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# An Anglo-Saxon site at Thrapston Road, Spaldwick, Cambridgeshire

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with contributions by Catherine Barnett, Lorrain Higbee and Chris J Stevens

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*The excavation of an area adjacent to Thrapston Road, Spaldwick, revealed archaeological remains ranging in date from early prehistoric to post-medieval, focusing in particular on the Iron Age and Anglo-Saxon periods. This report focuses on the evidence for Anglo-Saxon activity on the site, which comprises possible small-scale 'industrial' use in the early/mid-Anglo-Saxon period, before being formally reorganised in the late Anglo-Saxon period into tofts, each containing rectangular post-built structures.*

## Introduction

Wessex Archaeology was commissioned in 2010 by SD Construction and Developments Ltd to carry out an archaeological excavation at 33 Thrapston Road, Spaldwick, centred on NGR 512780 272917 (Figure 1). This followed on from an earlier desk-based assessment and evaluation of the site, both also carried out by Wessex Archaeology, in 2001–2 (Wessex Archaeology 2002a; 2002b).

This report focuses on the early and late Anglo-Saxon/early medieval and post-medieval archaeology; a full report may be found at <http://www.scribd.com/doc/219615611/Thrapston-Spaldwick>.

## Site location and geology

The site, which lies on the north-western fringes of the village of Spaldwick, comprised at the time of excavation a parcel of overgrown scrub covering approximately 0.12 hectares. Located on a gentle north-east facing slope, the site is bounded to the north-east by Thrapston Road, originally part of the road running from Huntingdon to Thrapston, which forms the village High Street, and which is now bypassed by the A14 (Figures 1 and 2). The site is bounded to the north-west and south-east by residential properties and to the south-west by further overgrown scrubland backing on to St James' Church.

The underlying geology is shown by the British Geological Survey (Sheet 2) as comprising Oxford Clays with Kellaway Beds.

## Archaeological and historical background

The manor of Spaldwick is first mentioned in the 10th century when it was granted to Ely Abbey by

Brithnoth, *ealdorman* of Essex, in AD 991. From 1109 to 1543 it was held by the Bishop of Lincoln who may have had a palace or hunting lodge to the east of the site, near to his deer park (the 12th century 'Forest of Spaldwick'), of which there is now no trace (Wessex Archaeology 2002a).

The banked enclosure around the presumed historic core of the village (Figure 1) is the site of the shrunken village of 'Danesfield', although the name Spaldwick (*Spalduice*) was in use by *Domesday* (Mawer and Stenton 1926, 247). The settlement of 'Danesfield' may have been in existence before AD 991 when Spaldwick was granted to Ely Abbey. The enclosure is roughly oval with the south and west sides marked by small surviving banks; the bank on the northern and eastern sides has been destroyed. The earthworks within the enclosure (see Figure 1) may range from building foundations, in the south, to a windmill mound or perhaps a very small motte in the west.

Previous archaeological investigations within the village of Spaldwick found two Anglo-Saxon or early medieval buildings succeeded by later medieval rubbish pits in yards with some industrial activity on a site on the northern side of Thrapston Road (Cambridge County Council Archaeology Field Unit (CCCAFU) 1996), and a medieval ditch and plough marks were recorded at Ferriman Road, to the south of the site (Murray 1998) (Figure 1).

The many 16th, 17th and 18th century Listed Buildings in Spaldwick may indicate the prosperity of the village, though none of these lie close to the site, and map regression shows that the village has changed little from 1775 (Wessex Archaeology 2002a, fig. 3). The line of the earthwork enclosure around 'Danesfield' may be seen on the 1775 Enclosure map, curving around and running along the northern edge of the site (see Figure 1).

## Excavation results

### *Early/mid-Anglo-Saxon (5th to 8th centuries)*

Despite the fairly extensive late prehistoric activity on the site only a few residual sherds of Romano-British pottery were recovered, and no features could be

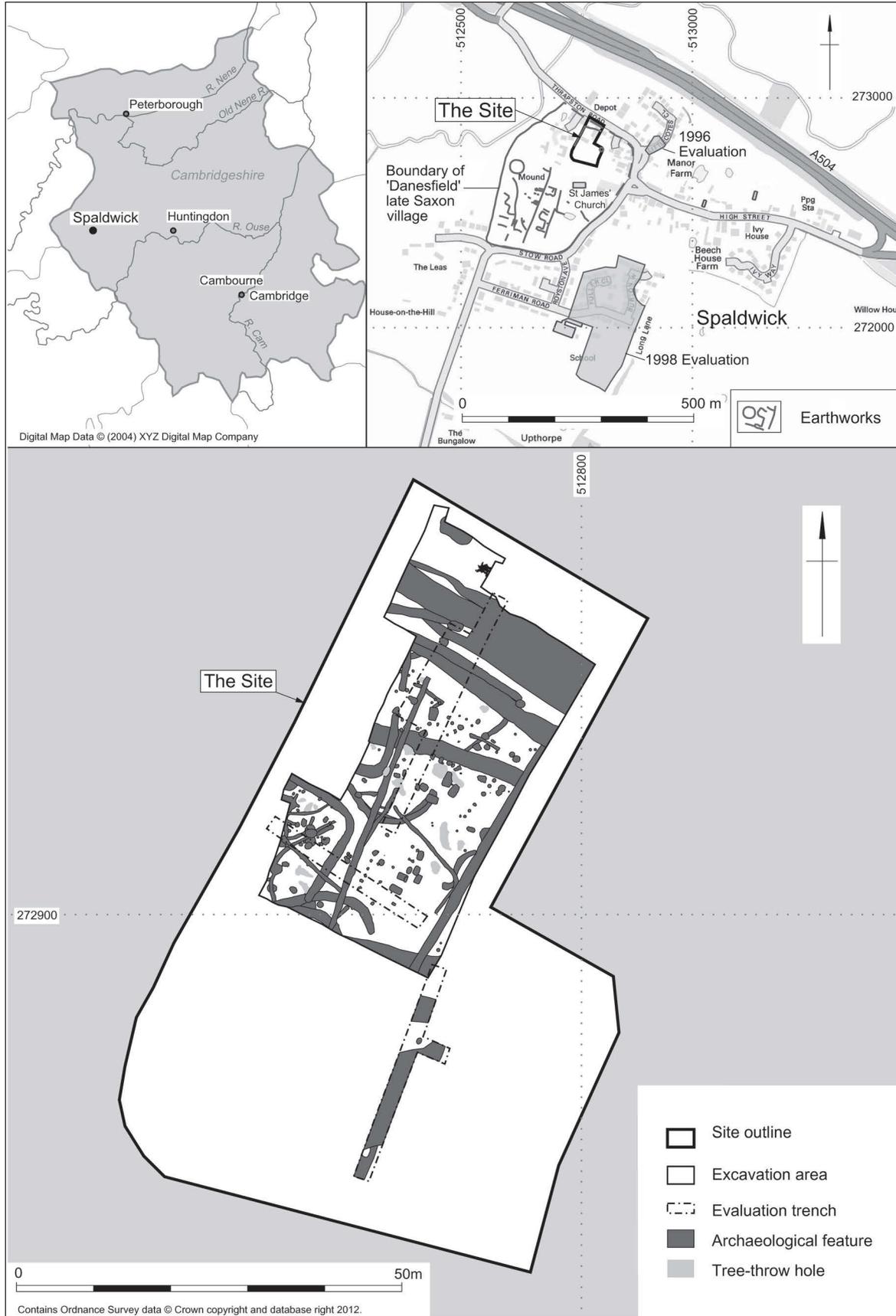


Figure 1. Site location.



