.39 m in diameter and from 0.12 to 0.65 m in depth. Pits 214 and 217 were within ring-gully (213) defining Structure 1; pit 217 was cut by Structure 1 and pit 214 cut pit 217. Pit 393 was isolated to the north-east of Structure 1, approximately 12 m south of the northern limit of the excavation. Pit 2558 was to the east of Structure 1, within the northern half of the site.



Fig. 3. Period 2: early to middle Iron-Age features.

Period 3: middle Iron Age (Fig. 4)

Three sub-circular enclosures (enclosures 1, 2 and 3) defined by substantial ditches were constructed on a NW–SE axis across the northern part of the site. There was no evidence that any of them had contained buildings. All three contained middle Iron-Age pottery and animal bones and there were particularly heavy concentrations in the fills of enclosure 1. To the west of enclosure 1 were the badly truncated remains of a roundhouse (Structure 2) and a sub-circular pit (389). Both these features contained complete barrel-shaped jars. Approximately 28 m south of enclosure 1 was a circular pit (815) containing middle Iron-Age pottery and metal-working debris. By the end of the middle Iron Age all of these features had silted up or had been backfilled.

Roundhouse

Structure 2 comprised two short lengths of gully (437 and 615) and was largely cut away by Roman trackway ditch 2711. Gully 437 was 1.40 m in length by 0.24 m in width and 0.18 m in depth and was oriented NE–SW. It ended in a terminus to the north-east, the fill of which (436) contained a complete barrel-shaped jar made in shell- and limestone-tempered ware. Gully 615 was 1.00 m in length by 0.35 m in width and 0.12 m in depth.

Pits

Pit 389 was sub-circular in plan, measuring 0.60 m in diameter by 0.15 m in depth. A complete barrel-shaped jar made in shell- and limestone-tempered pottery was recovered from the fill, along with inclusions of burnt stone. Pit 815 was circular in plan, measuring 1.24 m in diameter by 0.50 m in depth. The lowermost fill (816) contained frequent large stones and ten fragments of metal-working debris. Nine sherds of middle Iron-Age pottery were recovered from this pit.

Enclosures

Enclosure 1 comprised a sub-rectangular ditch, approximately 13.8 by 14.5 m (externally) with an entrance to the north-west (Fig. 5). The ditch overall measured *c.*3.00 m in width by 0.86 m in depth, although it was slightly shallower on the eastern side and comprised at least three recuts. The recuts were often difficult to distinguish but each was probably around 1.5 m in width, varying in profile from concave to flat-based with gently sloping sides. A series of substantial postholes (*c.*0.5 m diameter) revealed in the bases of four of the sections excavated through the ditch may have predated the enclosure. It could represent the ephemeral remains of a post-built structure. The enclosure entrance was elaborated by two rows of postholes forming a funnel shape. The ditch fills contained numerous animal bones, including those of cattle, horse and sheep, and sherds of pottery, including the remains of at least one barrel-shaped jar. No evidence for any structures was found within the enclosure. However, this does not preclude the possibility of a building or buildings constructed using either mass-wall techniques (i.e. turf walls) or stake walls, which have left no trace in the gravel. Whether buildings were present or not, the ditch was clearly the focus for structured deposition, with large amounts of animal bone and some pottery, possibly feasting debris, being deposited within it (see Evans below). Similar enclosures were found in the late Iron-Age/early Roman phase at Claydon Pike to the east (Miles *et al.* 2007) and in the Thornhill Farm excavation to the north, a particularly striking parallel there being enclosure E11 (Jennings *et al.* 2004, 54). The Claydon Pike enclosures were interpreted as animal stock pens, while enclosure E11, which contained significant amounts of burnt limestone and animal bone, was possibly domestic in nature.

Enclosure 1 was clearly different to many of the other enclosures in the immediate vicinity. Although a domestic function is quite feasible, a more wholly ritual purpose remains a possibility,

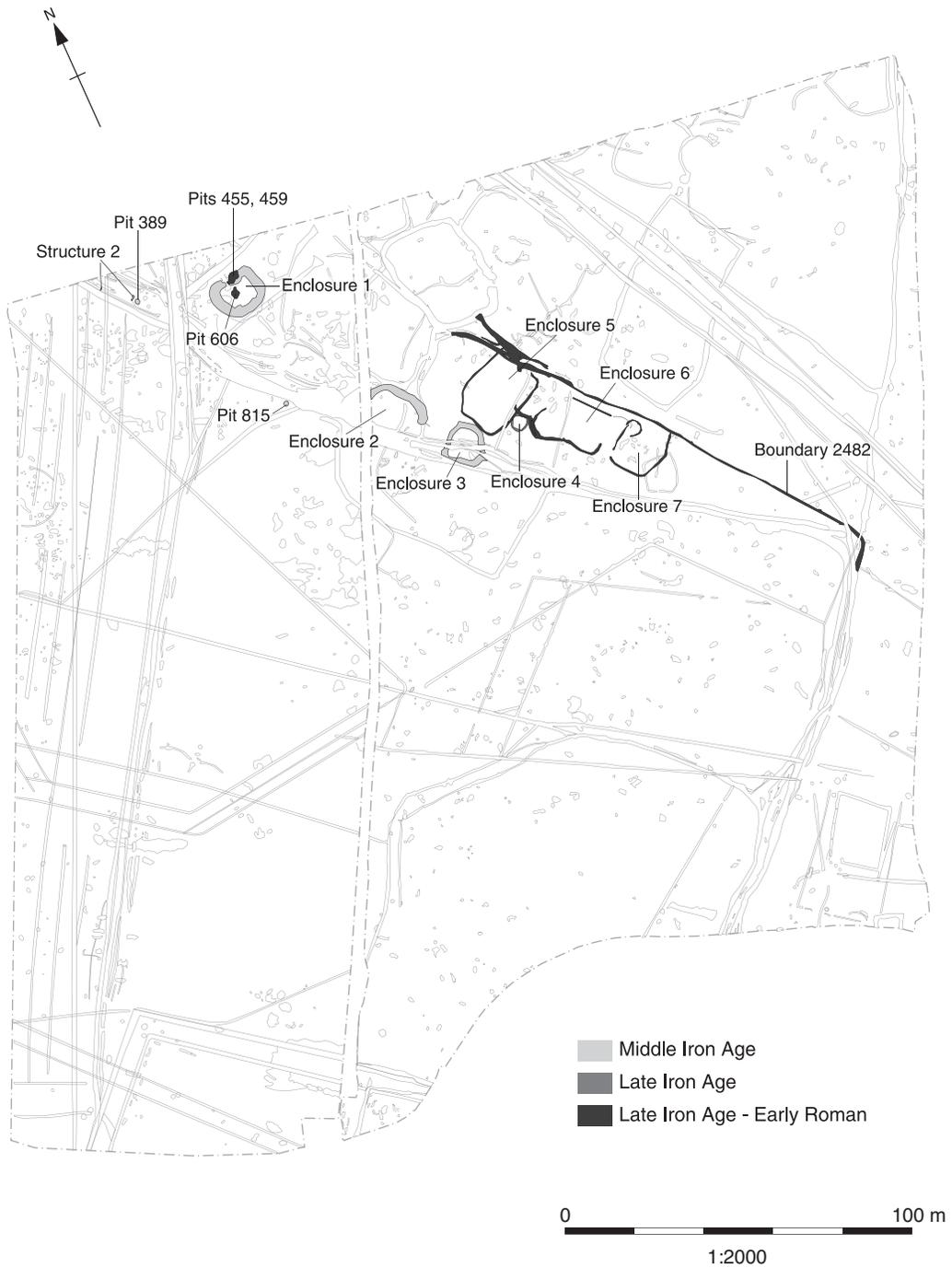


Fig. 4. Periods 3, 4 and 5: middle Iron-Age, late Iron-Age and late Iron-Age to early Roman features.

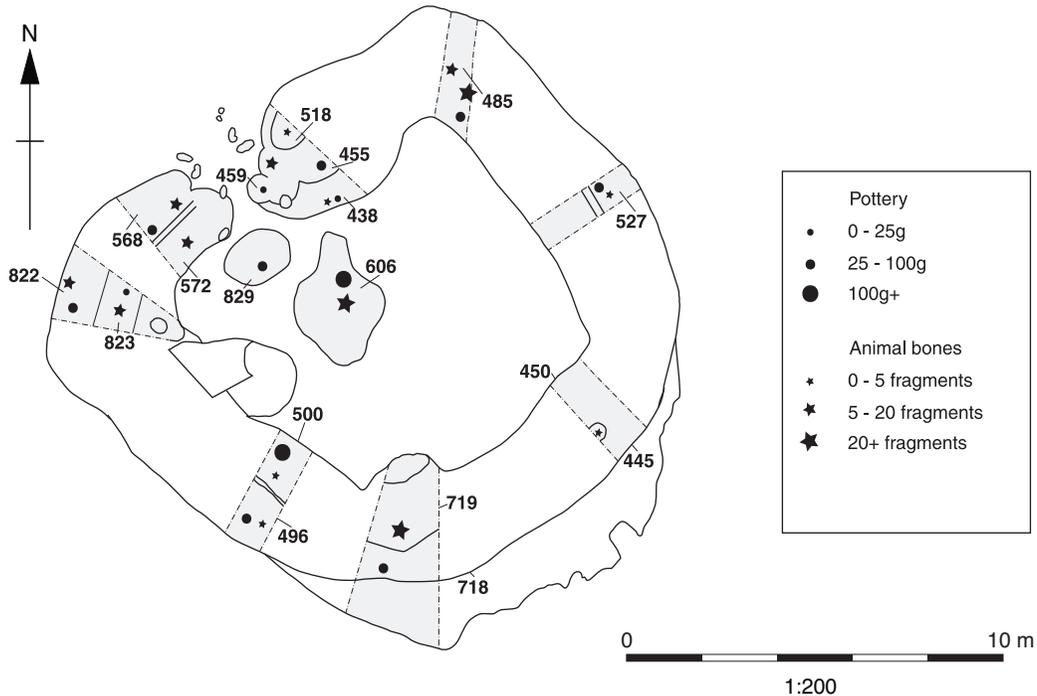


Fig. 5. Enclosure 1 showing distribution of pottery and animal bone.

especially as a pit (606) containing a cattle skull was dug within the interior during the late Iron Age/early Roman period (see below). However, it must also be reiterated that there need not have been any great differentiation between ritual and domestic function. During the early Roman period another pit (829) was dug in the entrance of the enclosure, while a substantial linear ditch was traced around its northern and western sides, possibly indicating that the feature still existed in some form.

Enclosure 2 comprised a substantial curvilinear ditch, oriented NW–SE and measuring 17 m in length by 1.3 m in width and 0.39 m in depth on average. In profile it was flat-based with concave sides. The ditch ended in a terminal to the south-west but was cut away by later Roman ditches to the south-east. Prior to its partial destruction it seems to have formed a substantial sub-rectangular enclosure with a south-west-facing entrance, which had been recut on at least two occasions. The ditch fills contained small amounts of early to middle Iron-Age and late Iron-Age pottery. As in enclosure 1 no trace of structures was found.

Enclosure 3 comprised a substantial sub-circular ditch, forming a two-phased enclosure, approximately 22.50 m in diameter. The entrance to the first phase was presumably cut away during the construction of the second. However, the second phase had a north-facing entrance approximately 4 m in width, formed by two rounded ditch termini. The ditch varied in profile from irregular to flat-based with concave sides and it was largely filled with layers of silty clay containing moderate amounts of pottery of early to middle Iron-Age date and large amounts of animal bone including two cattle skulls from the basal fills of the primary ditch in the south-west corner of the enclosure. As with enclosure 1, the ditch was clearly the focus for structured deposition (possibly of feasting debris) over a sustained period.

Period 4: late Iron Age (Fig. 4)

The only feature with a definite late Iron-Age date was a small sub-circular ring-ditch (enclosure 4) in the middle of the northern part of the site. It was approximately 5.00 m in diameter by 0.40 m in width and 0.15 m in depth. In profile the ditch was 'U'-shaped. Four sherds of late Iron-Age pottery were recovered from the upper fill.

Period 5: late Iron Age to early Roman (Fig. 4)

At some point during the late Iron Age to early Roman period a substantial linear boundary ditch (2482) was constructed across the site on a NW–SE alignment, similar to that of the middle Iron-Age enclosures (which had, however, gone out of use). The ditch had been cut away by later ditches at both ends, but at its south-eastern end it turned 90° to run south-west, indicating that it had originally run down the eastern side of the site. Adjacent to 2482 to the south-west was a series of three sub-rectangular enclosures (enclosures 5, 6 and 7). Like the middle Iron-Age enclosures, these enclosures were largely devoid of internal features apart from occasional tree-throw holes. However, as with the earlier enclosures, this does not mean that structures were not present. Three substantial pits were dug within the entrance of enclosure 1 (see Fig. 5). Two (455 and 459) were cut into the fills of the eastern ditch terminal and the other (606), which contained cattle remains, was positioned obliquely across the enclosure entrance. The positioning of these pits suggests that they represent some kind of closing deposit for the enclosure.

Enclosures

Enclosure 5 was sub-rectangular, measuring approximately 20 m in length by 16 m in width and oriented NE–SW. There was no sign of an entrance but the north-eastern side of the enclosure had been cut away by a later ditch. The enclosure was defined by a shallow ditch (2225) measuring 0.70 m in width by 0.46 m in depth on average. In profile the ditch was 'U'-shaped and its upper fill contained 16 sherds of late Iron-Age to early Roman pottery.

Enclosure 6 comprised two lengths of ditch, the southerly of which curved around to the north-east at either end. Taken together the two ditches formed a sub-rectangular enclosure approximately 20.0 m in length by 12.2 m in width and oriented NW–SE. The southern ditch was 0.8 m in width, while the northern one measured 0.4 m across. Neither ditch was excavated.

Enclosure 7 comprised a sub-rectangular enclosure oriented NE–SW and measuring approximately 16.6 m in length by 14.2 m in width. The enclosure had an entrance approximately 2 m wide at its south-western corner. The ditches were 0.46 m in width by 0.18 m in depth on average, and were varied in profile, ranging from flat-based to 'U'-shaped.

Boundary Ditch

Boundary ditch 2482 was approximately 140 m in length and oriented NW–SE, curving around to the south-west at its southern end. It was 0.95 m in width by 0.20 m in depth on average. In profile it had a flat base and concave sides.

Pits

Pit 455 was sub-circular in plan and measured 1.44 m in diameter by 0.72 m in depth. One sherd of late Iron-Age pottery and one sherd of early Roman pottery were recovered from it. Pit 459 was sub-circular in plan, measuring 0.56 m by 0.28 m in depth. Pit 606 was irregular in plan, 3.5 m in length by 2.38 m in width and 0.84 m in depth. The primary fill (605) of this pit had

been dumped from the northern end, possibly to create a ramp. Sealing this, and overlying a cattle skull placed on the base of the pit, was a layer of clay silt (604) containing rim sherds from three late Iron-Age to early Roman jars. Two sherds of early Roman pottery derived from other fills.

Period 6: early Roman (Fig. 6)

After the late Iron-Age to early Roman ditches had silted up, a substantial new boundary ditch (2701) was established to the south of the old boundary ditch (2482) on a similar NW–SE alignment. The same boundary was identified by cropmarks during the 1985–9 excavations (ditch 2622) and dated tentatively to the late Iron Age and early Roman period (Jennings *et al.* 2004, 39). To the north-east of the boundary a series of sub-rectangular enclosures (enclosures 8–15) was laid out in a very similar manner to the early Roman enclosures excavated just to the north (Jennings *et al.* 2004, fig. 3.18). Ditches 2706 and 2707 probably also date to this phase and may have formed part of a sub-rectangular enclosure, which ran beyond the limits of excavation to the north-west. At the same time, a double-ditched rectangular enclosure (enclosure 16) was established in the south-eastern corner of the site. The landscape was thus divided between enclosures, possibly a focus for settlement, to the north-east and east, and open ground, possibly pasture, to the south-west. After the development of these initial features, a second boundary ditch (2711) was established, running up the eastern side of the site for approximately 120 m before turning to recut ditch 2701. Approximately half way along the length of 2701, this new ditch (2711) turned to the south-west, before curving back to the north after approximately 30 m. Assuming that the north-western part of ditch 2701 was extant, a new sub-rectangular enclosure was therefore created to the south of the boundary ditch. Boundary ditch 2700, running NE–SW, was probably also established at this time. After boundary ditches 2701 and 2711 had gone out of use, but possibly prior to the disuse of the enclosures to the north-east, an irregular ditch (2693) was established dividing the southern part of the site up into three large enclosures or fields. Shortly after ditch 2693 was established another boundary ditch (2698) was constructed along the eastern side of the site. During the early Roman period pit 829 was dug in the former entrance of middle Iron-Age enclosure 1, but not cutting the ditch itself. By the end of the early Roman period all of these features had silted up or had been backfilled.

Enclosures

Enclosure 8 was sub-rectangular, oriented north–south and measuring approximately 10.60 m by 9.20 m. It was defined by a ditch measuring on average 0.60 m in width by 0.34 m in depth, and with a ‘U’-shaped profile. It had been recut on at least three occasions. There was an entrance approximately 2 m in width in the south-east corner of the enclosure. A gap in the southern ditch at *c.*0.4 m wide was not large enough to have served as an entrance.

Enclosure 9 was sub-rectangular and measured approximately 31.8 m in length by 25 m in width with an entrance 2 m wide in the south-eastern corner. It was oriented north–south. The ‘U’-shaped enclosure ditch measured 2 m in width by 0.49 m in depth and had been recut on at least one occasion. Although the enclosure interior was largely devoid of features, a sinuous ditch approximately 0.80 m wide by approximately 18 m long bisected the enclosure about half way up its length and there were several unexcavated pits and tree-throw holes.

