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The later prehistoric pottery from Cuxton, Kent (ARC CXT 98)

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1 INTRODUCTION

A total of 237 sherds (6,929 g) of later prehistoric pottery was submitted for analysis. The pottery was recovered from one large pit, two small pits, two tree-throws and six postholes. Overall the assemblage is in very good condition with a high mean sherd weight (29.2 g). This small assemblage was analysed and recorded using the methodology designed for the route-wide scheme in accordance with the recommendations set out by the Prehistoric Ceramics Research Group (PCRG 1997).

There is some confusion about the later prehistoric pottery assemblage in the site assessment report which states that there was a large storage pit in Area B which contained a large amount of pottery and that ‘in Area A there was another large storage pit that contained early to middle Iron Age pottery’ (Mackinder 2001, 9). Figure 4 of the assessment report also indicates this, as it has presented both large pits 40 and 343 as Bronze Age to Iron Age features. However, there is no pottery to support the interpretation of pit 40 as Bronze Age/Iron Age in date but rather a small, oval chalk bead thought to be early medieval in date was associated with an adult, female inhumation in context 41 of this pit (Blackmore 2001, 55, table 13). Context 41 is from ARC CXT 97 and not part of this analytical and reporting task as that feature is Saxon in date. This confusion is compounded by the pottery assessment report which states that ‘The majority of the pottery recovered came from a series of early Iron Age rubbish pits with very rich assemblages’ (Blackmore and Rayner 2001, 37). Therefore, it is important to confirm that there is only one rich early to early-middle Iron Age rubbish pit at Cuxton (ARC CXT 98), and this is pit 343. Investigations to find out if there was Iron Age pottery from ARC CXT 97 which could or should be assessed (at least) for comparison with ARC CXT 98 pottery determined that only nine sherds were recovered from pit 40 in this area (Mackinder, pers. comm.; inf. from V Diez). No further information appears to be available with regard to the pottery or other dating evidence from two other features (‘pit’; ‘tree hole with pottery ‘) which are indicated as being Bronze Age to Iron Age in date in the ARC CXT 97 area and mentioned as significant (Mackinder 2001, 24).

2 FABRICS

A total of eight fabric groups was present, and 14 fabric types defined for the assemblage (Table 1). The material is dominated by flint-tempered pottery (Figure 1) but in nearly every case the fabrics are associated with other distinctive inclusions, which has made this a complex analytical exercise. This has been fully detailed for ease of reading the report by presenting the various major and minor inclusions in the fabric type codes. All of the flint identified in these fabrics is crushed, calcined flint which was deliberately added as temper.

All of the fabrics are softly-fired (may be scratched with a fingernail) unless otherwise stated. The use of the descriptive term 'silty' indicates that extremely fine quartz sand (less than 0.1 mm) is present in the clay matrix; these fine quartz grains are not necessarily visible using x10 power binocular microscopy. If 7% or less organic matter (linear vesicles) is present in a fabric, then it is uncertain whether the organic matter was added as temper or naturally-occurring in the original clay matrix; this is discussed further below. Fabric samples which were thin sectioned and examined using a petrological microscope to confirm identification of inclusions are indicated (*).

