

Chapter 12: Neptune Wood

INTRODUCTION

In August 2005, Oxford Archaeology carried out an investigation at College Farm, Long Wittenham (NGR SU 5520 9365; Fig. 12.1), in advance of groundworks associated with the planting of Neptune Wood to commemorate the bi-centennial anniversary of the battle of Trafalgar. The work was commissioned by the Northmoor Trust. The investigation took the form of targeted trenching based on cropmark evidence and geophysical survey data. In addition to the targeted trenching, a watching brief was undertaken during excavation of a pond complex within the new woodland.

SUMMARY OF RESULTS

The fieldwork identified a number of buried archaeological features of several phases. A Mesolithic or early Neolithic flint was found in a probable tree-throw hole. A rectangular cropmark enclosure was dated to the early Iron Age, and a pair of large pits to the south proved to be of Saxon date. Artefactual evidence from two parallel ditches in the middle field suggests that they represent a Roman trackway of the 2nd-4th centuries AD, with a continuation of at least one of the ditches in the western field. Further parallel ditches, one containing a group of Roman pottery, may indicate an associated field system to the north and south. One of these ditches however contained a sherd of medieval pottery. Other features on a very similar alignment in the western field may have been medieval furrows, which were visible on the geophysical survey.

A significant variation in the depth of soil overlying the gravel terrace was also noted in different fields, with gravel occurring at a higher level towards the north-west, and soil cover being correspondingly thinner. This may have influenced the siting of some of the archaeological features discovered, and explain the difference in visibility of archaeological features as cropmarks and on the geophysical survey. Evidence for late medieval/post-medieval ridge and furrow was also revealed in the middle field.

The fieldwork consisted of 10 trenches, specifically targeted to locate, date and characterise possible features identified from the cropmark evidence and the geophysical survey. An additional phase of groundwork during excavation of the pond complex was subject to a watching brief.

Geology and topography

The development area lies some 200 m east of Long Wittenham at College Farm, and south of the minor road that connects Long Wittenham via Little Wittenham with Brightwell (see area outlined in green on Figure 12.2). The area of Neptune Wood lies adjacent to the existing Paradise Wood on its north side, and is aligned roughly east-west across three fields. The total area covered by the wood is just over 5 ha.

The site sits on valley gravel terrace deposits (BGS Sheet 254) at around 51 m above O.D. The surrounding area is also gravel terrace, but drops onto floodplain some 300 m to the north-west, where the river Thames bends north towards Clifton Hampden. The boundary between the western and middle field is sinuous, suggesting that this was formerly the line of a stream. The site is currently flat, although the eastern end of the middle of the three fields, and the western end of the eastern field, are liable to flooding. This area may therefore have formerly been lower-lying. Until recently, all three fields have been under cultivation, the western two under peas, the eastern field under wheat. Only the middle and western fields were subject to archaeological evaluation.

Archaeological and historical background

The westernmost field contains a variety of cropmarks (SMR 15311) indicating buried archaeology (see Figure 12.2). These comprise: a rectangular enclosure with a circle inside (SMR 8519), thought to be Iron Age, several sinuous ditches (some meeting at right angles) that probably represent a field system (NMR 1089371), a trackway (NMR 1089349, almost certainly Roman) and a group of large individual marks probably representing pits or wells. Seven Saxon sunken-featured buildings are recorded further north-west in this field (SMR 8522), and a probable Saxon hall has been identified only 50 m north of the rectangular enclosure from a photograph taken in 1986 (Dodd in Booth et al. 2007, Fig. 3.26 c). The cropmark evidence suggested that the rectangular enclosure lay just outside Neptune Wood, but the geophysical survey showed that the enclosure ditch lay further to the south-east and extended into the development area.

A smaller C-shaped enclosure (NMR 1089369) is visible in the middle field just north of Neptune Wood (Figure 12.2). The Roman trackway is also visible in the eastern field, but beyond the area to the east of the wood. Along the southern edge of this field, just outside Neptune Wood, are several linear features of uncertain character. Their north-east and north-west alignments make it possible that they are connected with the sinuous field system seen in the western field. Much of the middle field and the western part of the eastern field are liable to flooding, perhaps indicating a formerly low-lying area fed by the stream running between the western and middle fields. No cropmarks are visible in this area.

Map regression and study of vertical aerial photographs indicates that the area has probably always been fields since the medieval period. Examination of vertical aerial photographs from the 1940s at the NMR suggests that the western field was covered by medieval furrows. Evidence for the use of the middle and north fields is less clear. The earliest maps (Rocque 1761) show the area as open fields.

Findspots in the Sites and Monuments Record include a ground Neolithic axe from the western field (in possession of the Northmoor Trust).

Fieldwalking over the field immediately west of Neptune Wood during 2004 revealed part of a rotary quern of Upper Old Red Sandstone, probably of Roman date, and a scatter of Roman pottery (Lamdin-Whymark and Allen 2006). A small quantity of struck flint, largely of Neolithic or early Bronze Age date, was also recovered (Lamdin-Whymark *ibid.*).

Fieldwalking over an area 120 m by 30 m in the northern part of the middle field was carried out under the supervision of J Hinchcliffe of English Heritage in

1998. A summary report indicates that Roman pottery was found throughout the field, particularly towards the south end of the area walked. Struck flint (including a proportion with secondary working) was also recovered throughout the area, but with a concentration towards the north end of the area (towards the river).

Cropmarks in adjacent fields include a Roman and possibly prehistoric settlement astride a north-south trackway some 300 m to the north-east, within the Northfield Farm Scheduled Ancient Monument (Oxfordshire SAM 180), and medieval and probable Saxon halls some 200 m to the west just south of Long Wittenham. There was therefore potential for archaeological remains of a wide variety of periods within the development area.

GEOPHYSICAL SURVEY *by Alister Bartlett*

The survey at College Farm (Fig. 12.3) covers the site of the proposed new Neptune Wood in fields containing a number of cropmarks. The cropmark features (Figs 12.2 and 12.3) appear to be less substantial and more deeply buried than was the case at Northfield Farm, where the survey was highly responsive. The cropmark enclosure in the west field, and various linear features were not clearly detected, although various other magnetic anomalies may be archaeologically significant. These include magnetic anomalies which could indicate silted pits or other settlement remains in the northern half of the middle field. Roman pottery has been found in this area. Other more isolated anomalies in the west field were found by trenching to represent Saxon features. Various linear cultivation markings are visible, as also noted above at Paradise Wood. Strong irregular magnetic anomalies in the west field are likely to represent natural variations in the depth of soil cover above the gravel.

STRATIGRAPHIC NARRATIVE

Terrace gravels were encountered in all trenches and appeared to slope away to the south and east of the site. The overlying deposits comprised a friable, mid orange brown, clayey silt subsoil to the east, overlain by the existing topsoil. The subsoil was considerably thinner across the majority of the western field than it was to the east, and in places was not seen at all (i.e. Trenches 3 and 10). The exception was Trench 5, which was adjacent to the existing western boundary of the field. The varying depth of these deposits reflected both the shallow depth of the elevated area of gravel towards the north of the site, and a build up of soil against the existing field boundaries which is probably a result of subsequent cultivation.

Distribution of archaeological deposits

The site was broadly phased into five periods using spot dates from the pottery assemblage and the stratigraphic record, particularly the relationship between features and the subsoil.

The features investigated by the interventions are described where possible by phase. Dating has been assigned through pottery spot dates and stratigraphic relationships where appropriate (detailed in Appendices 1 and 2). Due to the uncertain

date of a large proportion of the ditches, these have been described by trench or groups of trenches.

Non-Archaeological Features

Geological Anomalies

Several of the features identified on the geophysical and cropmark surveys proved on excavation to be geological in origin due to their irregular shape and base. The sinuous feature seen as a cropmark running north-south through Trenches 1 and 2 was only identified clearly in Trench 2 (25209), where it had poorly-defined edges and changed in depth over short distances, with an irregular base. The feature consisted of a broad shallow hollow (some 3 m wide and only 0.2 m deep) with an irregular deeper central gully up to 0.6 m across and 0.25 m deep. Both the deeper gully and the broader hollow were filled with one dark brownish-orange clayey silt with sandy pockets (25008), which was sterile. The sides of the gully varied from gently sloping to vertical, and from one another, over a short length, the base was similarly irregular and the depth faded to almost nothing within the confines of the trench. This feature corresponds with the projected course of the sinuous linear feature identified from the cropmark survey, and is likely to be of geological origin.

In addition the anomalies in the southern end of Trench 11 were believed to have been caused by iron-panning in the soil disrupting the geophysical readings. Several of the features in the ponds area which initially resembled post-holes also proved on excavation to be naturally occurring silty patches within the natural gravel (see also Fig.12.13).

Trench 5 (not illustrated)

Trench 5 was located to the west of the western field and was targeted on two discrete geophysical anomalies. No features were observed although the depth of subsoil was considerably greater than trenches to the east. The terrace gravels were encountered at c. 50.55 m OD and were overlain by an homogeneous layer of subsoil (25001) which was 0.4 m thick to the west of the trench and 0.3 m thick to the east. The subsoil, which is interpreted as an earlier ploughsoil, was overlain by a layer of topsoil (25000) c. 0.25 m thick.

A number of geological variations within the gravel were noted which suggest that the geophysical anomalies were probably geological in origin.

