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**SAXON AND MEDIEVAL ACTIVITY AT
SCOTTS CLOSE, HILTON**

ARCHAEOLOGICAL EXCAVATION

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SAXON AND MEDIEVAL ACTIVITY AT SCOTTS CLOSE, HILTON

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SUMMARY

Between October 2001 and July 2004, Archaeological Solutions Ltd (formerly the Hertfordshire Archaeological Trust) carried out a programme of archaeological investigation at Scotts Close, Hilton, Cambridgeshire (NGR TL 2900 6635), in advance of residential development. The excavations revealed a system of late Saxon and early medieval boundary/drainage ditches, demarcating backyard plots or small areas of home pasture attached to individual peasant holdings. Clusters of contemporary pits were also found; the majority are thought to have functioned as drainage sumps or watering holes for livestock rather than rubbish pits. Activity at Scotts Close may have begun as early as the 9th century, providing the earliest evidence for Hilton's origins found to date. The most intriguing feature of the site was an early - middle Saxon inhumation, apparently accidentally disturbed and then reburied with a degree of care in the 10th - 12th century. The circumstances of the reburial offer an unparalleled insight into medieval Christian perceptions of pagan otherness and attitudes towards the pagan dead.

BACKGROUND

Introduction

A programme of archaeological work, comprising a desk-based assessment and trial trench evaluation (O'Brien & Crank 2001) followed by an open area excavation (Crank *et al.* 2004), was carried out by Archaeological Solutions Ltd (AS; formerly Hertfordshire Archaeological Trust (HAT)) between October 2001 and July 2004 at Scotts Close, Hilton, Cambridgeshire (NGR TL 2900 6635; Fig. 1; Plate 1). The investigations were commissioned by Woods Hardwick on behalf of Berkeley Homes (evaluation) and by Campbell, Melhuish & Buchanan Limited (excavation) to comply with a planning requirement in advance of proposed residential development.

The trial trench evaluation of the site revealed a large number of archaeological features, principally dating to the Romano-British and late Saxon/early medieval periods. Following the evaluation, a mitigation strategy was developed to enable preservation of some of the archaeological remains in-situ. The central eastern portion of the site (Fig. 2), which was deemed most at risk from the proposed development, was selected for open area excavation. This aimed to preserve by record archaeological remains which were likely to be destroyed by the development.

Site location, topography and geology (Figs. 1 & 2)

Hilton is a small village 7km south-east of Huntingdon on the south-eastern edge of the former county of Huntingdonshire. It is situated on slightly higher ground (10 - 17m AOD) above the valley of the Great Ouse to the north. The West Brook passes a short distance north and west of the village, while a canalised drain, a former tributary of the Ouse, lies approximately 200m to the south of the site.

The site at Scotts Close is at an elevation of approximately 15m AOD and covers a sub-rectangular area of *c.* 0.7ha. It lies in the centre of the modern village, bounded to the west by Scotts Crescent, to the south by Scotts Close and to the east by the remains of Hilton Hall. It was formerly in agricultural use. The medieval parish church of St Mary Magdalene and the village green are a few hundred metres to the south and east, respectively.

The underlying geology of the area is Oxford Clay (IGS 1983), with soils of the Evesham 3 association (SSEW 1983, 7), characterised as slowly permeable calcareous clayey and fine loamy over clayey soils. Seasonally waterlogged non-calcareous clayey soils are also present.

Archaeological and historical background

Evidence of prehistoric activity in the immediate vicinity of Hilton is scarce, though a recent excavation on the High Street revealed a ditch of probable Iron Age date (Grant *et al.* 2004, 14). However, activity is known in the wider area, for example in Fenstanton, where pits containing Neolithic and Beaker pottery have been found alongside a late Bronze Age/early Iron Age enclosure (Chapman *et al.* 2005). To the north and west, the Ouse valley boasts a wealth of prehistoric remains, including Neolithic cursus monuments at Eynesbury, Godmanchester, Buckden and Brampton (Pollard 2000).

Hilton would have lain in the hinterland of the Roman small town at *Durovigutum* (Godmanchester) some 5km to the north-west. Although most Romano-British settlement in the area seems to have been concentrated along the light gravel terraces of the Ouse, aerial photography has revealed cropmarks of probable Iron Age or Roman date on the clay plateau around Hilton (Deegan 1995, 7). Two major Roman roads, Ermine Street and the *Via Devana*, also passed within a few kilometres of Hilton.

As with the rest of the eastern region and the country as a whole, the period between the withdrawal of the Roman administration and the emergence of the first Anglo-Saxon kingdoms in the 7th century remains poorly understood. Nevertheless, the area has several important early Saxon settlement sites, including those at Gamlingay (Murray 2005/6) and Godmanchester (Gibson with Murray 2003), both occupying light-soiled, well-drained sites close to watercourses.

Medieval Hilton was part of the manor of Fenstanton, a monastic holding (Simkins 1974, 315). The Church of St Mary Magdalene is not mentioned in Domesday Book, but parts of the surviving fabric date to the 12th century, when Hilton is first recorded in documentary sources as *Hiltone* (Feet of fines for Hunts. 1196). Hilton may mean

'Hill Farm' (Mills 1991, 172); although the village does not stand on a pronounced hill, it is raised slightly above land to the north and east.

Scotts Close lies within the northern part of the village's presumed medieval core, a few hundred metres north of the church and west of the village green, a former common (Fig. 1). Wartime photographs predating the recent expansion of the village show earthwork remains of medieval settlement in the site's vicinity (Deegan 1995, 7). Aerial photographic survey has also revealed traces of medieval ridge and furrow 200m north and west of the site (*ibid*), indicating that agricultural land extended right up to the edges of, and possibly also into, the medieval settlement. Well-preserved remains of broad-rig ridge and furrow have also been recorded close to the High Street (Grant *et al.* 2004, 12; Drake and O'Brien 2004). A later medieval moated site survives at College Farm (Murray 1995a), on the western periphery of the village; a second moated site shown on the Enclosure Map of 1840 stood towards the north-eastern edge of the village but is no longer apparent.

Scotts Close is located immediately west of the site of Hilton Hall, originally an early 17th century brick house (Simkins 1974, 315). Historic maps suggest that the site has largely been undeveloped open land since at least the late 18th century. The presence of some woodland and tree cover on maps up to and including the 1887 Ordnance Survey suggest that it was not ploughed, perhaps being used instead as pasture (O'Brien & Crank 2001, 7-9).

METHODOLOGY

The archaeological investigation was carried out in two stages. Eight evaluation trenches were excavated in October and November 2001, followed by an open area excavation of the central eastern portion of the site in July 2004 (Fig. 2). Topsoil and undifferentiated overburden were mechanically excavated under close archaeological supervision using a 360° tracked excavator fitted with a 2m wide smooth-bladed ditching bucket. Exposed surfaces were then hand-cleaned and examined for archaeological features. Features and deposits were recorded using *pro-forma* recording sheets, drawn to scale and photographed as appropriate. Excavated spoil was searched for finds and the trenches were scanned by metal detector.

Ditches were excavated in segments up to 2m long; the segments placed to provide adequate coverage and to establish their interrelationships with other features. Pits and postholes were 50% excavated, while intrinsically interesting features, such as Grave Pit F2245 (see below), were 100% excavated. A purposeful sampling strategy was carried out, with the aim of investigating past environmental conditions as well as ascertaining the functions of some of the large pits on the site. Nine bulk samples were taken for the identification and analysis of charred plant macrofossils.

No factors are felt to have significantly affected the identification of archaeological features and finds. The high water table prevented the bases of some deeper features from being reached (e.g. F2218, F2294 and F2318).

DESCRIPTION OF RESULTS

Summary

Excavated features were assigned to phases on the basis of finds dates, stratigraphic relationships and spatial relationships between features (see Fig. 4).

With the exception of two post-medieval or modern pits, all the securely dateable features identified on site were late Saxon to medieval (9th - 14th century; Phases 1 - 4). They comprised clusters of pits and a system of boundary and drainage ditches, which underwent several stages of modification and development. In addition to the pit clusters and ditch system, the disarticulated remains of an early - middle Anglo-Saxon woman were found in a 10th - 12th century pit. This seemed to represent a later reburial of an individual whose original grave had been disturbed.

A large pit partially revealed at the north-eastern edge of the excavation (F2301) was initially thought to be medieval based on ceramic evidence, but was found to be post-medieval or modern after samples from an unusual pig skeleton found within it (L2303) were submitted for radiocarbon dating (Beta Analytic/Woolhouse, this report). A significant number of undated features, including additional pit clusters and further ditches, were also present.

Full descriptions of the excavated features and deposits can be found in the evaluation and interim reports (O'Brien & Crank 2001; Crank *et al.* 2004). Small modifications have been made to the phasing and interpretation offered in the interim report. A summary of the phases and the main features assigned to each is given below:

Phase	Date	Principal features
1	9 th - 12 th century	<ul style="list-style-type: none"> • Coaxial boundary ditches • Pits located around ditches • Disarticulated human burial
2	10 th - 13 th century	<ul style="list-style-type: none"> • Re-cutting of one of Phase 1 ditches on a larger scale
3	12 th - 13 th century	<ul style="list-style-type: none"> • Two parallel ditches • Pit clusters
4	Late 12 th - 14 th century	<ul style="list-style-type: none"> • Re-cutting of one of parallel ditches • Further pits

Table 1: Phasing

Deposit model

The topsoil (L2000) was a firm mid - dark brown loam 0.20 - 0.36m deep. Below this was firm mid grey/brown clay loam subsoil (L2001), encountered at depths of 0.20m to 0.65m. Archaeological features were cut into the natural clay and gravel drift (L2002), which was present at depths of 0.40 - 0.65m below ground level. This was highly variable, ranging from a dark orange/brown sand and gravel of varying consistency, to compact yellow/brown to blue/grey clay.

Roman activity

It was initially thought that a small number of Roman quarry pits were present in the excavation area, but further study of the associated pottery showed that the majority was in an abraded condition and was likely to be residual (Peachey, this report).

A number of possible Roman features, principally ditches, had been identified during the earlier evaluation of the site and dated on ceramic grounds. However, given the residual nature of the Roman finds from the excavation area, it seems unsafe to assume that the Roman features from the trial trenches were accurately dated. The predominantly north-west to south-east, south-west to north-east and west-south-west to east-north-east alignments of the putative Roman ditches of the evaluation resembled those of the late Saxon and medieval ditches found during the open area excavation (see below). It thus seems possible that they were actually contemporary with this boundary system, and that the Roman pottery was residual.

Nevertheless, this residual material is interesting evidence of possible Roman occupation in the vicinity of Hilton, the first such evidence to come to light. It might indicate the presence of an as yet undiscovered Roman rural settlement near the medieval village.

Possible sunken-featured building

A single possible sunken-featured building (F1015) was partially revealed in Evaluation Trench 7, just beyond the south-western limit of the excavation area (see Fig. 2). This comprised a sub-rectangular pit (F1015; 1.50m+ long x 2.00m wide x 0.62m deep) with steeply-sloping to near-vertical sides and a flattish, slightly concave base. The north-eastern corner of the pit was cut by a deep, steep-sided posthole with a pointed base, F1017 (0.35m wide x 0.64m deep). Given its partial excavation and the absence of any other Saxon structural remains on the site, the identification of this feature as a sunken-featured building is tentative. This building-type is typical of 7th century AD and earlier Saxon sites, though later examples are known (Powlesland 1997; Rhatz 1982); it is possible that the single (5g) sherd of Stamford ware from F1017 (L1018) is an accurate indicator of the feature's date but, given its small size, it could equally well be intrusive.

Given the presence of the re-buried early to middle Saxon skeleton in Grave Pit F2245, c. 30m north of F1015 could plausibly represent an outlying building associated with a previously unknown early - middle Saxon settlement in the vicinity.

Late Saxon and medieval pits and ditches

The ditch system (Figs. 5 & 6; Plates 2 - 4)

The excavation revealed a system of boundary ditches, aligned approximately north-north-west to south-south-east by west-south-west to east-north-east. Stratigraphic relationships and finds evidence suggested that the ditch system had changed and developed over the course of four distinct, yet overlapping, phases. This development could plausibly have spanned a period as long as 600 years (9th - 14th century). However, it seems more likely that a much shorter timeframe, centred on the 12th

century, was involved, as all four phases overlapped in this century. The system displays a striking level of continuity, with the ditches following the same alignments throughout the four phases of use.

The earliest phase of the boundary system (9th - 12th century) comprised five linear ditches (Figs. 4 & 6). Ditches F2292, F2100 and F2345 ran on broadly parallel west-south-west to east-north-east alignments; Ditches F2212 (=F2155/F2175) and F2037 ran approximately north-north-west to south-south-east, perpendicular to the other three ditches. The southern terminus of Ditch F2212 respected the west-south-west to east-north-east line formed by F2292 and F2100. All the ditches were fairly narrow and shallow (c. 0.60 - 1.05m wide x 0.16 - 0.60m deep), with similar moderate to steeply-sloping bowl-shaped profiles (Fig. 5) and compact grey silty clay fills. Ditch F2212 (=F2155/F2175) exhibited a slightly more complex sequence of infilling. All the ditches yielded Saxo-Norman pottery consisting mainly of St Neots, Thetford and Stamford wares. By far the largest assemblage (89 sherds) was found in F2100.

When viewed as a whole, the ditches appear to have formed the coaxial boundaries of several small geometric plots or fields, partially revealed within the excavation area. Ditches F2100 and F2345 seem to have demarcated parallel boundaries on opposite sides of a plot measuring approximately 20m wide. The western limit of this unit of land may have been delineated by Ditch F2212, while its eastern boundary lay beyond the limit of the excavation. At the western edge of the excavation, F2292 and F2212 may have formed the southern and eastern boundaries (respectively) of a neighbouring plot.

During Phase 2 (10th - 13th century), Ditch F2212 (=F2155/F2175) was re-cut by a larger ditch, F2106 (=F2119) (20.80m+ long x up to 1.54m wide x 0.44m deep, although narrower and shallower to the south) (Plate 2). This ran alongside the earlier ditch on a parallel north-north-west to south-south-east alignment, truncating its west side. It extended further south than F2212, continuing beyond the limit of the excavation area. Its extent to the north, as with F2212 (=F2155/F2175), was uncertain: a linear feature could be seen to continue northwards on the same alignment as F2106 (=F2119) and F2212 (=F2155/F2175), and a slot excavated 5m further north along its course revealed possible continuations of both ditches (labelled as F2314 and F2316); beyond this, however, an additional slot revealed only a single ditch (F2249), which contained 11th - 12th century pottery and could feasibly have belonged to either Phase 1 or 2. It seems possible, that the Phase 1 west-south-west to east-north-east ditches (F2292, F2100 and F2345) remained in use in Phase 2, forming perpendicular plot boundaries running at approximate right angles to F2106.

Phase 3 (12th - 13th century) saw the establishment of two new parallel west-south-west to east-north-east ditches in the southern part of the excavation area (F2035 and F2009 (Plate 3)). They were larger than the Phase 1 ditches which had followed the same alignments (F2035 was 1.06 - 1.54m wide x 0.32 - 0.45m deep; F2009 was 0.96 - 1.84m wide x 0.38 - 0.55m deep). Both had similar gently to moderately sloping bowl-shaped profiles, although F2009 was more variable and irregular as it extended east. Both yielded 12th - 13th century pottery and extended eastwards beyond the limits of the excavation, but their relationship with Phase 2 Ditch F2106 (=F2119) to the west could not be determined with certainty. Ditch F2009 clearly cut Phase 1 Ditch F2212 (=F2155/F2175) (Fig. 5), but could not be traced any further westward,

apparently terminating in or just short of Ditch F2106. It therefore seems likely that this Phase 2 ditch was still open and in use when Ditches F2009 and F2035 were dug and formed part of the same system.

The final phase of the ditch system's use (Phase 4; late 12th - 14th century) involved the re-cutting of the boundary represented by F2009. After it had filled in, two new ditches, F2306 (0.91 - 1.48m wide x 0.36m deep) and F2172 (0.98m wide x 0.48m deep) (Plate 4), were created just north of F2009, apparently replacing the earlier ditch. Both ditches had similar bowl-shaped profiles; F2172 being slightly steeper-sided. The two ditches began with rounded terminals located *c.* 0.20m apart and extended away from each other. Ditch F2172 ran east-north-eastwards for 7.00m before becoming ill-defined and impossible to trace. Ditch F2306 ran west-south-westwards for around 5.20m before becoming similarly difficult to follow.

It is not known whether any other parts of the boundary/drainage system remained in use at this time, but Ditches F2306 and F2172 make little sense in isolation and it seems likely that they were used in conjunction with other boundary features. However, pits dug through Ditches F2106 and F2035 during Phase 4 suggest that these ditches had largely filled in by this time. It may be that other Phase 4 boundaries contemporary with F2306 and F2172 were demarcated by fences, rather than ditches, which have left no identifiable trace in the archaeological record.

The pits (Figs. 4 & 5)

Forty-five dateable pits were distributed across the excavation area. The majority belonged to Phase 1, but pit-digging continued throughout the late Saxon and medieval periods (9th - 14th century; Phases 1, 3 and 4), with little evidence that the character of the activity changed significantly over time. A number of the pits had been re-cut or enlarged at a later date.

Phase 1 pits in north of site

A concentration of 13 Saxo-Norman pits were identified close to the northern limit of the excavation area, north and west of Phase 1 Ditch F2345 (F2326, F2324, F2288, F2286, F2290, F2350, F2347, F2328, F2352, F2356, F2343, F2341 and F2339). They were generally oval in plan and took the form of shallow scoops. Most were of small to moderate size (0.70 - 1.85m long x 0.50 - 1.10m wide x 0.06 - 0.69m deep), but generally did not exceed *c.* 0.40m in depth. The majority had single fills, perhaps suggesting they had filled in fairly rapidly. The distribution of the pits was notable, as they formed short rows or clusters, aligned parallel to the nearby contemporary ditch F2345. Grave Pit F2245 (Plate 6) was contemporary with these pits and was located among them, but was clearly distinct from them having a sub-circular, rather than oval, shape in plan.

Phase 1 pits around Ditches F2100 and F2292

A second group of 9th - 12th century pits (F2138, F2102, F2359, F2086, F2014, F2016, F2018, F2003, F2007, F2005 and F2214) were clustered around and between Phase 1 Ditches F2292 and F2100, close to the southern boundary of the excavation. They were generally oval or sub-circular in plan, with bowl-shaped profiles, although

a few were more elongated (F2102 and F2018). There was considerable variation in size, ranging from small scoops (e.g. F2016; 0.58 long x 0.45 wide x 0.12m deep) to quite substantial pits such as F2003 (1.87m long x 1.65m wide x 0.66m deep) and F2086 (2.38m long x 2.19m wide x 0.79m deep). However, like the pits to the north, they were generally shallow. Again, the locations of many of the pits seem to have been determined by the positions of the contemporary ditches. This was particularly clear with Pits F2014, F2016 and F2018, which were dug around the western terminus of Ditch F2100, respecting its position. The gap between the termini of F2100 and F2212 was effectively blocked by other pits in this group (F2003, F2007 & F2005; see Fig. 4), though it is unlikely that this was their primary function. Two additional pits (F2064 and F2066) were located together 5.5m north of Ditch F2292.

Several probable postholes were also located in this area (F2257, F2261, F2222 and F2216), all sub-circular, with steep sides and rounded bases (approx. 0.37 - 0.53m wide x 0.17 - 0.30m deep). However, there were no groupings or spatial configurations to indicate the presence of structures. Stratigraphic relationships indicated that not all were contemporary with the Phase 1 ditches.

Phase 3 pits

A distinct sub-circular cluster of five 12th - 13th century pits (F2070, F2072, F2078, F2076 and F2074) was located in the centre of the excavation area, roughly halfway between contemporary Ditches F2035 and F2009. All were oval in plan and formed medium-sized shallow scoops (0.90 - 1.30m long x 0.65 - 1.10m wide x 0.12 - 0.20m deep). A single larger, slightly deeper pit, F2030, was located 3m south of this cluster. The remaining two Phase 3 pits (F2312 and F2247) resembled those in the sub-circular cluster in dimensions, plan and profile, and were located together in the north-west of the site, alongside Ditch F2249. As with the majority of the Phase 1 pits, all those dated to Phase 3 had single fills, suggesting they had not remained open for long.

Phase 4 pits

Eleven pits were dug during the late 12th - 14th century (F2055, F2053, F2046, F2048, F2062, F2039, F2032, F2041, F2318, F2322 and F2022). They were generally sub-circular or oval, with steep bowl-shaped profiles or fairly straight, steep sides and flattish bases. On the whole, they were somewhat larger and deeper than the pits found in earlier phases, several being particularly large. Pit F2318, for example, measured 2.42m long x 1.40m wide x 0.64m deep. Most of the pits formed distinct inter-cutting clusters (e.g. F2318 and F2322; F2062, F2039 and F2032; F2055, F2053, F2046 and F2048).

