

The Anglo-Saxon Pottery from the Holdingham Roundabout site, Sleaford

Alan Vince and Jane Young

Four hundred and ninety-eight fragments of pottery from the Holdingham Roundabout site, Sleaford, excavated by APS (sitecode SLH01) were submitted for identification and assessment. They date from the early and mid Anglo-Saxon periods (broadly speaking within the 5th to the 9th centuries), with a small number of later sherds.

Methodology

Early and middle Anglo-Saxon pottery was once thought to have been produced as a domestic craft within the village. Study of pottery fabrics has demonstrated that this was rarely the case. It has further shown that the distribution of pottery was a complex process, which we still do not fully understand. It is hoped that by detailed study of the pottery inclusions found in early and mid Anglo-Saxon pottery we will be able to understand more fully the date and socio-economic relations of Anglo-Saxon settlements. Consequently, all of the pottery had to be examined under x20 magnification using a binocular microscope. Each sherd, where possible, was assigned to a fabric group, based on the identify of the major inclusion type(s) present and any further inclusions identified were listed as 'subfabrics'.

Where the sherds were large enough they were assigned to a form class. Details of decoration, use and post-burial alterations were all noted.

These records were listed in a database table and then combined with stratigraphic information supplied by Tobin Rayner of APS. On the basis of this information the likely date range of the settlement was estimated, and the potential for reconstructing the site history was discussed.

Fabric

Pottery of Anglo-Saxon, Saxo-Norman and medieval dates was present, but only a handful of the sherds were not Anglo-Saxon, which is clearly the main period of activity on the site.

Early to Middle Anglo-Saxon

It is clear that in Lincolnshire a number of wares which were initially thought to date solely to the early Anglo-Saxon period, mainly on the ground that they occurred in indisputable early contexts (such as cremation or inhumation cemeteries), are now thought to have continued in use into the subsequent middle Anglo-Saxon period, perhaps finally being replaced by Maxey and Ipswich wares during the 8th century. Consequently, undecorated handmade sherds with mineral or organic temper cannot normally be assigned without an element of doubt to a particular period and are classed as 'early to mid Anglo-Saxon'.

Cname	Principal inclusions	Sherds	Vessels	Weight
ASQSH	Detrital quartz and fossil shell	1	1	4
CHARN	Acid igneous rock	46	37	317
CHARN+CH	Acid igneous rock and organic temper	2	2	13
CHARN+Q	Acid igneous rock and detrital quartz	7	5	91
ECHAF	Organic temper	2	2	8
ESAX	Various (too small to classify)	104	87	42
ESAXLOC	Various (but suggesting a local origin)	2	2	21
ESAXX	Various (but suggesting a non-local origin)	2	2	11
ESGS	Water-polished quartz grains from Lower Cretaceous	3	3	23
FE	Ironstone fragments	4	4	26
GRBURN	No visible inclusions (imported Grey Burnished ware)	1	1	1
LIM	Oolitic limestone	18	18	116
LIMES	Other Limestone(s)	4	3	21
MISC	Unclassified	9	9	34
RQCL	Detrital rounded quartz	32	32	173
SST	Sandstone (unknown types)	16	16	79
SSTCL	Sandstone and other detrital grains	3	3	9
SSTCL - F	Sandstone and other detrital grains - fine textured	59	52	392
SSTCL - M	Sandstone and other detrital grains - medium textured	123	93	1457
SSTMG	Lower Carboniferous sandstone	11	11	96
Totals		450	384	2938

The majority of these fabric groups have been found on sites throughout Lincolnshire and their distribution in some cases suggests their area of origin. The CHARN fabric, for example, is most common in Leicestershire and within Lincolnshire is most common in the south and west of the county. This is consistent with an origin in Leicestershire, where there is an outcrop of acid igneous rock, the Mountsorrel granodiorite. The ESGS fabric, by contrast, is most common in northeast Lincolnshire and it is clear from this that the source of the quartz temper is the outcrop of Lower Cretaceous rocks to the west of the Wolds, or in sands and gravels derived from the erosion of these rocks. The likely origin of the oolitic limestone found in LIM is the Lincolnshire Limestone. However, the individual ooliths are often not cemented, which suggests that the source is further south than Sleaford, where the Ketton limestone outcrops (although it is notable that LIM was not found at Empingham, in Rutland). Samples of ASQSH from Dunholme have recently been studied in thin-section (Vince 2002) and a central Lincolnshire source proposed based on the character of the shell (probably shelly limestone, perhaps from the Cornbrash) and the quartzose sand (which was typical of that found in the Trent valley and the Witham terraces at Lincoln).