Mesolithic or early Neolithic

Part of a small irregular feature 25715 was found on the north edge of ditch 25713 in Trench 7 (Fig. 12.12). This consisted of a hollow in the gravel 0.37 m deep and at least 0.8 m across, with an area of flaky largely dissolved limestone concretion forming a dome on the flat base, and overlain and surrounded by a layer of flaky,

black and grey soil (25716), with black inclusions, probably manganese but possibly including some charcoal, and reddened stones. Within the middle of layer 25716 a flint blade was found. The reddening of the stones could be the result of mineral deposits rather than burning, and there was no evidence of reddening of the surrounding gravel, but the presence of the blade shows that this was not an entirely natural feature. It could have been a tree-throw hole in which the gravel pushed up by the roots subsequently decayed, and layer 25716 could have incorporated a small quantity of comminuted charcoal along with the flint in the layer that subsequently filled in the tree-throw hole.

Early Iron Age enclosure and associated features

Trench 9

The rectangular enclosure in the western field identified as a cropmark and located by the geophysical survey lay mostly outside the area of Neptune Wood, but the south-east corner was affected, and so was sectioned in Trench 9 to establish its size and date (Fig. 12.6). In the east-west section the ditch was 4.5m wide by at least 0.85m deep, although the bottom of the feature was not established due to safety considerations. The ditch had fairly gently sloping sides (40°) to the depth excavated (Fig. 12.6), and the outer edge appeared to be flattening, suggesting either a ledge or the base of the ditch.

The earliest excavated fill (25006) was a silty sand with *c.* 40% gravel, and produced five sherds of early Iron Age pottery and one sherd of early-mid Iron Age pottery (see Edwards, *Prehistoric Pottery*). This may have been primary silting. The remaining fills comprised compact, greyish brown sandy silts (25007 and 25008) which reflected the gradual silting up of the ditch.

A concentration of gravel inclusions within the fills along the northern edge of the feature may be indicative of an internal bank that had eroded into the ditch during the silting process, or could simply represent greater erosion at the inside corner of the ditch. Finds from these fills were a few mammal bones (see below).

The north-south section of the ditch was extended to investigate an ovoid feature (25010) immediately to the east and its relationship to the enclosure. The feature proved to be shallow (0.08m) and poorly defined, although a sherd of mid-late Roman pottery suggests that it post-dates the enclosure. The single fill of this feature (25002) was indistinguishable from deposit 25008, slow silting in the top of the enclosure ditch.

Early-mid Saxon

The geophysical survey identified several anomalies across the impact area, two of which were investigated in Trench 4. The excavation revealed several pits of Saxon date which produced a significant quantity of pottery, metal work and bone, indicative of the dumping of domestic refuse. Pit 25424 (Figs 12.7 and 12.8) was 3.5m in diameter and 1.1m deep and was initially backfilled to a depth of 0.2m with a layer of redeposited natural (25425). The subsequent fills comprised a single layer of charcoal-

rich silt with inclusions of early-mid Saxon pottery and some animal bone (25426) and a final layer of gravelly silts, thought to represent gradual erosion and silting (25427). This also contained Saxon pottery, together with one residual late Bronze Age or early Iron Age sherd. The function of the pit is unclear however the initial re-deposition of natural gravels suggests that it may have been dug as quarry and later reused as a refuse dump.

To the west of the trench there was a large soilmark, one third of which was excavated. This was provisionally interpreted as a series of intercutting pits (25400, 25403, 25413). The earliest fill (25418), was not dug completely as the water table was reached, but was believed by its silty nature to represent the initial phase of erosion of the pit sides. In section, it is clear that pit 25413 cuts both pit 25400 and 25403, though both pit 25403 and 25413 are filled in the later stages by 25411 and 25412 (fig 8). The lower fills comprised redeposited gravels (25404, 25405, 25410) interspersed with layers of fine silty material (25408, 25418). thought to be representative of repeated periods of deliberate backfilling followed by erosion and silting. The upper fills (25412, 25416, 25419) comprised a significant amount of charcoal, animal bone, mid-Saxon pottery and some metal work, which is interpreted as domestic debris.

The function of the intercutting pits was not clear from the excavation, however it is possible that they could represent quarrying activity or a waterhole (as the level of the water table was reached towards the bottom of the deepest pit). It seems likely that the pits relate to the Saxon settlements identified from cropmark evidence further north in the same field and in the field to the west of the investigation area (Dodd in Booth et al 2007, Fig. 3.26), and from a cemetery further west under Long Wittenham.

Roman (2nd-4th century AD)

The cropmark and geophysical survey interpretations had identified a possible trackway running roughly north-east/ south-west across the site. The trackway was clearly defined in the westernmost field, and in the field east of Neptune wood, but there was no evidence for its continuation into the field beyond (Fig. 12.3).

Trenches 1 and 2 were located to investigate the trackway in the western field and its relationship to a sinuous cropmark running north-east across it, tentatively identified by the geophysical survey (Fig 12.2). Trenches 6 and 7 were positioned across the line of the postulated continuation of the trackway ditches through the middle field. The sinuous feature was irregular in form and section and so was determined to be geological in origin (see above).

Trench 1

In Trench 1 (Fig. 12.9), 0.18 m of topsoil overlay four linear features cut into the gravel running roughly north-east to south-west. No dating evidence was recovered from any of them, but the most substantial were ditches 25106 and 25104. Both 25104 and 25106 were approximately 2 m wide and c.0.25 m deep, and were separated by a distance of approximately 4 m. Ditch 25106 was filled by a primary sandy silt that was 65 % gravel, i.e. eroded material from the ditch edges (25107), overlain by a mid

yellow brown sandy silt with only a little gravel (25108), suggesting that the ditch had stabilised and then filled by gradual silting.

Ditch 25104 had a single fill (25105) similar in composition to layer 25108 in ditch 25106 but more sandy. Ditch 25104 was recut on the southern edge by 25100, which measured 1.5 m wide by 0.5 m deep. The fills comprised a mid brownish-yellow silty sand with 60 % fine gravel, i.e. eroded natural from the ditch edges (25101), overlain by a brownish-grey silt with only 10 % gravel (25102) representing slower silting, and then a more orange-brown sandy silt with 60 % fine gravel and a little charcoal (25103). The gravel in the last fill may suggest either the erosion of a bank or the in-washing of an adjacent ploughsoil.

Some 8.5 m north of ditch 25106 was a narrower ditch 25109. This had steeply sloping sides and a flat base, and was 1.25 m wide at the top, 0.3 m deep and 0.85 m wide at the base. There were two fills: a primary very gravelly brownish orange silty sand (25110) and a cleaner mid yellowish-brown sandy silt (25111) above representing slower silting. Just 2 m north of this was another parallel gully 25112, 0.8 m wide and 0.25 m deep, with very steep sides and a flat base. This contained the same sequence of fills as ditch 25109.

Trench 2

Trench 2 (Fig. 12.10) was targeted on a further intersection between the cropmark trackway ditches and the sinuous linear feature shown on the cropmark plot. Here, the topsoil was 0.25 m deep and overlay a thin (0.04 m) layer of subsoil sitting upon gravel and archaeological features.

Two well-defined ditches were excavated in Trench 2 (25203 and 25211). These were of similar dimensions (*c.* 2m wide by 0.4 m deep), spacing (3.7 m apart) and alignment to 25106 and 25104 in Trench 1. In Trench 2, however, it was the northern ditch 25203 that was re-cut (as ditch 25201). The original cut had a natural sequence of primary very gravelly (65 %) orange-brown silty sand (25204) overlain by more greyish-brown clayey silt with only 35 % gravel (25205), and then more orange-brown sandy clay (25202), indicating more gradual silting up the profile. One sherd of later Roman pottery and one residual prehistoric sherd were recovered from this fill. The recut in Trench 2 is of similar dimensions to the re-cut in Trench 1 (25110), but is squarer in profile (Fig. 12.10). Recut 25201 had only a single fill of brownish-grey clayey silt with gravel similar to 25205. The homogeneous fill implies relatively rapid infilling, possibly from a bank or perhaps from an adjacent ploughsoil, hence the gravel. There were no finds from either feature.

Trench 6

Trench 6 (Fig. 12.11) was located to the west of the middle field. As the trackway ditches were not visible as cropmarks, or on the geophysical survey, the trench was targeted on the projected route of the cropmark trackway and upon two discrete geophysical anomalies (Figs 12.3 and 12.4). Topsoil (25600) was on average 0.25 m thick, and overlay a layer of subsoil (25601) that deepened to 0.40 m thick at the south of the trench, reflecting both the natural slope and a build up of soil against the

existing field boundary. The subsoil sealed the upper fills of the features described below, and is interpreted as an earlier ploughsoil.

Trench 6 revealed a number of features cut into gravel, including several ditches aligned roughly north-east to south-west. The most southerly two lay approximately 3.75 m apart, and may represent a pair of trackway ditches. The more southerly of these ditches was not excavated, as it was only partially exposed in the southern end of the trench. The northern ditch (25613) was 1.5 m wide by 0.44 m deep and produced several sherds of mid-Roman pottery. The fill (25614) comprised a mid grey silty clay with a concentration of eroded gravel in the base.

Some 6 m north of ditch 25613 was another linear feature (25603), 3.5 m wide and 0.8 m deep, the southern side sloping more gently than the northern side, so that the pointed base was not central, but towards the north. There were four fills: primary gravel silting on the side (25604) with a thin layer of dark grey clayey silt at the base (25605), possibly an originally waterlogged deposit, overlain by a more sandy grey silt (25606) and then a mid-grey clayey silt (25607) representing slower silting. Alongside this ditch was a narrower ditch 25610, some 1.3 m wide, with a bowl-shaped profile 0.4 m deep and two clayey silt fills, the lower (25611) brownish-grey and with primary gravel spills, the upper (25612) a cleaner mid-grey colour, both representing natural gradual silting. Only the upper fill of this ditch was recognised at first, but when fully excavated it lay very close to ditch 26513. There were no finds from either ditch. Ditch 25610 cut a possible pit or natural hollow 25608 filled with sterile grey clayey silt.