As in Phase 1, there was a noticeable correlation between the distribution of pits and linear features. Pits F2062, F2039 and F2032, for example, formed an intercutting line cutting the southern edge Phase 3 Ditch F2035. Although the ditch had largely filled in by this time, it may still have been partially visible and had some influence on the positioning of the pits. This also seems likely with the pit group to the west (F2055, F2053, F2046 and F2048). These were cut through Phase 2 Ditch F2106 and Phase 3 Ditch F2035, but nevertheless seemed to cluster in the corner formed by the earlier boundaries. The pits in this group yielded few finds and only the latest of

them, F2055, contained pottery (three 10th - 12th century St Neots and Thetford ware sherds). This is thought to be residual material from Ditch F2106 (=F2119) into which Pit F2055 had been cut.

Interpretation

The distribution of the pits often seems to have been influenced by the positions and alignments of the boundary ditches. In Phase 1 the pits were grouped around the contemporary ditches, aligned parallel to them and/ or clustered around their termini. The spatial relationship between pits and ditches is less pronounced in Phase 3, but in Phase 4 the pits in the south of the site clearly reflect the locations and alignments of earlier boundaries. It is suggested that the boundaries represented by the infilled ditches remained visible, perhaps still present as slight hollows, or demarcated by (archaeologically invisible) fences or hurdles; alternatively the boundaries may have continued to exist without physical demarcation.

The distribution of pits relative to ditches may have implications for the nature of late Saxon and medieval land use on the site. The pits may have been clustered alongside plot boundaries, at the edges of land units, because they were secondary to the principal use to which the land was being put. It may also say something about land ownership, with people taking care to respect the limits of their property when digging a pit. It is likely that the pits served a range of purposes and that one explanation will not fit all. Nevertheless, the similar forms taken by many of the pits throughout all four phases, combined with the fact that many seem to have formed replacements or re-cuts of earlier features, is suggestive that in many cases, they had a common purpose.

Some of the pits may have been dug to extract natural clay, although if this were the case, it is hard to understand why many were so shallow, rather than being dug further into the clay subsoil, where, presumably, purer raw material might be found. It is also notable that the clay from Scotts Close does not appear to have been of particularly high quality, though it may have been suitable for building clay-walled structures or for making daub.

Many of the pits inter-cut with one another, having been dug into the fills of earlier pits rather than into the natural drift deposits. This makes no sense in terms of raw material extraction; rather, it suggests an ongoing need for open pits in particular locations. This was particularly clear in the case of Phase 4 Pits F2062, F2039 and F2032 in the south-east corner of the excavation. Although all dated to Phase 4, stratigraphic relationships showed that the pits represented three distinct episodes of activity, with each successive pit being dug directly into the fill of its predecessor (Fig. 5). Clearly, there was an ongoing requirement for an open pit in this part of the site. The same pattern is illustrated by inter-cutting Pits F2318 and F2322 in the centre of the site and by Pits F2343, F2341 and F2339, to the west of Ditch F2345.

Moderate assemblages of pottery, animal bone and ceramic building materials were found, for example, in Pits F2018, F2041 and F2138, suggesting that they may have functioned as rubbish pits. A complete cattle skull had been dumped in Pit F2352 (Phillips, this report), while this and other pits nearby had ashy fills possibly representing hearth waste (e.g. F2286, F2288 and F2290; Plate 5). However, large

finds assemblages were rare. It seems more likely that the small quantities of broken pottery and animal bone recovered from the majority of the pits represent casually discarded waste that found its way into their fills through natural processes, rather than rubbish that was deliberately dumped in them. In most cases rubbish disposal does not seem to have been the primary function of the pits.

Given these observations, two remaining interpretations seem plausible for the majority of the pits revealed by the excavation: they may have been sumps intended to drain areas of waterlogged ground, or may have been intended as small watering holes for livestock, the natural clay being particularly suitable for holding collected rain and surface water. The two uses need not have been mutually exclusive, the collection of water for livestock being a useful by-product of the need for drainage.

The need for drainage would explain the frequent need to re-cut many of the pits in approximately the same locations after they had filled in with clay and silt run-off. The clay soil at Hilton is particularly poorly-draining; indeed, at the time of the trial trench evaluation much of the village had recently been temporarily under water following heavy rainfall. Post-medieval maps of the village show a number of water features which may have functioned as balancing ponds to control surface water run-off (Desk-based assessment; O'Brien & Crank 2001, 9) and a number of open drains still exist around the village. During fieldwork, the excavated features held water for a considerable period following rainfall.

Use of the pits for the watering of livestock is consistent with the small ditched fields or plots revealed by the excavation. The limited finds from the site suggest a location on the margins of inhabited areas. This, combined with the absence of evidence for structures, suggests that the plots were not themselves the site of domestic occupation. As they were clearly too small to have been part of Hilton's open field system, another agricultural use, e.g. as pasture for livestock, seems plausible. The plots may have formed small paddocks or areas of home pasture attached to peasant holdings, supplementing grazing rights on the village green. It should be borne in mind, however, that after rainfall during the excavation, water-filled features on site quickly became infested with insect larvae. Of course, cleanliness of drinking water for animals may not have been considered particularly important by late Saxon and medieval peasant farmers.

Grave Pit F2245: the medieval reburial of an early/middle Saxon inhumation

The most intrinsically interesting feature on the site was Phase 1 Pit F2245 (Figs. 4 & 5; Plate 6), located amid the cluster of other 9th - 12th century pits close to the northern limit of the excavation. It was a shallow, sub-circular pit (1.31m long x 1.20m wide x 0.30m deep) with a single fill comprising firm mid greyish brown clayey silt (L2246). It contained the partial skeletal remains of a human adolescent (SK2129), aged approximately 15 years at death (Phillips, this report).

The skeleton was disarticulated and the bones were found in no apparent order throughout the fill of the pit. Four sherds of 10th - 12th century pottery were also recovered from L2246, suggesting that the burial was contemporary with the other late Saxon/early medieval activity in the area. However, a chalk spindle whorl (SF4), copper-alloy weight (SF5), terracotta glass bead (SF6) (Fig. 8; Crummy, this report)

and a cowry shell (Joseph, this report) were also found in the pit. These would clearly be highly unusual grave goods in the context of a 10th - 12th century grave, but are typical of the finds commonly associated with female Anglo-Saxon burials of the 'Final Phase' (late 6th - 7th century).

The incompleteness of the skeleton is also difficult to explain. Poor preservation was unlikely to have accounted for all the missing skeletal elements. However, the majority of the absent bones were small and would have been less likely to have been recovered had the skeleton been disturbed and reburied (Phillips, this report). It thus seemed possible that F2245 represented the reburial of an earlier inhumation. A radiocarbon date for the skeleton of Cal AD 660 - 790 supports this theory (Beta Analytic/Woolhouse, this report).

The skeleton in Pit F2245 thus appears to have belonged to a young pagan Anglo-Saxon woman, probably originally buried around the late 7th century, at a time when the Conversion to Christianity must have been well under way in what is now Cambridgeshire. At some point in the 10th - 12th century, her grave was presumably accidentally disturbed, perhaps during the pit-digging within the excavated site. Whoever disturbed the grave then gathered up the majority of the skeleton and at least some of the grave goods and reburied them. The care taken over this act is attested by the fact that, despite their small size, grave goods such as the glass bead were not overlooked.

It also seems that the new grave was marked, as Grave Pit F2245 was flanked by three postholes (F2282, F2263 and F2284). Although none of these contained any finds, their spatial association with F2245 was clear (see Figs. 3 & 4). The postholes were aligned around the grave in a broadly east to west arc, perhaps mirroring standard Christian practice of burial on an east to west alignment, but clearly at odds with the general east-north-east to west-south-west alignment of contemporary features in this part of the site. Exactly how the grave was marked remains conjectural, but it seems possible that the postholes held wooden crosses or other grave markers. Again, the time taken in digging a new grave for the skeleton and the effort to mark its location implies a degree of care.

It seems highly likely that the original discoverer of the burial knew it was not Christian. The skeleton was accompanied by grave goods which would have been out of the ordinary in a medieval Christian context, and yet these (or at least some of them) were carefully gathered up and reburied in the new grave. In addition, the reburial took place away from consecrated ground rather than being taken the short distance south to St Mary's Churchyard. This recognition of pagan 'otherness', combined with the apparent respect shown for the skeleton, is intriguing.

SPECIALIST REPORTS

Struck flint

By Tom McDonald

A very small assemblage of struck flint was recovered from the archaeological excavation. It was noteworthy for its use of honey brown pebble flint. One flake, recovered from Ditch F2106, may be derived from a polished axe fragment, but this identification is tentative.

A total of nine residual struck flints (92g) were recovered from the site. Given the small size of the assemblage and its known residual nature, it has little potential for further study. However, it does indicate possible earlier prehistoric activity in the area, not noted during the evaluation at Scotts Close (Crank & O'Brien 2001) or the evaluation at College Farm (Murray 1995b), although possible Iron Age cropmarks have been noted in the area and an Iron Age pit was recorded in a nearby evaluation by the High Street (Crank, Grant & Williams 2004).

Feature	Fill	Type	Description
F2018	L2019	Secondary flake	Honey brown pebble flint. Not sharp, not patinated, not burnt, not retouched
F2020	L2021	Burnt fragment	Not retouched
		Two flakes	Honey brown pebble flint. Not sharp, not patinated, not burnt, not retouched
F2035	L2036	Secondary flake	Honey brown pebble flint. Not sharp, not patinated, not burnt, not retouched
F2106	L2107	Tertiary flake	Grey flint. Not sharp, not patinated, not burnt. Possibly a flake from a polished axe
F2119	L2120	Burnt fragment	Not retouched
		Single flake	Honey brown pebble flint. Not sharp, not patinated, not burnt, not retouched

Table 2: Composition of the struck flint assemblage

Pottery

By Peter Thompson and Andrew Peachey

The excavation recovered 449 sherds weighing 4.652kg, with 423 sherds weighing 4.214kg being stratified within archaeological features. All sherds were examined under a x35 or x20 binocular microscope and recorded in Excel databases by sherd count and weight per archaeological context; the databases will be deposited as part of the site archive. The majority of sherds are medieval (see Table 3), but there are also a significant number of Roman sherds, although these are probably all residual. The Roman sherds are reported on separately, below, by Andrew Peachey.

Period	Sherd count	Sherd weight (g)
Prehistoric	5	88
Roman	59	833
Medieval	385	3756

Table 3: All pottery by time period

The prehistoric pottery

By Peter Thompson

The earliest pottery from Hilton comprises four residual prehistoric sherds from Phase 1 (9th - 12th century) Ditch F2037 and one from Phase 1 Ditch F2345. From Ditch F2037, three sherds with abraded surfaces contain profuse shell temper with black cores and orange oxidised surfaces. They include two distinct rim profiles from shouldered (possibly carinated) vessels, comprising simple everted rims with finger nail ‘cable’ decoration. One sherd with a maximum body width of 0.6cm has a rim diameter of 18cm, while the second rim is of a similar diameter and is coil-built with a maximum wall width of 1.00cm.

These sherds are probably early Iron Age and are residual. The fourth tiny sherd is relatively undiagnostic, with one surface completely abraded away. It is reduced to very dark grey throughout and contains sub-angular, red/brown grog temper, suggesting a possible late Iron Age date. Another late Iron Age/early Roman sherd, pale grey in colour and containing shell and grog temper, came from Ditch F2345.

The Romano-British pottery

By Andrew Peachey

The Romano-British pottery accounts for just over 15% of the site assemblage by sherd count and 22% by fabric weight. A total of 46 sherds weighing 484g (average sherd weight 10.52g) of Romano-British pottery were recovered from 23 stratified features during excavations at Scotts Close, Hilton. The stratified features were generally of late Saxon and medieval date, with only four features containing solely Romano-British pottery, but in each case it was limited to single abraded sherds and was also regarded as residual. An additional 13 sherds (349g) of Romano-British pottery were present as unstratified material in the assemblage. The Romano-British pottery is all considerably abraded and in a poor state of preservation.

The pottery was referenced where possible to the National Roman Fabric Reference Collection (Tomber & Dore 1998). Due to the residual nature and abraded state of the pottery, no attempts have been made to further provenance or characterize the Sandy grey wares (GRS) or Romanising grey wares (BSW).

LNV CC	Lower Nene valley colour-coated ware (Tomber & Dore 1998, 118)
UNS GT	Unsourced (early Roman) grog-tempered ware (Tomber & Dore 1998, 214)
GRS	Miscellaneous sandy grey wares
BSW	Miscellaneous Romanising/black-surfaced grey wares

Table 4: Fabric codes and descriptions

Commentary

The bulk of the stratified Romano-British pottery (52.17% by sherd count; Table 5) comprised of GRS fabrics. The rim sherds present indicate that they were probably produced in the early to mid-2nd century, or slightly later, in forms that are common in the kiln assemblages recovered from Brixworth Roman Villa (Woods 1972) to the west of Hilton, although the actual source may have been closer. Forms included jars with plain cordons and everted, curved rims in Pit F2133 (L2331; Brixworth type

119) and Pit F2286 (L2287; type 107), as well as a cordoned narrow neck jar/flask in Ditch F2316 (L2317; type 141). A near-complete profile (six cross-joining sherds) of another cordoned narrow neck jar/flask is present in the unstratified material (Area 1B). The only other sherd of GRS to indicate another source is a medium-mouth jar with grooved decoration that probably originated in the Lower Nene valley (Perrin 1999, type 51) to the north of Hilton.

	Sherd count	Weight (g)
LNV CC	3	17
UNS GT	1	8
GRS	28	374
BSW	14	85
<i>Total</i>	<i>46</i>	<i>484</i>

Table 5: Quantification of residual Romano-British fabric groups in stratified contexts

The only Romano-British fine wares in the assemblage are also derived from the Lower Nene valley and include a colour-coated ‘dog-dish’ (Perrin 1999, type 233) in Pit F2359 (L2089). The small and residual nature of the Romano-British pottery assemblage does not allow any conclusions to be drawn and the probable sources of the pottery from Northamptonshire and north Cambridgeshire are to be expected in the mid-2nd century.

The medieval pottery

By Peter Thompson

The medieval pottery was recovered from a total of 52 features, with a further 12 unstratified sherds weighing 157g. The three wheel-made Saxo-Norman wares (St Neots, Thetford and Stamford) account for 71% of the stratified medieval sherd count (almost 73% by weight).

Fabric	Sherd count	% of sherd count	Sherd weight (g)	% of sherd weight
St Neots	225	60.1	2141	58.4
Thetford	21	5.6	134	3.7
Stamford	20	5.3	396	10.8
Developed St Neots	31	8.3	368	10.1
Developed Stamford	2	0.5	4	0.1
Lyveden-type	2	0.5	49	1.3
Ely-type	7	1.9	34	0.9
Other Medieval (sandy)	39	10.8	342	9.4
Other Medieval (shelly)	15	4	101	2.7
Grimston	11	3	98	2.7
<i>Total</i>	<i>373</i>		<i>3667</i>	

Table 6: Stratified medieval pottery by sherd count and weight

St Neots ware

The fabrics are dominated by the shelly Saxo-Norman St Neots wares, which account for 60% of the sherd count (when the Developed St Neots successor is added this figure rises to over 68%; see Table 6). South-west Cambridgeshire forms part of the heartland of production, with the type site of St Neots located 14km west of Hilton. No pottery kilns producing this ware have yet been discovered and it is believed to have been made on a local scale at a number of sites. The earliest St Neots ware found in Cambridgeshire dates to *c.* AD 900, but it is known to have been exported to Norfolk in the late 9th century and so was probably initially produced around *c.* AD 850. The earliest wares are handmade, but probably in the 10th and certainly by the mid-11th century, these were largely replaced by wheel-made forms (Addyman 1965, 53). A precise end date is not known, but production seems to have ceased between the middle and end of the 12th century.

The main forms identified in St Neots-type fabrics are deep bowls with inturned rims, shallow dishes with simpler or hammerhead rims, and small cooking pots with rolled, everted, plain or hollowed rims. Sagging bases are most common, whilst jugs appear quite late in the series and there are no spouted pitchers (Hurst 1956, 46). Although forms from different sites appear to be closely matched, it has been suggested that differing texture of fabrics and colour caused by differing properties in the local clays might provide some indication of provenance and date, although this needs to be viewed with caution (Hurst 1956, 32). So, for example, St Neots ware from around Cambridge, such as pre-conquest Cottenham (15km east of Hilton) is predominantly dark purple with a soapy feel and contains abundant white fossil shell (Hall 2000, 23).

Form	Rim type	Number	Rim diameter where known
Jars	Everted	7	2x12cm, 1x14cm, 1x20cm
	Everted (hollowed)	5	2x14cm, 1x16cm, 1x17cm, 1x 20cm
	Rolled out (jar?)	2	
Bowls and dishes	Inturned	3	1x20cm, 2x28cm
	Everted	2	
	Everted (hollowed)	2	1x16cm
	Simple upright	1	18cm
<i>Total</i>		22	

Table 7: Forms identified in St Neots-type ware

Twenty-two St Neots rims were identified (Table 7), of which everted jar rims, nearly half of them hollowed, indicate the commonest vessels present. Closed vessels outnumber open bowls and dishes by a ratio of 14:8, whilst no jug sherds were identified. Rim diameters are generally quite small, with eight vessels 12 - 16cm across (4.75 - 6.3 inches across). Hurst suggests smaller vessels of 4 - 6 inches diameter could be pre-Conquest, indicating that some of the Hilton collection might date to the 11th and possibly late 9th/10th centuries.

Thetford ware

The second Saxo-Norman ware is Thetford ware, a hard grey sandy fabric, the manufacture of which was centralised at several sites in East Anglia, the nearest being in Norfolk at Thetford itself. Its date range is the same as St Neots ware, having succeeded the earlier Ipswich wares in the 9th century, and in turn being replaced by medieval forms around the mid-12th century. Thetford ware comprises 5.7% of the Hilton sherd count, with diagnostic sherds comprising a jar (Ditch F2249 L2251), a probable bowl rim (Pit F2055 L2056) and a strap handle, probably from a costrel (Ditch F2100 L2101). A decorated sherd with a finger-impressed clay strip came from Ditch F2172 L2174 and another was unstratified.

Stamford ware

The last of the Saxo-Norman trio is Stamford ware from South Lincolnshire, commonly fired in whitish or pink fabrics and often coated with a yellow or orange glaze. It is the least common, but has the widest distribution of the three Saxo-Norman wares and has a similar date range. Like St Neots ware, its earliest known appearance is from imports in Thetford dated *c.* AD 900, so it was almost certainly manufactured earlier at Stamford. The fabric accounts for 5.3% of the Hilton sherd total, but 10.8% of the fabric weight compared to 3.7% for Thetford ware. This is due to a semi-complete deep Stamford ware bowl being present in Ditch F2100, L2101. This was also the only diagnostic profile other than a flat base sherd with a 12cm diameter.

Developed St Neots and Developed Stamford ware

In the 12th century, St Neots ware merged with medieval forms, producing larger vessels in shelly fabrics, usually with sand added, which continued possibly throughout the 13th century (Hurst 1976, 320-30). Developed St Neots fabrics account for 8.3% of the sherd count, although the only rim profile is a hammerhead rim to a dish from Pit F2032. Additionally, three body sherds exhibited roulette decoration. Two small sherds of Developed Stamford ware with mottled green glaze came from Ditch F2009, which is probably of mid-12th to mid-13th century date.

Ely and Lyveden wares

These wares were present in only small quantities. Ely ware, which usually contains various white 'grits' (shell, oolites or flint), is known to have been manufactured at Ely, and also at Colne 15km north of Hilton. It appears in the 12th century, contemporary with the latest Saxo-Norman wares and largely succeeds them for the duration of the medieval period, as seen, for example at Forehill, Ely (Hall 2003, 155). A stratified rim was recovered from Pit F2062, in addition to a residual rim from Pit F2301, and a further unstratified example. Lyveden/Stanion ware, imported from Northamptonshire, is another calcareous ware which first appears in the late 12th century and becomes more common in the 13th and 14th centuries. Only two sherds in Lyveden-type fabrics were present, in Ditch F2009 and Pit F2301.

Other unglazed wares

A largely miscellaneous group are medieval unglazed wares, which comprise nearly 15% of the sherds. These are unidentified fabrics, probably all or mostly locally made, that are contemporary with, or successors to, St Neots and Thetford wares. A total of 10.8% are sand tempered only and 4% contain shell (some with a little sand too). Few diagnostic sherds were present, although a fragment of a strap handle came from Pit F2070 and a sagging base from Ditch F2106.