The source of many of the fabric groups is at present uncertain. In some cases this is because the inclusions present in the fabric are of types which have a wide natural distribution or cannot be provenanced (such as the organic temper of ECHAF, which it has been suggested might be dried horse dung). However, the Holdingham Roundabout site includes a very high proportion of fabrics which have not been previously noted in the county. The presumption would therefore be that they are of local origin. However, they include SSTMG, which is tempered with a quartz sand derived from the Carboniferous sandstones of the Millstone Grit, or possibly the Coal Measures. Sands of this type occur extensively in Yorkshire, to the east of the Pennines and to the west of the North Yorkshire Moors and the Wolds. Further south fluvioglacial sands are mainly composed of quartz derived from Triassic sandstones, as for example in the Trent valley. Of the 11 sherds from the site only four contained solely quartz grains. In three of the others biotite, hornblende (?) and feldspar were present. Such minerals do occur in the Millstone grit but not the Coal Measure sandstones. In two other sherds the remaining inclusions are mixed, including limestone, shell and laminated clay pellets. These inclusions cannot be identified further without scientific analysis but tentatively suggest that the sherds are of Yorkshire origin. Since this is not a common type elsewhere in the county this would suggest that the occupants of the site had direct access to Northumbrian goods, presumably through trade from the Humber estuary round the coast to the fens.

The main fabric in the collection is one that had not been recognised on other Lincolnshire sites until this year, when it was found on three sites in the vicinity of Sleaford (Holdingham Roundabout, the Silk Willoughby to Hatton Pipeline (site 10) and the Staythorpe to Silk Willoughby pipeline (also a Site 10). This fabric was given the code SSTCL, to denote a sandstone-tempered fabric found in central Lincolnshire. The sandstone is of two sorts, both consisting of well-sorted overgrown quartz grains c.0.2mm across. In one type there is no other cement and the grains look like lumps of sugar whilst in the other there is a small amount of red haematite cement. The fabric can be subdivided into two subfabrics, one of which just contains these sandstone inclusions and quartz grains which are clearly derived from the sandstones (denoted STTCL fabric F). In the other, denoted SSTCL fabric M, there are also a range of other inclusions, primarily biotite and other granitic minerals. At the Holdingham Roundabout site it accounts for 38% of the early to mid Anglo-Saxon pottery by vessel count and 63% by weight. Despite the fact that the distributional evidence points inescapably to a local source, very similar wares have recently been recognised in the Thames valley (Vince 2002) where the inclusions have been identified using thin-section analysis. In that case they did not point to a local origin and it has been postulated that they were made on the continent and brought to the Thames valley along with Germanic immigrants. Despite the extensive search for continental vessels of early Anglo-Saxon date carried out by J N L Myres very few potential candidates have been found, and none proved. It would therefore be very unlikely that this is the correct interpretation of the Sleaford finds, but if it were so it would suggest that people in the Sleaford area were involved in traffic across the North Sea.

Several of the other fabrics from the site might also potentially have a non-local origin (eg LIMES) but require further scientific analysis to test this hypothesis.

A further unusual feature of the collection is the number of sherds which contain odd fragments of biotite or granitic rock alongside the normal range of inclusions for their group. Thus, in addition to the CHARN fabric itself there are 33 sherds in which biotite, feldspar or composite rock fragments of granitic appearance have been noted. Most of these are in the SSTCL fabric group but also include examples in FE, LIM, LIMES and SSTMG fabrics. In the latter, it is possible that these are components of the Millstone Grit and in the case of LIM it further emphasises the likely south Lincolnshire (or further south) origin of the ware, since erratics from the Mountsorrel granodiorite occur in deposits to the south of the outcrop. However, their presence in SSTCL cannot be explained easily, if SSTCL is indeed a local Sleaford product but would be consistent with a northwest European origin since biotite granite is a component in the detrital sands of southern Scandinavia, northwest Germany and the low countries..