Enclosure 10 was sub-rectangular in plan, and oriented NW–SE. It measured approximately 24.8 m in length by 21.20 m in width. No entrance was apparent, although this may have lain beyond the limits of excavation. In profile the ditch was flat-based and approximately 1.00 m in width by 0.40 m in depth.

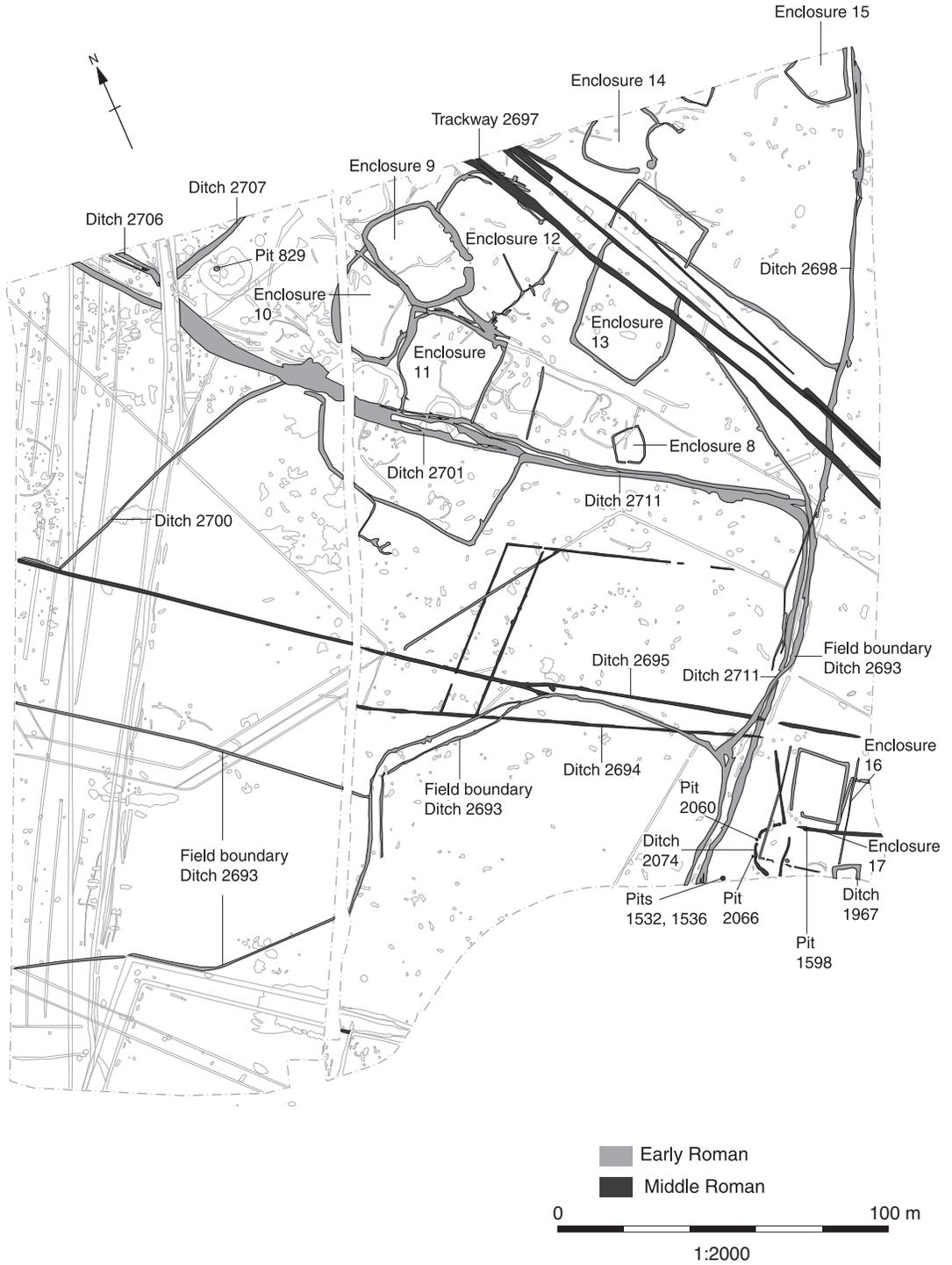


Fig. 6. Periods 6 and 7: early Roman and middle Roman features.

Enclosure 11 was sub-rectangular and measured approximately 30 m in length by 28 m in width. A ditch 1.17 m in width and 0.24 m in depth defined the enclosure on three sides. The fourth (south-western) side was defined by boundary ditch 2701.

Enclosure 12 was rather ephemeral in comparison to the other enclosures. It was defined by irregular intercutting ditches, which were not certainly contemporary. The probable enclosure measured *c.*39 by 30 m. A large gap, some 10 m wide, was defined by two (unexcavated) ditches, running north-east in the south-eastern corner of the enclosure, and may have served as an entrance. The ditches, were generally 'U'-shaped in profile. The enclosure interior was largely devoid of features, although there were several tree-throw holes and unexcavated pits and gullies.

Enclosure 13 was a substantial sub-rectangular area measuring approximately 52 m by 28 m and oriented NE-SW. An entrance seemed to be present in the south-eastern side of the enclosure. Neither this enclosure nor any of the pits within were excavated.

Enclosure 14 was sub-rectangular in plan and comprised two curvilinear ditches, both of which appeared to run on beyond the northern limit of excavation. The enclosure measured approximately 20 by 18 m and had an entrance approximately 2.6 m wide in its south-eastern corner. The interior contained several unexcavated pits and part of a ditch. As this enclosure was not excavated its inclusion within the early Roman phase should be considered speculative.

Enclosure 15 was sub-rectangular in plan and measured approximately 18 by 15 m. No entrance was visible, but the enclosure appeared to run beyond the limit of excavation at its northern end. This enclosure was unexcavated.

Enclosure 16 in the south-eastern corner of the excavation area was approximately 55 by 33 m across and oriented NE-SW. Its limits were defined by three shallow linear ditches measuring on average 0.56 m in width by 0.12 m in depth. At its south-western limit the enclosure was defined by three shorter lengths of gully. Lying within the north-eastern half of the area defined by these ditches was a second rectangular enclosure on the same orientation. It measured approximately 37.0 by 22.5 m across and had an entrance approximately 4 m in width in its south-western corner.

Boundary Ditches

Boundary ditch 2701 was oriented NW-SE. It bisected the northern part of the site and was made up of a number of smaller ditches with a complex stratigraphic sequence that could not be unravelled as parts of it had been cut away by later features. The ditch measured 201 m in length, 4.17 m in width and 0.34 m in depth on average.

Boundary ditch 2711 partially recut ditch 2701 and represented a major reorganisation of the early Roman landscape (see phase summary above). The ditch was approximately 309 m in length, 1.57 m in width and 0.43 m in depth and had been recut on at least one occasion.

Ditch 2698 was a substantial linear boundary running SW-NE along the eastern edge of the site at least as far as ditch 2711. It was 140 m in length, 0.89 m in width and 0.17 m in depth on average.

Boundary ditch 2700 in the western part of the site was approximately 101 m in length and oriented NE-SW. It measured 0.96 m in width by 0.45 m in depth and was recut on at least one occasion. Six sherds of early to middle Iron-Age pottery were recovered from the fill.

Field boundary 2693 was defined by an irregular ditch, which divided the southern part of the site into three areas oriented roughly NW-SE. The entire ditch network was approximately 541 m in length, 1 m in width and 0.27 m in depth on average. Two sherds of early to middle Iron-Age pottery were recorded from the fills.

Pit

Pit 829 was sub-circular in plan measuring 1.80 by 1.35 m across and 0.54 m in depth. Fourteen sherds of early Roman pottery were recovered from the upper two fills.

Period 7: middle Roman (Fig. 6)

The middle Roman period was characterised by a wholesale reorganisation of the landscape. The early Roman enclosures and ditch system in the north-eastern part of the site had gone out of use and a substantial ditched trackway (2697) was driven through this part of the site from north-west to south-east. To the south the early Roman fields were superseded by a more regular, grid-like field system (2695) dividing the landscape into parcels oriented NW–SE. Contemporary with ditch system 2695, lying to its south-west, was linear ditch 2694. In the south-east corner of the site, early Roman enclosure 16 was superseded by sub-rectangular enclosure 17, which ran beyond the limits of the excavation to the south-east. Within enclosure 17 a smaller sub-rectangular ditch (1967) was established (extending beyond the limits of excavation) and to its west a curvilinear ditch (2074) was cut. To the west of enclosure 17 four pits (1532, 1536, 2060 and 2066) were dug and backfilled. Within enclosure 17 a single pit (1598) was dug cutting ditch 1927 and backfilled.

Enclosures

Enclosure 17 was sub-rectangular and ran beyond the limits of excavation to the south and east. The part of the enclosure revealed during excavation measured approximately 45 by 70 m across and was defined by four ditches, one of which subdivided the enclosure interior on a NW–SE axis. Where excavated these ditches ranged from 0.54 to 0.90 m in width and from 0.20 to 0.38 m in depth. Six sherds of early Roman pottery were recovered from the upper fill of the north-western enclosure ditch.

Within the southern part of enclosure 17, ditch 1967 defined a much smaller sub-rectangular enclosure, running beyond the limits of excavation to the south-west. It was oriented NE–SW and the part of it revealed during excavation measured 8.50 m by 4 m. In profile the ditch was ‘U’-shaped and had been recut on at least three occasions. A total of 43 sherds of early to middle Roman pottery was recovered from the ditch fills.

Ditches

Ditch 2074 lay just to the west of enclosure 17. It comprised two stretches of curvilinear gully approximately 18.2 m in length, with a narrow gap 0.2 m in width approximately half way along its length. Both lengths of gully had been recut once. The ditch measured 0.4 m in width by 0.21 m in depth on average.

Ditch system 2695 comprised a rectilinear enclosure oriented NW–SE. It measured approximately 90 m in length by 52 m in width and joined a linear ditch on the same alignment to its south-west measuring 232 m in length. The ditches were 0.75 m in width by 0.21 m in depth on average. A single sherd of early Roman pottery was recovered from the ditch fills. Ditch 2694 was oriented NW–SE. It measured 122.00 m in length by 1.43 in width and 0.25 in depth.

Trackway

Trackway 2697 consisted of two parallel ditches approximately 7 m apart running across the north-eastern part of the site from north-west to south-east. The trackway was approximately 160 m in length and the ditches were 2.6 m in width on average. Although the feature was not excavated, it is clear in plan that both ditches had been recut on a number of occasions and that the northern ditch had shifted to the north-east over time.

Pits

Five pits (1532, 1536, 2060, 2066 and 1598) in the south-eastern part of the excavation area could be assigned to this phase. All were sub-circular and they ranged from 0.44 to 1.40 m in diameter and from 0.23 to 0.70 m in depth. Over 150 sherds of early Roman pottery were recovered from these pits, most from 1598, 2060 and 2066. No other finds were recorded.

Period 8: late Roman (Figs. 7 and 8)

By the late Roman period large parts of the site had been abandoned or perhaps turned over to meadow. A substantial double boundary ditch (2375) ran along the western side on a NE–SW orientation; it was traced in the 1985–9 excavations further north as ditch 302 (Jennings *et al.* 2004, 62). This feature was cut by a substantial double-ditched enclosure (enclosure 19) along the boundary of which lay seven inhumation burials and grave cuts (9000, 9001, 9002, 260, 299, 292 and 355) in the south-western corner of the site (Fig. 8). At some point after the construction of enclosure 19, a right angled ditch (2722) was cut. It probably represented part of a smaller rectangular enclosure running beyond the limits of excavation to the south-east. Five more burials and grave cuts (1054, 1058, 1075, 1062 and 1071) clustered immediately to the west of the south-eastern return of this ditch. All the burials had been truncated and those clustering near ditch 2722 were particularly badly affected.

Boundary Ditch

Boundary Ditch 2375 comprised two parallel ditches, oriented NE–SW along the western side of the site (Fig. 7). The ditches were approximately 254 m in length by 1.2–1.5 m in width. The date of this feature is based on its alignment with a similar feature uncovered during the earlier excavations to the north (Jennings *et al.* 2004).

Double-Ditched Enclosure

Enclosure 19 comprised two substantial parallel ditches oriented NW–SE (Fig. 8). Only two sides of the enclosure were excavated. The remainder extended beyond the limits of the trench. The part of the enclosure revealed measured 89 m in length by 42 m in width. The outer ditch (2704) was 2.16 m in width by 0.47 m in depth on average, and had a flat or concave base, with slightly concave sides. It had been recut at least once. The internal ditch (2692) was 1.01 m in width by 0.38 m in depth on average, and had a flat or concave base with concave sides. The ditch fills contained seven sherds of early Roman pottery, including a sherd from the rim of a black-burnished ware cooking pot.

Ditch 2722 was oriented NW–SE with a 90° return to the south-west. It was approximately 31 m in length, 1.3 m in width and 0.32 m in depth. In profile the ditch was ‘U’-shaped, having a flattish base and concave sides. The ditch had been recut on at least two occasions (1114 and 1490). Three sherds of Roman pottery came from the primary fill (1112) of the final recut (1490).

Inhumations

Within the enclosure was a series of inhumations, placed along the inside of the internal ditch (Fig. 8). All these inhumations had been severely truncated and in some cases the majority of the skeleton had decayed, leaving only long bones (see Witkin below).

Inhumation 9000 comprised adult human long bones. It lay in a rectangular grave cut (258) with a flat base and steeply sloping sides, measuring 1.8 m in length by 0.55 m in width and 0.16 m in depth.

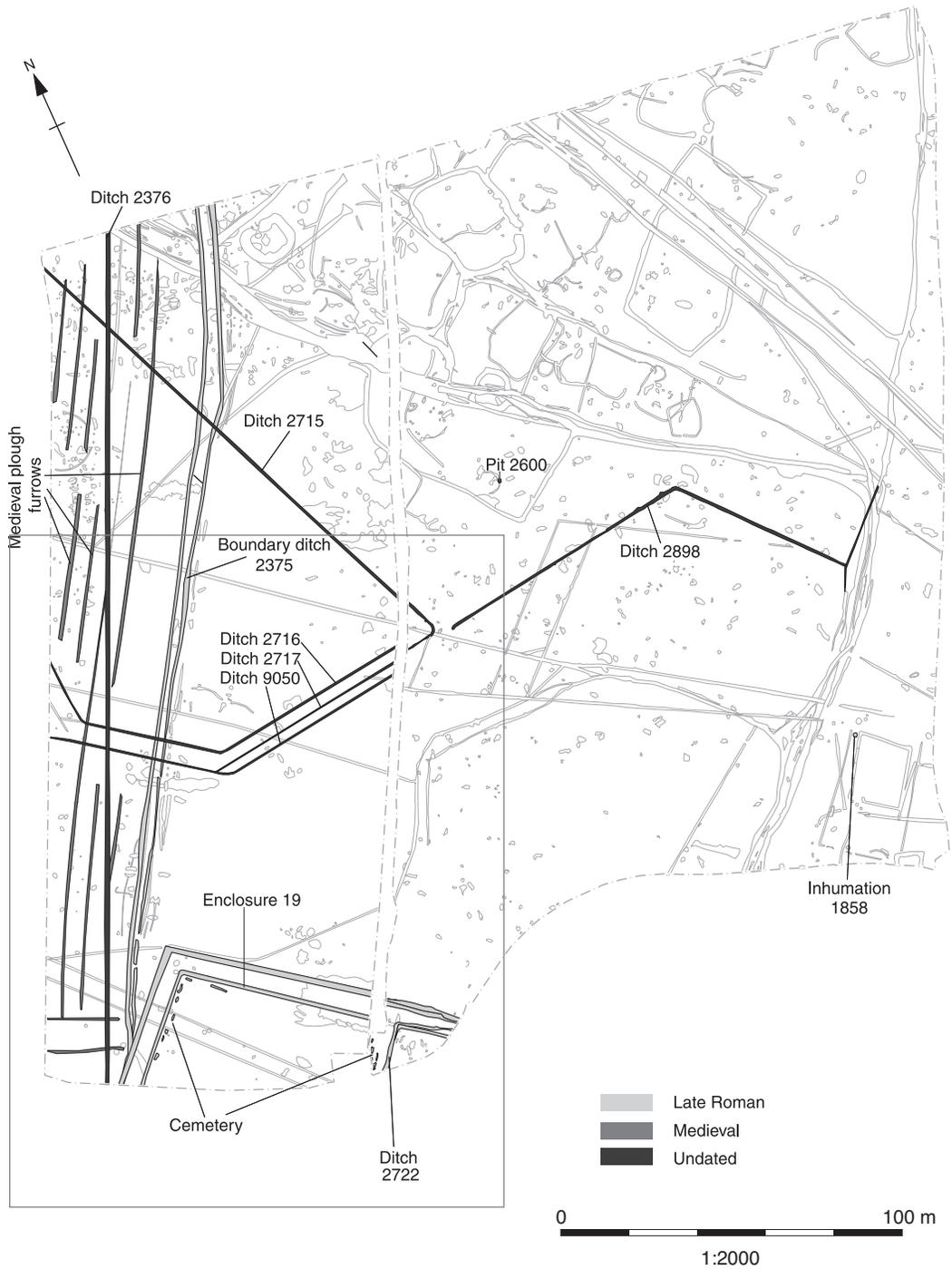


Fig. 7. Periods 8 and 9: late Roman, medieval and undated features.

