# The Saxon pottery from the East London gravels: thematic text

Site code: IG-HR93, IL-UC83, R-126, R-MHF77, UP-HH89, UP-MF83, UP-WW82

July 2007

Author: Lyn Blackmore and Alan Vince



Museum of London Archaeology © Museum of London Archaeology Mortimer Wheeler House, 46 Eagle Wharf Road, London N1 7ED

tel 0207 410 2200 fax 0207 410 2201 email mola@mola.org.uk



# The East London landscape: settlement and economy: Saxon pottery contribution

#### Introduction

The pottery was examined macroscopically and using a binocular microscope (x 20) where appropriate, and recorded on paper and computer by sherd count, estimated number of vessels and weight. The fabrics were identified by codes based on those used by the Museum of London but, for the medieval period, taking into consideration the fabric groupings of the county type series, which follows a numerical system (Cunningham 1985; Drury 1993). The latter is based on finds from Chelmsford and Colchester, and although modified for the Colchester (Cotter 2000, 12) and extended over the years by Helen Walker (EAFU), some of the fabrics that occur in western side of the county are not included in it.

This problem of identification is compounded by the problems encountered when classifying small and featureless sherds from multiperiod sites, or where fabrics continue over a long period of time. At Hunts Hill, and to a lesser extent on the other sites, it was difficult to distinguish between Iron Age and Saxon sherds with organic inclusions, or between Iron Age and medieval sherds with shell or other calcareous inclusions. Even where rims are present these can be difficult to date precisely. This was amply demonstrated in the present project, when several specialists failed to come to a concensus over the dating of some of the pottery from Uphall Camp. Ambiguous Iron Age/Saxon sherds also occur at Hunts Hill, Great Arnolds Field and Moor Hall Farm.

Other problems include the way in which the pottery was recorded: by different specialists at different times and in different places. As a rule the sherds that had been recorded were returned to the same bag as those that had not, making it difficult to know what remained to be done; thus some sherds may have been recorded more than once, and others not at all. Furthermore, it is possible that not all the contexts were analysed, as there was not time to trawl through all boxes on the off chance that more post-Roman material might be found.

The fabrics that were recorded are outlined in the individual pottery reports, and in the reports on the thin section and chemical analysis (Vince 2006a, b). The following summarises the results of this work and what might be deduced from it.

#### Saxon sites

All the sites studied here lie to the east of the River Ingrebourne. Saxon pottery was found on four of the sites in the study area, but the amounts are rather small, as are the sherds. This suggests that the sites may lie at the periphery of areas of occupation. The greatest number of sherds is from Hunts Hill, where the most complete vessel was also found. These finds and others noted below are listed in Table 1; the fabrics from sites in the study area are listed in Table 2 and Table 3.

Site	Date	Sherds	ENV	Weight in gm	Comment/Reference
R-MHF77	IA/S	1	1	30	
UP-MF	ES	13	13	86	
UP-HH	IA/S	80	42	703	
UP-WW	S	51	25	322	
IG-HR	S	1	1	14	unstratified; Blackmore 2003a
IL-UC	IA/S	31	??	??	Blackmore 2003a
HOW60/61	IA/S	<i>c</i> . 60	??	??	Blackmore 2003a
Berwick Ponds Farm	S	??	??	??	HAT excavations
Dagenham: DMH03	S	85	??	1926	PCA excavations; Jarrett in prep
Rainham (LSA98)	S	98	69	1823	Blackmore in prep
Rainham, Gerpin's Farm	S	4 pots	4 pots		Evison 1955; Leary 1955; Evison 1979, 77;
Ardale	S	240	??	??	Wilkinson 1988, 93
Prittlewell (EX- PRO05)	S	3 pots	3 pots		Pollit 1923, 92–4; Evison 1979, 80; Tyler 1988, 114
North Shoebury (1971–72)	S	9 pots	9 pots		Tyler 1995, 46–52; 102
North Shoebury (1981)	S	28	24	707	Tyler 1995, 101–24
Mucking	S	32,000	??	??	Hamerow 1993, 22

*Table 1 The distribution of Saxon pottery in the study area and on other sites in south Essex* 

### 5th and 6th centuries

Rather surprisingly, the earliest Saxon pottery was found at Manor Farm, which is in the most elevated location (Boyne Hill gravels) and the furthest from the Thames. Although small (Table 1; Table 2), this assemblage includes sandstone-tempered and bone-tempered fabrics that are considered typically 'early', and only two sherds with chaff tempering. Analysis of other Early Saxon sites in the Greater London area (Cowie and Blackmore in prep) has shown that bone-tempered wares occur in small numbers on sites along the north bank of the Thames. Sandstone-tempered wares, by contrast, occur on Early Saxon sites across most of the London region (see below, trade and economy). More precise dating is not possible at the stage. It is possible that these wares continued into the late 6th/early 7th century, as a few fragments have been found in Lundenwic (Blackmore et al 2004, 303–4; Cowie and Blackmore in prep; Cowie et al in prep). They probably began to decline in popularity in the 6th century as chaff-tempered wares became more common, but may have continued in use beyond this in the hinterland (Blackmore 1999, 39; 2003b, 230–1). Another fabric

type that occurs at Manor Farm and on earlier and Middle Saxon sites in the region contains igneous rock inclusions (Williams and Vince 1997; Vince 2006; see below, trade and economy).