Cname	Total
FE	1
LIM	1
LIMES	2
SST	3
SSTCL - M	23
SSTMG	3
Grand Total	33

In addition to these mineral gritted or organic tempered handmade sherds there is a single example of a wheelthrown continental vessel, a Grey Burnished ware (GRBURN). Such vessels occur mainly in late 7th and 8th century assemblages, especially on the sites of trading centres, known as *wics* or *emporia*. No such centres are known between York to the north and Ipswich to the south although numismatic evidence suggests that there may be one or more such sites in the fens (Ulmschneider 2000). The presence of a single sherd of this type is not sufficient evidence to suggest direct overseas contact, but it is clearly unlikely that the vessel was brought to England either through York or Ipswich.

Middle Anglo-Saxon wares

A small quantity of sherds of definite middle Anglo-Saxon wares was present, 23 sherds. The majority of these were of Southern Maxey ware (RMAX), a shell-tempered ware produced from naturally shelly bands in the Oxford Clay. Similar wares were produced in the Romano-British and medieval periods and kilnsites for these periods exist in northern Bedfordshire and northern Buckinghamshire. It is likely that this is the source area for the middle Anglo-Saxon ware too. It is, in any case, clear that the ware could not have been produced in Lincolnshire. Two examples of a local version of Maxey ware, MAXQ, were found. These have only been recognised on sites in central Lincolnshire or that part of the Trent valley accessible from central Lincolnshire. The precise source is unknown but is likely to have utilised an outcrop of Cornbrash or similar Jurassic shelly limestone close to Sleaford. One sherd of Ipswich-type ware was present. Following a national survey of this ware it is clear that there is only one source of Ipswich ware, at Ipswich itself. This survey has also shown that there are no examples of

the ware which need date before c.720 nor any which need be later than the mid 9th century. A single sherd of ELFS was present. This ware contains abundant fine shell temper which in thin-section is indistinguishable from that of Northern Maxey ware (middle Saxon), Lincoln late Saxon shelly wares and Potterhanworth ware (medieval). The ware may have been produced in small quantities throughout the middle Anglo-Saxon period but is particularly common in the 9th century, probably overlapping with the introduction of wheelthrown wares in the late 9th century. Finally, there are three sherds of a shell-tempered ware, MSAXLOC fabric A. This ware is similar to and contemporary with Northern Maxey ware.

Cname	Total
ELFS	1
IPS	1
MAXQ	2
MSAXLOC	3
RMAX	16
Grand Total	23

Saxo-Norman wares

Two sherds of Stamford ware, both of Fabric B, were noted. Both were too small for precise identification of the form but their appearance suggests a late 11th/early 12th century date in one case and a 12th-century date in the other.

Medieval wares

An unstratified sherd of Bourne ware (BOU) and two sherds of a glazed oxidized sandy ware (LMLOC) of late medieval date were present.

Forms and function

The majority of the early to middle Anglo-Saxon sherds were too small for the form of the vessel to be established. In the remainder the usual range of vessel forms was present. Most were jars, ranging in size from small vessels (6) to large (6). In seven cases no size was recorded and these are probably medium-sized vessels. A single bowl completes the range.

Form	Total
	362
bowl	1
jar	5
large jar	3
large storage jar	2
large vessel	1
Loomweight/handle	1