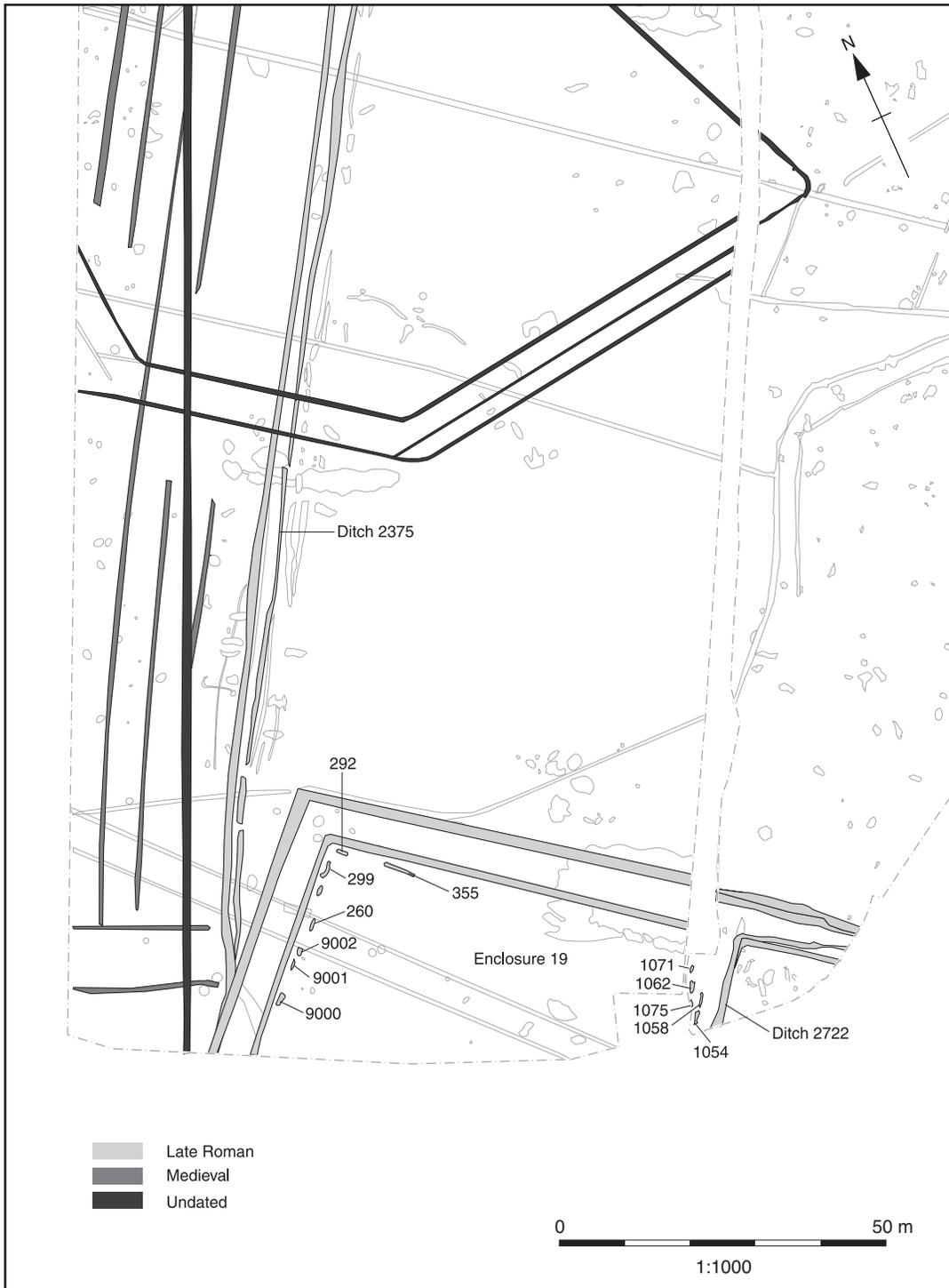


Fig. 8. The late Roman cemetery and double-ditched enclosure.

Inhumation 9001 comprised a single adult human long bone. It lay in a sub-rectangular grave cut (262) with a flat base and (severely truncated) steeply sloping sides. The cut measured 1.6 m in length by 0.5 m in width and 0.13 m in depth.

Inhumation 9002 comprised a single adult human long bone in a sub-rectangular grave cut (264) with a flat base and (severely truncated) steeply sloping sides. The cut measured 1.96 m in length by 0.43 m in width and 0.12 m in depth.

Inhumation 299 comprised the extended inhumation of an adult 30–36 years of age. It lay in a sub-rectangular grave cut (288) with a flat base and steeply sloping sides, measuring 1.16 m in length by 0.42 m in width and 0.12 m in depth.

Inhumation 355 comprised the skeleton of an adult male 30–40 years of age in an extended position. The grave cut (294) was sub-rectangular with a flat base and steeply sloping sides and measured 2.09 m in length by 0.64 m in width and 0.20 m in depth. Overlying the skeleton and filling the grave cut was a clay silt (295) containing moderate inclusions of sub-rounded limestone gravel. Three sherds from a Roman necked jar were recovered from the fill.

Inhumation 1054 comprised an adult skeleton buried in an extended position. The grave cut (1053) was sub-rectangular with a flat base and steeply sloping sides. It measured 2.00 m in length by 0.35 m in width and 0.03 m in depth.

Inhumation 1058 comprised an adult skeleton also buried in an extended position in a sub-rectangular grave cut (3031) with a flat base and steeply sloping sides. The cut measured 2.16 m in length by 0.54 m in width and 0.04 m in depth.

Inhumation 1062 comprised an adult skeleton buried in an extended position in a sub-rectangular grave cut (1061) with a flat base and steeply sloping sides. The cut measured 1.82 m in length by 0.56 m in width and 0.07 m in depth.

Inhumation 1075 comprised a few teeth and skull fragments from an adult skeleton along with a stain derived from the right arm. The remains lay in a sub-rectangular grave cut (1074) with a flat base and steeply sloping sides. It measured 1.70 m in length by 0.40 m in width and 0.03 m in depth.

Grave cuts 260, 292 and 1071 were devoid of human remains and it must be assumed that the skeletons had completely decayed. Cut 260 was sub-rectangular in plan with a flat base and (severely truncated) steeply sloping sides. It measured 1.34 m in length by 0.38 m in width and 0.12 m in depth. Cut 292 was also sub-rectangular in plan and had a flat base and steeply sloping sides. It was oriented NW–SE and measured 1.75 m in length by 0.52 m in width and 0.19 m in depth. Cut 1071 was also sub-rectangular in plan with a flat base and steeply sloping sides. It was oriented NE–SW and measured 1.26 m in length by 0.4 m in width and 0.03 m in depth.

Period 9: medieval (Fig. 7)

The only medieval activity comprised a series of plough furrows to the west of late Roman boundary 2375. These largely ran parallel to the late Roman ditch, although two in the south-west corner of the site ran at right angles to it. The layout of the furrows strongly suggest that the Roman boundary was still a visible feature during the medieval period.

Period 10: post-medieval (Fig. 7)

During the post-medieval period the area continued to be largely devoid of activity. A large ditch (2376) running along the western side of the site extended beyond the limits of excavation to the north and south. A large oval pit (2600) was dug and recut (2525) to the south of early Roman boundary ditch 2711. The upper fill of the recut contained a curious deposit consisting of an iron

knife, a pin and a fragment of fired clay lying beneath a limestone slab. In the north-west and central part of the site was an enigmatic arrangement of linear ditches (2715, 2716, 2717, 9050 and 2898) initially thought to be glider defences but possibly representing field drainage.

Undated inhumation (Fig. 7)

Inhumation 1858 was a crouched adult inhumation oriented north-south in an oval pit measuring 1.2 m in length by 0.64 m in width and 0.15 m in depth. The pit had a flat base and shallow concave sides.

FINDS

Pottery by Dan Stansbie

The excavations at Coln Gravel yielded 1,957 sherds of pottery weighing approximately 10,106 g. The assemblage spans the early Iron Age through to the middle of the 3rd century AD. Contexts yielded groups weighing an average of 44 g and the average sherd weight was 5 g. Pottery from early Roman groups makes up the bulk of the assemblage, 55 per cent by weight. Equal amounts of early to middle Iron-Age pottery and middle Iron-Age pottery make up the next largest proportion of the assemblage, together 32 per cent by weight. Questions over the date of the transition to 'Belgic' style pottery in the Upper Thames Valley mean that unambiguously late Iron-Age groups are difficult to define. Consequently late Iron-Age pottery accounts for less than 1 per cent of the assemblage by weight. However, late Iron-Age to early Roman pottery, including much grog-tempered material in the 'Belgic' tradition, accounts for 12 per cent of the assemblage by weight. The remainder of the assemblage comprises early Iron-Age pottery at <1 per cent by weight.

Methodology

The pottery was recorded using Oxford Archaeology's standard system (Booth 2004). The assemblage was sorted macroscopically into fabric groups (Table 1) based on surface appearance and major inclusion types. Where possible, fabrics have been referenced to the National Roman Fabric Collection (NRFC: Tomber and Dore 1998) where fuller descriptions are given. Each fabric was recorded by weight, sherd number and estimated vessel equivalent (EVE) for every excavated context and the data entered into an excel spreadsheet. EVEs measure the proportion of the total rim that survives; thus a vessel with half (50%) of its rim present has an EVE of 0.5. Vessel forms were also classified using the Oxford Archaeology system, apart from samian forms which were identified using Webster (1996).

Pottery was recovered from 230 contexts in total. None of these produced more than 100 sherds, and only 8 per cent produced more than 30 sherds. As Timby (2004, 90) emphasised in her report on the pottery from Thornhill Farm in 1985–9 'work by De Roche on Iron-Age assemblages from the Thames Valley considered 30 sherds to be the minimum viable size with which to ascribe a date to a context with any degree of confidence'. As with the Thornhill Farm excavations this figure will be adopted as a rule of thumb here.

The 2003–4 excavations, like those undertaken during 1985–9, produced little in the way of clear stratigraphic sequences, and it was not always possible to ascribe individual contexts to particular phases of activity. The pottery was therefore divided into broad period-based phases, similar to those employed by Timby for the 1985–9 excavations. Early Iron-Age, early to middle Iron-Age

Table 1. Iron-Age and Roman pottery.

Fabric	Description	Sherd no.	%	Weight (g)	%
Prehistoric					
AG2	fine/moderate sand and grog	2	<1	1	<1
AL2	fine/moderate sand and limestone	1	1	6	1
AL3	moderate sand and limestone	36	2	262	3
AM2	fine/moderate sand and mica	9	<1	51	1
AM3	moderate sand and mica	4	<1	6	1
AS2	fine/moderate sand and shell	30	2	148	1
AS3	moderate sand and shell	28	1	77	<1
FA3	moderate flint and sand	3	<1	9	<1
GS3	moderate grog and sand	4	<1	5	<1
SI3	moderate sand and oxide minerals	4	<1	53	1
SL2	fine/moderate sand and limestone	32	2	108	1
SL3	moderate sand and limestone	354	18	1348	13
SL4	moderate/coarse sand and limestone	253	13	1543	15
Roman*					
A13	South Gaulish amphorae (GAL AM)	1	<1	31	<1
B11	Dorset black-burnished ware (DOR BB 1)	4	<1	45	<1
C10	Roman shell-tempered fabric	14	1	51	1
E20	fine sand-tempered fabric	79	4	389	4
E30	medium to coarse sand-tempered fabric	23	1	186	2
E50	limestone-tempered fabric	22	1	302	3
E72	Malvernian rock-tempered fabric	62	3	136	1
E80	grog-tempered fabric (SOB GT)	258	13	961	10
M12	North Gaulish white ware mortaria (NOG WH)	18	1	144	1
O20	sandy oxidised ware	1	1	3	<1
O30	North Wiltshire oxidised ware	25	1	104	1
O40	Severn Valley ware (SVW OX2)	114	6	336	3
Q10	white-slipped oxidised ware	8	<1	165	2
R10	fine grey ware	2	<1	19	<1
R20	sandy grey ware	202	10	780	8
R35	North Wiltshire grey ware	156	8	495	5
R50	black surfaced ware	11	1	124	1
R95	Savernake ware (SAV GT)	166	8	2133	21
S20	south Gaulish samian ware	6	<1	11	<1
S30	central Gaulish samian ware	2	<1	31	<1
W20	sandy white ware	22	1	37	<1
W21	Verulamium region white ware (VER WH)	1	1	6	1

*NRFC in brackets

and middle Iron-Age pottery is assigned to ceramic phase 1, which corresponds roughly to Timby's Group 1; late Iron-Age pottery to ceramic phase 2 which corresponds to Group 2; late Iron-Age to early Roman pottery to ceramic phase 3, which corresponds to Group 3; and early Roman pottery to ceramic phase 4, which is equivalent to Group 4. The pottery is phased by context-group date, and small amounts of ostensibly earlier material therefore appear in all phases.

Due to the nature of the stratigraphic record and the condition of the ceramic assemblage, the boundaries between ceramic phases lack solidity. This is particularly true of the boundary between early and middle Iron-Age material, which has been based on differences in proportions of shelly to sandy fabrics at similar sites in the Upper Thames Valley such as Claydon Pike (Edgeley-Long 2002, 35). The possibility of applying a similar methodology to the Coln Gravel assemblage was considered, but it was felt that it might be misleading given the assemblage's relatively small size and the paucity of large groups. Handmade pottery in shelly or sandy fabrics has therefore been assigned a broad early to middle Iron-Age date range, except where identifiable vessel forms are present.

Condition

With an average sherd weight of 5 g the condition of the pottery was generally poor and the surfaces of the sherds were not well preserved. As at Thornhill Farm, whilst relatively large sherds were present *in situ* and substantial parts of individual vessels appeared to be present, their removal upon excavation caused many of the sherds to fragment, creating new fractures and hampering an accurate sherd count. This fragmentation was also exacerbated by the nature of the material itself, which for the most part consisted of poorly fired handmade or slow wheel-made wares.

Ceramic Phase 1

Early Iron-Age pottery

A single sherd of early Iron-Age pottery, accounting for less than 1 per cent of the overall assemblage by weight, was recovered. It was made in a moderate flint- and sand-tempered fabric (FA3) and probably came from the shoulder of a carinated bowl. Decorated with oblique incised lines above parallel incised horizontal lines, it is paralleled in form and decoration by a sherd from Roughground Farm, Lechlade (Hingley 1993, fig. 31.44).

Early to middle Iron-Age pottery

Pottery of early to middle Iron-Age date accounts for a moderate proportion of the overall assemblage, approximately 16 per cent by weight. It is dominated by moderate shell and limestone fabrics (SL3), 61 per cent by sherd count and 57 per cent by weight. Moderate/coarse shell and limestone fabrics (SL4) are also prominent, 21 per cent by sherd count and weight. Less significant are moderate shelly and sandy fabrics (AS3) – 6 per cent by sherd count and 4 per cent by weight; fine/moderate sandy and shelly fabrics (AS2) – 5 per cent by sherd count and 6 per cent by weight; and moderate sand and limestone fabrics (AL3) – 3 per cent by sherd count and 5 per cent by weight. Also present, though in minimal amounts, are fine/moderate sandy and micaceous fabrics (AM2), moderate sandy and micaceous fabrics (AM3) and moderate shelly and ferruginous fabrics (SI3), which together account for approximately 4 per cent by sherd count and 7 per cent by weight. No identifiable vessel forms are present within the assemblage.

Middle Iron-Age pottery

In terms of fabric composition the middle Iron-Age assemblage is similar to the early to middle Iron-Age material. Shell and limestone fabrics dominate, with moderate/coarse shell and limestone-tempered fabrics (SL4) accounting for 58 per cent by sherd count and 63 per cent by weight, moderate shell and limestone fabrics (SL3) for 20 per cent by sherd count and 19 per cent by weight, and fine/moderate shell and limestone fabrics for 12 per cent by sherd count and 6 per cent by weight. The remainder of the assemblage comprises moderate sand and limestone fabrics (AL3), moderate sand and micaceous fabrics (AM3), fine/moderate sandy and shelly fabrics (AS2),

and moderate sandy and shelly fabrics (AS3), together accounting for 10 per cent of the assemblage by sherd count and 12 per cent by weight. Vessels attributed to the middle Iron-Age ceramic phase are largely homogeneous, comprising barrel-shaped jars with a variety of plain rims (CB1) except for one vessel with a small rounded bead rim (CB2).

Ceramic Phase 2

Late Iron-Age pottery

Late Iron-Age pottery accounts for a modest proportion of the overall assemblage at <1 per cent by weight. Malvernian rock-tempered fabrics (E72) dominate the late Iron-Age assemblage, 73 per cent by sherd count and 68 per cent by weight. They are supplemented by grog-tempered fabrics (E80), 27 per cent by sherd count and 32 per cent by weight. Vessels present, all in Malvernian limestone-tempered fabrics, comprise three barrel-shaped jars with a variety of plain rims and one bead rim jar with a small flat topped square bead.

Ceramic Phase 3

Late Iron-Age to early Roman pottery

The site yielded a range of fabrics commonly dated to the late Iron-Age period. Together they account for about 12 per cent of the total assemblage by weight. Contexts containing exclusively grog-tempered pottery are common, and grog-tempered wares dominate the assemblage, 56 per cent by sherd count and 53 per cent by weight. Moderate grog- and shell-tempered material represents 1 per cent of the assemblage by sherd count and less than 1 per cent by weight. Sand-tempered material, representing a transitional late Iron-Age to early Roman group of fabrics, includes fine sand-tempered fabrics (E20) and medium to coarse sand-tempered fabrics (E30) and accounts for 23 per cent by sherd count and 31 per cent by weight. Malvernian rock-tempered fabrics (E72) account for 6 per cent by sherd count and 3 per cent by weight. The remainder of the assemblage is made up of shell-tempered fabrics (C10), intrusive Roman sandy grey ware (R20), residual moderate shell and limestone fabric (SL3) and residual moderate/coarse shell and limestone fabric (SL4), together 14 per cent of the assemblage by sherd count and 12 per cent by weight.

