# **CHAPTER 17**

# **Prehistoric pottery**



by Matt Leivers

# **17** Prehistoric pottery

#### Matt Leivers

The prehistoric pottery assemblage studied here consists of 8,085 sherds weighing 58,040 g, recovered from six sites: the LTCP, MTCP, M11, FLB, SG and NP sites. Quantities of pottery recovered by site are given in Table 17.1.

Small quantities of Early Neolithic, Middle Neolithic, Late Neolithic, Early Bronze Age and Early Iron Age ceramics are present within the assemblage, with larger amounts of Middle Bronze Age, Late Bronze Age and Mid-Late Iron Age material.

Most published assemblages of prehistoric ceramics from Essex derive from either the northern side of the lower Thames valley, the central portion of the county around the Chelmer and Blackwater rivers, or the north-eastern area around Ardleigh. Given this, the assemblage from Stansted provides a relatively scarce opportunity to examine a substantial body of material from beyond the traditional 'core' areas of prehistoric activity in Essex (in addition to the material in Brown 2004; Every 2007).

Earlier prehistoric ceramics in Essex tend to be understood primarily in terms of their relationships to ceremonial earthworks. Although the Neolithic and Early Bronze Age pottery from Stansted is not abundant, its occurrence in an area in which large-scale architectural modification of the landscape did not occur has the potential to contribute to the understanding of the more prosaic aspects of life in Essex in the fourth and third millennia BC. In later periods, the much more frequent Middle and Late Bronze Age ceramics can contribute to an understanding of the relationship between Ardleigh and other Deverel-Rimbury ceramics (Brown 1995b), and the still obscure mechanisms by which Deverel-Rimbury pottery was superseded by the so-called Post-Deverel-Rimbury traditions which typify the Later Bronze Age (Needham 1996; Brown and Murphy 1997).

# **Methods**

The material was analysed in accordance with Wessex Archaeology's recording system (Morris 1994), which follows the nationally recommended guidelines of the Prehistoric Ceramics Research Group (Prehistoric Ceramics Research Group 1997). Sherds were examined using a x20 binocular microscope to identify clay matrices and tempers, and fabrics were defined on those bases. Fabric analysis was undertaken by the author (LTCP, MTCP, FLB, SG, NP) and Anne-Maíre Denvir (M11). The author integrated the resulting fabric type series, and textual comments on the M11 material by Anne-Maíre Denvir were incorporated into this report.

A number of research aims were identified in the *Stansted Airport Project Design Update Note 2* (Framework Archaeology 2004b), and analysis was carried out with these in mind. The stated aims include the possibility of contributing to the debate concerning the dating and relative chronology of Neolithic pottery regionally and nationally; the chronological definition of Middle and Late Bronze Age settlement features; and the characterisation of apparently alternate strategies of structured deposition in the Middle and Late Bronze Ages.

In addition, analysis of the assemblage was intended to elucidate issues concerning the location of manufacture of vessels, assisting the understanding of local and nonlocal production; to characterise the range of forms present within chronological groups; and to identify any correspondences between those forms and observed or implied functions.

# **Condition**

Condition of sherds was assessed on the basis of the degree to which edges and surfaces were abraded. The assemblage was dominated by sherds in moderate condition, with much smaller proportions of good, poor and very poor sherds. There were very few reconstructable profiles, despite the occurrences of probable singlevessel deposits. The presence of residues was also recorded.

#### <u>Summary</u>

A total of 67 fabric groups were defined, which have been grouped into eight chronological periods. The breakdown of ceramics by fabric group and chronological period is given in Table 17.2. Fabric descriptions are given below.

# Early Neolithic Pottery (Fig. 17.1, nos 1-5)

On the MTCP 107 sherds weighing 506g were identified as Early Neolithic, in four fabrics (FL44, FL45, FL46 and QU52), all likely to be of local manufacture. None have any traces of slip, wiping or decoration.

The assemblage contained only four rims (all in FL44), three of which were recovered from the fill of a single feature (fill 506 of pit 344278). Each of these three rims (one of which had a post-firing perforation below it) was from a different bowl, none of which was represented amongst the plain body sherds recovered from the same feature. In total the pit contained portions of six vessels, three represented by single rim sherds and three by collections of less well-preserved plain body sherds (in FL45, FL46 and QU52).

Each of the three rims from 506 is plain, and two are of forms suggesting open bowls with necks above sharply carinated bodies, while the third appears to be from a neutral undifferentiated vessel.

The fourth rim was recovered from fill 1737 in feature 1738, a small pit which also contained six plain body sherds. In this instance two body sherds derived from the same vessel as the rim (in FL44) which is another open carinated bowl with a neck, while four smaller sherds were from a second vessel in FL45.

Four small sherds (three in FL44, one in QU52) were recovered from the fill of pit 323037. These sherds are too small to assign to a form, and their size and moderately abraded condition suggests that they entered the feature accidentally. However,

*Corylus* charcoal radiocarbon dated to  $3707 - 3636 \text{ BC}^1$ , suggesting that the feature and pottery are contemporary.

On the LTCP only 25 sherds weighing 96g were identified as Early Neolithic, all belonging to a single vessel of fabric FL29. The material was recovered from the single fill (995107) of a small pit (995106). The fabric is likely to have been manufactured locally.

The group contains 23 plain body sherds. Two joining sherds from a rolled, flattopped rim suggest a neutral form. Exterior surfaces are smoothed, and have no traces of any slip, wiping or decoration. The small size of the assemblage and predominance of plain body sherds precludes further reconstruction of the vessel's profile.

A further 33 sherds weighing 57g came from three tree-throws on SG. All are plain body sherds in poor to moderate condition, likely to belong to three different vessels.

# Discussion

All of the Early Neolithic fabrics are similar to both Middle and Late Bronze Age flint-tempered pottery, and it is possible that further Early Neolithic sherds remain unidentified amongst the much larger Bronze Age assemblages (a problem encountered on other multi-period sites in Essex: see Brown 1988, 264; Hedges and Buckley 1978, 259).

The classification of Early Neolithic pottery in Britain remains confused. The continued use of contradictory type-names for perceived local variations with uncertain cultural and chronological significance has largely obscured understandings of how different ceramic traditions may have arisen and been used (Table 17.3). The most recent nomenclature in Table 17.3 allows for three overlapping pottery assemblages in the Early Neolithic of southern Britain: the Eastern, South-western and Decorated styles. This characterisation is quite misleading, and there is more likely to have been a background of plain bowl pottery of various kinds across the country, to which decoration is eventually added. Many assemblages contain both plain and decorated vessels, and decoration appears to have been used preferentially on particular vessel forms - principally heavy-rimmed shouldered bowls.

The very earliest Neolithic pottery (Herne 1988) is not present at Stansted, where the forms appear to be slightly later, more akin to decorated assemblages. Traditionally this material would be classified as a plain component of a Mildenhall-style assemblage. In Essex, this pottery is typified by deep open bowls with rolled rims. Carinated and closed forms are rarer, as are other rims (Hedges 1980). Deposits of pottery in pits are fairly frequent in the Early Neolithic in Essex, and parallels for the LTCP/SG material can be identified across the county. Examples are known from Springfield Lyons (Buckley and Hedges 1987, 3), Great Baddow (Brown and Lavender 1994), Lofts Farm (Brown 1988), Little Waltham (Drury 1978), Chigborough Farm (Adkins and Adkins 1985), Heybridge Basin (Brown and Adkins 1988), Asheldham (Bedwin 1986), North Shoebury (Brown 1995a) and elsewhere (Hedges 1980; Brown 1997). Few of these ceramics come from the Stansted region,

<sup>&</sup>lt;sup>1</sup> All dates are give at 95.4% confidence

with the exception of Elsenham Cross, Pledgdon, where Warren recorded 'Windmill Hill Ware' in pits (Warren 1945). Such features are often interpreted as parts of "a pattern of shifting settlement in successive, small woodland clearances, dependant as much on wild plants as cereal cultivation" (Brown 1997, 94). This picture fits particularly well with the pollen evidence from Stansted Brook, which suggests no large-scale clearance until the Middle Bronze Age (Wiltshire 1991).

On the MTCP site it is possible that a different practice resulted in the deposits. The general dichotomy between the larger, well-preserved rim sherds and the smaller, more abraded body sherds (together with the fact that rims and bodies are often from different vessels) hints at a depositional practice common in the Early Neolithic elsewhere in Britain (Garrow 2006). It can be suggested that these pots were often used in special performances and acts of consumption, deposited with some formality, with selected sherds (particularly from the rim and carination) selected and carefully placed in pits.

Although too much should not be made of such a small assemblage, it is possible that the Early Neolithic ceramics from the MTCP site on the one hand and the LTCP and SG sites on the other represent different sorts of activity, distinct in terms of their fabric type, location, and depositional practice.