The geophysical anomalies targeted by Trench 6 are likely to have been geological, as variations in the gravel were noted within the trench, but no recognisable features. At the very north end of the trench, some 6 m from 25610 and running parallel to it, was another linear soilmark 0.4 m wide. This was not investigated, but was believed to be a deep ploughing mark.

Trench 7

Trench 7 (Fig. 12.12) was located in the east of the middle field. As with Trench 6, this was located over the projected line of the trackway ditches as they did not show as cropmarks or geophysical anomalies. The trench was also targeted over two discrete anomalies shown on the geophysical survey (Figs 12.3 and 12.4).

The topsoil (25700) was on average 0.25 m thick, and overlay a layer of subsoil (25701) that deepened to 0.35 m thick at the south of the trench, reflecting both the natural slope and a build up of soil against the existing field boundary. The subsoil sealed the upper fills of the features described below, and is interpreted as an earlier ploughsoil. Three ditches were also found at the south end of this trench, and the southernmost pair, ditches 25708 and 25713, are considered to represent the eastern continuation of the trackway (northern and southern ditches respectively). Ditch 25708 was 0.65m deep and was at least 1 m wide, extending beyond the end of the trench. A thin primary gravel and silty sand (25709) was overlain by a tenacious yellowish-brown sandy silt with little gravel (25710), presumably representing gradual silting. This was overlain by a similar silt but with 40 % gravel, (25711), perhaps indicating either the erosion of a bank or that an adjacent ploughsoil was being washed into the ditch. Ditch 25713 was 0.39 m deep and 1.5 m wide, and contained a

single grey clayey silt (25714) indicative of gradual silting. Both produced several sherds of 2nd-4th century AD pottery.

Immediately north of ditch 25713 was another ditch (25705), c. 3 m wide, which was part-sectioned and at least 0.5 m deep, and contained a primary fill of eroded gravel and silt (25706) overlain by a mid-yellow brown sandy silt with little gravel, indicative of gradual silting. This feature was tentatively linked with 25603 in Trench 6, and if so, would indicate a slightly different alignment to the trackway ditches, running more westwards.

Towards the north end of Trench 7 was a fourth linear feature 25703, of which several metres were exposed. The fill 25704 produced two sherds of Saxo-Norman pottery, and this is judged to be a medieval furrow.

The geophysical anomalies targeted by Trench 7 are likely to have been geological, as variations in the gravel were noted within the trench, but no corresponding archaeological features.

Ponds complex

In addition to the trackway, evidence for a Roman field system was uncovered during the ponds complex watching brief (Fig. 12.13). Ditch 25974 in the north of the area was a metre wide and 0.32 m deep, was aligned roughly south-west/ north-east and was traced for over 25 m. Where sectioned it had sloping sides and a cupped base, and was filled with a mid-grey slightly silty clay over a primary brownish-grey sandy silt with gravel, suggesting gradual silting. A significant quantity of Roman pottery was recovered from the one excavated section (fill 25976). A further ditch (25980), found at the bottom of a small circular pond, was recorded in plan running north-west to south-east at right angles, and it is possible that these features together represent Roman field boundaries associated with the trackway. The pottery recovered probably dated from between the late 2nd and late 3rd centuries AD, and, together with the close alignment of these ditches to the trackway, this suggests that they may all have been contemporary.

At the south end of the ponds complex, a single posthole or small pit 0.6 m in diameter and surviving 0.32 m deep, with sloping sides and a cupped base, was recorded (25960). The grey sandy silt fill contained a single sherd of Roman pottery. A second circular feature 25977 with identical fill was found immediately to the east, but was only 0.12 m deep with shallowly sloping sides. Several other circular or oval soil-marks were investigated, but all proved to be irregular and sterile. The purpose and date of 25960 and 25977 remains uncertain.

Roman or Medieval?

Ponds complex

Pit or posthole 25960 lay immediately east of a gully terminus (Fig. 12.13), which was sectioned but produced no finds. This gully was part of a group of gullies or ditches, all on a west-south-west alignment approximately parallel both to 25974 and to the trackway ditches in Trenches 6 and 7. Apart from the gully terminal there were four

linear features (25952, 25954, 25956, 25962/25965). Ditches 25954 and 25962/5 lay 5.5-6 m apart, and were both 0.75-0.9 m wide and up to 0.25 m deep; 25952 was a much narrower and steeper-sided gully (0.2 m wide and deep) that merged with 25954, and 25956 lay 1.7 m further south and was 0.5 m wide and 0.2 m deep. All were filled with mid greyish-brown sandy silt. A single body sherd of pottery was recovered from fill 25955 in ditch 25954, but none of the prehistoric, Roman or the medieval pottery specialists wishes to claim it, so its date is uncertain.

Trench 11

Two narrow ditches (25919, 25907) crossing Trench 11 (Fig. 12.14) on a west-south-west alignment appear to be in line with these ditches in the ponds complex, and probably represent continuations of 25952 and 25956. The more southerly (25907) was just over 1 m wide and 0.45 m deep, with steeply sloping sides and a narrow flat base. There were four fills; a primary gravel spill, then a relatively gravel-free mid greyish brown clayey silt (25909), then a similar but darker and more gravelly silt (25910) and finally another clean sandy silt with occasional pockets of natural gravel (25911). Overall the sequence appears to indicate natural silting. No further dating evidence was recovered from these ditches.

Trench 11 also revealed a series of intercutting pits and a third ditch or gully (25912) approximately at right angles to the others. The stratigraphy of these pits and ditches suggests that ditch 25907 was the earliest feature, cut by pit 25914 at its northernmost end, which was cut in turn by gully 25912. Linear feature 25919, truncates this gully (25912) as does pit 25916. None of these features contained any artefacts.

The alignment of all of these ditches makes it probable that they are Roman or later, but whether Roman or late Saxon/medieval remains uncertain.

Medieval

Pond complex

A series of broad shallow north-west/south-east aligned features (25968, 25970, 25972; Fig. 12.13), one of which cut Roman ditch 25974 and others of which overlay the west-south-west ditches described above, represent the furrows of ridge-and-furrow open field cultivation. The lines of these furrows are also visible on the geophysical survey plot in the middle field (Fig. 12.4). The artefactual evidence recovered from them includes clay pipe fragments, indicating a late medieval or post-medieval date.

Four shallow east-west linear features were excavated across the site which have been attributed to Medieval ridge and furrow on the basis of their wide, shallow nature and the fact that they cut soils overlying the gravel (25308/312, 25703, 25801 and 25804). Feature 25703, the only one in the middle field, was on a west-south-west alignment, and was over 2 m wide. The feature in Trench 3 was nearly 4 m wide and was apparently running on a north-east/south-west alignment, with two cuts, a broad one (25308) and a narrower one (25312) visible in section. There were three fills, only

the primary fill in both cuts being separate, the upper two (25310 and 25309) overlying both cuts. It is possible that 25312 was an earlier shallow gully, but there were no finds. Both 25703 and 25308 were very shallow with a shelving profile. 25704, the fill of 25703, contained two sherds of Saxo-Norman pottery; there were no finds in 25308. As 25308 did not continue into the southern Trench 3 excavation area, however, it is uncertain whether this was a linear feature or a shallow pit or hollow.

Trench 10

The last two possible furrows were both in Trench 10 (not illustrated). This trench was positioned west of Trenches 1 and 2 to look for a continuation of the cropmark ditches, and to investigate discrete anomalies identified on the geophysical survey. The topsoil was 0.3 m deep and came down onto gravel at 50.55 m OD. Two broad soil marks were found running parallel 12.5 m apart across the gravel in the bottom of the trench in an east-west direction. The more northerly (25801) was 2.3 m wide and proved to be 0.1 m deep, with very gently shelving sides and an irregular base. The fill was an homogeneous loose medium brown silty sand, with much small gravel. The southern soilmark was of similar width and fill, but was not excavated. No other archaeological features were recorded within trench.

Both the linear features are in line with furrows evident on the geophysical survey (Figs 12.3 and 12.4). The southern soil-mark is also close to the line of the northernmost of the three cropmark ditches thought to represent a trackway, and may correspond to it. This soil-mark is also on the projected line of ditch 25109 in Trench 1.

Undated features

Trench 3

Trench 3 (Fig. 12.15) was targeted on a ditch intersection suggested by the cropmark evidence. The initial trench revealed a layer of topsoil (25306) around 0.25 m deep overlying terrace gravels at an average height of 50.30 m OD. Two ditches approximately at right angles (25300 and 25315) and a much wider feature in between (25308) were found. The last of these (25308) cut a thin layer of subsoil (25314) that was only found in the south-east part of the trench, so was judged to be later. In order to clarify the date and relationships of these features, an additional small area was opened up over the projected intersection of all three features. Ditches 25300 and 25315 continued into this area, and one additional feature was found (25319). Ditch 25300 was traced for 13 m on a north-south alignment and measured 1.5 m wide by 0.6 m deep. Gully 25315, which ran into 25300 and so was presumably contemporary, was traced for 10 m on an east-north-east alignment and measured 1 m wide by 0.32 m deep. A third feature (25319), possibly representing the end of a linear ditch on a west-north-west alignment, was observed in section west of 25300 opposite to ditch 25315, although it was very ephemeral and no relationship with the other features could be established. There were no finds from any of these features.

Ditch 25300 clearly corresponds to the cropmark ditch on the same alignment, and it is possible that feature 25319 is the end of the cropmark ditch running north-westwards from it. Ditch 25315 did not show on the cropmark plot.