The closest site with pottery of this date is that at LESSA Sports Ground, 400m to the west of the Ingrebourne River and 1km north of the Thames floodplain, between Rainham and South Hornchurch on the west side of Rainham Road (A125; TQ 5200 8310). There a range of similar material was found together with a very small amount of chaff-tempered pottery (Table 1; Blackmore in prep, a; Sankey in prep), suggesting that the associated occupation dated to the late 5<sup>th</sup> or early 6th century. The same fabrics also occur at Dagenham Heathway, which is dated to the 6th century (Jarrett in prep).

#### 6th and 7th centuries

The sites at Moor Hall Farm, Hunts Hill and Whitehall Wood all yielded small amounts of chaff-tempered and sand-tempered pottery, some definitely Saxon, some ambiguously Iron Age/Saxon (Table 1, Table 2). The lack of diagnostic forms makes precise dating difficult, but the lack of typically early fabrics such as are described above suggests that these sites were occupied in the 6th century or later. Moor Hall Farm is the most easterly of the potential Saxon sites in the project, and also the closest to the Thames. Perhaps surprisingly, only one sherd of possible Saxon pottery was found, and this is of the most problematic pieces as the form, a bowl or jar with flat-topped rim, is perhaps more typical of the Iron Age

At Hunts Hill the assemblage is clearly dominated by chaff-tempered wares, which total at least 62 sherds; two further sherds could possibly be of Iron Age date. Sandy wares, by contrast, are in the minority, with only 17 sherds, of which up to eight could be of Iron Age date. Most of the assemblage is from period 11, with 24 sherds from 18 Saxon or probable Saxon vessels found in five features: the cemetery S144, a pit that may be related to it (S183), a ditch forming part of S145, ditch S179 and water hole S181. Most sherds are small, but one near complete pot was found in a possible grave. In addition, 13 residual sherds from nine vessels were found in two Saxon-Norman features (B131, S148). The dating of the possible Saxon pottery from prehistoric and Roman features (two and 32 sherds respectively) is less certain. Those from S136 include a bowl rim in a sandy fabric that may be of Iron Age date ([6596]) and part of a sand-and-chaff-tempered jar, probably of rounded form with the shoulder sloping to a simple upright rim ([270], surface find). This distinctive form is typical of the London region from the 5th to 7th centuries (Blackmore in prep), but this find probably dates to the 6th/7th century.

At Whitehall Wood, the most northerly site, 46 chaff-tempered sherds were identified as Saxon and five as Iron Age or Saxon; some contain sand but there are no predominantly sand-tempered wares. Only one rim was found ([312]); this is of flaring everted form and probably of late 6th or 7th-century date. This suggests that there was a domestic occupation nearby. Dating is problematic, but the fact that all is chaff-tempered, with no typically Early Saxon fabrics such as sandstone-tempered ware, suggests that the activity dates to the later 6th or 7th centuries. The absence of diagnostically later fabrics such as Ipswich ware, however, may reflect the local economy rather than dating, and it is not impossible that the assemblages discussed here contain material of 8th-century date (Blackmore 2001, 40; in prep, b).

#### Discussion: settlement and dating frameworks

The Saxon finds are significant as there are few known sites of this period between Mucking, near the mouth of the Thames, and Barking. Indeed, a recent distribution map shows this area as a complete blank (MoLAS 2000, map 9). The Saxon pottery is, therefore of significance as an indicator of landscape development and cultural change, and can inform on the range and source of the pottery in use in the 5th to 7th centuries. This was time of considerable change. While there are still few published 5th-century findspots other than Mucking and Linford, small amounts of early Saxon material have recently been found that await publication.