# Chronology

In very general terms, the emergence of decoration in the Early Neolithic ceramics of the English south-east is a late development (Herne 1988), perhaps implying that the plain Stansted material lies at an earlier point in the decorated sequence. Radiocarbon dates on hazelnut shell from context 353012 in pit 344278 of 3637 – 3498 BC (NZA - 20960) and *Corylus* charcoal from the fill of pit 323037, most probably of 3707 – 3636 BC (NZA-20918), may support this assumption. However, two points should be considered in any consideration of the chronological significance of this material: firstly, the assemblage is very small; and secondly, decorated vessels did not replace plain ones. Whittle (1977) has typified the ratio of decorated to plain vessels in assemblages of his Decorated Style (which equates with the older 'Windmill Hill' nomenclature of which Mildenhall Ware is considered a sub-set: see Table 17.3) as 3:7. Given these factors, it is not possible to determine whether the absence of decoration is a chronological trait, or a deliberate choice by the users of the pottery.

The radiocarbon dates obtained for pits 323037 and 344278 are entirely typical Early Neolithic determinations, both nationally and within Essex (Fig. 17.2 Inf. http://ads.ahds.ac.uk/catalogue/resources.html?c14\_cba).

Slightly earlier dates were obtained from a hearth pit with associated ceramics at Little Waltham. Comparable dates have been obtained from the Orsett causewayed enclosure, and from settlement at Bradwell-on-Sea Site 8 and The Stumble. At the latter site, the determinations came from a pit group containing pottery.

These determinations are spread across Essex and (with the exception of Little Waltham) basically contemporary, suggesting a human presence across the county by the mid-4<sup>th</sup> millennium BC.

# Middle and Late Neolithic pottery (Fig. 17.1, nos 6-9)

#### Peterborough Wares (3350 – 2700)

A single pit (436070) on the M11 site produced 12 sherds (weighing 92 g) from a single Mortlake-type vessel in FL26. Four sherds were decorated fragments of rim, while the remaining eight were body sherds, of which two were plain and six decorated. The top of the rim and interior surface immediately below it are decorated with whipped cord maggots arranged transversely and horizontally respectively, while the concave neck bears the infrequent impressions of a blunt sub-circular implement (perhaps a small bone) on the exterior surface. Pit 436070 is dated to the Late Bronze Age by other ceramic associations, indicating that the Mortlake sherds must be residual. However, the likelihood that all 12 sherds derive from a single vessel indicates that the original depositional location was probably in the immediate vicinity.

A similar deposit came from tree-throw 504018 on SG, containing two sherds from a Mortlake-type rim decorated with incised lines in a chevron pattern, and ten body sherds decorated with finger-nail crescents. Thirteen plain body sherds came from a second vessel. The majority of the other Middle Neolithic pottery on SG was recovered from later features.

Only five sherds of Middle Neolithic pottery were recovered from the MTCP. These weighed 27g and derived from three vessels (fabrics FL41 and 42), identified as Peterborough Ware (although the second and third vessels are tentative assignations). Single rim and body sherds represented one vessel (FL41) with fingernail impressions on the exterior, rim, and interior immediately below the rim. Only one simple plain rim sherd of the second vessel (FL42) was recovered. These three sherds came from fill 320003 of tree-throw 320001, containing an assemblage of mixed date, and as such are unlikely to represent *in situ* Middle Neolithic activity. The third vessel (FL42) consisted of two sherds, one with an upright very slightly thickened rim. These sherds came from fill 316034 of pit 316032. It is difficult to assign the MTCP sherds to a Peterborough Ware sub-style with any degree of certainty, but the form of the FL41 vessel is more suggestive of Mortlake than of either Ebbsfleet or Fengate Wares.

#### Discussion

The Peterborough Ware element of Middle Neolithic impressed wares developed out of earlier Neolithic bowl traditions, perhaps originally representing one on the Early Neolithic decorated bowl styles in the lower Thames area (Smith 1956). Peterborough Wares elaborate on the existing styles of earlier Neolithic bowls, but have a much more restricted set of forms, dominated by the shouldered bowl with a cavetto zone beneath the rim. The decoration on these pots generally consists of multiple, repeated impressions, made using twisted and whipped cord, the ends of bird bones, roundtoothed combs, finger-nails and finger-tips. Fabrics are almost entirely tempered with coarse flint. Traditionally, three styles of Peterborough Ware are identified which were once thought to form a continuous developmental sequence. *Ebbsfleet Ware* is most like the earlier Neolithic forms. These vessels have simple rims and relatively long necks; the decoration is confined to the upper part of the vessel and is generally simple and restrained, with incisions and impressions. With *Mortlake Ware* the rim is elaborated into a kind of collar and the decoration becomes more profuse. Twisted and whipped cord impressions are used as decorative techniques, along with impressions of bird bones, stick and fingernail. The neck on Mortlake Ware is reduced to such an extent that it becomes a cavetto zone. Finally, in *Fengate Ware* the rim becomes a heavy collar. The neck is almost totally gone, and the base of the pot becomes flattened, sometimes forming a pedestal.

It is only in the last ten years that an adequate group of radiocarbon dates for Peterborough Ware has started to build up (Gibson and Kinnes 1997), demonstrating that the Ebbsfleet/Mortlake/Fengate sequence does not work, and that Fengate vessels may have been in circulation as early as Ebbsfleet. Moreover, they suggest that Peterborough Wares were in use by 3350 BC, and had gone out of circulation by 2500 BC, making them securely middle Neolithic.

The differences between the Ebbsfleet, Mortlake and Fengate styles and their relationships to earlier forms may lie not in their chronological relationship, but rather in their treatment and circumstances of use and deposition. Nationally, a picture is beginning to emerge to which the Stansted material can contribute. Within Essex Peterborough Ware (primarily of Mortlake-type) is well represented at the Springfield cursus (Buckley et al. 2001), and entirely absent at the Springfield Lyons and Orsett causewayed enclosures (ibid.; Hedges and Buckley 1978). This difference is of interest in terms of the ongoing debate concerning the relative dates, uses and depositional associations of the various Peterborough Ware sub-styles, and also in terms of the relationship between Peterborough and decorated earlier Neolithic ceramics. However, the association or otherwise of Peterborough Ware with major earthworks is at best incidental to the Stansted material. It is perhaps more significant that Peterborough Ware is not well-represented in Neolithic features and levels of more ephemeral Essex sites. At Great Holts Farm a small shallow pit contained Peterborough Ware, further pits at Elms Farm contained Mortlake Ware and others at Chigborough Farm contained unspecified Peterborough Ware (Brown 1997). Small quantities of unspecified Peterborough Ware were found at Great Clacton, 30 sherds from two Ebbsfleet vessels came from Waltham Abbey, a single unspecified sherd from Danbury and sherds of unspecified, Mortlake and Fengate wares from Wicken Bonhunt (Hedges 1980). It would appear that Peterborough Ware in Essex as a whole is rather under-represented in relation to (the at least partially contemporary) decorated earlier Neolithic pottery, a phenomena that is repeated at Stansted.

#### Grooved Ware (2900 - 2400)

Only four abraded sherds of Late Neolithic pottery weighing six grammes were recovered from the lower fill of a tree-throw on the MTCP. No other material was recovered from this feature, which consequently remains undated. It is impossible to identify such a small assemblage to type, or to comment on its significance. Grooved Ware in Essex is not uncommon, and includes Clacton (from pits at Lyon Point and Newport) and Durrington Walls (from the Tye Field, Lawford 'henge' and the Springfield cursus) sub-styles. Large collections are not often found, and in this respect the Stansted material is not atypical.

#### Beakers (2700 - 1700)

Only four sherds weighing eight grammes from the LTCP have been assigned to the Early Bronze Age, three due only to the fabric type. All are grog-tempered, and form fabric groups GR4 and GR5. A single probable Beaker sherd with comb and cord impressions represents GR4. GR5 consists of three featureless sherds containing less coarse sand and more evenly oxidised than GR4. The diagnostic Beaker sherd came from the fill of pit 913804, which also contained Early to Middle Iron Age pottery in similarly small quantities. The three plain sherds came from truncated feature 469005, which was otherwise sterile. A single featureless body sherd from the MTCP has been assigned to this period on the basis of the grog-tempered fabric (GR6). It was recovered from the same tree-throw fill as the Middle Neolithic sherds.

More diagnostic Beaker sherds came from SG, although again numbers were low (only 14 sherds), condition poor, and some identified only by fabric (all GR5). Some were decorated with very abraded incised and impressed motifs. Little can be said about an assemblage of this size, which seems to be largely or wholly residual.

# Middle Bronze Age pottery (Fig 17.3, nos 10-21)

The largest period assemblage dated to the Middle Bronze Age (3,093 sherds weighing 27,605 g), with ceramics belonging to the Deverel-Rimbury tradition recovered from the FLB (35 sherds weighing 186 g), M11 (162 sherds weighing 856 g), LTCP (346 sherds weighing 3,280 g), and MTCP sites (2,550 sherds weighing 23,283 g).