Topsoil and subsoil

Interestingly, the excavation revealed that the topsoil and subsoil (medieval ploughsoil) in the east field were around twice as deep when compared to that in the west field, (0.65-0.7 m compared to 0.35-0.4 m) indicating that the two fields, although next to each other have been subject to different soil formation processes. This discrepancy in the depth of later soils is probably responsible for the differences in the visibility of archaeological features in both the cropmarks and the geophysical survey.

FLINT

by Hugo Lamdin-Whymark

Introduction

A total of three flints was recovered during the excavation and watching brief at Neptune Wood. The three flints were retrieved as residual finds in later contexts.

Methodology

The lithic assemblage has been quantified and characterised typologically according to broad artefact/debitage type. During the initial analysis additional information on condition (rolled, abraded, fresh and degree of cortication), and state of the artefact (burnt, broken, or visibly utilised) was also recorded. Dated was attempted where possible. Retouched pieces were classified according to standard morphological descriptions (e.g. Bamford 1985, 72-7; Healy 1988, 48-9; Bradley 1999, 211-277).

The assemblage

The assemblage consists of two flakes and a blade. A small cortical flake was recovered from context 25800 and a side trimming flake was found in context 24205. Neither flake exhibit distinctive technological traits that assist with dating. The blade from context 25716 (Sf 25004), a possible tree-hole, is more diagnostic. The blade is of narrow proportions, exhibits platform edge abrasion, a narrow linear platform and appears to have been removed using a soft percussor, such as antler. The dorsal surface of the blade also exhibits the scars of previous flake removals, demonstrating this blade was removed from a single platform blade core. This form of blade technology is associated with Mesolithic to early Neolithic flintworking.

PREHISTORIC POTTERY

by Emily Edwards

Introduction

A total of nine plain, broken and abraded body sherds were recovered from contexts 25006, 25202 and 25427 at Neptune Wood (Table 12.1). These were small, plain undiagnostic sherds which were dated according to fabric. Six sherds were recovered from the fill of an enclosure ditch in Trench 9 (25006), one from a probably Roman ditch (25203) and two from the fills of a Saxon pit (samples 25001 and 25003 from layers 25426 and 25427) in Trench 4.

Methodology

Fabrics were coded using OA standard codes to denote inclusion types: A; sand, F; flint, P; ferruginous pellets, S; shell. Each fabric has been examined microscopically using a binocular microscope (x 20) and differentiated according to the size and type of major inclusions. Size range for inclusions: 1 = <1 mm fine; 2 = 1-3 mm fine-medium and 3 = 3 mm < medium-coarse. Small crumbs were not assigned to a fabric type.

Quantification was by sherd count and weight (Table 12.2), not by minimum number of vessels (based on rims and other diagnostic pieces), as no rims or diagnostic pieces were present.

Fabrics (Table 12.2)

This assemblage consists of very broken and abraded plain body sherds and, as such, the fabrics can only indicate a late prehistoric date and a local origin. The flint, shell, sand and calcareous inclusions will derive from the Lower Chalk, Upper Greensand and Fourth Terrace glacial sands and gravels of which Castle Hill is comprised (British Geological Survey, 1: 50,000 Solid and Drift series, Sheet 254).

Comparative material

The pottery is of similar appearance to material recovered from a number of adjacent sites including excavations carried out between 2003 and 2005 by Oxford Archaeology, Savory and Rutland's excavations at Wittenham Clumps (Hingley 1979; Savory 1937) Allen's Pit (Bradford 1942), and Mount Farm (Myres 1937), Wigbald's Farm (Savory 1937), Kirtlington (Harding and Benson 1967), Standlake (Riley 1947) and Appleford (De Roche and Lambrick 1980, 45-59).

ROMAN POTTERY

by Paul Booth

Introduction

The 2005 work at Neptune Wood produced 53 sherds (923 g) of Roman pottery, the majority of which was of middle to late Roman date, or occurred in context groups of that date. The pottery was recorded using the standard codes set out in the OA system for material of this date, with each context group divided in relation to fabric and form types and other characteristics as appropriate. Quantification was by sherd count and weight and rim equivalents (REs) were used to quantify vessel types. The pottery was in moderate to good condition - surfaces were relatively well-preserved and the average sherd weight of 18.7 g was quite high, although a few very small sherds were present. A breakdown of the pottery by context, and giving spot dates, is given in Table 12.3 below.

The fabrics identified are listed and quantified below with summary descriptions, including cross-reference to the national Roman fabric reference collection codes (Tomber and Dore 1998), where appropriate, in bold (see Table 12.4).

General discussion

The assemblage was dominated by reduced coarse wares, but was too small for consideration of the proportions of fabrics or ware groups to be meaningful. One significant characteristic of the material is the lack of late Iron Age/early Roman 'Belgic type' (E) wares. Widely distributed in the region, their absence here is likely to be significant and indicative of a low level (if not a total lack) of 1st century activity. The oxidised and reduced coarse wares are all likely to have been products of the Oxford industry. There were few particularly distinctive fabrics and forms; the Oxford mortaria included a rim of Young (1977) type M17 (AD 240-300) and the colour-coated ware (F51) sherds included a bowl base. Joining sherds of another base were recorded in fabric F50. The appearance of the colour-coat and of the base form suggest that this was not a typical F51 vessel and it may have been an example of the small-scale mid-late 2nd century fine ware production at Lower Farm, Nuneham Courtenay (Booth *et al.* 1993). Other vessels represented by rim sherds were a jar in fabric W20, jars and probable jars (less likely bowls) in fabrics R10 (2) and R30 (3) and a straight sided bowl or dish in fabric R20. Few of these vessels can be considered chronologically diagnostic, although one of the fabric R10 jars has a rim type which appears to be more common after AD 240 than earlier, but earlier examples are known (c.f. Young 1977 type W33.6 for the rim form).

The only group of any size was of 39 sherds (717 g) from context 25976, a fill of field boundary ditch 25974. This group included five of the eight recorded rim sherds, but apart from the R10 jar discussed above none of these was closely datable. The base in fabric F50, perhaps from a beaker, also came from this context. The group must date from at least the mid 2nd century, but could have a *terminus post quem* of the mid 3rd century if the most common dating for the R10 jar hooked rim form is followed. The absence of fabric F51 in this group, however, probably argues against a date as late as the 4th century, although negative evidence must be used with caution in such small groups. The fills of trackway ditches 25613 and 25708, and of the recut 25201, all produced sherds indicative of a mid 3rd century or later date for these

deposits. Despite being based on very small numbers of sherds this picture appears to be quite consistent.

POST-ROMAN POTTERY

by Paul Blinkhorn

Introduction

The pottery assemblage comprised 51 sherds with a total weight of 2,494 g (Table 12.5). It consisted predominantly of the fragmented remains of one unusually large jar and part of a second large jar of early-middle Saxon date, and a small assemblage of medieval and early post-medieval wares.

Methodology

The pottery was initially bulk-sorted and recorded on a computer using DBase IV software. The material from each context was recorded by number and weight of sherds per fabric type, with featureless body sherds of the same fabric counted, weighed and recorded as one database entry. Feature sherds such as rims, bases and lugs were individually recorded, with individual codes used for the various types. Decorated sherds were similarly treated. In the case of the rimsherds, the form, diameter in mm and the percentage remaining of the original complete circumference was all recorded. This figure was summed for each fabric type to obtain the estimated vessel equivalent (EVE).

The terminology used is that defined by the Medieval Pottery Research Group's Guide to the Classification of Medieval Ceramic Forms (MPRG 1998) and to the minimum standards laid out in the Minimum Standards for the Processing, Recording, Analysis and Publication of post-roman Ceramics (MPRG 2001). All the statistical analyses were carried out using a Dbase package written by the author, which interrogated the original or subsidiary databases, with some of the final calculations made with an electronic calculator. All statistical analyses were carried out to the minimum standards suggested by Orton (1998-9, 135-7).

Early/middle Saxon assemblage

The fabrics were as follows:

F1: Chaff-tempered. Moderate to dense organic voids up to 5 mm, rare to sparse sub-rounded quartz and/or calcareous material up to 1mm. 20 sherds, 373 g

F2: Sand and chaff. Moderate to dense sub-rounded quartz up to 1 mm, sparse organic voids up to 5 mm. 17 sherds, 1955 g

This assemblage consisted mostly of the remains of two large hand-built vessels, one in fabric F1 and the other in fabric F2. It was not possible to fully reconstruct either,

but all the contexts which produced E/MS pottery produced sherds of these vessels, and cross-fitting sherds from the vessel in fabric F2 also occurred in all of them (25412, 25419 and 25426).

Both the vessels are undecorated, and of a standard sub-globular form, so it is impossible to date them typologically other than to within the broad early – middle Saxon period (*c.* AD 450 – 850). Radiocarbon dating has shown that they date to the very late 6th to mid-7th century (see below).

There was insufficient pottery to reconstruct a profile of the chaff-tempered pot (Fig. 12.17, No. 1), but a single rimsherd was present, which indicates that the vessel originally had a rim diameter of around 220 mm, and the curvature of the surviving body sherds indicates a large vessel.

The second vessel, in sandy fabric F2, was more complete than the chaff-tempered vessel, and it was possible to reconstruct it to virtually a full profile (Fig. 12.17, No. 2), although the very top of the rim is missing, and the base sherds could not be joined to the body. Despite this, it is obvious that it an extremely large vessel for the period, with a maximum diameter of nearly 500 mm. The remains of the neck suggest that it originally had a rim diameter somewhere in the region of 360 mm, and was around 480 mm high. A small rimsherd (Fig. 12.17, No. 3) in the same fabric weighing 7g was found in context 25426, but appeared to belong to a third vessel with an estimated diameter of perhaps 210 mm.