Like the middle and late Iron-Age assemblages, the late Iron-Age to early Roman assemblage is dominated by jars at 100 per cent of EVEs. Necked jars with everted rims (CD7) are the dominant vessel type. Three of these vessels were made in fine sandy ware (E21). There were also single examples in Malvernian rock-tempered ware (E72), grog-tempered ware (E80) and shelly ware (C10). Also present were two 'Belgic' high-shouldered necked jars with everted rims (CE7) in grog-tempered ware (E80), a barrel-shaped jar with a plain rim (CB1) in Malvernian rock-tempered fabric (E72) and a residual barrel shaped jar (CB1) in moderate/coarse shell and limestone fabric (SL4).

Ceramic Phase 4

Early Roman pottery

A wider range of fabrics than occurs in the earlier ceramic phases is dated to the early Roman period. These account for the greatest proportion of the overall assemblage at 55 per cent by weight. No particular ware dominates the early Roman assemblage. However, despite its more robust character, Savernake ware (R95) may be seen as most common, contributing 18 per cent by sherd count and 38 per cent by weight. Sandy grey ware (R20) accounts for 22 per cent by

sherd count and 14 per cent by weight, and North Wiltshire grey ware (R35) for 16 per cent by sherd count and 9 per cent by weight. Severn Valley oxidised ware (O40) is also prominent at 12 per cent by sherd count and 6 per cent by weight. Grog-tempered wares also remain fairly important at 8 per cent by sherd count and 6 per cent by weight and some transitional Iron-Age/Roman fabrics are also present, including fine sand-tempered fabrics (E20), limestone-tempered fabrics (E50) and Malvernian rock-tempered fabrics (E72), together 7 per cent by sherd count and 10 per cent by weight. Regional and continental imports are present, but in very small quantities. Black-burnished ware (B11), Verulamium region white ware (W21), south and central Gaulish samian (S20 and S30), north Gaulish white ware mortaria (M12) and south Gaulish amphorae (A13) all account for <1 per cent by sherd count and weight. Also present, although in minimal amounts, are residual fine/moderate sand and limestone fabric (AL2), moderate sand and limestone fabric (AL3), fine/moderate sand and micaceous fabric (AM2), fine moderate shelly and sandy fabric (AS2), moderate shell and limestone fabric (SL3), moderate/coarse shell and limestone fabric (SL4), fine grey ware (R10), black-surfaced ware (R50), oxidised ware (O20), white slipped oxidised ware (Q10) and sandy white fabrics (W20), together accounting for 11 per cent by sherd count and 17 per cent by weight.

The increasing range of fabrics in this period is mirrored by an increasing repertoire of forms, including new types of vessels such as flagons and dishes used for eating and drinking. However, the assemblage is still overwhelmingly dominated by jars, which make up 77 per cent by EVEs. These are supplemented by flagons at 15 per cent, tankards at 2 per cent, dishes at 4 per cent, and mortaria also at 2 per cent. The majority of the jars are made in sandy grey ware (R20) and consist of necked jars with a variety of everted rims (CD7). Other jars of this type are made in Savernake ware (R95), Severn Valley ware (O40), North Wiltshire sandy grey ware (R35), fine sand-tempered fabric (E20) and limestone-tempered fabrics (E50). In addition there is a 'cooking-pot' type jar (CK7) in black-burnished ware (B11), a necked jar with bifid rim (CD3) in Savernake ware (R95) and a barrel-shaped jar (CB7) with slightly everted rim in Malvernian rock-tempered ware (E72). Also present is one ring-necked flagon (BB1) in white-slipped oxidised ware (Q10), a hooked rimmed mortaria (KA5) in North Gaulish white ware (M12), two curving sided dishes with hooked rims (JB5) in black-surfaced ware (R50) and a type 31 dish in central Gaulish samian ware.

Funerary Pottery

Three sherds from a necked jar (CD7) in sandy grey ware were recovered from grave 294 (inhumation 355), which was part of the late Roman cemetery within enclosure 19. As this material was present in the backfill rather than placed on the base of the grave it seems that there is nothing constituting a 'funerary' assemblage from this site.

Catalogue of illustrated vessels (Fig. 9)

The illustrated vessels are a small representative sample of the pottery recovered during the excavations.

101. Fabric FA3. Early Iron Age. (2393).
102. Fabric Q10, form BB 160. Mid 1st to mid 3rd century. (2063).
103. Fabric R35, form CD 730. Late 1st to mid 2nd century. (2063).
104. Fabric R95, form CD 310. Late 1st to mid 2nd century. (2063).
105. Fabric SL4, form CB 113. Middle Iron Age. (436).

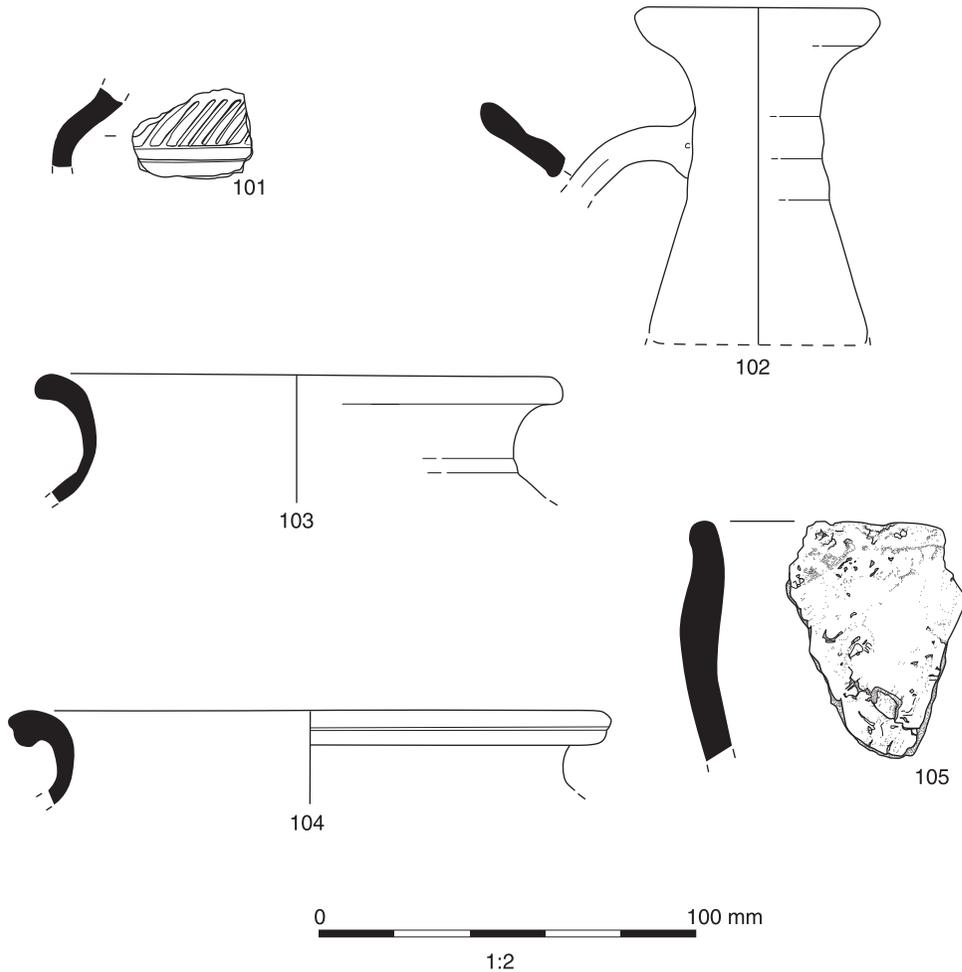


Fig. 9. Pottery.

Discussion

In general the pottery survived in poor condition. The average sherd weight was 5 g and only 17 groups containing more than 30 sherds. There are therefore no large and well stratified 'key groups' to provide a reliable guide to dating. In addition there appears to be a high degree of residuality within the assemblage, although work on the larger assemblage from the 1985–9 Thornhill Farm excavations indicates that this may not be the case because 'if the condition of the pottery was caused by the constant reincorporation of material in ditch backfills as they were recut, one would expect the final phase pottery to be less degraded than the earlier material and this is not the case' (Jennings *et al.* 2004, 172). Indeed it is suggested that the poor condition of the pottery at Thornhill Farm was caused by pottery having been deposited on the ground surface before making its way into the cut features (*ibid.* 173). The dates assigned to the pottery from Coln Gravel should therefore be treated with caution and the boundaries between the ceramic phases must be seen as fairly fluid.

Only one sherd of decorated early Iron-Age pottery was recovered. Nothing similar, either in terms of fabric or decoration, came from the excavations at Thornhill Farm during 1985–9 (Timby 2004), nor are any parallels forthcoming from other sites in the Upper Thames Valley such as Farmoor (Lambrick and Robinson 1979), Watkins Farm (Allen 1990) and Gravelly Guy (Lambrick and Allen 2004). The presence of this sherd suggests activity of some kind at Coln Gravel during the early Iron Age.

Early to middle Iron-Age pottery has been defined through the presence of limestone- and calcareous-tempered fabrics along with some sand- and shell-tempered material and very occasional sandy and micaceous pottery or sand- and grog-tempered material. At other sites in the Upper Thames Valley, such as Claydon Pike (Jones 2006), Groundwell West (Timby 2001), Ashville (De Roche 1978, 69), Farmoor (Lambrick 1979, 36) and Gravelly Guy (Duncan *et al.* 2004, 279) fabric proportions are seen to be chronologically significant, with the quantity of calcareous fabrics decreasing in favour of sandy fabrics through the early and middle Iron Age. However, the later prehistoric assemblage from the 1985–9 excavations was assigned a date from the middle Iron Age period despite being dominated by calcareous fabrics (Timby 2004, 90–108), as it was unclear at the time whether differences in fabric proportions had any chronological significance in the Lechlade area. Within the 2003–4 assemblage gravel limestone and calcareous fabrics account for 84 per cent of the ceramic phase 1 assemblage while sandy fabrics account for only 16 per cent. Ostensibly this may suggest that the ceramic phase 1 assemblage is of early Iron Age rather than middle Iron Age date. However, the small size of the sample and its poor state of preservation limit the value of these figures, and it is preferable to assign a broad early–middle Iron Age date to this material in the absence of identifiable vessel forms. Middle Iron-Age pottery comprises calcareous and sandy pottery but is defined by the presence of barrel-shaped or ovoid jars with plain rims. Such vessels are found in middle Iron-Age contexts across southern Britain, and are well attested in the Thames Valley (Harding 1972). Similar vessels were present within the 1985–9 Thornhill Farm assemblage (Timby 2004), at Claydon Pike (Jones 2006) and at Gravelly Guy (Duncan *et al.* 2004).

Late Iron-Age pottery comprises grog-tempered wares which once again are ubiquitous in the late Iron Age of southern Britain. Grog-tempered wares are present at Thornhill Farm in ceramic group 3 (early 1st century AD onwards: Timby 2004, 91) and in the late Iron Age at Gravelly Guy (Green *et al.* 2004, 305). Malvernian rock-tempered wares are also present at Thornhill Farm in ceramic group 2 (1st century BC–AD: Timby 2004, 90). Late Iron Age to early Roman pottery is defined by the presence of high-shouldered necked jars in grog-tempered wares and necked jars in fine sandy wares with small amounts of Malvernian rock-tempered wares. These fabrics are also present at Thornhill Farm and Gravelly Guy, although high-shouldered necked jars are absent from the former site (Timby 2004). This pattern is typical of the region, in which there is an absence of the ‘Belgic’ repertoire of forms characterised by high-shouldered jars, butt-beakers and imitation ‘Gallo-Belgic’ platters in the late Iron Age. Early Roman pottery is characterised by a preponderance of sandy grey wares and Savernake wares with some North Wiltshire grey wares and Severn Valley wares and is heavily jar based. These characteristics are typical of early rural assemblages in the region, and the assemblage compares well with that from Thornhill Farm and Gravelly Guy (Green *et al.* 2004). Indeed the presence of small amounts of black-burnished ware is also mirrored at Gravelly Guy and Thornhill Farm, as is the presence of Verulamium white ware at Gravelly Guy. There is even part of a central Gaulish samian ware Dragendorff 31 and a North Gaulish white ware hook rimmed mortarium, attesting some indirect contact with the continent. However, the absence of large quantities of regional fine ware such as Oxfordshire ware, and the large number of jars which characterise the assemblage indicate that there was little or no domestic occupation on the site by the mid 3rd century AD.

Socio-economic status

Iron-Age ceramics have traditionally been used as a means of investigating cultural identity rather than social and economic status. However, the absence of fine or decorated ware amongst the early to middle Iron-Age ceramics can be used to suggest that the assemblage was not of particularly high status. Indeed, the ubiquitous barrel-shaped jars were most likely used for the cooking and storage of food, although their use in the serving of food and feasting cannot be definitively ruled out. Similarly, in the late Iron Age the dominance of the jar and the absence of forms more clearly associated with consumption, such as butt-beakers and platters, may be taken as an indication of low status, notwithstanding the fact that chronological and regional factors must account for this absence to some degree. In his study of ceramic approaches to differentiating between Roman site types Evans (2001), while acknowledging that there is a chronological element to the presence of large numbers of jars, argues that pottery assemblages from low-status rural sites are typically jar dominated. As the Coln Gravel assemblage is both early and jar dominated it seems that the pottery indicates a comparatively low status for the site, and this is backed up by the comparative absence of fine wares and regional imports.

Worked Stone by Ruth Shaffrey

The assemblage includes three pieces of worked stone (a saddle quern, a rubber and a whetstone) and one piece of unworked but utilised stone (a processor). Two of these were examined with the aid of a $\times 10$ magnification hand lens and two were thin-sectioned (report in site archive). All four are a very good example of their respective artefact class and the three worked items are all extremely well made. The saddle quern (SF 5; Fig. 10), rubber (SF 29) and processor are from Iron-Age contexts (855 (enclosure 1), 2501 (enclosure 3), and 481 (enclosure 1) respectively) and, although a small assemblage, indicate that a high level of care was paid to the quality of tools during this phase.

The saddle quern is particularly well shaped and is carefully pecked all over. It has been well used as a saddle quern before being re-used, presumably (because of the density of burning on the base) in a hearth, and then discarded in the ditch of enclosure 1. The rubber is also carefully worked, although only an edge fragment remains, and is also burnt. It was found in the ditch of enclosure 3 with other general refuse. The processor is unworked but has areas of significant abrasion, particularly at each end, through use as a hammerstone/pounder. It is a flat but well-rounded pebble and rubbed areas with limited polish suggest that it served a multifunctional role. A simple pebble such as this would have had great potential for fulfilling several tasks and yet, although multifunctional tools have been identified for up to four different processes (Roberston-Mackay 1987, 118), utilised pebbles are rarely assigned more than one function in the archaeological literature. No lesser consideration appears to have been given to tool quality during the early Roman period with the only item, a Kentish Rag whetstone (unstratified: SF 34), being another good example of its artefact class, complete and very well used on all sides.

Catalogue of worked stone

Rubber, edge fragment. Old Red Sandstone. Nicely shaped and burnt/blackened on one edge. Enclosure 3 (2501). SF 29. Fragment measures $80 \times 60 \times 40$ mm. Middle-late Iron Age.

Processor, complete. Granite. Flat, oval, well-rounded pebble. Percussion wear around the edges and particularly at each end reveal its use as a hammerstone. Polish on one surface suggests additional use as a rubber. Enclosure 1 (481). Measures $118 \times 78 \times 23.5$ mm. Middle-late Iron Age.

Saddle quern (Fig. 10), half. Old Red Sandstone. High quality: pecked all over and carefully shaped. Grinding surface has been worn smooth through use and base is curved. Heavily blackened and burnt on

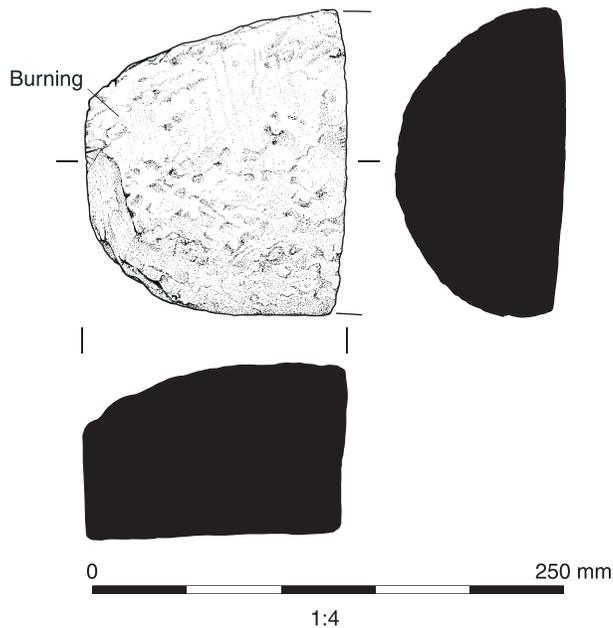


Fig. 10. Saddle quern.

base. Enclosure 1 (855). SF 5. Measures 140 mm long (c.300 mm originally) \times 160 \times 90 mm thick. Middle-late Iron Age.

Whetstone, complete. Kentish Rag. Very well used 'cigar shape' with concave profiles on all four sides though two more worn than the others. Rectangular but rounded section. Unstratified (1034). SF 34. Measures 117 \times 30–32 \times 23–29 mm.

Discussion

The worked stone assemblage from Coln Gravel is small but of high quality and includes three imported specimens, of Kentish Rag and Old Red Sandstone (ORS). The whetstone was a surface find assumed to be Roman in date. Whetstones of Kentish Rag are commonplace on Roman sites in the Gloucestershire region (Roe 2006) and its discovery is nothing unusual.

