

LATE SAXON AND MEDIEVAL SETTLEMENT AT THE FORMER COWPER TANNERY, LIME STREET, OLNEY

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Early-middle Anglo-Saxon activity comprised a single pit and a small assemblage of pottery. Settlement began in the late Saxon period, the 11th century, with a small timber building and an associated boundary ditch. By the 12th century a system of boundary ditches defined domestic plots to either side of a road, perhaps related to creation of a planned town. Features within the plots included an iron smelting furnace, a well, pits and postholes. The boundaries were retained and modified through the 13th to 16th centuries. A malt or drying oven, dated to the 13th-century, was probably associated with a nearby house. From the 16th to 20th centuries the site was divided into the three plots, with the original boundary alongside the early road still respected, but defined by a stone wall.

INTRODUCTION

In 2003 Northamptonshire Archaeology undertook an open area excavation on behalf of Bloor Homes, in the northern part of the site of the former Cowper Tannery in Olney, Buckinghamshire (NGR SP 887510; Fig 1). The work met the requirements of a brief issued by the Archaeology Officer for Milton Keynes Council. A desk-based assessment of the entire Cowper Tannery site had suggested that there was the potential for Roman and medieval archaeology (Prosser 1998), and trial trench evaluation in the northern half of the site found a posthole structure, boundary ditches and pits dating from the late Saxon to medieval periods, and a quantity of tap slag suggested that iron-working had taken place on or near the site in the medieval period (Stevens 2002).

The open area excavation examined a roughly triangular area measuring 150m east-west by 85m north-south, approximately 0.5ha in extent (Fig 2). The client report, providing a detailed description of the evidence was issued in 2004 (Thorne & Walker

2004), and a copy is lodged with the Archaeological Officer for Milton Keynes, SMR Event Numbers 738 (excavation) and 621 (evaluation). The archive will be transferred to the Buckinghamshire County Museum Service under the accession number A.2003.67 and the evaluation archive as 2002.104.

TOPOGRAPHY AND GEOLOGY

The site lies at the southern end of Olney, bounded by Bridge Street to the east, Lime Street and properties fronting on to Weston Road to the north, and the river Great Ouse to the south. The site lies on sloping land rising from 51.70m OD in the south-east to c.54.80m OD at the north and west. A foot-path bisected the site west-east: to the south were the disused tannery buildings and relatively undisturbed waste ground lay to the north (Fig 2).

The underlying solid geology is mapped as limestone with some sandy beds, with overlying drift geology of glacial deposits comprising boulder clay with involution hollows and river terrace sand and gravel.

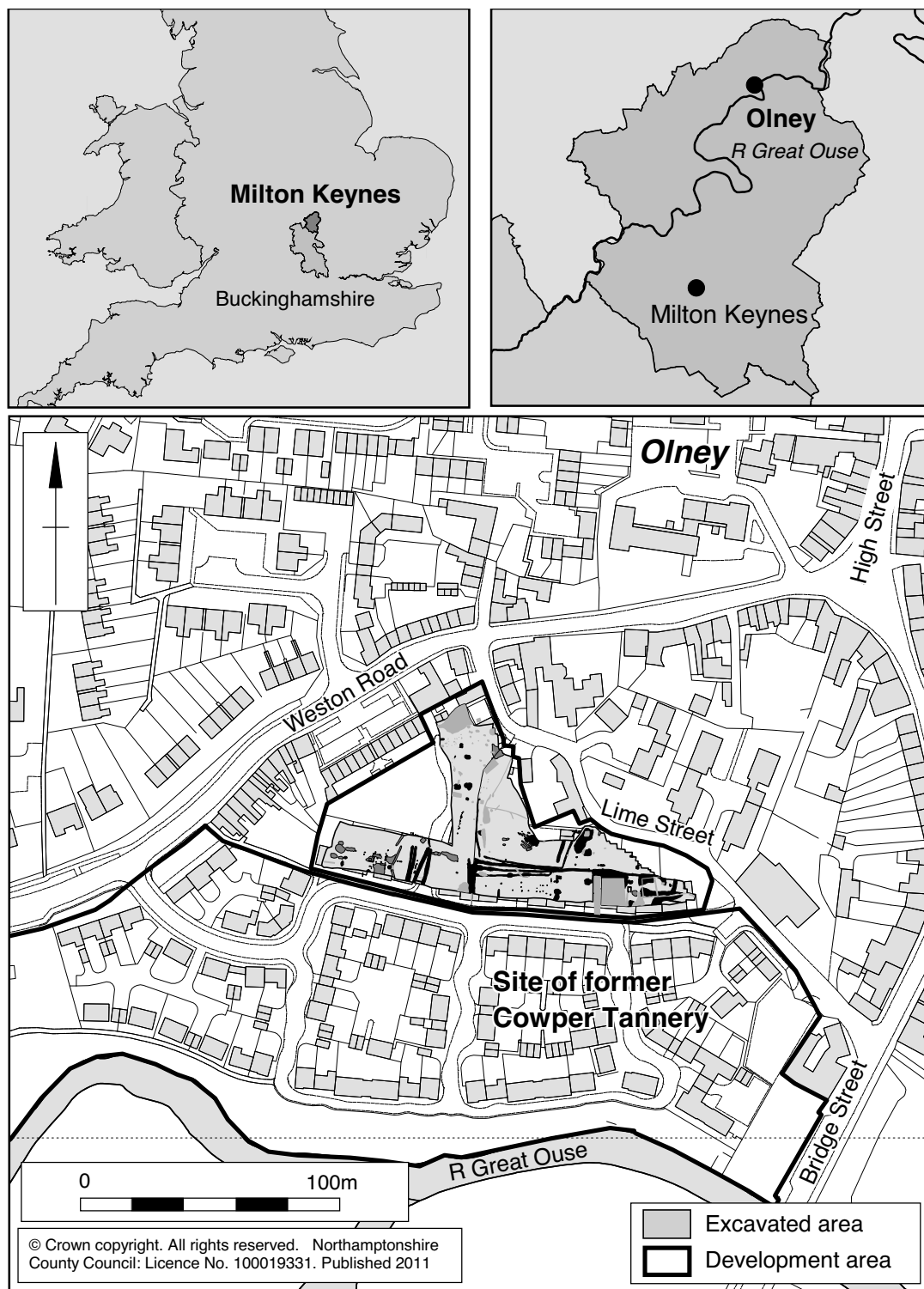


FIGURE 1 Site location

HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

Prehistoric evidence is slight in the area. There was a Roman settlement of several hectares at Ashfur-long in the north of Olney.

Early to middle Saxon evidence is slim: the

name Olney may be from a British name, *Olla*, but Baines (1979, 159) prefers the derivation from a man of the 7th century called *Oslaf*, being Olney, his island, as it was surrounded by watercourses. References in a 10th-century charter to *dene æcre* and *ecgan croft* indicate earlier settlement (Baines 1979, 181).

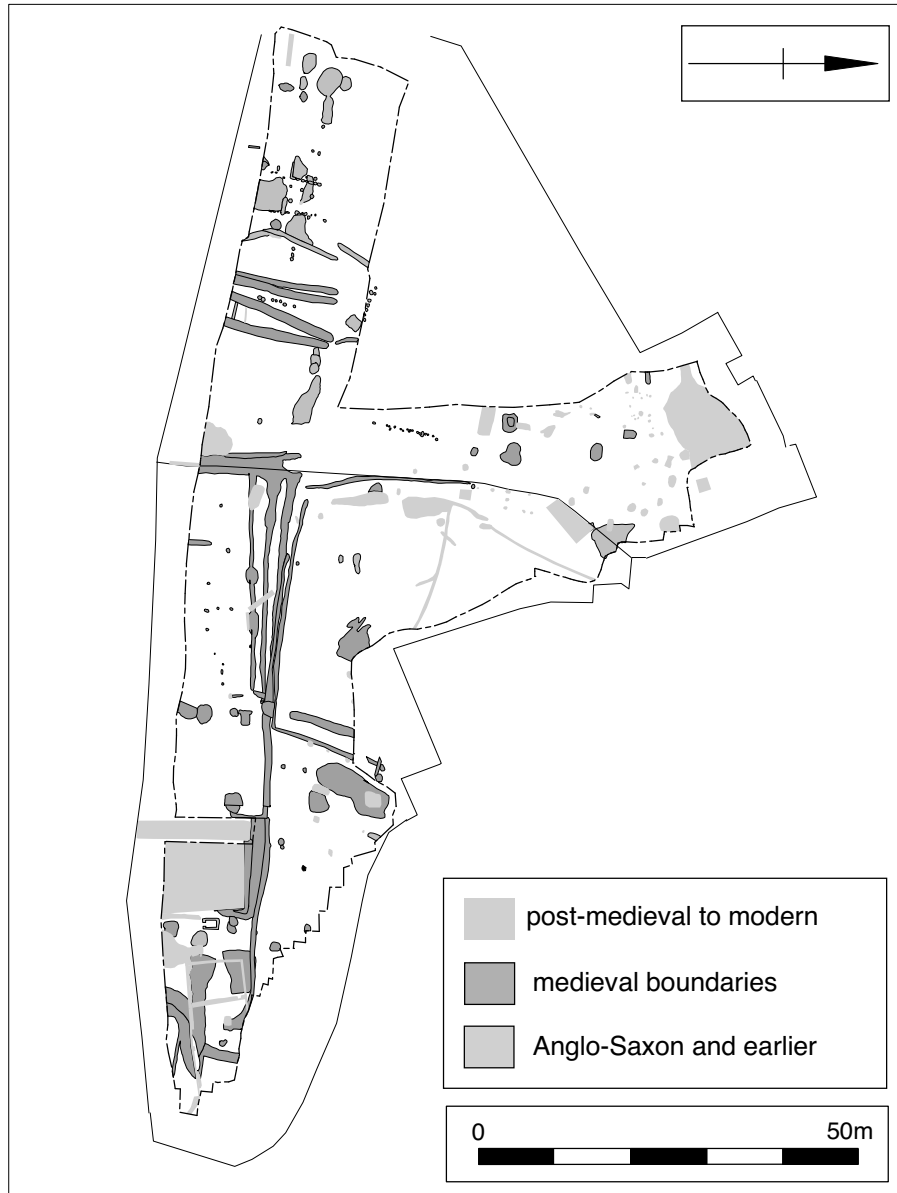


FIGURE 2 General site plan, showing all features

In 979, this land was granted by King Ethelred to his kinsman Ælfhere, Ealdorman of Mercia, '*These are the land boundaries of the 10 hides at Olney*'. The 10-hide assessment remained unchanged in 1086, when the Domesday Commissioners found land for 10 ploughs. The manor was worth £12 as it had been in Edward the Confessor's time, when the thegn Burgred held it. Burgred's successor was the Bishop of Coutance and Olney became the head of the Bishop's fief. Olney was probably a royal estate (Baines 1979, 180).

The southern boundary of Cowper's Tannery is close to Ælfhere's estate boundary, the Great Ouse, which at this point comprises two streams, as stated in the charter. The northern stream turned Olney Mill, which in 1086 was worth 40s and 200 eels. The Ho Brook formed the western boundary and the shallow river crossing of Wilinford the eastern boundary. Wilinford comes from *Wilig*, the Anglian for West Saxon *welig*, a willow – suggesting that the crossing is a very old one. By 1334 there was a bridge at this crossing which was in need of repair.

To the north of Olney was the hamlet of Olney Hyde, part of the manor of Olney within the land granted to Ælfere. Fieldwork in 1957 identified both the deserted hamlet and the pottery production centre. Excavations of pottery kilns in 1967 and 1969 produced two types of ware, 'A' ware dated to the mid 12th to late 13th-centuries and 'B' ware during the 14th to early 15th centuries (Mynard 1984). The 'A' ware is the predominant pottery from the Cowper Tannery excavation.

A planned town was probably founded at Olney in the 12th or early 13th centuries, with the line of the present High Street preserving this form. Boundaries within the excavated site may throw

further light of the origins of the planned town, as discussed at the end of this report. Olney became a manorial borough in 1237.

Tanneries have existed in Olney for some considerable time. The first mention of a tannery was in 1780, when William Cowper, writing to John Newton, said that his pet hare had escaped and fallen into a lime pit at Mr Wagstaff's tannery, which probably lay closer to the river, to the south of the Cowper Tannery. Mr Wagstaff's tannery closed in c.1877 and was sold in 1898 to William and Joseph Pebody. The tannery was remodelled and extended, with new buildings and new processes of tanning, and continued in business as the Cowper Tannery until shortly before the tannery buildings were surveyed in 2002 (Prentice 2002). A 19th-century stable was also recorded before demolition (Thorne 2003).

By 1882 (Ordnance Survey First Edition Map 25" series), the site was in a form that survived until demolition, with a footpath bounding the southern end of the excavated site and a limestone wall dividing the site in two, north to south.

THE CHRONOLOGICAL SEQUENCE

PREHISTORIC TO ROMAN

Forty-nine residual flints are dated to the Neolithic and Bronze Age periods.

There was a sherd of Iron Age shelly ware pottery in a small pit, 250, and a lug handle and a lava quern fragment in pit 721. Along with few residual Roman finds, including four coins and a sherd of pottery, dated to the 3rd-4th centuries AD, this suggests limited activity in the Iron Age and Roman periods (Fig 3).

TABLE 1 Chronological development (see Fig 3)

<i>Period</i>	<i>Description</i>
Neolithic and Bronze Age	Worked flint
Iron Age	Pit with pottery
Roman (AD43–400)	Residual finds
Early to middle Anglo-Saxon (AD400–850)	Minor features and residual pottery
Late Saxon (AD850–1100)	Settlement, timber-building
Medieval (12th century)	Plot boundaries, smithy
Medieval (13th–15th centuries)	Development of boundaries, malt house
Post-medieval (16th century to present)	Boundaries and other features

EARLY-MIDDLE ANGLO-SAXON

An elongated slot or gully, 697, contained a single sherd of early/middle Saxon pottery (Fig 3). Other residual early/middle Saxon sherds were recovered from the eastern end of the site.