Table 1: Quantification of fabrics by sherd count and weight

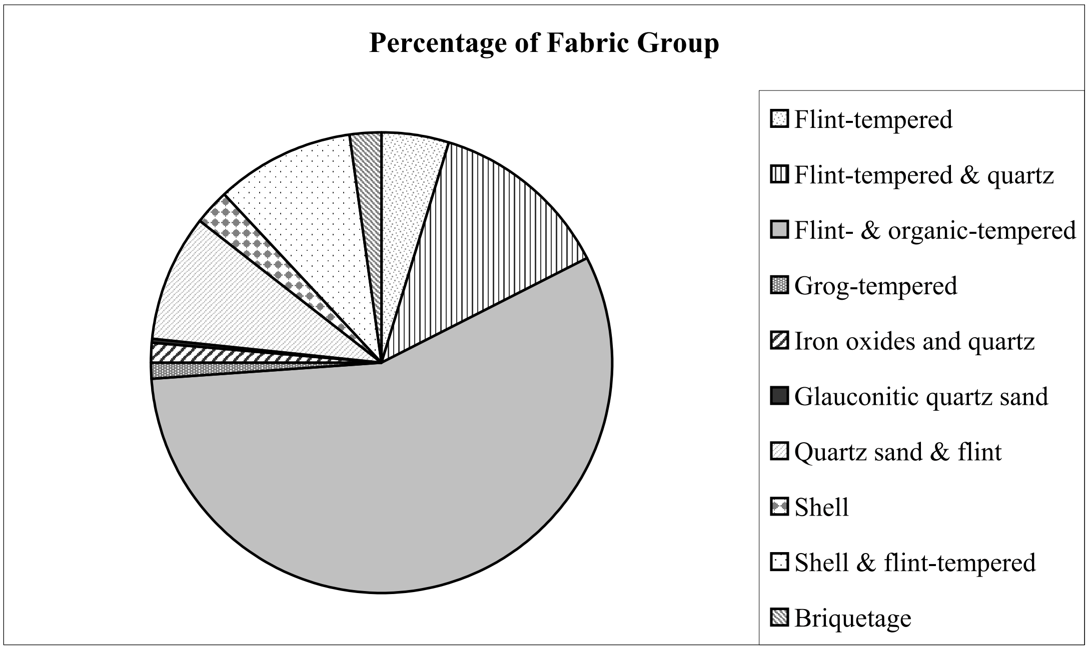
FABRIC GROUP	FABRIC TYPE	COUNT	%	WEIGHT	%
Flint-tempered					
	F1	1	0.4	22	0.3
	F2	10	4.2	14	0.2
Flint-tempered and quartz sand					
	FQ1	1	0.4	2	<0.1
	FQ2	10	4.2	720	10.4
	FQ3	20	8.4	1060	15.3
Flint- and organic-tempered					
	FV1	133	56.1	3937	56.8
Grog-tempered					
	G1	3	1.3	16	0.2
Iron oxide-rich					
	IQ1	3	1.3	36	0.5
Glauconite and quartz					
	Q1	1	0.4	5	0.1
Quartz and flint-tempered					
	QF1	12	5.1	265	3.8
	QF3	9	3.8	129	1.9
Shell-rich					
	S1	6	2.5	138	2.0
Shell-rich and flint-tempered					
	SF1	23	9.7	516	7.4
Briquetage					
	VFS1	5	2.1	69	1.0
	TOTAL	***237***	***99.9***	***6929***	***99.9***

Fabrics containing flint temper are the most common type in the assemblage (74% of sherds, 83% of weight), and there is a considerable amount of variation amongst them. The most frequent fabric group is *flint-and-organic-tempered* with a single, broadly-defined, rather coarse fabric type (FV1, 56-57%). In addition there are fine wares (F1, FQ1) with smaller and better sorted inclusions and distinctive coarse wares (FQ2, FQ3) with larger and poorly-sorted inclusions. Three of these flint-tempered fabrics have naturally-occurring fine to silt-sized quartz (F1, F2, FV1) only visible in thin section, while the other three are distinctively sandy in texture (FQ1, FQ2, FQ3) with quartz or glauconite pellets which are visible at x10 power and can be felt as 'sandy' in hand specimen. Therefore there are at least three different types of clay matrices amongst these *flint-tempered, flint-and-organic-tempered* and *flint-tempered and quartz sand* fabric groups and all will be from different sources: very fine to silt-grade quartz clay matrix, quartz sand clay matrix, and glauconite with quartz sand clay matrix.

In addition, there are two sandy fabrics with small quantities of flint temper which are distinctive for the quantity and size of the quartz compared to those above, and referred to as the *quartz and flint-tempered group*. Fabric QF1 is flint-tempered in a coarse sandy clay matrix and the frequency of the quartz is twice that of the flint. In contrast fabric QF3 has much less flint (5-7%) and also a sparse amount of linear vesicles indicating former organic matter which suggests that a distinctively different fabric recipe was in mind.

Excluding briquetage, *shell* fabrics are well-represented (9-12%), with one fine ware (S1) and one coarse ware (SF1). There are only rare examples of *glauconite/quartz sand* (0.1-0.4%) and *iron oxide-rich* fabrics (1%). The scheme-wide synthesis of the later prehistoric pottery should reveal where minor fabrics such as these are more popular on particular sites and could provide greater understanding of their significance within Iron Age assemblages in Kent.

Figure 1: Proportions of Iron Age pottery fabric groups by number of sherds



2.1 Sources of the fabrics

A variety of geological deposits is found up to 1 km around the site, including Alluvium, 1st Terrace, Head, Clay with flints, and Upper Chalk with flints, while London Clay, Blackheath and Oldhaven Beds of sands with clay, Woolwich Beds of sands and clays, Thanet Beds of sands, Middle Chalk, and Gault all occur within 7 km of the site (Geological Survey Sheet 272). The popularity of flint-tempered fabrics, therefore, is a reflection of the availability of flint in this area and around the site. A model of resource procurement for pottery production based on ethnographic data from agricultural, non-industrial communities indicates that the majority of materials which potters use are found within 1 km of the production location ('preferred territory') and up to 87% of the clays utilised in production come from within 7 km (Arnold 1985). This model has been recommended as suitable for examining the likely resources for pottery manufacture in the later prehistoric period in Britain in order to identify which fabrics may be local products and which are not likely to be (Morris 1994a; 1994b), although topographical variation may affect the distances involved.