Saddle querns and rubbers of ORS are far less common in Gloucestershire than rotary querns and no definite examples were found amongst the large assemblage from the 1985–9 excavations (Shaffrey 2004, 85). In addition, the ORS that is found at, for example, the nearby sites of Claydon Pike (1 km away: Roe 2006) and Horcott Pit (3 km away: Shaffrey forthcoming a) is mostly known or assumed to be from the Forest of Dean. Although it is difficult to be precise about the source of the rubber, the saddle quern is from south Wales, somewhere west of Newport. As it is usual for more local materials to be exploited for saddle querns, this source is of interest. The presence of ORS of middle Iron-Age date at Coln Gravel is in keeping with our general understanding of quern supply in the region, but the provenance of the saddle quern suggests that detailed attention should be paid to the petrology of querns of ORS.

The saddle quern is also an extremely well finished example of the formed type; that is, it is shaped all over and not left with a rough base. Early saddle querns tend to be bulkier and cruder

in form (Shaffrey forthcoming b) while physically well-made and well-dressed examples such as this generally date from the early Iron Age onwards (Shaffrey forthcoming b and 2008). The style of the quern is therefore in keeping with the general period. However, it stands out because it is of better quality than other saddle querns of comparable date from the immediate vicinity (Shaffrey 2004 and forthcoming a; Roe 2006).

Although it is unusual for all the worked stone from a site to be of the quality represented here, the assemblage is very small and thus provides insufficient evidence on which to base assumptions of high status. The objects are also likely to be the surviving sample of a much larger assemblage of stone tools and should therefore be placed in the context of the finds from the earlier excavations at Thornhill Farm. Those excavations produced a large quantity of worked stone including examples of all the artefact types represented at Coln Gravel and of other types including loom weights and spindle whorls (Shaffrey 2004). This small assemblage adds to the earlier evidence the definite use of ORS for saddle querns and rubbers and an example of a Kentish Rag whetstone. The multifunctional processor is similar to a number of polishing pebbles already identified (*ibid.*).

Metalwork and Metal-Working Debris by Ian Scott

A modest assemblage of metalwork was recovered from the excavations at Coln Gravel. It comprised 58 iron objects (including 49 hobnails), two copper-alloy fragments and three lead objects. In addition, 13 pieces of slag or cinder were recovered. The preservation of the ironwork was good, although much of the material was encrusted with corrosion products. Most of the finds were recovered from Iron-Age or early-middle Roman contexts.

The recovery of ten fragments of cinder or slag from a middle Iron-Age pit (815) suggests that limited metalworking was occurring in the vicinity at that time. A curved length of iron wire came from a late Iron-Age/early Roman boundary ditch (2482) but being small could be intrusive. A small iron fragment, possibly from a knife, and three pieces of iron slag were recovered from late Roman grave 288, while 49 hobnails were recovered from grave 295 within the same inhumation cemetery.

The recut (2525) of an oval pit (2600) approximately 21 m south of early Roman boundary ditch 2711 contained an iron knife with the remains of a wooden handle and also a possible iron awl. The hafting of the knife suggests that it is of post-medieval date.

The remaining metalwork (9 objects) was recovered by the use of a metal detector and mostly consisted of miscellaneous scraps, none of which was closely datable. The copper alloy comprised a small cast edge fragment, too small to be closely identified, and a small piece of sheet decorated with six closely set pinholes along one edge. The lead objects were a small irregular pierced disc, possibly a small weight, a thick circular pierced weight and a cast object rolled into a ball. The last may be a trial casting or a lead model.

In contrast with the finds from previous excavations just to the north (Jennings *et al.* 2004, 69), the quantity of metal artefacts recovered from Coln Gravel was very limited. The lack of a single brooch is particularly striking given the relative proliferation of such objects (43) in the excavations of 1985–9. This must reflect the location of the 2003–4 excavations away from the main area of settlement.

Jet Bead by Leigh Allen

A single jet bead of Roman date was recovered from context 1076, the backfill of grave 1074 overlying skeleton 1075. It is sub-rectangular in shape with a domed face and has a small indentation at the centre and incised notches at the rounded corners. The long sides are undercut and pierced laterally by two holes. The undercutting would have allowed the bead to sit up against other beads and form a curve to fit around the wrist or arm. It remains uncertain whether the bead was actually deliberately deposited with the burial, although this seems unlikely given its stratigraphic position in the grave backfill.

Worked Flint by Rebecca Devaney

A single piece of flint, possibly an end scraper, was recovered from the fill of early Roman boundary ditch 2701 at the point where it cut middle Iron-Age enclosure 3. The scraper is made on a small, plunging flake. It has a lipped bulb, which is indicative of a soft hammer mode. There is direct retouch on the distal left and right. However, the scraper has suffered moderate post-depositional damage and it is likely that the retouch originally continued around the distal end to form an end scraper.

Fired Clay by Dan Stansbie

An assemblage of 235 fired clay objects weighing 3,954 g was recovered from the excavations at Coln Gravel. It was scanned rapidly by context group, with quantification (number of objects and total weight of group) derived principally from the initial basic finds record. The material was assigned to one of four fabrics. Fabric 1 contains sand, but no other obvious inclusions; fabric 2 is calcareous; fabric 3 is limestone-tempered; and fabric 4 is sandy with grog inclusions. All were oxidised and hard fired. Impressions of organic remains were visible in the surfaces of fragments belonging to all of the fabrics. The material was largely recovered from undatable or post-medieval contexts (76% by weight). The remainder was from contexts of early to middle Iron-Age date (3% by weight), middle Iron-Age date (3% by weight), late Iron-Age date (1% by weight), late Iron-Age to early Roman date (13% by weight) and early Roman date (4% by weight). The majority was assigned to fabrics 1 and 4 and is likely to have been used in a structural capacity. Some of this material had smooth surfaces, but much of it was more amorphous. One piece from enclosure 3 had three finger tip impressions. A few pieces appeared to have come from hearths or oven bases.

Ceramic Building Material by Dan Stansbie

Forty-six fragments of ceramic building material were recovered from the excavations. The material was rapidly scanned and found to be undiagnostic, generally fragmentary and abraded.

Human Remains by Annsofie Witkin

A total of ten poorly preserved inhumations were analysed. Nine belonged to the late Roman period and the other remained undated. They were all adults and only one could be sexed as male. The late Roman burials were all located in two distinct areas within a double-ditched enclosure (19) in the south-western part of the excavation area. The undated inhumation burial was located c.165 m north-east of the enclosure (Figs. 7 and 8).

Provenance

Skeletons 299, 355, 9000, 9001 and 9002 were in a linear arrangement alongside the inner ditch of enclosure 19. Two other possible graves (260 and 292) were part of this burial group but contained no bone. Four further inhumation burials (1054, 1058, 1062 and 1075) were located as a small group *c.* 50 m to the south-east within the enclosure. No bones survived in another possible grave-cut (1071) in the same area. All burials within enclosure 19 lay in very shallow sub-rectangular grave cuts and were dated to the late Roman period on the basis of their location in relation to other dated features.

The isolated skeleton (1858) was located in an oval grave-cut (1857) between two enclosure ditches (1595 and 1938) on the south-eastern side of the site. The individual was crouched and oriented north–south. The ditches are dated to the late Iron Age/early Roman period but the inhumation burial is unlikely to be associated with the surrounding features and is therefore undated.

Methodology

The skeletal and cremated remains were analysed according to the recording standards set out by Brickley and McKinley (2004). Completeness was scored using four categories: poor (0 – 25%), fair (26–50%), good (51–75%) and excellent (76–100%). Skeletal preservation was scored using a scale ranging from poor (near complete destruction of the cortical surface) to excellent (cortical surfaces of the bones preserved). Preservation and completeness of the skeleton primarily affects the recording of pathological lesions and metric data. The skeletal inventory of the articulated remains was recorded pictorially as well as in tables (details in site archive). The dental inventory followed the Zsigmondy system. Dental notations used generally accepted recording standards and terminology (after Brothwell 1981) and adult individuals were aged by dental attrition (Miles 1962; Brothwell 1981). Sex was determined by diagnostic features present on the cranium (Buikstra and Ubelaker 1994). The remains were examined for abnormalities of shape and surface texture. When observed, pathological conditions were fully described and recorded following the standards listed in osteological textbooks (Buikstra and Ubelaker 1994; Brickley and McKinley 2004).

Preservation and Completeness

The preservation of all inhumations was very poor with substantial cortical erosion and flaking of the bone surface. Most of the skeletons (1054, 1058, 1062, 1075, 1858, 9000, 9001 and 9003) were recorded as destroyed and only two (299 and 355) as in a poor condition. Little bone survived from each individual and the majority of the bones present consisted of more or less fragmented long-bone shafts. Skeleton 355 was the most complete individual with 25 per cent of the bones present. The very poor bone survival was due to the acidic soil conditions as well as heavy truncation due to modern ploughing.

Age and Sex

Four individuals could be aged through their surviving dentition: one (1075) between 18 and 24 years, two (299 and 355) between 30 and 36 years and one (1858) between 30 and 40 years. The size of the long-bone fragments from skeletons 1054, 1058, 1062, 9000, 9001 and 9002 indicated that they were all adults. Only one individual (355) – a male – could be sexed.

Dental Pathology

Two carious lesions were recorded on the dentition of skeleton 299. Dental caries is destruction of the enamel caused by the production of acid from bacteria present in dental plaque. The cavities are commonly found in areas where food is likely to get trapped (Hillson 1996, 269, 275).

Discussion

The late Roman burials were located in two distinct areas. That arrangement appears to denote distinct burial practices although there are common features such as the relationship with boundaries, grave orientation and body position.

Location of the burials in the landscape

The linear burial group and the burial cluster are both within the same large enclosure adjacent to contemporary boundaries. This pattern of discrete clusters of burials within enclosures and near boundary ditches is not unusual and it is often associated with small rural settlements and villas (Esmonde Cleary 2000). A similar pattern of small clusters associated with boundaries was present at nearby Claydon Pike (Witkin 2006).

The location of the burials along field boundaries suggests that the disposal of the dead was integrated with other land uses and activities rather than reserved for a separate domain (Esmonde Cleary 2000, 132). The meaning of the deliberate placement of burials in close proximity to contemporary boundaries is, however, harder to discern. It might imply a recurring encounter of the living with the dead (Pearce 1999, 51). It could possibly indicate that ancestors were used to legitimise claims to land, and as such the dead would have had an active role in the lives of the living. A physical boundary can also be seen as a liminal space and the association of burials with boundaries as a means to bind the possible influence of the dead (Esmonde Cleary 2000, 138). That the burials were adjacent to contemporary boundaries may signify that as long as the physical boundary was maintained the liminal boundary was intact and the living were protected from the dead. Conversely, the boundaries may be there to protect the dead from malignant forces.

Burial orientation and grave goods

The burial rituals of all the late Roman inhumations are summarised in Table 2. They show a general north–south orientation. An analysis of the late Roman burial orientation in Hampshire found that 60.42 per cent of the burials were oriented broadly north–south (Pearce 1999, 155). This was also the most prevalent grave orientation in rural Oxfordshire (Booth 2002, 22) and at nearby Claydon Pike (Witkin 2006).

The orientation of the grave therefore appears to have been an important aspect of the burial ritual. It possibly denoted the direction the soul of the individual had to face in order to embark on its journey through the afterlife (Black 1986, 230). However, the fact that at least five of the burials are aligned with the enclosure ditch suggests that in some circumstances other concerns were more important and influential than a deliberate north–south orientation.

Skeleton 355 had footwear placed in the south-eastern end of the grave. The majority of burials with footwear are found in south-central England and are almost exclusively associated with rural villas and other minor settlements, although quite a few examples have been found in the large urban cemetery at Lankhills, Hampshire (Philpott 1991, 167; Boyle pers. comm.). Burials with hobnails become more common in the 2nd and 3rd centuries AD but the majority of examples dates to the 4th century. The archaeological detection of this rite is dependent upon the presence of items such as hobnails, which are likely to be preserved, and its apparent chronological

Table 2. Summary of burial ritual.

Skeleton number	Cut number	Orientation	Body position	Coffin	Grave goods
299	288	NW-SE	Supine	None	Knife?
355	294	NW-SE	Supine	None	Hobnails
9000	258	NE-SW or SW-NE	Unknown	None	None
9001	262	NE-SW or SW-NE	Unknown	None	None
9002	264	NE-SW or SW-NE	Unknown	None	None
1054	1053	NE-SW	Supine	None	None
1058	1057	NE-SW	Supine?	None	None
1062	1061	NW-SW	Supine	Possible?	None
1075	1074	S-N	Supine	None	None

distribution may reflect fashions in footwear as much as changes in burial rites. Nonetheless, it is likely to be associated with a belief in, for example, the need of the dead for shoes in the afterlife.

A small iron fragment which may have been part of a knife was located within grave 288 (skeleton 299). It is not known if the fragment was within the backfill or if it was deliberately deposited with the burial. Iron knives have, however, been found in Roman inhumations, primarily in the south-central England (Philpott 1991, 176).

Animal Bone by Emma-Jayne Evans

A total of 2,118 fragments (12,916 g) of bone and teeth was recovered from the Coln Gravel excavations. Almost all the bone had fresh breaks, and refitting of broken fragments reduced the total fragment count to 745 (Table 3).

All the animal remains were counted and weighed and where possible identified to species, element, side and zone (Serjeantson 1996). Fusion data, butchery marks, gnawing, burning and pathological changes were noted when present. The quantification of species was carried out using the total fragment count, in which the total number of fragments of bone and teeth was calculated and that figure was broken down to the total number of fragments identifiable to each species. In addition the minimum number of individuals (MNI) was calculated using the zoning method (Serjeantson, 1996). Tooth eruption and wear stages were measured using a combination of Halstead (1985), Grant (1982), and Levine (1982), and fusion data were analysed according to Silver (1969). Measurements of adult (fully fused) bones were taken according to the methods of von den Driesch (1976).

A total of 172 fragments of bone and teeth were identifiable to species, 23.1 per cent of the total number of bones recorded. All of the identifiable bone is from domestic species (Table 3). None of the sheep/goat bones were identifiable as either sheep or goat.

The bone has survived in poor condition and the degree of fragmentation has no doubt affected the number of bones identifiable to species and the amount of information that can be gained from the identified bone. There is very little butchery evidence, with only seven identifiable bones

Table 3. Number of animal bones identifiable to species (MNI).

Number	Cattle	Sheep/Goat	Horse	Pig	Dog	Unidentified	Total
	95 (5)	34 (3)	36 (3)	6 (1)	1 (1)	573	745

exhibiting cut and chop marks. Of these, two cattle skulls have cut marks associated with skinning and the rest had been chopped for marrow extraction or had dismemberment cut marks. None has gnawing marks. One cattle molar had been burnt (along with eight other small, unidentifiable fragments). Ten bones could be measured, although none of these measurements can be used to estimate withers heights. Twelve mandibles could be aged and there is limited fusion data. Four bones have pathological changes. Articulations were noted between some cattle and some sheep/goat bones.

There was no noticeable difference in species representation between Iron-Age and Roman features. The small size of the sample size would, however, make any such comparison largely meaningless.

Context of Deposition

Animal bone was recovered from just 149 contexts across the site and only 33 (c.22%) of these contained more than five bone fragments. As would be expected, most bones were recovered from ditch fills, although there were also deposits within pits, some of which may be regarded as 'structured'. One of these structured deposits lay in the base of pit 606 and comprised a cattle skull, two mandibles, a scapula, a long bone and part of a rib (Fig. 4). Other bone fragments (mostly cattle) came from fills above this. The pit, which is dated to the late Iron Age/early Roman period, lay just inside the entrance to middle Iron-Age enclosure 1 and may have been dug as part of a rite of termination for this feature (see above). Certainly the enclosure ditch itself was relatively rich in animal bone, containing over 25 per cent (190) of the total recovered from both season's excavations (Fig. 5). Most of these were cattle bones, and there is some indication of concentrations near the ditch's entrance terminals and at its southern end. Another possible structured deposit comprising an extremely degraded cattle skull and two cattle molars lay within the top fill of middle/late Iron-Age ditch (1364) belonging to enclosure 3.

Conclusions

Although only a small percentage of the already modest animal bone assemblage was identifiable to species, it was similar in composition to the much larger faunal assemblage from previous excavations at Thornhill Farm between 1985–9 (Levine 2004). Cattle were clearly the dominant species (55%), followed by horse (21%), sheep/goat (20%), pig (3.5%) and dog (1%). The higher proportion of horse bone from the 2003–4 excavations should not be given too much significance given the size of the assemblage from the Coln Gravel excavations. As mentioned in Levine's report (*ibid.* 132), the taphonomic agents involved in the destruction of animal bone at the site (e.g. poor soil conditions and redeposition) ensure that small taxa are likely to be under-represented. Cattle clearly played an important role in the economy of the Iron Age and early Roman period at Thornhill Farm where previous analysis suggested a specialist pastoral regime operating on a subsistence level (Jennings *et al.* 2004). There is nothing within the faunal assemblage of the 2003–4 excavations to alter this interpretation.

Plant and Invertebrate Remains by Mark Robinson and Seren Griffiths

The Iron-Age and early Roman settlement at Coln Gravel was sited near the confluence of the Thames and Coln rivers. The site was interspersed with late glacial palaeochannels, which by the Iron Age no longer held water, and the water table was some 1.2 m below the gravel surface. Negative features contained preserved organic material.

The Samples

A total of 120 soil samples were taken during the 2003 and 2004 seasons of excavation at Coln Gravel (see Jennings *et al.* 2004 for a synthesis of the earlier work at Thornhill Farm). Twenty-two of the samples were processed solely for the recovery of human skeletal remains. Of the other 98 soil samples, taken for the recovery of plant and invertebrate remains, 31 were processed for charred plant remains, 31 for waterlogged plant remains and 19 for mollusc shells. Fourteen monolith samples were taken to recover pollen sequences (see below) and three samples were taken (in addition to the 31 waterlogged samples) to recover insects.