Paul Blinkhorn records 23 sherds (148g) of hand-built early/middle Saxon pottery in four fabrics: chaff tempered, wet-hand finished surfaces, 1 sherd, 9g; sparse rounded quartz, 9 sherds, 57g; very fine, slightly sandy, 7 sherds, 53g; and sandy, 6 sherds, 29g. The evaluation had produced six sherds in the sandy fabric and two sherds of a granite-tempered ware. All the sherds are undecorated, making it impossible to date them other than to within the broad period. Three rimsherds are all from small jars. The range of fabrics is similar to that found at other contemporary sites in the county, such as the assemblage from Pennyland, Milton Keynes (Blinkhorn 1993).

THE LATE SAXON SETTLEMENT (11th century)

At the south-west corner of the site a discrete concentration of features are dated to the 11th century (Fig 3).

The Late Saxon Timber Building

This building comprised at least one room, around 6.0m long by 5.5m wide, with a possible second room of similar size to the south, although much of the wall sub-structure had been lost. Comparisons to other local 11th-century structures at Tattenhoe, Milton Keynes (Ivens *et al* 1995, 16–24) show a general similarity in size.

The best preserved section was the western wall, which comprised a line of closely-abutting elongated postholes (Figs 4, 5 and 6, Section 3). This may suggest that the walls were stave-built, using abutting planks edge to edge. Little of the east wall survived, but posthole 66, cutting two earlier phases of possible post-pits, may have held a door post, perhaps partnered by posthole 64. As is common with post-built structures of this date, there was little evidence for the end walls, although the southern end of the principal room was partially defined by a slot, 81, with a deeper posthole at its western end. Another length of slot, 160, ran westward from the south-west corner of this room.

A layer of gravel, 386, filled a shallow hollow

within the building and continued to the west, perhaps defining the location of an original doorway, later blocked. To the south of this room, gravel layer 381 may have been an external layer or a surface within a second room at least 4m long, but the only surviving evidence for walls was a short line of postholes to the north-east, 85–91.

In the angle of the western wall and slot 160, which probably held a timber screen, there was a rectangular pit, 423, 1.05m by 0.95m and 0.70m deep with vertical sides, suggesting that it had either been lined or was not open for long (Figs 5 & 6, Section 2). This may have been a cess pit, and while the fills showed no clear evidence for cess they did include some animal bone and pottery, and concentrations of charcoal, grain and chaff. The pit was overlain by a layer of gravel, 382.

Pottery recovered from some postholes and slot, 81, is dated to the 11th century, and a fragment from a rotary quern was found on the floor. Posthole 66 and the earlier pits or post-pits, 71/73, contained charred seed, wheat grains of free-threshing wheat. There was also wheat chaff, a few grains of rye and barley, a moderate amount of weed seeds and two fragments of hazel nutshell.

To the east of the building there was a gully system, aligned north to south. Ditch 141, in the south, was 0.80m wide and 0.2m deep with vertical sides. Originally, there was an 8m-wide gap between this and a northern arm, 69, with a gravel layer, 380, leading to the postulated eastern doorway of the building. This entrance was later largely blocked by a new length of ditch, 74/143 (Figs 3 and 5).

Other Saxon Features

To the west of the building there was a cluster of irregular tree root holes (Fig 3). To the east of the boundary ditch there were further tree holes, and an isolated oval pit at the northern end of the site, 697, was also dated to the 11th century.

A line of eight postholes and an associated pit, 4/22, located in the trial trenching, suggest the possible presence of a second timber building, to the east of the boundary ditch, but this area was not available for further investigation and the pit and postholes are undated.

Some of the postholes and tree holes further east (see below) may have had an origin in the 11th century, or they may have contained residual 11th-century pottery in addition to pottery dating to the 12th century.

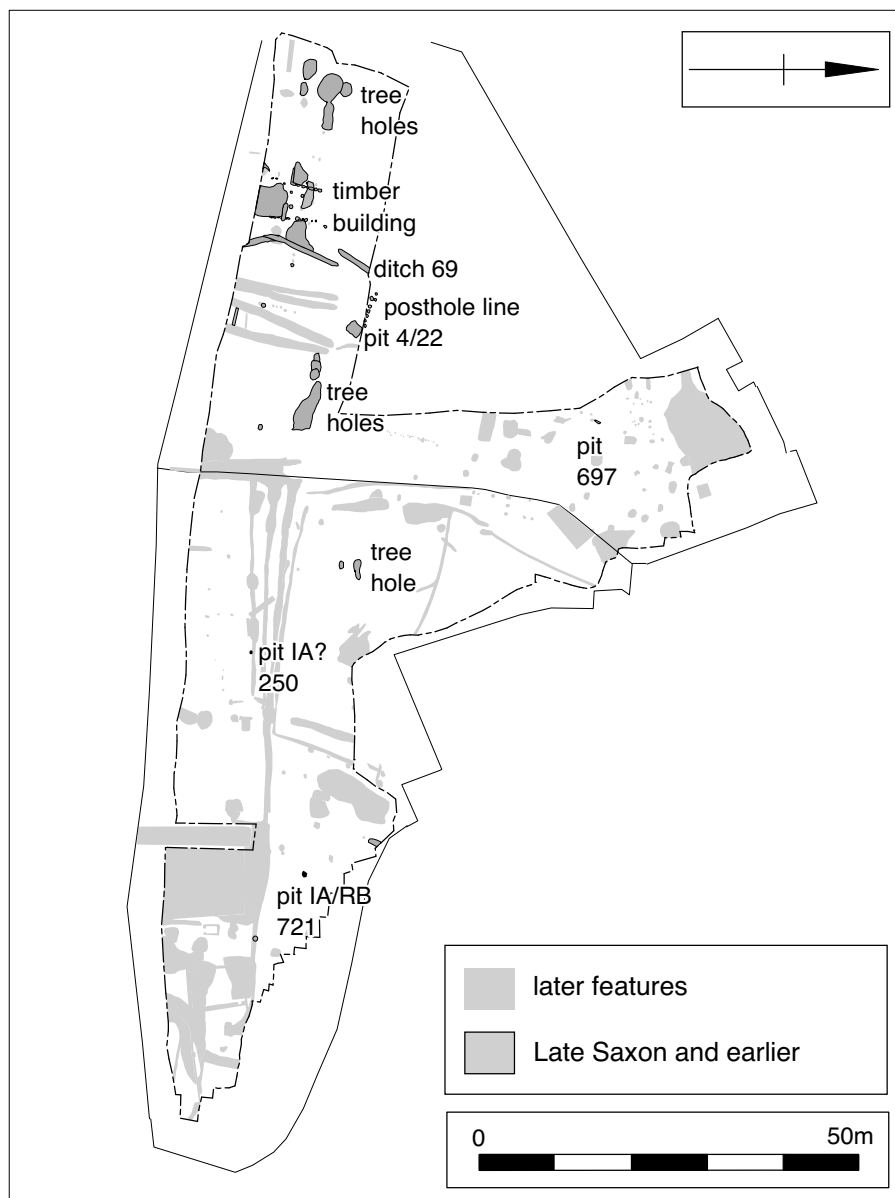


FIGURE 3 Late Saxon and earlier features

The Late Saxon Pottery

by Paul Blinkhorn

St Neots Ware (F100: SNC1), c.AD900–1100, 16 sherds, 85g, EVE = 0.25. All the sherds are from the small to medium-sized jars, a vessel type which was one of the staples of this industry. Slightly

unusually, there are no inturned-rim bowls, another usually common St. Neots ware vessel type.

St Neots ware (*T1(2) type*, F200), AD1000–1200 (Denham 1985), 246 sherds, 2311g, EVE = 2.66. Has larger, sparser inclusions and in a variety of red, brown and pale grey colours. The majority of the assemblage consisted of jars (EVE = 2.29),



FIGURE 4 The late Saxon timber building during excavation

but a few fragments of inturned-rim bowls were noted (EVE = 0.37).

Stamford ware (F205: MS19), 10th–12th century, 2 sherds, 12g, EVE = 0. Two bodysherds with external yellow glaze, suggesting a date of the early 11th century or later, as glazing was relatively rare on Stamford ware before that time (Kilmurry 1980, 135). Both sherds occurred in contexts dated to CP1 (11th century).

The Late Saxon Finds by Tora Hylton

There are two residual objects of Anglo-Saxon date. A hooked tag (Fig 7, 1), used to secure items of clothing, is a form in use from the 7th–11th centuries, but was from a 13th-century pit (Hinton 1990, 548–52). A pair of tweezers made from sheet metal was from the subsoil (Fig 7, 2), and is similar to examples from Shakenoak, Site F (Brodrribb *et al* 1972, figs 30, 134, 135) and Tempsford (Hylton 2005, 77).

A fragment from a lower rotary quern in coarse-grained sandstone conglomerate, from the floor of the timber building, has a worn convex grinding surface, and retains part of a waisted central spindle socket, 20–40mm diameter, that penetrates through the 90mm thick stone.

A bone roughout/pinbeater came from a post-hole.

Illustrations (Fig 7)

- 1 Hooked tag, complete, copper alloy. Length: 24mm, width: 13mm, SF78, pit 761
- 2 Tweezers, complete, copper alloy. Length: 40mm, width: 15mm, SF59, 2, Subsoil

THE BOUNDARY SYSTEM (12th century)

The Ditches

In the 12th century, a wider landscape of new boundaries divided the site into a series of plots with the east separated from the west possibly by a road running south-north (Figs 8, 9 & 10). To the south there was a clear gap, up to 15m wide, between the eastern and western ditch systems, but to the north the boundary ditches were either absent or lost in an area more heavily disturbed and truncated by later activity.

The ditch systems were evidently long-lived, as most had been redefined by re-cutting up to four or five times. To the west, four ditches defined a north-south boundary line, DG1 (Fig 8). The ditches varied from 0.50–1.00m wide, and 0.10–0.45m deep and the re-cutting sequence ran from west to east. The ditch fills included pottery, slag, and fragments of lava quern. A line of postholes, running north to south, was associated with these boundary ditches, and may have defined the

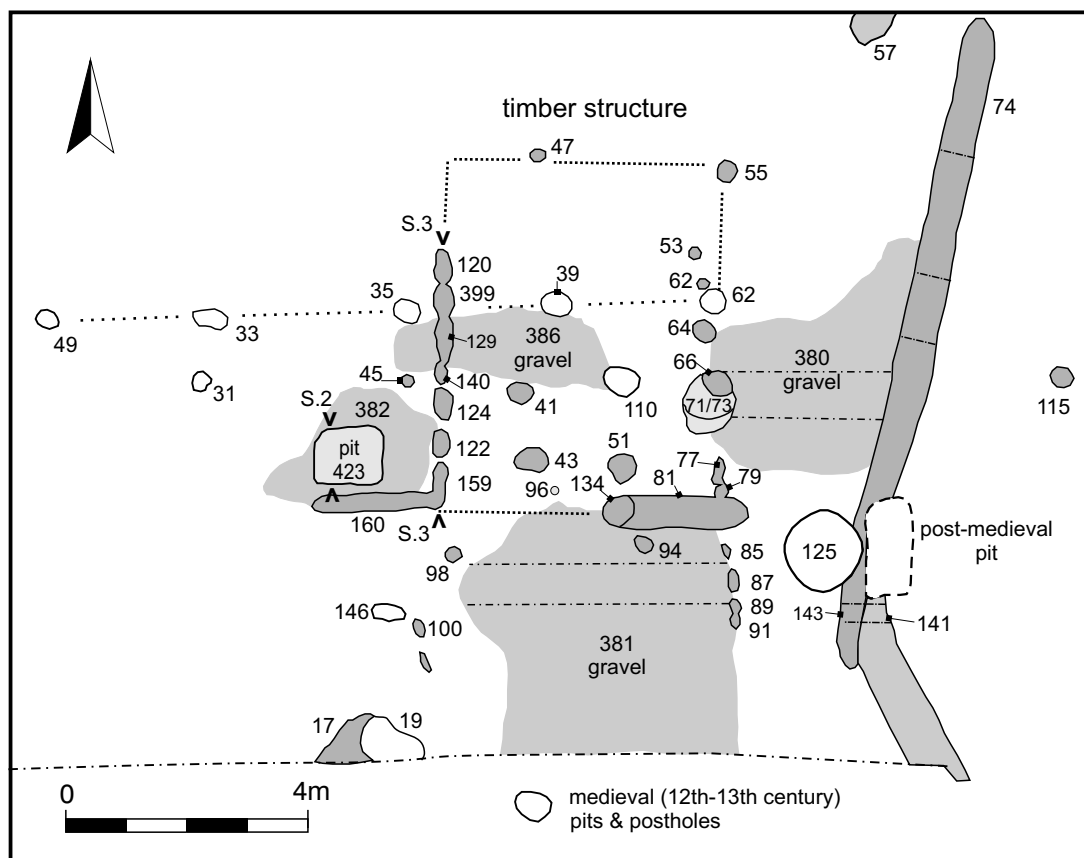


FIGURE 5 The late Saxon timber building

western side of the road at one stage.

To the west of boundary DG1 was a line of widely-spaced postholes, aligned east to west (see Fig 5). To the south, a shallow oval pit, 125, contained pottery and animal bone and quantities of charred seed.

The eastern side of the road was defined by boundary ditch, DG2 (Figs 8 & 9, Section 6). There was a succession of re-cuts, 212, 208 and 210, each up to 1.5m by 0.30-0.55m wide. The only textile tools recovered, a spindle whorl and a bone tool, perhaps used as a pin beater, came from these ditches. Section 6 also shows the post-medieval limestone wall that defined a property boundary on this same alignment through to the 21st century. The line of boundary DG2 was continued northward by ditch 448, but this ditch did not have a sequence of re-cutting to indicate that it was

retained over an extended period of time.

At the northern end of DG2, the earlier ditches in the sequence turned eastwards to form an east to west boundary, DG3. These ditches were 0.80 and 1.80m wide and 0.18 to 0.40m deep, their shallowness reflecting the extent of later truncation, perhaps through agricultural use in the late medieval and post-medieval periods. The ditch fills contained dumps of pottery, including part of a watering pot (Fig 18, 19, found in evaluation), a lamp (Fig 17, 14) and slag. South of ditch system DG3 there were sparse lines of postholes, possibly forming animal pens, and these contained pottery dated to the 11th century and 12th centuries. A large circular pit, 225, contained pottery dated to the 12th century.