15 fabrics were identified (FL30 – 33, FL43, FL47-52, QU53-56), more or less sandy and (with the exception of FL43) all tempered with crushed calcined flint in varying quantities. FL43 was tempered with crushed calcined flint, quartz sand and – exceptionally – grog.

The Middle Bronze Age assemblage can be divided into three basic vessel types, which correspond to the standard tripartite division of Deverel-Rimbury ceramics into Bucket, Barrel and Globular (see below). In addition to these three basic types there are a small number of anomalous sherds belonging to vessels of different forms. One rim and a dozen plain body sherds in FL30 seem to belong to a small closed bowl. Four sherds in QU54 and QU56 are portions of metalworking crucibles. With the exception of one crucible sherd recovered from topsoil, all of the anomalous forms came from waterhole 309075 on the MTCP site.

The majority of the *in situ* assemblage appears to be domestic rubbish, either being deposited expediently in contemporary features in deliberate, unstructured waste disposal, or entering features and layers through processes such as manuring of fields.

There are two general exceptions to this pattern: the ceramics from waterhole 309075, which – while still possibly representing rubbish disposal – are more highly structured and consequently may have been more overtly meaningful to the Middle Bronze Age inhabitants of Stansted; and those vessels and fabrics associated with the barrow to the north of the main focus of settlement on the MTCP site. Both of these are discussed in more detail below.

# Distribution

# <u>FLB</u>

A very small number of coarseware sherds in FL30, FL31 and FL47, plus two fineware sherds in FL51 were recovered from the FLB site. While 21 of the 35 sherds were residual or from contexts which could not be closely dated, the remainder came from a pair of features which may have been associated with contemporary settlement in the area, represented by a single roundhouse. Ditch 403017 contained seven sherds of coarseware in FL30 and FL31 which probably entered the feature during backfilling in the Late Bronze Age (Late Bronze Age ceramics are also present). Pit 408013 (adjacent to the western edge of the roundhouse, and radiocarbon dated to 1,405 - 1,255 BC) contained fragments of two vessels. One was a medium-sized plain bucket-shaped jar in FL30 with a simple upright rim; the second a globular vessel in FL51 with similarly simple rim. Both are represented by a very small number of sherds, probably due to the feature being incompletely excavated.

# <u>M11</u>

The M11 excavations produced a quantity of Middle Bronze Age ceramics from pits and other features in the north-western area of the site. The assemblage is largely undiagnostic, consisting mainly of plain body sherds and extremely small, undecorated simple rim fragments, but it can be divided into coarse bucket-shaped jars in FL30 and FL32 and fine globular vessels in FL51.

A large proportion of the assemblage (89 sherds weighing 565 g) was recovered from fills 425003 and 425004 of tree-throw 425005. The feature was located in an area without structures or evidence of domestic habitation, possibly indicating that the ceramics resulted from deliberate deposition away from habitation areas. The assemblage includes both coarse (FL30) and fine (FL51) wares. The FL30 fabric from 425005 is somewhat coarser than usual and shows no immediate signs of domestic usage. Some FL51 rim sherds showed evidence of burning and residual organics in the interior, suggesting different uses for the fine and coarse wares.

# <u>LTCP</u>

On the LTCP site, the material appears to derive from exclusively domestic contexts: no features were indicative of individually deposited complete or near complete vessels, urned cremations, cremation cemeteries, or barrows. Sherds regarded as *in situ* in deposits contemporary with their use and deposition were recovered from a range of features (tree-throws, pits, ditches, postholes) spread in a broad east – west band across the LTCP site. No evidence of differential deposition of fabric types can be detected: the three coarseware fabrics present (FL30, FL32 and FL33) occur

together, and every feature containing fabric FL31 (on this site a fineware only) also contains either one or two of the coarseware fabrics. The only distinction notable between coarse and finewares is that whereas coarsewares occurred as residual sherds in later features, finewares did not.

Average sherd content for Middle Bronze Age features on LTCP site was 16, and only three features contained sherd counts significantly above average. Posthole 124025 contained 37 plain body sherds from a single bucket-shaped vessel in FL33, which is likely to have been deposited in pieces in the void left by the rotted or removed post.

Intervention 116013 (ditch 138017) contained 50 sherds from five vessels, representing the whole range of coarse and finewares present on LTCP site. With the exception of just under half of a thin flat base in FL30, each vessel is represented by a small number of small, moderately abraded sherds probably representing domestic rubbish.

Pit 134001 contained 53 sherds representing at least six vessels (a coarse bucketshaped jar in FL32, two in FL33 (one of which had an applied cordon with a groove along the upper surface), and three globular vessels in FL31, one of which had a very slight pinched-up cordon. The sherds are again relatively small and moderately abraded, with the exception of four larger sherds of the cordoned globular vessel, which may have survived better due to the higher quality of its manufacture. Further sherds from some of these vessels were recovered from the deposit sealing the pit, interpreted as a Romano-British disturbance. Rubbish disposal again appears to be the likely mechanism of deposition.

# MTCP

On MTCP the assemblage can be divided into the larger proportion recovered from features associated with the enclosed Middle Bronze Age settlement at the south end of the excavation, and the much smaller group of sherds from a round barrow 560 m to the north.

84 sherds weighing 768 g were recovered from 14 fills of this barrow ditch (309238). Much of the material seems to have been deposited in the ditch during the erosion of the barrow mound, which was probably the original location of the ceramics. However, it is possible that some deposits were placed in the ditch originally, although there is nothing in the surviving ceramics to distinguish different depositional processes. Six sherds weighing 17 g are highly abraded and are intrusive, of Middle Iron Age date. The remaining 78 sherds are Middle Bronze Age, and consist of 26 sherds of a bucket-shaped vessel in FL30 (several of which have burnt residues on the interior); eight sherds of at least one FL31 globular vessel with smoothed surfaces; one sherd in a coarser variant of FL31 that may be a second vessel; seven sherds of a bucket-shaped vessel in FL33; 22 sherds of a bucket-shaped vessel in FL47, generally in poor condition; and 14 sherds of the only example of FL43 from any of the Stansted sites.

FL43 is exceptional amongst the Stansted Middle Bronze Age ceramics in that it contains grog amongst its tempering agents. The occurrence of grog in such limited

quantities (a single vessel) and with a notable contextual association raises the question of why this temper was chosen in the manufacture of this vessel, why this vessel was chosen for deposition in this location, and indeed why there are no other Middle Bronze Age grog-tempered vessels in the Stansted assemblage. In purely technological terms, grog is an ideal – if not *the* ideal – tempering medium: as Cleal notes, "it is relatively easily crushed, is easy to use… provides a stable non-plastic …and does not suffer post-firing changes which would endanger or destabilise the pot" (1995, 192). As Cleal notes, one prerequisite for the use of grog in pottery manufacture is a ready source of the raw material, which – as she points out – is hardly scarce on Middle Bronze Age settlements where broken vessels are a common occurrence. Her suggestion "that there were social constraints on its use" (*ibid.*) is echoed by Gibson when he suggests that "the fact that it involves the destruction and pulverising of former pots may itself be a symbolical act referencing such concepts as continuity and rebirth" (2002, 32).

The abundance of available sherds on MTCP site which could have been transformed into temper suggests that the absence of such temper in the vast majority of vessels was a cultural choice on the part of the potters, assuming that manufacture occurred locally, as seems likely. Given this, the presence of the grog-tempered vessel in the barrow ditch suggests in turn either that this vessel was an import from an area in which grog-tempered vessels were more common, or that it was manufactured for a particular purpose or set of purposes which culminated in (but were not necessarily limited to) its deposition in the barrow. In terms of the first suggestion, grog-tempered vessels are more frequent in north-east Essex, where they tend to occur as a part of the Ardleigh sub-style: Brown (1995b, 129) tabulates 41% of vessels from the Ardleigh urnfield as grog-tempered, with other sites in the region having between 10% and 62% grog-tempered. In terms of the second possibility, Gibson's suggestion concerning the symbolism of grog may be appropriate in this instance, where the vessel was both an import and selected for its symbolic meanings.

The rest of the MTCP site assemblage came from within the Middle Bronze Age settlement at the southern end of the site. Sherds were recovered from roundhouse gullies and postholes, from ditches, and from pits and waterholes.

The largest single assemblage was recovered from feature 309075, which originally may have been a waterhole, immediately to the east of the roundhouses. The fills of this feature contained 1,081 sherds weighing 12,025 g. 979 sherds weighing 11,498 g were from coarsewares including bucket and barrel-shaped jars, a small bowl, and a crucible, while 102 sherds weighing 527 g were from globular vessels. The occurrence of fabric types by stratigraphic group is given in Table 17.4.

The sequence of fills in the feature began with a water-lain deposit containing no pottery. A series of fills interpreted as material weathered from the pit's edges while it stood open contained a small quantity of generally small sherds deriving from several bucket-shaped and globular vessels. This material has the characteristics of casual discard or inclusion by chance, and is very different in nature from deposits higher in the stratigraphic sequence. The weathering deposits also contained an anomalous group consisting of two small sherds (six grammes) of Late Bronze Age pottery and four larger sherds (42 g) of what appears to be the footring base of a small bowl of

Middle or Late Iron Age type. The inclusion of these ceramics in these stratigraphically early fills cannot be adequately explained and may result from excavation or post-excavation error.