Figure 2. Overall view of site during excavation, view from the south-west.

definitively dated to this period. It appears that the site was abandoned, possibly around the time of the conquest until the 5th–8th centuries when a number of pits and other features were dug.

Evidence for activity in the early/mid-Anglo-Saxon period comprises a number of pits (Figure 3). The base of large oval pit 663 (2.3m x 1.6m x 1m deep), adjacent to the eastern edge of the excavated area, cut through a sandy layer within the Oxford Clay, breaching the water table and has been tentatively interpreted as a watering hole; the profile shows one steep side and the other more gradually sloping, which could have allowed access for animals to drink (Figure 4). The base of the pit was filled after going out of use through the gradual accumulation of laminated silt deposits (666–671), and this was followed by a series of dumped layers (672–4); subsequently, late Anglo-Saxon-medieval boundary ditch 791 cut through the top. Pit 663 produced 12 early/mid-Anglo-Saxon sherds, as well as animal bone (64 fragments) and a possible iron smithing hearth bottom (a full quantification of finds by feature for all Anglo-Saxon and early medieval features is given in Table 1).

Nine shallow, sub-rectangular ‘fire pits’, forming two clusters (433, 729 and 752 to the north; 435, 705, 715, 724 and 725 to the south) with one outlier (450), have been assigned to the early/mid-Anglo-Saxon

period, although the only dating evidence recovered comprised four early/mid-Anglo-Saxon sherds from two intercutting pits (435, 725). Within the two clusters the pits were located close enough together to perhaps imply successive rather than contemporaneous use, a suggestion supported by the fact that pit 435 cut the corner of pit 725. The pits were all of broadly similar shape and size (1.2–1.8m long, 0.8–1.2m wide, 0.1–0.2m deep; near vertical sides and flat bases), and most had similar burnt material in their fills. The sides of most of the pits were heat-affected, although this was not consistent or continuous around the sides of any of the pits, while the pit bases were only slightly heat-affected.

The depositional sequence recorded in pit 724 (Figure 4) is somewhat different to the others, and may provide an insight into how the pits may have functioned. A dense layer of charcoal (723), mainly consisting of large pieces of roundwood and dominated by blackthorn (*Prunus spinosa*), lay at the base of the pit. This was overlain by a layer of slightly heat-affected flint nodules (722), apparently dumped into the pit rather than burnt or heated *in situ*. A deposit of accumulated debris comprising a fine dark silty loam with a distinct ashy grey hue and small fragments of charcoal (721) sealed the layer of stones. Layer 721 was sealed by an upper fill of topsoil-derived



Figure 3. Phase plan: early/mid-Anglo-Saxon features.

Feature	Animal Bone	Burnt Flint	Fired Clay	Pottery	Slag (g)
<i>Early/mid-Anglo-Saxon</i>					
Fire pit 433	116	159	31		
Fire pit 435	10			2	
Fire pit 450					5
Fire pit 705	46		2		
Fire pit 715	11				
Fire pit 724	47				
Fire pit 725	3			2	
Fire pit 729	4				
Fire pit 752	7				
Pit 525	125			21	33
Pit 455	14			3	
Waterhole 663	64			12	112
<b>sub-total</b>	<b>447</b>	<b>159</b>	<b>33</b>	<b>40</b>	<b>150</b>
<i>Late Anglo-Saxon/early medieval</i>					
Pit 448	11			3	
Pit 490	5			3	
Gully 539	1			1	
Pit 543	5			2	
Posthole 776	4			2	
Ditch 782	21			20	
Fence 786	2			1	
Ditch 791	26			13	13
Gully 793	40			15	
Structure 799	12			13	226
<b>sub-total</b>	<b>127</b>	<b>-</b>	<b>-</b>	<b>73</b>	<b>239</b>

Table 1. All finds by feature.