North of ditch system DG3 were two large pits, 732 and 730, containing pottery, with some vessels largely intact, dated to the 12th century. A series of

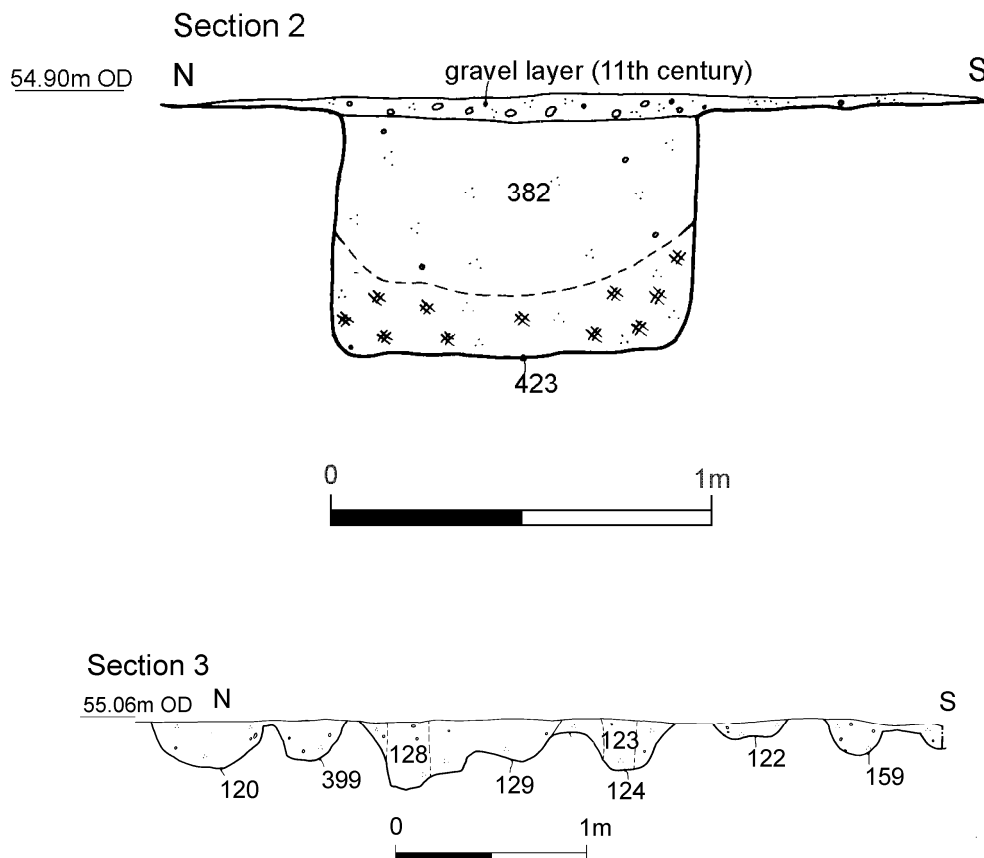


FIGURE 6 Sections of pit 423 and the postholes forming the west wall of the timber building

probable tree holes, 735 and 738, covering an area 1.1m by 4m, also contained pottery of 12th-century date, along with animal bone and some slag. Further west an extensive irregular tree hole, 428, 3.5m across and 0.70m deep, contained pottery dated to the 11th and 12th centuries in the lower and upper fills respectively, and appeared to have been deliberately backfilled.

A ditch, 799, 1.6m wide and 0.47m deep with steep sides and a wide flat base, may have defined the eastern boundary, DG4. The primary ditch fill contained slag dumped from the nearby smelting furnace, but this ditch system lay in an area heavily disturbed by later activity, which included two areas of tree clearance with fills that included pottery dated to the 13th century, while another contained an Anglo-Gallic jetton dated to the 13th to 15th centuries.

Close to the eastern boundary of the site were the remnants of a stone-lined drain, 748, with a fill of dark brown silty clay containing pottery dated to the 12th century. The presence of the stone-lined drain suggests that contemporary stone buildings probably lay nearby but beyond the excavated area.

The Smithy (12th century)

Only the base of an oval iron smelting furnace, 803, survived. It was 0.50m long by 0.35m wide and 0.11m deep, cut into the natural clay. The surrounding area was scorched red-purple. While the pit fill, 802, did not contain dateable material, tap slag was found in the fills of a large proportion of features dated to the 12th century, suggesting that the furnace was of the same date.

The evidence from the site and the debris, see below, indicates that there was a small smithy

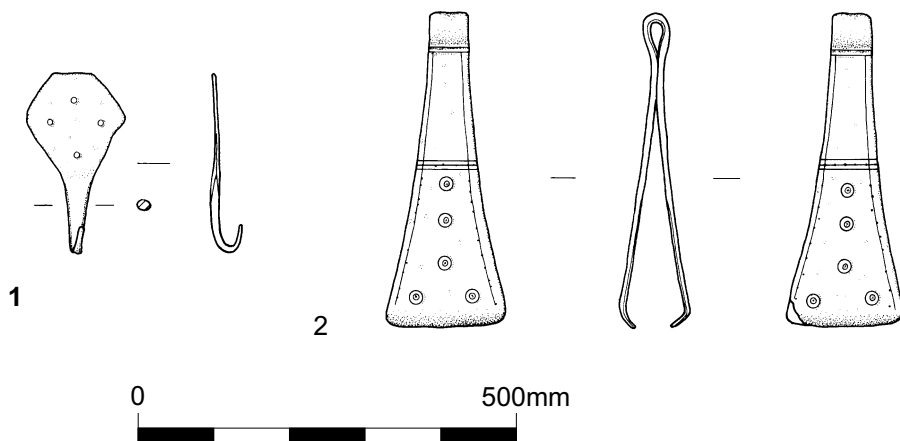


FIGURE 7 Late Saxon copper alloy finds: 1) hooked tag, 2) tweezers

containing a smelting furnace and probably a smithing hearth as well, but no trace of an associated building had survived.

Metalworking Debris by Andy Chapman

A total of 83.0kg of metalworking debris was recovered, with the fill of the small furnace, 803, producing 13.9kg. The majority of the slag, including all the larger quantities, came from features dated to the 12th century. Smaller quantities from ditches and pits dated to either the 11th or 13th centuries are probably intrusive and residual respectively.

Apart from the furnace, the larger groups of slag were in two clusters. One group came from the boundary ditches around the junction of ditches DG2 and DG3, some 35m west of the excavated furnace, perhaps derived from dumping in the corner of the plot. Another group came from boundary ditches DG1 even further to the west, perhaps suggesting that either this western area was part of the same property, or that other unlocated furnaces were in operation on other plots.

The slag is predominantly tap slag from iron-smelting furnaces, dark grey in colour, dense and heavy, even though it contains frequent and sometimes large gas bubbles. The fragments range from 5mm up to a large block 200mm square, indicating that it had been broken up prior to deposition, perhaps as a result of having been in surface dumps before it was incorporated into the ditch fills.

There is also a small quantity of miscellaneous slag and a little light coloured and vesicular fuel

ash slag. Three small lumps of dense slag, 27-40mm diameter, and a larger irregular piece, 65mm long, are partially magnetic and are also visually distinguished by their rusty red-brown surface coloration. They do not show the characteristic spongy nature of an iron bloom formed in smelting, but may have been formed immediately adjacent to the bloom. A single oval lump of dense iron slag, 89mm long by 72mm wide and 40mm thick, weighing 316g, with fuel impressions on its under surface, has a concave/convex section typical of a smithing hearth bottom.

A single deposit shows very different characteristics. The 13.9kg of slag from the fill of the small furnace, 803, at the eastern end of the site, comprised only broken fragments of furnace slag, typically irregular, light and highly vesicular, although some denser slag is also present. Impressions of fuel charcoal are common and many fragments have orange-red fired clay adhering to them. Of particular interest is an example of a blowing-hole plate, 90mm long by 70mm wide, with a smooth surface, which would have formed immediately adjacent to the hottest part of the furnace, the aperture of the blowing hole, where a tuyère or nozzle would have entered.

Slag, including tap slag, came from ditch 799, part of DG4, adjacent to the furnace. The residue from a soil sample of the primary ditch fill, 801, also contained some magnetic debris, including small angular pieces and some flat plates and spherical droplets, characteristic of hammerscale.

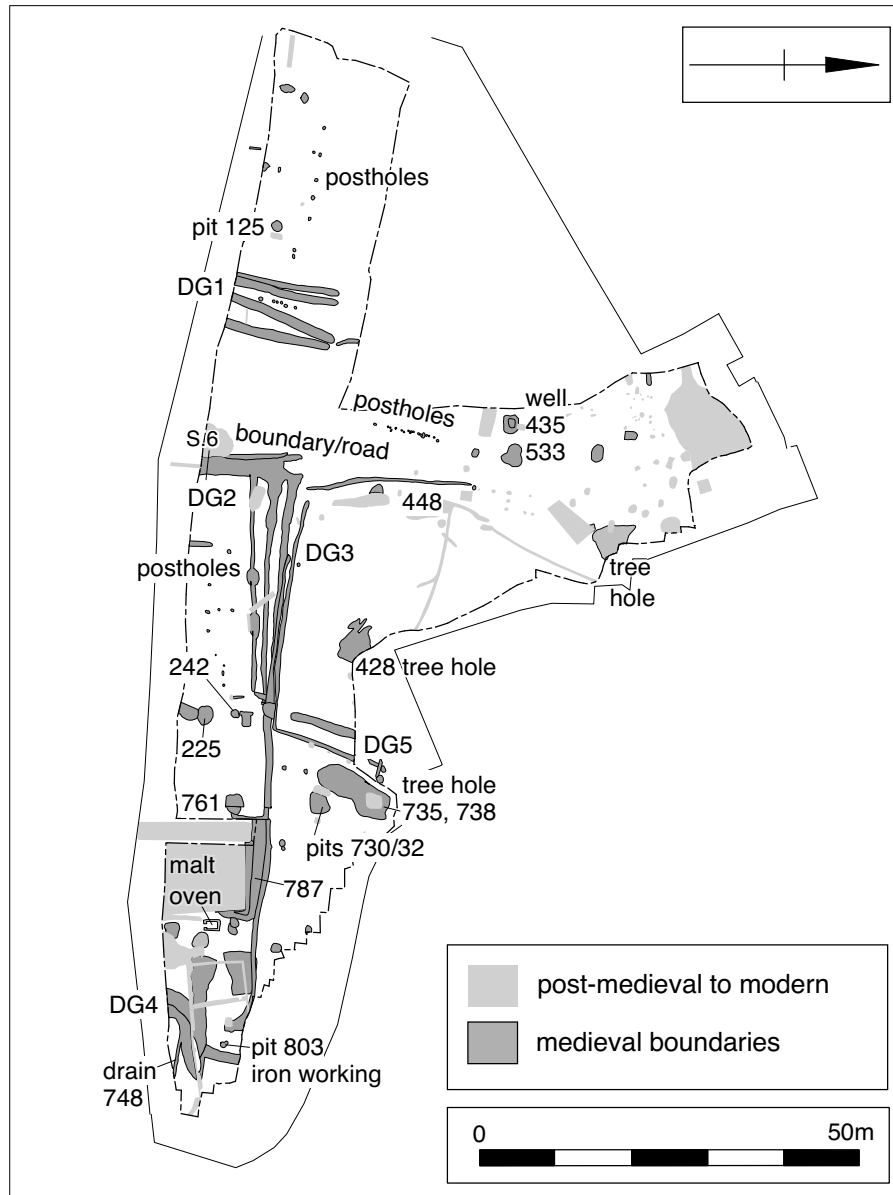


FIGURE 8 Medieval boundary ditches and other features (12th–14th centuries)

This, together with the single possible smithing hearth bottom, suggests that secondary smithing also took place on the site.

The Well and Other Features

In the north there was a well, pits and a line of postholes (Fig 8). The well, 435, was 2.0–2.5m in diam-

eter and 1.70m deep with several courses of limestone lining surviving, 538 (Figs 11 & 12). The primary fill, 537, which was still wet during excavation, lacked organic remains, but large fragments from a pottery jug with a strap handle (Fig 17, 11) had been thrown in and a large flint nodule had been dropped in (no doubt with a satisfying

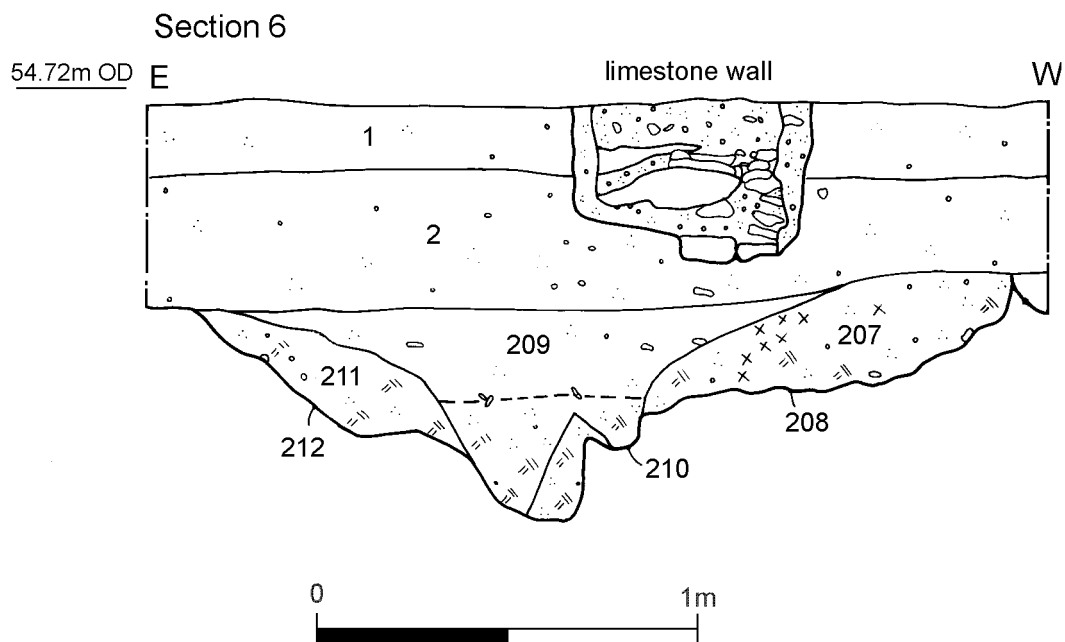


FIGURE 9 Boundary ditch system DG2, with post-medieval to modern boundary wall above