The flint-tempered fabrics have glauconite-rich and glauconite-free sandy clay matrices. The most likely clay sources for the glauconite-rich fabrics in this area are found in the Gault deposits of the Upper Cretaceous (Gallois 1965; Dines *et al.* 1954). The closest sources of Gault clay can be found 5 km to the south of Cuxton just west of Snodland on the same side of the Medway or 6 km to the south-east on the east side of the Medway directly opposite Snodland. This particular source is extensive and continues south-east to Folkestone (Geological Survey of Great Britain Sheets 288 and 305/306). Glauconitic sand is also found in the Reading Beds and London Clay but not in the same significantly high frequency as found in the Cuxton pottery fabrics, and dark clays and glauconitic sands are found in the Thanet Beds of the Isle of Thanet (Dines *et al.* 1954, 47).

One *glauconite and quartz sand* fabric (Q1) has such abundant glauconite that hardly any quartz is visible. The glauconite pellets are usually altered to glassy black or glassy red limonite in these fabrics due to the firing of the pottery vessels. Couldrey (1984, 54) has defined an identical fabric in the Farningham Hill assemblage and remarked on its strong similarity to a fabric in the Little Waltham (Essex) assemblage, as well as the presence of a macroscopically identical fabric amongst the late Iron Age (Belgic) pottery in an area around Maidstone and the Medway valley.

However, the commonest flint-tempered fabric (FV1), which is also the commonest single fabric in the assemblage, does not have glauconite pellets but was tempered with organic matter. This raw materials used to make this fabric are most likely to have been from local sources.

The type of shell in the *shell-rich* fabrics (S1, SF1) is most likely to be fossil shell while that in the *briquetage* fabric (VFS1) is definitely fossil shell. The closest sources for fossil shell in this area are the Woolwich Beds (Cooper, in Couldrey 1984, 41; Dines *et al.* 1954), and these are located in frequent patches all over this area of the North Kent Downs. The texture and other inclusions in these three shell-bearing fabrics strongly suggest that they derive from three different sources. The three closest sources of Woolwich Beds are located 4 km to the north-west and north of Cobham Park, 6 km to the north in the Medway estuary and 15 km to the east at Upchurch (Geological Survey of Great Britain Sheet 272). Fabrics SF1 and VFS1 are similar in general description to several of those from Farningham Hill (Couldrey 1984, 41-3), principally due to the presence of flint and organic matter with the shell. The different ratios of inclusions between the Cuxton shell fabrics and the Farningham ones suggest that they are not the same but rather reflect the general use of shell-bearing fabrics in this North Kent Downs area during the Iron Age. The briquetage fabric has a variety of inclusions in addition to organic temper and fossil shell such as flint, fine quartz and a sparse amount of glauconite, which suggests that it may come from an area of the Woolwich Beds near exposures of Reading Beds within the same Eocene strata which do have glauconite present (Dines *et al*. 1954, 48). Needless to say, the briquetage fabric used to make ceramics associated with the winning of salt from brine is likely to derive from a clay source near the Thames.

There are also rare amounts of shell in two of the flint-tempered fabrics (F1 and F2) which are most likely to have been naturally-occurring in the original clay sources.

2.2 Discussion

There is one common element amongst the fabric types which needs to be emphasized. This assemblage has an underlying inclusion represented by linear vesicles or voids, remaining from burnt out organic matter, which occur in nine out of 14 fabrics. Organic matter may be moderately dense as observed in pottery fabric FV1 and briquetage fabric VFS1, or rather sparse as in fabrics FQ2, FQ3, G1, IQ1, QF1, QF3, and SF1. In the former it would normally be interpreted as organic matter added to clay as temper, while being seen in the latter as naturally-occurring in the original clay raw material. However, the ubiquity of this inclusion amongst a range of fabric types with different natural clay matrices in this assemblage strongly suggests that this may well be a cultural marker for the potters and the pot users in this area. If organic matter had been naturally occurring and simply represented variation within a clay deposit, then the other components in the clay such as the quartz sand would have been more similar. This is not the case with this assemblage because the organic matter is found in sparse quantity in both glauconite-rich fabrics (FQ3, QF3) and in a quartz fabric with no glauconite present (QF1), and a silty fabric (SF1), suggesting clays from different sources.

A similar situation was observed in the Farningham Hill, Darent valley assemblage. Couldrey defined a vegetable-tempered fabric group with quartz in the fabric types (Fabric K) and a vegetable- and shell-tempered group (Fabric M) both of which, however, were infrequent in the assemblage (0.5% and 0.1% respectively) (Couldrey 1984, 42-3, table D). Macpherson-Grant suggested that the organic matter found in several of the fabrics at Monkton Court Farm, Thanet, was naturally-occurring, but quantification of the fabrics is not available (1992, 53). Is the variable presence of organic matter always a result of natural occurrences in different geological deposits in the region or is the addition of organic matter as temper a cultural marker during the second half of the first millennium BC in north-west Kent? Could the frequent presence of this inclusion signal the identity of the potters who also may have been the local salt makers using organic matter to deliberately create significant porosity in their ceramic containers and other equipment for evaporating water from brine?