Early-middle Saxon hand-built pots of the size of No.2 are rare in the region. For example, at Eynsham Abbey, Oxfordshire, just five hand-built early-middle Saxon rimsherds from a total of 1,183 examples had a diameter greater than 300 mm, and just 22 had a diameter of 260 mm or greater (Blinkhorn 2003). One decorated vessel in a comparable fabric with a rim of nearly 300 mm was found at the Oxford Science Park excavations (Blinkhorn 2001, 89-197 and Figs 12.1 and 14), one plain vessel with a diameter of just over 300 mm in a limestone fabric came from Yarnton (Blinkhorn in Hey 2004, 267-270 and Fig. 14.1), and one unpublished vessel of comparable size to No. 2 came from New Wintles Farm, Eynsham (OXCMS 1976.97; see also Hawkes and Gray 1969).

The function of these pots is unclear. The fact that few other sherds of contemporary material occurred at this site suggest that very little pottery apart from these two vessels were used. There are no obvious signs of the vessels having been heated, and no limescale on the inner surface of either. It is possible that they may have been used for storage in an isolated structure with only seasonal or occasional use, but what they may have held can only be a matter for speculation.

The medieval assemblage

The medieval pottery was recorded utilising the coding system and chronology of the Oxfordshire County type-series (Mellor 1984; 1994), as follows:

OXBF: North-East Wiltshire Ware, AD1050 – 1400. 4 sherds, 31 g

OXAM: Brill/Boarstall ware, AD 1200 – 1600. 5 sherds, 99 g

OXDR: Red Earthenwares, 1550+. 3 sherds, 36 g

One small whiteware sherd from context 25955 weighing 4 g in a quartz and flint-tempered fabric was also found. This sherd does not belong to any of the main medieval fabric traditions, but is not accepted as prehistoric or Roman either.

The pottery occurrence by number and weight of sherds per context by fabric type is shown in Table 12.5. Each date should be regarded as a *terminus post quem*. The range of medieval pottery types is typical of sites in the region. Most of the assemblage comprised plain bodysherds, although a glazed bifid rimsherd in fabric OXAM was noted in context 25964. Such vessels are typical of the 15th/16th century.

METALWORK

by Ian Scott

This site produced a small assemblage comprising 44 fragments, most of which are very small unidentifiable fragments (n=32) from sieving of samples.

Most of the assemblage is from Saxon or early medieval contexts. The finds include a whittle tang knife fragment of uncertain form (Sf 25002), a fragment of plate with a regular pattern of punched holes (Sf 25001), possibly a strainer, and an irregular sheet fragment. There is a fragment of thin sheet (Sf 25000) from an early Iron Age context. There are also a number of nails and a chisel, the latter possibly quite modern.

ROMAN COINS

by Paul Booth

Only one coin was recovered during the excavation at Neptune Woods whose details are summarised Table 12.6. The coin was unstratified and in poor condition, to the extent that it could not be precisely identified. It is believed that the coin is of 4th century date, assignable to the major period of minting of the House of Constantine, from AD 330-346. The reverse types, *Urbs Roma* and *Victoriae DD Augg q NN*, are very common ones in this period. The identification of the latter is, however, quite speculative, although entirely consistent with the obverse, which is probably of Constans.

ANIMAL BONE

by Fay Worley

Summary

This report presents an assessment of a small archaeofaunal assemblage recovered from early Iron Age, Roman and Anglo-Saxon features excavated from Neptune Wood, Little Wittenham, Oxfordshire. The assemblage primarily comprises the disposal of domestic and horn working refuse in enclosure ditches and pits. Of

particular interest are the evidence of longitudinal and transverse butchery on a horn core and possible shed fallow deer antler in Anglo-Saxon pit fills.

Introduction

Excavations during August 2005 at Neptune Wood, Little Wittenham investigated a series of cropmarks and identified features including an early Iron Age enclosure, Anglo-Saxon pits and Roman trackway ditches. A small assemblage of animal bone was recovered from eleven contexts in these features. This report presents the results of the assessment of the animal bone assemblage.

Animal bone was recovered through hand collection and wet sieved bulk samples (processed using 500 µm residue mesh and 250 µm flot mesh). The hand-collected faunal remains were washed and marked prior to assessment and are stored in one archive box (200 x 2400 x 400mm), bagged into context groups. The faunal remains from the sieved residues were not further washed or marked and are stored with the hand collected remains.

A full record of the assemblage, documented in a *Microsoft Access* database, can be found with the site archive.

Methodology

Faunal material was identified by comparison with textual sources (Cohen and Serjeantson 1996; Hillson 1986; 1992; Lavocat 1966; Schmid 1972) and the OA faunal reference collection. Specimens were identified as specifically as possible to element and taxon with siding information included where appropriate. Species classes of large mammal (horse, cattle and red deer sized), medium mammal (sheep/goat, pig, roe deer, large dog sized), small mammal (rabbit sized) and micofauna (vole, mouse, frog sized) were utilised where identification to more specific taxon was not possible. Sheep and goat bone was differentiated used criteria presented in Boessneck (1969), Hillson (1986, 101) and Prummel and Frisch (1986) with the class sheep/goat used where further identification was not possible.

Indicators of age-at-death such as bone fusion (following Silver 1969), mandibular tooth attrition (following Grant 1982) and general observations on size and bone porosity were noted. Skeletally mature elements (those for which bone fusion was complete) were measured following standard conventions (von den Driesch 1976). Where possible, sex was determined using sexually dimorphic characteristics. Any evidence of non-metric variation and pathological alteration was noted.

Evidence for post-mortem variation (butchery marks, gnawing and burning) was noted and described when present.

Fragmentation was recorded using bone zones suggested by Serjeantson (1996) and Cohen and Serjeantson (1996). Preservation was recorded using a six point graded scale based on Lyman (1994, 355).

The weight of each specimen was noted, the weight of any specimens less than 1 g was recorded as "0 g". Fragment counts in this report refer to refitted fragment counts.

Results

A refitted total of 293 fragments (2457 g) animal bone was recovered from the excavations. The assemblage originated from eleven contexts comprising five individual features divided between four evaluation trenches as presented in Table 12.7. The features are an early Iron Age enclosure ditch 25011, two Anglo-Saxon pits 25413/25403 and 25424 and two sections of Roman trackway ditch 25613 and 25708. The majority of the bone by weight and fragment count was from the hand collected assemblage.

The condition of the bone was generally very good (grade 1) or good (grade 2) with a small minority of fragments graded fair (grade 3) or poor (grade 4). The animal bone from the trackway fills was in the worst condition (fair or fair to poor) (see Table 12.8).

The condition of the bone was suitable for the recognition of modification in the form of burning, gnawing, fresh breaks and butchery (see Table 12.9).

A small proportion of burnt fragments were recovered from the two pits. This is interpreted as disposal of bone burnt during domestic activities.

The only gnawed bone fragments were recovered from pit 25413/25403 and indicate the presence of canids in the vicinity and that they had access to the faunal remains.

A proportion of the bone from all features, with the exception of trackway ditch 25708, exhibited fresh breaks indicating post-depositional mechanical damage. Butchery was identified on bone fragments from all features. Butchery evidence is discussed in relation to specific features below.

The cattle scapula from context (25008) exhibited unusual taphonomic modification in the form of a series of small circular and sub-circular holes on the medial and lateral faces of the scapula neck. These are interpreted as possibly the results of insect action.

Taxa identified include domestic species (cattle, horse, sheep, goat, pig), possible domestic species (goose) and wild species (deer, bird, fish, micro-mammal). Cattle and large mammal are the most frequent taxa represented, followed by sheep/goat and then the remaining taxa. Minimum numbers of individuals for each taxon are presented by individual feature in Table 12.10.

Trench 9: early Iron Age enclosure ditch group 25011

Animal bone from this feature was recovered in contexts (25004), (25006), (25007) and (25008). The assemblage included cattle, horse, large mammal, sheep or goat and medium mammal bone. Cattle was the most well represented taxon. The identified cattle bone was only from the right hand side of the skeleton and included fragments of femur, navicular-cuboid tarsal, scapula and mandible. An unisided maxillary molar was also identified. The long bones and mandible both produced evidence of age at death (see Table 12.11) which together with the element representation indicates that the bones can be attributed to a minimum of one individual aged 8-18 months old at death.

Horse was represented in Trench 9 by two left mandibular fragments; the gonial angle and third molar. Both may have come from the same animal. Although

the mandibular molar was too fragmentary to be aged using metric data (see Levine 1982), its presence indicates that the animal was at least 3.5 - 4.5 years old at death (see Table 12.11).

In addition to the elements mentioned above, thirteen indeterminate fragments, a long bone diaphysis fragment and an unfused vertebral plate were also from a large mammal, possibly horse or cattle. If horse or cattle, the unfused vertebral plate suggests an age-at-death of less than five years.

A sheep or goat right humerus and right metacarpal were recovered from the ditch. These also represent a minimum of one individual aged at least 10 months old at death (see Table 12.11). A medium mammal long bone diaphysis fragment from this context was also found. This element had been broken when fresh, presumably to recover the bone marrow. A single medium mammal sized indeterminate fragment was the only animal bone recovered from sieved deposits in this feature.

Trench 4: Anglo-Saxon pits 25413/25403 and 25424

Trench 4 contained two Anglo-Saxon pits which together produced the majority of the faunal assemblage excavated from Neptune Wood. Pit 25413/25403 had two phases of deposition. The lower fill of the pit (25418) included redeposited natural from which a goose right humerus, fragment of cattle metatarsal and fragment of worked bone plate were recovered. No dating evidence is available for this fill. The upper fills of pit 25413/25403, (25412) and (25419), was described by the excavator as containing domestic refuse. This interpretation is consistent with the animal bone assemblage which included cattle, large mammal, medium mammal, pig, sheep, goat and small/medium mammal elements. Horn cores also suggest that debris from horn-working was deposited in the pit. Cattle was the most common taxon identified followed by sheep/goat (including elements identified as both sheep and goat). A single pig element was recorded. A large proportion of fragments could only be identified to the level of large, medium or small mammal.