FIGURE 10 The site looking south-west, across medieval boundary ditches

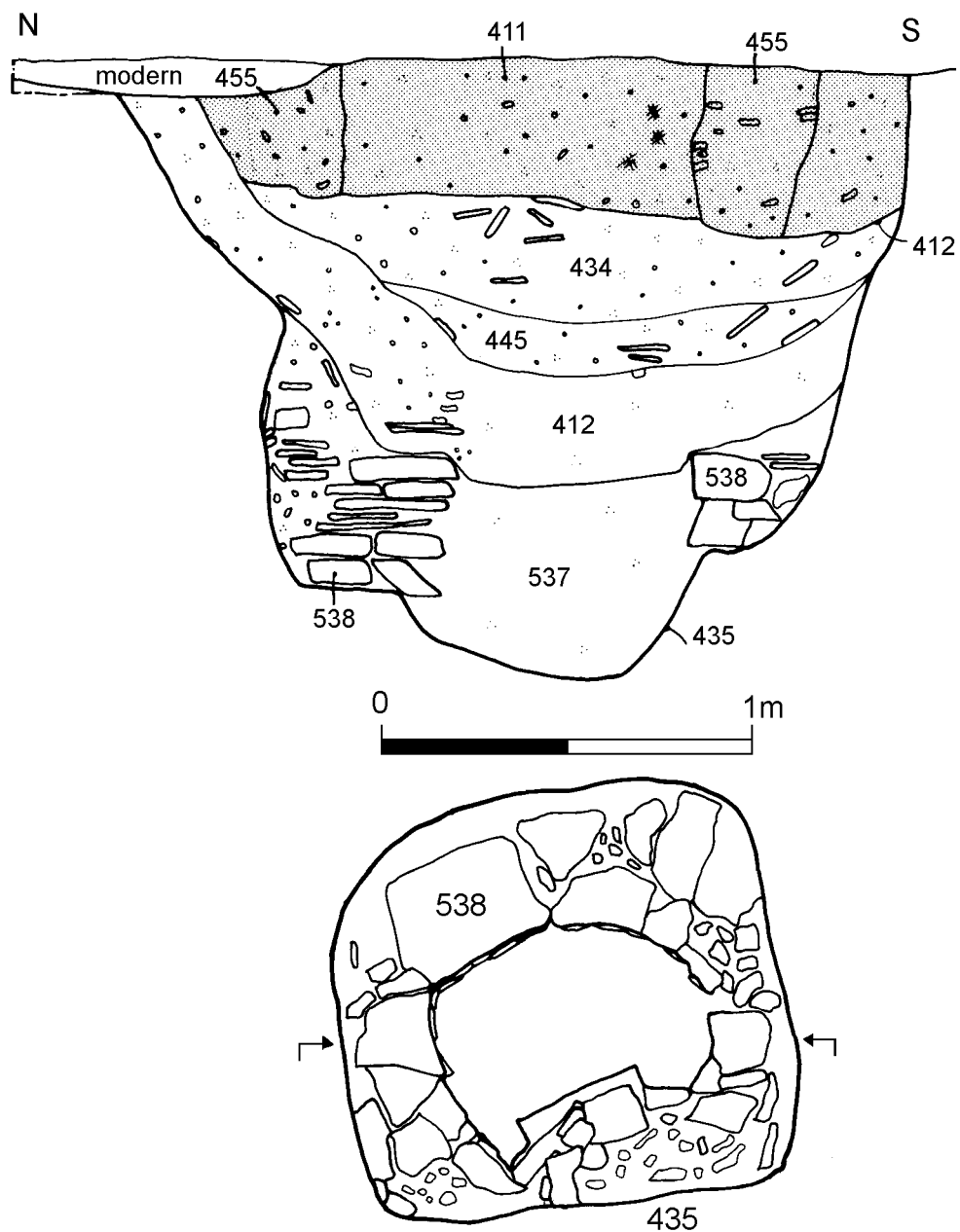


FIGURE 11 Section of medieval well, 435, and plan of stone lining



FIGURE 12 Pots and flint nodule in lower fills of well 435



FIGURE 13 Complete cooking pot (12th century) from pit 533 (see Fig 17, 2)

splash). The upper part of the lining had been removed, and there were silty fills, 445 and 434. The uppermost fills, 411 and 412, included pottery dating to the 12th and 13th centuries.

Next to the well, three intercut rubbish pits, 533, contained large concentrations of pottery, animal bone and slag, including two near complete pots (Figs 13 & 16, 2 & 4), part of a possible lantern (Fig 17, 16) and a whetstone.

The Finds (12th century) by Tora Hylton

Fifteen objects were recovered, the largest number from any one period. The majority came from the southern half of the site within boundary ditches DG1, DG2 and DG3. The finds comprise a possible tang from a whittle-tang knife; four sharpening stones, two fashioned from micaceous schist (Norwegian ragstone); seven fragments of lava quern, that may have originated from the Mayen-Niedermendig area of Eifel, Germany; the only textile tools, a spindle whorl and pinbeater; and a fragment of bone comb manufactured from a split rib. The comb resembles a type thought to have been used on double-sided combs in use from the 12th century through to the 16th-17th centuries. The longitudinal edges are notched like the side plates from composite combs; on one side the notches are 3mm apart, and on the other closely-set at 1mm.

The Charred Plant Remains (12th century)

by Angela Monckton

From the north, the well and associated pits, the deposits produced a scatter of domestic waste, from the ditch systems in the east there was more legumes and nutshell as domestic waste, as well as cereals. The deposits from the western end of the site contained remains of partly cleaned cereals, see pit 125 below.

Wheat was the main cereal with both bread wheat and rivet wheat as chaff, with arable weed seeds. The main weeds were stinking mayweed, the large grasses including brome grass indicating the cultivation of heavy clay soils, and vetches. Weeds typical of autumn wheat sowing included corn cockle and cleavers.

Pit 125 in the west was the most productive and contained over a thousand items in an eighth of the sample at a density of 466 items per litre of sediment. The flot was dominated by cereal grains, mainly wheat, but also quite numerous chaff frag-

ments, both bread wheat and rivet wheat and weed seeds. Seeds were outnumbered by the grains but were still quite numerous, mainly stinking mayweed, large grasses and vetches possibly including cultivated vetch. There was some germination of the wheat, about a quarter of the grains had some trace of sprout impression or were sunken, many of the rest of the wheat grains were shrivelled or pitted and germination could be underestimated. Of the small amount of barley about half was germinated. It is possible that the grain may have been disposed of because it was spoiled, perhaps the remains of grain being stored and processed on the site.

THE BOUNDARY SYSTEM (13th-15th centuries)

The focus of settlement remained in the east during this time, with a significant increase in activity from the mid 13th century into the mid 14th century, the period with the second highest density of pottery, although pottery of this period was not found in the western boundary, DG1 (Fig 8).

To the east pottery dated to the 13th century came from all ditch fills and the area of the malt oven and associated features, see below. A new boundary ditch system, DG5, may have been introduced to divide the plot to the north of ditch system DG3 (Fig 8). The finds from this ditch included a quern fragment and pottery dated to the 13th century.

The Malt/Drying Oven

The sunken chamber of the malt/drying oven, 804, measured 1.40m long by 1.00m wide with a flue, 0.5m wide, opening into a sunken stoking area to the south (Figs 14 & 15). The surviving lining comprised five courses of limestone, to a height of 0.32m, with battered sides. Some of the limestone within the southern half of the chamber was burnt pink or grey. Immediately within the flue opening there was an oval patch of reddening, 812, which probably lay beneath a lost stone hearth-slab, and a more extensive area of reddish-purple, dark grey or black soils, 806, residue from firing lay beyond this, but no carbonised debris survived in the oven to indicate what materials were being dried in the oven. However, a quantity of charred cleaned cereal grains from a nearby clay floor, 765, was about 50% barley and 22% of this had germinated.

While the sunken chamber survived, the outer walls of the oven, which would have stood at ground level, had been lost, and there was no evidence for an associated building to the south. Two postholes, 809 and 811, each side of the malt oven were at least 0.50m wide and up to 0.15m deep.

Similar ovens are frequently encountered on both rural and urban medieval sites, where they were used at low temperatures to create the malt for brewing, by killing off sprouting barley, although they were often also used as general drying ovens for sheaves of harvested grain crops that were going into storage or for drying other herbage to be used as animal fodder or bedding or on house floors. They were usually in detached buildings but lying close to a domestic range or other functional buildings, such as a bakehouse or barn on sites of manorial status. Several well-preserved ovens, mainly within surviving malt houses, were excavated at the deserted medieval hamlet of West Cotton, Raunds, Northamptonshire (Chapman 2010, 225–230).

To the east of the malt/drying oven was a broad shallow pit, 789, 2.0m in diameter with a flat base 0.26m deep (Fig 14). This pit would have impinged on the eastern wall of the broader oven construction, indicating that it was probably of a later date. The fill, 768, contained 14th-century pottery, including a sherd possibly from a curfew (Fig 17, 15), indicating that the malt house had fallen out of use within the 14th century.

To the south of the oven, there was a succession of clay floors and hearths. Hearth base, 768, 0.5m square, comprised six successive layers of burnt clay up to 0.10m thick (Fig 14). A limestone slab, 767, 0.25m square, heavily fire reddened and cracked, was the surviving hearth base from the final use. This hearth lay within an area of four successive burnt clay floors, 765–768, extending 4.0m by 1.50m, which patches of dark charcoal-rich clays, 772 and 774, and cut by a posthole, 770 (Fig 13). The clay floor, which contained pottery dated to the mid-13th century and a copper alloy ring, would have lain within a building, perhaps a kitchen range that had also contained the malt oven, but this area was heavily disturbed by later activity, and no traces of walls were recovered. A soil sample from floor 765, as already noted, contained a quantity of cleaned cereal grain, mainly barley but also including oats and wheat.

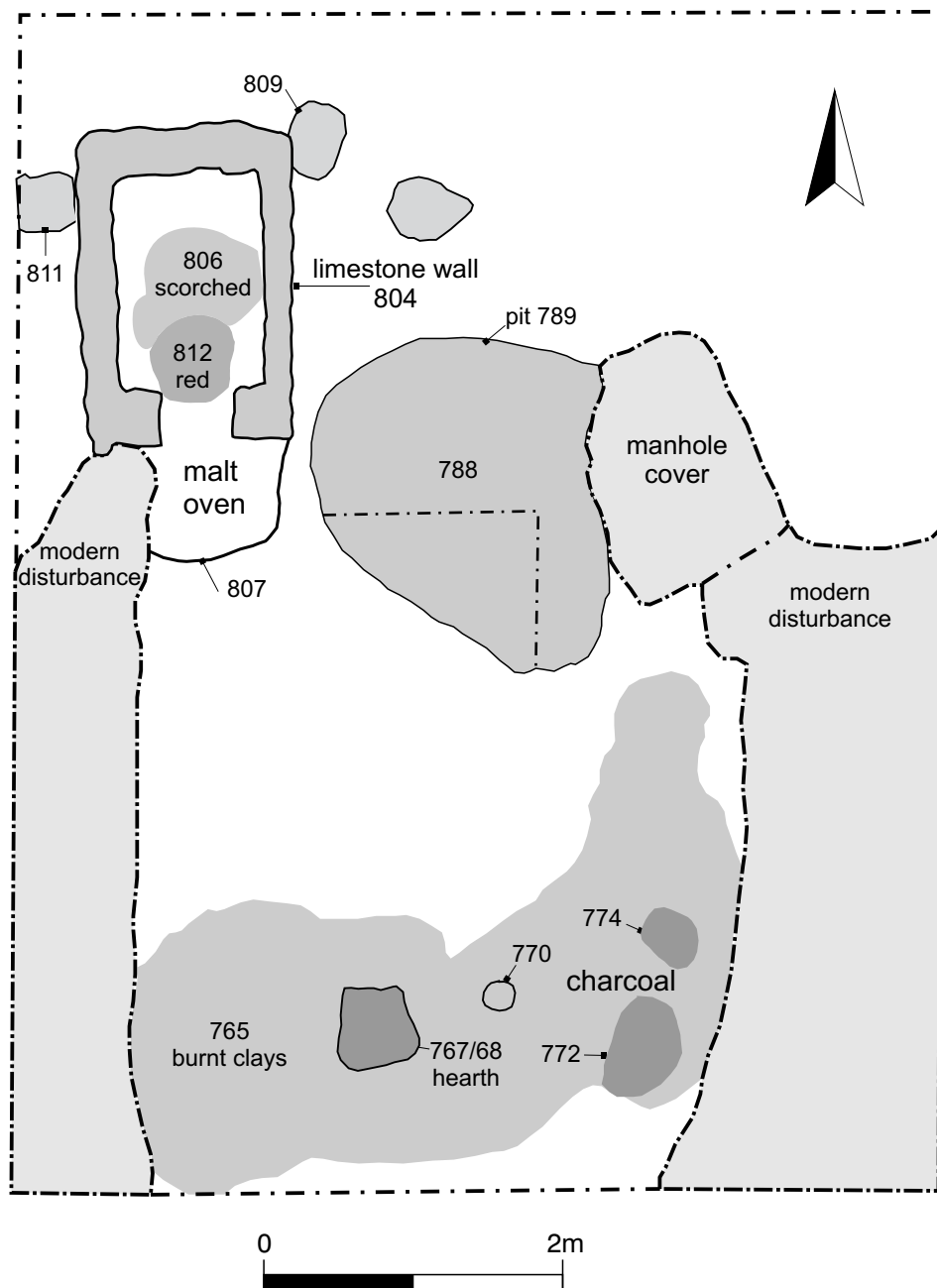


FIGURE 14 Malt/drying oven, 804, and hearth 767/68 (13th-14th centuries)