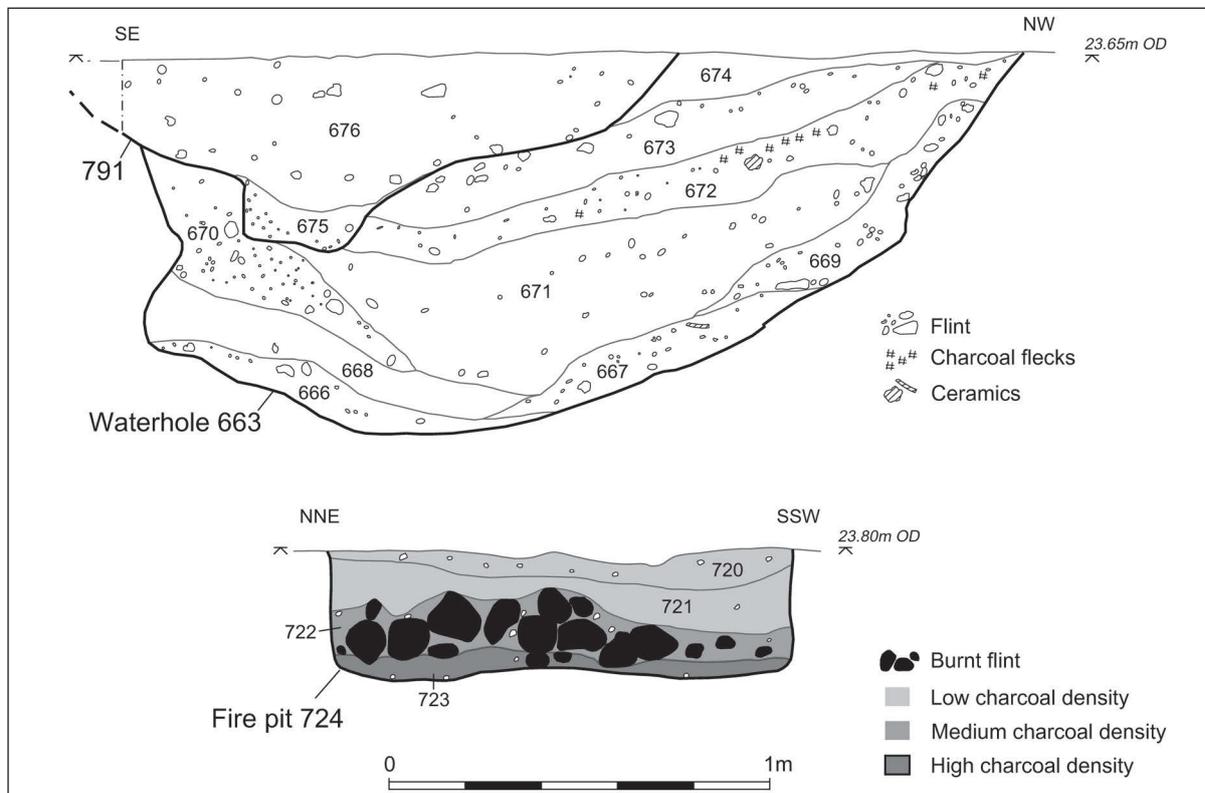


Figure 4. Sections of selected early/mid-Anglo-Saxon features (waterhole 663, 'fire pit' 724).

material (720). The remaining eight pits were filled with a mixed layer of silty loam including abundant charcoal (again dominated in most cases by black-thorn) and heat-affected flint nodules of varying size (Figure 5). The density and size of the charcoal increased towards the bases of these pits, but there were no clearly differentiated charcoal and stone deposits as seen in fire pit 724.

Apart from the four sherds of pottery noted above, other finds from the pits comprised 244 fragments of animal bone (mostly cattle and sheep/goat, but also a few pig, red deer and bird bones), 33 fragments of fired clay, 159 pieces of burnt, unworked flint, and one piece of ironworking slag. There was a concentration of finds in pit 433 (all of the burnt flint, most of the fired clay, and approximately half of the animal bone).

The possibility that these pits may be slightly later in date, perhaps late Anglo-Saxon, cannot be ruled out, although the southern cluster was cut by timber structure 799 (see below).

Two other pits (455, 525), both on the eastern side of the excavation area, may also belong to this phase of activity; both produced early/mid-Anglo-Saxon pottery (three sherds from pit 455, 20 from pit 525) and although one sherd of medieval pottery was also recovered from 525 this was small and could well have been intrusive. Pit 525 also produced 125 fragments of animal bone and two pieces of ironworking slag, and a small quantity of cereal grains (barley and free-threshing wheat).



Figure 5. 'Fire pit' 433 after partial excavation.

#### *Late Anglo-Saxon/early medieval (9th to 11th/12th centuries)*

Two right-angled gullies (539 and 793) appear to be related, forming a 'pair', and may be the earliest features in this phase (Figure 6). These two gullies ran parallel across the southern half of the site before turning to the south-west, though their full extent is unclear. Pottery indicates a late Anglo-Saxon/early medieval date (three sherds of St Neots ware and one of early medieval shelly ware, alongside 12 early/mid-Anglo-Saxon sherds), and both gullies were cut by later boundary ditches (780 and 791 respectively).

The main focus of activity in this phase, however, was the construction of two timber structures, probably domestic buildings, and associated fences within clearly defined ditched boundaries (tofts). This marks a significant period of landscape reorganisation, and may represent the earliest evidence for the village of 'Danesfield' (Figure 6). The excavated area constitutes the majority of one toft and part of a second, both oriented north-east to south-west and respecting the present-day alignment of Thrapston Road along the north-east side of the site.

The tofts were separated by ditches 780 and 791, with ditch 782 to the north; a sample taken from the latter proved to be rich in cereal remains, of free-threshing wheat, probably characteristic of threshing waste (see Stevens, below). The main toft exposed extended for at least 37m and tapered from 17m wide at the northern end to 11m at the southern end. Ditch 782 along the northern side exhibited at least three episodes of recutting, by ditches 422 and 587 (Figure 7), resulting in a broader ditch (3.6 m wide, 1.1m deep) than the two forming the sides of the plot. Deposits within ditch 782 suggest the presence of a bank to the south, apparently backfilled during the medieval period. The two side ditches (780 and 791) were between 1m and 2m wide, and approximately 0.5m deep. Thirteen sherds of early/mid-Anglo-Saxon pottery were recovered from the eastern ditch 791 (which cut possible waterhole 663) and 20 late Anglo-Saxon/early medieval sherds from ditch 782 recuts 422 and 587 to the north.

Within the central toft lay a rectangular timber structure (799), just over 20m south of ditch 782, and following the same alignment as the side ditches, but closer to ditch 780. Structure 799 comprised 12 post-holes, and measured 8m by 4m. The postholes varied in size and the profile and plan of several indicate that posts were replaced during the structure's use. The two postholes on the east side may indicate the location of a centrally placed doorway in this wall. Three postholes produced early/mid-Anglo-Saxon pottery (a total of 13 sherds), but the sherds are small (mean sherd weight 4g) and are considered likely to be intrusive here. Furthermore, one of the postholes in the east wall cut one of the earlier Anglo-Saxon 'fire pits' (715), and the projected wall line passed very close to three others.

To the north of structure 799 was a probable yard. A number of postholes formed two sides of a fence alignment (786) running parallel to the eastern and