Samples were taken from a range of feature types and periods, including middle to late Iron-Age ring-gullies, late Iron-Age/early Roman boundary and enclosure ditches, various pits and postholes and the Roman trackway. A detailed methodology for the analysis can be found in the site archive.

Waterlogged assemblages were poorly preserved at the site. Charred assemblages were very sparse and, excluding charcoal, were only present in four samples. On the basis of the assessment of macroscopic plant and invertebrate assemblages (Sikking 2005), four flots (three waterlogged samples and one with charred plant remains) were recommended for further analysis, but following additional phasing information only one of the waterlogged samples was selected. It came from an early/middle Iron-Age enclosure ditch (sample 129, context 2501, enclosure 3: Fig. 4). The charred sample originated from an early Romano-British ditch (sample 98, context 2086, ditch 2711: Fig. 6).

Results

The identifications from the waterlogged and charred plant material (excluding charcoal) are listed in Tables 4 and 5. Nomenclature follows Stace (2005). The molluscan evidence in these flots is included in Table 6. The waterlogged remains showed evidence of recent deterioration, probably as a result of water abstraction over the past two decades related to gravel quarrying.

The waterlogged assemblage

Sample 129 from the bottom of the early/middle Iron-Age enclosure ditch belonging to enclosure 3 (context 2501) contained plant remains preserved by waterlogging. The aquatic ecology of *Ranunculus* subgen. *Batrachium* sp. (water crowfoot), and its preservation in anoxic environments, indicates that the ditch contained stagnant water during the Iron Age. Occurrence of shells of stagnant water molluscs including *Lymnaea peregra*, *L. truncatula* and *Anisus leucostoma* supports this. There is no evidence of a riverine component from the molluscan assemblage to suggest flooding. The majority of the waterlogged plant remains such as *R. repens* (creeping buttercup), *Potentilla anserina* (silverweed), and *Carex* spp. (sedges) have their origin in a wet grassland terrestrial environment surrounding the ditch or perhaps even on the higher banks of the ditch itself. Terrestrial species are also present in the molluscan assemblage. It seems most likely that the terrestrial molluscs and plants entered the ditch through natural processes, probably from the immediately local environment.

The charred assemblage

The charred assemblage of sample 98 (context 2086) represents a range of coarse herbage, with indications of a damp environment, as the assemblage from sample 129 also suggests. There is only a slight presence of charred cereal processing remains. The assemblage probably represents the burning of general waste plant debris from the settlement.

Table 4. The waterlogged plant remains.

Sample		129
Context		2501
Phase		Early/mid Iron Age
Feature type		Enclosure ditch
Floated volume (litres)		1
Number of waterlogged items/litre		
<i>Ranunculus</i> cf. <i>repens</i> L.	Creeping buttercup	3
<i>R. parviflorus</i> L.	Small-flowered buttercup	2
<i>R. sceleratus</i> L.	Crowfoot buttercup	–
<i>R.</i> subgen. <i>Batrachium</i> sp. (A. Gray)	Water crowfoot	9
<i>Urtica dioica</i> L.	Common nettle	222
<i>Chenopodium ficifolium</i> Sm.	Fig-leaved goosefoot	–
<i>C. album</i> L.	Fat hen	4
<i>Atriplex</i> spp.	Orache	6
<i>Stellaria media</i> gp. (L.) Vill.	Common chick weed	–
<i>Persicaria maculosa</i> Gray	Redshank	18
<i>P. lapathifolia</i> (L.) Gray	Pale persicaria	4
<i>Rumex conglomeratus</i> Murray	Sharp dock	–
<i>Rumex</i> sp.	Dock	28
<i>Rorippa nasturtium-aquaticum</i> (L.) Hayek	Watercress	–
<i>Rubus arvensis</i> L.	Field penny-cress	1
<i>Rubus fruticosus</i> agg L..	Brambles	1
<i>Potentilla anserina</i> L.	Silverweed	3
<i>P.</i> cf. <i>reptans</i> L.	Creeping cinquefoil	4
<i>Aethusa cynapium</i> L.	Fool's parsley	1
<i>Hyoscyamus niger</i> L.	Henbane	1
<i>Ballota nigra</i> L.	Black horehound	1
<i>Galeopsis tetrahit</i> agg.	Common hemp-nettle	–
<i>Mentha</i> cf. <i>aquatica</i> L.	Water mint	–
<i>Plantago major</i> L.	Greater plantain	–
<i>Sambucus nigra</i> L.	Elder	–
<i>Valerinella dentata</i> L.	Narrow-fruited cornsalad	1
<i>Carduus</i> sp.	Thistle	7
<i>Lapsana Communis</i> L.	Nipplewort	1
<i>Sonchus asper</i> (L.) Hill	Prickly sow-thistle	4
<i>Juncus</i> sp.	Rush	1
<i>Eleocharis S. Palustres</i> sp.	Spike rush	1
<i>Isolepis setacea</i> (L.) R. Br.	Bristle club-rush	–
<i>Carex</i> spp.	Sedge	31
Total weed seeds		354
Total number of waterlogged items		356

Table 5. The charred plant remains (excluding charcoal).

Sample		98	129
Context		2086	2501
Phase		Early Romano-British	Early/Mid Iron Age
Feature type		Ditch	Enclosure ditch
Floated volume (litres)		20	1
Number of charred items/litre		12.6	3
CEREAL GRAIN			
<i>Triticum spelta</i> L.	Spelt wheat	1	2
<i>Triticum</i> sp.	Wheat	6	–
<i>Hordeum vulgare</i> L.			
	- hulled lateral 6 row barley	1	–
<i>Hordeum</i> sp.- hulled	Barley	2	–
<i>Hordeum</i> sp.- median	Barley	1	–
<i>Hordeum</i> sp.	Barley	11	–
Cereal indet	Cereal	39	–
Total grain		61	2
CEREAL CHAFF			
<i>Triticum spelta</i> L. glume			
	base Spelt wheat	2	–
<i>T. spelta</i> L. rachis node	Spelt wheat	–	1
<i>T. dicoccum</i> or <i>spelta</i> glume			
	base Emmer/spelt wheat	2	–
<i>Hordeum</i> sp. rachis node	Barley	–	1
Total chaff		4	2
WEED SEEDS			
<i>Ranunculus</i> cf. <i>repens</i> L.	Creeping buttercup	1	–
<i>Urtica urens</i> L.	Small nettle	1	–
<i>Chenopodium album</i> L.	Fat-hen	1	–
<i>Persicaria maculosa</i> Gray	Redshank	1	–
<i>P. lapathifolia</i> (L.) Gray	Pale persicaria	2	–
<i>Fallopia convolvulus</i> (L.)			
	A. Löve Black bindweed	3	–
<i>Rumex</i> sp.	Dock	4	–
<i>Barbarea vulgaris</i>			
	W. T. Aiton Winter cress	1	–
<i>Potentilla</i> sp.	Cinquefoils	1	–
<i>Medicago lupulina</i> L.	Black medick	4	–
cf. <i>M. lupulina</i> L.		5	–
Apiaceae indet	Carrot family	1	–
<i>Plantago lanceolata</i> L.	Ribwort plantain	7	–
<i>Odontites vernus</i> (Bellardi)			
	Dumort Red bartsia	1	–
<i>Galium aparine</i> L.	Cleaver	9	1

<i>Centarea</i> sp.	Knapweed	–	–
<i>Leucanthemum vulgare</i> Lam.	Oxeye daisy	3	–
<i>Juncus effusus</i> gp.			
Fruit clusters	Soft rush	79	–
<i>Eleocharis S. Palustres</i> sp.	Tussock rush	12	–
<i>Carex</i> spp.	Sedge	26	–
<i>Bromus cf. secalinus</i> L.	Rye brome	1	–
Gramineae indet	Grass	1	–
Weed seed indet		23	–
Total weed seeds		187	1
Total number of charred items		252	3

Early–Middle Iron Age

Environment

Evidence from the waterlogged flot from sample 129 suggests a number of microcosms existed in or around the settlement at Thornhill Farm. The large number of *Utrica dioica* (common nettle) seeds together with *Hysocyamus niger* (henbane) and *Ballota nigra* (black horehound) indicates nutrient rich disturbed ground (Stace 2005). The presence of *Persicaria maculosa* (redshank) suggests that some ground had been recently disturbed (redshank being an annual weed), while the presence of significant quantities of nettles might suggest that some of the ground was disturbed less frequently or was continuously muddy. These areas seem to have been set against a background of wet pasture as evidenced by the presence of *Ranunculus cf. repens* (creeping buttercup), *Juncus* sp. (soft rush) and *Carex* sp. (sedges). Evidence of *Carduus* sp. (thistles) might indicate that the area was overgrazed. None of the plants featured on the list provides evidence for woodland or scrub vegetation, with the exception of a single seed of blackberry (*Rubus fruticosus* agg.).

Economy

A slight presence of *Triticum spelta* (spelt wheat) showed the use of cereal during the early–middle Iron Age. There was no evidence for larger-scale processing.

Early Romano-British

Environment

Molluscan evidence from sample 98, including shells of such species as *Lymnaea truncatula*, *Anisus leucostoma* and *Succinea* or *Oxyloma* sp, suggests that even shallow archaeological features such as ditch 2711 held at least temporary bodies of stagnant water. However, drier, open terrestrial conditions are suggested for the general ground surface of the site by the presence in the sample of *Vallonia excentrica* and *Pupilla muscorum*. There are also numerous shells of *Trichia hispida* gp. which could have lived either on the damp ditch sides or on the general ground surface.

The charred remains were mostly from cut herbaceous vegetation derived possibly from grassland surrounding the site. The presence of numerous seed clusters of *Juncus effusus* gp. (soft rush) is suggestive of wet pasture with rush tussocks. Some seeds of *Leucanthemum vulgare* (oxeye daisy), which is characteristic of hay meadow, are also present.

Table 6. Mollusca.

Period	Middle/Late Iron Age	Early Romano-British
Context <sample>	2501 <129>	2086 <98>
Feature type	Ditch fill	Ditch fill
<i>Carychium</i> sp.	+	
<i>Lymnaea truncatula</i> (Mull.)	+	+
<i>L. peregra</i> (Mull.)	+	
<i>Anisus leucostoma</i> (Mull.)	+	+
<i>Succinea</i> or <i>Oxyloma</i> sp.		+
<i>Pupilla muscorum</i> (L.)		+
<i>Vallonia excentrica</i> Sterki		+
<i>Vallonia</i> sp.	+	
<i>Trichia hispida</i> gp.		+

Key: + = present

Economy

There is continued evidence for the use of cereals at the site. The few grains and pieces of chaff of *Triticum spelta* (spelt wheat) and *Hordeum vulgare* (barley) represent cereal crops typical of the region. Some of the weeds such as *Galium aperine* (cleavers) are cereal weeds (in this case specifically autumn sown crops). The seed clusters of *Juncus effusus* gp. (soft rush) suggest that rush was deliberately cut and then accidentally burnt. It may have been cut for animal bedding or amongst vegetation cut for animal fodder or roofing. The evidence for an animal dependant economy (nutrient rich ground, overgrazing, absence of cereal resources) makes it tempting to see the cut rush as an aspect of animal husbandry.

Conclusions

Only four of the samples processed as part of the excavations at Coln Gravel produced evidence for cereal crops and only one in volumes worthy of analysis. The preservation of waterlogged plant remains is poor and restricted over this area of the site. The evidence in negative features for plants and molluscs which exploit waterlogged niches (such as *Ranunculus* subgen. *Batrachium* sp.) suggests that the water table has lowered since the formation of these deposits. It seems likely that this resulted from gravel extraction in the area since the 1980s and possibly earlier. The paucity of charred crop remains appears to result not from post-depositional factors (as with the waterlogged remains) but is an artefact of human activity. The samples emphasise a limited use of cereal crops in the early–middle Iron Age and the early Roman period. It seems that the site produced very small volumes of grain or, more likely given the over-riding impression of wet conditions, that any grain utilised was imported (perhaps already processed given the equally limited evidence of cereal chaff). The reliance on cereals seems to have been no more than that which was adequate for the settlement's immediate needs. The indications of nutrient rich soils, the limited apparent reliance on plant resources, the suggestion of overgrazing with consequential muddy areas, and the exploitation of rush might be taken together to indicate a dependence on animal resources. The nutrient rich species perhaps indicate dung deposits, and the rush may have been used as animal bedding. This generally concurs with evidence from the previous excavations at Thornhill Farm (Robinson 2004), although the results from the Coln Gravel samples do provide less evidence for hay meadow. The continued evidence for an environment dominated not by cereals but by

wet grassland with no evidence for woodland or scrub is of interest. One point of note is that the water snail *Lymnaea truncatula* which lived in some of the ditches on the site is the intermediate host of the sheep liver fluke. It is therefore unlikely that the economy of the site would have placed much emphasis on sheep rearing.

Palynological Analysis by Denise Druce

Following an assessment of eight monoliths taken from a number of features at Coln Gravel, two were deemed to contain sufficiently well-preserved pollen grains to merit further analysis. Monolith 119 came from the primary and lowermost secondary fills of Iron-Age enclosure ditch 1626/1628 (enclosure 3), which showed evidence for a recut. Monolith 95 came from mid Roman ditch section 1499 (part of ditch 2695) and cut through two contexts (1502 and 1501). Thirteen sub-samples were taken from the lowermost 0.30 m of sediment from ditch 1626/1628 and seven from the lowermost 0.15 m of sediment from ditch 1499 (context 1501). A full methodology can be found in the site archive.

Results

Monolith 119

Among the samples taken from fill of Iron-Age enclosure ditch 1626/1628 (enclosure 3) the pollen concentration in four (0.38 m, 0.40 m, 0.41 m and 0.46 m depth) was very low. The pollen evidence from the other nine samples indicated a very open landscape. It appears to have been surrounded primarily by grassland/rough ground during the accumulation of the sediments. The assemblages were dominated by Poaceae (grass family) and *Plantago lanceolata* (ribwort plantain) pollen, with *Plantago* being the most dominant taxa (40–60% Total Land Pollen (TLP)). *Cichorium intybus*-type pollen (which includes, for example, nipplewort, dandelions and hawkweeds) was also well represented and reached levels of 20 per cent TLP or more.

The suite of herbaceous pollen in ditch 1626/1628 proved to be very similar to that in ditch 1499 (see below). However, additional taxa included *Apium*-type (honewort, marshworts); *Centaurea scabiosa* (greater knapweed); Fabaceae (pea family); *Galium*-type (including bedstraws, squinancywort, wild madder); *Lotus* (trefoils); cf. *Ononis* (restharrow); and *Mentha*-type (calamints, wild marjoram, thyme, gypsywort, mints, claries). Apart from very few grains at 0.25 m depth, *Cerealia* pollen was notably absent from ditch 1626/1628.

There was an increase in pollen concentration at 0.30 m depth, coinciding with a slight increase in a number of the herbaceous taxa and the singular presence of *Centaureium* (centauries) and *Circaea* (enchanter's-nightshades). The last is typical of woods and hedgerows. Although the pollen diagram (Fig. 11) from ditch 1626/1628 appeared to show some variation in the relative values of some of the taxa, it is highly likely that these fluctuations are the result of differential pollen preservation rather than actual vegetation changes. Proportions of corroded and crumpled grains were especially high at some levels, and consequently there is likely to be some distortion in the pollen curve from this feature. As a result, any changes in the pollen diagram must remain speculative.

Monolith 95

Of the seven samples taken from mid Roman ditch 1499, four contained abundant identifiable pollen grains. Herbaceous pollen dominated the assemblages in all four samples and was primarily made up of Poaceae, which reached levels of 30–43 per cent TLP, and *Plantago lanceolata* pollen, which reached levels of c.20 per cent TLP in three of the four samples. *Cichorium intybus*-type

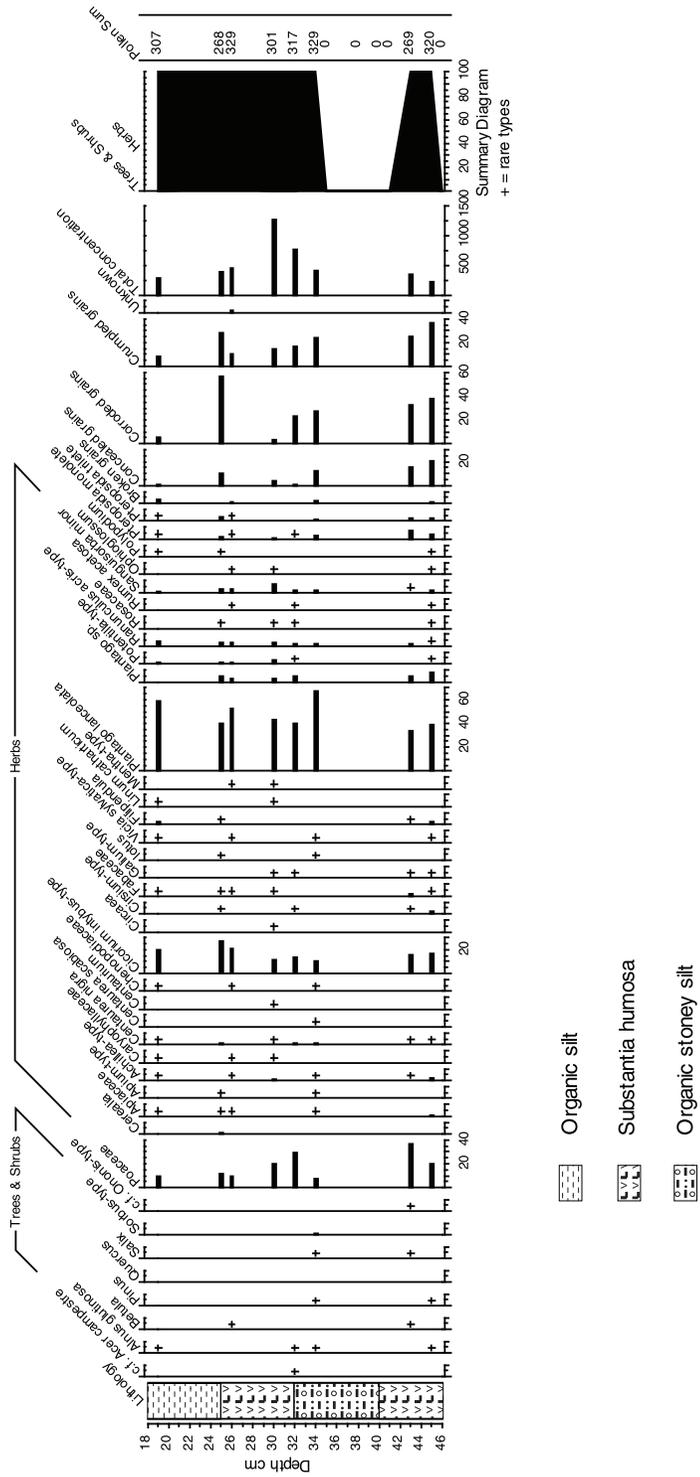


Fig. 11. Pollen Diagram for Iron-Age enclosure ditch 1626/1628 (enclosure 3).

pollen was also well represented, especially in the upper two samples (0.23 m and 0.25 m depth) where it reached 15–20 per cent TLP. *Achillea*-type pollen (which includes chamomiles, scented mayweed and scentless mayweed) reached <10 per cent TLP, and Cyperaceae (sedge), reached levels of about 10 per cent TLP in the upper two samples. A very limited number of *Potamogeton* (pondweed) pollen grains were also present at 0.25 m depth, which, coupled with the increase in Cyperaceae, may suggest an increase in wetness at this level.