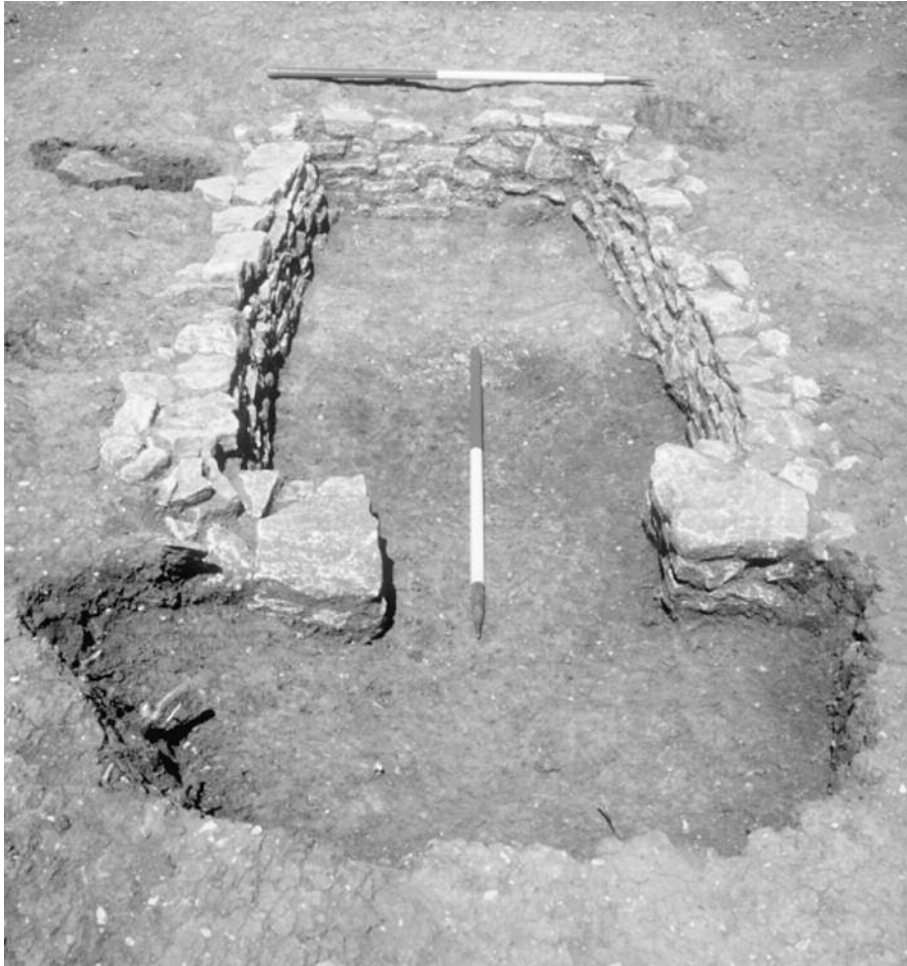


FIGURE 15 The malt/drying oven, looking north through the flue

The Medieval Pottery by Paul Blinkhorn

The pottery assemblage comprised 3,770 sherds with a total weight of 51,554g. The estimated vessel equivalent (EVE), by summation of surviving rimsherd circumference was 35.12. The evaluation produced 434 sherds (5,069g. EVE = 2.59). The bulk of the assemblage comprised Saxo-Norman, medieval and post-medieval wares, but Iron Age, Romano-British, Early/Middle Saxon and late Saxon pottery types were also present in small quantities. The range of ware types present indicates that the site was mainly occupied from the 11th-14th centuries, with local shelly wares dominating to an abnormal degree. Some unusual vessels and decorative techniques were noted,

perhaps because lack of competition from other industries allowed the potters to produce a more sophisticated range of wares, but the assemblage was largely utilitarian in nature.

Fabrics

The following fabric types were present:

Late Saxon to medieval

The late Saxon and medieval pottery was recorded using the coding system of the Milton Keynes Archaeological Unit type-series (e.g. Mynard & Zeepvat 1992; Zeepvat *et al* 1994). The code numbers prefixed 'F' are those used in the pottery database (in archive).

Olney Hyde 'A' ware (F330: MC3), AD1100–1400. 3,125 sherds, 43,031g, EVE = 29.75. This ware produced the bulk of the pottery, which is unsurprising given the location of the production centre less than 1km to the north of Olney (Mynard 1984). The range of forms and fabrics is typical of the shelly ware industry of the region, comprising mainly jars (EVE = 20.06), with smaller quantities of large, shallow bowls (EVE = 4.46) and jugs (EVE = 5.05), the latter often having highly decorated handles. One of the bowls was much deeper than is normal for such vessels and was sooted and scorched on the interior, suggesting it may have been used as a fire-cover, although it lacks the external decoration and air-holes which such vessels usually have (Fig 16, 8). A single body sherd from another possible curfew was also present (Fig 17, 15), as was the stem from a pedestal lamp (Fig 17, 14) and the base from a pierced vessel which may have been a lantern (Fig 17, 16).

Most vessels were undecorated, although 18 rouletted sherds were noted. These are likely to be fragments of jugs, although rim sherds from two bowls were noted with such decoration (Fig 18, 18). Five sherds with incised cordons were present, as were four sherds with rouletted applied strips, and a single sherd with an incised abstract sgraffito. Six sherds with thumbled applied strips are probably pieces of large storage vessels.

One vessel worthy of note, from the evaluation, is the head of a watering-pot in a shelly coarseware fabric (Fig 18, 19). The assemblage was dated to the 12th century, which is a little early for such vessels, but the lack of Potterspury ware means that it could conceivably be later (as discussed below). The sherd appears to be unique in a shelly coarseware fabric. Watering pots are known in finer fabrics, such as Brill/Boarstall ware (e.g. Mellor 1994, fig 66.5), with an example from The Ridings, Northampton (Blinkhorn in Capon 2005). However, the large size of the knob suggests that this vessel was considerably larger than most known vessels of the type, and was perhaps used for watering a kitchen garden rather than flowering plants in pots, which is the usual interpretation for the function of the smaller, later medieval vessels.

Another unusual sherd, found in the same context as the watering pot, is an upright loop handle (Fig 18, 20). This has few parallels, although a small number of vessels with such handles were noted at the kiln site at Lyveden in

north-east Northamptonshire (Steane & Bryant 1975, fig 23.104). Such vessels appear to be pottery skeuomorphs wicker baskets. Another example, from the main excavation, ditch system DG1, is dated to the 12th century (CP2) (Fig 17, 10).

Catalogue of Illustrations (Figs 16, 17 & 18)

- 2 Near-complete small jar. Orange fabric with darker surfaces, outer base pad and lower body lightly and evenly sooted. CP2, pit 533 (see Fig 13)
- 3 Near-complete jar. Grey fabric with orange-brown surfaces, lower body and base pad evenly sooted, patches of sooting on shoulder and rim. All CP2, ditch 148, DG1
- 4 Near-complete small jar. Orange fabric with grey core, outer base pad and lower body evenly sooted. CP2, pit 533
- 5 Rim and upper body from large jar. Orange fabric with grey core. Outer surface lightly sooted below the shoulder and in patches on the rim. CP2, ditch 58, DG1
- 6 Rim and upper body from large jar. Grey fabric with buff surfaces. Outer surface lightly sooted below the shoulder and in patches on the rim. CP2, ditch 202, DG2
- 7 Rim and upper body of jar. Grey fabric with reddish-brown surfaces. Light patchy sooting on outer surface and rim. CP2, pit 658
- 8 Full profile of deep bowl. Grey fabric with reddish-brown surfaces. Inner surface scorched and sooted. Used as a fire-cover? CP2, stone-lined drain 748
- 9 Profile of shallow bowl. Grey fabric with orange surfaces. Base pad heavily scorched and sooted. CP2, pit 337 under ditches DG2/DG3
- 10 Upright loop handle from a bowl. Grey fabric with pale reddish-brown surfaces. CP2, ditch 148, DG1
- 11 Rim and handle from a jug. Dark grey fabric with buff surfaces. CP2, well 435
- 12 Highly decorated jug handle. Grey fabric with orange surfaces. CP2, pit 730
- 13 Rouletted lower body and base probably from a jug. Grey fabric with orange-brown surfaces. CP2, ditch 148, DG1
- 14 Pedestal lamp, most of bowl and base missing. Light grey fabric with orange-red surfaces. CP2, ditch 284, DG3 west
- 15 Fragment of curfew? Grey fabric with brown surfaces, inner scorched and sooted. CP5, pit 788, pit 789
- 16 Fragment of lantern? Grey fabric with reddish-brown surfaces. CP2, pit 533
- 17 Upper body of jug with applied strip decoration. Uniform pale orange-red decoration. CP2, ditch 284, DG3 west

- 18 Rouletted rimsherd probably from a bowl. Grey fabric with brick-red surfaces. CP4, recut of well 435
- 19 Head of a watering pot in a shelly coarseware fabric. CP4, evaluation trench 8/03
- 20 Loop handle in a shelly coarseware fabric. CP4, evaluation trench 8/03

Potterspury Ware (F329: MC6), AD1250–1600, 102 sherds, 1,537g, EVE = 1.38. This pottery type was relatively rare. For example, the material comprised 42% of the pottery from Great Linford, Milton Keynes (Mynard & Zeepvat 1992, 262) and nearly 50% (by weight) of the high medieval pottery at the Elms site, Brackley (Blinkhorn 1998–99).

The range of vessel forms is similar to that of the Olney Hyde Ware, being mainly jars (EVE = 1.03), with smaller quantities of bowls (EVE = 0.16) and jugs (EVE = 0.19), although a rim sherd from an internally glazed dripping dish was noted (CP5, mid 14th–15th centuries). Such vessels, which were used to catch the fat from spit-roasting meat, were rare before the 14th century. In this region, they seem restricted mainly to towns and higher status sites such as manors or ecclesiastical complexes, perhaps reflecting the greater levels of social sophistication at such places, but there can little suggestion of this site having any such status on the evidence of a single vessel.

Fig 18, 21 Rim and upper body of jar. Grey fabric with pale orange-buff surfaces. Outer surface and rim heavily sooted. CP4, ditch 783, DG3

Brill/Boarstall Ware (F324: MC9), AD1200–1600?, 12 sherds (174g), EVE = 0.11. The majority of the assemblage was from glazed jugs with slip stripe decoration, although three sherds from plainer vessels, probably bowls, were redeposited in a CP8 context. Most sherds were small and/or abraded.

Medieval Grey Sandy Wares (F301: MS3), mid 11th–late 14th centuries, 72 sherds (946g), EVE = 0.59. Mainly sherds from jars (EVE = 0.53), although a single rim sherd from a jug (EVE = 0.06) was also noted.

Fig 18, 22 Rim and upper body of large jar. Uniform grey fabric, outer surface scorched orange and sooted below the shoulder. CP2, pit 533

Sandy and Shelly ware (F302: MSC1), late 11th–mid 13th centuries, 6 sherds (239g), EVE = 0.05. All sherds were from jars, including a rim sherd and a large fragment from a base. A base sherd had several large splashes of green glaze on the outer surface, indicating that it had been fired with glazed vessels.

Olney Hyde 'B' ware (F401: MSC6), mid 14th–late 15th century, 2 sherds (30g), EVE = 0. Plain body sherds from vessels of indeterminate type.

Late Medieval Reduced Ware (F365: TLMS3), late 14th–mid 16th centuries, 15 sherds (118g), EVE = 0.03. The single rim sherd was from a bowl, a major product of this tradition.

Midland Purple ware (F403 PM14), AD1450–1600, 10 sherds (156g), EVE = 0.05. All bodysherds with a purple glaze, except for a single rim sherd from a jar or jug.

Oxford ware (F347, Oxfordshire fabric OXY (Mellor 1994)), c. late 11th–14th centuries. Hand-made and wheel-thrown vessels. 2 sherds (14g), EVE = 0. Both sherds are from the bodies of unglazed jars.

The range of fabrics is typical of sites in the region comprising almost entirely local wares, with a small number of regional imports, such as Oxford ware. The evaluation produced a similar, if slightly more limited range of pottery types:

Chronology

Each pottery assemblage was given a seriated Ceramic Phase (CP) date, based on the range of wares present, and adjusted according to the evidence from the stratigraphic matrix (Table 2).

The pottery occurrence per ceramic phase (Table 3) indicates that the bulk of the pottery was deposited between CP1 and CP5, with the majority occurring in deposits dated to CP2.

Examining the proportion of the main fabrics in each of the medieval phase assemblages (Table 4), perhaps the most striking feature is the lack of Potterspury wares. Both Olney Hyde and Potterspury ware types are common on sites in Buckinghamshire, and Potterspury ware in particular is usually the main pottery type in assemblages dating to the later 13th and 14th centuries. This is not the case here; even during CP5 (mid 14th–mid 15th