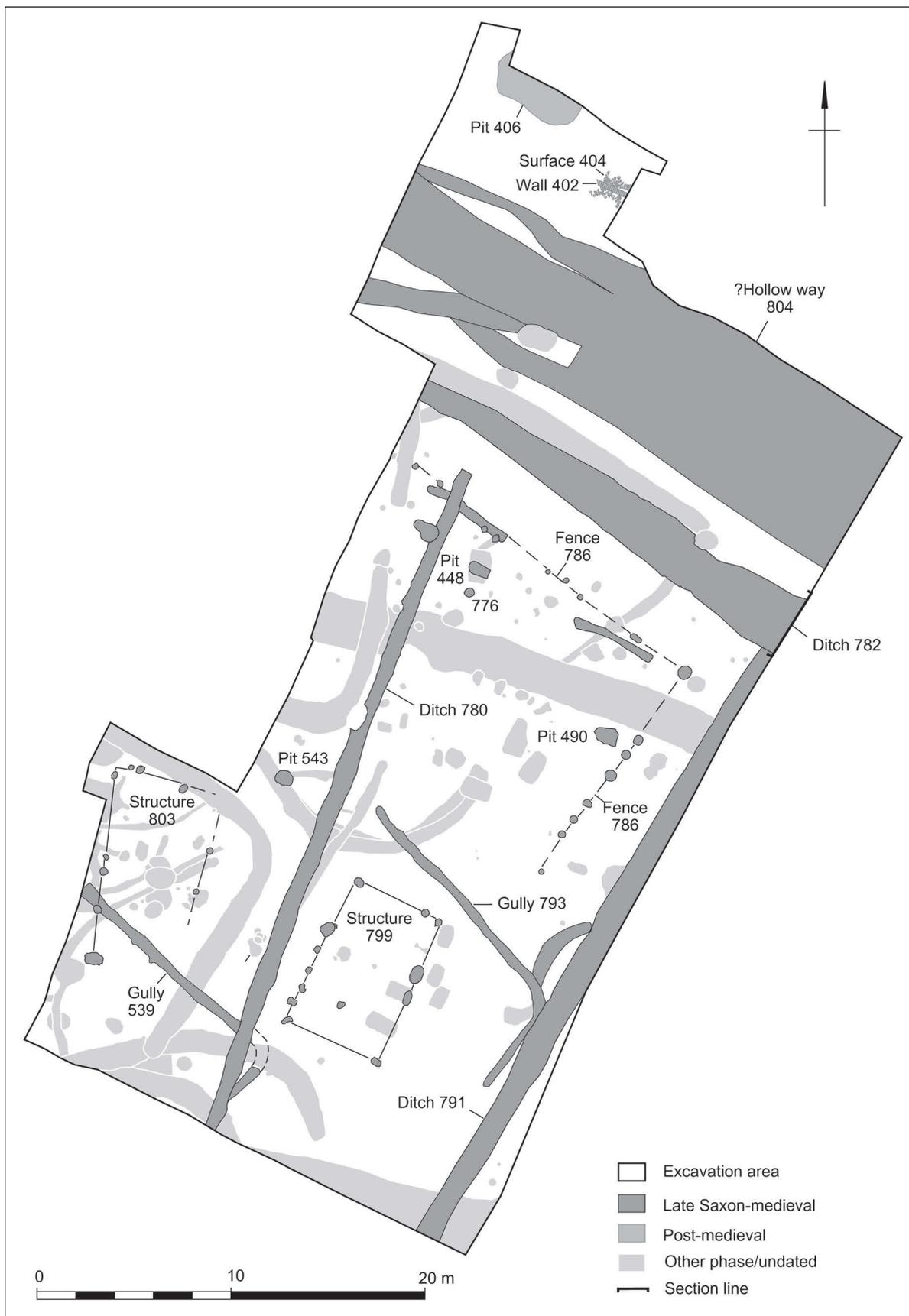


Figure 6. Phase plan: late Anglo-Saxon/medieval and post-medieval features.

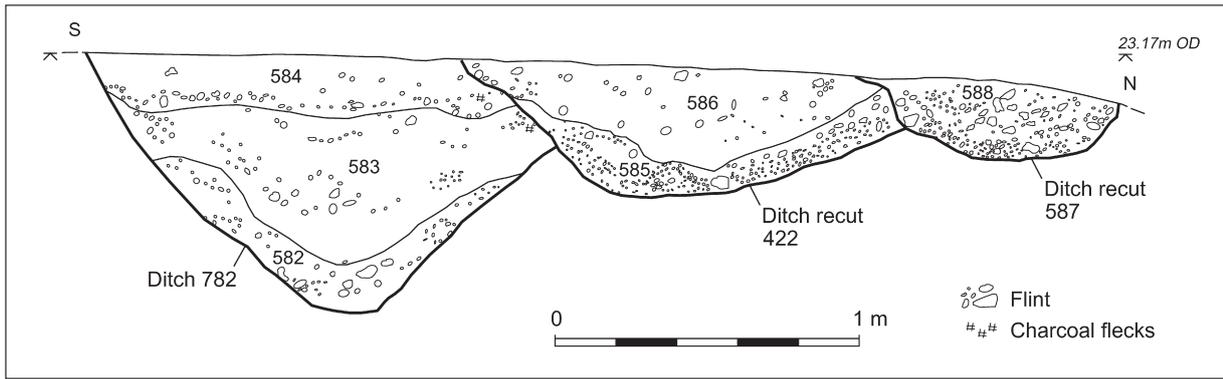


Figure 7. Sections through late Saxon/medieval boundary ditch 782.

northern boundary ditches (786 and 791 respectively) and at a distance of about 4m inside them. Two small pits (448, 490) and posthole 776 comprised the other contemporary features identified in this area and these produced a total of one sherd of early/mid-Anglo-Saxon and seven sherds of late Anglo-Saxon/early medieval pottery.

A second possible rectangular structure (803), on a similar alignment to structure 799, was more tentatively identified within the plot or toft to the west. Structure 803 comprised ten postholes forming a ground plan measuring an estimated 10m by 4m. No dating evidence was recovered from any of the postholes. Pit 543, probably a rubbish pit, to the north-east of structure 803, yielded two sherds of late Anglo-Saxon St Neots ware.

#### Late medieval (13th to 15th century)

Features dated to the later medieval period (Figure 6) suggest that the area reverted to agricultural use at this time. Late medieval feature 804 comprised an 8m wide series of ditches 10m to the south of and parallel with Thrapston Road. Parallel and less than 3m to the south was the late Anglo-Saxon-medieval ditch 782 bounding the north side of the tofts. It is possible that feature 804 represents a hollow-way, with possible origins in the late Anglo-Saxon period, comprising a sequence of linear hollows and ditches, the latter perhaps drainage ditches which broadly confined the shifting course of the route. Cobble patch 404 may also have been an element of this complex, and the gravel in the lowest fills (585 and 588) of the recuts (422 and 587) of ditch 782 may derive from similar metallated surfaces of which no other trace survived.

## Finds

### Pottery

Lorraine Mephram, with a contribution by Patrick Quinn

Only the Anglo-Saxon and early medieval pottery (109 sherds; 652g) is discussed here; details of all other pottery are held in the project archive, while a full report including the prehistoric material can be found online (<http://www.scribd.com/doc/219615611/Thrapston-Spaldwick>). Anglo-Saxon and medieval pottery is quantified by feature in Table 2.

### Methods of analysis

The Anglo-Saxon pottery has been subjected to full fabric and form analysis, following the standard Wessex Archaeology pottery recording system (Morris 1994), which accords with nationally recommended guidelines for the recording of post-Roman pottery (Medieval Pottery Research Group 2001). Fabrics have been defined and coded on the basis of predominant inclusion type; totals and summary descriptions are given in Table 3. To support the fabric analysis, samples of six selected fabric types were submitted for thin section analysis by Dr Patrick Quinn (University College, London). His full report is held in the project archive, and a summary of his results is incorporated below.