Glazed Grimston ware

Grimston ware is a reduced sandy fabric that is largely a successor to Thetford-type ware, which was also produced at Grimston. These can be plain or glazed wares, the latter comprising a lustrous green glaze that was sometimes decorated with clay pellets and strips often containing brown iron glaze. This was produced from the late 12th century and continued throughout the medieval period. The modest amount present at Hilton comprises 11 sherds, representing 3% of the total sherd count, nearly all being fragments of glazed jug from Pit F2318.

The main dating evidence

The earliest pottery

The following discussion focuses on the principal diagnostic sherds, particularly in relation to key features and stratigraphic sequences. The earliest medieval occupation at Hilton cannot be dated precisely. However, there is no middle Saxon pottery present, with a few possible exceptions from Phase 1 Pits F2339 and F2341. Pit F2339 contained one small handmade fragment, possibly of a shouldered vessel, that could predate the 10th century. The fabric contains large voids from burnt organics, together with a little very coarse angular flint and other mineral inclusions. This pit cuts Pit F2341, which contained another small handmade sherd in a black fabric with oxidised surfaces and rare very coarse angular limestone inclusions. The two sherds described above are probably late Saxon in date. Amongst the Saxo-Norman sherds that appear to be early (i.e. pre-Conquest), Phase 1 Pit F2214 contained a thick handmade St Neots-type sherd, whilst Phase 1 Pits F2286 and F2288 in the north-western corner of the site contained fragments of similar fabric, dark purple and soapy to the touch, including two small jar rims.

Immediately south of these, Phase 1 Pit F2328 contained a dark brown inturned flanged rim to a dish similar to pre-Conquest examples from St Neots (Hurst 1956, 67, no. 4), although several paler grey sherds, with orange surfaces and a little less shell might suggest a post-Conquest date. Phase 1 Pit F2018 yielded sherds of all three Saxo-Norman wares including a St Neots inturned flanged rim similar to an illustrated pre-Conquest example from St Neots (Hurst 1956, 67, no. 10). Phase 1 Ditch F2227 contained a small abraded St Neots-type jar rim similar to examples from Cambridge and St Neots. Ditch F2249 (potentially a continuation of either Phase 2 Ditch F2106 or Phase 1 Ditch F2175) also contained a dark sherd from a small jar rim in sandy Thetford-type ware, but this was also abraded and could be residual.

Mid-11th - 12th century

However, whilst some of the pottery appears to be of late 9th/10th to mid-11th century date, the bulk of the diagnostic sherds indicate a post-Conquest date. The pottery from Phase 1 Ditch F2212 (=F2155/F2175) and its replacement, Phase 2 Ditch F2106 (=F2119), consisted mainly of residual Roman and St Neots ware. However, F2175 contained a flat base measuring 18cm in diameter in a black shelly fabric with pale orange surfaces (although the shelly composition was not so apparent on the surfaces), with a little sand also added. This is probably a later St Neots ware and so can be assigned an 11th - 12th century date. F2106, contained a sherd in similar fabric and also a heavy inturned wheel-made bowl rim in dark brown St Neots fabric measuring 28 - 30cm in diameter. One other small sherd from this ditch contained sand and a little shell and is possibly an early Ely-type, suggesting a 12th century date. The pottery thus indicates the two ditches could have been dug within less than a century of each other.

Phase 1 elongated Pit/Ditch F2192 contained a 17cm diameter cooking pot, in good condition, with a hollowed rim and internal beading (Fig. 7.1). This thin-walled sherd with a little sand in the temper is of late 11th, or more probably, 12th century date. Phase 1 Ditch F2100 contained 89 sherds (1.609kg), accounting for 24% of the entire medieval pottery assemblage from the site (by sherd count; 44% by weight). The pottery was in a very good state of preservation, comprising large unabraded sherds of all three Saxo-Norman fabrics, representing at least five vessels. Three partially reconstructable pots are in St Neots ware. One is a jar rim of 20 cm diameter (Fig. 7.2), which is comparable to a rim from Cottenham, although the latter was dated to before the Conquest (Hall 2000, 30, no. 12). The second is an inturned thickened rim with a diameter of 28cm (Fig. 7.3), similar in profile to an unstratified shallow dish from Tempsford in Bedfordshire (Hurst 1956, 57, no. 18). The third is a cooking pot with a hollowed rim 18cm in diameter (Fig. 7.4).

The Hilton examples, with their light brown colour, thin walls, added sand and fine wheel-finish, were made towards the end of St Neots production in the 12th century. Associated with these was a deep bowl in Stamford ware with a flattened, everted rim with both internal and external yellow glaze (Fig. 7.5). The glaze was burnt on the outside surface to a deep green colour, and the vessel was clearly used as a cooking pot despite its glaze decoration. The profile bears resemblance to examples from Stamford Castle and School, the former coming from contexts of 12th - early 13th century date (Hurst 1958, 47, figs. 2, 32 & 33; and 50, figs. 3 & 18). The fifth vessel is part of a Thetford-ware strap handle, probably from a costrel.

12th - 13th century pottery

Phase 3 Ditch F2009, overlying Ditch F2212=F2155/F2175, contained two sherds, small but in good condition, of Developed Stamford ware with a date centred on the mid-12th to mid-13th centuries, along with a body sherd of Developed St Neots ware with roulette decoration. The latter is identical to sherds from Phase 4 Pit F2318, which also contained the latest datable sherds from the site. Therefore, a 13th century date for Ditch F2009 can be inferred. To the south of Ditch F2009, Phase 3 Ditch F2035 contained a similar sherd along with two sand-tempered fabrics. Phase 4 Pit F2062 contained two Developed St Neots ware sherds included a hammerhead rim

(late 12th - 13th century) and an Ely-type bowl rim of 24cm diameter (13th - 14th centuries), suggesting a 13th century date.

13th - 14th century pottery

Phase 4 Pit F2318 contains what is likely to be some of the latest pottery from the site, with ten sherds of green-glazed Grimston ware, including an example with brown trailed iron slip, probably all from the same jug. This is of the Highly Decorated period and is unlikely to date much later than the mid-14th century. Also present were two sherds of Developed St Neots ware, in good condition, with roulette decoration. A later 13th century date is possible for this context. One other sherd of glazed Grimston ware was recovered from Phase 4 Pit F2041.

A sherd from Phase 4 Ditch F2306, with its orange/brown fabric containing quartz sand and sparse fine white shell, might be akin to an Ely-type ware, but is not closely datable as these wares continued in use into the 16th century. The potentially late date of this sherd is compatible with the stratigraphic relationships of Ditch F2036, which must have post-dated Pit F2318. Ditch F2172, which is thought to be associated with Ditch F2306, also contained a possible Ely-type sherd, the rest of the pottery presumably being residual St Neots and Thetford-type wares, the latter including a sherd with a decorative thumb-impressed strip.

The 'negative evidence'

The absence of imported Essex wares supports a 14th century end date for activity at the site. Essex wares were first imported into Cambridgeshire in relatively small amounts in the 13th century and increased between the 14th - 16th centuries, as seen for example, at Forehill, Ely and at Cambridge (Edwards & Hall 1997, 153-68; Hall 2004, 137-41). Hedingham ware is also present at Waterbeach Abbey just north of Cambridge, the occupation of which is historically attested between 1293 and 1359, whilst other Essex wares from the neighbouring abbey of Denny are unlikely to date from before the mid-14th century (McCarthy & Brooks 1988, 273). The absence at Hilton could, of course, be down to a matter of choice and the assemblage is fairly small (although Essex imports have been recovered from even smaller assemblages at sites such as Fowlmere, south-west of Cambridge (Thompson 2006)). However, this does tie in with a suggested cessation of deposition of pottery at Scotts Close some time during the 14th century, and possibly before its beginning.

A similar argument might also apply to Ely wares. At Hilton, the sherd total is 1.9%, which is small when compared to Forehill (58% of medieval and post-medieval sherds). At the Permanex excavation in St Ives, 6km north of Hilton, the ceramic evidence indicates that the medieval site was abandoned by the end of the 14th century. Here, 55% of the medieval sherds were of Ely-type ware (34% of the site total) which might suggest that the Hilton site was largely abandoned before the import of Ely wares, the principal successors to Saxo-Norman wares, really took off (Thompson 2005; Edwards & Hall 1997).

Conclusion

The excavation produced a comparatively small number of sherds, dominated by the trio of wheel-made Saxo-Norman wares, which comprised 71% of the medieval total. Several fabric types and small rim sherds indicate the presence of pre-Conquest pottery of 9th to mid-11th century date, suggesting the start of medieval occupation. However, the majority of diagnostic sherds, including the well-preserved part vessels from F2100, L2101, together with later fabrics such as Developed St Neots and Ely-type wares, indicate the main period of occupation was between the late 11th - 13th centuries. A Highly Decorated glazed Grimston jug is amongst the latest closely datable pottery from the site, suggesting occupation had ceased by the late 14th century and possibly even before the end of the 13th century. The presence of a quantity of residual Roman sherds (15% of the site assemblage) suggests occupation took place nearby.

List of illustrations

- Fig. 7.1 F2192, L2193, St Neots jar rim
- Fig. 7.2 F2100, L2101, St Neots jar rim
- Fig. 7.3 F2100, L2101, St Neots bowl rim
- Fig. 7.4 F2100, L2101, St Neots jar rim
- Fig. 7.5 F2100, L2101, Stamford bowl

Ceramic building materials

By Andrew Peachey

A total of 20 fragments (240g) of ceramic building materials (CBM) were recovered from eleven features during excavations at Scotts Close, Hilton. A full quantification by context is included in Table 8.

The bulk of the CBM consists of small fragments of non-diagnostic, oxidized CBM with no consistency of fabric. The majority is probably medieval in date, but the possibility of it being residual and of Romano-British date cannot be ruled out. Preservation is very poor and, excluding the fragment in Phase 4 Pit F204, L2047, the average sherd weight is extremely low at 7.95g. The CBM in L2047 is a single fragment of medieval flat tile in better condition than the remainder of the assemblage. The fragment has a pale yellow (Munsell 2.5Y8/4) smooth upper surface and rough lower surface, with an oxidized pale red (10R6/4) core. The fabric is hard with a slightly soapy finish and was tempered with sparse to common shell/calcareous inclusions (<2.50mm), but is now vesiculated.

Context	No. of fragments	Weight (g)
L2034	5	31
L2038	2	20
L2042	2	5
L2047	1	89
L2103	1	6
L2120	1	20
L2125	1	3
L2238	4	23
L2334	1	16
L2340	1	10
L2344	1	17
<i>Total</i>	<i>20</i>	<i>240</i>

Table 8: Quantification of CBM by context

Small finds

By Nina Crummy

Fig. 8.1. SF 1. (L2042) F2041. Pit fill. Fragment of a Norwegian Ragstone hone, rectangular in section and tapering towards the centre, where it has broken. The surviving end is irregular in shape and worn, but less polished from use than the rest of the hone, and presumably formed the grip. Length 94mm, maximum width 33mm, section at the break 26mm by 18mm. Norwegian Ragstone is a fine-grained schist from quarries near Telemark, Norway and hones of this type were imported into Britain in considerable numbers from the late Saxon period onwards, perhaps continuing as late as the early post-medieval period (Moore & Oakley 1979, 280-3; Crummy 2000, 121).

Fig. 8.2. SF 3. (L2229) F2227. Ditch fill. Fragment of the upperstone of a rotary quern of Mayen lava, with traces of radial tooling on the grinding surface. The other surface is pecked and, though irregular, also worn. Though no part of the original edge survives, the present outer edge is worn to an irregular curve, which, coupled with the wear on the pecked surface, suggests the fragment has been used as a rubbing stone. Maximum surviving dimensions 124mm by 56mm, maximum thickness 32mm. The trade in lava querns from the Eifel Hills in Germany appears to have operated continuously from about the 7th century to the late medieval or early post-medieval period (Buckley & Major 1988, 37-9).

Fig. 8.3. SF 4. (L2246) F2245. Pit/Grave fill. Plano-convex spindlewhorl made from hard chalk, with the rilling characteristic of lathe-turning on both surfaces. The spindle hole tapers towards the convex (lower) face (plano-convex whorls are conventionally shown in archaeological literature with the flat side downwards, but were used with the flat side uppermost). Diameter 32mm, height 18mm, maximum diameter of spindle hole 10mm. Whorls of this type were used over a very long period, with examples coming from Anglo-Saxon and medieval contexts (West 1985, fig. 30, 7 & fig. 72, 6; Crummy 2003, 186; Woodland 1990, 216-19).

Fig. 8.4. SF 5. (L2246) F2245. Pit/Grave fill. Copper-alloy disc, probably a weight rather than a residual Roman coin, as no surface features are visible. Weight 17g, but this includes traces of iron corrosion adhering in places to the surface. Diameter 33mm.

Fig. 8.5. SF 6. (L2246) F2245. Pit/Grave fill. Small globular bead of terracotta glass with yellow zigzag trail, Guido type 8xvi, which dates from the 6th - 7th century (1999, 64).

(L2287) F2286. Pit fill. Small sandstone slab split from a waterworn pebble along the bedding planes. One edge is curved and original to the pebble, the others are worn breaks. One surface is worn smooth, the other fairly rough but slightly worn. Probably used as a cobble. Maximum dimensions 69mm by 66mm, 16mm thick.

(L2108) F2106. Ditch fill. Fragment of a cobble or small paving slab similar to the above, but made from mudstone. Maximum dimensions 86mm by 65mm, 14mm thick.

(L2101) F2100. Ditch fill. Heavily corroded iron object, the section tapering in both dimensions; probably a nail. Length (with corrosion) 93mm.

Human bone

By Carina Phillips

Introduction

The disarticulated remains of a juvenile skeleton, SK2129, were excavated from Pit F2245. A cowry shell (Joseph, this report), spindle whorl, copper-alloy weight and bead (Crummy, this report) were found with the remains. The skeleton was partially complete. Preservation of the bone was poor, with high surface erosion and mottling. Fragmentation had also occurred. A metatarsal from L2108, the upper fill of Phase 2 Ditch F2106, was identified during the animal bone analysis.

Material

Preservation of all the human bone was poor, with surface erosion and mottling; fragmentation had also occurred both during excavation and earlier.

SK2129 was partially complete. Parts of the occipital, temporal and frontal skull, complete mandible, cervical vertebrae (1 - 6), 3rd and 4th lumbar, parts of the ribs, the sternum and pelvis and most of the upper and parts of the lower long bones were present. A metacarpal and one hand phalanx were also found. The remains were aged at 15 years (+/-36 months) based on tooth development (Buikstra & Ubelaker 1994; Ubelaker 1999). Bone fusion state supported this (Mays 1998). Sex and height estimates were not possible due to the young age of the bones and fragmentation. No pathologies were evident.

Ditch F2106, L2108, produced a left 3rd metatarsal; it is unclear if this is part of Skeleton SK2129.

Discussion

Human skeleton SK2129 was excavated from a sub-circular pit (F2245) flanked on three sides by postholes in a broadly east to west alignment, which may have held

grave markers. The incompleteness of the skeleton may be due to poor preservation and fragmentation of the bones; however, it seems unlikely that this could account for all the missing elements. Some teeth were missing post-mortem and all thoracic and some lumbar vertebrae and a number of ribs were missing, in addition to almost all lower leg, hand and foot bones. A number of the unfused epiphyses were also absent, although these may have been affected by preservation. A majority of the absent bones are small and others, such as the ribs, may have become fragmented in the original burial context. Therefore, when reburial had occurred, then these bones would have been less obvious and so less likely to be recovered than the larger bones. The field observation that the bones were 'jumbled and disarticulated' at time of excavation is also supports the interpretation of this skeleton as having been reburied.

Animal Bone

By Carina Phillips

Introduction

A small animal bone assemblage of 342 fragments was excavated from Scotts Close, Hilton. Seventeen fragments came from undated features. Phases 1 (9th - 12th century), 2 (10th - 13th century), 3 (12th - 13th century) and 4 (late 12th - 14th century) have been grouped together for the animal bone analysis due to their overlapping date ranges; these phases produced 158 fragments collectively. A large assemblage of 167 fragments came from Pit F2301. It was initially thought, on the basis of pottery evidence, that this feature was medieval, but radiocarbon analysis of an unusual pig skeleton recovered from it showed the pit to be post-medieval or modern and the ceramic material residual. The condition of the bone varied from context to context and even within contexts. A greasy texture was exhibited on a number of bones from all phases, relating to the collagen in the bone; mottling was also observed on 'greasy' bones. Concretion occurred on a few fragments, caused by the bone being in a wet anaerobic environment. One bone was beginning to fossilise. The different conditions relate to different degrees of preservation on the site. Fragmentation was high in some instances and was mostly caused during and after excavation.

Method

Bones were identified and recorded to species and element when possible. The category sheep/goat has been used due to the difficulties in clearly identifying the species sheep (*Ovis sp.*) or goat (*Capra sp.*), unless a clear identification was possible. Tooth wear for cattle, sheep and pig were recorded using the method of Grant (1982) and ages assigned following the method of Hambleton (1999). Tooth wear ageing for horses follows Farbenfabriken (1994). Measurements were taken when viable following the methods of Jones *et al.* (1976) and von den Driesch (1976), and are contained in the site archive. Withers heights were calculated for horses following Kiesewalter in Driesch & Bosseneck (1974) and for dogs following Harcourt (1974). When available, the fusion state of identifiable bones was also recorded and ages were assessed following Silver (1969). Fragments unidentifiable to a particular species were recorded under the categories of 'large-sized', consisting of cattle (*Bos sp.*), red deer (*Cervus elaphus*), fallow deer (*Cervus dama*) and horse (*Equus sp.*) -sized fragments and 'small-sized', consisting of sheep/goat, roe deer (*Capreolus capreolus*), pig (*Sus sp.*) and dog (*Canis familiaris*) -sized bone fragments. The unidentifiable

bone fragments were recorded as such. Evidence of burning, sawing, chopping, knife-cutting and gnawing was also recorded, as was smashed bone.

The data has been separated for analysis into two groups: Saxon/medieval fragments dating to the 9th - 14th century (Phases 1 - 4) and post-medieval/modern fragments. Bone fragments from the four Saxon and medieval phases are considered together because of the widely overlapping date ranges for these phases. The minimum number of individuals (MNI) of a species was calculated from most frequent left or right skeletal element (minimum number of elements).

Saxon - medieval results

	NISP	MNI	Chopped	Cut	Smashed	Gnawed
Cattle	30	3	2	1	5	2
Sheep/goat	31	3	0	2	1	8
Horse	8 (*3)	2	0	0	0	1
Dog	3	1	0	0	0	1
Pig	7	1	0	0	0	0
Domestic Fowl	1	1	0	0	0	0
Goose	1	1	0	0	0	0
Frog/toad	1	1	0	0	0	0
Large sized	35	-	2	5	4	4
Small sized	22	-	0	1	1	2
Unidentifiable	19	-	0	0	0	0
Total	158	-	4	9	11	18

*n= number of bones belonging to one animal

Table 9: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI) for the Saxon-medieval animal bone

A total of 158 fragments of animal bone came from Saxon - medieval features. Preservation of these fragments varied; a majority of the assemblage was of 'normal' condition. Ten percent had a greasy texture related to the amount of collagen in the bone; mottling also occurred on most 'greasy' bones (9%). Concretion was present on a few fragments (2%); this was caused by a waterlogged anaerobic environment. An almost complete horse tibia from Ditch F2249, L2250 (Phase1/2), exhibited concretion and was also beginning to fossilise. Cattle and sheep/goat were most frequent. Horse, dog, pig and cat (*Felis catus*) were also identified in small numbers, along with single domestic fowl (*gallus sp.*), goose (*Anser sp.*) and frog/toad (*Rana sp. /Bufo sp.*) bones. Butchery was evident in the form of chop marks (3% of the assemblage) and cut marks (6%). Smashed bone fragments formed 7% of the assemblage. Such fragments occur when the bone is smashed by a blunt object in order to access the bone marrow; this usually occurs as part of the cooking/preparation process. Carnivore gnawing was also present on 12% of the assemblage, indicating that dogs/foxes had access to some of the bone before it was deposited. It can be tentatively suggested based on the composition of the assemblage that it consists of domestic and butchery waste.

An almost complete cattle skull and atlas were the only animal bones present in F2352, L2355. The skull exhibited cut marks suggestive of skinning and the atlas exhibited a chop mark, possibly caused when removing the head from the rest of the

carcass. This may represent butchery waste, the brain having not been utilised. Three articulating bones from the right hind leg of a horse were present in Ditch F2009, L2010. The bones came from an animal approximately 149cm in withers height, roughly 15 hands (Clutton-Brock 1974). Fusion (ankylosis) of the proximal end of the metatarsal and adjoining tarsals (hock joint), caused by exostoses, had occurred. This is likely to be bone spavin. Bone spavin causes exostoses, which limits movement of the joint and results in lameness until fusion (ankylosis) of the joint takes place. Once ankylosis takes place the animal is suitable for slow work (Baker & Brothwell 1980, 118). There are thought to be a number of causes for spavin including faulty shoeing, heavy work or working on hard surfaces (ibid.). The distal shaft of the same metatarsal also exhibited pathological change, but suffered from erosion and fragmentation, hindering a detailed description of the pathology. The observable part of the bones exhibited new bone formation in the form of small nodules on the medial side of the distal shaft and a larger mass on the lateral side. Further description or suggested diagnosis is not possible.