From the dating of the fabrics, it can be suggested that the Manor Farm site may be contemporary with the site at LESSA Sports Ground (Blackmore in prep, a) and the first phase of activity at Berwick Ponds Farm (Maloney and Holroyd 2003, 43; see below). Other sites if the same period include North Shoebury, where a small community, possibly a family group of *laeti*, was buried (Tyler 1995, 51-2; Wymer and Brown 1995, 161), Linford (Barton 1962) and the second phase of activity at Mucking, when the nature of activity changed from Germanic, military (?federate) occupation to Anglo-Saxon rural settlement (Hamerow 1993, 93-7). The sites at Manor Farm and LESSA Sports Ground can also be linked by the pottery to others in the Thames valley, the latest of which is a site within Lundenwic (Blackmore 2000; see below, trade and economy). Other sites in the general area where early Saxon pottery has been found include Oliver Close, Leyton (LE-OC93; Greenwood 2001, 216; C Jarrett pers comm), East Ham Memorial Hospital in Newham (EHM 03; Maloney and Holroyd 2004, 78) and Whale Bone Lane North in Dagenham. At the latter site the rim of a stamp-decorated jar dated to the 5th century was found during gravel extraction in 1936 (C Jarrett pers comm). Also in Dagenham, Saxon pottery of uncertain date has been found at Goresbrook Fields, Goresbrook Road (DA-GB 95; Greenwood and Maloney 1996, 11), while a 6th-century assemblage has been found at Dagenham Heathway (DMH03; Jarrett in prep). In Romford, a sherd of possible Saxon pottery was found at Hornchurch Bus Garage, Hornchurch Road (HO-BG 95; Greenwood and Maloney 1996, 11), to the north of the LESSA Sports Ground site; like Manor Farm, this site is located on Boyne Hill Terrace gravel.

By the mid- to later 6th century it would appear that fairly affluent communities were being established in the area of Aveley (Wilkinson 1988, 45) and Rainham. The assemblages from Moor Hall Farm, Hunts Hill and Whitehall Wood probably date broadly to this period. Their distribution suggests that they, and possibly also Manor Farm, lay on the periphery of a complex closer to the Ingrebourne. This may have had its centre of occupation at Berwick Ponds Farm, where a 5th- to 7th-century settlement with six sunken-floored buildings was found. Later Saxon settlement is indicated in a different area of the site (Maloney and Holroyd 2003, 43). The important mid-6th to mid-7th century cemetery site at Gerpins Farm (Evison 1955; O'Leary 1955), undoubtedly of high status, indicates a centre of power in this region at a time when the new Anglo-Saxon kingdoms were emerging. Saxon pottery has also been reported at Wennington Road, Rainham (WNN 03) and South Hall Farm, Rainham (RA-SH 95; Greenwood and Maloney 1996, 11; C Jarrett pers comm). How the Gerpins Farm site relates to the princely burial at Prittlewell (Hirst et al 2004) is beyond the scope of this essay, but the situation is certainly similar to that in the Prittle valley, where a number of findspots have also been noted. Gerpins Farm and Prittlewell reflect the dramatic changes that were

taking place in the structure and economy of these rural settlements due to increasing wealth and power, both of inviduals and, from the 7th century, of the church. From *c* 666 until the Viking raids of the mid-9th century the main centre of religious, industrial and trading activity was at Barking, where a double house was founded by Eorcenwald. Saxon pottery has been found not only on the site of the abbey but also elsewhere in Barking (Greenwood et al 1997, 31; Maloney and Holroyd 2004, 62), and finds of possible Saxon pottery suggests that there may also have been contemporary activity at Uphall Camp (Greenwood 2001, 216, fig. 11; Blackmore 2003a). It is, therefore, becoming clear that the river valleys of the Roding (Barking and Uphall Camp), the Ingrebourne, the Prittle Brook and doubtless others were being colonised in the 6th and 7th centuries.

#### Discussion: burials and ritual

The near complete pot from Hunts Hill is of importance as only five other cemeteries along or close to the south coast of Essex have pottery that has been published. The earliest are at Mucking and at North Shoebury. The former spans a long period (Hirst and Clark in prep) and has yielded a large amount of pottery, aspects of which have been published in a number of reports (some listed in Jones 1980; see also Myres 1977). At North Shoebury six graves and five cremations dated to the 5th century were excavated in the 1970s (Tyler 1995, 46–52). Cremations M636 and M651 were contained in pedestal-footed urns with incised and bossed decoration (both now missing the neck and rim). Associated with M636 were the necks/rims of two Frankish biconical jars with raised plain and dimpled cordons (ibid, fig 39, M686, A, B and C). Inhumation M685 contained a small rounded chaff-tempered bowl from a burial (ibid, fig 38, M685, D). Other pots from the site contain vegetable and/or sand temper.