### Description of assemblage

The identification of an Anglo-Saxon element within the assemblage is somewhat problematic. A total of 109 sherds have been dated as early/mid-Anglo-Saxon solely on the grounds of fabric; there are no clearly diagnostic sherds. Nearly all fabrics are sandy and are almost entirely unoxidised; these are harder-fired than those sandy wares identified as later prehistoric (although petrographic examination indicates that all were fired to less than 850°C, the same as the prehistoric fabrics), and coarser. The condition of the sherds is fair; despite their hard-fired nature, sherds on the whole are smaller than in the prehistoric assemblage, and are at least slightly abraded. Mean sherd weight is 6.0g.

	Saxon	St Neots ware	Stamford ware	early medieval Shelly	early medieval Sandy	Total
<i>Early/mid-Anglo-Saxon</i>						
Fire pit 435	2/14					2/14
Fire pit 525	20/152			1/7		21/159
Fire pit 725	2/36					2/36
Pit 455	3/19					3/19
Waterhole 663	12/98					12/98
<b>sub-total</b>	<b>39/319</b>			<b>1/7</b>		<b>40/326</b>
<i>Late Anglo-Saxon/early medieval</i>						
Pit 448	1/15			2/32		3/47
Pit 490		3/18				3/18
Gully 539	1/3					1/3
Pit 543		2/48				2/48
PH 776		1/8			1/2	2/10
Ditch 782		9/215	2/14		9/113	20/342
Fence 786	1/6					1/6
Ditch 791	13/60					13/60
Gully 793	11/40	3/11		1/4		15/55
Structure 799	13/48					13/48
<b>sub-total</b>	<b>40/172</b>	<b>18/300</b>	<b>2/14</b>	<b>3/36</b>	<b>10/115</b>	<b>73/637</b>

*Table 2. Anglo-Saxon and early medieval pottery by feature. Number/weight in grammes.*

Fabric Code		No. sherds	Weight (g)
QU400*	Quartz inclusions <0.5mm, derived from arenitic sandstone in slightly calcareous clay matrix; crushed sandstone possibly added as temper	28	184
QU401*	Sandstone inclusions (quartz, polycrystalline quartz, and rock fragments) <1mm and fossil shell <1mm in fine, non-calcareous clay matrix; both possibly added as temper	44	222
QU402*	Coarse fabric: rounded quartz and polycrystalline quartz <2mm, some possibly added as temper, in fine, non-calcareous clay matrix; sparse carbonate inclusions	13	92
QU403	Fine fabric: finer variant of Q400; inclusions <0.25mm	13	58
QU404*	Quartz-rich sandstone inclusions <2mm (quartz and polycrystalline quartz), poorly sorted, probably naturally occurring; possible plant temper, in non-calcareous clay matrix	1	16
QU405*	Abundant quartz, polycrystalline quartz and sandstone <2mm (derived from coarse arkosic sandstone); sparse carbonate inclusions, whether temper or naturally occurring uncertain; in non-calcareous clay matrix	2	11
QU406*	Sand-sized inclusions of quartz and polycrystalline quartz <0.5mm (well sorted, probably added as temper) in silty non-calcareous clay matrix; sparse chert and sandstone inclusions	3	37
VE400	Organic-tempered fabric: moderate, fairly well sorted organic inclusions <3mm; rare quartz	5	32
<b>Total</b>		<b>109</b>	<b>652</b>

*Table 3. Anglo-Saxon pottery fabric totals and summary descriptions. \* indicates fabrics samples for petrographic analysis.*

### Fabrics

Lorraine Mephram and Patrick Quinn

A total of eight fabrics has been identified (Table 3), and samples of six were thin-sectioned (Q400, Q401, Q402, Q404, Q405, Q406).

The Anglo-Saxon fabrics are compositionally distinct from the prehistoric sherds analysed in that they are dominated by quartzose inclusions rather than shell and/or grog. In all but one sample (Q402) this material appears to have derived from sandstone. The source of this sandstone material is not entirely clear. Sandy layers occur within the Oxford Clay and in the Kellaway Beds below it. However, these are doggers or sandy clay rather than pure sandstones of the type seen in these fabric samples. Nevertheless, the calcareous sandstone seen in Q402 could have derived from a calcareous cemented sandy layer in the Oxford Clay or other Jurassic marine sedimentary unit. Vince found calcareous sandstone inclusions in Iron Age ceramics from Cambridgeshire and interpreted it as having a Lower Cretaceous origin (Vince 2006); he also found calcareous sandstone temper in Anglo-Saxon ceramics from the county, which he interpreted as the Jurassic Spilsby Sandstone (Vince 2007a).

Non-calcareous quartz arenite sandstone (as in Q400) does not occur as a primary outcrop in the region around Spaldwick and the nearest *in situ* sandstone outcrops may be some distance away. However, eroded sandstone clasts could be present in the glacial till or fluvio-glacial material that covers the Oxford Clay in places. Given that the sandstone clasts in several of the samples are thought to have been added as temper (Q400, Q401, Q406), it is possible to envisage the selection of glacial erratic for this purpose. Vince also attributed the presence of sandstone inclusions in Anglo-Saxon ceramics from Cambridgeshire to the use of boulder clay (Vince 2007a and b).

### Forms

There are only four rim sherds amongst the Anglo-Saxon assemblage. One of the rims (from 'fire pit' 725) is from a fairly thick-walled vessel with an upright, rounded rim. The other rims are simple and rounded in profile, but the rim orientation and overall vessel profile are unknown in all cases. These do not, therefore, help to confirm the dating of the assemblage. No decoration is present, and only eight sherds (three in

fabric Q401, four in Q403, and one in Q404) are bur-nished.

### Discussion

The dating of this small group of sherds, then, has to rely heavily on parallels with the fabric types, and there are similarities with early/mid-Anglo-Saxon wares identified at other Cambridgeshire sites, such as Cambourne New Settlement and Eynesbury (Seager Smith 2009; Mephram 2004), as well as the assemblages previously analysed by Vince (2007a and b). In the absence of a well-understood and well-dated early/mid-Anglo-Saxon ceramic sequence for the region, the Eynesbury assemblage was dated broadly, on typological grounds, to the 5th–7th centuries, and it is likely that the Spaldwick assemblage falls within the same date range.