Cattle was mainly represented by cranial and lower limb elements including cranium, right maxillary teeth, three horn cores, a left mandible, an axis, left and right radius fragments (left charred), a right astragalus, 4 metatarsal fragments, and 2 fragments of first phalanx, probably from different phalanges. The element representation of the assemblage suggests that it represents a minimum of two cattle (from three identified horn cores and four metatarsals). Three elements could be assigned to an age-at-death range from epiphyseal fusion and tooth eruption (see Table 12.11). The mandible suggests that one individual was over 28-36 months at death while fusion of the proximal radius and distal phalanx suggest an age at death of over 12-18 months and over 18 months respectively. One of the metatarsal fragments was small and younger- looking than the others.

Butchery in the cattle bone assemblage from the upper fills of the pit suggests horn working and marrow processing. All metatarsal fragments had been split approximately longitudinally, presumably for the bone marrow. Two horn cores had been butchered; one had been chopped from its skull while the other had been sawn both longitudinally and transversely. The transverse saw cut was probably to remove the horn sheath from the horn core and the longitudinal cut may have been made in order to open or "break" the horn into a sheet for further working (see MacGregor 1985, 66). MacGregor suggests that the horn is usually softened by soaking whilst on

the horn core but is broken after having been removed and then boiled (*ibid.*). The evidence from Neptune Wood suggests that here the horn was broken whilst attached to the horn core, either before or after boiling.

In addition to the cattle bone fragments in the upper fills of pit 25413/25403, 43 fragments of bone were identified as large mammal. In the absence of any other identified species in this feature, these are most likely to be cattle. Large mammal fragments included 20 rib blade fragments, 6 flat bone fragments (2 with cut marks), 5 long bone diaphysis fragments, a charred fragment of long bone (possibly radius), a charred fragment of tibia and two further charred indeterminate fragments, the spinous processes from 2 thoracic and 1 lumbar vertebrae, a fragment of cervical vertebra and 3 further vertebral fragments. One thoracic vertebra fragment and the lumbar vertebra fragment had been gnawed by a carnivore, probably a dog, indicating that it may have been moved by scavenging from its original depositional location.

Butchery was identified on two flat bone fragments (each with a cut mark) and the long bone diaphysis fragments which all had been broken when fresh. The cut mark on the flat bones may have been inflicted during division of the carcass or removal of the meat while the broken long bones suggest processing for marrow. Sheep/goat was represented by seven fragments including one positively identified as sheep (a left mandible aged at 3 - 10 months old at death, see Table 12.11) and one as goat (a horn core). Elements identifiable only as sheep/goat were a left and right humeri (the left older than 10 months at death), a left metatarsal, a left tibia (aged 1.5 to 2 years old at death) and a metacarpal. Where siding of the elements was possible all were from the left side.

Butchery was identified on two sheep or goat fragments. the goat horn core had been chopped transversely from the skull, probably to remove the horn sheath for processing. The proximal articular surface of the sheep/goat metatarsal was punctured by a hole *c.* 6 mm across, possibly made to access the bone marrow.

The only pig specimen identified in the upper fill of pit 25413/25403 was a left frontal bone.

Six fragments from the upper fill of pit 25413/25403 were identified as medium mammal sized. These included 4 long bone diaphysis fragments (one charred), the gonial angle of a mandible and a fragment of rib blade. 57 fragments could only be identified as medium or large mammal. These included 7 cranial and 50 indeterminate fragments. One further fragment of rib was identified as belonging to a small mammal.

The only specimens to be recovered from sieved samples in the upper fill of pit 25413/25403 were two small or medium mammal sized indeterminate fragments. Pit 25424 also contained two phases of activity (25426 and 25427), separated by a lens of gravel. Both fills contained single residual small prehistoric pottery sherds, but 25426 also contained Saxon pottery, and a substantial assemblage of charred grains (see below).

The top fill (25427) of the pit contained large mammal, medium mammal, deer and cattle/deer elements. Deer was represented by a shed antler including the coronet, the base of the beam and brow tine. The antler had fragmented into 16 pieces post-deposition. While the size of the antler suggests that it might be red or fallow deer, its smooth surface morphology with very little pearling or guttering (Hillson 1996, 9) is suggestive of fallow deer. Unfortunately, comparative faunal fallow deer antler reference specimens were not available to the author, identification is therefore reliant on textual sources. Recent archaeozoological research has considered the date of the

introduction of fallow deer in to Britain and concluded that living populations were not introduced until the Norman period (Sykes 2004). If the antler fragments from (25427) are indeed fallow deer, whether of prehistoric or Anglo-Saxon date, they indicate long distance trade of antler as a raw material or artefact rather than local procurement.

A right calcaneum from (25427) may be cattle or red/fallow deer. The calcaneum had been broken into at least four pieces post-deposition. Eight further large mammal indeterminate fragments from this context may also be from that element.

In addition to the antler and calcaneum a large mammal cervical vertebra and two burnt medium mammal indeterminates (recovered through sieving) were identified from (25427).

Fill 25426 contained cattle, sheep/goat, fish, bird, large mammal, medium mammal and micro-mammal bone, all of which was recovered from sieved samples. The only identified cattle bone was an incisor tooth. Large mammal bone, possibly cattle, included four long bone fragments (broken while fresh) and an enamel fragment. Identified sheep/goat bone included a mandibular canine tooth and distal fibula. Two indeterminate fragments were identified as probably from a small bird and one indeterminate fragment could be recognised as fish bone but not further identified (Nicholson pers. comm.). Nine fragments of burnt medium mammal sized bone, 11 fragments of medium/large mammal sized bone and a further indeterminate fragment were also recovered from the sieve. The only microfaunal specimen identified in this context, and in the total site assemblage, was a distal left scapula from a micro mammal.

Cross-joining sherds of the same pottery vessel were found in both pits, strongly suggesting that they were in use at much the same time. The character of the faunal assemblages in pits 25413/25403 and 25424 is in contrast very different, in both the species and element composition and size of the fragments. While pit 25413/25403 appears to have been for the disposal of domestic and possibly craft refuse, the assemblage in pit 25424 is more residual in character.

Trenches 6 and 7: Romano-British trackway ditches 25613 and 25708

The fills of the trackway ditches contained only three fragments of large mammal long bone in fair and poor condition. The two fragments from (25614) and one fragment from (26711) had been broken when fresh suggesting that they are possibly debris from processing for marrow. One of the fragments from (25614) had been further fragmented post deposition. These fragments are interpreted as refuse disposal but may have been redeposited in the context. No animal bone was recovered from sieved contexts in these trenches.

Metric data

Elements mature and complete enough to be measured were recovered from the enclosure ditch 25011 and upper fill of Anglo-Saxon pit 25413/25403 (see Table 12.12). Following Teichert (1975) the complete sheep/goat metacarpal was from an animal which would have stood at a withers height of 558mm. Comparison of the

cattle astragalus metric data with contemporary measurements held on the University of Southampton *Animal Bone Metrical Archive Project* (<http://ads.ahds.ac.uk/catalogue/specColl/abmap/search.cfm>) indicates that the individual was slightly below the median size recorded for the period. Insufficient measurements of contemporary sheep/goat metacarpals or cattle scapulae are available for comparison with the Neptune Wood early Iron Age measured specimens.

PALAEO-ENVIRONMENTAL REMAINS

by Seren Griffiths

Methodology

Four 40 litre samples were taken as part of the excavation at Neptune Wood, Wittenham. Samples were taken to assess the preservation of charred plant material and for the retrieval of small bones and artefacts. The samples were processed by floatation using a modified Siraf-type machine, the flot being collected onto a 250 micron mesh. The samples were air-dried and the flots scanned under a binocular microscope at Oxford Archaeology.

Charred plant remains and snails

Flot volumes ranged between 30ml and 100ml (Table 12.13). Charcoal was present in all flots, but other types of charred ecofacts were only present in samples 25003 (context 25427) and 25001 (context 25426). Sample 25003 (context 25427) contained one item of *Corylus avellana* (hazel) nutshell. Sample 25001 (context 25426) included frequent examples of cereal grain *Triticum spelta/ dicoccum* (spelt/emmer wheat), and possible incidences of *Hordeum* (barley). Weed seeds representing of a range of taxa were present including large Leguminosae (pea family), Polygonaceae (dock family), and probable Compositae (daisy family), as well as a fragmentary grass seed ?*Bromus* (brome grass). An element of chaff was present-a glume base of the *T. spelta/ dicoccum* type.

Snails were also present in all of the flots. In samples 25001 (context 25426), 25002 (context 25412) and 25003 (context 25427) these assemblages were dominated by the burrowing snail *Cecilioides acicula*, which is likely to be intrusive. A few examples of other taxa were present in these samples, but there were under 5 items in each flot. However sample 25000 (25006) contained a range of snail taxa, the majority larger than 2mm, as well as *C. acicula*, but no charred plant matter.

LAND AND FRESHWATER SNAILS

by E C Stafford

The four samples (Table 12.13) processed for charred plant remains from Neptune Wood were also submitted for the assessment of molluscan remains.