One other horse bone produced a withers height measurement for this phase from Pit F2328 L2330. This was a metacarpal 21.22cm in length, producing a withers height of 135.9cm, equivalent to approximately 13 hands. This bone was also quite robust, possibly belonging to a small, stocky horse used as a pack or draft animal (Rackham 1995, 173). The height differences are quite large and may relate to an increase in the size of horses through time, as the larger horse came from a feature (Ditch F2009) dating to Phase 3 (12th - 13th century) and the smaller came from an earlier feature dated to Phase 1 (9th - 12th century). This suggestion is extremely tentative due to the small number of bones it is based on.

Post-medieval - modern results

	NISP	MNI	Chopped	Cut	Smashed	Gnawed
Cattle	68 (*60)	2	2	1	0	1
Sheep/goat	3	1	0	0	0	1
Horse	6	2	0	0	0	0
Dog	5 (*5)	1	0	0	0	0
Pig	73 (*72)	2	0	1	0	0
Cat	1	1	0	0	0	0
Large sized	7	-	1	0	2	0
Small sized	2	-	0	0	0	0
Unidentifiable	2	-	0	0	0	0
Total	167	-	3	2	2	2

*n= number of bones belonging to one animal

Table 10: Number of Identified Specimens (NISP) and Minimum Number of Individuals (MNI) for the animal bone from Pit F2301 (post-medieval/modern)

A majority of the F2301 assemblage was made up of the bones from a substantially complete pig skeleton and a partial cattle skeleton (L2303). The pig skeleton accounted for 72 fragments (43% of the assemblage). It was missing only some of the foot bones (some metapodials, astragali, carpals, tarsals and most phalanges were absent). These bones may have been missed in recovery due to their small size. The presence of some of the foot bones suggest it is unlikely that the feet were removed before deposition and the absence of butchery supports this, although it should be

emphasised that butchery does not always leave recognisable traces even when bone surfaces are perfectly preserved (Collins 1987, cited in Halstead & Cameron 1992, 501). Tooth wear indicates that the pig was adult at time of death (Hambleton 1999), with a numerical value (nv) of 46 following Grant (1982). The pig skull exhibited a shorter snout than exhibited on usual pre-medieval archaeological pig skulls. Radiocarbon dating of the pig skeleton gave multiple date ranges of Cal AD 1640 to 1680, Cal AD 1730 to 1810 and Cal AD 1930 to 1950 (Beta Analytic/ Woolhouse, this report).

It is unclear how the cattle skeleton was found in relation to the pig skeleton within F2301. The cattle skeleton lacked its skull, mandible, all cervical vertebrae and some thoracic and lumbar vertebrae and most of the foot bones. The absence of this number of bones suggests that it may have only been partially complete when deposited. There was no evidence of butchery. The fusion state of the bones suggests that the skeleton belonged to a calf aged approximately 10-12 months at death (Silver 1969).

Also in F2301, L2302, was a very partial dog skeleton (five bones only). The dog was adult and approximately 55.4cm at shoulder height based on tibia length, falling in the middle range of 9th - 11th century dogs following Harcourt (1974).

Little can be said about the other 30 animal bone fragments found in this feature, other than that a small number could be identified to sheep/goat, pig, cattle, horse and cat.

Discussion

The small size of the assemblage hindered detailed analysis of the animal bone and consequently limits further discussion. The Saxon - medieval bone is likely to consist of domestic and/or butchery waste. Domestic species, particularly cattle and sheep, dominate the assemblage. These species probably represent the main meat-producing animals. The other species such as pig, domestic fowl and geese, and possibly horse, would also have been utilised for meat and for other carcass resources such as skins. Horses would have been primarily exploited for transport and dogs for hunting.

The post-medieval/modern assemblage mainly consists of the bones from the skeletons of a pig and calf in L2303. The radiocarbon results indicate that the bones in L2303 date at the earliest to 1640/1680 cal AD. The shortened snout of the pig may be due to breed influences which were popular in the 18th and 19th centuries. Asian pig breeds in particular, imported in the 18th century, have a 'squashed' snout. It has also been suggested that a pathological growth abnormality may have resulted in a shortened snout appearance (T. O'Connor, *pers. comm.*).

The cowry shell

By Julian Joseph

Introduction

The base of a cowry shell was found in a 10th - 12th century (Phase 1) pit (F2245) at Scotts Close, Hilton. There was also a fragment from the same cowry shell and a piece of an oyster shell which it has not been possible to identify.

The feature from which the shell came contained a partial human skeleton. The individual was estimated to be approximately 15 years old at the time of death, but the sex of the remains could not be determined from the surviving bones (Phillips, this report). Some of the bones were missing and all were disarticulated when recovered, suggesting that this was a reburial. In addition to the shells, a spindle whorl, a copper-alloy disc and a bead were found in the same context (Crummy, this report). The feature itself was a sub-circular pit containing a single fill (L2246) and flanked by three postholes.

A glossary of terms relating to cowries and an overview of cowry species, biology and ecology, as well as the various uses to which cowrie shells have been put in different cultures, can be found in Appendix 1.

Description of the specimen

The specimen consists of the basal part of a cowry shell. It measures 72.80mm in length and 42.80mm in width at its widest surviving part. The columellar side is somewhat flat (Plates 7 & 8).

Within the aperture, the fossula and columella are broken away, leaving a length of fossula about 5mm wide and making the aperture appear wider than it should be. The white outer layer of the shell is present anteriorly, but lost on the posterior two thirds. Nineteen columellar teeth remain on the white area, the rest having been broken away. There are 23 labial teeth. There appear to be traces of calcareous worm tubes over the teeth and in the spaces between them. This indicates that the shell must have been empty when it was collected. The top of the shell is broken off and missing. The broken edge is rough, so it is unlikely to have been cut off and is more likely to have been found in this condition.

Examination of the small fragment (Plate 9) shows it is the lower edge of the fossula. It fits onto the corresponding broken edge of the fossula. The break is visible at the far left of the photograph.

Identification of the specimen

Identification was based mainly on the size of the specimen and the structure of the surviving teeth. The mid-columellar teeth are quite long, extending slightly over the base, and are plicate, i.e. they extend as long folds. This occurs in only one species of comparable size: *Cypraea pantherina* (Solander 1786). The general shape of the specimen is also consistent with this species.

The surface is unusually flat for the species. This suggests that it could be the rarer northern subspecies *rasnasraniensis* (Heiman 2002), which has an almost flat base. However, the shell does not seem sufficiently broad in comparison with its height. The ratio of width to length for *rasnasraniensis* is 0.61, and that for height to length is fairly constant at 0.52 (Heiman 2002, 43-4). The ratio of width to length for the specimen in question is 0.588. However, the widest part is missing, so this figure is slightly low. Width to length ratios for specimens of the nominate subspecies in the author's collection range from 0.57 to 0.596. That of the specimen in question is within the range for the nominate subspecies, but is slightly too narrow for the northern subspecies. Since the top part of the specimen in question is missing, the height to length ratio, which would give a more definitive indication of the subspecies, cannot be determined. Thus the subspecies cannot be determined with certainty.

Approximate age at death

The specimen appears to be an adult shell, in that all the surviving teeth appear to be fully developed. However, the extremities appear to be slightly shorter than those of fully adult shells of the same species. This suggests it is a young adult, so it was probably approximately 7 - 12 months old (Dr. Lorenz, *pers. comm.*) at the time of death. Size is not affected by age. When the animal reaches maturity, the outer lip of the shell turns in so that the aperture becomes a slit, and growth ceases except for a thickening of the shell, especially at the margins and extremities.

Occurrence of cowries in European graves

Cowries have been found in early graves in England, France and Germany, along with other personal objects buried with women. Examples have been found pierced for suspension as pendants, some resting on the skeleton in pairs, suggesting attachment to garments. Several have been found in Saxon women's graves in Kent and Somerset. In one of these in Somerset, possibly dating to the 7th century, a *C. pantherina*, pierced at one end, was found beside the skeletons of a woman and a seven month old child. Other grave goods included a piece of chalk cut into the shape of a heart, a large boar tusk, a thick iron pin 2.5 inches long, a flint scraper and a Roman coin. Cowries were possibly believed to ensure life and resurrection (Allan 1956, 6).

Dr. Felix Lorenz (*pers. comm.*) has stated that *C. pantherina* have also been found in 5th century Merovingian graves in Southern Germany. Only wealthy women had them in their graves. He was of the opinion that they came from the Yemen area.

Conclusion

The base of a cowry shell found in a 10th - 12th century grave at Scotts Close, Hilton, appears to be from a shell of *Cypraea pantherina*. Specimens of the same species have been found in other Anglo-Saxon and contemporary European graves. It was probably intended as a charm rather than as an ornament. Its presence suggests that the human skeleton with which it was found was probably that of a woman.

Charred plant macrofossils and other remains

By Val Fryer

Introduction

Samples for extraction and analysis of plant macrofossil assemblages were taken from across the excavated area and seven samples were submitted to form the basis of this report.

Methods

The samples were bulk floated by Archaeological Solutions and the flots collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications of up to x16; the plant macrofossils and other remains noted are listed in Appendix 2. Nomenclature within the table follows Stace (1997). Material has been categorised by group: cereals, herbs, wetland plants and other plant macrofossils. The presence of mollusc shells and other material types has also been noted.

All plant remains were charred. Modern contaminants including fibrous roots, seeds and arthropods were present throughout. As the density of material present in each assemblage was extremely low, no attempt was made to quantify the plant remains; approximate density of material within each samples is recorded in Appendix 2.

Sample composition

Plant macrofossils

Cereal remains and/or seeds of common weed plants were present at a low density in all but Sample 8 (Modern Pit F2358, L2310). Preservation was generally very poor; the cereal grains and seeds were very puffed, possibly due to high temperatures during combustion, and the chaff was extremely abraded and fragmented.

Barley (*Hordeum sp.*) and wheat (*Triticum sp.*) grains were recorded, with wheat occurring more frequently. Both elongate grains typical of spelt (*T. spelta*) and rounded hexaploid forms (almost certainly of bread wheat (*T. aestivum/compactum*) type) were present, along with spelt glume bases and a single bread wheat type rachis node. The occurrence of spelt within these assemblages is somewhat unexpected, as its cultivation had ceased in the eastern region by the middle Saxon period. However, possible sherds of Roman pottery were recorded from a small number of the excavated features and it would appear most likely that these, along with the spelt chaff, were residual from earlier Roman horizons. This prolonged period of burial and disturbance would also explain the heavily-abraded condition of the chaff.

Weed seeds were extremely rare and all were present as single specimens within the assemblages. Taxa noted included stinking mayweed (*Anthemis cotula*), a cereal crop weed commonly found on the local heavy clay soils, a small or immature variety of medick or clover (*Medicago/Trifolium sp.*) and indeterminate grasses (*Poaceae*). A single nutlet of saw-sedge (*Cladium mariscus*) was noted in Sample 1 (Phase 1 Pit F2245, L2246).

Small charcoal fragments were present in all assemblages alongside pieces of charred root or stem and indeterminate fragmented seeds.

Molluscs

Mollusc shells were present at a very low density in all but Samples 10 (Undated Pit F2159, L2160) and 11 (Phase 1 Pit F2192, L2193). Most specimens retained delicate surface structures and good pigmentation and these are therefore almost certainly modern contaminants within the contexts. However, a small number of shells were pitted, abraded and heavily-fragmented and these may be contemporary with the features from which the samples were taken. All four of Evans (1972) ecological groups of land snails were represented and, in addition, a limited number of freshwater species were also recorded.

Other materials

The fragments of black 'cokey' and tarry material are probable residues of the combustion of organic remains (including cereal grains) at extremely high temperatures. Other remains were exceedingly rare, but small pieces of bone, fish bone and burnt or fired clay were recorded from Samples 1 (Phase 1 Pit F2245, L2246), 7 (Phase 2 Ditch F2106, L2107) and 9 (Phase 4 Ditch F2306, L2307).

Summary

In conclusion, although plant remains are present, the density of material recovered is extremely low and the preservation of the macrofossils is generally very poor. Despite the fact that the majority of samples were taken from features of late Saxon and medieval date, it would appear likely that a high proportion of the material recovered is residual from earlier Roman deposits, and, as a result, it is difficult to base any interpretation of the features upon the results obtained. However, it is curious that more material of late Saxon and medieval date is not obviously present within these samples, and it is possible that this absence of material may indicate that the excavated features were peripheral to any main centres of activity during these periods.

Radiocarbon dating

Beta Analytic/Thomas Woolhouse

Two samples of bone were submitted to Beta Analytic Inc., Miami, Florida, for radiocarbon dating analysis. Radiocarbon dates (Table 11) were obtained in order to provide absolute dates for the partial human skeleton (SK2129) found in Pit F2245 and the pig skeleton found in Pit F2301 L2303.

Sampling strategy

The human and animal bone assemblages were sub-sampled for material for radiocarbon dating at the post-excavation stage. This was done based on the perceived potential significance of the source features.

The human inhumation (SK2129) in 10th - 12th century (Phase 1) Pit F2245 was accompanied by grave goods which were highly unusual in a medieval context. Bone from the skeleton was therefore sampled for radiocarbon dating in order to investigate the hypothesis that this feature actually represented a medieval reburial of a disturbed early - middle Saxon inhumation.

Pit F2301, in which the skeleton of an elderly pig was found, was provisionally dated on ceramic grounds to the medieval period. This breed of pig is not thought to have been present in England as early as the medieval period, so the skeleton was sampled for radiocarbon dating to further investigate this potentially significant medieval spot date.

Method

Calibrated date ranges (Table 11) were based on the internationally recognised maximum intercept method (Stuiver and Pearson 1986). This calibration curve is generally agreed upon back to *c.* 2500 BC, thus covering the period in question. Calibrations were compiled using a recent calibration database (Stuiver & van der Plicht 1998; Stuiver *et al.* 1998; Talma & Vogel 1993). The samples were not known to have been disturbed by later archaeological activity. It is possible, given the high water table at the site, that the pig skeleton found at the base of Pit F2301 had been exposed to some groundwater contamination.

Results

It was anticipated that the human skeleton would date to the early - middle Saxon period. The sample provided a radiocarbon date range of 660 to 790 cal. AD (1290 to 1160 cal. BP), indicating that the buried individual had died during the middle Saxon period. Pit F2245 therefore represented a medieval reburial of the skeleton.

The pig skeleton was found in a provisionally medieval context. The radiocarbon dating was inconclusive as the sample returned three possible date ranges. However, all of these were post-medieval or modern, indicating that the small amount of medieval pottery found in the same pit as the pig was residual and that the pig was therefore not a very early example of a rare breed.

Laboratory number (Beta-)	AS sample number	Analysis	Conventional radiocarbon age	Calibrated results: 2 sigma calibration (95% probability)	Calibrated results: 1 sigma calibration (68% probability)	Intercept of radiocarbon age with calibration curve
217809	HAT 569/ F2245	Radiometric standard delivery (collagen analysis)	1290+/-40BP	Cal AD 660 to 790 (Cal BP 1290 to 1160)	Cal AD 680 to 770 (Cal BP 1270 to 1180)	Cal AD 700 (Cal BP 1250)
217810	HAT 569/ L2303	Radiometric standard delivery (collagen analysis)	220+/-40BP	Cal AD 1640 to 1680 (Cal BP 310 to 260)	Cal AD 1650 to 1670 (Cal BP 300 to 280)	Cal AD 1660 (Cal BP 290)
				Cal AD 1730 to 1810 (Cal BP 220 to 140)	Cal AD 1770 to 1800 (Cal BP 180 to 150)	
				Cal AD 1930 to 1950 (Cal BP 20 to 0)	Cal AD 1940 to 1950 (Cal BP 10 to 0)	

Table 11: Calibration of radiocarbon age to calendar years

DISCUSSION

Hilton's development

Roman and early Saxon occupation?

Evidence of Roman activity at Scotts Close was limited, consisting of moderate quantities of probably predominantly residual pottery and some possible Roman ditches. Nevertheless, this evidence may point to a previously unknown Romano-British rural settlement or farmstead in the vicinity, in the hinterland of the small town at Godmanchester. Aerial photography has previously identified cropmarks of probable Iron Age or Roman date around the village (Deegan 1995), while fragments of re-used brick of Roman character in the fabric of St Mary Magdalene's Church (HER 05783A) offer a further slight indication that a Roman building once existed in the area.

A Romano-British settlement in Hilton would represent an important addition to our knowledge of Roman occupation in west Cambridgeshire. At present, known sites tend to be clustered along the courses of the Cam, Ouse and Nene, taking advantage of the lighter soils of the river valleys (Wickes 1995, 25-9; Hanley 2000). Remains of extensive Romano-British agricultural landscapes, comprising field systems, enclosures, animal paddocks and droveways, survive along the Ouse valley terraces (Gibson 2005, 28). The clay uplands appear to have been more sparsely settled, but this may be more a consequence of the poor responsiveness of the clay soils to aerial photography than a reflection of the true settlement pattern. Aerial photographs taken

in particularly dry conditions in Summer 1995 revealed cropmark enclosures possibly representing Roman settlement sites in several parishes around Hilton, including Conington, Elsworth and Knapwell, all on similar heavy clays (Taylor 1997, 32, 42 & 77). The residual pottery from Scotts Close is particularly interesting in the light of the discovery on site of the reburial of an early - middle Saxon individual. This throws up the tantalising possibility of continuity of occupation from the Roman to the Anglo-Saxon period.

The original provenance of the early - middle Saxon inhumation (SK2129) reburied in Grave Pit F2245 is unclear. However, it seems reasonable to conjecture that it originated close to, if not at, the site. The intensive medieval pit and ditch-digging in the area provides a likely context for its discovery and disturbance in the 10th - 12th century. Moreover, if the reasons suggested for the careful reburial of the skeleton (see below) are accepted, there is no reason to suppose the skeleton and grave goods would have been moved far. The emphasis is perhaps more likely to have been on minimising disruption and rapidly reburying the deceased. If the individual was originally buried on or close to the site, this may indicate the presence of an undiscovered early - middle Saxon settlement site in the vicinity, a possibility further enhanced by the putative sunken-featured building found during the evaluation.

To an even greater extent than the known Roman sites, early - middle Saxon settlements in the region tend to follow the major rivers and their tributaries, favouring light, dry soil sites in close proximity to watercourses. Close to Hilton, regionally and nationally important early Saxon settlements fitting this model have recently been excavated at Cardinal Distribution Park, Godmanchester (Gibson with Murray 2003) and Station Road, Gamlingay (Murray 2006). A site of this date at Hilton would constitute fascinating evidence of early Saxon settlement on the Huntingdonshire clay plateau and future fieldwork in the village may allow this possibility to be further investigated.

The origins of the modern village

The boundary ditches and pits at Scotts Close constitute the earliest firm evidence found to date for the origins of Hilton. The presence of early forms of St Neots ware and other Saxo-Norman pottery suggests that activity on site may have begun as early as the 9th century, perhaps predating the construction of the surviving church by up to 300 years.

Many later medieval villages are known to have their origins in the late Saxon period, a group in which Hilton can now be included. It has been suggested that there was a widespread shift in settlement from the late 8th/9th century, with the regularly shifting, migratory hamlets and farmsteads of the early to middle Saxon period being replaced by essentially stable communities living in increasingly nucleated villages (Hamerow 1991, 16-17). This picture of discontinuity is reinforced by archaeology, which generally supports the view that later Saxon and medieval nucleated villages do not occupy the same sites as pre-9th century settlements (Lewis *et al.* 1997, 95; Taylor 1983, 128; Hamerow 1991, 16).

However, it is too early to say with certainty whether Hilton first originated during this suggested 'late Saxon shift'. Importantly, the early - middle Saxon burial found

on site may indicate the presence of an as yet undiscovered settlement of this date close by, pointing to still-earlier origins for the village. Continuity of settlement from middle Saxon through to medieval times has been argued at Maxey and Wollaston (Northants.). At Maxey, a 7th century hamlet may have shifted the short distance to the site of the existing medieval village, while at Wollaston, pre-9th century pottery has been found at more than one location around the village, suggesting the nucleated village may have resulted from several earlier hamlets coalescing (Lewis *et al.* 1997, 97). The early to middle Saxon settlement at Willingham later became a manorial centre for Ely, possibly pointing to a continuous sequence of occupation from early Saxon to medieval times (Taylor 2000, 24). The development of nucleated villages across Midland England in the late Saxon and early medieval period may therefore have been a less dramatic change than has sometimes been argued. Some nucleated villages probably grew from pre-existing settlements or shifted very slightly from old settlement sites, rather than being completely new foundations in new locations. Given the early - middle Saxon burial found at Scotts Close, future excavation around the village may reveal the same to be true of Hilton.