Only 16 Anglo-Saxon sherds came from features stratigraphically phased as Anglo-Saxon (12 from pit 663, 2 from 'fire pit' 435 and 2 from 'fire pit' 725). In addition, 20 sherds from pit 525 may serve to date this feature, if one small medieval sherd can be considered as intrusive, while three sherds from pit 455 have been taken as dating evidence, albeit tentative. A further 13 sherds formed the only dating evidence in three postholes in timber building 799, but their small size and highly abraded nature precludes their use as firm evidence. All other Anglo-Saxon sherds came from later features and topsoil contexts.

### Animal Bone

Lorraine Higbee

A total of 552 bones (refitting bones counted as 1) was recovered from Anglo-Saxon and early medieval contexts, more than half (290) from early/mid-Anglo-Saxon contexts. The number of identified fragments, however, is quite small (162) and this limits their potential for detailed analysis.

In terms of the numbers of identified specimens compared by species proportions (see Table 4), the early/mid-Anglo-Saxon phase appears to be dominated by cattle, while the late Anglo-Saxon/medieval phase appears to be sheep/goat-dominated. Whether or not this apparent difference in the relative importance of livestock species is real and reflects a shift in husbandry strategy is uncertain given the small sample size. It is also difficult to assess how the Spaldwick assemblage fits with regional trends since variations in the relative importance of sheep/goat

**Table 4.** Animal bone: number of identified specimens present (or NISP) by period.

Period/Species	cattle	sheep/goat	pig	horse	red deer	domestic fowl	rat	Unidentifiable	Total	Identified specimens
Early/mid-Anglo-Saxon	46	32	5		2	1	1	203	290	87
Late Anglo-Saxon/medieval	15	33	12	3	4	8		187	262	75
<b>Total</b>	<b>61</b>	<b>65</b>	<b>17</b>	<b>3</b>	<b>6</b>	<b>9</b>	<b>1</b>	<b>390</b>	<b>552</b>	<b>162</b>

and cattle have been noted (Crabtree 2010). Less common species represented include pig, horse, dog, red deer (mostly antler) and domestic fowl.

Analysis of body parts and age data indicates that livestock were raised locally and slaughtered on-site, and suggests that the local economy was a self-sufficient producer of meat and secondary products.

#### *Other finds*

A small fragment of an antler comb was recovered from possible early/mid-Anglo-Saxon pit 525; this is part of the tooth plate from a double-sided composite comb of a type current from the Romano-British period through to the medieval period (MacGregor 1985, fig. 51).

A small quantity of slag was recovered from Anglo-Saxon and medieval features (329g). Some of this clearly represents iron smithing slag, and includes one possible hearth bottom, from early/mid-Anglo-Saxon waterhole 663. However, the small assemblage also includes a few pieces of a very light vesicular material, grey in colour, which results from some kind of pyrotechnic activity, but not necessarily metalworking and not necessarily of Anglo-Saxon or medieval date as similar material also occurred in Iron Age contexts on the site. Overall, the quantities of slag are insufficient to postulate on-site metalworking, or any other industrial activity.

### **Environmental**

#### *Charred plant remains*

Chris J. Stevens

#### *Introduction*

Three samples were selected for full analysis; these came from two early/mid-Anglo-Saxon features ('fire pit' 433; pit 525), and one late Anglo-Saxon/medieval (ditch 782). The samples were processed using standard flotation methods with the flot collected on a 0.5mm mesh. For the three samples selected for analysis all identifiable charred plant macrofossils were extracted from the flots, together with the 2mm and 1mm residues. Identification was undertaken using a stereo incident light microscope at magnifications of up to x40, following the nomenclature of Stace (1997) for wild species and the traditional nomenclature as provided by Zohary and Hopf (2000, tables 3 and 5) for cereals. The results are presented in Table 5. In the case of the 0.5mm to 1mm fraction from ditch 782 the sample was extremely rich in small weed seeds and for this reason only one-third of the sample was examined. The results were then multiplied by three to provide estimates for the flot as a whole.

#### *Results and discussion*

Of the three samples, that from the early/mid-Anglo-Saxon 'fire-pit' 433 produced very little in the way of plant remains, being dominated by wood charcoal. However, those present did include several thorns of

sloe/hawthorn (*Prunus spinosa*/*Crataegus monogyna*), along with three intact fruits of sloe (*Prunus spinosa*), of which two had the stones clearly visible, and a well preserved stone. The only other remains in this sample were a single grain of rye (*Secale cereale*) and a seed of vetch/wild pea (*Vicia/Lathyrus* sp.).

The charcoal from 'fire pit' 433 contained large quantities of sloe or blackthorn (*Prunus spinosa*) (Barnett, below), and it is probable that many of thorns derive from the burning of blackthorn or hawthorn (*Crataegus monogyna*) twigs and branches. Several whole fruits of sloe (*Prunus spinosa*), while possibly representative of the collection of such fruits for consumption, are also likely to have come in with scrub/hedge material collected as fuel, still attached to the plant. Fruits of sloe gradually dry on the plant and become quickly wrinkled and this would imply that the wood with the berries is likely to have been collected between September and November. More importantly, it suggests that at least some of the wood, if not a large part of it, was burned green with the berries still attached.

The remaining two samples had a greater quantity of cereal remains, although only that from late Anglo-Saxon/medieval ditch 782 might be deemed rich in cereal remains. Unlike the Iron Age samples, these samples produced no remains that might be associated with turves. Early/mid-Anglo-Saxon pit 525 produced a few grains of barley (*Hordeum vulgare* sl) and a single rachis fragment and several grains of free-threshing wheat (*Triticum aestivum/turgidum* type). A possible grain of hulled wheat (*Triticum dicoccum/spelta*) was recovered along with two extremely badly preserved glume bases. This sample also has a single fragment of hazelnut (*Corylus avellana*) shell. Seeds of wild species were relatively few but comprised a similar range of species to those seen in the Iron Age samples. These included fig-leaved goosefoot (*Chenopodium ficifolium*), dock (*Rumex* sp.), clover (*Trifolium* sp.), meadow grass/cat's-tails (*Poa/Phleum* sp.), oats (*Avena* sp.) and stinking mayweed (*Anthemis cotula*).

The richer sample from late Anglo-Saxon/medieval ditch 782 had a large number of grains of free-threshing wheat (*Triticum aestivum/turgidum* type), with a similar number of rachis fragments of free-threshing wheat. In most cases these rachises were not identifiable, but in a few cases they could be identified as from hexaploid free-threshing wheat, (*Triticum aestivum* sl).

The cereals from ditch 782 and pit 525 are relatively typical of Anglo-Saxon and medieval assemblages with a high prevalence of free-threshing wheat, along with smaller amounts of barley and rye (Stevens 2009). The high numbers of rachis fragments is of some significance, particularly since they are far more readily destroyed during charring than grains (Boardman and Jones 1990). The ratio of rachis fragments to grain is 1:2–6; as such, a higher ratio of rachis fragments, as seen here, is characteristic of threshing waste (van der Veen 1992, 82), in particular rachises removed by raking or coarse sieving.