The other three cemeteries are broadly contemporary with each other, dating to the late 6th and early 7th centuries and broadly contemporary with the conversion to Christianity of Sabert, king of the East Saxons and nephew of Aethelbert of Kent. The site at Gerpins Farm, Rainham (Evison 1955; O'Leary 1955), excavated in 1937, is only 3 km to the east of the study area. The number of burials is uncertain but included at least six men and one woman. The finds include a range of weapons, fine glass vessels and a gold pendant incorporating a coin of Marikios that dates to AD 582-602. The site was dated to the mid-6th to mid-7th century, as no late Roman or 5th-century objects were found, and some items would now be considered typical of the Conversion period. At least two of the four complete pottery vessels are stylistically datable to the later 6th or 7th century. One of these, a squat biconical 'bowl' with rouletted decoration, is a Merovingian import (Evison 1955, 170, fig 7, no 1; 1979, 77, figs 14e, 24f; O'Leary 1955, 67), while another is decorated with comb impressions and has a near parallel in the Middle Saxon settlement of Lundenwic (Evison 1955, fig 7, no.3; Blackmore 1989, 76). The other two pots, however, are problematic; one is a biconical jar that is probably of 5th- or earlier 6thcentury date, but the other is slightly barrel-shaped (ibid, fig 7, no.2) and the drawing suggests it may be of prehistoric date. No pottery was found in the nine inhumation burials at Ardale School, to the south of Aveley, but one chaff-tempered cremation urn was discovered (Wilkinson 1988, 54, 93-4, fig 79, no.2)

The site at Prittlewell is the furthest from Hunt's Hill; it was also the first to be discovered in south Essex, being identified in the 1920s. The pottery, found in the 1930s, comprises a handmade vessel (from grave 33) and two very similar tall biconical 'bowls', both Merovingian imports, that were found in a female burial (grave 30; Pollitt 1932, 92–3, 94; Evison 1979, 80, figs 16a, 16b; Tyler 1988, 108, 114).

The amount of pottery from the above sites is not great, but it is present and would in most cases appear to indicate sex and/or status (Blinkhorn 1997, 122–3) although this need more research. The reasons for the lack of ceramic vessels from the possible graves at Hunt's Hill are unclear. They may have existed but been damaged by ploughing or robbed out. Alternatively, their absence may reflect a lower status of the deceased or the date of the graves. The one pot that was found was not in a definite grave, and it is not decorated, which might suggest that was a domestic or personal item rather than one made specially for a burial rite. It is insufficient evidence to offer any theories on the nature or date of the feature, but if it was from a grave the size and simplicity of the vessel might suggest that it was buried with a child.

#### **Discussion: trade and economy**

The finds from both Gerpins Farm and Prittlewell indicate close connections with Kent, and also with the continent, albeit probably via Kent. This is hardly unexpected, as Aethelbert of Kent, high king of the peoples south of the Humber, was the brotherin-law of Sledd, king of Essex (possibly from *c* AD 587; Yorke 1990, 46) and uncle of Sledd's son Sabert, who was on the throne by AD 604. Both Aethelbert and Sabert died in 616.

The amount of Saxon pottery from the sites in the study area is extremely limited (Table 2), but it is nonetheless informative, especially when compared with finds from other sites in the region and beyond it. In order to do this, a selection of twelve sherds was studied in thin section and chemically by Alan Vince (2006a). At present little work of this kind has been carried out in Essex, and the main comparative data is from Barking, Lundenwic and rural Saxon sites of the 5th to 9th centuries to the north, south and west of London (notably Vince 2002; 2003a, b).

Site	Fabrics	Sherds	ENV	GM	Rims
UP-HH all	CHAF, CHAFRQ, CHFS, CHSF, CHSFRQ, ESAN, ESANA, ESANAO, ESANB, ESANBO, ESANC, ESANCO, ESANDO	85	46	729	7
UP-WW all	CHAF, CHAFRQ, CHSF, CHSFRQ	51	25	322	1
UP-MF all	CHSF, ESANQ, ESBO, ESIG, ESSTC, ESSTD, ESSTM	13	13	86	0
R-MHF	IRON AGE/CHSF	1	1	30	1
Total		150	85	1167	7

Table 2 Early Saxon	settlement as	s indicated b	v the	distribution	of potterv types
			,		

#### Local and regional pottery production

#### Lyn Blackmore and Alan Vince

As noted above, a number of different pottery fabrics are present. For the early Saxon period the most typical are the sandstone-tempered wares (ESST), which fall into two or three main groups (Blackmore and Vince in prep a, b). One of these contains a fine sugary sandstone (ESSTA, ESSTB), while another is coarser and contains abundant crushed quartz sandstone (ESSTD). The source of these wares is unknown, but they could have been made locally. The third type (ESSTC) contains a coarse, Lower Carboniferous sandstone that would appear to be derived from the Millstone Grit.