The fills above the weathered material are mostly deliberate deposits, and contain very large amounts of pottery, animal bone and flint. The nature of these deposits varies between layers of burnt material and backfills, both of which contained large quantities of ceramics. The most significant single fill consisted of a dump of 188 sherds deriving from three vessels (309114). One sherd weighing nine grammes came from a globular vessel decorated with rough horizontal incisions. This sherd was moderately abraded, unlike the remaining 187 sherds (3,837 g) which were in good condition and derived from two bucket-shaped vessels. Neither of these pots was deposited complete: each is represented by a single rim sherd, and there are only five base sherds amongst the bulk of the pottery. It seems most likely that the vessels were broken elsewhere (presumably in the settlement) and that certain portions were then selected for deposition in the pit.

This appears to be the case for the majority of the layers containing large numbers of sherds: the lowest such deposit for instance contained an assemblage which included 60 sherds weighing 754 g again deriving from two bucket-shaped vessels, and another 33 sherds weighing 397g from a third bucket-shaped pot. None of these vessels were represented by rim or base sherds. One very clear example of the deposition in the waterhole of sherds selected from a vessel broken elsewhere is provided by the only instance of an Ardleigh-style jar. Three sherds of this vessel weighing 352 g were recovered from the upper fills of pit 319033, located 10.5 m to the north-west of the waterhole, while a further three sherds weighing 19 g were recovered from 309077, which represents one of the final back-fillings.

This same stratigraphic group also contained two sherds weighing 10 g in QU54, derived from a small metalworking crucible, in form an over-fired bowl with a pinched spout. A further sherd of this same vessel (weighing 17 g) was recovered from 309105 (the uppermost fill of the waterhole). With the exception of a single sherd of a second crucible in FL56 recovered from topsoil, these sherds are the only evidence of Bronze Age metalworking from the Stansted sites.

Two other anomalous pot types were recovered from the waterhole, both in 309081, radiocarbon dated to 1,382 –1,122 BC. The first is represented by six sherds in FL30 (including a rim decorated on the top with fingernail impressions) from a closed vessel with a diameter at the mouth (120 mm) significantly smaller than the maximum girth around the body. This vessel has a very thin wall (9 mm maximum surviving thickness) and may be a barrel-shaped vessel of unusual form, a simple sub-biconical vessel, or even a small bowl. Whichever form (and there is too little of the vessel surviving to choose between them), the pot seems to be unique within the Stansted assemblage. The second vessel is represented by 10 sherds in FL47 weighing 134 g deriving from a barrel-shaped jar. The only other certain example of such a vessel on the Stansted sites is that recovered from 320057, a deposit in the pit cut through the fills of the feature containing the glacial erratic boulder in the centre of the Middle Bronze Age settlement (see below).

It is clearly not by chance that so much pottery was deposited in the waterhole, nor is it accidental that there are a significant number of fabrics and forms found only there, or in a very limited number of similarly significant contexts elsewhere on the MTCP settlement. Clearly the waterhole was a focus for a series of acts which involved the deposition of large quantities of pottery, and the associations of animal bone and burnt material in these deposits suggests some form of food preparation or consumption which it is tempting to interpret as ceremonial in nature.

Ethnographic accounts demonstrate that waste materials can be highly significant in the conceptual definition of cleanliness and dirtiness, the sacred and the profane, the pure and the tainted, and so on. It is also clear that the ways in which different cultures define waste materials are very variable. The modern understanding of rubbish as dirty and as something to be cast away is very different from much more complex ways of distinguishing between materials. Thus the Kenyan Marakwet see ash, chaff and animal dung as entirely separate materials which must never be put together (Moore 1982). Similarly, Welbourne has shown that the Endo don't consider broken pieces of pottery to be refuse, and that the places where they are deposited are far from being thought of as rubbish dumps (Welbourne 1984).

That the waterhole deposits are not simply rubbish disposals is indicated by the inclusion of the very rare barrel-shaped vessels, the metalworking crucible, and sherds of the only Ardleigh-style jar from the site. The inescapable conclusion is that the waterhole formed a focus for the controlled deposition of a range of materials undoubtedly of some significance in the lives of the inhabitants of the settlement on the MTCP site.

A second waterhole lay just within the eastern boundary of the settlement on the MTCP. This feature (323001) contained a much smaller quantity of pottery than 309075 (65 sherds weighing 495 g), but had a similar sequence of deliberate fills separated by periods of natural silting. Despite the similarity of the two features and the deposits within them, waterhole 323001 does not seem to have been a major locus for significant deposition in the Middle Bronze Age (although in the Later Bronze Age the proportions of ceramics present in the two features is reversed).

One other feature is worth considering in the context of significance and depositional practice. This is 320046, a pit lying in the centre of the settlement on the MTCP site and containing a very large quartzite boulder. The original fills and later siltings of the pit (beneath and around the stone) contained no pot, except for a single moderately abraded rim sherd from a bucket-shaped jar. However, at some point while the boulder was still visible a second pit (320047) was cut through the fills of the first. This second pit stood open for a time and began to silt up; one of these silts contained four sherds in poor to moderate condition derived from two bucket-shaped jars and a globular vessel, likely to have entered the pit through chance. Above these silts are a sequence of three deposits which appear to be deliberate fills. The lowest of these contained 31 sherds weighing 191 g from a bucket-shaped jar in FL32, and six sherds weighing 46 g from two globular vessels in FL48 and FL51. One small sherd in QU27 came from the middle layer, but the uppermost fill contained a significant quantity of ceramics. These included nine sherds of a bucket-shaped jar in FL30 with fingernail impressions on the rim and fingertip impressions on the shoulder. Eleven sherds came from a globular vessel in FL31, the well-finished surface of which is uncommon in that fabric. 63 rim, base and body sherds represented four bucket-shaped jars with wiped surfaces in FL32; one of these vessels had a small raised boss below the rim and a second had a row of fingertip impressions on the shoulder. A single rim sherd came from a barrel-shaped vessel in FL32, a form otherwise only represented in waterhole 309075. Five sherds in FL51 came from a highly burnished globular vessel decorated with square-toothed comb impressions.

It has been suggested that this layer accumulated naturally over a period of time, with the cultural materials present within it deriving from residual background scatters in the general area. The condition of the pottery tends to belie this interpretation: most sherds are only moderately abraded, and some are in good condition (better indeed than the majority of sherds in rubbish pits). On the basis of the pottery, it seems more likely that small deposits of material were placed in the feature sequentially, with the small number of abraded sherds (all from a single globular vessel in FL31) perhaps entering the feature naturally, or from elsewhere.

The rest of the *in situ* assemblage from the MTCP site came from roundhouse gullies and post-holes, from ditches, and from pits. Much of this material seems to be rubbish disposal or material derived from use in manuring. Some of the pits however have indications that rubbish disposal may have had a formal element, with some selection of material and structure to deposition, rather than simply being a means of disposing of unwanted debris.

# Discussion

Deverel-Rimbury assemblages tend to divide into three basic vessel types: the socalled Bucket, Barrel and Globular Urns. It should be noted that the traditional nomenclature of the Deverel-Rimbury type series contains within it the functional assumption of vessel-use as a container for cremated human remains: this applies to all three vessel types as indicated by the term *urn*. It is however by no means the case that Deverel-Rimbury ceramics were used exclusively in funerary contexts, and as such the urn label is misleading. Consequently, at Stansted this term has been rejected in all instances where the ceramics are not associated with human remains, or in which there is no reasonable expectation that funerary activity may have occurred. Functionally neutral terms such as jar or vessel are preferred.

In Essex, Deverel-Rimbury ceramics fall primarily into two regional groups: Ellison's Lower Thames Valley grouping (Ellison 1975) in the centre and south and the Ardleigh group (Erith and Longworth 1960) in the north-east.

# Ardleigh Group

Deverel-Rimbury assemblages of the Ardleigh style consist of bucket-shaped and globular jars. The former are typified by frequent fingertip rustication, 'horseshoe' handles and a high proportion of grog amongst the otherwise predominantly flint-tempered fabrics (Brown 1995b, 127). Radiocarbon dates for the type span the period 2199 - 1510 cal. BC to 1510 - 1270 cal. BC (at 98% confidence) at the Brightlingsea cemetery (*ibid.*) and 1420 - 950 cal. BC at Chigborough Farm (*ibid.*), suggesting that this style at least begins in the Early Bronze Age, and continues to be used until the end of the Middle Bronze Age. A chronology of types has been suggested, with

profusely-decorated, grog-tempered vessels with internally or externally expanded or 'T'-shaped rims lying early in the sequence (Brown 1999 fig 73.136). Late Ardleigh style ceramics tend to be relatively plain, and can have rows of perforations below the rim (Brown 1999 fig 69.116). Dating places some of these plain vessels in the second half of the second millennium BC, and towards the end of the period vessels become very similar to plain jars of the Late Bronze Age, and may indeed demonstrate a continuity of Ardleigh ceramics into that period.