	Phase	EMAS	EMAS	LAS/EM
	Feature Number	433	525	782*
	Feature type	'fire pit'	pit	ditch
	Context	434	524	748
	Sample	5	18	27
	Size/Litres	17	18	2
	Flot size (ml)	1650	100	20
	% Roots	3	30	10
	<i>Common Name</i>			
Cereal				
<i>Hordeum vulgare</i> sl (grain)	barley	-	3	-
<i>H. vulgare</i> sl (rachis fragments)	barley	-	1	-
<i>Triticum dicoccum/spelta</i> (grain)	emmer/spelt wheat	-	1	-
<i>T. dicoccum/spelta</i> (glume bases)	emmer/spelt wheat	-	2	-
<i>Triticum aestivum/turgidum</i> (grains)	bread/rivet wheat	-	7	127
<i>T. aestivum/turgidum</i> (rachis fragments)	bread/rivet wheat	-	-	105
<i>T. cf. aestivum</i> (hexaploid rachis fragments)	hexaploid rachis fragment	-	-	3
<i>Secale cereale</i> (grain)	rye	1	-	1
<i>Secale cereale</i> (rachis frags)	rye	-	-	13
Cereal indet. (grains)	cereal	-	2	-
Cereal culm nodes	cereal	-	-	2
<i>Corylus avellana</i>	hazelnut	-	1	-
<i>Chenopodium ficifolium</i>	fig-leaved goosefoot	-	1	-
<i>Chenopodium album</i>	fat-hen	-	-	19
<i>Atriplex</i> sp.	orache	-	1	36
<i>Rumex</i> sp.	dock	-	2	8
<i>Prunus spinosa</i> (fruit/stones)	sloe	3/1	-	-
<i>P. spinosa/Crataegus monogyna</i> (thorns)	sloe/hawthorn thorns	++	-	2
<i>Trifolium</i> sp.	clover	-	3	-
<i>Galium aparine/tricornutum</i>	cleavers/corn cleavers	-	-	36
<i>Vicia/Lathyrus</i> sp.	vetch/pea	1	-	5
<i>Prunella vulgaris</i>	selfheal	-	-	1
<i>Sambucus nigra</i>	elder	-	-	1
Asteraceae indet. >2.5mm	Indet. daisy/thistle type	-	-	1
<i>Anthemis cotula</i>	stinking mayweed	-	1	24
Poaceae large (culm node)	grass culm node	-	-	1
<i>Lolium perenne</i> L.	ryegrass	-	-	4
<i>Poa/Phleum</i> sp.	meadow grass/cat's-tails	-	2	-
<i>Avena</i> sp. (grain)	oat grain	-	1	33

Table 5. Charred plant remains.

EMAS = early/mid-Anglo-Saxon; LAS/EM = late Anglo-Saxon/early medieval; ++ = frequent; \* flot estimated.

Weed seeds mainly comprised both small and large seeded species. In the former group were those of fat-hen (*Chenopodium album*), orache (*Atriplex* sp.), dock (*Rumex* sp.) and stinking mayweed (*Anthemis cotula*). In the latter group were seeds of vetch/wild pea (*Vicia/Lathyrus* sp.), cleavers (*Galium aparine/tricornutum*) and oats (*Avena* sp.).

Both small and large seeds are relatively prolific in the samples, although it might be noted that around half of the small weed seeds are of stinking mayweed (*Anthemis cotula*), which has a tendency to

remain in the heads and therefore is often removed with coarse sieving waste. The samples are likely to come from the waste generated from processing sheaves for clean grain. It is quite possible that the crops were stored as sheaves after harvesting in summer. However, whether this was a common practice, or one that was only conducted in years when poor weather conditions restricted the processing of crops following harvest, is difficult to gauge from two samples.

The presence of stinking mayweed (*Anthemis cotula*)

can be associated with the cultivation of heavy clay soils. This species occurs in earlier periods, but only upon Romanised settlements, and its widespread occurrence in the Anglo-Saxon period as seen here is quite probably related to the introduction of heavy mouldboard ploughs (Stevens with Robinson 2004).

### Wood Charcoal

Catherine Barnett

#### Introduction

Five samples were analysed for charcoal, all from the early/mid-Anglo-Saxon 'fire pits'. All wood charcoal >2mm was separated from the processed flots and the residue scanned or extracted as appropriate. The samples proved rich and so were sub-sampled, with a number of fragments felt to be representative of the sample as a whole identified, normally 100 fragments. The fragments were prepared for identification according to the standard methodology of Leney and Casteel (1975, see also Gale and Cutler 2000). Identification was undertaken according to the anatomical characteristics described by Schweingruber (1990) and Butterfield and Meylan (1980) to the highest taxonomic level possible, usually that of genus, with nomenclature according to Stace (1997). Individual taxa were quantified (mature wood and twig separated) and the results tabulated (Table 6).

#### Results and Discussion

A minimum of eight woody species were represented: ash (*Fraxinus excelsior*), blackthorn (*Prunus spinosa*), buckthorn (*Rhamnus cathartica*), elder (*Sambucus nigra*), field maple (*Acer campestre*), pomaceous fruits (Pomoideae), hazel (*Corylus avellana*), oak (*Quercus* sp.). The charcoal from each of these five early/mid-Anglo-Saxon features proved relatively similar, supporting the assumption that they are related in function and chronology. Three of the five were heavily dominated by blackthorn (*Prunus spinosa*) at 60–86%, with common Pomoideae (usually identifiable further as hawthorn, *Crataegus* type) at 10–14%. Pomoideae, however, formed the dominant type in pit 435 at 70%, with ash (*Fraxinus excelsior*) in pit 724 at 46%, though blackthorn was still common in the latter. Oak (*Quercus* sp.) occurred in three contexts, while field maple (*Acer campestre*), buckthorn (*Rhamnus cathartica*) and elder (*Sambucus nigra*) each occurred in one context.

All the taxa found are relatively common deciduous types and most are tolerant of a variety of free-draining soils. However, in combination, the taxa found are strongly suggestive of hedging or open scrub. In addition, for all of the species represented, there proved to be an overwhelming predominance of juvenile wood, twigwood and young roundwood, usually 3–10 years old when cut. Although there was clearly a substantial presence of roundwood, this varied in age, diameter and species, so there is no clear indication of management of woody resources, for example by coppice rotation. Instead, exploitation of substantial quantities of immature scrub and/or

hedges for fuel is indicated. Whether this was purposeful or as a result of extensive earlier deforestation in the area which limited availability of larger trees and shrubs or access to remaining resources is unclear. However, it is apparent that a very open landscape occurred locally during the Anglo-Saxon period.