Until now it has been thought that, unless the temper was obtained by crushing quernstones, ESSTC should be an import from the north of England, or from the Midlands. There is, however, a problem with this theory. All the sandstone-tempered fabrics occur on Early Saxon sites across most of the north London region, accounting for between 15% and 40% of the sherds found (Laidlaw and Mepham 1996; Laidlaw 1996; Blackmore 1997; Sloane and Malcolm 2004, 21–3; Blackmore in prep, **a**). Beyond this, however, the picture is rather different, as no such wares have yet been identified in Northamptonshire or Bedfordshire. The present study has not fully resolved this problem, but it has certainly shed light on it and may give support to the suggestion that a sherd from Lundenwic containing sandstone and metamorphic rock (a gneiss) might be from a source in north Essex (Vince 2003b, sample V1721; Blackmore and Vince in prep, b). This is thought to be made of boulder clay such as the Anglian till, outcrops of which occur between Albans/Watford and Chelmsford and to the south of this, the closest to Lundenwic being at Finchley (Sumbler 1996, 118–9, figs 29, 32).

As only one sherd is known, the significance of the find was unclear, but study of three sandstone-tempered sherds and one containing biotite granite from Manor Farm (fabrics ESIG, ESSTC, ESSTD) shows that all three have the related inclusions and the same groundmass. This is derived from fluvio-glacial deposits, the texture of which can be matched in the Claygate Beds of the London Clay. While the same clays can also be found in central and northern England and in Jutland (Vince 2006), it is unlikely that Millstone Grit-type sandstone occurs in Denmark. It was, however, carried by glacial and fluvial action from the original outcrops in the Pennines and the north-east of England to the Midlands and East Anglia, in the same way the biotite granite reached Essex from Scandinavia, Scotland and the north of England. The granitic inclusions in the Manor Farm sherd are not the same as those found in the granodiorite from Mountsorrel, Leicestershire, and this might point to it being from a more local source. This in turn suggests that all four sherds may have a relatively local origin, although they could be from East Anglia or further afield. Chemical analysis of the present samples and others from sites in south Essex would almost certainly give a better idea of the source of these wares and pave the way for wider research. A current problem, for example, is that, rather surprisingly, sandstonetempered pottery has not been noted in any earlier publications of Essex pottery, although the fact that they have now been recognised at Dagenham (Jarrett in prep) suggests they may simply have been classified as sand-tempered wares (Blackmore in prep, a). At Mucking the presence of sandstone-tempered wares is suggested by the

coarse-slipped *Schlickung* pottery found there, and these wares may be included in the unclassified fabrics; they would still, however, be a minority group (Hamerow 1993, 27-31).

The use of crushed calcined bone as added temper was first identified in Saxon pottery at Spong Hill (Brisbane 1994, group X). It can appear as either blue-black or white, but without a microscope the darker inclusions can be mistaken for phytoliths or flint, while the whiter inclusions could be identified as flint or chalk. On this basis, it is possible that the ware is present at North Shoebury, where the cremation urn M636 was said to be in a chalk-tempered fabric (Tyler 1995, 50-1), which would be an unusual ware for Essex. The bone inclusions in the Manor Farm sherds are heavily stained and may be of fossil origin, possibly derived from fish or small amphibians (Vince 2006). No bone tempering was reported at Mucking, but the type may be included in fabric type 7 (Hamerow 1993, 28). The ware has, however, been found at Dagenham (Jarrett in prep), and also at St Mary Cray in Kent, at Hammersmith, at Hanwell (MoL acc. no. 34.27a), at Prospect Park (Laidlaw and Mepham 1996, 34-5; Williams 1999, 74) and at Kingston (site M; Jarrett 2002, 195-6). This is, therefore, a Thames Valley tradition, and the general distribution follows that of the lead weights noted below, suggesting connections between the different sites. It is unlikely that, however, that these pots are all from a single source, as the two samples from Manor Farm use different clays (sample V3565 is similar to the Claygate Beds, the upper strata of the London Clay).

The study of the chaff-tempered wares included both thin sectioning and ICPS analysis of six samples from Manor Farm, Hunts Hill and Whitehall Wood, and this showed more conclusively that the wares were locally made. Previously the only work on these wares was the study of two samples from Barking (Vince 2005), which showed a chemical difference between those fabrics and finds from Greater London sites to the south and west. This was confirmed in the present study, which also showed that the fabrics are different from those used in the medieval period at Harlow, although there was one overlap with a sample from Noak Hill, Mill Green. The chaff-tempered wares used in the study area were, therefore, probably made from the same, or similar parent clays as the Mill Green and South Essex shell-tempered wares (ie upper beds of the London clay or later Tertiary clay). On this evidence, the former suggestion (Vince 1990, 99) that some of the chaff-tempered pottery used in Lundenwic might be imported from Essex now seems very unlikely.