lugged vessel	2
small biconical jar	1
small jar	1
small vessel	4
Grand Total	383

Only 27 of the early to middle Anglo-Saxon sherds had any trace of use. This is 5% of the total sherds. This low figure might be partially due to the small size and poor condition of the sherds but is, nevertheless, typical of early Anglo-Saxon domestic pottery collections. For comparison, the figure for a late 11th-12th century pottery assemblage recently analysed from a site in the Thames valley was 40% with traces of use. Study of better-preserved collections than that from Holdingham Roundabout has shown that quite often the jars do not have the thick soot coating on the exterior which is typical of later cooking vessels but still have deposits on the interior which show that they have been used for cooking food (carbonised deposits) or boiling water (kettle fur). They do, however, often have soot around the rim or neck. This suggests that the difference between early Anglo-Saxon pottery and that in the later periods might be due to the method of suspension of the vessels rather than to their function. Soot cannot be deposited on a vessel which is sitting in embers and is most easily deposited when the vessel is being licked by a smoky flame. This is consistent with the evidence from the Holdingham Roundabout site. Seven sherds have external sooting. Of these, two have internal carbonised deposits as well. However, twenty sherds have these internal deposits without any evidence for external sooting. Most of these sherds come from sherds whose form is uncertain but three come from small jars. Two vessels have lugs and were clearly designed for suspension. Of these, one was sooted and the other not.

Of the definitely middle Anglo-Saxon types, only six of the 24 vessels were large enough to establish a form, and all of these were Southern Maxey wares, five of which were noted as being large jars and the other simply as a jar (this latter vessel is on display). It has been noted in the Ipswich ware survey that most of the vessels found outside of East Anglia are large vessels used as containers or as pitchers, traded for their own sake. The Southern Maxey sherds, however, were from sooted vessels, as were vessels of ELFS and MSAXLOC.

Decoration

Many of the vessels were crudely burnished on the exterior but the incidence of decoration was low. Three main forms of decoration were present: incised linear tooling with a round-ended tool; stamping and bossing. All three types can occur on the same vessel, although at this site, where only 12 vessels had any decoration and the sherds are so small it is not surprising to find that this is not the case. Decoration is a crude guide to date in that incised decoration is thought to run from the 5th to the 7th centuries, stamping from the late 5th to the 7th century and bossing from the late 5th to the 6th century. Applying this crude rule of thumb to the decorated sherds from this site, we find that the earliest vessel would be the quartz sand tempered RQCL example, followed by two of the SSTCL - M vessels which have just incised decoration. Stamping, sometimes with incised decoration, occurs on examples of CHARN, SSTCL - F, SSTCL - M and SSTMG.. Interestingly, the latter vessel has signs of use

(internal carbonised deposit), so we cannot say that decorated vessels were used simply for display or storage.

Cname	incised	incised;boss	pressed rim	Stamp	stamp;incised	none	Total
ASQSH						1	1
CHARN				1	1	35	37
CHARN+CH						2	2
CHARN+Q						5	5
ECHAF						2	2
ERRA						2	2
ESAX						87	87
ESAXLOC						2	2
ESGS						3	3
FE						4	4
GRBURN						1	1
LIM			1			17	18
LIMES						3	3
MISC						9	9
RQCL		1				31	32
SST						16	16
SSTCL						3	3
SSTCL - F				1	1	50	52
SSTCL - M	2		1		2	88	93
SSTMG					1	10	11
Grand Total	2	1	2	2	5	371	383

Stratigraphic assessment

The pottery comes from 95 separate contexts, including [306], a number used for unstratified finds. Saxo-Norman or later pottery was recovered from contexts [051], [089], [159] and [212]. Two of these contexts are part of a complex of gullies running north-south. The sherds are late medieval and probably intrusive from medieval plough furrows. The remaining two are from contexts which were stratigraphically late and may provide a *terminus post quem* for this phase of activity.

The remaining contexts either produced solely early to mid Anglo-Saxon pottery or assemblages which contained mostly pottery of this type with a small number of definitely mid Anglo-Saxon sherds. The pottery is notably fragmentary. The average sherd size was only 7.32 gm. There is some variation in sherd size from context to context and the presence of material recovered from sieved soil samples will bring the average sherd size down. Nevertheless, it is likely that the small sherd size is the result of the deposits on the site being subjected to redeposition. This means that a) one cannot assume that any assemblage of pottery formed a contemporary group and b) there should be a large margin of error included in any dating. Thirteen contexts produced sherds of middle Anglo-Saxon date (see table).

Most of these occurred as single sherds but there is a significant group from contexts [254] and [230], the fills of a sunken-featured building. Even in this context group, however, the majority of the sherds are of early to mid Anglo-Saxon types.