2.3 Flint-tempered group

F1. Common (20%) well-sorted, angular flint, ≤2 mm, rare (2%) angular, well-sorted shell, ≤2 mm, in the clay matrix (*); in thin section, there is also sparse (5%) fine to very fine, subangular to subrounded quartz, ≤0.1 mm, and rare (1-2%), rounded iron oxides, <0.3 mm, in a slightly micaceous clay matrix.

F2. Very common to abundant (30-40%) well-sorted, angular flint, ≤2 mm with rare pieces up to 3 mm, and rare (1%) angular shell fragments, ≤2 mm, in a fine silty clay matrix.

2.4 Flint-tempered and quartz sand group

FQ1. Moderate (10%), well-sorted, angular flint, ≤2 mm, and common (20-25%), subrounded to rounded, very well-sorted, quartz and glauconite pellets, ≤0.2 mm, in the clay matrix; the frequency of glauconite is the same as, or just slightly more than, the quartz indicating that the clay matrix derives from an Upper Greensand/Gault deposit.

FQ2. Common (20-25%), poorly-sorted angular flint, ≤12 mm, moderate (10%), moderately-sorted, subrounded to rounded, quartz, ≤0.3 mm with occasional grains up to 1.0 mm, and sparse (3-7%) linear vesicles, ≤14 mm, representing organic matter in the clay matrix; this fabric is similar to FQ3 but has no glauconite (*) (reference collection sample is overfired/refired, hard and harsh but majority softly fired).

FQ3. Moderate (10-15%), poorly-sorted, angular flint, ≤7 mm and usually ≤5 mm, common (20-25%), well-sorted, rounded, glauconite pellets and quartz, ≤0.5 mm, and sparse (3-7%) organic matter, ≤10 mm, in the clay matrix; one body sherd (PRN 1037) displayed moderate organic matter. This fabric is similar to FQ2 but has an overwhelming dominance of glauconite in the sand component (25:1) (*).

2.5 Flint and organic-tempered group

FV1. Moderate to common (10-20%), poorly sorted, angular flint, ≤8 mm, moderate to common (10-20%) linear vesicles, ≤8 mm with the majority ≤5 mm, rare (<2%), poorly-sorted, rounded iron oxides or ferruginous fine sandstones, ≤4 mm, rare limestone, and rare (<2%), rounded quartz grains, ≤1 mm, in a very dense, fine sand clay matrix (*); in thin section, there is moderate (10-15%), very well-sorted, subrounded to subangular quartz, ≤0.2 mm in a slightly micaceous clay matrix. There is deliberate variation in this description to accommodate variation observed in hand specimen.

2.6 Grog-tempered group

G1. Common (25%) poorly-sorted, angular, oxidised grog, ≤5 mm, sparse (3%) angular flint, ≤2 mm, and rare (1%) linear vesicles of organic matter, ≤3 mm, in a fine, silty clay matrix which is soapy to the touch; the organic matter is most likely to have been naturally occurring in the clay of this fabric.

2.7 Iron oxide-rich group

IQ1. Moderate to common (15-20%) rounded, moderately-sorted iron oxides, ≤5 mm with majority ≤2 mm, and common to very common (25-30%) subrounded to rounded, well-sorted quartz, <0.5 mm in the clay matrix; some examples have a denser texture and sparse (3%) linear vesicles, ≤5 mm; this fabric is coded as an iron oxide-rich fabric because the rounded oxide fragments and rounded quartz suggest that they are found together in the same natural clay source and because the iron oxides are very distinctive macroscopically.

2.8 Glauconite and quartz

Q1. Abundant (50%), very well-sorted, rounded to subrounded glauconite and quartz, 0.2-0.3 mm, and rare (1%), subrounded quartz up to 2 mm; this fabric appears to be identical to the description of Fabric A at Farningham Hill (Couldrey 1984, 38-9)

2.9 Quartz and flint-tempered group

QF1. Common (20-25%), poorly-sorted, rounded to subangular, coarse to fine quartz, 1.5-0.8 mm for the rounded grains but the majority <0.2 mm, and subangular to angular, moderate (10-15%), well-sorted, angular flint, ≤2 mm, rare to sparse (1-3%) linear vesicles, ≤2 mm, and rare to sparse (1-3%) iron oxides, ≤ 3mm (*); the frequency and texture of the quartz is best seen in thin section where it is most distinctive.