#### **Imported pottery**

No continental pottery was found on any of the sites in the study area, but it does occur at Gerpins Farm, Rainham. Like Prittlewell, this was clearly an important consumer sites, and both communities had access to objects imported from the continent, including Frankish pottery (Tyler 1995, 163). As yet, however, virtually nothing is known of the associated settlements or how they were supplied, but it is clear that Essex was closely linked to Kent in the late 6th and early 7th centuries. On the basis of parallels within Kent, it was initially thought that the imported pottery from Prittlewell was made in Kent (Pollitt 1932, 93). Now, however, it is clear that these are imported vessels, which, along with other goods and Kentish-style jewellery such as the jewelled gold pin from Forest Gate (Smith 1903, 329, fig 2; Jones 1980, 91) probably reached Essex via Kent and over the Thames rather than directly by sea.

The main centre of trade in the Middle Saxon period was at Barking, where the commercial importance of the double religious house established there c 666 is well evidenced by large amounts of Middle Saxon pottery and other finds (Blackmore and Redknap 1988; Redknap 1991; 1992; Hull 2002; Vince 2002). It is likely that the abbey, which had trading connections with Lundenwic, served as an entrepôt and distribution point for the hinterland.

Other evidence for connections along the Thames valley includes coins and the distribution of lead weights. Gold coins of the early 7th century have been found at Prittlewell and in Southend, while later coins occur at Barking Abbey (MacGowan 1996) and in Leyton (Smith 1903, 328). Lead weights (Blackmore in prep, d) have been found on a number of 5th- to 6th-century sites, including Berwick Ponds Farm (Maloney and Holroyd 2003, 43), Linford (Barton 1962, 67–8) and Mucking (Hamerow 1993). Upstream from the City, they occur at Hammersmith, at Hanwell (Wheeler 1935, 136–9, fig 19) and at Barton Court Farm (Miles 1986, microfiche). The only known example from a site to the south of the Thames is from Keston (Philp 1973, 162, fig 49, no. 480).

Table 3 Kev to the	Saxon fabric codes	s used in this report

Code	Period	Expansion and description Date range AD		Thin section	ICPS
Chaff-temper	ed				
CHAF	ES/MS	chaff-tempered ware; London clay or brickearth matrix	400–750		V3576
CHAFRQ		as CHAF, with sparse rounded quartz sand	400–750		
CHFS	ES/MS	chaff-tempered ware with moderate to abundant sand (up to 1mm) and fine grits	400–750		
CHFSRQ	ES/MS	as CHSF with sparse rounded quartz sand	400–750	V3573	V3573 V3574
CHSF	ES/MS	chaff-tempered ware, fine with sparse chaff in a silty matrix with groundmass of fine sand	400–750	V3575	V3571 V3572 V3575
CHSFRQ	ES/MS	as CHSF with sparse rounded quartz sand	400–750		
Sand-tempere	d				
ESAN	ES/MS	sand-tempered, miscellaneous	400–600		
ESANA	ES	sand-tempered, abundant fine to medium quartz sand (up to 1mm) and sparse very fine flint	400–600		
ESANAC	ES	as ESANA with fine calcareous matter	400–600		
ESANAO	ES	as ESANA with sparse organic inclusions	400–600		
ESANB	ES	sand-tempered, brickearth with sparse to moderate medium sand and sparse fine	400–600		

		flint			
ESANBO	ES	as ESANB with organic inclusions	400-600+		
ESANC	ES	sand-tempered ?brickearth, coarser than ESANA and ESANB	400-600+		
ESANCO	ES	as ESANC with organic matter	400-600+		
ESANDO	ES	as ESANC with organic matter	400-600+		
ESANQ	ES	as ESANA but ?Reading Beds clay	400-600+		
Sandstone-te	mpered				
ESSTC	ES	sandstone-tempered, coarse sandstone with large quartz grits	400-600+	V3568, V3569	
ESSTD	ES	sandstone-tempered, abundant evenly- sized sandstone-tempered	400-600+	V3570	
ESSTF	ES	sandstone-tempered, fine haematite coated 'red' sandstone	400–600		
ESSTM	ES	mixed sandstone-tempered ware	400-550		
Other wares	1				
ESIG	ES/MS	Granite/igneous rock-tempered ware		V3567	
ESBO	ES	bone-tempered ware	400–600	V3565, V3566	

## Bibliography

Andrews, P, and Crockett, A, 1996 *Three excavations along the Thames and its tributaries, 1994: Neolithic to Saxon settlement and burial in the Thames, Colne and Kennet valleys*, Wessex Archaeol Rep 10, Salisbury

Barton, K J, 1962 Settlement of the Iron Age and Anglo-Saxon Periods at Linford, Essex, *Trans Essex Archaeol Soc* Vol.1, Part 2 (Third Series), 57-104.