Pollen from a variety of other herbaceous plants was present in at least three of the four samples, but each represented less than *c.*5 per cent TLP. These plants included Caryophyllaceae (pink family), *Centaurea nigra* (common knapweed), Chenopodiaceae (goosefoot family), *Filipendula* (meadowsweets), *Ranunculus acris*-type (buttercups), *Rumex acetosa* (common sorrel) and Brassicaceae/*Sinapis*-type pollen (cabbage family). *Cerealia* (cereal-type) pollen, including probable *Hordeum* (barley) (S. Peglar pers. comm.) was present in all of the samples, and in all cases the cereal type grains matched the criteria outlined by Anderson (1979). Accordingly, all were at least 40 µm in size with an annulus diameter of at least 8 µm.

The pollen of a number of annual herbaceous species was limited to the lowermost sample at 0.29 m depth. Grains included those of *Fallopia convolvulus* (black bindweed), *Linum catharticum* (fairy flax) and *Rhinanthus*-type (including eyebrights, yellow bartsia and toothwort). There was also a small but noticeable increase in Apiaceae (carrot family), *Sanguisorba minor* (salad burnet), and *Succisa pratensis* (devil's-bit scabious) at 0.23 m depth. However, values for all of these taxa remain relatively low (< 5% TLP). Overall, there were no significant changes in the pollen assemblages and the flora present throughout the accumulation of the lowermost sediments within the ditch was consistent with primarily open grassland/rough ground with an element of damp ground.

The pollen evidence from ditch 1499 (Fig. 12) indicated that the landscape was more or less devoid of trees/hedgerows. A slight increase in *Alnus glutinosa* (alder) and *Corylus-avellana*-type pollen (hazel/*Myrica gale*) was registered at 0.27 m depth, although levels of tree/shrub pollen do not exceed more than 10 per cent TLP. In addition, the total pollen concentration almost doubled at this level. This may indicate that the deposits accumulated much more slowly and therefore that surfaces were exposed much longer to airborne pollen, thus creating slightly skewed data. Pollen grains of *Quercus* (oak), *Betula* (birch) and *Salix* (willow) were present at 0.25 m and 0.27 m depth, although apart from *Quercus*, they were each at levels of less than 1 per cent TLP. *Pinus* (pine) pollen was evident at 0.29 m depth and *Sorbus*-type (whitebeams) and *Calluna vulgaris* (heather) at 0.25 m depth.

A number of *Pteropsida* (fern) spores, including *Ophioglossum* (adder's-tongues) were present in all of the samples. They may represent vegetation growing in and around the ditch.

Discussion

Interpreting the pollen data from man-made features such as ditches and pits has to be carried out with a degree of caution. They are likely to contain pollen from a variety of different sources including regional and local vegetation as well as from material eroded from the sides of the feature (Dimbleby 1985). Pollen records from ditches that are associated with archaeological sites may also contain records of material that was brought onto the site or represent pollen from functional material such as bedding or fodder.

There is no obvious evidence for any washed-in or dumped material in either of the ditches from Coln Gravel. In fact the pollen curves from both features record no discernible changes in the landscape whilst the ditch sediments were accumulating. Partly as a result of this, the interpretation of the pollen evidence is essentially qualitative, and in some cases based on the presence or absence of specific indicator taxa.

The evidence from the middle Iron-Age ditch 1626/1628 showed little evidence for cereal cultivation. Levels of *Plantago lanceolata* were high, and the pollen assemblage consisted primarily of grassland herbs and ruderals with little evidence for shrub/tree or hedgerows. This is consistent with the environmental evidence from previous excavations at Thornhill Farm, which suggested that the Iron-Age/early Roman landscape consisted mainly of areas of pasture (Robinson 2004).

As Robinson (2004) suggested, it is unusual for settlements of the mid-late Iron Age in southern Britain to contain a paucity of evidence for cereal usage/cultivation. However, evidence for a primarily pastoral economy has also been obtained from other sites in Gloucestershire and Wiltshire, including a number from the excavations alongside Roman Ermin Street (Mudd *et al.* 1999). The charred plant remains from the later prehistoric features from the road scheme were notable for the absence of cereal remains and weed seeds associated with cultivation (Pelling 1999). In contrast, the pollen evidence from Latton 'Roman Pond', which contained sediments that started to accumulate in the late Bronze Age, suggests that the Iron-Age landscape consisted of both pasture and cultivated land (Scaife 1999).

The pollen evidence from the mid Roman ditch 1499 (2695) also indicated an open landscape, with little in the way of shrub/woodland or hedgerows. The overwhelming dominance of Poaceae, *Plantago lanceolata*, and herbaceous pollen associated with grassland/rough ground, such as *Cichorium intybus*-type, *Achillia*-type and *Ranunculus acris*-type, suggests that the area surrounding the ditch was primarily given over to pasture (Behre 1981; Faegri and Iversen 1989). Given the wide range of habitats occupied by some herbaceous taxa, it is often difficult to interpret the nature of the surroundings. However, given the presence of *Potamogeton* and Cyperaceae it is likely that conditions in and adjacent to the ditch were fairly wet.

Unlike that from ditch 1626/1628, the pollen evidence from ditch 1499 suggested that some cultivation was taking place nearby. Indeed, given the poor dispersal of cereal pollen, the levels of nearly 5 per cent TLP in the fills from the ditch suggest that cultivation may have been taking place very near the ditch. This is also implied by the combined presence of the cultivation indicator *Fallopia convolvulus* and Brassicaceae/*Sinapis*-type pollen in the ditch fills (Faegri and Iversen 1989).

Behre (1981) suggested that *Plantago lanceolata*, which is a relatively prolific pollen producer, plays a significant role in the recolonization of fallow or abandoned land and, together with grasses and other perennial species, favours areas that were once cultivated. It is possible, therefore, that the area around ditch 1499 was being used for either rotational cultivation or represents land being 'let go' for pasturage.

Overall, the pollen evidence from the fills of ditches 1626/1628 and 1499 indicated a very open landscape with little evidence for trees, shrubs or hedgerows bordering the ditches. The area around ditch 1499 appears to have been used for both cereal cultivation and pasture, the latter representing either fallow land or land that had been 'let go.' In contrast, the vegetation surrounding ditch 1626/1628 is typical of fallow/pasture land with very little evidence for cereal cultivation.

DISCUSSION

The evidence uncovered during the excavations at Coln Gravel relates very closely to that uncovered during excavations at Thornhill Farm between 1985 and 1989 (Jennings *et al.* 2004). In fact the archaeological features revealed comprise part of the same settlement uncovered during the earlier excavations, and some features running beyond the limits of the 2003–4 excavations can be traced to the north on the plan of the 1985–9 excavations. This discussion of the Coln Gravel site therefore complements the detailed discussion of the earlier Thornhill Farm site

to be found in Jennings *et al.* 2004. The site revealed during the 2003–4 excavations suffers from many of the same problems of interpretation as the earlier site, namely that features comprise intercutting pits and ditches with homogeneous fills, that the pottery assemblage is sparse and not particularly distinctive, that the site has been badly truncated and that little evidence for structures survives. Chronological resolution has therefore proven problematic, with particular difficulty experienced in distinguishing between early and middle Iron-Age phases and middle and later Iron-Age phases. The functional interpretation of enclosures has also proved difficult, with the lack of structures making it difficult to distinguish between domestic and stock enclosures. However, despite the evident problems, the information gained during the 2003–4 excavations has served to illuminate our understanding of Iron-Age and Roman settlement in the immediate area, and it fills in our picture of the Iron Age and the Roman period at a regional scale.

Period 1: early Iron Age

Evidence of early Iron-Age activity is exceptionally sparse, being restricted to a single sherd of pottery. This dearth of evidence is perhaps largely explained by the difficulty of distinguishing between pottery fabrics of early and middle Iron-Age type. However, the lack of features in the following early to middle Iron-Age phase reinforces the impression of a relative lack of activity in the earlier part of the Iron Age.

Period 2: early to middle Iron Age

Early to middle Iron-Age features comprised a large roundhouse (approximately 16 m in diameter), defined by a ring-gully, and three pits. There were no postholes associated with the roundhouse, although shallow postholes need not have survived the truncation of the gravel. The ring-gully lay in the north-western corner of the site, and part of its circumference ran beyond the limits of excavation. The evidence suggests the presence of domestic settlement, which would appear to have been of low density. Further discussion of the nature of the settlement is difficult, given the lack of evidence. However, by analogy with other settlements of this kind on the first gravel terrace (e.g. Claydon Pike) this would lead to a view that its economy was pastoral. A lack of environmental and artefactual evidence from these features, including animal bone and pots, means that further inferences concerning the nature of the environment, economy and society are difficult to draw.

Period 3: middle Iron Age (1985–9 excavations period A)

By the middle Iron Age settlement had become more firmly established with substantial penannular enclosures occupying the higher ground towards the northern end of the site. These enclosures followed a broadly NW–SE alignment, possibly following a slight ridge that divided dryer, more habitable ground to the north-east from lower ground more prone to flooding to the south-west. To the north-west of the enclosures were the remains of a ring-gully which had largely been cut away.

The nature of the settlement is difficult to infer, given that only part of one structure survived. However, given the substantial scale of the ditches and the quantities of pottery and animal bone within their fills, it seems unlikely that they were all stock enclosures. It is more probable that some at least represented domestic enclosures containing either mass-wall structures or post-built structures that left no trace in the gravel after truncation. These enclosures are comparable to similar features found to the north during the 1985–9 excavations, particularly enclosure 120

(Jennings *et al.* 2004, 26–8) which also contained no trace of structures but did appear to be paired with a contemporary roundhouse. A similar enclosure at Claydon Pike did contain a well-defined roundhouse gully (Miles *et al.* 2006).

A pastoral interpretation for the site economy is suggested by the environmental evidence, which indicates an open landscape with few trees or shrubs and the presence of species such as ribwort plantain common in pastoral landscapes. The material culture assemblage recovered from the ditch fills, consisting largely of barrel-shaped jars in sandy or calcareous fabrics, does not suggest a settlement of particularly high status. The presence of two cattle skulls in the fills of enclosure 3 probably formed part of a special or structured deposit, suggesting that routines of everyday life commonly conducted on middle Iron-Age domestic sites were enacted in and around the enclosures. Possible metal-working debris from this phase also suggest that small scale craft-working/industrial activities were carried out.

Period 4: late Iron Age (1985–9 excavations period B)

Activity dating to the late Iron Age was restricted to a single sub-circular ring-ditch in the centre of the northern part of the site. The feature contained four sherds of late Iron-Age pottery and was cut by late Iron-Age to early Roman ditches. Given the size of the feature (approximately 5 m in diameter) it could be interpreted as an eaves drip gully for a small roundhouse or a stack-ring. The relative lack of evidence for this period of occupation means that inferences concerning economy, society and environment are difficult to draw, and in this respect the evidence is comparable to that uncovered during the 1985–9 excavations.

Period 5: late Iron Age to early Roman (1985–9 excavations periods C–D)

The late Iron-Age to early Roman settlement may be seen as an elaboration of the middle Iron-Age occupation, with the settlement focus again occupying the north-eastern part of the site, just to the north-east of the middle Iron-Age enclosures. A substantial linear ditch ran across the site from north-west to south-east and sub-rectangular enclosures abutted it to the south-west. No structures were apparent within the enclosures, but once again mass-wall structures or shallow postholes need not have left any trace in the gravel. Three pits containing late Iron-Age to early Roman pottery were dug across the entrance to middle Iron-Age enclosure 1, possibly acting as closing deposits and emphasising the shift of the settlement to the north.

In general the layout of the site and the environmental evidence gained from the earlier excavations (Jennings *et al.* 2004) indicates that the economy of the settlement continued to be predominantly pastoral. The material culture assemblage is poor. There is therefore little reason to suppose that the evidence represents anything other than a low-status subsistence farming community.

Period 6: early Roman (1985–9 excavations periods E–F)

The early Roman period was the phase when occupation was at its most extensive, with substantial and frequently recut boundary ditches dividing the site into north-eastern and south-western sectors. To the north-east and east was a series of sub-rectangular ditched enclosures. The lack of structures within these enclosures may again be due to the destruction of ephemeral remains or reflect their use largely for stock control. Alternatively there may have been a combination of stock control and settlement. To the south-west a network of slighter boundary ditches divided the landscape into large fields.

The chronology of this phase is based on spatial and stratigraphic relationships with the earlier enclosures and on an assemblage of early Roman pottery. Pollen samples suggest that the landscape continued to be open with few trees or shrubs. The presence of ribwort plantain is indicative of land being used for grazing. The animal bone assemblage, mostly recovered from the fills of the enclosure ditches, is dominated by cattle although sheep/goat bones are also prominent. This evidence indicates that the local subsistence economy continued much as before, relying on animal husbandry probably centred on cattle. The pottery assemblage was dominated by jars in a variety of locally produced fabrics suggestive of a low-status rural site (Evans 2001). However, small amounts of regional and continental imports indicate contact with the outside world, a contact which is perhaps also evidenced by the charred remains of wheat and barley recovered from boundary ditch 2711. In addition it must be emphasised that although there is a tendency to see a lack of material goods as indicating poverty, this is not necessarily the case. Indeed Taylor (2001, 56) has argued that ‘we still tend to be hung up on the idea that durable material goods equal wealth, which they obviously do not outside specific social contexts’. It may be that wealth was expressed in the consumption of cattle and sheep/goats, the remains of which were recovered from the pit and ditch fills of the early Roman settlement.

Period 7: middle Roman (1985–9 excavations period G)

The middle Roman period was characterised by a reorganisation of the landscape. The enclosures and ditches in the north-eastern part of the site were infilled and abandoned and a trackway was established across this area. To the south a new set of linear ditches and a sub-rectangular enclosure were established. The chronology of these features has been established by reference to the 1985–9 excavations, where the trackway was dated to the 2nd century AD. Environmental evidence suggested that much of the area had been turned into hay meadows (Robinson 2004), although the pollen evidence from the 2003–4 excavations does suggest that some cereal crops were also grown on site at this time (see Druce above). Unsurprisingly the middle Roman archaeology uncovered during the 2003–4 excavations mirrors that from the 1985–9 excavations very closely. There the ‘most significant features were newly constructed trackways, which crossed the site and divided up the landscape, seemingly without any regard for earlier activity. There is no evidence for actual occupation at the site from this period. Instead it seems to have formed part of an outlying field and trackway system. There was thus a shift of emphasis from the movement of animals within the site, to movement through its former area, with it now being tied into a wider landscape of exploitation.’ (Jennings *et al.* 2004, 19).

It seems likely that the site was incorporated into the outlying field systems of the developing settlement at Claydon Pike as part of a wider reorganisation of the middle Roman landscape (see below). Indeed as Taylor (2001, 53) has argued, we may infer a wholesale re-organisation of tenurial arrangements and social control of space, although we may not be able to access the precise details of those changes.

Period 8: late Roman

In the late Roman period Coln Gravel was largely devoid of activity, the exceptions being a substantial boundary ditch running along the western side of the site from north to south and a large rectangular double-ditched enclosure in the south-western corner cutting the ditch. Contained within this enclosure were two groups of inhumations. The chronology of this phase is again largely based on work done during the 1985–9 excavations, when the boundary ditch was traced to the north, as the pottery assemblage is undiagnostic. The enclosure is probably an

outlying part of the Roman settlement at Kempsford Bowmoor uncovered immediately to the south of the 2003–4 excavations during an earlier evaluation by OAU (OAU 1989; see below).

Period 9: medieval

The only evidence relating to the medieval period comprises a series of plough furrows running from north to south down the western side of the site. These were restricted to the western side of the late Roman boundary ditch, suggesting that boundary was still marked in some way during the medieval period.

The Local and Regional Setting

The excavations at the Coln Gravel site appear to have encompassed the fringes of two settlements belonging to different phases. To the north there are elements of the early–middle Iron-Age to early Roman settlement at Thornhill Farm which was comprehensively excavated in 1985–9. To the south lay the outer ditches and cemetery of the mid–late Roman settlement at Kempsford Bowmoor. In between lay an area of comparatively sparse activity for any period, presumably relating to its relatively low-lying position with a propensity to flood.