The excavated evidence suggests that the site lay on the periphery of the late Saxon and medieval village. This is supported by the relatively small quantity of finds: even the large ditches generally only yielded a few hundred grams of pottery each. This, coupled with the complete absence of evidence for buildings, suggest that it was not itself the site of domestic occupation. The distribution of finds was also noticeably weighted towards the southern edge of the excavation area, perhaps reflecting increased proximity to inhabited areas. By far the largest pottery assemblage, comprising 44% (by weight) of the medieval total, and including large unabraded sherds from several partially reconstructable vessels, came from Ditch F2100 in the south of the site. This fits well with the southern part of the site lying closer to St Mary's Church and probably, therefore, to other core areas of the late Saxon and medieval village.

The small enclosed plots at Scotts Close were thus probably back-land areas just outside the main areas of occupation in the village. They were too small to have formed part of Hilton's open field system and another agricultural use, perhaps as allotments or areas of pasture for grazing, seems more probable. Many of the pits found across the site may have been dug to assist surface drainage, but perhaps also served to collect drinking water for livestock (see Description of Results, above).

It has been powerfully argued that the difficulties involved in farming certain soils were the determining factor in the development of nucleated settlements as the population grew in the late Saxon period (Williamson 2003). Nucleation occurred in those areas where the soils were not only heavy and needed large teams of oxen to work them, but more particularly in those regions where the soil type afforded only a narrow window of opportunity each year in which to plough or harrow the fields without damaging the soil structure (Williamson 2003, 155). In these areas, it was imperative that people contributing to the plough team lived in close proximity so that they could assemble rapidly and take advantage of every available hour in which the fields were in a suitable condition to work. This weighed against dispersed settlement, where valuable time would have been wasted in bringing together a plough team from scattered farmsteads. The need to keep large numbers of ploughing oxen in close proximity required abundant good grazing and encouraged settlement to

concentrate close to areas of damp ground suitable for pasture (Williamson 2003, 180-1).

This model fits Hilton well. The Evesham 3 soils on which the village lies are nutrient-rich, but heavy, very poorly-draining and prone to compaction. They would have required large plough teams to farm and the soil structure would have allowed only a short time each year to work the fields (Williamson 2003, 142-8). These conditions would have required the local population to live close together so that a plough team could be assembled rapidly, perhaps helping to explain the development of the nucleated village in the late Saxon period. The need for grazing for these draft cattle may have determined the choice of location for the village. The large areas of damp ground at the village green and in the possible pasture plots at Scotts Close constituted a vital agricultural resource and would have acted as a pull factor encouraging settlement.

A slight reservation must be made: Hilton does not display a 'classic' nucleated form, with post-medieval maps showing several distinct clusters of houses, the gaps between which have since been filled in with more recent housing. Nevertheless, these were no more than a few hundred metres apart, certainly not scattered widely across the landscape as in areas of 'ancient countryside'. The villagers of Hilton would still have lived close enough together to be able to assemble quickly when required. In addition, it is not known exactly how this post-medieval settlement pattern came about and what relationship it bears to any earlier patterns. Indeed, the features found at Scotts Close help to 'fill in' the gaps between the clusters of older houses in the village, perhaps hinting at a once more compact and nucleated settlement pattern, possibly only broken up later on. The end date for activity at Scotts Close (Thompson, this report) might point to the downturn of the rural economy at the beginning of the 14th century, or the Black Death, as the likely date of depopulation and decline in the core of the early medieval village and the consequent genesis of the more dispersed village plan recorded on post-medieval maps.

Whereas villagers would probably have had communal rights to graze their livestock on the green, there are indications that the plots at Scotts Close were in individual or family ownership. This is suggested by the way the pits found on site were often clustered close to, or aligned parallel with, the contemporary boundary ditches, apparently respecting the limits of the land units that the ditches demarcated. Similar areas of home pasture, attached to individual peasant tofts, were identified in the deserted medieval village of Grenstein in Norfolk, although in this instance, the paddocks may have originally been domestic holdings, taken over as pasture by villagers in adjacent plots only as the population of the settlement fell (Wade-Martins 1980, 114-5). Areas of privately-owned pasture were apparently not part of the original village layout at Grenstein in the same way as they may have been at Hilton.

The area excavated at Scotts Close was too small, and too peripheral, to allow a reconstruction of Hilton's early morphology. The principal alignments of the ditch system bear little direct relationship with the extant streets in this part of the village, possibly hinting at an earlier village layout. However, in broad terms, the regular system of rectilinear plots demarcated by right-angled boundary ditches is typical of many medieval villages across the region and the country as a whole. Often, as for example at Grenstein, a row of sub-rectangular tofts flanked a through-road or green

and terminated in a common back-ditch (Wade-Martins 1980, 101). The plots at Hilton may similarly have flanked a now-vanished route. However, more complex arrangements of rectilinear tenements have been identified in villages such as Cottenham, where the late Saxon/ early medieval settlement was radial in form, apparently converging on a now-disappeared open space, green, springhead or early manor house (Mortimer 2000, 19, 20 fig. 18). Future fieldwork in Hilton's centre may uncover a wider area of the late Saxon and early medieval village and allow its early layout to be reconstructed.

It has been suggested that settlements with rectilinear plans and boundaries between plots are a reflection of tenurial status and the freedom of individual villagers in relation to space (Reynolds 2003, 131). They may have been founded under lordly control, their spatial organisation reflecting growing social rigidity, increasingly regulated space and the imposition of a plan on the population. The rectilinear layout of this part of late Saxon Hilton may thus tell us something about the social context within which the village formed. The present excavation has been a small, but valuable first step in dating and characterising Hilton's early development, with important implications for our understanding of medieval settlement in the region and its relationship to earlier settlement patterns (Wade 2000, 24).

The early - middle Saxon inhumation

Medieval reburial

The most intriguing feature of the site was the pagan Anglo-Saxon inhumation apparently disturbed and then reburied with some care in the medieval period. As far as is known at the time of writing, this is unparalleled. It affords a unique insight into medieval perceptions of 'otherness' and attitudes towards the pagan past.

It seems likely that the original burial was accidentally disturbed during the medieval pit and ditch-digging on site. Whoever found it then seems to have felt it necessary to gather up the skeleton and at least some of the grave goods and rebury them, possibly also marking the grave, as suggested by the surviving postholes around Pit F2245. It seems likely that the burial's medieval discoverer knew it was non-Christian, as the reburial took place away from consecrated ground, rather than being taken the short distance to St Mary's churchyard a few hundred metres to the south. However, at the same time, the seemingly careful collection and re-deposition of the grave goods, some of which, like the glass bead, were very small and could easily be overlooked, suggests a degree of care was taken over the reburial. This level of care stands in contrast to the treatment of accidentally disturbed graves in some medieval Christian cemeteries (Hadley 2001, 42-3). At St. Helen-on-the-Walls, York, for example, intercutting burials were common and articulated limbs were sometimes found overlying other burials, suggesting disregard for the earlier interments (Hadley 2001, 119). This apparent recognition of the burial as non-Christian, combined with the respectful treatment of the skeleton and grave goods defies simple explanation.

In the absence of direct parallels for the reburial, the treatment of prominent and highly-visible pagan sites and monuments by Anglo-Saxon and medieval Christians offers a valuable source of comparison. Such an enquiry reveals a deep ambivalence in attitudes towards the pagan past. At times, the response of the Church to pre-

Christian sites was to attribute them to the Devil and treat them as places of evil. This may explain the careful burial of some of the standing stones at Avebury (Wilts.) in the early 14th century, interpreted by some as an attempt to reduce their perceived malevolent influence (Burl 2002, 32-4). However, although highly plausible, the evidence supporting this interpretation is far from clear-cut. References to the proscription of the worship of stones by the ecclesiastical authorities have been cited, but a direct link with sites such as Avebury remains speculative (Ucko *et al.* 1991, 179).

In contrast to this possible fear of the pre-Christian site at Avebury, in other instances attempts were made to appropriate pagan monuments for the new religion. At Rudstone (Humberside), a standing stone was probably first Christianised by affixing a crosshead to it (hence Rud- or rood/cross -Stone) and then incorporated into All Saints Churchyard (Holtorf 1998, 23). This may have been an attempt to ritually purify a formerly pagan site, but should more probably be seen in the context of the Church trying to ease the process of conversion by retaining some of the sites and paraphernalia of the old religion. At times then, sites and monuments associated with the old religion were salvaged and incorporated into the new; the Church's response to the pagan landscape was not uniformly hostile.

However, the treatment of pre-Christian sites and monuments that could usefully be reused in Christian worship and pastoral provision cannot necessarily be extrapolated to Christian treatment of the pagan dead and their burial places. The later use of the pagan royal burial ground at Sutton Hoo may be more relevant in this context. Between the 7th/8th and 11th century, the site was used as an execution ground, evidenced by the contorted and bound 'sand bodies' and postholes of gallows excavated by Martin Carver's team (Carver 1998, 72-3 & 137-40).

The initial executions at Sutton Hoo appear to have been contemporary with and intimately associated with the burial mounds themselves. It has been suggested that they represent individuals who opposed the new dynastic leaders buried under the mounds, their executions being connected with the exercise and display of kingship (Carver 1998, 140-2; Lucy 2000, 75). After the royal dynasty had converted to Christianity, their old burial site continued to be used as a place of execution. Carver suggests that a pagan cemetery may have been deemed a proper place to dispose of criminals who had sinned against the authority of the ruler and also against the Christian God. One of the two groups of mutilated bodies, inhumed in 'satellite burials' clustered around Mound 5, may have been of unrepentant pagans, executed and then deliberately buried next to the mound remembered as belonging to the founder of pagan kingship (Carver 1998, 76 & 142-3). The other group, situated on the eastern periphery of the cemetery, may have been of Christians who had strayed or rebelled. Although not permitted a burial on consecrated ground, they were given at least an approximation of a proper Christian burial rite, some having coffins or being aligned east to west in the Christian manner (Carver 1998, 143).

In part, the burial of executed criminals at Sutton Hoo in the Christian era was probably intended to be a further punishment for their crimes. In addition to being unconsecrated ground, epic poems such as *Beowulf* depict barrows as the houses of dragons and demons, so perhaps offenders were buried alongside the mounds in the belief that they would suffer eternal torment from the supernatural monsters residing

in them (Reynolds 1998). However, in addition to the perceived punishment being meted out to the criminals by burying them at a pagan site, this use of Sutton Hoo as an execution ground was probably also intended as a statement of contempt for the pagans originally buried there and should be seen as a concerted attempt to degrade the site. This degradation stands in stark contrast to the respect apparently shown to the pagan burial at Hilton.

This careful treatment of the pagan remains at Scotts Close could stem from recognition on the part of the burial's discoverers that the individual was in some way connected to them. Perhaps they had some sense that the buried individual had lived in the same settlement and the same local landscape as they did and were therefore, in a sense, their ancestor. As such, although they were not Christian, they were still deemed worthy of a respectful reburial. Similar concerns run through the Icelandic sagas, which although written in the post-Conversion period (post *c.* 1000) by medieval Christians, often portray the pagan Icelanders in a positive light. In some passages, they are depicted as almost proto-Christians, for example, anointing their newborn children with water in a ritual strongly reminiscent of Christian baptism (e.g. *Laxdaela Saga* Chap. 8; Kunz 1997, 283). The medieval writers seem reluctant to reject their ancestors just because they were not Christian and display a respectful curiosity about paganism rather than simply condemning it (Kellogg 2000, 46). A similar sense of affinity with their forebears, transcending the religious divide, may explain the respect shown by people in the medieval period to the pagan Saxon at Hilton. Thus, as with the eastern group of criminal burials at Sutton Hoo, the Hilton skeleton was not worthy of reburial on consecrated ground, but was thought to deserve at least a respectful and semi-Christian rite, as suggested by the east to west-aligned grave markers.

However, this is probably pushing things too far. It is to be doubted whether the person(s) who accidentally dug up the pagan Anglo-Saxon at Scotts Close in the 10th - 12th century had any real idea of the antiquity or original cultural context of the burial. When unexpectedly coming across a skeleton in un-consecrated ground, accompanied by unusual objects (e.g. the cowry shell and copper alloy disc), their reaction is probably far more likely to have been one of fear than of affinity.

After disturbing an unusual burial, the medieval finder may have been more worried about the consequences of angering the spirit of the dead individual. In early medieval thought and folklore, the evil dead could physically rise up from the grave and haunt the living. William of Malmesbury (*Gesta Regum II*, Chap. 4) writes that it is well-known that the Devil causes the bodies of the evil dead to walk (Sharpe & Giles 1911). William of Newburgh (writing *c.* 1198) recorded four contemporary accounts of physically active and malevolent corpses in various parts of Britain and indicates that he had heard of others too (Stevenson 1856/1996, 656-61). In one account, from around 1196, a wicked man who had died angry and unshriven came out of his grave every night and roamed the streets of Anantis Castle (possibly Alnwick, Northumberland) causing plague. Criminals, thought to have died unrepentant or unfit for Salvation, were often buried face-down, sometimes with rocks on their backs to prevent them moving from the grave if they did wake from death (Simpson 2003, 1). Belief in the restless dead may also be one reason why criminals and suicides were routinely buried at crossroads from the Anglo-Saxon period onwards. The choice of roads may have been thought to confuse the angry

ghosts of the deceased and prevent them from returning to haunt their homes (Halliday 1997), while the cross of the road may have been thought to disperse the evil energy from the corpse (Halliday 1995, 113). Aelfric of Eynsham, writing in the early 11th century, described 'heathen burials' as places of evil and a favourite haunt of witches (Halliday 1995, 113).

Fear that criminals and other unrepentant wrongdoers could rise from the grave and terrorise the living may thus have been fairly widespread in the medieval period. There may, of course, have been some differences between the attitude of the average medieval villager and a lord or high ecclesiast, but William of Newburgh's accounts caution against too simplistic an interpretation of superstitious, credulous peasants and a rational elite. In one of William's accounts, of a revenant haunting a Buckinghamshire village, Bishop Hugh of Lincoln was consulted as to what should be done. Although his opinion as to the appropriate way to end the haunting may have varied from that of the villagers, there is no indication that he doubted the truth of the story and the existence of the 'ghost' (Simpson 2003, 2).

This fear of haunting by the restless corpses of criminals and unrepentant sinners may well have extended to the pagan dead, and explain the respect shown to the disturbed pagan Saxon. Its discoverer may have felt it necessary to attempt to placate the deceased by reburying her with her original grave goods. It is tempting to see the postholes around the pit as holding warning markers, to make sure the burial was not disturbed again, or perhaps wooden crosses, to keep a potentially restless spirit at bay. When in the 19th century, thunderstorms followed the opening of a round barrow at Beedon (Berks.), the villagers thought it 'caused by the sacrilegious undertaking to disturb the dead' (Burl 2002, 35). One of the labourers employed left the work in consequence. It is not difficult to imagine this irrational fear of the dead and the perceived supernatural punishment for disturbing them persisting even today.

Cultural context of the original burial

Whatever the motivation of those responsible for the reburial of SK2129, the skeleton and grave goods themselves are interesting for the light they shed on early - middle Saxon burial customs in the region. Although much cannot be known about the circumstances and character of the original burial, the grave goods and radiocarbon date of AD 660 - 790 suggest that it belonged to the 'Final Phase' of pagan furnished inhumations, when the Conversion to Christianity was gaining momentum and the custom of accompanied burial gradually dying out.

However, the burial cannot be assumed to be pagan simply because it was accompanied with grave goods: there was no immediate contradiction between Christianity and the use of grave goods and the Church never banned their use (Lucy 2000, 5). Moreover, the radiocarbon date of the skeleton is fairly late in a pagan context. By this time, the Conversion must have been well under way in what is now Cambridgeshire. Several large monasteries had been founded, including the royal houses at Peterborough (655-6) and Ely (672). King Offa founded a minster at Cambridge in the 8th century and early mother churches may also have been established at Godmanchester, St Neots and St Ives, all short distances from Hilton (Oosthuizen 2000). These and other sites would presumably have acted as centres for preaching and pastoral provision to the region's laity. A mid-7th to late 8th century

cemetery, thought to be Christian based on the date, general lack of grave goods, broadly east to west alignment of the graves and the presence of a possible timber church, has been excavated 15km south-west of Hilton at Gamlingay, testifying to the spread of Christianity among the local population (Murray 2005/6, 264-9). A late 6th/7th century cemetery, identified as Christian on the basis of grave alignments, the general paucity of grave goods and the presence of an ancient church nearby, is also known at Burwell (Lethbridge 1924).

It thus seems more likely that the original burial at Hilton took place against a background of religious flux in which both pagan and Christian ideas co-existed. It would have taken time for the developing Church to fully establish the frameworks for preaching and pastoral care necessary to fully complete the process of Christianisation. It is easy to imagine that initially at least, remoter communities away from the new minsters might rarely see a priest and people's understanding of the new religion and what it required of them might be limited. In such a climate, old beliefs and rites would no doubt have persisted, perhaps blurring and merging with new Christian elements in the minds of the rural population.

Exactly what significance burial with a glass bead, copper alloy disc, chalk spindle whorl and cowry shell had in the minds of the relatives of the Hilton skeleton is ultimately unknowable. Large, complete cowry shell amulets have been found as female grave goods at a number of sites, mainly in southern England (Lucy 2000, 135), but also at Cleatham, Lincolnshire (Leahy & Coutts 1987, 7) and in Viking York (Richards 1991, 89). At least six cowries have been recovered from sites in Cambridgeshire, from Little Shelford (Taylor 1997, 82), Haslingfield (necklace), Linton Heath B (grave 73, beside head), Shudy Camps (graves 48 and 91, beside head; Lethbridge 1936) and Burwell (grave 42, amulet box) (Meaney 1981, 123). Cowry shell beads, one attached to a pendant, have recently been recovered from two graves (SG69 & SG82) in the late 6th/7th century inhumation cemetery at Water Lane, Melbourn (Duncan *et al.* 2003, 111). This relatively widespread distribution might suggest that some common significance was attached to cowries in Anglo-Saxon thought and culture. They may have had associations with female identity, as they are typically found in late 6th/7th century female graves (Huggett 1988, 70-2). The occurrence of cowries together with chalk whorls, as seen at Hilton, has also been noted in the graves of pregnant females at Camlerton (Somerset) and Shudy Camps (Cambs.) and it has been suggested that the combination of these objects may have connotations to do with breast feeding (Meaney 1981, 98).

Cowry shells have had symbolic or ritual significance in many cultures, but for varying reasons. They have been widely-used as natural amulets against sterility and the evil eye and have been associated with the vulva, fecundity and good luck (Meaney 1981, 125). They are also used as funerary or decorative emblems and can signify life and death, functioning as underworld resurrection symbols, as do some other shells (Tressider 2001, 123, 437; Monserrat 1996; Richards 1992). Ethnographic parallels suggest that cowries with the top sliced off, such as this one, may have been used in divination (Meaney 1981, 259-60).

However, it is obviously possible to read too much into the significance and symbolism attached to grave goods. More prosaically, it may simply have been the shell's 'exotic' provenance which was important, with a family or community making

a statement about its socio-economic position and aspirations through the display and conspicuous consumption of a rare object. Alternatively, it may just have been the shell's aesthetic quality, as a beautiful object, which was foremost in the minds of people who buried cowries with their loved ones.