Blackmore, L, 1989 'The pottery' in R. Whytehead and B. Cowie with L. Blackmore 'Excavations at the Peabody site, Chandos Place and the National Gallery, *Trans London and Middlesex Archaeol Soc* 40, 71-107.

Blackmore, L, 1997 The fifth-century pottery, in Milne, G *Excavations and Associated Research at St Brides, 1952-54 and 1992-95.* English Heritage Archaeological Reports. The Grimes London Archive Vol.2.

Blackmore, L, 1999 Aspects of trade and exchange evidenced by recent work on Saxon and medieval pottery from London, *Trans London Middlesex Archaeol Soc* 50, 38–54

Blackmore, L, 2000 The origins of Lundenwic? Archaeology Matters 11, Museum of London

Blackmore, L, 2001b Pottery: trade and tradition, in Hill and Cowie, 22-42

Blackmore, L, 2003b The pottery, in Malcolm and Bowsher, 225-41

Blackmore, L, 2003a Assessment of the post-Roman pottery from the East London gravels

Blackmore, L, Vince, A, and Cowie, R, 2004 The origins of Lundenwic? Excavations at 8–9 Long Acre/16 Garrick Street, WC2, *London Archaeol* 10(11), 301–5

Blackmore in prep, a, The pottery, in Sankey, D in prep

Blackmore, L, in prep, b, The pottery, in Cowie, R, Blackmore, L,

Blackmore, L, in prep, c, The pottery, in Cowie et al in prep

Blackmore and Vince in prep, a Pottery Supply, in Cowie, R, and Blackmore, L,

Blackmore and Vince in prep, b Pottery supply, in Cowie, R, et al

Blinkhorn, P, 1997 Habitus, social identity and Anglo-Saxon pottery, in *Not so much a pot, more a way of life: current approaches to artefact analysis in archaeology* (eds C G Cumberpatch and P Blinkhorn), Oxbow Monogr 83, Oxford, 113–24

Brisbane, M, 1994, The cremation pottery fabrics: a note, in C Hills, K Penn and R Rickett, *The Anglo-Saxon cemetery at Spong Hill, North Elmham: Part 5, Catalogue of cremations*, East Anglian Archaeol Rep 67, 36

Cowie, R, and Blackmore, L, in prep, a Early and Middle Saxon rural settlement in the London region, MoLAS Monograph Series

Cowie, R, and Blackmore, L, with Davis, A, Keily, J, and Rielly, K, in prep, *Lundenwic: excavations in Middle Saxon London*, *1987–2000*, MoLAS Monogr Ser

Evison, V I, 1955 Anglo-Saxon finds near Rainham, Essex, with a study of glass drinking-horns, *Archaeologia* 96, 159-95.

Evison, V I, 1979 *A corpus of wheel-thrown pottery in Anglo-Saxon graves*, Roy Archaeol Inst Monogr Ser, London

Greenwood, P, 1982 The cropmark site at Moor Hall Farm, Rainham, Essex, *London Archaeol* 4, no 6, 185-93

Greenwood, P, 2001 Uphall Camp, Ilford - an Update, London Archaeol 9:8, 207-16

Greenwood, P and Maloney, C, 1996, London Fieldwork and Publication Round-up 1995, *London Archaeol* 8, supplement 1

Greenwood, P, Maloney, C and Gostick, TJ, 1997, London Fieldwork and Publication Round-up 1996, *London Archaeol* 8, supplement 2

Hamerow, H, 1993 *Excavations at Mucking. Volume 2: the Anglo-Saxon Settlement.* English Heritage Archaeological Report No.21

HAT 2002 'Sunken Featured Buildings at Berwick Ponds Farm, Rainham, Havering, (BPD99)', Unpub Hertfordshire Archaeological Trust Annual Report 1-3

Hawkins, D, 1996 Roman Kingston-upon-Thames: a landscape of rural settlements, *London Archaeol* 8, 46–50

Hill, D, and Cowie, R, (eds) 2001 *Wics: the early mediaeval trading centres of northern Europe*, Sheffield

Hirst, S, with Nixon, T, Rowsome, P, and Wright, S, 2004 The Prittlewell Prince. The discovery of a rich Anglo-Saxon burial in Essex, MoLAS, London

Hirst, S M, and Clark, D, in prep *Excavations at Mucking: Vol 3, The Anglo-Saxon cemeteries*, Engl Heritage Archaeol Rep

Hull, G, 2002 Barkingwic? Saxon and medieval features adjacent to Barking Abbey, *Essex Archaeol Hist* 33, 157–90

Jarrett, C, 2002 Saxon pottery in Hawkins et al, 195-9

Jarrett, C, in prep, The pottery from Dagenham Heathway (DMH03)