QF2 (not used)

QF3. Common to very common (25-30%), very well-sorted, rounded, glauconite pellets and quartz, ≤0.5 mm, sparse (5-7%) angular flint, ≤3 mm, and sparse (3%) linear vesicles (organic matter), <5 mm; this appears to be an intermediate to fine version of FQ3.

2.10 Shell-rich group

S1. Common (20-25%), very well-sorted, angular to subangular shell, ≤2 mm with the majority ≤1 mm (*); in thin section, rare (1%) fine quartz, <0.25 mm, is also visible.

2.11 Shell-rich and flint-tempered group

SF1. Common (20-25%), poorly-sorted, angular shell fragments, ≤8 mm, moderate (10-15%), poorly-sorted, angular flint, ≤5 mm, and sparse (3-5%) linear vesicles in a fine, dense, silty clay matrix (*); in thin section, rare (1%) silt-grade sized quartz and rare to sparse (2-3%) iron oxides, ≤0.2 mm, are also visible.

2.12 Briquetage group

VFS1. Moderate (10-15%), linear vesicles (organic matter), ≤16 mm, sparse (7%), angular flint, ≤4 mm, and sparse (7%), angular, re-crystallized fossil shell, ≤7 mm, in a fine sand clay matrix (*); in thin section, there is common (20-25%), very well-sorted, subangular to subrounded, fine quartz sand, <0.2 mm.

3 FORMS AND DECORATION

This modest assemblage contained a considerable variety of vessel forms. Amongst the jars there are two with obtuse angle, shouldered profiles (R6, A1), one with a well-rounded, shoulder (R7), an ovoid (R2) with or without an integral spout, a slack-profile type (R4), and one form only represented by its upright rim broken at the neck (R3). One of the Cuxton shouldered jars was decorated with finger-tip impressions along the shoulder (Fig. 2, No. 12), one has finger-tip impressions on the exterior of the rim edge (Fig. 2, No. 9), and one (Fig. 2, No. 14) has not only finger-tipping along the shoulder but also an extra pair of finger-tip impressions above the shoulder which may be decoration or possibly a 'signature' of the potter (cf. Tomalin 1995). The slack-shouldered jar has the appearance of a cable-like decoration on the top of the rim, but this effect is the result of pulling up clay from the interior of the vessel and smearing it over the top with the fingers.

There are three types of bowl, one with a sharp, acute-angle, carinated profile (A2), one which is softly profiled with a rounded body and short to medium-length neck (R5), and a small, hemispherical example which could be a cup (R1). In addition, there is a very large vessel (Fig. 2, No. 13) which has a shouldered profile with wiped exterior surface and finger-tip impressions along the shoulder but is burnished on the interior – a characteristic normally associated with bowls and other open vessel forms.

There is one neutral profile vessel, burnished on both surfaces, which is a saucepan pot (R8). In addition, there is a footring base (B3), burnished on all surfaces indicating that it derives from a bowl, which has a burnished cross or 'X' tooled onto the underside. This decoration is not uncommon on footring vessels in Kent (cf. Farningham Hill; Couldrey 1984, fig. 15, 15).

All but one of these forms (R9 jar) are typical of the early/middle Iron Age, *c* 600/550-300 BC, in Kent with similar examples found at Highstead (Period 3; Macpherson-Grant 1991, 42) and Ebbsfleet (Macpherson-Grant 1992) in Thanet, Bigberry, near Canterbury (Thompson 1983), and sites 1 and 3 at Barham Downs on the A2 south of Canterbury (Macpherson-Grant 1980). The majority of vessel forms are paralleled in many published earlier Iron Age assemblages in northern France (Hurtrelle *et al* 1990). An exact parallel for the Cuxton spouted vessel (Fig. 2, No. 3) was found at Houplin-Ancoise, Pas-de-Calais (ibid., 93, fig. 6, 53). Type R9 is a simple, upright to slightly everted rim form and appears as both bowls (Fig. 2, No. 1, Fig. 3, No. 23) and a jar (Fig. 3, No. 24). The bowl example, if associated with the carinated profile, is found in early/middle Iron Age assemblages but the jar form is later Iron Age in date as at Farningham Hill in the Darent valley (Couldrey 1984, form 4). It is important to note that saucepan pots like the Cuxton example (Fig. 3, No. 22) had been found in Kent prior to this project (Thompson 1983, fig. 10, 37; Couldrey 1984, 46, fig. 15, 28) but none of the associated deposits had been radiocarbon-dated. The well-stratified relationship of the Cuxton saucepan pot with many different kinds of early/middle Iron Age vessels and the slightly below average weight of the single sherd from this vessel (17 g) strongly suggest that it was contemporary in use with these types, if not actually curated.

Table 2 presents a correlation of fabric types to form types for the general purpose of the scheme-wide later prehistoric pottery synthesis.