Sample <25000> (25006) derived from an enclosure ditch of early Iron Age date. Molluscan remains were moderately preserved, although the majority of the shell comprised broken unidentifiable fragments. Of the identifiable shell the majority comprised freshwater *Lymnaea* spp. predominantly the slum species *L. truncatula* with lesser numbers of *L. palustris*, *L. peregra*. The presence of these species suggests a rather damp environment, possibly seasonal standing water within the ditch. Terrestrial species were present in low numbers although these largely consisted of *Trichia hispida*. Single specimens of *Carychium minimum* and *Vallonia excentrica/pulcella* were also noted. This suggests the presence of damp grassland within the vicinity, possibly pasture (Robinson 1988). There is no evidence for the growth of lush vegetation within the ditch or of the presence of a hedge immediately adjacent, nor any form of shaded environment such as woodland in the immediate vicinity.

Three samples from pit fills dated to the Saxon period were also examined. These included <25001> (25426) and <25003> (25427) from pit [25424] and <25002> (25412) from pit [25401]. Shell numbers were very low in these samples and consisted entirely of dryland terrestrial species. Identifiable species mainly included *V. excentrica*, *Vertigo pygmaea*, *Candidula* spp. including *C. gigaxii* and *T. hispida*, with single specimens of *Carychium* spp. *Cepea* spp. and *V. pulcella*. Interpretation is limited due the low shell numbers, but the species present would be consistent with an open environment, possibly short (grazed?) grassland.

CHARRED PLANT REMAINS

by Ruth Pelling

Methodology

During excavation at Neptune Wood, bulk samples of deposit were taken for the extraction of charred plant remains as well as bones and small artefacts. Four samples of 40 litres were processed by floatation using a modified Siraf-type machine. Flots were collected onto a 250 micron mesh. Dried flots were scanned under a binocular microscope at Oxford Archaeology before being submitted for more detailed examination. Samples were taken from three Saxon pits and one early Iron Age ditch fill. A reasonable assemblage of charred seeds and chaff was noted in one Saxon pit fill (sample 25001, context 25436) while two items were noted in pit fill 25426 (sample 25003).

Sample 25001 was sorted under a binocular microscope at x10 to x20 magnification for the extraction of charred seeds or chaff. Identification was based on morphological criteria and by reference to modern comparative material. Nomenclature and taxonomic order follows Clapham, Tutin and Moore (1989). Quantifications given in Table 12.14 below are based on seed, nutlet etc unless otherwise stated. Grain is quantified on the basis of embryo ends.

Results

Charred remains were dominated by cereal grain and weed seeds. The majority of cereal grain was identified as *Hordeum vulgare* (barley). Preservation was generally moderate or poor with distortion and clinkering. Better preserved grains displayed the characteristic angular profile of hulled *Hordeum vulgare* with fragments of lemma and palea still adhering. A single grain of *Avena* sp. (oats) and a rachis node of *Triticum* sp. were also identified. Neither could be identified to species although the *Triticum* is of a free-threshing variety (either *Triticum aestivum*, bread type wheat or *T. turgidum*, rivet wheat). Two further possible economic taxa were more tentatively identified: *Linum usitatissimum* (flax or linseed) and *Vicia/Pisum* sp. (bean/pea). The preservation of the *Linum usitatissimum* seed was poor due to the oily nature of the seed, although the surface texture did appear to be consistent with the identification. The *Vicia/Pisum* seeds lacked the testa and hila necessary for identification and the presence of a wild vetch cannot be discounted. A single fragment of *Corylus avellana* nut shell was recovered from sample 25003, possibly derived from food waste.

Wild seeds identified included species which tend to be associated with disturbed ground or arable habitats, such as *Rumex* sp. (docks), *Polygonum aviculare* (knotgrass), *Plantago lanceolata/media* (plantain) and *Anthemis cotula* (common mayweed), all of which may have entered the assemblages as contaminants of cereal grain. *Brassica/Sinapis* sp. includes the cultivated brassicas (cabbage, turnip, mustard etc) as well as wild species, several of which are also characteristic of disturbed ground. *Eleocharis palustris* (common spike-rush) is characteristic of at least seasonally wet ground while several species of *Carex* (sedge) are also found in wet or damp habitats. The presence of such damp ground species in association with charred arable weeds and cereal grain may indicate that cereal crops were being cultivated on damp ground.

Discussion

The deposits from the pits at Neptune woods produced low densities of charred plant remains in which cereal grain and weed seeds predominate. Chaff was very rare, although the chaff of free-threshing cereals (barley, oats and free-threshing wheats, all of which have grain which separates easily from its rachis) tends to enter charred assemblages less readily than grain. Free-threshing chaff tends to survive charring less well than the chaff of hulled wheat (Boardman and Jones 1990) while the initial threshing stages in which the grain is separated from the rachis and straw are more likely to take place outside the settlement. Such a mixture of crop plants and weeds in low densities might represent background scatters of routine crop processing waste, including occasional lost crop seeds, which has been re-deposited in the back fill of pits.

The crop plants identified are characteristic of the Saxon period. Hulled barley was a staple cereal crop throughout the Saxon period and the charred grains are ubiquitous on Saxon sites. The wheat present could not be identified to species although a free-threshing variety is indicated. *Triticum aestivum* (bread wheat) is the species most commonly encountered on Saxon sites (eg. Greig 1991), largely replacing the hulled wheat, *Triticum spelta* (spelt wheat), following the collapse of Roman administration. The status of oats on the site is unclear and could be present as an arable weed, although the cultivation of oats was established in southern Britain by

this time. It is not possible to establish whether the flax represents an oil or a fibre crop at the site, either of which is possible.

RADIOCARBON DATING

Two elements of the archaeology were considered for radiocarbon dating, the Iron Age enclosure ditch in Trench 9 and the Saxon pits in Trench 4. Only a very few animal bones, none of them articulated bone groups, were recovered from the enclosure ditch, and these from secondary fills. The possibility of residual material within the ditch was therefore judged to be significant, and the potential for dating the enclosure ditch was therefore judged to be low.

The Saxon pits both contained significant quantities of occupation material, including refitting groups of potsherds, pit 25413 more so than pit 25424. Animal bones from the former pit included a variety of species, and included probable evidence of horn-working. Charred seeds from pit 25424, layer 25426, provided a characteristically Saxon assemblage in terms of the crops represented. Although a single redeposited sherd of prehistoric pottery was present in this layer, the potential for dating the charred plant remains from layer 25426, and by extension the refitting groups of pottery in the same deposit, was therefore judged to be high.

Charred barley grains (*hordeum vulgare*) from soil sample 25001, taken from layer 25426 within pit 25424, were selected and identified by Ruth Pelling and submitted for AMS radiocarbon dating to the Poznań Radiocarbon Laboratory in Poland. Plant remains were subject to a standard AAA (acid-alkali-acid) pre-treatment protocol to remove soil humic acids and dissolved carbon dioxide. Purified carbon dioxide is then converted into graphite targets for accelerator mass spectrometer (AMS) measurement. Dates are recorded in uncalibrated years BP (Before Present, AD1950). Isotopic fractionation was corrected for using the $\delta^{13}\text{C}$ values relative to modern standards (Oxalic Acid II). For details of pre-treatment, combustion, graphite production and AMS measurement see Czernik and Goslar (*Radiocarbon* 43 (2001)). Calibration is made using the OxCal v3.10 program (Bronk Ramsey 2005) and atmospheric data from Reimer et al *Radiocarbon* 46 (2004).

The grains gave a date of 1410 ± 30 BP, which calibrates to 590-670 cal AD at 95% probability. This date falls within the expected date range for the artefacts and environmental remains from the layer, and although no $\delta^{13}\text{C}$ measurements have yet been provided for the sample, there is no reason to doubt the date obtained.

DISCUSSION

Geophysical and Cropmark Survey

One of the principal aims of the fieldwork was to use geophysical survey to pinpoint the exact location of the cropmarks identified on the aerial photographs. It is clear from the survey results that the buried enclosure and other archaeological features lie significantly further south and east than they are plotted as cropmarks (Fig. 12.3). Although the enclosure and some larger discrete features were identified, the

geophysical survey overall did not reveal a clearer picture of the buried archaeology (see Bartlett November 2005). In the south-western field in particular the response was very patchy which may have been in part due to interference from the low overhead power lines, although there is no clear evidence of a localised effect along the course of the power lines.

Several of the anomalies interpreted from the geophysics plan and investigated in the subsequent excavation proved to be geological in origin, in particular the sinuous feature running the west field and the soil marks investigated in Trench 5. However particularly in the case of the features in Trench 5, the anomalies were indistinguishable from those which represented archaeological features on the geophysics plot. This has significant implications for the interpretation of the geophysical survey over the areas not investigated by excavation.

The furrows of medieval or post-medieval ridge-and-furrow were picked up by the geophysical survey in both the western and middle fields, and were confirmed in both fields by subsequent trenching and excavation.

The early Iron Age enclosure

The pottery from the ditch shows that this enclosure was probably contemporary with the hillfort and the settlement on the plateau below it. In addition to the pottery from the enclosure ditch, there were two residual sherds of late Bronze Age or early Iron Age date in Trench 4 and one in Trench 2. These sherds could represent contemporary external activity around the enclosure, or evidence of earlier activity in the area. If contemporary, they suggest an earlier inception for the enclosure than suggested by the few sherds from the ditch, possibly in the late Bronze Age.