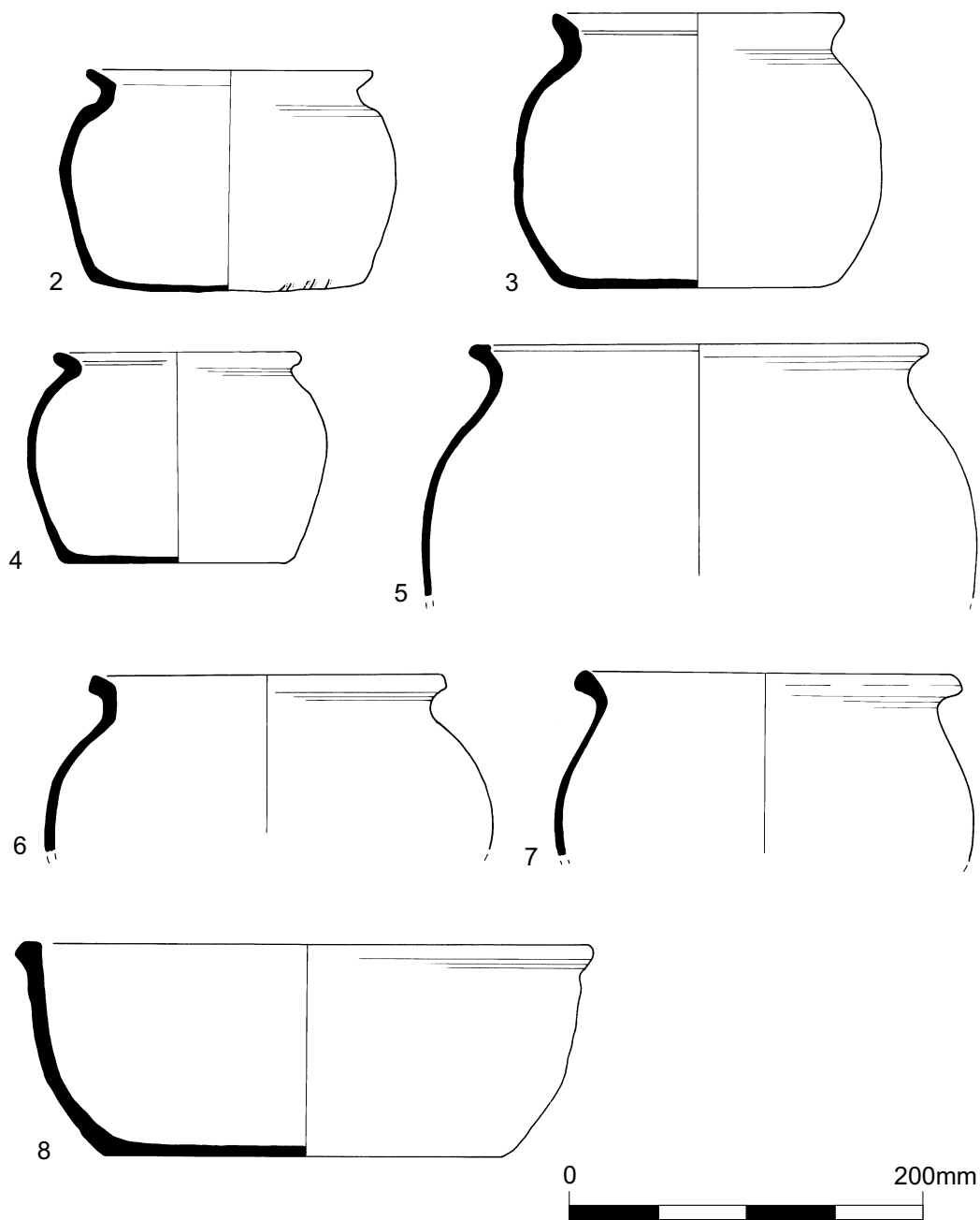


FIGURE 16 Medieval pottery: jars, 2-7, and a bowl, 8

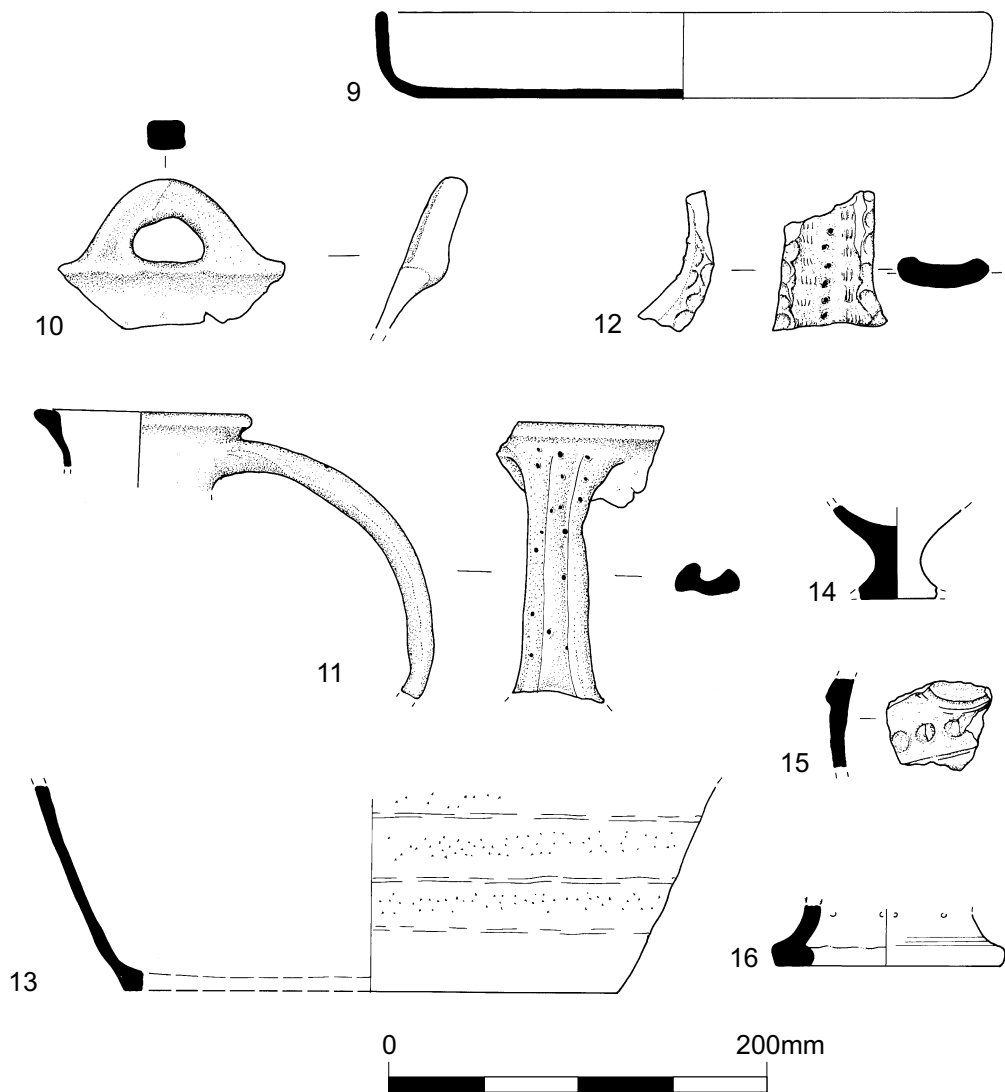


FIGURE 17 Medieval pottery: bowl, 9; handles, 10–12 and other vessels, 13–16

centuries), as Potterspury provides less than 25% of the assemblage. Generally, from CP2 (12th century) onwards, the assemblage is dominated by Olney Hyde ware, which was manufactured in the eponymous village to the north of Olney. This is a pattern which has been noted at other sites in the town, although most excavations were small scale. The implications of this are that some of the

contexts which have been dated to CP2 could be later, but there is simply no way of knowing from the pottery, and some contexts which can be dated to CP3 (Early–mid 13th century) or later from the stratigraphy contain no pottery later than CP2.

The large quantity of Olney Hyde ‘A’ ware in CP5 (mid 14th–mid 15th centuries) does suggest that there was a degree of residuality, as it is

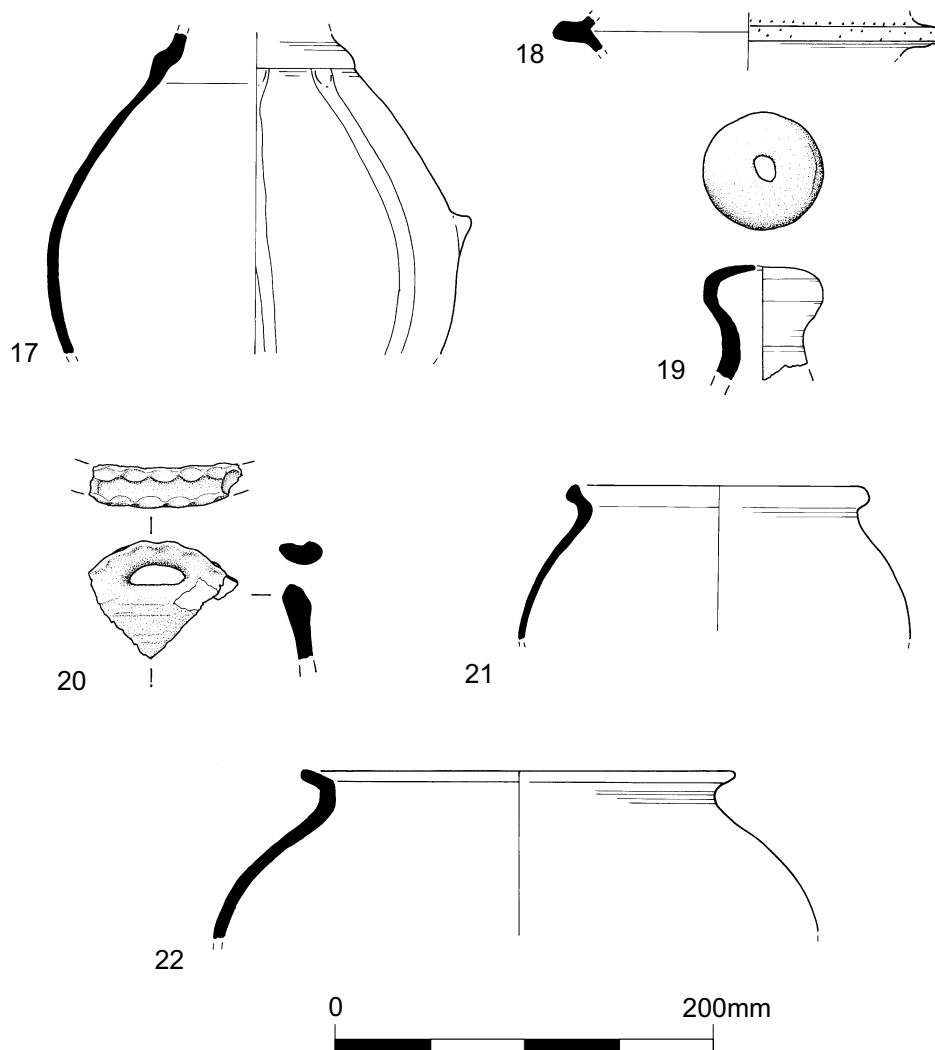


FIGURE 18 Medieval pottery: Jug, 17; bowl rim, 18; watering pot, 19; loop handle, 20; Potterspurgy ware and grey sandy ware jars, 21 and 22

expected that the shelly ware kiln at Olney Hyde had ceased production during that phase, and the drop in the proportion in CP5 coupled with an increase in the use of Potterspurgy ware would appear to support this.

Vessel Use

Vessel use shows a pattern typical of rural small

towns in the midlands in the medieval period (Table 5). The assemblages are dominated by jars, with jugs increasing in significance, although always in the minority. Few other vessel types were noted, although there are body sherds from a lamp, two possible curfews, a dripping dish, and the base of a possible lantern. Otherwise, the assemblage seems largely utilitarian, with none of the table wares that

TABLE 2 Ceramic Phase dating scheme

<i>Ceramic Phase</i>	<i>Defining Wares</i>	<i>Chronology</i>
E/MS	Early/middle Saxon	AD450–850
LSAX	F100, St. Neots Ware	900–1000
CP1	F200, St. Neots ware, T1(2) type F205, Stamford ware F301, Medieval Grey Sandy Wares	11th century
CP2	F302, Sandy and shelly ware F330, Olney Hyde 'A' ware	12th century
CP3	F324	Early–mid 13th century
CP4	F329, Potterspury Ware	Mid 13th–mid 14th centuries
CP5	F365, Late Medieval Reduced Ware F401, Olney Hyde 'B' ware	Mid 14th–mid 15th centuries
CP6	F403, Midland Purple ware	Mid 15th–16th centuries

TABLE 3 Pottery occurrence per ceramic phase, all fabrics

<i>Phase</i>	<i>Sherds</i>	<i>Weight (g)</i>	<i>EVE</i>	<i>Mean Weight (g)</i>
E/MS	1	6	0	6.0
LSAX	8	38	0	6.3
CP1	132	1082	1.09	8.2
CP2	1844	29925	24.83	16.2
CP3	144	1381	0.58	9.6
CP4	878	9555	6.90	10.9
CP5	119	1022	0.76	8.6
CP6	0	0	0	–
CP7	7	418	0	59.7
CP8	40	566	0	14.2
CP9	6	306	0.16	51.0
CP10	12	58	0	4.8
Total	3191	44357	34.32	–

TABLE 4 Pottery occurrence per ceramic phase, major fabrics, expressed as a percentage of the phase total, by weight (g)

<i>Fabric/ Ceramic Phase</i>	<i>F200 St Neots ware T1(2) type</i>	<i>F301 Medieval Grey Sandy Ware</i>	<i>F330 Olney Hyde 'A' ware</i>	<i>F324 Brill/ Boarstall Ware</i>	<i>F329 Potterspury Ware</i>	<i>Other</i>	<i>Phase Total</i>
CP1	91.3%	1.3%	–	–	–	7.4%	1.1kg
CP2	4.0%	1.7%	93.4%	–	–	0.9%	29.9kg
CP3	4.3%	0.7%	88.1%	2.8%	–	4.1%	1.4kg
CP4	0.7%	3.8%	81.8%	0.4%	12.3%	1.0%	9.9kg
CP5	0	1.7%	67.5%	0	24.1%	6.7%	1.0kg

became common at urban centres and places of status during the 14th century.

Discussion

There was low-level activity at the site before the 11th century, and it was only then that large pottery assemblages began to be deposited. It is not possible to say if this occurred before or after the Norman Conquest.

The assemblage has a range of fabrics typical of sites in the region, comprising local wares with few regional imports. The medieval pottery is dominated by Olney Hyde ware, and Potterspury ware, a type usually very common in the later 13th and 14th centuries, is under-represented. It must be assumed that this is due to the proximity of the Olney Hyde production centre to Olney, which meant that it was simply not economically feasible to bring in pottery from further afield, that which did occur perhaps having arrived as personal possessions or containers for trade goods. It is possible that the glazed jugs may have been in demand as tablewares, although this was not the case at other sites in the region, where glazed vessels were used more frequently (Blinkhorn 2000).

This is hardly surprising, given the number of shelly ware industries near Olney. In addition to Olney Hyde, there are kilns known at Yardley Hastings, Northamptonshire, c.5km to the north-west of Olney (Brown 1994), and Harrold, 7km to the north east, although few have been excavated and published. It is possible that the relative lack of competition may have allowed the Olney Hyde potters to indulge in a more sophisticated range of vessel types. Usually, the range of vessels produced by the shelly ware industries of the area was very limited, the overwhelming majority of the production comprising jars, bowls and jugs, with one or two pedestal lamps. Jars usually form the bulk of any shelly ware assemblage, with a representation of 85-90% of a group not being unusual.

Here, a somewhat wider range of vessel types is present. The watering pot (Fig 18, 19) is without parallel in a shelly fabric in the area, and the number of rouletted sherds appears unusually large. The bowls with the upright loop handles are also very rare (Fig 17, 10 and Fig 18, 20), as is the possible lantern fragment (Fig 17, 16). The number of shelly ware jugs is also higher than is usually noted, presumably instead of glazed-ware jugs such

as Brill and Potterspury, which elsewhere are usually far more common in assemblages of the 13th century and later in the region.

Overall, the assemblage appears typical of those found in small towns in the region, being dominated by utilitarian wares and vessels, with few imports, and little evidence of the relative social sophistication and long-distance trade seen in the pottery found in large towns and cities of the period.