Ardleigh-type Globular vessels have thin walls and well smoothed and burnished surfaces. Lug handles are sometimes present, and can be either plugged through the vessel wall or simply luted onto the exterior.

#### Lower Thames Valley Group

Vessels of this group belong more firmly within the main Deverel-Rimbury tradition. As a type, this material is unlikely to date prior to 1600 BC, and is unlikely to have become widespread prior to 1500 BC, with a *floruit* between 1500 and 1150 cal BC (Needham 1996). Dates for the southern central group in Essex span the range 1600 – 930 BC (Brown 1995b, 130-1).

The jars of this group are plainer than the Ardleigh type, with decoration primarily consisting of rows of finger-tip impressions or applied cordons on the body, and finger impressions on the rim (Dacre and Ellison 1981 fig 19.E3). Globular fineware vessels are a much less frequent component of assemblages, but do occur, and in Essex are sometimes replaced by stamp-decorated bowls (Brown 1995b).

*Bucket-shaped jars* tend to have the thickest walls (which are - as the name implies – usually straight and flared) and to be the most coarsely tempered of the Deverel-Rimbury series. Size and capacity vary considerably, from 2,000 to 40,000 cm<sup>3</sup> (Barrett 1980, fig 2). Surfaces can be slipped or wiped, but are more often left rough. Rims are generally simple and upright, with rounded and flattened forms prevalent. More elaborate forms are scarce, but include rims with a slight bevel, thickened forms, 'T'-shapes, and closed rounded types. Decoration on the tops of rims is limited to either fingertip or nail impressions. Body sherds can have fingertip impressions on the shoulder, below the rim or elsewhere, incised horizontal lines, raised bosses, and pinched-up or applied cordons, some of which are decorated with fingertip or nail impressions. Pre-firing perforations sometimes occur below the rim.

*Barrel-shaped jars* were first defined by Calkin (1962, 19-24) as convex-bodied, with more or less concave necks, flat or internally-bevelled rims (some expanded outwards), and either plain or decorated at the shoulder or rim with fingertip or nail impressions. Lugs are entirely lacking, but fine horizontal and vertical cordons are common. The most characteristic features were the thinness of the wall, the finer flint temper, and the often-vesicular fabric.

*Globular vessels* generally represent the fineware component of the Deverel-Rimbury tradition, with better finished (nearly always smoothed, some burnished) surfaces, thin walls and much finer, better-sorted temper. As the name suggests, vessels tend to be bulbous, and can have pronounced necks. Size and capacity again varies, from 3,000 to 35,000 cm<sup>3</sup>. Rims are predominantly simple, upright and flat, some with a

slight bevel. A few bevelled rims are slightly everted. Decoration consists mainly of tooled or incised lines forming geometric motifs dominated by zigzags between horizontal lines, while some sherds have slight, pinched-up cordons. Opposed lugs are also common.

Deverel-Rimbury ceramics are well represented in Essex (Brown 1995b). In general terms, assemblages divide into two types, with cremation cemeteries in the north-east containing large quantities of complete or near-complete Ardleigh-type vessels, while settlements in central and southern Essex are typified by vessels belonging to Ellison's Lower Thames Valley group (Ellison 1975; 1980). The main characteristics of Ardleigh-type vessels and assemblages include horseshoe handles, fingertip rustication, a variety of decorative motifs, the presence of globular vessels, the frequency of grog as a temper and (more generally) the occurrence of large cremation cemeteries. Central and southern vessels and assemblages on the other hand tend to be typified by applied cordons, finger-impressed rims, single horizontal rows of fingertip impressions on the body, an absence of globular forms, the presence of stamp-decorated bowl-like forms, the absence of grog as a temper, and the isolation of ring-ditches and funerary deposits.

The Stansted assemblage does not fit exclusively in either group. Only one of the vessels is of Ardleigh type, but the assemblage contains finewares - the absence of which is a defining factor of the Lower Thames Valley group (Ellison 1975) - and has no stamp-decorated bowls. The very low incidence of grog temper on the other hand allies the assemblage to the south/central group. Both horseshoe handles and applied cordons are present, and grog is very scarce. In his discussion of Essex Deverel-Rimbury ceramics, Brown excluded the four known sites in north central Essex from his discussion, as "the location of the sites makes it uncertain to which group they belong" (Brown 1995b, 133 n7). The Stansted material belongs to this anomalous group (which includes Shalford, Bocking, Braintree and Bulmer Tye), as does the group of sites on the A120 (Every 2007).

These uncertainties aside, the Stansted pottery is clearly a domestic assemblage. Settlement sites in Essex are not common, and in 1996 Brown was able to identify only a single possible Middle Bronze Age building, from Howells Farm (Brown 1996, 26). One recurrent feature of the known settlement sites is placed deposits of ceramics in pits, rather than simple rubbish disposal (Brown 1996, 27), and the Stansted material again conforms to this pattern, indicating a further link with Lower Thames Valley type assemblages.

In terms of chronology, the most closely dated material is the Ardleigh assemblage from Brightlingsea, where five dates span the range 2199 - 1270 BC at 98% confidence (Brown 1995b, 128). These dates can be associated with grog-tempered, horseshoe-handled, highly decorated Ardleigh Urns, which on this basis would belong as much in the Early as the Middle Bronze Age. Later vessels seem to lose all three of these features, and Brown suggests that later pottery from the northern area becomes more similar to the southern and central material (*ibid.*, 129), or indeed that the southern and central material is itself later. Dates for the southern central group span the range 1600 - 930 BC (*ibid.*, 130-1). The dated Stansted material falls in the range 1,413 - 1,122 BC.

The Stansted assemblage as a whole spans the period 1700 - 1100 BC. This range begins rather earlier than would be expected for a Lower Thames Valley assemblage, and it is highly significant that two of the earliest dates - 1690 - 1520 cal. BC (NZA23237) and 1610 - 1430 cal. BC (NZA23242) - are associated with material from the lower fills of the barrow ring ditch on the MTCP. Fills immediately above those providing the dates contained the only Middle Bronze Age grog-tempered pottery from the excavations. Although the quantity of sherds is small, and the determination a *terminus post quem*, it is notable that this early date is associated with one of the indicators of Ardleigh-type ceramics, in a context that would be entirely usual for such vessels in the Ardleigh core area.

Pottery in direct association with these radiocarbon dates consists of 25 plain body sherds of a coarse bucket-shaped vessel in FL30 (several of which have burnt residues on the interior). Eight sherds of a globular vessel in FL31 are in a similar early stratigraphic position.

The rest of the assemblage falls in the range of 1520 - 1122 cal. BC, entirely within the range of both Ardleigh and Lower Thames Valley assemblages elsewhere in Essex.

#### Chronology and phasing

The series of radiocarbon dates from broadly Middle Bronze Age features provides the opportunity to bring a finer chronological resolution to the contemporary ceramics, and by extension to features which are otherwise undated.

# Periods

Correlating the dates with the fabric groups associated with them allows the formulation of a three-period chronology of Early to Middle Bronze Age settlement at Stansted.

Period 1 – c. 1700 cal. BC – c. 1500 cal. BC Period 2 – c. 1500 cal. BC – c. 1300 cal. BC Period 3 – c. 1400 cal. BC – c. 1100 cal. BC

Each period can be identified by a *fabric type assemblage*, the second and third of which add to the existing suite of fabrics (Fig. 17.5).

Period 1 clearly falls within the Early (rather than Middle) Bronze Age, but the associated ceramics belong unequivocally to the Deverel-Rimbury series. The material in question is that from the barrow and surrounding ditch on the MTCP, and a number of possibilities arise: either the dates and ceramics are correct and contemporary, indicating a potentially early beginning for Deverel-Rimbury in the area; the true date of the deposit lies at the upper end of the range, towards 1500 cal BC; or some archaeologically invisible process has resulted in the ceramics and the timber from which the date was obtained ending up in the same deposit. This latter is possible if – for instance – the timber derives from some structure or component within an Early Bronze Age mound, into which Deverel-Rimbury ceramics were inserted at the beginning of the Middle Bronze Age, subsequent to erosion or

deliberate levelling removing mound deposits (containing both timber and pottery) into the ditch.

Periods 2 and 3 are securely Middle Bronze Age, and contain the standard Deverel-Rimbury ceramic suite, dominated by large bucket-shaped vessels with a much smaller quantity of globular types. General trends observable through time include the slight increase in quartz-tempered fabrics, the thinning of vessel walls, and the proliferation of decorative techniques. Both globular and bucket-shaped vessels show form changes over time, both within fabric groups and with new forms introduced with new fabrics.

#### Forms

#### Bucket-shaped vessels

The progression of bucket-shaped vessels is difficult to typify, due to the small numbers of diagnostic forms in Periods 1 and 2. However, Period 1 (FL30) ceramics generally have thick walls, flat rims and are not decorated.