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BIBLIOGRAPHY

Addyman, P.V. 1965 'Late Saxon settlements in the St Neots area', *Proceedings of the Cambridge Antiquarian Society* 58, 38-73

Allan, J. 1956 *Cowry Shells of World Seas*. Georgian House, Melbourne

Baker, J. and Brothwell, D. 1980 *Animal Diseases in Archaeology*. Academic Press, London

Bender, B. 1998 *Stonehenge. Making Space*. Berg

Brown, N and Glazebrook, J (eds) 2000 Research and Archaeology: A framework for the eastern counties. 2. Research agenda and strategy. *East Anglian Archaeology Occasional Papers* 8

Buckley, D.G. and Major, H. 1988 'Quernstones' in Crummy, N. 'The post-Roman small finds from excavations in Colchester 1971-85', *Colchester Archaeological Report* 5 (Colchester), 37-9

Buikstra, J.E. and Ubelaker, D.H. 1994 *Standards for Data Collection from Human Skeletal Remains*. Arkansas Archaeological Survey Report no. 44, Fayetteville, Arkansas

Burgess, C.M. 1985 *Cowries of the World*. A.S. Barnes and Co., New York

Burl, A. 2002 *Prehistoric Avebury. 2nd Edition*. Yale University Press, London

Carver, M. 1998 *Sutton Hoo: Burial Ground of Kings?* British Museum Press, London

Chapman, A., Carlyle, S. and Leigh, D. 2005 'Neolithic Beaker pits and a Bronze Age landscape at Fenstanton, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 94, 5-20

Clutton-Brock, J. 1974 'The Buhen Horse', *Journal of Archaeological Science* 1, 89-100

Collins, P. 1987 *Getting into the Groove: an experiment to find differences between cut-marks made by non-metal and metal tools*. Unpublished BA dissertation, Department of Archaeology and Prehistory, University of Sheffield

Crank, N. and O'Brien, L. 2001 *Scott's Close, Hilton, Cambridgeshire: an archaeological desk-based assessment and field evaluation*. Hertfordshire Archaeological Trust unpublished report 980

Crank, N., Grant, J. and Williams, J. 2004 *Land at High Street, Hilton, Cambridgeshire: an archaeological evaluation*. Archaeological Solutions unpublished report 1528

- Crank, N., Manning, K., Nicholson, K. and Rennell, R. 2004 *Residential Development, Scotts Close, Hilton, Cambridgeshire: an archaeological investigation interim site narrative*. Archaeological Solutions unpublished report 1653
- Crummy, N. 2000 'The small finds' in Brooks, H. 'Excavations at 79 Hythe Hill, Colchester 1994 - 5', *Essex Archaeology and History* 31, 112-24
- Crummy, N. 2003 'Small finds' in Gibson, C. 'An Anglo-Saxon settlement at Godmanchester, Cambridgeshire', *Anglo-Saxon Studies in Archaeology and History* 12, 183-90
- Deegan, A. 1995 'Aerial photographic assessment: archaeology' Air Photo Services report in Murray, J. *College Farm, Gravely Road, Hilton: an archaeological desk-based study*. Hertfordshire Archaeological Trust unpublished report 133
- Drake, J. and O'Brien, L. 2004 *Land at High Street, Hilton, Cambridgeshire: archaeological field survey*. Archaeological Solutions unpublished report 1551
- Driesch, A. von den and Bosseneck, J. 1974 'Kritische Anmerkungen zur widerristhöhenberechnung aus Längenmaßen vor-und frühgeschichtlicher Tierknochen', *Säugetierkundliche Mitteilungen* 22 (Munich), 325-48
- Driesch, A. von den 1976 *A Guide to the Measurement of Animal Bones from Archaeological Sites*. Peabody Museum
- Duncan, H., Duhig, C. and Phillips, M. 2003 'A Late Migration/Final Phase cemetery at Water Lane, Melbourn', *Proceedings of the Cambridge Antiquarian Society* 92, 57-134
- Edwards, D. and Hall, D. 1997 'Medieval pottery from Cambridge sites in the Benet Street - Market area', *Proceedings of the Cambridge Antiquarian Society* 86, 153-68
- Evans, J. 1972 *Land Snails in Archaeology*. London
- Farbenfabriken Bayer Veterinary Department Leverkusen/Germany, 1994, *Book for Farmers, Stock Disease*. Baywood Chemicals Ltd, Suffolk,
- Gibson, C. with Murray, J. 2003 'An Anglo-Saxon settlement at Godmanchester, Cambridgeshire', *Anglo-Saxon Studies in Archaeology and History* 12, 137-217
- Gibson, C. 2005 'A Romano-British rural site at Eaton Socon, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 94, 21-38
- Glazebrook, J (ed) 1997 *Research and Archaeology: A framework for the eastern counties*. 1. Resource assessment. *East Anglian Archaeology Occasional Papers* 2
- Gmelin, J.F. 1791 *Carli Linnaei Systema Naturae*. 13th Edition. Leipzig

Grant, A. 1982 'The use of tooth wear as a guide to the age of domestic ungulates' in Wilson, W., Grigson, C. and Payne, S. (eds.) *Ageing and Sexing Animal Bones from Archaeological Sites*. BAR British Series 109, 91-108

Grant, J., Williams, J. and Crank, N. 2004 *Land at High Street, Hilton, Cambridgeshire: an archaeological desk-based assessment and evaluation*. Archaeological Solutions unpublished report 1528

Guido, M. 1999 *The Glass Beads of Anglo-Saxon England, c. AD 400 - 700*. London

Gurney, D 2003 *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Paper 14

Hadley, D.M. 2001 *Death in Medieval England – an Archaeology*. Tempus, Stroud

Hall, D. 2000 'The ceramic sequence' in Mortimer, R. 'Village development and ceramic sequence: the middle to late Saxon village at Lordship Lane, Cottenham, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 89, 21-5

Hall, D. 2003 'The pottery' in Alexander, M. 'A medieval and post-medieval street frontage: investigations at Forehill, Ely', *Proceedings of the Cambridge Antiquarian Society* 92, 153-7

Hall, D. 2004 'Medieval pottery' in Cessford, C. and Dickens, A. 'The origins and early development of Chesterton', *Proceedings of the Cambridge Antiquarian Society* 93, 125-37

Halliday, R. 1995 'Wayside graves and crossroad burials', *Proceedings of the Cambridge Antiquarian Society* 84, 113-19

Halliday, R. 1997 'Criminal graves and rural crossroads', *British Archaeology* 25 (June 1997)

Halstead, P. and Cameron, E. 1992 'Bone remains from Flag Fen Platform and Fengate Power Station post alignment', *Antiquity* 66, 499-501

Hambleton, E. 1999 *Animal Husbandry Regimes in Iron Age Britain*. BAR British Series 282, Oxford

Hamerow, H.F. 1991 'Settlement mobility and the 'Middle Saxon Shift': rural settlements and settlement patterns in Anglo-Saxon England', *Anglo-Saxon England* 20, 1-17

Hanley, R. 2000 'Roman rural settlement' in Kirby, T. and Oosthuizen, S. (eds.) *An Atlas of Cambridgeshire and Huntingdonshire History*. Centre for Regional Studies/ Anglia Polytechnic University, 20

Harcourt, R.A. 1974 'The dog in prehistoric and early historic Britain', *Journal of Archaeological Science* 1, 151-75

- Heiman, E.L. 2002 *Cowries of East Sinai*. Keterpress Enterprises, Jerusalem
- Holtorf, C.J. 1998 'Christian landscapes of pagan monuments', *3rd Stone* Oct-Dec 1998, 21-6
- Huggett, J.W. 1988 'Imported grave goods and the early Anglo-Saxon economy', *Medieval Archaeology* 32, 63-96
- Hurst, J.G. 1956 'Saxo-Norman pottery in East Anglia, St Neots ware', *Proceedings of the Cambridge Antiquarian Society* 49, 1-70
- Hurst, J.G. 1958 'Saxo-Norman pottery in East Anglia', *Proceedings of the Cambridge Antiquarian Society* 21, 37-65
- Hurst, J.G. 1976 'The pottery' in Wilson, D.M. *The Archaeology of Anglo-Saxon England*, 284-348
- Institute of Field Archaeologists 1999 *Standard and Guidance for Archaeological Excavation*. IFA, Reading
- IGS (Institute of Geological Sciences) 1983 *East Midlands Sheet 52°N - 02°W 1: 250,000 Series. Solid Geology*. Ordnance Survey, Southampton
- Jones, R., Wall, S., Locker, A., Coy, J. and Maltby, M. 1976 *Computer Based Osteometry Data Capture User Manual*. (1). 1st Supplement to AML Report Number 2333, Ancient Monuments Laboratory DoE. Report Number 3342
- Kellogg, R. 2000 'Introduction' in Thorsson, O. 2001 (ed.) *The Sagas of Icelanders*. Penguin Books, 15-54
- Kirby, T and Oosthuizen, S (eds.), 2000 *An Atlas of Cambridgeshire and Huntingdonshire History* Sudbury: Lavenham Press
- Kunz, K. 1997 (trans.) 'The saga of the people of Laxardal' in Thorsson, O. 2001 (ed.) *The Sagas of Icelanders*. Penguin Books, 270-421
- Leahy, K. and Coutts, C.M. 1987 *The Lost Kingdom: the search for Anglo-Saxon Lindsey*. Scunthorpe
- Lethbridge, T.C. 1924 'The Anglo-Saxon cemetery, Burwell, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 27, 72-9
- Lethbridge, T.C. 1936 *A Cemetery at Shudy Camps, Cambridgeshire. Report of the excavation of a cemetery of the Christian Anglo-Saxon period in 1933*. CAS Quarto Publications, New Series No. 5
- Lewis, C., Mitchell-Fox, P. and Dyer, C. 1997 *Village, Hamlet and Field. Changing medieval settlements in central England*. Manchester University Press
- Linnaeus, C. 1758 *Systema Naturae*. 10th Edition. Stockholm

- Lorenz, F. 2002 *New Worldwide Cowries*. Conchbooks, Hackenheim, Germany
- Lorenz, F. and Hubert, A. 2000 *A Guide to Worldwide Cowries* Conchbooks, Hackenheim, Germany
- Lucy, S. 2000 *The Anglo-Saxon Way of Death. Burial rites in early England*. Sutton, Stroud
- Mays, S. 1998 *The Archaeology of Human Bones*. Routledge, London
- McCarthy, R. and Brooks, C. 1988 *Medieval Pottery in Britain AD 900 - 1600*. Leicester University Press
- Meaney, A.L. 1981 *Anglo-Saxon Amulets and Curing Stones*. BAR British Series 96, Oxford
- Meaney, A.L. 1994 Gazetteer of Hundred and Wapentake meeting places in the Cambridge region. PCAS 82, 67 - 92
- Mills, A.D. 1991 *The Popular Dictionary of English Place-Names*. Parragon
- Monserrat, D. 1996 *Sex and Society in Graeco-Roman Egypt*. Kegan Paul International, London
- Moore, D.T. and Oakley, G.E. 1979 'The hones' in Williams, J.H. *St Peter's Street, Northampton, Excavations 1973 - 6*. Northampton, 280-3
- Mortimer, R. 2000 'Village development and ceramic sequence. The middle to late Saxon village at Lordship Lane, Cottenham, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 89, 5-33
- Murray, J. 1995a *College Farm, Gravely Road, Hilton: an archaeological desk-based study*. Hertfordshire Archaeological Trust unpublished report 133
- Murray, J. 1995b *College Farm, Gravely Road, Hilton: an archaeological evaluation*. Hertfordshire Archaeological Trust unpublished report 140
- Murray, J. 2006 'Excavations at Station Road, Gamlingay, Cambridgeshire', *Anglo-Saxon Studies in Archaeology and History* 13, 173-330
- Naerbeth, C. 2004 The Cowry Shell as Money, in *Mollusc World* 6. Conchological Society of Great Britain and Ireland
- O'Brien, L. 2004 *An Archaeological Assessment and Updated Project Design for the Publication of Excavations at Scotts Close, Hilton, Cambridgeshire, 2004*. Archaeological Solutions unpublished report 1709

- O'Brien, L. and Crank, N. 2001 *Scotts Close, Hilton Cambridgeshire: an archaeological desk-based assessment and field evaluation*. Hertfordshire Archaeological Trust unpublished report 980
- Oosthuizen, S. 2000 'Anglo-Saxon monasteries and minsters' in Kirby, T. and Oosthuizen, S. *An Atlas of Cambridgeshire and Huntingdonshire History*. Centre for Regional Studies/ Anglia Polytechnic University, 28
- Page, R.W., Proby, G. and Inksipp-Ladds, S. (eds) *Victoria History of the County of Huntingdon*, Volume 2. St Catherine's Press: London.
- Perrin, R. 1999 'Roman pottery from excavations at and near to the Roman small town of Durobrivae, Water Newton, Cambridgeshire, 1956 - 58', *Journal of Roman Pottery Studies* 8
- Pollard, J. 2000 'The Neolithic' in Kirby, T. and Oosthuizen, S. (eds.) *An Atlas of Cambridgeshire and Huntingdonshire History*. Centre for Regional Studies/Anglia Polytechnic University, 7
- Powlesland, D 1997, 'Early Anglo-Saxon Settlements, Structures, Form and Layout' in J Hines (ed.) *The Anglo-Saxons from the Migration Period to the Eighth century*. Centre for Interdisciplinary Research on Social Stress, San Marino/Boydell Press, Woodbridge, 101-124
- Rackham, D.J. 1995 'Appendix: skeletal evidence of medieval horses from London sites' in Clark, J. (ed.) *The Medieval Horse and its Equipment c. 1150 - 1450*. Medieval Finds from Excavations in London 5, Museum of London
- Reynolds, A. 1998 'Executions and hard Anglo-Saxon justice', *British Archaeology* 31 (February 1998)
- Reynolds, A. 2003 'Boundaries and settlements in later sixth to eleventh-century England', *Anglo-Saxon Studies in Archaeology and History* 12, 98-136
- Richards, J.D. 1991 *Viking Age England*. English Heritage/Batsford
- Rahtz, P 1982, 'Buildings and rural settlement' in D M Wilson (ed.) *The Archaeology of Anglo-Saxon England*, Cambridge University Press, Cambridge, 49-98
- Richards, J.D. 1992 'Anglo-Saxon symbolism' in Carver, M. (ed.) *The Age of Sutton Hoo*. Boydell & Brewer, Woodbridge & Rochester, 131-47
- RCHM(E) 1926 *An Inventory of the Historic Monuments in the County of Huntingdonshire*. HMSO, London, 138
- Sharpe, J. and Giles, J.A. 1911 *William of Malmesbury's Chronicle of the Kings of England from the Earliest Period to the Reign of King Stephen*. G. Bell, London
- Silver, I.A. 1969 'The ageing of domestic animals' in Brothwell, D., Higgs, E. and Clark, G. (eds.) *Science in Archaeology*. Thames and Hudson, 283 - 302

Simkins, M.E. 1974 'Hilton' in Page, W., Proby, G. and Inskip Ladds, S. (eds.) *The Victoria History of the County Of Huntingdon. Vol. II.* University of London Institute of Historical Research (reprint from original edition of 1932, Dawsons of Pall Mall), 315-18

Simpson, J. 2003 'Repentant soul or walking corpse? Debatable apparitions in medieval England (1)', *Folklore* December 2003

SSEW (Soil Survey of England and Wales) 1983 *Legend for the 1:250,000 Soil Map of England and Wales. A brief explanation of the constituent soil associations.* Harpenden

Solander, D.C. 1786 *The Natural History of Many Curious and Uncommon Zoophytes Collected from Various Parts of the Globe by the Late John Ellis.* Benjamin White and Son, London

Stace, C. 1997 *New Flora of the British Isles.* Second Edition. Cambridge University Press

Stevenson, J. 1856/1996 *The History of William of Newburgh.* Reprint, Llanerch Publishers, Felinfach

Stuiver, M. and Pearson, G.W. 1986 'High precision calibration of the radiocarbon timescale AD 1950 - 500 BC', *Radiocarbon* 28(2B), 805-38

Stuiver, M. and van der Plicht, H. 1998 'Editorial comment', *Radiocarbon* 40(3), xii-xiii

Stuiver, M., Reimer, P.J., Bard, E., Beck, J.W., Burr, G.S., Hughen, K.A., Kromer, B., McCormac, F.G., Plicht, J. and Spurk, M. 1998 'INTCAL 98 radiocarbon age calibration 24,000 - 0 cal BP', *Radiocarbon* 40(3), 1041-83

Talma, A.S. and Vogel, J.C. 1993 'A simplified approach to calibrating C14 dates', *Radiocarbon* 35(2), 317-22

Taylor, J. and Walls, J. G. 1975 *Cowries.* T. F. H. Publications, New Jersey

Taylor, C. 1983 *Village and Farmstead. A history of rural settlement in England.* George Philip, London

Taylor, A. 1997 *Archaeology of Cambridgeshire Vol. 1: South West Cambridgeshire.* Cambridgeshire County Council

Taylor, A. 2000 'Early Anglo-Saxon settlement' in Kirby, T. and Oosthuizen, S. (eds.) *An Atlas of Cambridgeshire and Huntingdonshire History.* Centre for Regional Studies/ Anglia Polytechnic University, 24

- Thompson, P. 2005 'The pottery' in Nicholson, K. 'Medieval deposits and a cockpit at St Ives, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 94, 103-115
- Thompson, P. 2006 'The pottery' in Trott, K. *The Archaeological Investigation at Long Lane/Rectory Lane, Fowlmere, Cambridgeshire*. Archaeological Solutions unpublished report 2097
- Tomber, R. and Dore, J. 1998 *The National Roman Fabric Reference Collection*. Museum of London, London
- Tressider, J. (ed.) 2001 *The Complete Dictionary of Symbols in Myth, Art and Literature*. Duncan Baird Publishers, London
- Trott, K. 2006 *Residential development at Long Lane/Rectory Lane, Fowlmere, Cambridgeshire*. Archaeological Solutions Unpublished Report 2097
- Ubelaker, D.H. 1999 *Human Skeletal Remains: Excavation, Analysis, Interpretation*. Aldine, Chicago
- Ucko, P.J., Hunter, M., Clark, A.J. and David, A. 1991 *Avebury Reconsidered. From the 1660s to the 1990s*. Unwin Hyman
- Wade, K. 2000 'Anglo-Saxon and medieval (rural)' in Brown, N. and Glazebrook, J. (eds.) *Research and Archaeology: a Framework for the Eastern Counties, 2. research agenda and strategy*. East Anglian Archaeology Occasional Paper 8, Scole Archaeological Committee, 23-6
- Wade-Martins, P. 1980 'Fieldwork and excavation at Grenstein (Greynston)' in Wade-Martins, P. *Village Sites in Launditch Hundred*. East Anglian Archaeology 10, Norfolk Archaeological Unit/ Norfolk Museums Service, 93-161
- West, S. 1985 *West Stow, the Anglo-Saxon Village*. East Anglian Archaeology 24
- Wickes, M. 1995 *A History of Huntingdonshire*. Philimore, Chichester
- Williamson, T. 2003 *Shaping Medieval Landscapes. Settlement, Society, Environment*. Windgather Press, Macclesfield
- Woodland, M. 1990 'Spindle-whorls' in Biddle, M. *Object and Economy in Medieval Winchester*. Winchester Studies 7ii, Clarendon Press, Oxford, 216-25
- Woods, P.J. 1972 'Excavations at Brixworth, Northants., 1965-1970. The Romano-British villa. Part 1 - the Roman coarse pottery and decorated Samian ware', *Northamptonshire Archaeology* 8, 1-102

APPENDIX 1: COWRY SHELLS

Glossary of terms

Aperture The opening of a shell

Columella The central axis of a coiled shell, formed by the inner wall of the whorls and often forming a thickened inner lip

Columellar teeth Teeth along the columellar (inner) lip

Fossula A spoon-shaped depression at the anterior end of the columellar lip of a cowry shell

Gastropod A mollusc with a single shell. The shell is usually coiled (spiral)

Labial teeth Teeth along the outer lip

Nominate subspecies The subspecies that represents the species as originally named, e. g. *Cypraea pantherina pantherina*

Pyriform Pear-shaped

Rostrate With produced, beak-line extremities

Spire The coils of a gastropod shell. In cowries, this is very small and often not visible

Subspecies A population of individuals differing significantly from other populations of the same species

Teeth Ridges that run along both edges of the aperture of a cowry shell

A brief overview of the cowries

The cowries are a group of approximately 230 living species of marine gastropod molluscs. They belong to the superfamily *Cypraeacea*, which includes three main families: *Ovulidae* (egg shells), *Triviidae* (includes the British ‘cowries’) and *Cypraeidae* (the ‘true’ cowries). The family has a worldwide distribution between the latitudes of approximately 40° north and 40° south. The majority of species inhabit warm, shallow water in the Pacific and Indian Oceans; there are a few species in the Caribbean Sea and a number of species in the cooler waters of the Mediterranean, southern Africa and southern Australia.

The shell

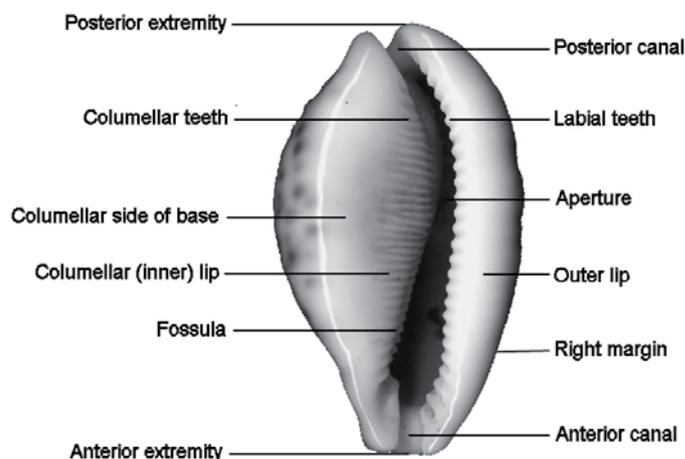
The shell of a cowry is typically domed with a flat base and almost bilaterally symmetrical. It is usually solid and glossy and often very colourful. They range in size from approximately 10 - 150mm, depending on the species. The spire, usually prominent in gastropod shells, is small and completely, or almost completely, hidden

in adult specimens of most species. The aperture is reduced to a narrow slit, usually with teeth along both edges.