The Medieval Finds by Tora Hylton

There were few artefacts from features dating to the 13th century. More came from features of the 14th and 15th centuries, although much of this material was probably redeposited. These artefacts indicate that this was a poor rural community, but with access to some trade goods, as items from Scandinavia, Germany and France are represented.

A branch fragment of a horseshoe from boundary ditch 217, DG2 has a distinctive sinuous wavy outer edge, created during the punching of the countersunk depressions. Such shoes are often referred to as "Norman" shoes.

There are two iron buckles with D-shaped frames: one (Fig 19, 3) resembles an example from London dating from c.1270–1350 (Egan 1991a, fig 45, 305). The two copper alloy finds comprise a one-piece buckle plate (Fig 19, 4) and a fragment of a decorative binding strip (Fig 19, 5).

Illustrations (Fig 19)

- 3 Buckle and plate, iron. Complete but part of buckle frame broken. D-shaped frame with narrowed off-set bar. Tongue-shaped plate attached with notch for the pin and recess for the frame. Buckle – Width: 20mm Length: 15mm. Plate – Length: 27mm Width: 14mm. SF57, 411 recut of well 435
- 4 Buckle plate, copper alloy. Complete, one-piece plate folded widthways, recess for the frame and hole for the pin. Plate secured by four tacks with dome heads. The shanks of the tacks pass right through the plate and are clenched on the underside. Undecorated but good patina. Length: 15mm Width: 27mm. SF 80, ditch 785, DG3
- 5 Binding strip/mount, copper alloy. D-shaped cross-section and decorated with a stylised 'chip carved' panel. SF 43, ditch 152, DG1

There are six fragments from lava rotary querns. All have worn surfaces, and joining fragments indicate that there were two querns that would have

TABLE 5 Vessel occurrence by EVE, expressed as a percentage of each phase assemblage

<i>Ceramic Phase</i>	<i>Jars Total</i>	<i>Bowls</i>	<i>Jugs</i>	<i>Other</i>	<i>Phase</i>
CP1	96.3%	3.7%	0	0	1.09
CP2	70.2%	14.8%	14.3%	0.7%*	24.83
CP3	56.9%	17.2%	25.9%	0	0.58
CP4	67.8%	13.5%	18.7%	0	6.90
CP5	64.5%	35.5%	0	0**	0.76
Total	23.98	5.02	4.98	0.18	34.16

* – lantern? (see Fig 18, 16): ** – dripping dish

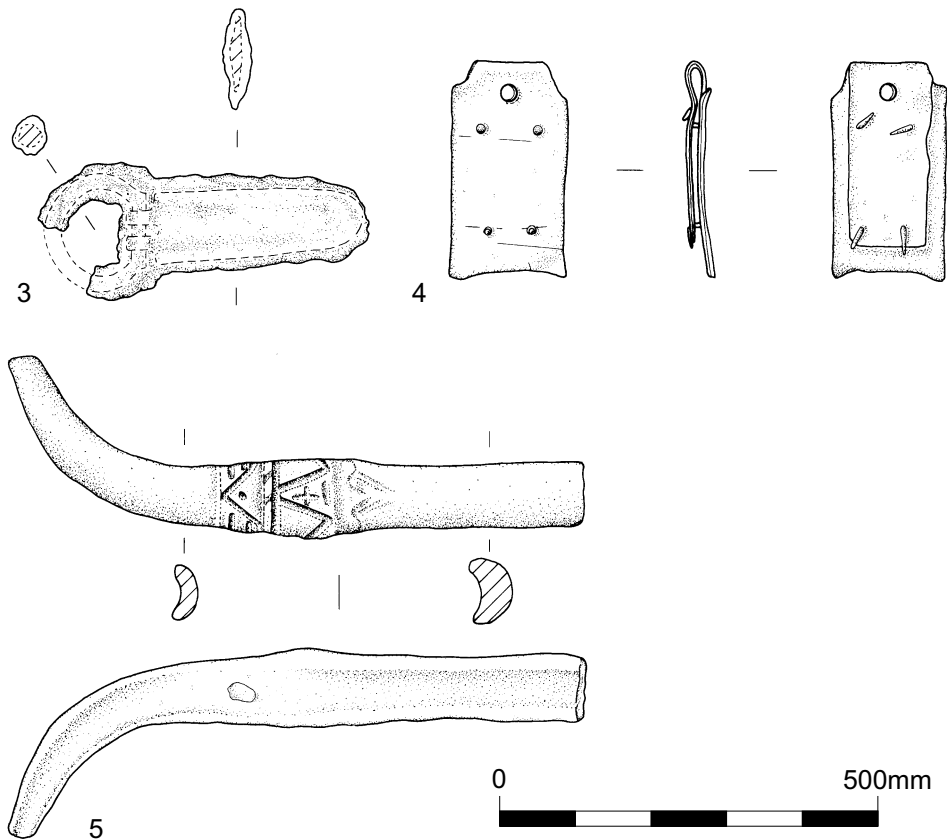


FIGURE 19 Medieval finds: iron buckle and plate, 3; copper alloy buckle plate, 4 and copper alloy binding strip, 5

measured in excess of 420mm and 500mm in diameter and 15-20mm thick.

Of particular interest is the presence of a large copper alloy Anglo-Gallic jetton manufactured in France and dating from c.AD1200–1400, from the surface of a series of tree root holes (Barnard 1916, plate II, no 48).

The remaining finds came from pits and tree root holes and include fragments of iron and nails.

The Animal Bone by Karen Deighton

The majority of the 8kg of animal bone was recovered from contexts dating to the 11th to 13th centuries (Table 6). Evidence of butchery, mainly chopping, was restricted to the three major domesticated species at a moderate rate of 2-5.7%. Some ribs had been split, suggesting their use in stews. Little difference was seen between the three phases.

Two partial skeletons were found, both from 12th-century contexts. A toad or frog came from ditch 284, DG2/DG3, within a dump of refuse in the ditch terminal. A puppy skeleton from a small

pit, 242, is from an animal less than 9-months old, as indicated by the lack of fusion in the distal humerus and in the olecranon (ulna) (Silver 1969).

Discussion

The three domestic species cow, sheep/goat and pig form the major part of the assemblage. Deer antlers in a 12th-century context were from an animal of two years or more, the burr suggesting that it was collected following shedding.

Rabbit appear only in 13th-century contexts. Dog skeletons or partial skeletons were common in 12th- and 13th-century contexts and were often articulated when found. A single example of hedgehog, an indigenous animal that can be eaten, was in a 13th-century context. Evidence for neonates was restricted to the 12th century: one cattle and one sheep. A single bone with a spur (*carpometacarpus*) suggested the presence of a cockerel.

The material was concentrated in contexts dating to the 12th century, and this phase also has the greatest diversity of species. The importance of

TABLE 6 Number of identifiable fragments by species and period

<i>Species</i> (common name)	<i>11th cent.</i> No (%)	<i>12th cent.</i> No (%)	<i>13th cent.</i> No (%)
<i>Equus</i> (horse)	—	24 (9.4)	1 (1.4)
<i>Bos</i> (cow)	25 (54.3)	96 (36.8)	24 (32.8)
<i>Ovicaprid</i> (Sheep/goat)	9 (19.5)	76 (29.8)	28 (38.3)
<i>Sus</i> (pig)	10 (21.7)	37 (14.5)	8 (10.9)
<i>Cervid</i> (deer)	—	2 (0.8)	—
<i>Canid</i> (dog)	—	1*(0.4)	5 (6.8)
<i>Ovicapreolus</i> (sheep/goat/roe)	—	2 (0.8)	2 (2.8)
<i>Gallus</i> (chicken)	—	6 (2.3)	1 (1.4)
<i>Anser</i> (goose)	—	2 (0.8)	1 (1.4)
<i>Avis</i> (Bird indet.)	2 (4.3)	2 (0.8)	—
<i>Erinaceus</i> (hedgehog)	—	—	1 (1.4)
<i>Oryctolagus</i> (rabbit)	—	—	2 (2.8)
Small mammal	—	1+	—
Amphibian	—	6	—
Large ungulate (Horse/cow/red deer)	1	15	11
Small ungulate (Sheep/goat/roe/pig)	3	16	3
Total	50	286	87

*Partial skeleton +cat/rabbit sized pelvis

cattle and pig appears to decline through time while sheep seem to increase. Comparisons for 11th- and 13th-century material are very tentative due to the small size of the assemblages, but they do appear to fit the pattern for relative percentages of the major domesticates in the South Midlands during the medieval period (Robinson & Wilson 1983). Comparisons of the Olney assemblage with nearby urban centres such as Bedford (Grant 1979) show a sharp contrast, with sheep as the dominant species. This contrast between urban and rural assemblages is usual and is linked to the fact that sheep are more marketable.

Charred Plant Remains by Angela Monckton

Medieval (13th to 14th centuries)

The soil samples from 13th-century contexts on the south-eastern plot, around the area of the malt oven and hearths, contained possible domestic waste, with samples more broadly from the eastern half of the site containing more barley and oats, suggesting the use of mixed cereals. Wheat was still well represented and included rivet wheat as well as bread wheat.

A soil sample from ditch system DG3, eastern end, was productive with a density of 71 items per litre, dominated by cereal grains with a high proportion of oats and some barley as well as wheat grains. Some of the oats and barley are germinated. Wheat chaff was quite abundant with both bread wheat and rivet wheat; some barley chaff and straw fragments were also present. Weed seeds formed a lower proportion of this sample than most of the others, large grasses being the most numerous; these are grain-sized weeds which stay with the grain after cleaning. This sample also had more food remains as peas and pea-sized legumes. This may be a mixture of waste including domestic waste and partly cleaned grain.

In a sample from the uppermost floor, 765, around the hearth 767/68, about half the grain was barley, the highest proportion from the samples, and there was also some germination (22%). Barley and oats were sometimes grown as a mixed crop as they are both spring sown, wheat was also present so this must have been mixed with the other grain in use or disposal as wheat is usually autumn sown. There was very little chaff and weed seeds, suggesting that this was cleaned grain.

Cereals

Wheat grains were the most numerous of the charred remains, mainly free-threshing wheat (*Triticum* sp). Wheat chaff fragments (rachis segments) were found, some were identified as bread wheat (*Triticum aestivum* s.l.). Most of the chaff recorded as of free-threshing wheat was consistent with the form of bread wheat, although broken short and abraded. A few fragments were identified as rivet wheat (*Triticum turgidum* type), only certainly present from the 12th century.

Bread wheat is a free threshing cereal so the chaff is easily removed by threshing, and if grain was transported it would be cleaned to reduce the bulk. The presence of chaff suggests that the grain was produced nearby, and the grain in most of the samples appears to be only partly cleaned. Similar partly cleaned cereals have been found in other suburbs such as at Bonners Lane, Leicester and at St Marys Gate, Derby (Monckton 2004, Monckton unpublished). The cereals at Olney were not necessarily grown on or around the site itself, although they are likely to have been produced nearby.

Whole grains were used in pottage and baking so cereals would be supplied to towns as grain as well as flour (Moffett 1993). Grain brought into towns for sale at markets as whole grains was only partly cleaned (Dyer 2002). The final cleaning of contaminants was carried out when the grain was used, by coarse sieving to remove large straw nodes and seed heads, then fine sieving to remove the small seeds. This may have been carried out on a domestic scale during food preparation. The presence of samples with partly cleaned cereals at a fairly high density, probably disposed of as cereal cleaning waste, in a number of similar deposits suggests that this was perhaps more than domestic activity, and it is known that a variety of prepared food was sold to people visiting towns for shops and markets (Dyer 2002). Processing cereals produced locally, probably for sale in the town, continued from the 11th to 13th centuries.

Other Crops and Food Plants

Some of the less productive samples suggest the domestic activity of food preparation from charred remains probably from domestic hearths: this would have occurred on any site where people lived and worked. Legumes included beans (*Vicia faba*), probably field bean, and peas (*Pisum sativum*). Some incomplete pea-sized legumes and some

fragments were identifiable only as possibly peas or beans (*Vicia/Pisum*). Cultivated vetch (*Vicia sativa* ssp *sativa*) was probably present, but there were too few complete seeds to be certain: other medium-sized legume fragments were possibly of this fodder crop or were small peas (*Vicia sativa/Pisum*). Hazel (*Corylus avellana*) nutshell fragments were found in most of the samples.

A few seeds of flax or linseed (*Linum usitatissimum*) were found: the seeds are edible and could be from food or fodder. Stems were not found as they are rarely preserved. No larger plant remains such as nutshell or fruit stones were recovered from the residues over 3.5mm.

Wild Plants

Evidence from the weed seeds suggests the presence of autumn and spring sown crops, although the weeds were not easily associated with particular crops because only mixtures of remains were found. The cultivation of heavy soils is suggested from the abundance of stinking mayweed which became more abundant with the introduction of the mouldboard plough (Greig 1991). Some lighter soils were probably also cultivated, suggested by the weeds such as cornflower. The presence of leguminous weeds may suggest crop rotation including fallow or perhaps fodder crops. The weed contamination was high in some of the crops.

Numerous weed seeds were mainly from weeds of disturbed ground or arable land. The most numerous were stinking mayweed (*Anthemis cotula*), which was common in medieval times and is a plant of heavy soils. The large grasses were also numerous, including brome grass (*Bromus hordeaceus/secalinus*), which is known as a common weed of early cereal crops. Leguminous plants, particularly numerous in some soil samples, included vetches or vetchling (*Vicia/Lathyrus*) and could also include agricultural weeds such as tares. Weeds particularly associated with autumn sown cereals included corn cockle (*Agrostemma githago*) and possible cornflower (*Centaurea cyanus*) which is more typical of lighter soils and is particularly associated with free-threshing cereals, as also found here. Arable weeds also included a seed of scentless mayweed (*Tripleurospermum inodorum*). A group of weeds typical of disturbed ground included goosefoots (*Chenopodium* sp), docks (*Rumex* sp) and chickweed type plants (*Stellaria* sp.). As well as vetches or vetchling, the Legumi-

nous plants include clover type plants (*Medicago, Melilotus* or *Trifolium*), which can occur as arable weeds but also grow on grassland. Others plants of grassy vegetation included crested dog's-tail grass (*Cynosurus cristatus*), eyebright or bartsia (*Euphrasia/Odontites*), and ribwort plantain (*Plantago lanceolata*). Buttercup (*Ranunculus acris, repens* or *bulbosus*) was present as a plant of damp grassy vegetation. Plants of wet ground were few in number, sedges (*Carex* sp) and spike-rush (*Eleocharis* sp.) perhaps from poorly drained areas of the fields or from the ditches. A couple of seeds of club-rush (*Schoenoplectus* sp) were found; this plant grows in wetland and could be from material used as thatch.