Jones, W T, 1980 Early Saxon cemeteries in Essex, in *Archaeology in Essex to AD* 1500 (ed D Buckley), CBA Res Rep 34, 88–95, London

Laidlaw, M, 1996 Pottery: Early Saxon, in P Andrews, Hurst Park, East Molesey, Surrey: Riverside settlement and burial from the Neolithic to the Early Saxon Periods' in P Andrews and A Crocket 1996, 89–91 (51-111)

Laidlaw, M, and Mepham, L, 1996 Pottery: Early Saxon, in P Andrews 1996, 33-8. 'Prospect Park, Harmondsworth, London Borough of Hillingdon: Settlement and Burial from the Neolithic to the Early Saxon Periods' in P Andrews and A Crocket 1996, 26–39 (1-50)

Malcolm, G, and Bowsher, D, with Cowie, R, 2003 *Middle Saxon London, Excavations at the Royal Opera House 1989–99*, MoLAS Monogr ser 15

Maloney, C, and Holroyd, I, 2003 London Fieldwork and Publication Round-up 2002, *London Archaeol* 10, supplement 2

Maloney, C, and Holroyd, I, 2004 London Fieldwork and Publication Round-up 2003, *London Archaeol* 10, supplement 3

McGowan, K, 1996 Barking Abbey, Current Archaeology XIII:5, 172-8.

Miles, D (ed), 1986 Archaeology at Barton Court Farm, Abingdon, Oxon, CBA Res Rep 50, London

MoLAS, 2000 The archaeology of Greater London: an assessment of archaeological evidence for human presence in the area now covered by Greater London, London

Myres, J N L, 1977 *A Corpus of Anglo-Saxon Pottery of the Pagan Period*, Cambridge University Press

O'Leary, J G, 1955 The Saxon Burials at Gerpins Farm, Rainham *Trans Essex Archaeol Soc* XXV, part 1, 60-7

Philp, B J, 1973a An Anglo-Saxon hut at Lower Warbank, Keston, in Philp (ed), 156–63

Philp, B J (ed), 1973 Excavations in West Kent 1960–1970: The discovery and excavation of prehistoric, Roman, Saxon and medieval sites mainly in the Bromley area and in the Darent Valley, Kent Monogr Ser 2, Dover

Pollitt, W, 1932 The East Saxons of Prittlewell, *Trans Southend-on-Sea Dist Archaeol Hist Soc* 2.2, 89–102

Redknap, M, 1991 The Saxon pottery from Barking Abbey: part 1, local wares, *London Archaeol* 6, 353–60

Redknap, M, 1992 The Saxon pottery from Barking Abbey: part 2, the Continental imports, *London Archaeol* 6, 378–81

Sankey, D in prep, Excavations at LESSA Sports Ground

Sloane, B, and Malcolm, G, 2004 *Excavations at the priory of the Order of the Hospital of St John of Jerusalem, Clerkenwell, London*, MoLAS Monogr Ser 20

Smith, R, 1903, Anglo-Saxon remains, VCH Essex I, 315-31

Sumbler, M G, 1996, *British regional geology: London and the Thames Valley*, 4 edn, British Geological Survey, London

Tyler, S, 1995 The early Saxon cemetery, in Wymer and Brown (eds), 46-52

Vince, A, 1990 Saxon London: an archaeological investigation, London

Vince, A, 2002a Characterisation studies of some early to mid-Anglo-Saxon pottery from rural sites in the Thames Basin, AVAC reports 2002/24

Vince, A, 2002b Phase IIIa pottery, in Hull, 164-8

Vince, A, 2003a Characterisation studies of Anglo-Saxon from Lundenwic: chafftempered wares, AVAC reports 2003/67

Vince, A, 2003b Characterisation studies of Anglo-Saxon from Lundenwic: non-local coarsewares, AVAC reports 2003/44

Vince, A, 2006a Characterisation Studies of Anglo-Saxon and Medieval Pottery from Upminster, AVAC reports 2006/62

Wheeler, R E M, 1935 London and the Saxons, London Museum Catalogues 6, London

Williams, D F, 1999 A note on the petrology of some Early Saxon pottery from Prospect Park, Harmondsworth, in Farwell et al, 74–5

Williams, D, and Vince, A, 1997 The characterization and interpretation of Early to Middle Saxon granitic tempered pottery in England, *Medieval Archaeol* 41, 214–20

Wilkinson, T, 1988

Wymer, J J, and Brown, N R, 1995 *Excavations at North Shoebury: settlement and economy in south-east Essex 1500 BC–AD 1500*, East Anglian Archaeol Rep 75, Chelmsford

Yorke, B, 1990