The earliest phase of settlement at Coln Gravel/Thornhill Farm (early–middle Iron Age) was roughly concurrent with the origins of other local sites on the first gravel terrace such as Claydon Pike and Horcott Totterdown Lane (Pine and Preston 2004). Although the difficulties of dating this period have been discussed, it would appear to be a time of increasing colonisation of these more marginal lower terraces, possibly due to increased pressure on traditional pastoral land (Lambrick 1992, 94).

Throughout the middle Iron Age both of the settlements mentioned above appear to have shifted in location. Each area of domestic activity probably represented successive generations of one or two family groups associated with roundhouses, enclosures and the occasional four-post structure possibly for grain storage. The various foci of middle Iron-Age occupation at Coln Gravel/Thornhill Farm may have been part of a similar phenomenon, although they could equally have represented contemporaneous family groups. Some areas of both Horcott and Claydon Pike were enclosed by ditched boundaries, but the landscape as a whole appears to have remained fairly open, as would befit sites whose primary economic regime was pastoral farming. At Coln Gravel/Thornhill Farm the emphasis is also upon livestock control, with roundhouses and possible stock enclosures forming ‘units’ around a central open space and, at some point, a boundary ditch defining much of the western side (see Jennings *et al.* 2004, 149, fig. 2.1).

The relationship between specialised subsistence sites such as these and settlements operating more mixed agricultural economies on the higher gravels terraces and beyond is one which has been commented upon on a number of occasions (Hingley 1989; Allen 1990, 78; Jennings *et al.* 2004; Miles *et al.* 2006). Recent excavations on the Corallian Ridge at Coxwell Road, Faringdon, c.10 km south-east of Coln Gravel, revealed an apparently low-status settlement of early to middle Iron-Age date with a large quantity of grain storage pits and cereal remains which included spelt, barley and emmer. The high density of pits was interpreted as representing centralised distribution of produce, with grain being traded with specialist pastoral sites in the lower terraces of the Upper Thames Valley and possibly even with local hillforts such as Badbury and Little Coxwell (Weaver *et al.* 2004; Cook *et al.* 2004). However, the relationships between the hillforts, mixed economy ‘low-status’ sites such as Coxwell Road and Valley sites such as Coln Gravel remain quite uncertain.

There was clearly an intensification of activity in the Upper Thames Valley during the later Iron Age/early Roman period, with many sites also showing some degree of transformation and/or

shift in location (Miles *et al.* 2006). In some ways this shift may be seen as part of the wider pattern of settlement migration already witnessed in the early to middle Iron Age, although the radical reorganisation of some settlements points to more specific economic and even socio-political developments in the region. Taking the Thornhill Farm site as a whole, there appears to have been quite an expansion of settlement at the start of the 1st century AD, represented by groups of tightly knitted enclosures, extensive ditched outer boundaries and a number of waterholes (Jennings *et al.* 2004, fig. 2.2). This points to more intensive pastoral activity. Similar changes were noted at Claydon Pike. However, certainly not all settlements in the region underwent such intensification. Horcott Totterdown Lane, for example, had no more dense settlement in this phase than in the preceding middle Iron Age. Nevertheless, there were many physical changes occurring that were quite similar to those at Thornhill Farm and Claydon Pike, including the establishment of a ditched droveway and probable stock pens (Pine and Preston 2004). All of this suggests that most of the floodplain and lower valley terraces in this region were almost certainly used for fairly intensive animal pasture, an interpretation corroborated by the general environmental evidence from the period indicating damp open heavily-grazed grassland (Robinson 2006).

The status of the Coln Gravel/Thornhill Farm settlement, especially in relation to neighbouring Claydon Pike, has already been discussed (Jennings *et al.* 2004; Miles *et al.* 2006) and so will not be repeated at length here. Despite the many physical similarities of the late Iron-Age/early Roman phases between the two sites, there is evidence in the quantity and range of imported crops and other goods that indicates the presence of wider networks of exchange, and probably a differing social status, at Claydon Pike. This would certainly explain Claydon Pike's pronounced physical, social and economic transformation in the early 2nd century AD at the apparent expense of Thornhill Farm where occupation ceases. It has been suggested (Robinson 2006) that Thornhill Farm was incorporated into a wider estate based at Claydon Pike at that time, and the excavations at Coln Gravel in 2003–4 revealed nothing to overturn that idea.

The double-ditched boundary and burials in the southernmost part of the 2003–4 excavations almost certainly represent the outer fringes of a Roman settlement at Kempsford Bowmoor lying just beyond the stream to the south-east (OAU 1989). This little-known and ill-defined site has been dated from pottery and coins recovered during an evaluation approximately to the 2nd to 4th centuries AD. It may well have formed a 'satellite' settlement within the larger Claydon Pike estate, with which it appears to have been linked by a trackway. Certainly the presence of inhumation graves clustered around its outer double-ditched boundaries is strikingly similar to the contemporary Claydon Pike settlement. There can be no doubt that the establishment of the site at Kempsford Bowmoor – whatever its economic and social status – was firmly tied with the local and regional reorganisation of the landscape in the 2nd century AD (see Henig and Booth 2000; Miles *et al.* 2006) and that the settlement continued in some form into the later Roman period.

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Location of the Archive

The archive will be deposited with the Corinium Museum, Cirencester.

Bibliography

- Allen, T.G., 1990. *An Iron Age and Romano-British enclosed settlement at Watkins Farm, Northmoor, Oxon.* (Thames Valley Landscapes: The Windrush Valley **1**, Oxford).
- Allen, T.G., 1991. 'An oppidum at Abingdon, Oxfordshire', *South Midlands Archaeol.* **21**, 97–9.
- Allen, T.G., 1997. 'Abingdon: west-central redevelopment area', *South Midlands Archaeol.* **27**, 47–54.
- Allen, T.G., 2000. 'The Iron Age background', in Henig and Booth, 1–33.
- Allen, T.G., Darvill, T.C., Green, L.S., and Jones, M.U., 1993. *Excavations at Roughground Farm, Lechlade, Gloucestershire: a prehistoric and Roman landscape* (Thames Valley Landscapes **4**, Oxford).
- Allen, T.G., and Robinson, M., 1993. *The prehistoric landscape and Iron Age enclosed settlement at Mingies Ditch, Hardwick-with-Yelford, Oxon.* (Thames Valley Landscapes: The Windrush Valley **2**, Oxford).
- Anderson, S.T., 1979. 'Identification of wild grass and cereal pollen', *Danmarks Geologiske Undersøgelse Årbog* **1978**, 69–92.
- Behre, K.-E., 1981. 'The interpretation of anthropogenic indicators in pollen diagrams', *Pollen et Spores* **23/2**, 225–43.
- Black, E.W., 1986. 'Romano-British burial customs and religious beliefs in south-east Britain', *Archaeol. Jnl.* **143**, 201–39.
- Booth, P., 2002. 'Late Roman cemeteries in Oxfordshire: a review', *Oxoniensia* **66**, 13–42.
- Booth, P., 2004. 'Oxford Archaeology Roman pottery recording system' (Oxford Archaeol. unpublished rep.).
- Boyle, A., Jennings, D., Miles, D., and Palmer, S., 1998. *The Anglo-Saxon cemetery at Butler's Field, Lechlade, Gloucestershire* (Thames Valley Landscapes **10**, Oxford).
- Brickley, M., and McKinley, J., 2004. *Guidelines to the standards for recording human remains* (Institute of Field Archaeologists Paper **7**, Southampton).
- Brothwell, D., 1981. *Digging up Bones* (Oxford University Press).
- Buikstra, J.E., and Ubelaker, D.H., 1994 *Standards for data collection from human skeletal remains* (Fayetteville, Arkansas).
- CAT 1996. 'Land to the rear of Sherborne House, Lechlade, Gloucestershire: archaeological evaluation report' (Cotswold Archaeol. Trust unpublished rep.).
- Coe, D., Jenkins, V., and Richards, J., 1991. 'Cleveland Farm, Ashton Keynes, second interim report: investigations, May–August 1989', *Wiltshire Archaeol. Mag.* **84**, 40–50.
- Cook, J., Guttman, E.B.A., and Mudd, A., 2004. 'Excavations of an Iron Age site at Coxwell Road, Faringdon', *Oxoniensia* **69**, 181–285.
- De Roche, C.D., 1978. 'The Iron Age pottery', in M. Parrington, *The Excavation of an Iron-Age Settlement, Bronze-Age Ring-Ditches and Roman Features at Asbville Trading Estate, Abingdon (Oxfordshire) 1974–76* (CBA Research Rep. **28**), 40–74.
- Dimbleby, G.W., 1985. *The palynology of archaeological sites* (London).

- Driesch, A. von den, 1976. *A Guide to the Measurement of Animal Bones from Archaeological Sites* (Peabody Museum Bulletin 1, Harvard Univ., Cambridge, Mass.).
- Duncan, D., Lambrick, G., and Barclay, A., 2004. 'Later prehistoric and Roman pottery', in Lambrick and Allen, 259–334.
- Edgeley-Long, G.P., 2002. 'Form and function: vessel manufacture and use at the middle Iron Age settlement of Fairford, Claydon Pike' (University of Southampton MA thesis).
- Esmonde Cleary, S., 2000. 'Putting the dead in their place: burial location in Roman Britain', in J. Pearce, M. Millett and M. Struck (eds.), *Burial, society and context in the Roman World* (Oxford), 127–42.
- Evans, J., 2001. 'Material approaches to the identification of different Romano-British site types', in S. James and M. Millett (eds.), *Britons and Romans: advancing an archaeological agenda* (CBA Research Rep. 125), 26–35.
- Faegri, K., and Iversen, J., 1989. *Textbook of modern pollen analysis* (Chichester).
- Fulford, M., and Nichols, E. (eds.), 1992. *Developing landscapes of lowland Britain: the archaeology of the British gravels, a review* (Soc. Antiq. Occasional Paper 14, London).
- Grant, A., 1982. 'The use of tooth wear as a guide to the age of domestic ungulates', in B. Wilson, C. Grigson and S. Payne (eds.), *Ageing and sexing animal bones from archaeological sites* (BAR British Series 109, London), 91–108.
- Green, S., Booth, P., and Allen, T., 2004. 'Late Iron Age and Roman pottery', in Lambrick and Allen 2004, 303–34.
- Halstead, P., 1985. 'A study of mandibular teeth from Romano-British contexts at Maxey', in F. Pryor, *Archaeology and environment in the lower Welland Valley* (East Anglian Archaeol. Rep. 27), 219–24.
- Harding, D.W., 1972. *The Iron Age in the Upper Thames Basin* (Oxford).
- Hearne, C.M., and Adam, N., 1999. 'Excavation of an extensive late Bronze Age settlement at Shorncliffe Quarry, near Cirencester, 1995–6', *Trans. BGAS* 117, 35–73.
- Henig, M., and Booth, P., 2000. *Roman Oxfordshire* (Stroud).
- Hillson, S., 1996. *Dental anthropology* (New York).
- Hingley, R., 1989. *Rural settlement in Roman Britain* (London).
- Hingley, R., 1993. 'Early Iron Age pottery', in Allen *et al.* 1993, 40–4.
- Jennings, D., Muir, J., Palmer, S., and Smith, A., 2004. *Thornhill Farm, Fairford, Gloucestershire: an Iron Age and Roman pastoral site in the Upper Thames* (Thames Valley Landscapes 23, Oxford).
- Jones, G.P., 2006. 'The pottery', in Miles *et al.* 2006.
- Lambrick, G., 1979. 'The Iron Age pottery', in Lambrick and Robinson, 35–46.
- Lambrick, G., 1992. 'The development of late prehistoric and Roman farming on the Thames gravels' in Fulford and Nichols, 78–105.
- Lambrick, G., and Allen, T.G., 2004. *Gravelly Guy, Stanton Harcourt: the development of a prehistoric and Romano-British community* (Thames Valley Landscapes 21, Oxford).
- Lambrick, G., and Robinson, M.A., 1979. *Iron Age and Roman riverside settlements at Farmoor, Oxfordshire* (CBA Research Rep. 32, London).
- Lamdin-Whymark, H., Brady, K., and Smith, A., forthcoming. 'Excavation of a Neolithic to Roman landscape at Horcott Pit, near Fairford, Gloucestershire, 2002–3' (Oxford).
- Levine, M.A., 1982. 'The use of crown height measurements and eruption-wear sequences to age horse teeth' in B. Wilson, C. Grigson and S. Payne (eds.), *Ageing and sexing animal bones from archaeological sites* (BAR British Series 109, London), 223–50.
- Levine, M.A., 2004. 'The faunal remains', in Jennings *et al.*, 109–32.
- Miles, A., 1962. 'Assessment of age of a population of Anglo-Saxons from their dentition', *Proc. of the Royal Soc. of Medicine* 55, 881–6.
- Miles, D., 1997. 'Conflict and complexity: the later prehistory of the Oxford region', *Oxoniensia* 62, 1–20.
- Miles, D., Palmer, S., Smith, A., and Jones, G.P., 2006. *Iron Age and Roman settlement in the Upper Thames Valley: excavations at Claydon Pike and other sites within the Cotswold Water Park* (Thames Valley Landscapes 26, Oxford).
- Mudd, A., Williams, R.J., and Lupton, A., 1999. *Excavations alongside Roman Ermine Street, Gloucestershire and Wiltshire: the archaeology of the A419/A417 Swindon to Gloucester road scheme 2* (Oxford).

- OA 2003. 'Cotswold Community, Wiltshire and Gloucestershire, 2002: archaeological excavation interim report' (Oxford Archaeol. unpublished rep.).
- OAU 1989. 'Kempford Bowmoor, Gloucestershire: archaeological evaluation' (Oxford Archaeol. Unit unpublished rep.).
- OAU 2001. 'Allcroft Farm, Little London, Lechlade, Gloucestershire: post-excavation assessment report' (Oxford Archaeol. Unit unpublished rep.).
- Pearce, J., 1999. 'The dispersed dead: preliminary observations on burial and settlement space in Roman Britain', in P. Barker, C. Forcey, S. Juni and R. Witcher (eds.), *TRAC 98: proceedings of the eighth annual theoretical Roman archaeology conference* (Oxford), 151–61.
- Pelling, R., 1999. 'Charred and waterlogged plant remains', in Mudd *et al.*, 469–93.
- Philpott, R., 1991. *Burial practices in Roman Britain* (BAR British Series 219, Oxford).
- Pine, J., and Preston, S., 2004. *Iron Age and Roman settlement and landscape at Totterdown Lane, Horcott, near Fairford, Gloucestershire* (Thames Valley Archaeol. Services Monograph 6, Reading).
- Powell, K., Brown, L., and Laws, G., forthcoming. 'An early prehistoric enclosure and Iron Age and Romano-British settlement at Latton Lands, Wiltshire: excavations, 2001–2004', *Wiltshire Archaeol. Mag.*
- Robertson-Mackay, R., 1987. 'The Neolithic causewayed enclosure at Staines, Surrey: excavations, 1961–63', *Proc. Prehistoric Soc.* 53, 23–128.
- Robinson, M., 2004. 'The plant and invertebrate remains', in Jennings *et al.* 2004, 133–46.
- Robinson, M., 2006. 'The environmental archaeology of the Cotswold Water Park' in Miles *et al.* 2006.
- Roe, F., 2006. 'The worked stone', in Miles *et al.* 2006.
- Scaife, R., 1999. 'Pollen from Latton "Roman pond"', in Mudd *et al.* 1999, 510–12.
- Serjeantson, D., 1996. 'The animal bones', in E.S. Needham and T. Spence (eds.), *Refuse and disposal at area 16, East Runnymede: Runnymede Bridge research excavations 2* (London), 194–253.
- Shaffrey, R., 2004. 'Worked stone', in Jennings *et al.*, 84–88.
- Shaffrey, R., 2008. 'The worked stone from Beechbrook Wood', in L. Allen (ed.) 'Small Finds from Section 1 of the Channel Tunnel Rail Link, Kent' (CTRL Scheme-wide Specialist Report Series Archaeology Data Service).
- Shaffrey, R., forthcoming a. 'The worked stone', in Lamdin-Whymark *et al.*
- Shaffrey, R., forthcoming b. 'The worked stone', in T.G. Allen and H. Lamdin-Whymark, 'Excavations at Taplow Court, Buckinghamshire: a late Bronze Age and Iron Age Hillfort' (Thames Valley Landscapes Monograph, Oxford).
- Sikking, L., 2005. 'Coln Gravel (Thornhill Farm Pit): post-excavation assessment and updated project design' (Oxford Archaeol. unpublished rep.).
- Silver, I.A., 1969. 'The ageing of domestic animals', in D. Brothwell, and E.S. Higgs (eds.), *Science in archaeology* (London).
- Stace, C., 2005. *New flora of the British Isles* (Cambridge).
- Taylor, J., 2001. 'Rural society in Roman Britain', in S. James and M. Millet (eds.), *Britons and Romans: advancing an archaeological agenda* (CBA Research Rep. 125), 46–59.
- Timby, J., 2001. 'The pottery', in G. Walker, 'A middle Iron Age settlement at Deer Park road, Witney: excavations in 1992', *Oxoniensia* 60, 78–82.
- Timby, J., 2004. 'The pottery', in Jennings *et al.*, 90–108.
- Tomber, R., and Dore, J., 1998. *The national Roman fabric reference collection: a Handbook* (London).
- Weaver, S.D.G., and Ford, S., 2004. 'An early Iron Age occupation site, a Roman shrine and other prehistoric activity at Coxwell Road, Faringdon', *Oxoniensia* 69, 119–80.
- Webster, P. 1996. *Roman pottery in Britain* (CBA Practical Handbook in Archaeol. 13, York).
- Witkin, A., 2006. 'The human skeletal remains', in Miles *et al.*