At approximately 60 m square the enclosed area is only 0.36 ha, and the enclosure is of average size for those in the Upper Thames Valley (Hingley and Miles 1984, Fig. 4.3). It is very similar in area to the nearest other confirmed early Iron Age enclosure, a sub-rectangular enclosure c 40 m by 80 m at Allen's Pit, Dorchester, but the latter had a ditch more than 5 m wide and nearly 3 m deep (Bradford 1942), and although the ditch at Neptune Wood was not bottomed, this was only 4 m wide and did not appear to be a defensive earthwork of the same type. The width as found is the result of considerable erosion, and the ditch was probably less than 3 m wide originally. Harding (1972, 15-16) also suggested that Wigbald's Farm, Long Wittenham, was also an enclosed settlement of similar type and date, but this is uncertain. The Neptune Wood enclosure, with its possible roundhouse inside, is better regarded as a domestic farmstead, similar to other local sites such as Smiths pit 1, Cassington (Harding 1972, 15 and Pl. 27) and a cropmark site at Culham Heights overlooking Andersey Island, from which early Iron Age pottery has been noted when fieldwalking.

The environmental evidence is limited but informative. Snails from the enclosure ditch include aquatic species, suggesting that the water table was high enough for seasonal standing water in the ditch. There was no evidence to suggest that the enclosure was enclosed by a hedge, so protection was presumably provided by upcast from the ditch, possibly surmounted by a fence or palisade. The surroundings included damp grassland, possibly pasture.

Following discussion between Oxfordshire County Archaeological Services, The Northmoor Trust and OA and in accordance with the aims of the project to protect any significant archaeology in the area of the proposed wood, it was agreed to

redesign the northern limit of the wood in the vicinity of Trenches 4 and 9. This measure should minimise any impact on the area of the prehistoric enclosure.

The Roman trackway and field system

Cropmark evidence suggested that there were three roughly parallel ditches crossing the western field. These were not directly in line with the pair of ditches traced continuing across the adjacent field to the south-west, as the southernmost of the three ditches was in line with the more northerly ditch in the adjacent field. This may indicate that the cropmarks plotted in the western field of the investigation were not entirely accurate, and were perhaps confused with the furrows evident in the geophysical survey on very much the same alignment. The geophysical survey did not identify the trackway ditches clearly in the western field (see Bartlett November 2005 report), although some very tentative lines are indicated on Figures 3 and 4. Looked at on the wider scale (Fig. 2), it appears that the trackway is curving gently south-westwards.

The scale of the investigations makes it difficult to be certain about the orientation and development of the trackway. The lengths of ditch exposed within individual trenches was generally too narrow to be certain that the apparent alignments can be projected with confidence from trench to trench; where longer lengths of ditch were exposed, as in the ponds, it is clear that the orientation of some of the ditches changed along their length. The limited excavations mean that few finds were recovered, so that only in the case of ditch 25974 can we be confident that the ditch is securely dated by the pottery. No environmental remains of any significance were recovered from any of the ditches to assist in dating them or characterising the environment around them when they were open. In the western field, the similar orientation of the medieval furrows makes distinguishing the trackway from later features particularly difficult.

With these caveats in mind, it is nevertheless possible to draw some conclusions. Ditches plausibly associated with the cropmark trackway, and containing Roman pottery, were found crossing the middle field. The more northerly ditch, the only one excavated in both trenches, is of very similar size and character in both cases. The artefactual evidence recovered from these ditches suggested that they silted up during the 2nd-4th centuries AD.

The trackway is shown as a triple-ditched feature in the western field on the cropmark survey, and three or more ditches on virtually parallel alignments were found in Trenches 1, 2 and 10, 6 and 7. The third ditch in Trenches 6 and 7 was more substantial than either of the others, and should certainly be regarded as a significant boundary.

Like the ditches containing Roman pottery in Trenches 6 and 7, the two most substantial ditches in Trenches 1 and 2 lay approximately 4 m apart, and have plausibly been interpreted as two of the trackway ditches. One of those in Trench 2 also contained a sherd of Roman pottery. If these ditches are linked across these two trenches, their orientation has changed from that in Trenches 6 and 7, turning more south-westwards. While not corresponding to the cropmark evidence in this field, this would be more in line with the continuing alignment of the trackway evident from cropmarks in the field to the south-west.

The recut found in Trenches 1 and 2, which was seen in the southernmost ditch in Trench 1, but the more northerly in Trench 2, could have been present as separate ditches along other sections of the trackway, indicating a route that may have shifted laterally over time. Alternatively it may indicate a change of orientation, representing the same ditch cutting obliquely across the earlier ones; it is of very similar dimensions to the more northerly ditch in Trenches 6 and 7, and is in line with them. As the modern boundary of the middle and eastern field still lies very close to the trackway line, it is also possible that these ditches represent boundaries of widely-spaced date, phases in the long-term survival of this boundary from the Roman period.

No surviving trackway surface was found between any of the ditches, but those spaced 3.75 m apart have been seen as the most likely contemporary pairing. The trackway is therefore considered to represent a minor track rather than a major route.

The dating evidence for the trackway is of particular interest in terms of the local landscape, as there are several small Roman settlements which were connected by this track way and an adjoining track which ran north towards Northfield Farm. Excavations of this north-south trackway have indicated that it was only in use in the early Roman period, along with the rest of the settlement (Gray 1978,15; Hewett 1901). As only late Roman pottery was recovered from the trackway section examined in the current excavation, this could indicate the construction or continued use of the east-west trackway at a time when the north-south trackway was falling out of use. Where specified, the later Roman sherds come from secondary fills, so it is more likely that the trackway was all of one date, but that this part of the trackway continued in use.

North of the trackway in the middle field a number of parallel, or nearly parallel, ditches were found, one of which (25974) contained a reasonable assemblage of Roman pottery. A cropmark enclosure has tentatively been identified some 30 m north of this ditch (and just outside the wood), although the geophysical survey provided only tentative confirmation of the existence of this feature. The form of this enclosure is similar to late Iron Age and Roman enclosures around Stanton Harcourt further upriver (Grimes 1943-4; Case and Whittle 1982, 115-16), so it is conceivable that the pottery in the ditch is residual, and is derived from the enclosure. Most such enclosures however date to the first or early 2nd century AD, rather than any later (see Lambrick and Allen 2004, Chapter 4, 161-175), so residual material of this date is less likely. Ditch 25974 was exposed over a fair distance, and does not cut any Roman features, so overall residual material seems less likely than that the pottery does date the ditch. This suggests a Roman field system adjacent to the trackway.

The four or five ditches exposed at the south end of the ponds area, all of which are on a similar alignment to 25974, contained only one small sherd of pottery between them, which is claimed neither by the Roman or post-Roman pottery specialists, and a Roman sherd from a small pit or posthole alongside one of the ditches. On balance, therefore, these ditches may also belong to the Roman period.

Ditch 25315 to the south is also on much the same alignment, and it is possible that this too belongs to this Roman field system. Ditches 25300 and 25319 opposite to 25315 may then have been another part of this system, forming fields that were not rectangular but rhomboidal. The possible layout of such a field system is indicated in Figure 16. As the modern field boundary in the middle field however follows the line of the trackway so closely, ditches broadly parallel to this could be of any date, and a later, possibly Saxon or early medieval date for some of the ditches either on the north or the south cannot be ruled out.

Other undated ditches 25109 and 25112 in Trench 1, ditches 25603 and 25610 in Trench 6, ditch 25705 in Trench 7 may also potentially have belonged with the Roman field system, or could have been part of the medieval ridge and furrow indicated on the geophysical survey.

The Middle Saxon waterholes

The circular anomalies investigated in Trench 4 proved to be Saxon pits, probably associated with the settlement evident in cropmarks further north in the same field. The presence of sherds of both vessels within both pits may indicate that they were in use contemporarily, but the animal bones suggest otherwise. The majority of the sherds of both vessels occurred in pit 25413, and these were also the larger sherds. It is therefore also possible that pit 25413 was filled first, and that sherds lying around the pit were later incorporated into the neighbouring pit 25424. The date of the very large vessel found in pit 25413 may therefore be slightly earlier than the radiocarbon date of 590-670 cal. AD provided for charred barley in layer 25426, but the state of the sherds in 25424 was not significantly more abraded than those in 25413, so the difference in date was probably slight.

The unusually large size of the vessels found in the pits has been commented upon (above), and the neck of vessel LW2 is without parallel in the region. It is possible that these vessels were made as water containers, hence their large size, and that the pits in which they were eventually deposited were indeed waterholes. The convex neck of LW2 was probably accompanied by a short out-turned rim (similar to LW3), providing two grooves around the neck where rope could be secured for lowering to pots into the water.

The charred seeds deposited in pit 25424 indicate that the local inhabitants were cultivating barley, wheat and possibly oats, and the presence of *eleocharis palustris* suggests that cultivation was occurring not only on dry ground but also on damp ground. Although very few, the snails suggest that the vicinity of the pits was dry, and hint at grazed grassland, so perhaps cultivation was occurring close to the Thames. There is a tantalising hint of the cultivation of flax as well, which is known on other sites in the Upper Thames valley in the Saxon period. The single charred hazelnut also suggests that nut trees were present in the vicinity.

Animal bones from pit 25413 indicate a predominance of cattle, but with sheep, goats and pigs also present. Crafts are also indicated by the working of horn-cores, and geese may either have been kept or hunted. The second pit 25424 contained a very different fauna, including antler from red or roe deer, a small mammal, a small bird and a fish. Some of these bones may have entered the pit accidentally, but the shed antler and the fishbone must be evidence of human agency. They provide evidence of the exploitation of wild resources as well as domesticated animals.

The function of these pits is uncertain, although the evidence is suggestive of quarries or waterholes that were subsequently reused for the disposal of animal bone, pottery and various organic components along with a little metalwork. This domestic rubbish suggests a continuing focus of Saxon settlement close by.

Evidence of medieval activity (other than agricultural) is inconclusive. One of the group of ditches parallel to the Roman trackway, and to the modern field boundary, in the middle field contained a single potsherd whose date is disputed. If this was not medieval, then all of the ditches and adjacent pits may have been Roman,

and this area may have been part of the open field system throughout the medieval period.