Despite the fact that young narrow pieces dominated, a high temperature of burn was achieved with the selected fuel, as attested to by the glassy, vitrified appearance of many of the pieces. According to the experimental work of Prior and Alvin (1983), temperatures >800°C are necessary to achieve this. It might be suggested that, given the young wood and types used, careful management of the fire, possibly within a restricted area or structure, would be needed to reach such temperatures, and casual domestic fires are not indicated.

### Discussion

#### Early/mid-Anglo-Saxon (5th–8th centuries)

Activity on the site during this period is somewhat enigmatic. There are no definite structures, but this is in line with the general pattern across the region, where settlement was concentrated in the valleys and is rare on the clay uplands, which were probably used primarily for pasture (Wright 2009, 115–6). The presence of a probable waterhole certainly fits the latter supposition.

The nine sub-rectangular 'fire pits' excavated are of uncertain function, and the dating evidence from them is very slight (four sherds of pottery). The charcoal found within them indicates the exploitation of large quantities of immature scrub or hedges for fuel. The relatively small size of the pits, the type of fuel burnt in them, and the presence of variable quantities of lightly burnt flint nodules renders their initial interpretation as charcoal-burning pits highly unlikely. The 'pitsteads' used in the Anglo-Saxon charcoal-burning industry were usually circular, often banked around the edges, and at least 4 metres across (see Steane 1985, 222 for medieval examples), and would have used very large quantities of mature wood (up to several tons in each episode of burning) which in this instance, given the evidence for the deforestation of the surrounding landscape, would not have been easily available. A link with metalworking is unsupported by any other firm evidence for on-site metalworking in the form of slag, but some kind of craft or industrial function still seems to be the best interpretation. The relatively large quantity of animal bone recovered from the pits should be noted (more than was recovered from the whole of the late Anglo-Saxon/medieval phase), as should the concentration of this material, together with fired clay and nodules of lightly burnt flint, in one of the pits; it may be that these pits were used for cooking. Continuity between this phase of activity and the late Anglo-Saxon/early medieval phase cannot be demonstrated, and any

Feature	729	724	450	435	433
Context	730	723	452	436	434
Sample	34	32	16	11	5
Size Litres	2	2	8	9	17
Flot Size ml	400	250	425	1700	1650
Charcoal 4/2mm	240/100 ml	160/50 ml	150/150 ml	950/425 ml	700/500 ml
Comments	Moderate sample but inc v large pieces. *inc 12–22mm 8–11 yrs	Moderate sample but large pieces (esp Pomoideae), occ. fissured and vitrified. *10–30mm 3–8 yrs, **10mm 4–5 yrs	Moderate sample, several warped and vitrified but friable and fragmentary, all young rwd 10–15mm diameter, *3–5 yrs, **5 yrs, ***3–10 yrs	Rich sample, large pieces (esp Pomoideae), occ. vitrified	V large sample, big pieces, occ. fissured and vitrified. *8–22mm 5–13 yrs, **10–22mm 5–22 yrs
<i>Acer campestre</i>	-	-	2	6	-
<i>Corylus avellana</i>	-	-	-	-	2 rwd
<i>Fraxinus excelsior</i>	-	46 rwd*	10 rwd*	3	1
Pomoideae	13, 1 twd	16	10 rwd**	-	-
Pomoideae, <i>Crataegus</i> -type	-	-	-	70	14*
<i>Prunus</i> sp.	-	18 rwd*	-	1	-
<i>Prunus spinosa</i>	80 rwd*, 6 twd	-	60 rwd***	-	83 rwd**
<i>Quercus</i> sp.	-	20 rwd**	2 rwd	12	-
<i>Rhamnus cathartica</i>	-	-	-	5 twd	-
<i>Sambucus nigra</i>	-	-	-	3	-
Unidentified	-	-	16, 1 twd	-	-
<b>Total no. frags. used</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 6. Charcoal from early/mid-Anglo-Saxon 'fire pits'. rwd: roundwood; twd: twigwood.

connection with the later village development seems fortuitous.

#### Late Anglo-Saxon/early medieval (9th–11th/12th centuries)

The evidence from the late Anglo-Saxon to early medieval period is of particular interest in throwing some light, albeit somewhat dim, on the origins of the modern village. Comparable evidence is scarce within the county. This period saw the creation of formalised land divisions or tofts which extended south from what is now Thrapston Road, a medieval route which perhaps originated as a hollow-way through the settlement. These tofts appear to have contained rectangular post-built timber structures with fences sub-dividing the yard areas and perhaps represent the beginnings of the village. Evidence of the cultivation of the clay soils of the area, probably related to the introduction of heavy mouldboard ploughs, comes in the form of seeds of stinking mayweed re-

covered from one of the boundary ditches.

The area at this time formed part of Mercia, with Cambridge as a possible frontier *burh*, but it is assumed that the arrival of the Danes in 875 and a settlement at Cambridge from c. 889 must have stimulated some reorganisation of land ownership, from multiple estates with dependent tenures, to the Danish system of free tenancies (Ellis *et al.* 2001, 103). In this context it is perhaps significant that the early village was named 'Danesfield'. After the reconquest of the Outer Danelaw in 916–7, serfdom and the manorial system were reintroduced. It is more likely that the laying out of tofts in Spaldwick is linked to the latter phase, given the pottery evidence, which includes St Neots and Stamford wares and other 10th–12th century wares from the boundary ditches, although the rectangular buildings produced only residual early/mid-Anglo-Saxon sherds. The village may, however, have slightly later origins. A possible parallel can be seen at Bassingbourn in the south of the county,

where there is a suggestion of an earlier (early/mid-Anglo-Saxon) origin to the village with subsequent changes in layout taking place in the 10th/11th century and possibly linked to land ownership changes after the Norman conquest (Ellis *et al.* 2001, 123).

In terms of pottery, the late Anglo-Saxon and early medieval village shows less reliance on local supplies, with regional wares (from St Neots and Stamford) appearing from the 10th century; this may reflect the position of the settlement on what may have been even at that time a major route between Cambridge, Huntingdon and Thrapston. There is little else, however, to illustrate the material culture of the settlement. In contrast to the early/mid-Anglo-Saxon period, cattle were predominant rather than sheep/goat (although quantities are very small), while weed seeds suggest that the heavy clay soils of the area were being increasingly cultivated; crops include wheat, barley and rye.

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The archive is currently stored at the offices of Wessex Archaeology under the project code 75070, but in due course will be deposited with the Cambridge Archaeological Store under the accession code ECB3445.

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