In Period 2 bases with and without feet are present. FL30 remains undecorated, but FL32 has applied cordons with finger-tip impressions, while FL33 has applied cordons with linear grooves, and fingernail or tip impressions on rims, which are either flat and upright or pointed and out-turned.

Period 3 contains the greatest form changes. Decorative schemes proliferate, with applied horseshoe and straight cordons (some straight examples decorated with finger-tip impressions), finger nail impressions on rim tops and outside edges, and finger tip impressions on bodies. New fabric FL47 has pinched-up cordons. Rims similarly become more varied, with flat, round, expanded and 'T'-shaped forms, on upright, out-turned and closed vessels.

The most immediately obvious addition to the repertoire in Period 3 is the series of small (often 'knobbed') cups and/or dishes, mostly in FL30 but also in FL32 and FL33. These are small and thin-walled, and there is a similar thinning of walls in most fabric groups (although thick-walled vessels remain).

#### Globular Vessels

Over time a number of changes are visible within the Globular series. There are both new form traits associated with new fabrics (feet on FL51 vessels for instance) and form changes within fabric groups through time.

FL31 vessels begin in Period 1 as relatively thick-walled, with strong demarcation of the bipartite form, and simple decorative schemes at the shoulder. Bases have no feet.

In Period 2, FL31 vessels remain strongly bipartite, but the shoulder is now marked by a pinched-up cordon and walls are thinner. FL51 vessels have bases with feet. Walls are generally thinner. Rims are upright and rounded or flat. In Period 3, vessels can be very thin walled. Decorative schemes are dominated by panels of chevrons between horizontal lines. Rim forms become more elaborate and varied (everted, flat, inturned, rounded, 'Y'-shaped), and forms are much more weakly bipartite, or even bulbous. These changes apply to all fabrics.

#### Distributions

Having identified both *period type assemblages* and *chronologically significant forms*, it becomes possible to examine assemblages from undated features. An assemblage size of >24 sherds was set as the necessary minimum, and assemblages with non-Deverel-Rimbury components (typically Later Bronze Age or historic fabrics) were only included where the later materials were in very small quantities (<3 sherds weighing <5g) or were clearly intrusive from later features cutting Middle Bronze Age ones.

Nine features were identified with assemblages fulfilling these criteria. In combination with the radiocarbon determinations, these give a sequence of settlement across the airport, as in Figure 17.6.

# Late Bronze Age pottery (Fig. 17.4, nos 22-29)

The Late Bronze Age marks a decline in the quantities of ceramics recovered from the sites, both in terms of sherd numbers (2,029 compared to 3,093 Middle Bronze Age sherds) and more particularly total weight (14,632 g compared to 27,605 g Middle Bronze Age). There is however a marked continuity in type: the Late Bronze Age ceramics all belong to the so-called 'post-Deverel-Rimbury' tradition, in which plainware assemblages tend to become increasingly decorated (although the material is for the most part almost entirely plain). The chronological relationship between the Deverel-Rimbury and post-Deverel-Rimbury traditions need not be as straightforward as the names suggest, as there is some evidence that Deverel-Rimbury ceramics remained in currency in Essex into the Late Bronze Age (Brown 1996, 29 and see below).

Late Bronze Age ceramics were recovered from five sites: SG (11 sherds weighing 23 g), FLB (14 sherds weighing 35 g), LTCP (238 sherds weighing 938 g), MTCP (743 sherds weighing 4,500 g) and M11 (1,027 sherds weighing 9,147 g). When comparison is by site, rather than by the assemblage as a whole, the decrease in quantities from Middle to Late Bronze Age can be seen on the FLB, LTCP and MTCP/SG sites. On the M11 site however, the sherd count increases dramatically (from 162 to 1,027), suggesting a shift in the main focus of activity from the south-eastern limit of the BAA landholding to the south-western area.

The assemblage has been divided into ten fabrics, five flint-tempered (FL34 – 38) and five sandy (QU26, QU27, QU32, QU49 and QU50). The flint-tempered fabrics are mostly coarsewares, although there is some variation in wall thickness and surface finish within fabric groups, and FL36 and 37 are also present as a limited number of fineware sherds. Sandy fabric QU32 is a fineware, QU49 and QU50 are coarsewares, and QU26 and QU27 occur as both coarse and fine vessels, finewares in general having more effort expended over the preparation of temper, surface finish and (rarely) decoration.

Most vessels are represented by a limited number of body sherds which preclude the assignation to form (FL34 for instance is represented by a single plain body sherd). The only distinguishable sherds are a portion of a flat-topped lug or handle in fabric FL36, which appears to belong to a coarseware jar, and a second handled jar in FL35 (parallels for this form come from North Ring, Mucking (Bond 1988) and Lofts Farm (Brown 1988)). One abraded sherd has a pair of incised parallel lines that may identify it as a Class IV bowl (Barrett 1980). These are usually well finished, but the sherd from Stansted is abraded and too little of the outer surface survives to allow identification of any treatment. A second abraded shouldered sherd in the same fabric has a row of possible fingernail impressions. A third sherd in this fabric is carinated, with a short neck and probably everted rim (the rim is missing). 12 sherds in fabric FL36 belong to a bowl (probably of Barrett's Class III as the fabric is reasonably coarse) with a simple slightly inturned rim and decoration consisting of at least one horizontal incised line on the body of the vessel. Two angled body sherds in fabric FL36 are perhaps from fineware bowls of Class IV. A heavy flat base with a foot marked by diagonal finger impressions in fabric FL37 has a possible parallel form in a grog-tempered vessel at the Broomfield enclosure (Atkinson 1995), and similar forms occur at Runnymede Bridge (Needham 1991). In both instances the bases belong to coarse jars. A simple plain upright rim in fabric FL36, another in FL37, two rims in fabric FL38 (two sherds upright and internally bevelled, one pointed and in-turned), and a simple everted rim in fabric QU27 all come from fineware vessels, probably bowls. The two near-complete FL35 vessels from the M11 site are plain coarseware jars with smooth shoulder and neck profiles, upright rims, and flat bases. The majority of reconstructable forms appear to be bipartite.

#### Distribution

#### SG

Only 11 sherds were recovered, weighing 23 g, in five fabrics (FL35, QU26, QU27, QU32 and QU49). Most sherds were residual in later features.

# <u>FLB</u>

Only 14 sherds weighing 35 g in FL35, QU27 and QU32 were recovered from FLB, from two Late Bronze Age ditches. The material is probably refuse or midden material used in manuring.

# <u>LTCP</u>

The distribution of the Later Bronze Age pottery on LTCP again reflects the low number and small average sherd weight of the assemblage: few sherds or groups of sherds came from features of Late Bronze Age date, most being residual in later deposits. Of those that were recovered from Late Bronze Age features, most were scattered across the excavated areas and not associated with any concentrated settlement evidence. The exceptions to this pattern include a scatter of pits around a pair of post-built structures at the north end of the LTCP site. One of these pits contained three sherds from two vessels, all of which were very small and can probably be considered as chance inclusions. Perhaps more significant is the assemblage from a group of features associated with a burnt mound and palaeochannel at the south end of the same trench. Although the sherd count was again low, with only six recovered, the sherds were much larger (9.5 g average) and the range of vessels greater: two were coarsewares in FL35, while the third was a fineware bowl in QU27.

# MTCP

Most Late Bronze Age pottery from the MTCP site was recovered from features within the area of the Middle Bronze Age settlement, and from boundaries and other features in the surrounding landscape. Within the settlement area, many Middle Bronze Age features showed a continuity of use into the Late Bronze Age. Interestingly, the main waterhole immediately east of the settlement contains very little Late Bronze Age pottery (two sherds weighing 6 g from early weathering deposits, likely to be intrusive), whereas the smaller waterhole within the settlement contains rather more. This feature (323001) contained small portions of four Late Bronze Age coarseware vessels in FL35, FL36, FL37 and QU27, all recovered from deposit 323003, which is considered to have formed as a result of episodic dumping over a prolonged period. The significance of the waterholes has been discussed previously; if settlement continued into the Late Bronze Age on the MTCP site then some continuity of depositional practice could perhaps be expected also.

It is however incontrovertible that new forms of deposition were adopted at this time. A small group of five pits 174 m north-east of the settlement contained a range of material including animal bone, burnt and worked flint, fired clay and (in one instance) a small fragment of human bone. The two smallest features (316092 and 316094) contained either no pottery or a very limited number of very small sherds (nine weighing nine grammes), and another (309228) had only a single sherd weighing one gram in an assemblage otherwise limited to some struck flint. This feature may have been associated with the other four pits in some way, rather than being a depositional locus in itself.