Like all shells, that of a cowry is made of a combination of needle-like crystals of calcite and aragonite (both forms of calcium carbonate) and a fibrous protein component. In cowries, the crystals are arranged in layers, with crystals in different layers aligned in different directions, thus preventing fractures from spreading across the shell when it is stressed. The protein surrounds the crystals, giving extra strength. The outermost layer is usually highly polished.

Shell terminology

The following diagram shows the parts of a cowry shell as viewed from the base:



Characteristics of the species

The average length of an adult shell of *Cypraea pantherina* is in the range 56 - 74mm. The shape is somewhat elongate-pyriform. The sides and base are white, the teeth fine and the columellar teeth are plicate and extend over the base. The upper surface is very variable in colour, from whitish to chestnut red, with numerous blackish brown spots and a pattern similar to that of the well-known 'tiger cowry', *Cypraea tigris* (Linnaeus 1758) (see Plates 10 - 17).

Cypraea pantherina is closely related to *C. tigris*, which is heavier and less elongate, with fewer, coarser teeth and marbled sides in mature specimens (Plates 18 & 19). *C. tigris* is distributed throughout the Indian and Pacific oceans, but does not overlap with *C. pantherina*.

Habitat, distribution and biology

Most cowry species live in association with coral reefs in tropical and subtropical regions, in depths of less than 25m. Some deeper or cooler water species live in association with sponges or among sea grass. Some species are herbivorous, feeding on seaweed; most, however, are predators, often feeding on sponges, or scavengers.

Cypraea pantherina is native to the Red Sea and the Gulf of Aden. It has been found near Massawa in 3m or more of clear water, in areas of abundant coral. It is usually found under slabs or in crevices on hard coral reef, in 0.3 - 5ft of water. It is mainly active at night, but also moves about during the day. *C. pantherina rasanraniensis* (Heiman 2002), the northern subspecies, is restricted to the east coast of the Sinai peninsula and the extreme northern part of the Red Sea.

Little is known about the ecology of *Cypraea pantherina*. Specimens in captivity have been observed to feed on bivalve molluscs. They may also feed on dead organic matter, as does *C. tigris*.

Uses of cowries

Cowries have been put to many uses in various parts of the world at different times. The most common of these are as money or as charms.

Money

Small species, mostly *Erosaria moneta* (Linnaeus 1758) and *E. annulus* (Linnaeus 1758), served as currency in ancient China during the Shang (1600 - 1100 BC) and Zhou (1100 - 221 BC) Dynasties. More recently, they were used as money in India and in parts of Africa. They are said to have been used in some remote parts of Africa as late as the 20th century.

Charms

In many cultures around the world, cowries were believed to confer fertility, protection against evil spirits and good luck in general. Pliny said cowries were consecrated to Venus, and specimens have been found in Pompeii. Cowries were carried when hunting and were attached to fishing nets not only as weights, but also to bring good luck for fishing.

Other uses

Large cowry species such as *Cypraea tigris* (Linnaeus 1758) have in the past been eaten in a number of islands in the Indian and Pacific oceans, for example, Hawaii (boiled) and the Philippines (dried, then fried). The large and attractive 'Golden Cowry' *Lyncina aurantium* (Gmelin 1791) was used as a badge of rank by chiefs in Fiji. In ancient Athens, cowries were used as ballot balls for voting. In Italy, they were used for burnishing paper. Cowries are said to have been carried far and wide by Gypsies. They were shipped to Europe in large quantities in the 19th century.

APPENDIX 2: ENVIRONMENTAL SAMPLES

Sample No.		1	7	8	9	10	11	12
Context No.		2246	2107	2310	2307	2160	2193	2332
Feature No.		2245	2106	2358	2306	2159	2192	2128
Feature Type		Pit/Grave	Ditch	Pit	Ditch	Pit	Pit	Pit
Phase		1	2	-	4	-	1	-
Date		10 th – 12 th	10 th – 13 th	Modern	12 th -14 th	Undated	10 th - 12 th	Undated
Cereals	Common name							
Avena sp. (awn frags.)	Oat				x	x		
Hordeum sp. (grains)	Barley		x				x	
Triticum sp. (grains)	Wheat	x			x	x	x	
(glume bases)		x						xx
(spikelet bases)		x						
(rachis internodes)		x			x			
T. spelta L. (glume bases)	Spelt					x		
T. aestivum/compactum type (rachis nodes)	Bread wheat				x			
Cereal indet. (grains)		x			x			
Herbs								
Anthemis cotula L.	Stinking mayweed		x					
Medicago/Trifolium sp.	Medick/clover/trefoil				xcf	x		
Small Poaceae indet.	Grass	xcf			x	x		
Wetland Plants								
Cladium mariscus (L.)Pohl	Saw-sedge	x						
Other Plant Macrofossils								
Charcoal <2mm		xx	x	x	xxx	x	x	x
Charcoal >2mm					x			
Charred root/rhizome/stem		x					x	
Indet.seeds		x				x		x
Molluscs								
Woodland/Shade Loving Species								

Carychium sp.		x	x		x			
Punctum pygmaeum				x				
Zonitidae indet.		x	x					
Open Country Species								
Vallonia sp.				x				
V. costata					x			
V. pulchella		x		x	x			
Catholic Species								
Cochlicopa sp.		x	x		x			
Limacid plate					x			
Trichia hispida group		x	x					
Marsh/Freshwater Slum Species								
Vertigo sp.		x						
Freshwater Obligate Species								
Anisus leucostoma			x					x
Lymnaea sp.			xcf					
Other Materials								
Black porous 'cokey' material				x	x		x	
Black tarry material		x						
Bone		x						
Burnt/fired clay					x			
Fish bone		x						
Small mammal/amphibian bone		x	x		xpmc			
Sample Volume (litres)		c. 470	15	30	30	30	20	20
Volume of Flot (litres)		0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1
% Flot Sorted		100%	100%	100%	100%	100%	100%	100%

Key to Table

x = 1 – 10 specimens xx = 10 – 100 specimens xxx = 100+ specimens

pmc = possible modern contaminant

PLATES



Plate 1 Site during excavation, taken from the north



Plate 2 Ditches F2106 and F2175, taken from the north



Plate 3 Ditch F2009, taken from the west

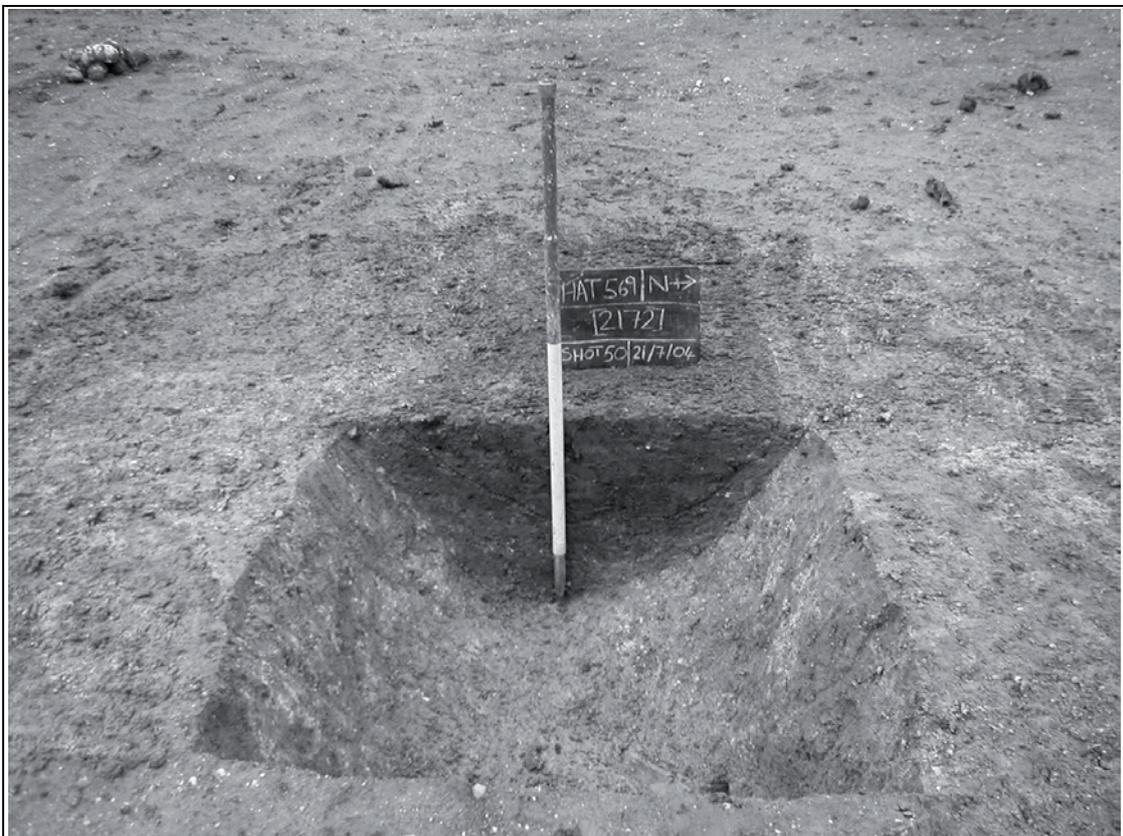


Plate 4 Ditch F2172, taken from the east

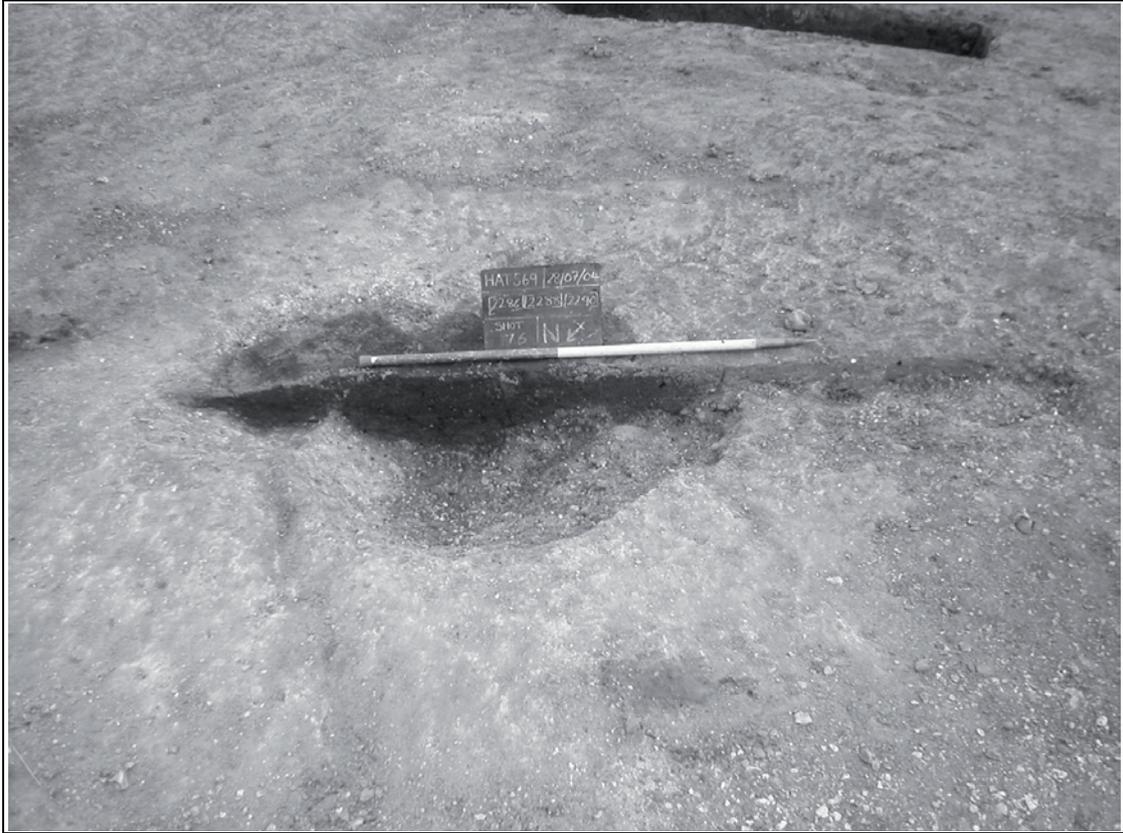
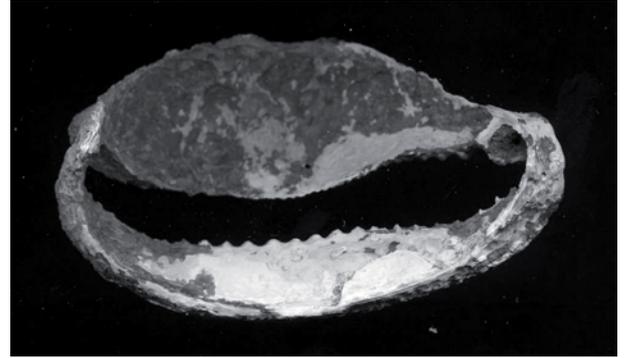


Plate 5 Pits F2286, F2288 and F2290, taken from the north-west



Plate 6 Grave pit F2245, taken from the south during excavation



Plates 7 and 8 The cowry shell from Grave Pit F2245. Basal view (left) and top view (right)

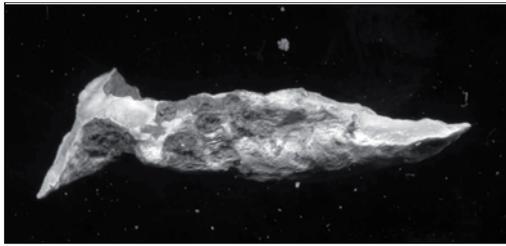


Plate 9: Fragment of lower edge of the fossula from the cowry shell in Grave Pit F2245



A. *Cypraea pantherina*, dark red, rostrate form, Jeddah, Red Sea. 68.4 x 38.7mm

B. *Cypraea pantherina*, Dahlak Is., Red Sea. 59.1 x 35.0mm

C. *Cypraea pantherina*, Elat, Northern Red Sea. 67.3 x 39.6mm

D. *Cypraea pantherina*, pale specimen, no locality data. 64.1 x 38.0mm

Plates 10 - 17: Variations in *Cypraea pantherina*, upper row: dorsal (upper row) and basal (lower row) views. All specimens in the collection of Julian Joseph (British Shell Club)



Plates 18 and 19: *Cypraea tigris*, Sabah, East Malaysia. 85.0 x 59.3mm. Left: dorsal view, right: basal view. Specimen in the collection of Julian Joseph (British Shell Club)