POST-MEDIEVAL(16th to 20th centuries)

A limestone property boundary wall, levelled in 2003 as the site was cleared, followed a boundary that had existed since the 12th century (Fig 20). The wall foundation comprised five random courses of rough rubble. There were two courses of regular limestone below present ground level and seven thin regular courses of limestone were still extant above ground (see Fig 9).

In the later post-medieval period, through to the 19th century, the northern part of the site contained rubbish pits and there were two probable 19th-century wells. Several areas of cobbled surfaces were sealed below one metre of introduced topsoil, which predated the adjacent stable building (Fig 20).

A small limestone outbuilding, 92, on the east side of the boundary wall, was partially floored with broken furnace casting crucibles dating to the 19th or 20th centuries. The northern end of the site had been used as a pear orchard in the later 20th century, and there was a small row of garages. A wrecked car (a Morris Traveller) was deposited in a rectangular pit during the 1980s.

Finds of note include a Jew's harp from a mid-19th century deposit, comparable with an example from Winchester (Lawson 1991, fig 206, 2269), and a wool bale seal. Three possible tenterhooks came from a post-medieval posthole. Also recovered were two half pennies of George II (1727–60) and George III (1760–1820), numerous clay tobacco-pipe stems and three decorated pipe bowls dating to the period 1700–1840.

Post-medieval pottery included a possible chamber pot and a pancheon (Fig 21).

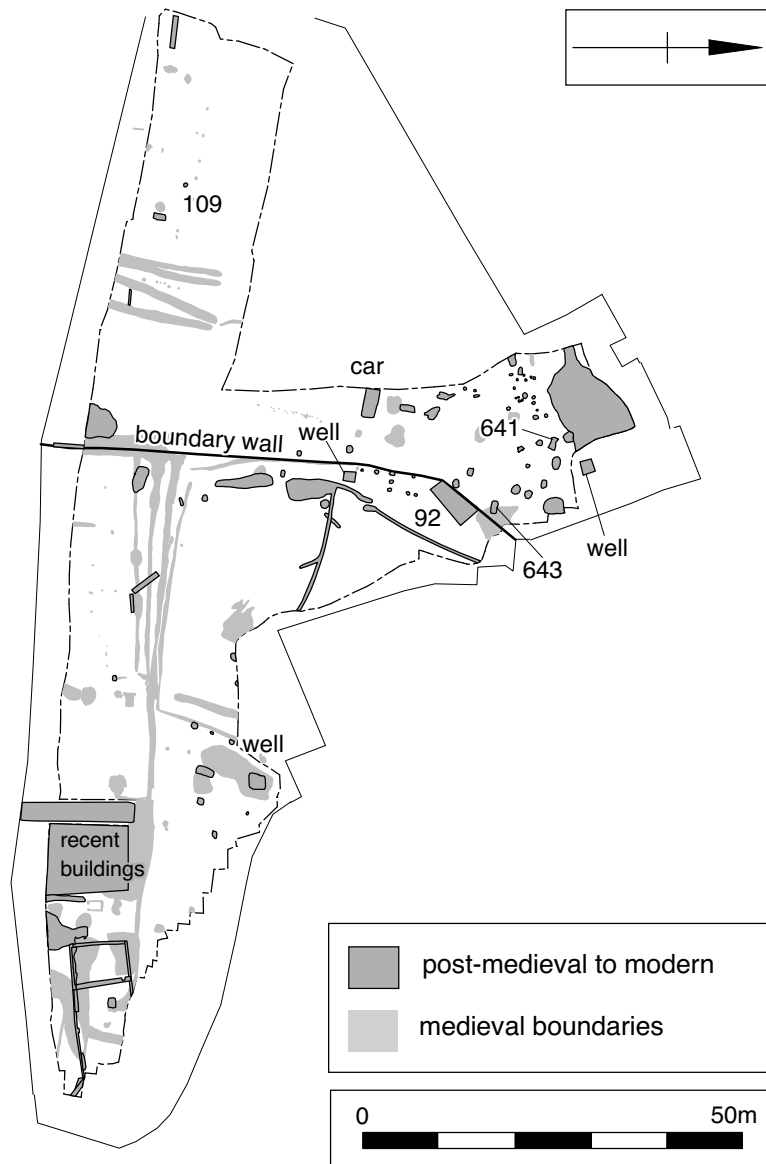


FIGURE 20 Post-medieval to modern boundaries and features

Illustration Fig 21

23 Possible chamber pot. Orange fabric with brick-red surfaces. Uniform glossy orange glaze over the inner surface. Red Earthenware (TLMS12), 16th-19th centuries CP7, north end, fill 640, pit 641

24 Pantheon. Orange fabric, slightly flaking black glaze over the whole of the inner surface. Black-glazed coarsewares (F426: PM16), 17th century +. CP9, north end, fill 642, pit 643

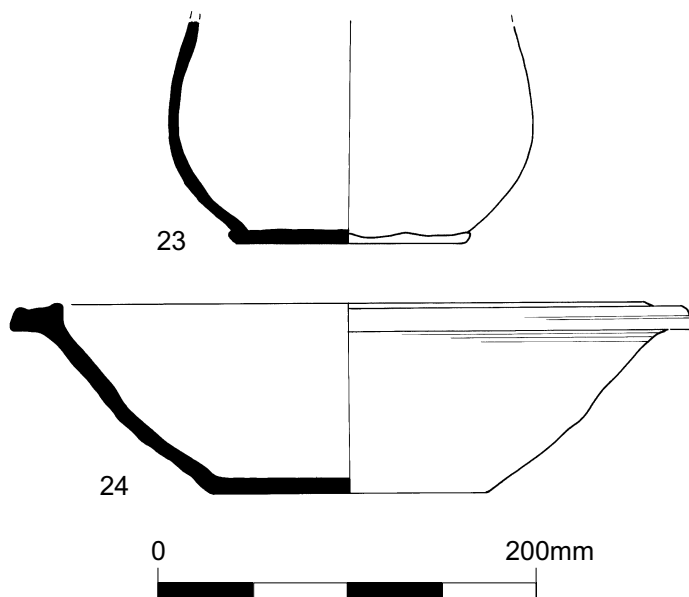


FIGURE 21 Post-medieval pottery: possible chamber pot, 23 and a pancheon, 24

DISCUSSION

by Alex Thompson and Andy Chapman

Town Planning

There was limited evidence of early/middle Anglo-Saxon activity in the area. In the 11th century a small timber building and an adjacent boundary ditch were perhaps part of a more extensive settlement that lay largely beyond the excavated area, to the west and north. This late Saxon occupation was perhaps focussed on the river, where a mill was recorded in 1086. It is difficult to be certain how this related to the rest of Olney, which apparently also developed during the later Saxon period.

A system of linear boundary ditches had appeared by the 12th century, delineating plots that were probably the southernmost end of a more extensive planned town (Fig 22). It has been suggested that a planned town was founded at Olney in the 12th or early 13th centuries, the line of the present High Street preserving this form (Prosser 1998). West Street, which runs parallel to High Street at 110-120m to the west, is likely to have been at least near contemporary in origin. To the south, West Street terminates at Spring Lane, but if its course is projected southward, continuing

parallel to High Street which swings a little to the west, it matches with the boundary ditches that may have flanked a road or trackway running south-north across the Cowper Tannery site, originating in the 12th century.

If this medieval boundary on the Cowper Tannery site is associated with the broader pattern of early town planning, including the setting out of High Street and West Street, then the archaeological evidence indicates that this occurred within the 12th century, and was therefore of Norman origin, within about a century of the Conquest.

High Street now continues southward to the junction with Weston Road. However, a major property boundary, still extant, continues this line further south, perhaps suggesting that High Street originally continued southward, and only later did the road branch eastward, High Street South, and then southwards, Bridge Street, to the bridge across the Great Ouse, and a bridge was certainly in existence by 1334. It may be suggested that this awkward approach to the bridge was perhaps not part of the original town plan, but a later diversion, and perhaps the earlier bridging point lay to the west, at the end of a direct southward continuation of High Street. It may also be noted that East

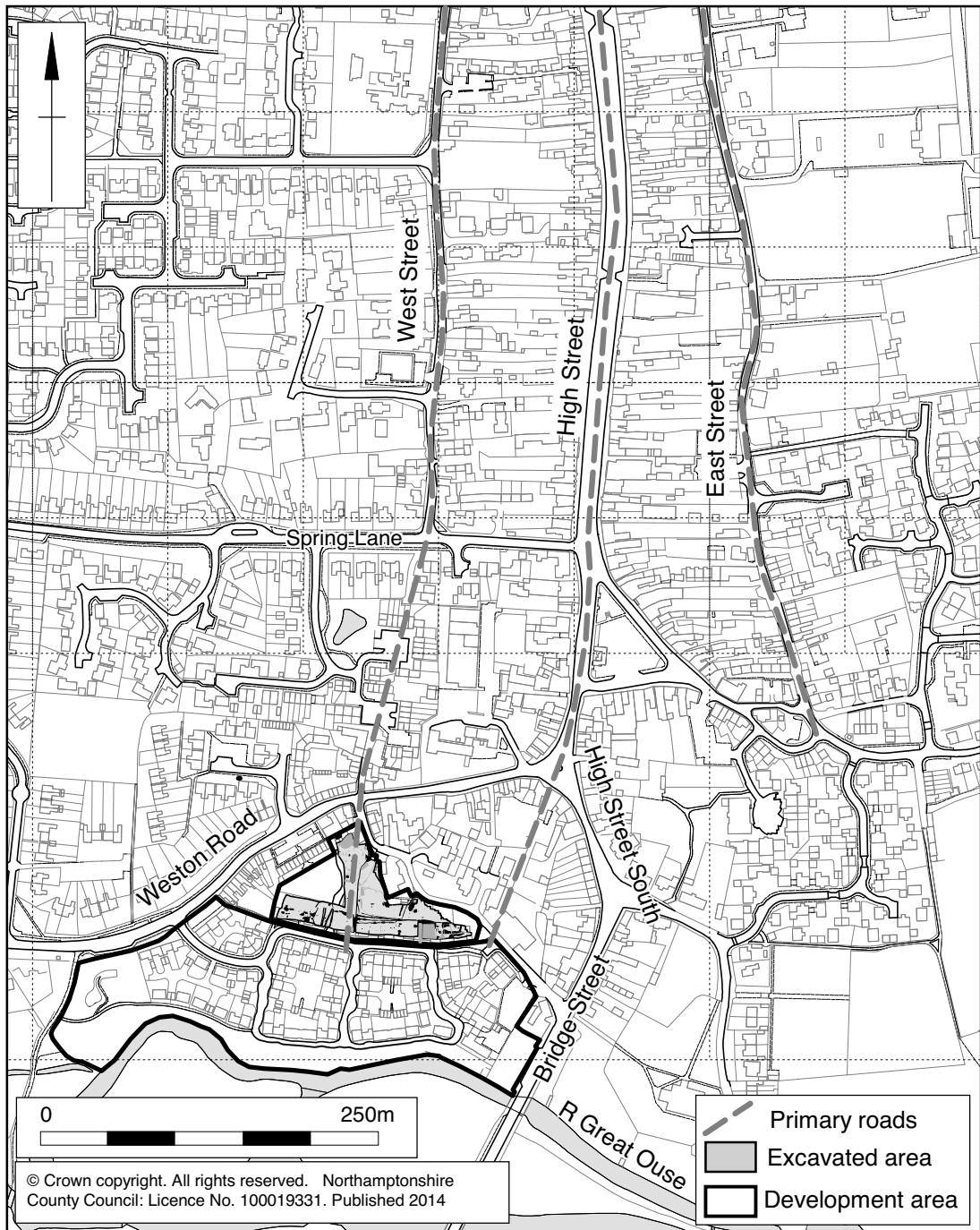


FIGURE 22 Olney, interpretation of early town plan

Street, forming the back lane to the east of High Street, is much less regular than West Street, and rather than being parallel to High Street it is more meandering and to the south diverges from High Street. It is suggested that East Street may also have been a later addition to the town plan, probably following the postulated eastward relocation of the bridge.

It is suggested that the medieval plots at the Cowper Tannery site lay at the southernmost end of a town plan of the 12th century based on the two parallel roads of High Street and West Street.

Site Economy

In the 11th century, occupation was largely at the western end of the site, suggesting that a focus of settlement may have lain further to the west. Little can be said about the site economy at this time, although soil samples produced wheat grain and chaff, and some rye and barley, indicating that crops were being processed and stored here: a fragment from a rotary quern was also recovered.

In the 12th century, within the ditched plots there was an iron smelting furnace to the east, a pit containing much dumped cereal grain to the west, and a well and pits in the north, all suggesting the presence of nearby settlement, although no buildings were identified on the site. Wheat crops were being grown nearby and processed on site, and the animal bone assemblage suggests that cow, sheep/goat, pig, chicken and goose were part of the diet of the local inhabitants.

During the 13th century the plot boundaries were retained and re-cut. A malt/drying oven and nearby hearths indicate the presence of a farm in the immediate vicinity. The animal bone suggests that there was an increase of sheep/goat in preference to cattle in the local inhabitants' diet.

Items such as the Norwegian ragstone whetstone, the lava querns from Germany and the jetton appear to reflect the successful trade enjoyed by Olney during the Middle Ages. It is not surprising that the bulk of the 12th and 13th-century pottery deposited in the pits and ditches was largely of a utilitarian nature, often from the local Olney Hyde industry, as it was likely to have derived from households of ordinary citizens of Olney.

There was only limited evidence for use of the site through the 15th to 18th centuries, and it is likely that the land was under agricultural use through this period. In the 19th century, when the

majority of the site was used as an orchard, rubbish pits clustered at the northern end of the site, probably associated with properties on Weston Road and the stable on 'Dead Lane' (now Lime Street). Dead Lane was apparently so-called in the latter post-medieval period as it was a through road to the church from the Weston Road. Lime Street had become a backwater in preference to Weston Road. However, throughout this period the major land boundary established in the 12th century was still extant, and was replaced by a boundary wall that ran north-south across the site up to time of its clearance in 2003, immediately prior to the excavation.

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