The two remaining pits contained much larger quantities of pottery. 316085 contained fragments of six coarse vessels in FL35, FL36, FL37 and QU26, and two finer vessels in FL36. Most were represented by small groups of sherds which could not be identified to form, with the exception of the FL35 vessel, which was a jar. None of the vessels were deposited complete, as rim and angled body sherds were underrepresented and there were no bases. Context 334059 contained fragments of six coarse jars in FL35, FL37, QU27 and QU49, and four fine vessels in QU32 and QU50. The coarse jars in FL37 and QU 49 were both represented by substantial numbers of body sherds, but once again rims and bases were under-represented or absent. The FL35 and QU27 vessels were represented by no more than three plain body sherds each. The fineware vessels were presented somewhat differently: the QU32 pot was represented by two rim sherds, while the three vessels in QU50 were represented by rims, body sherds and bases. The form of these was probably bowls. Three of the vessels (two coarse jars and a fine bowl) were decorated: a jar in FL37 with fingertip impressions on the shoulder, a bowl in QU50 with fingertip impressions on the rim and shoulder, and a vessel in QU49 with an incised horizontal line above the base.

# <u>M11</u>

The M11 site was typified by the occurrence of Late Bronze Age pottery in features which were dated to the Middle Bronze Age or Early Iron Age. In part this is an effect of residuality and intrusion, but is equally the result of the attempt to delineate bounded ceramic traditions which in fact cross period divisions. Even so, a number of features could be more confidently identified as Late Bronze Age, and as in preceding periods these were clustered in the northern third of the site.

Many of these features contained small quantities of ceramics in terms of both sherd counts and weights in simple depositional contexts, and these can be considered as chance inclusions or simple waste. Three sets of features however contain either significantly greater sherd counts and weights, or more complex depositional patterns, and these are likely to have resulted from more formal sets of activities.

The first of these is a waterhole (430084) where 62 sherds weighing 1,116 g were recovered from various fills of the feature. The first episodes of deliberate deposition contained no pottery, but from the fills above them came a substantial portion of the base and body of a handled coarse jar in FL38 (from context 430063). This vessel had a base with a marked foot decorated with finger impressions, and had been deposited as a group of very abraded sherds. The anthropogenic materials in the fills of this stratigraphic group have been interpreted as casual or coincidental inclusions, but the nature of the pottery in 430063 makes this unlikely, and it is more probable that the deposits are of a similar nature to those in Middle and Late Bronze Age waterholes on MTCP. A later layer of deliberate backfill (separated from the former by a weathering layer) contained two sherds from a coarse jar in FL35 (from context 426033). A further small group of sherds from the final phases of waterhole silting came from FL35 vessels, and are more likely to represent accidental inclusions.

The second notable depositional context consists of two pairs of small pits. In each case, one of the pair contained a range of materials dominated by a very substantial quantity of pottery: pit 423113 contained 231 sherds weighing 3,533 g, and pit 423161 447 sherds weighing 2,807 g. In both instances single vessels were represented almost complete, and they had very probably been deposited as whole pots. Both of the vessels were plain coarseware jars in FL35, with smooth shoulder and neck profiles, upright rims, and flat bases. The accompanying pit of each pair contained the same suite of materials, but with virtually no pottery.

These paired pits, in which whole or nearly whole vessels were placed into the ground, have been found elsewhere in the Stansted area at the Social Club (SCS), Bury Lodge (BLS), Car Park (CIS), and particularly Duckend Farm (DFS) sites (Havis and Brooks 2004). At DFS, two pits produced large parts of three Late Bronze Age jars (*ibid.*).

# Discussion

For the last quarter of a century, analyses of Middle and Late Bronze Age ceramic sequences in southern and eastern England have followed the model proposed by John Barrett, in which Deverel-Rimbury ceramics typifying the Middle Bronze Age are succeeded by post-Deverel-Rimbury traditions which continue into the Early Iron Age

(Barrett 1980). The most recent synthesis of Bronze Age chronology places the floruit of the Deverel-Rimbury series between the 16th and 12th centuries, with post-Deverel-Rimbury beginning as a largely undecorated style in the 12th century; decoration becomes prevalent by the 8<sup>th</sup> century (Needham 1996).

The emergence of Late Bronze Age ceramic traditions however remains poorly understood, both in terms of chronological position and the mechanisms through which the various Deverel-Rimbury traditions were replaced by the so-called post-Deverel-Rimbury plain ware assemblages, and by other less clearly understood traditions.

The Stansted excavations have provided a number of ceramic sequences which include Deverel-Rimbury and Late Bronze Age traditions<sup>2</sup> in closed and dated stratigraphic groups. These provide an opportunity to further examine this change, to place it in a local chronological scheme, and perhaps to investigate the circumstances in which this change was taking place and to which it contributed.

The apparent spread of Middle Bronze Age settlement across the airport raises the question of continuity into the 11<sup>th</sup> century BC and the Late Bronze Age. In ceramic terms, this is one of the most difficult periods to identify, as there are no agreed criteria for identifying assemblages falling between standard Deverel-Rimbury types and fully Late Bronze Age ceramics.

Elaine Morris has recently highlighted these problems in her discussion of the Green Park, Moore's Farm and Reading Business Park ceramics (Morris forthcoming). She provides a 'checklist' of holes in our understanding of this period:

Do Middle and Late Bronze Age types occur together, suggesting that 'post-Deverel-Rimbury' is an inaccurate label?

Can the two types be contemporary, either through curation of Middle Bronze Age forms or processes of transformation?

Are some Late Bronze Age assemblages more like Middle Bronze Age ceramics in their fabrics, forms and uses?

Are there regional variations?

She argues that it is "surprisingly common" to find assemblages of Middle Bronze Age pottery in association with atypical Late Bronze Age material belonging to a "long and variable continuum of transition" (*ibid*.). Her discussion of this transition in the Thames and Kennett valleys identifies a series of forms which occur in association with – but which in her terms are not – Deverel-Rimbury ceramics. The available radiocarbon dates for this group are singularly unhelpful in attempting to date the occurrence of types, but it is notable that some of the features Morris identifies

<sup>&</sup>lt;sup>2</sup> The question of how to refer to Late Bronze Age ceramics remains a vexed one. Current convention is to distinguish between an early, undecorated phase of post-Deverel-Rimbury (dated in Needham's chronology to the period 1150 - 950 cal BC) succeeded by a decorated phase which had developed by the mid-8<sup>th</sup> century, and which is therefore properly Early Iron Age (Needham 1996). The reaction against the post-Deverel-Rimbury nomenclature is not new, but the label is not as misleading as is sometimes claimed, since it refers to a ceramic tradition which developed *after* Deverel-Rimbury had been the dominant tradition for some centuries, but which did not necessarily *replace* it. A greater problem is the way in which the label subsumes the variety which has become apparent in Late Bronze Age ceramics.

(thinner walls, finger-tipping on rims) are also features of Middle Bronze Age Period 3 identified at Stansted.

It is undoubtedly the case that the changes in fabrics and forms manifested in Stansted's Middle Bronze Age Period 3 presage the emergence of fully Late Bronze Age ceramics. There are however surprisingly few instances where demonstrably Period 3 features also contain standard Late Bronze Age plain wares. An ostensible disjuncture is surprising given the arguments advanced here and elsewhere for a *continuum* of ceramic development, and the demonstration of a process of change through the Middle Bronze Age. This is discussed further below.

# Dating

Given the spread of Middle Bronze Age settlement across the airport, it is again surprising that it is only on the MTCP site that there is any significant quantity of Period 3 Middle Bronze Age and Late Bronze Age ceramics occurring together. On the LTCP, FLB, and M11 sites, only single features contain both types.

On the MTCP sites, 13 features contain both Middle and Late Bronze Age pottery. Of these, five contain over 24 sherds. It is probable that only two of these (pits 303015 and 303036) actually date to this transitional period, which may be significant given their proximity to *Roundhouses 8 and 9*. A single radiocarbon date for a deliberate backfill mid-way up the sequence in the former pit places that event in Period 3 of the Middle Bronze Age.

What is interesting is that the majority of the features (whether or not they contain significantly sized assemblages) with Middle and Late Bronze Age pottery mixed through the stratigraphic sequences only contain a single fabric identified as Late Bronze Age (FL36) among Period 3 Middle Bronze Age assemblages. Five very small sherds of this fabric were associated with the Period 3 date from 303015, while two much larger sherds in the same fabric came from the context below, suggesting that FL36 begins as a component of the Middle Bronze Age Period 3 assemblage which is in fact the only recognisable element of a new ceramic that is a move towards – but is not yet – Late Bronze Age plain wares.

Late Bronze Age fabrics FL35 an FL38 appear in the uppermost fills of some of these features, and are perhaps the earliest true Late Bronze Age fabrics. The significance of these two fabrics is increased as they are both represented in the upper fills of intervention 430068 (waterhole 430084) on the M11 site. This feature has FL38 sherds from a handled coarse jar with a base with a marked foot decorated with finger impressions in a tertiary silting episode above stakes dated 1410 - 1210 cal. BC. Later fills contain only FL35 sherds.

Other forms are almost impossible to detect. One vessel has a flat base with a rounded wall/base junction; one has a flat-topped, tapering plain upright rim; walls are generally thin (one is burnished internally); the only observable profile is rounded.