Table 2: Correlation of fabric types with vessel form (vessel count)

Diagnostic	Fabric Types								
Forms	FQ1	FQ2	FQ3	FV1	G1	Q1	QF1	S1	SF1
Rims									
R1		1							
R2			1	1					
R3		1	1						
R4			1						
R5							2		
R6		1		1					
R7		1							
R8		1							
R9	1				1	1			
Bases									
B1		1	1	3				1	
B2				4					
B3				1					
Shoulders									
A1				1			2		1
A2					1				
A3				2					

3.1 Rims

R1. Hemispherical small bowl/cup (Fig. 2, No. 17)
R2. Flat-topped, convex-profile, neckless ovoid jar, with (Fig. 2, No. 3) or without a spout (Fig. 2, No. 4)
R3. Upright, severely flattened rim on inclined neck jar with uncertain profile (Fig. 2, Nos 5-6)
R4. Upright, rounded rim on slack-shouldered, barrel-profile jar (Fig. 2, No. 7)
R5. Rounded or flat-topped, slightly flaring or fully flaring rim with medium-length neck on round-shouldered bowl (Fig. 3, Nos 19-20)
R6. Short, upright rim on obtuse-angle, shouldered jar (Fig. 2, Nos 8-9)
R7. Upright, flat-topped rim on high, well-sprung, round shouldered jar (Fig. 2, No. 10)
R8. Saucepan pot (Fig. 3, No. 22)
R9. Everted rim from a bowl or a jar (Fig. 3, Nos 23-24)

3.2 Bases

B1. Simple flat base (not illustrated)
B2. Curled edge, flat base (Fig. 2, No. 11)
B3. Footring base (Fig. 3, No. 18)

3.3 Angled sherds

A1. Obtuse angle, shoulder sherd (Fig. 2, Nos 12-14)
A2. Acute angle, shoulder sherd (Fig. 2, No. 2)
A3. Round shoulder sherd (not illustrated)

4 SURFACE TREATMENT

There are four types of surface treatment visible on the Cuxton vessels: wiping, burnishing, red-finish and rustication. Wiping is a relatively common technique found on the exterior and interior surfaces of coarse ware jars (Fig. 2, Nos 5, 7-8, 10 and 13-14), or specifically in a zone such as below the shoulder on the exterior (Fig. 2, No. 9). Burnishing is found on the exterior only of jars (Fig. 2, No. 16), on both surfaces of bowls (Fig. 2, Nos 1, 17, Fig. 3, Nos 18-20), and just on the interior surface of bowls (Fig. 2, No. 13).

Early/middle Iron Age red-finished pottery from Kent was investigated to identify the methods employed to create this effect by Middleton who determined that it was achieved by the application of ochre/haematite in many cases but also could be created thorough oxidisation of well-burnished surfaces of ferruginous clay vessels (1995, 208). There is one vessel displaying this technique in the Cuxton assemblage (Fig. 3, No. 21), and it is also burnished on both surfaces, indicating that the red-finished vessel was a bowl. In plan, this bowl is very large with a shoulder diameter of 34 cm.

Rustication is a surface treatment which appears to be distinctive to the eastern Kentish early/middle Iron Age (Macpherson-Grant 1991), and very similar in visual effect to the 'scoring' technique of the east Midlands (Elsdon 1992). There are at least five different variations of this technique including the most impressive version made from the application of extra clay globules to the surface of a vessel in the form of encrustation, the application of a thick, clay slurry to the surface, combing of marks into the leather-hard surface, a less distinctive scratching effect, and the most common which is a form of simply roughening of the surface. At Cuxton there are only five vessels displaying rustication, all using the roughening technique (Fig. 2, No. 16). The location of rustication can be all over the exterior of the vessel or confined to a zone at and below the shoulder, as is the case for the illustrated jar from Cuxton which is burnished on the upper vessel exterior, wiped on the interior, and has rustication on the lower vessel exterior.

The addition of crushed, calcined flint chips to the underside of bases, known as 'basal flints' as opposed to flint temper, is a typical late Bronze Age/early Iron Age form of surface treatment in flint-rich areas of southern Britain. There is one example in the Cuxton assemblage (Fig. 2, No. 15). However, there is also an unusual example of extra clay being added to the underside of one base (Fig. 2, No. 11). This was recognised as distinctive because the additional clay has extra organic matter within it, not just impressed into it.