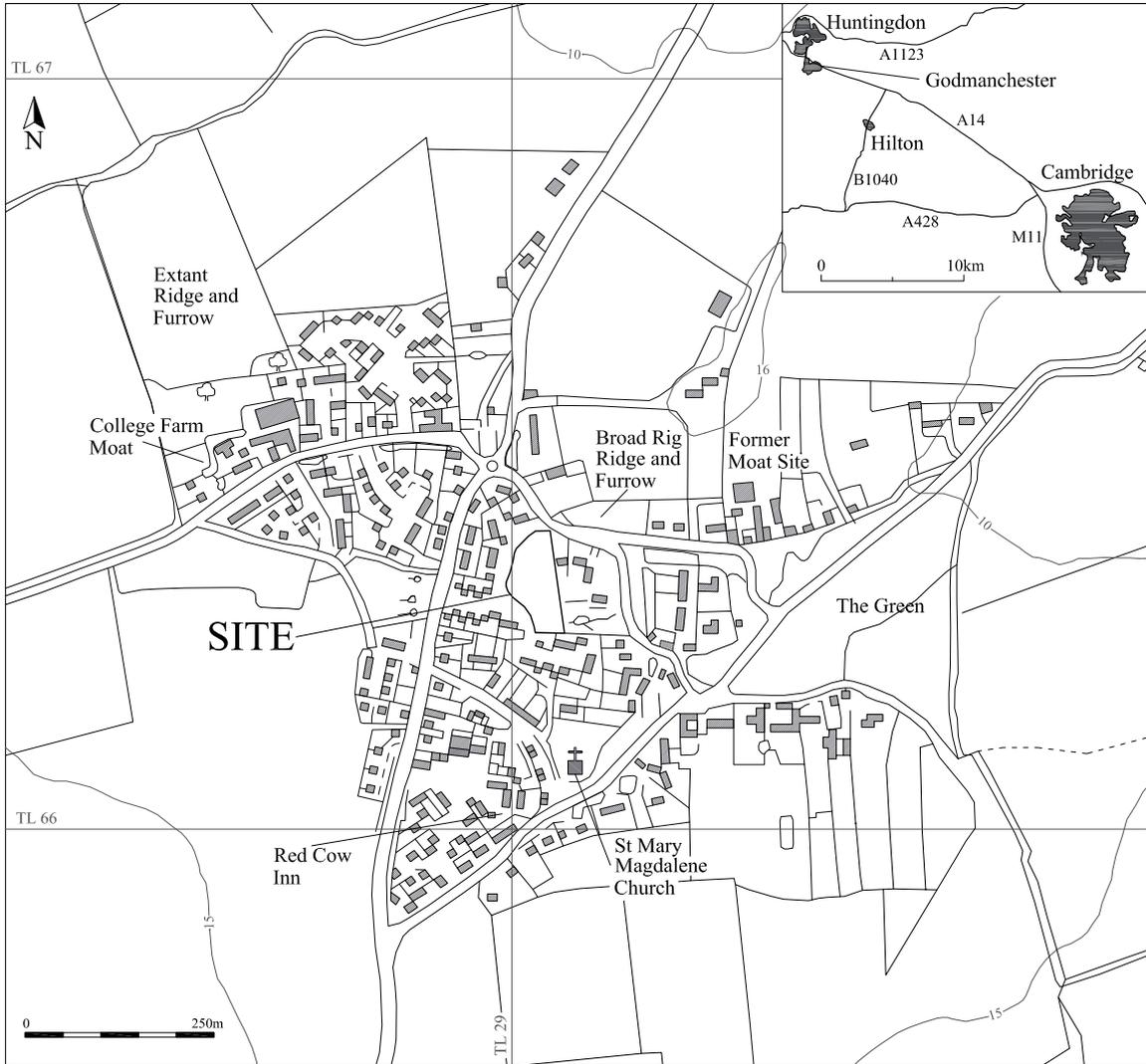


Figure 1 Site location plan

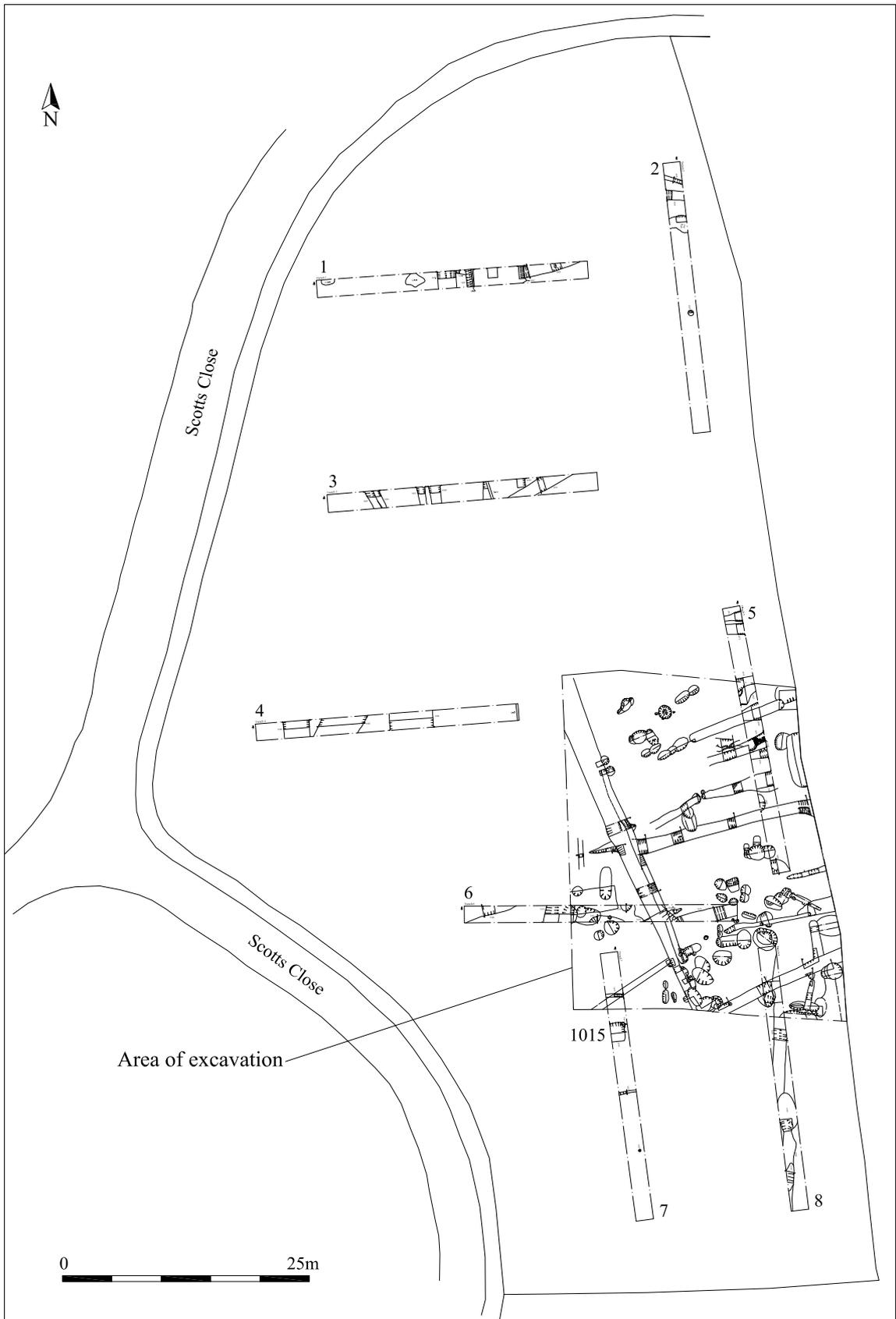


Figure 2 Site plan

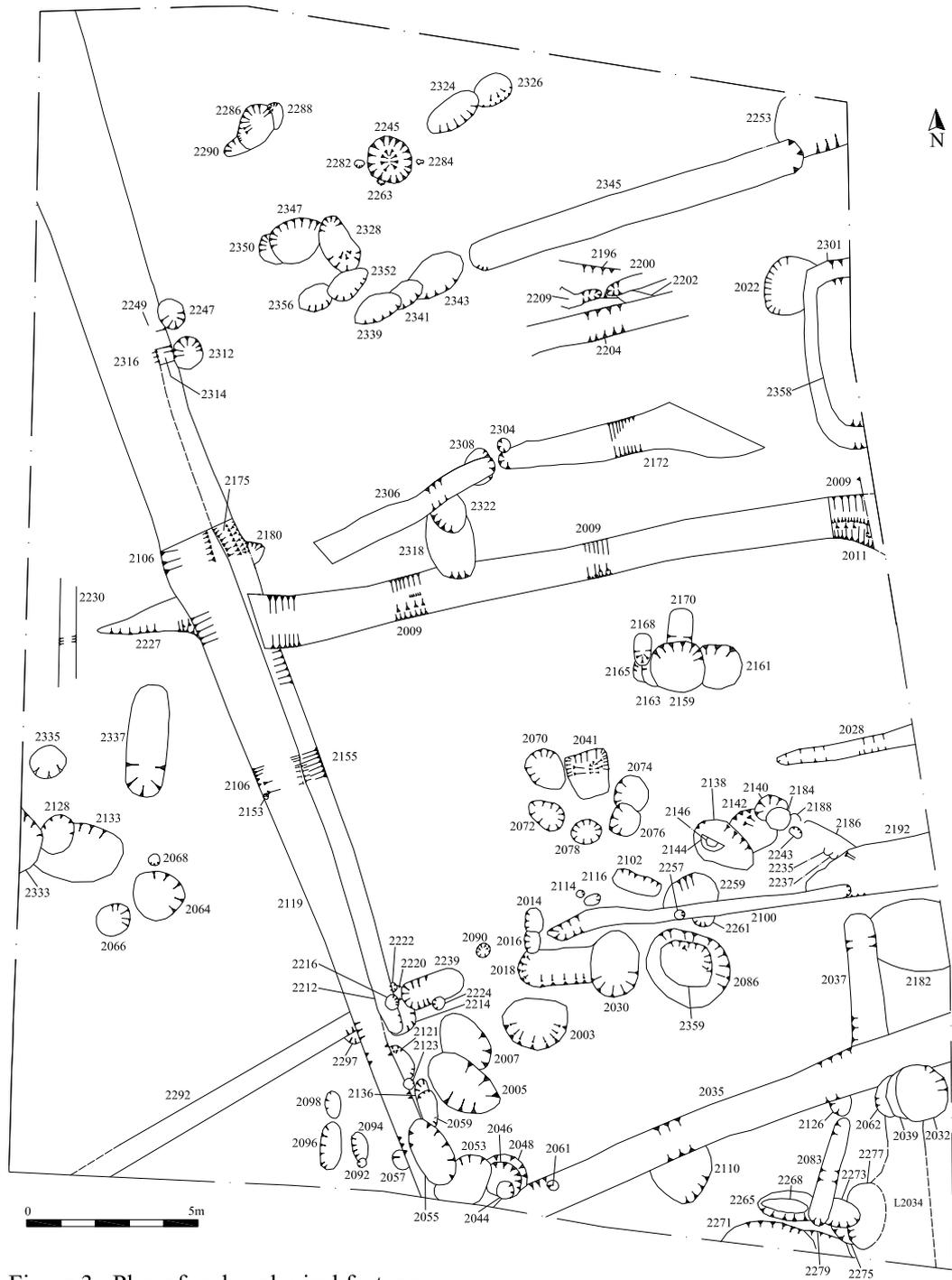


Figure 3 Plan of archaeological features

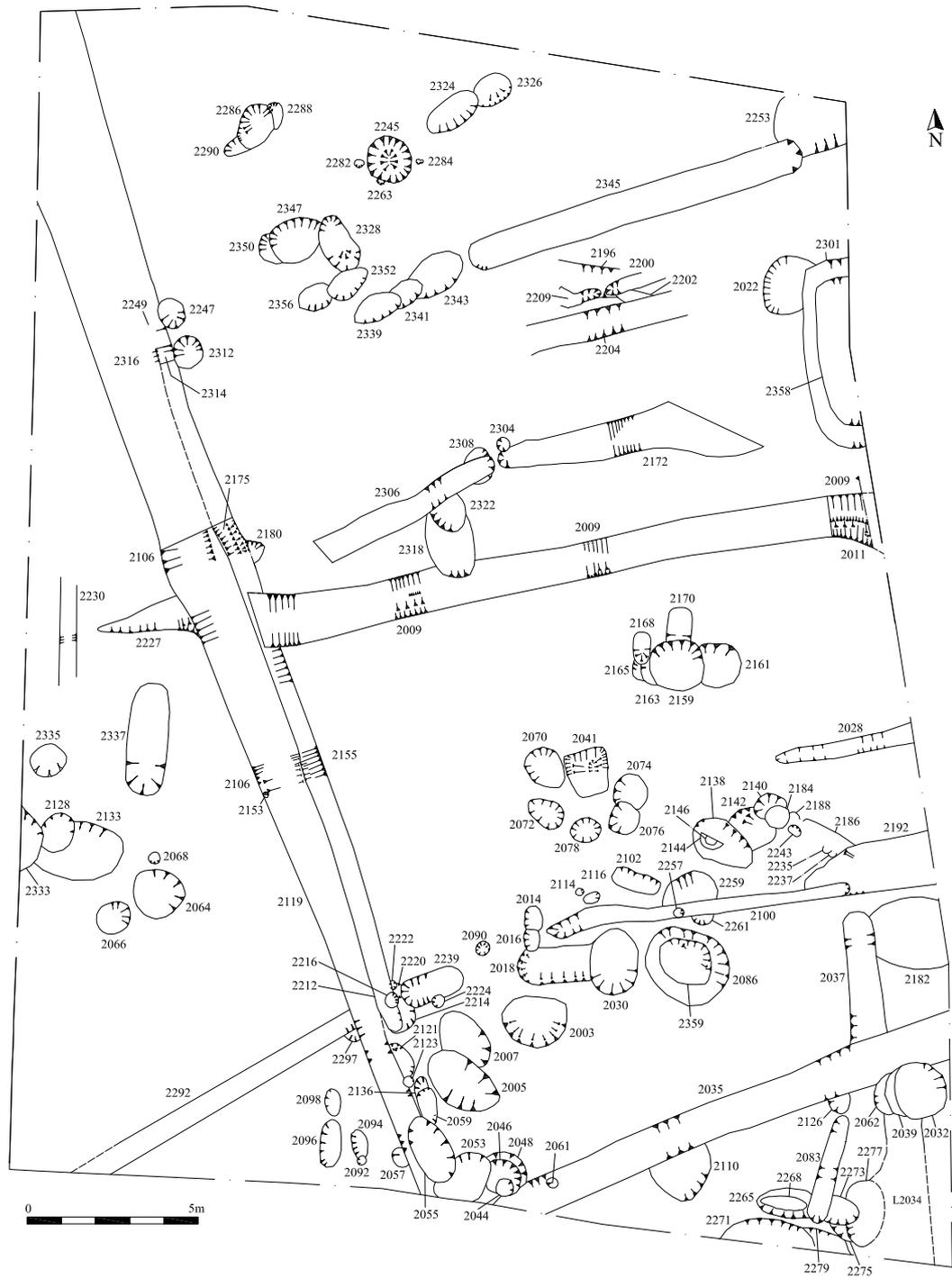
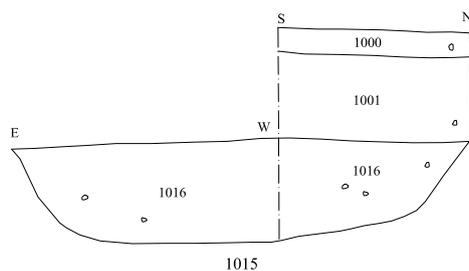
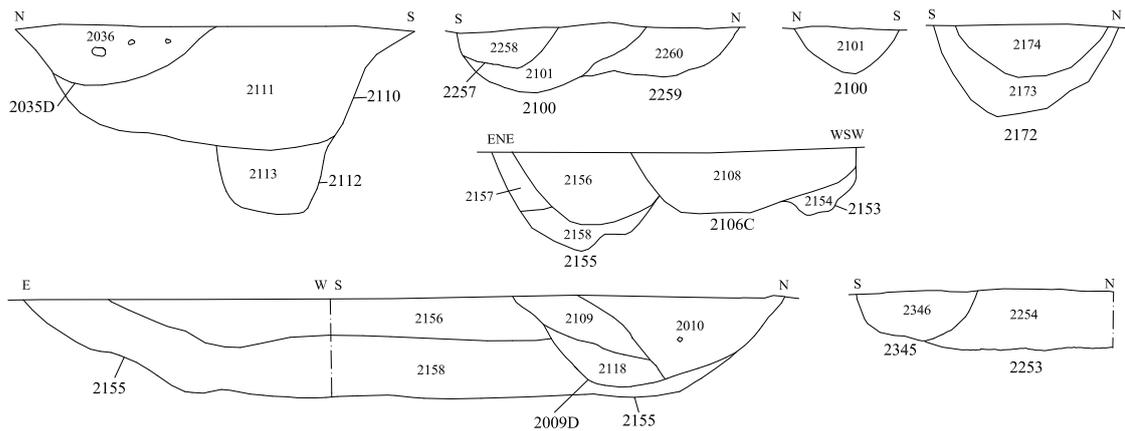


Figure 4 Phase plan

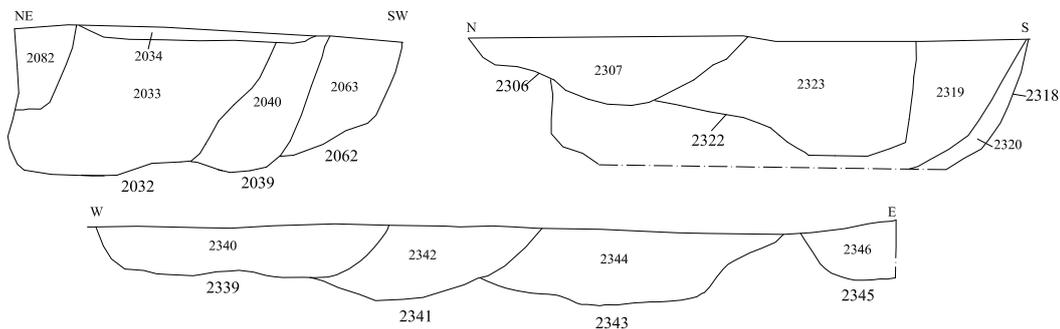
Possible sunken-featured building



Late Saxon and medieval boundary ditches



Late Saxon and medieval pits



Grave pit F2245



Figure 5 Selected sections

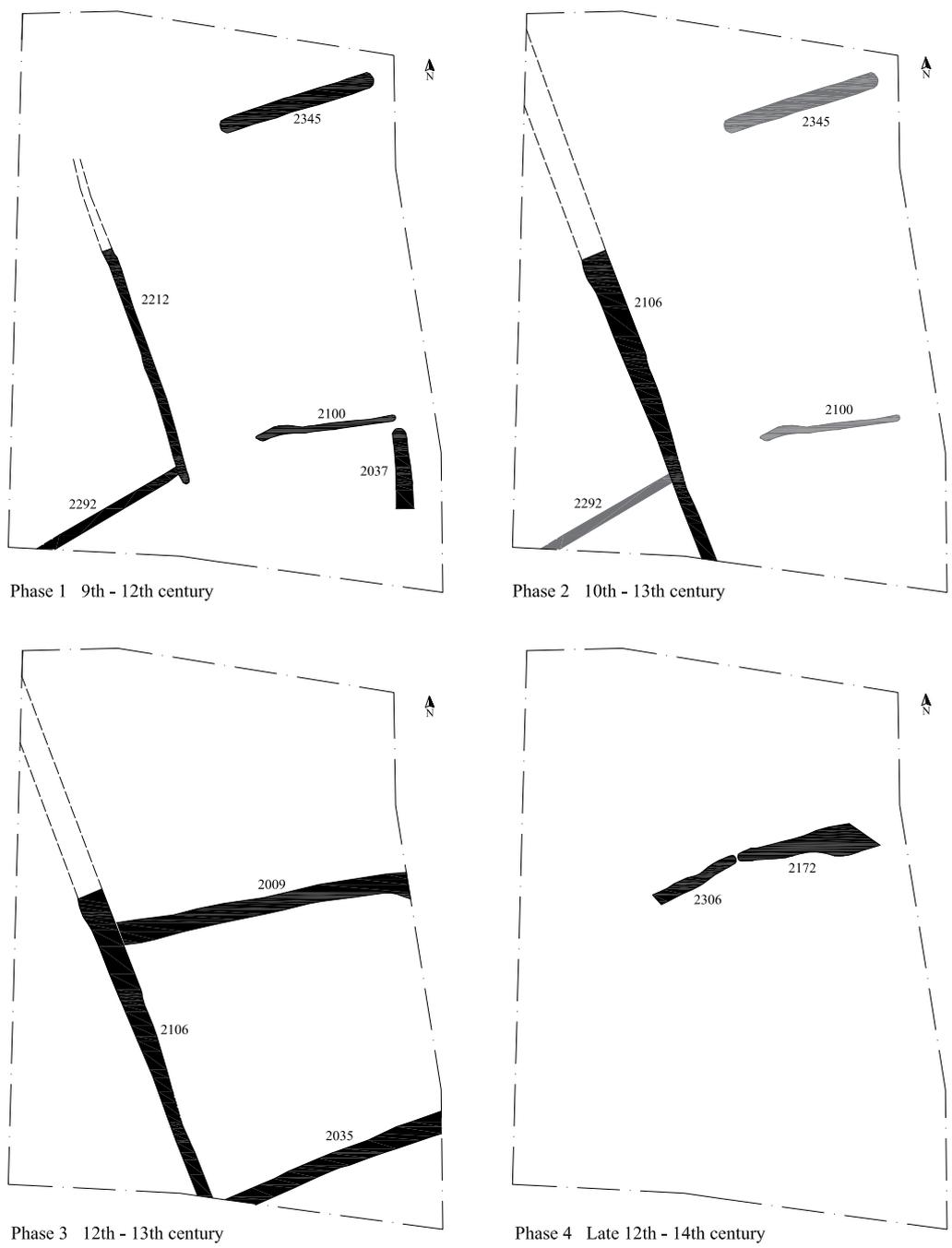


Figure 6 Suggested development of the medieval ditch system



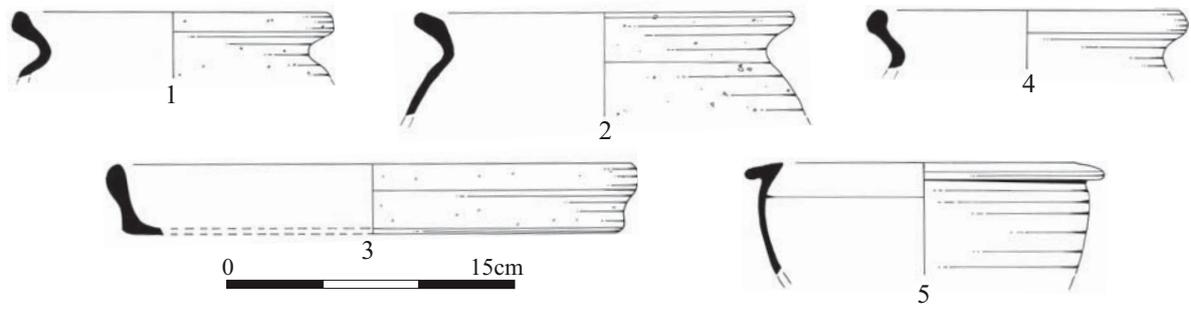


Fig. 7 Pottery. Scale 1:4.

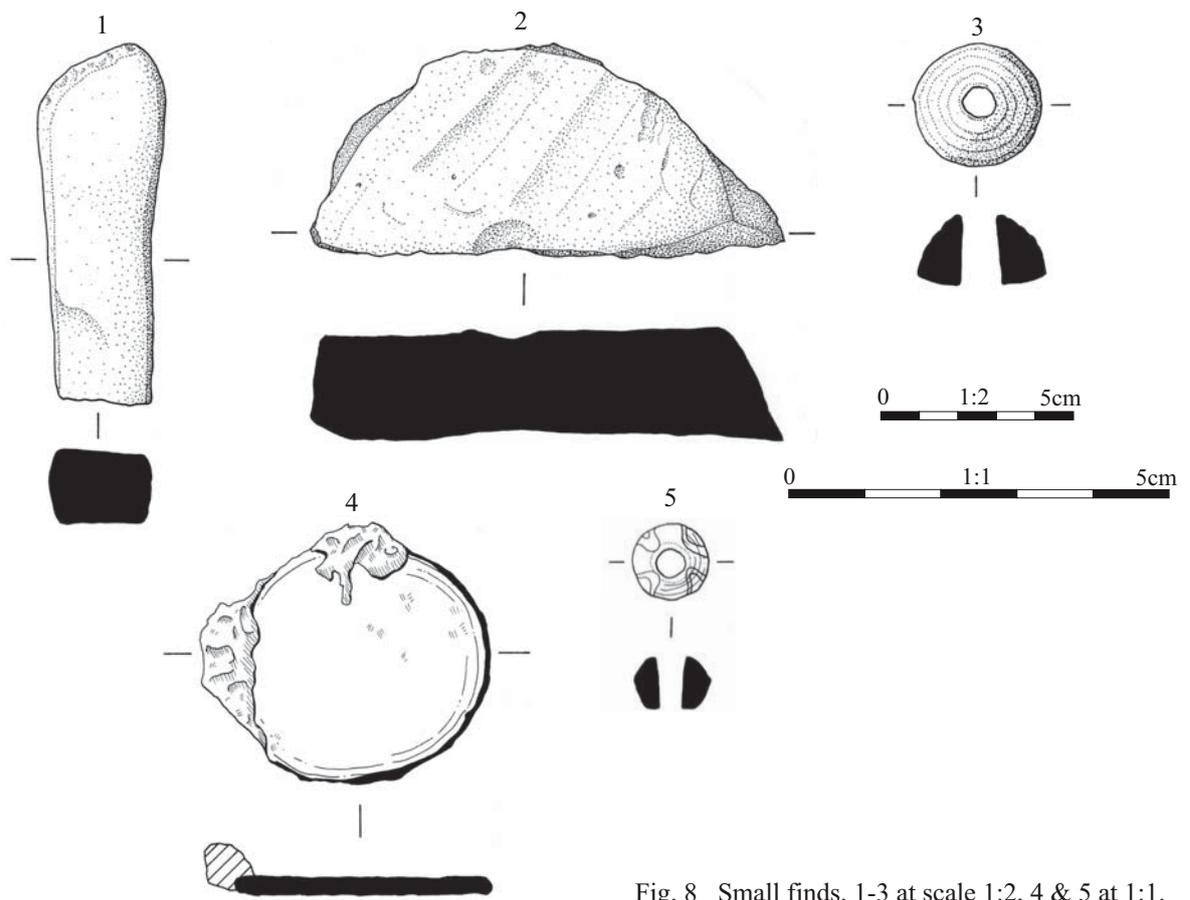


Fig. 8 Small finds. 1-3 at scale 1:2, 4 & 5 at 1:1.