Context	Total
016	1
037	2
089	1
147	1
153	2
191	1
194	1
202	1
211	1
230	4
252	1
254	7
277	1
Grand Total	24

.There is some slight evidence for a shift in focus of the site from the early/middle to middle Anglo-Saxon period. Most of the earlier pottery comes from the central part of the site, followed by the north, then the east and then the northeast. By contrast, over half of the middle Anglo-Saxon sherds come from the north, followed by the central part and only two sherds of this date come from elsewhere (the south and northwest). In general, however, the north and central parts of the site produced the bulk of the pottery in both periods.

Assessment

The pottery from the Holdingham Roundabout, Sleaford, excavation indicates that the site was occupied in the early Anglo-Saxon period, starting no later than the 6th century, and that occupation continued into the 8th century, and possibly into the 9th. There is then a gap in the pottery sequence, corresponding to the late 9th, 10th and early 11th centuries, followed by further activity.

The quantity of pottery datable for certain to the 8th (and/or 9th) centuries is much lower than that which can be broadly dated to the 5th/9th centuries, suggesting that most of the latter is actually datable to the earlier part of this time bracket. In other words, either the site is less intensively occupied in the 8th/9th centuries than earlier or they are using less pottery. The second option is quite possible but the quantity is low even by comparison with other Lincolnshire sites of this period.

There are hints in the early/middle Anglo-Saxon period for an atypical character to the pottery assemblage. Similar characteristics are, however, beginning to be found on other early Anglo-Saxon

sites, all of which so far are within 5km of Sleaford. This may suggest that the Sleaford area was involved in coastal or marine trade. However, this interpretation depends entirely on identifications made with a binocular microscope which ought to be tested using scientific methods. Thin-section analysis would be the first technique to use but for SSTMG chemical analysis using ICPS (Inductively-Coupled Plasma Spectroscopy) would allow the Holdingham Roundabout finds to be compared with those from sites in Yorkshire, from which they are visually indistinguishable.

Given the small size of many of the sherds there is limited scope for destructive sampling but it would nevertheless be possible to find twenty-five samples for the relevant fabric groups (see table). Those in which granitic inclusions have been identified by eye, using a binocular microscope, are particularly in need of testing. They amount to twelve samples.

Sample No	Context	Code	Granite inclusions?	Comments	Cost of Analysis
1	240	CHARN	Yes	+ comm limestone incl fossil shell	£21 plus VAT
2	306	CHARN	Yes		£21 plus VAT
3	306	CHARN	Yes		£21 plus VAT
4	153	CHARN+Q	Yes	+ rounded quartz & limestone & sst	£21 plus VAT
5	153	CHARN+Q	Yes	+ greensand & rounded quartz & sst	£21 plus VAT
6	306	CHARN+Q	Yes	+ rounded quartz	£21 plus VAT
7	133	ESGS		+ shelly limestone	£21 plus VAT
8	306	LIM		& sst	£21 plus VAT
9	016	SSTCL - F		F	£21 plus VAT
10	051	SSTCL - F		F	£21 plus VAT
11	069	SSTCL - F		F	£21 plus VAT
12	170	SSTCL - F		F	£21 plus VAT
13	254	SSTCL - F		F	£21 plus VAT
14	007	SSTCL - M		M	£21 plus VAT
15	050	SSTCL - M	Yes	M + limestone & feldspar	£21 plus VAT
16	053	SSTCL - M	Yes	M + granitic	£21 plus VAT
17	069	SSTCL - M		M + greensand	£21 plus VAT
18	088	SSTCL - M		M	£21 plus VAT
19	157	SSTCL - M	Yes	M + feldspar	£21 plus VAT
20	283	SSTCL - M		M	£21 plus VAT
21	306	SSTCL - M	Yes	M + biotite	£21 plus VAT
22	306	SSTCL - M	Yes	M + feldspar & comm oolite	£21 plus VAT
23	306	SSTCL - M		M	£21 plus VAT
24	069	SSTMG		+ limestone & fine quartz & chaff	£42 plus VAT
25	137	SSTMG	Yes	+ chaff & biotite & limestone	£42 plus VAT
Grand					£567 plus VAT

total

Inc
VAT

£666.25