5 FIRING CONDITIONS AND COLOUR

The majority of vessels in this assemblage have been affected by post-manufacture re-burning which is discussed further below. Therefore, the original colour of many of the pots cannot be ascertained but several vessels have been unaffected by this condition. In particular, there are many examples of round-bodied, shiny, black bowls (Fig. 3, Nos 19-20) which appear to be a distinctive characteristic of some early/middle Iron Age assemblages in Kent. In contrast, a bowl with a sharply carinated profile (Fig. 2, Nos 1-2, probably one vessel) is irregularly fired with patches of dark and light red colour on the exterior, and there are shouldered bowls with deliberate shiny, red exterior surfaces (Fig. 3, No. 21). These visual effects will be discussed further in the scheme-wide ceramics review, and correlated to the different fabric groups related to the different examples where appropriate. For Cuxton, the black round-bodied bowls and the red, shouldered bowl are in the same fabric (QF1), while the fabric of the carinated example is very different (G1). In addition, the saucepan pot is black and shiny. Examples of jars unaffected by re-burning are usually irregularly fired on their exteriors.

6 VESSEL SIZES AND EVIDENCE OF USE

Due to the quality of preservation of this small assemblage, there are ten vessels with reconstructed diameters; five are 10-18 cm in diameter (small), four 20-28 cm (medium), and one 30-38 cm (large). All of these are illustrated. The data are presented in Table 3. Theses vessels represent the usual range of sizes expected within an early/middle Iron Age assemblage with three small bowls (Fig. 3, Nos 19-20 and 23), a small saucepan (Fig. 3, No. 22), four medium-sized jars (Fig. 2, Nos 4-6 and 9), and one large jar (Fig. 2, No. 10). In addition, there is at least one large, red-finished bowl (Fig. 3, No. 21), one, very large, finger-tip impressed probable bowl (Fig. 2, No. 13) and one large finger-tip decorated jar (Fig. 2, No. 12).

Table 3: Vessel sizes based on recorded rim and base diameters

DIAGNOSTIC	V. small	Small					Medium					Large				
FORM	< 10 cm	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38
Rims																
R1		1														
R2										1						
R3							1									
R4								1								

DIAGNOSTIC	V. small	Small					Medium					Large				
FORM	**< 10 cm**	**10**	**12**	**14**	**16**	**18**	**20**	**22**	**24**	**26**	**28**	**30**	**32**	**34**	**36**	**38**
R5					1	1										
R6									1							
R7														1		
R8				1												
R9				1												
	Small	**Medium**					**Large**					**V. large**				
Bases																
B1		1		2	1											
B2	1	1			1											
B3	1															

Coded data are available on the database regarding the wall thickness of all entries. Amongst these there are three different, impressively thick-walled, coarse ware vessels (Fig. 2, No. 10 and PRN 1034 and PRN 1052) which are likely to have been storage jars.

Otherwise, there is very little evidence of use in this assemblage, and no examples displaying soot, limescale or interior pitting of calcareous fabric inclusions. There are three examples of burnt residues, two on the interior of plain body sherds and one inside a flat base. The footring base bowl with the tooled decoration underneath (Fig. 3, No. 18) had been heavily used, evidenced by the abraded interior surface, and had also been deliberately chipped around its broken wall as though it had been reused for another purpose. Interior abrasion can be a result of scraping of the surface with a tool repeatedly or as a result of the softening of the surface having been used as a container of acidic food which etches the surface. This special bowl appears to have experienced a complicated use-life and is recommended for lipid residue analysis and other investigative techniques to determine its history.

7 BRIQUETAGE

A total of five body sherds (69 g) from two different salt evaporation, or briquetage, containers were found in pits 101 and 343. These vessels are used in the evaporation process to win salt from brine through heating or boiling the water over a hearth or in an oven (Morris 2001a), and in some areas of Britain these containers were also used to transport the salt cakes to the consumers (Morris 1994a; 2001b). The presence of these sherds at Cuxton indicates that the transportation of salt in ceramic containers also took place in Kent during the early/middle Iron Age. Briquetage containers found on several later prehistoric sites along the route of the Channel Tunnel Rail Link are the first identifications of this trade in salt during the earlier Iron Age in Kent. The ratio of briquetage fragments to pottery sherds is 0.02 by number and 0.01 by weight. Further discussion can be found in the scheme-wide later prehistoric pottery synthesis.

8 DEPOSITION AND FRAGMENTATION

Sherds from a great number of vessels were recovered from pit 343; over 50 different vessels, 20 of which are illustrated (Figs 2-3, Nos 3-22), are represented in this feature, often by single sherds alone. Amongst these there are approximately 21 bowls/saucepan and 33 jars. This ratio appears to be a significant cultural marker for the early/middle Iron Age settlements and will be explored further in the synthesis. Many of the vessels in the pit were affected by extreme post-manufacture heating which caused them to become very hard fired and cracked (Fig. 2, Nos 8 and 11), and often bloated and twisted (Fig. 2, No. 7). In addition, one of the bowls (Fig. 3, No. 19) shows signs of having been refired after breaking. It is very unlikely that this effect occurred during manufacture because all of the pots have different fabrics, including some with and some without glauconite. Two obvious interpretations are first, that a structure such as a dwelling in the area had caught fire; the pots, some of which may have been on the floor and were unaffected while the others stored in the rafters being badly affected, were broken when the household items were being rescued. Alternatively it may be possible that the fire damage was deliberate and that these are offerings to the fire, as part of or after a feast for example. It may be that this evidence indicates a combination of both of these suggestions with the structure being sacrificed or discontinued from the living world, with the fragmentation of vessels as part of that process. The absence of more than 10% of any single vessel, and the typical survival of about 1% for most of them, is an issue which requires further research on better preserved deposits. In the present case truncation of the site is extreme. Estimates of the degree of survival of individual vessels could be significantly affected by such factors.

9 CATALOGUE OF ILLUSTRATED VESSELS

(PRN, Pottery Record Number in database)

Figure 2

1. Everted rim bowl; form R9; fabric G1; burnished on both surfaces; probably same vessel as no. 2; PRN 1086, context 331, posthole 331.
2. Sharply carinated bowl; A2; fabric G1; well smoothed, possibly burnished on both surfaces; probably same vessel as no. 1; PRN 1085, context 331, posthole 331.
3. Spouted, ovoid jar; R2; fabric FV1; PRN 1050, context 342, pit 343.
4. Ovoid jar, medium-sized; R2; fabric FQ3; reburnt, very hard condition; PRN 1011, context 342, pit 343.

5. Upright rim, necked jar, medium-sized; R3; fabric FQ3; wiped on both surfaces; reburnt, cracked, harsh condition; PRN 1012, context 342, pit 343.
6. Upright rim, necked jar; R3; fabric FQ2; PRN 1058, sample 11, context 342, pit 343.
7. Slack-profile, necked jar with upright rim, medium-sized; R4; fabric FQ3; wiped on both surfaces; one rim sherd in good condition, two reburnt in cracked, bloated and twisted condition; PRNs 1013-1014 and 1068, contexts 342 and 383, pit 343.
8. Shouldered jar, medium-sized; R6; fabric FQ2; wiped on both surfaces; reburnt, bloated, cracked, crazed and twisted condition; PRN 1051, context 342, pit 343.
9. Shouldered jar; R6; fabric FV1; finger-tip decoration on exterior edge of rim; wiped on exterior surface below the shoulder; PRN 1055, context 342, pit 343.
10. Round-shouldered jar, large; R7; fabric FQ2; wiped on both surfaces; PRN 1056, context 342, pit 343.
11. Spurred base, medium-sized; B2; fabric FV1; extra organic inclusions on underside in extra clay layer; PRN 1030, context 342, pit 343.
12. Shouldered jar, large; A1; fabric SF1; wiped on both surfaces; decorated with finger-tip impressions on shoulder; PRN 1001, context 342, pit 343.
13. Shouldered bowl, large; A1; fabric FV1; burnished on interior, wiped on exterior; finger-tip impressions on shoulder; PRN 1004, context 342, pit 343.
14. Shouldered jar; A1; fabric FV1; wiped on both surfaces; finger-tip/nail impressions on shoulder zone and also two impressions above shoulder; PRN 1005, context 342, pit 343.
15. Flat base, medium-sized; B1; fabric FV1; additional crushed, burnt flints impressed into underside of base; PRN 1052, context 342, pit 343.
16. Round-shouldered jar; A3; fabric FV1; burnished on the upper exterior, roughened on the lower exterior, wiped on the interior; PRN 1032, context 342, pit 343.
17. Hemispherical bowl, small; R1; fabric FQ2; burnished on both surfaces; PRN 1010, context 342, pit 343.

Figure 3

18. Footring base, medium-sized; B3; fabric FV1; burnished on all surfaces; tooled/burnished 'X' on underside of base; abraded interior from use; broken wall edges appear to have been snipped around full circumference; PRN 1054, context 342, pit 343.
19. Round-bodied bowl with upright, medium-length rim, small; R5; fabric QF1; burnished on both surfaces; small area of reburnt condition on rim and rim-neck fracture edge; PRN 1039, context 342, pit 343.
20. Round-bodied bowl with upright to flared, medium-length rim, medium-sized; R5; fabric QF1; burnished on both surfaces; PRN 1040, context 342, pit 343.
21. Shouldered bowl; A1; fabric QF1; red-finished, possibly slipped, exterior and burnished on both surfaces; PRN 1035, context 342, pit 343.
22. Saucepan pot, small; R8; fabric FQ2; burnished on both surfaces; PRN 1057, context 342, pit 343.
23. Upright, slightly everted rim bowl; R9; fabric FQ1; burnished on both surfaces; PRN 1091, context 338, posthole 338.
24. Upright, slightly everted rim jar, small; R9, fabric Q1; burnished on exterior; PRN 1076, context 114, ditch 115.

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