#### Late Bronze Age

Late Bronze and Early Iron Age traditions are generally understood in terms of the six-fold class division proposed by Barrett (1980, 302-3). Class I in this scheme is the most frequent component, which includes coarseware jars, either plain or with applied cordons and finger impressions. Class II vessels are fineware jars with better surfaces and complex decoration. Bowls are represented by Class III, which are coarse, and the more frequent Class IV, which are well-finished. The bowls represent a "marked departure from the Deverel-Rimbury tradition" of large bucket, barrel and globular vessels (Barrett 1980, 302). Class V vessels are very scarce, being small cups. The remaining component identified by Barrett consists of dishes or lids.

In general Late Bronze Age assemblages in Essex are dominated by coarseware jars, with fineware bowls the second most common form. This is true across the county, with no suggestion of the regionalism evident in the varying Deverel-Rimbury traditions. Fabrics begin as predominantly flint-tempered, with an increase in sand temper through time.

All of these traits can be paralleled in the Stansted assemblage, but it is difficult to find exact parallels between sites, as individual assemblages tend to include numerous variations on the basic form types. Dating on the basis of parallels with Broads Green (Brown 1989) and Springfield Lyons (Brown 1987) would place the assemblage in the 9th –8th centuries.

However, the dating of the Stansted ceramics as currently understood does not support such a chronology. There are two groups of dated ceramics, one beginning in Middle Bronze Age period 3 and no longer apparent by the end of the 11th century, the second not emerging until the 8th century and continuing into the Early Iron Age. If short radiocarbon chronologies are used, the Late Bronze Age vanishes almost entirely, at least in ceramic terms.

The identification of FL36 as more properly belonging in Middle Bronze Age Period 3 – and the suggestions that FL38 and FL35 lie at the beginnings of the Late Bronze Age plain ware sequence are supported by a single radiocarbon date of 1260 - 1010 Cal BC (Oxford-OxA-15389) for pit 334059 on the MTCP, which dates the majority of the other Late Bronze Age fabrics (FL35, FL37, QU27, QU32, QU49 and QU50).

As noted above, this pit is particularly interesting as it contains a large ceramic assemblage containing six coarse jars (represented mostly by body sherds) and four fine vessels, at least some of which are bowls (represented by rims only or as near-complete pots). Two coarse jars were represented by substantial numbers of body sherds, but rims and bases were under-represented or absent. The others were represented by no more than three plain body sherds each. The fineware vessels were presented somewhat differently: one pot was represented by two rim sherds, while three vessels (probably bowls) were represented by rims, body sherds and bases. Three of the vessels (two coarse jars and a fine bowl) were decorated: a jar with fingertip impressions on the shoulder, a bowl with fingertip impressions on the rim and shoulder, and a vessel with an incised horizontal line above the base. A

neighbouring pit has an assemblage containing six coarse and two finer vessels, both types represented by small sherd groups, without bases and with too few rims.

These pits (along with a third containing a single sherd of unidentifiable pottery and two smaller features containing cremated bone) are situated a considerable distance away from the Middle Bronze Age settlement. There is in fact no ceramic evidence that activity in or around the Middle Bronze Age settlement on the MTCP site survived beyond the end of the 11th century. With the exception of FL34 and FL38 (which remain without direct dates) every Late Bronze Age fabric is contained in 334059 or its undated pair. Where these same Late Bronze Age ceramics do occur on the settlement on the MTCP site, they tend to be in the upper fills of silting-up features (including roundhouse ring-gullies), suggesting that these had been abandoned by this time. The point at which the settlement was abandoned *may* be dated by the burial of the large stone in pit 320046, dated to 1050 - 830 Cal. BC (NZA20916). Such an abandonment would account for the absence of convincing Middle Bronze Age 3 – transitional – full Late Bronze Age ceramic sequences in individual features, and the total lack of assemblages dated to the 10th and 9th centuries.

On the basis of pottery it is difficult to argue for dense settlement anywhere within the excavated areas. Activity is best attested at the westward limits of the excavations, on the LTCP site, where a burnt mound and a scatter of pits and postholes contain Late Bronze Age ceramics; and on the M11 site, where a similar pit scatter is situated near a waterhole. On the MTCP site, a number of small pits contained large quantities of pottery.

Only on the M11 site is there any indication of continuity in ceramic type. Fabric FL35 on that site is dated to 790 - 410 cal BC (NZA23239); predominantly Early Iron Age. This anomaly is probably due to FL35 being the commonest of the Late Bronze Age fabrics, undoubtedly of local manufacture, and probably not very chronologically significant after its initial appearance. A very large proportion of assemblage groups on the M11 contain large quantities of FL35, and although undated, these are likely to be transitional Late Bronze Age/Early Iron Age.

# Early Iron Age (Fig 17.7, nos 30-32)

The perceived decline in ceramics during the Late Bronze Age continues into the Early Iron Age, with only 863 sherds weighing 4,343 g recovered. No Early Iron Age pottery was found on the FLB site; two sherds weighing one gram came from NP; three sherds weighing 13 g came from SG; 90 sherds weighing 276 g came from the MTCP site; 178 sherds weighing 536 g were recovered from the LTCP site, and 590 sherds weighing 3,517 g from the M11 site.

Eleven fabrics were identified. The sandy fabrics which emerged in the Late Bronze Age had become predominant by the Early Iron Age (a phenomenon noted across Essex by Sealey (1996, 47)), and are represented by QU28, QU29, QU30, QU31 and QU57. Flint fabrics continue in smaller numbers as FL23, FL27, FL39 and FL40, and shell-tempered fabrics emerge for the first time as SH2 and SH3.

As with the Late Bronze Age assemblage, much of the Early Iron Age material is too fragmentary to allow forms to be reconstructed. The diagnostic pottery of the Early Iron Age in Essex belongs to Cunliffe's Darmsden-Linton style zone (Cunliffe 1991, 76), typified by carinated tripartite bowls (Sealey 1996, 47). Examples of similar bowls were recovered from LTCP. A flared rim sherd in fabric QU28 is from a bowl with a shoulder decorated with at least one horizontal groove. Two rims and a carinated sherd in fabric QU29 and a carinated, grooved shoulder in FL39 are from similar vessels. Neither is complete enough to confidently identify the tripartite form, but a tentative assignation to the Darmsden-Linton style is possible. A sherd in fabric QU31 has three incised horizontal lines that are comparable to Darmsden-Linton style decoration. The two rims in fabric FL40 are similar to a jar with a round or slightly angular shoulder, concave neck and everted rim from Lofts Farm (Brown 1988, 268 no 73). The 144 sherd of a vessel in fabric QU29 are from a shouldered jar or bowl with a slightly flaring rim and relatively short neck. The SH3 vessel from MTCP probably also belongs to the Darmsden-Linton tradition, being a small shouldered bowl. On M11 the forms appear to be mainly coarse jars and fineware carinated bowls of probable Darmsden-Linton type. At least one bowl with a pedestal base from context 424005 on M11 is of a type more common in the south of the Essex (Brown, 1996, fig 2).

#### Distribution

# <u>MTCP</u>

On the MTCP site, two transitional Late Bronze Age/Early Iron Age pits contained quantities of Early Iron Age ceramics. Pit 1752 contained five small sherds weighing 6 g, from a vessel in QU31. Pit 340004 contained six sherds weighing 15 g from a vessel in FL40, and 53 sherds weighing 94 g from a vessel in QU31. The rest of the assemblage was residual material recovered from later features, and included four sherds from a Late Iron Age ditch (intervention 323025, ditch 344347) in shell-tempered fabric SH3.

# <u>LTCP</u>

Early Iron Age ceramics were mostly recovered as residual sherds from later contexts, including three sherds in shelly fabric SH2, and 144 sherds weighing 391 g from a single vessel in QU29. These last were found in a Mid/Late Iron Age gully (intervention 114056, gully 102096). Only three pits and one linear feature of Early Iron Age date produced contemporary ceramics, and these were dispersed across the excavated areas. Six sherds weighing 34 g in QU28 came from intervention 137016, ditch 150070. These derived from a shouldered vessel with a short neck.

# M11

Early Iron Age pottery was recovered from two significant groups of intercutting pits. The first lay in the north-west corner of M11 and consisted of features 436073, 436102, 436103, 436088, 436105, 436085, 436106, 436107 and 436091, with 436097 and 436099 close by but not stratigraphically connected. All except 436097 and 436106 contained ceramics. Two earlier pits in the sequence are at least Late Bronze Age in date, and it is probable that the whole group lies at the transition of the Bronze

and Iron Ages, since all of the vessels from the pits are in flint-tempered fabrics (FL27, FL39 and FL40).

The second group of pits lies on the eastern edge of the site, and the stratigraphic relations of features are unfortunately less clear, as the range of fabrics is greater. 424007 contained both flint-tempered and sandy fabrics (FL23, FL39, QU57); 436005 and 436009 contained FL39 only; and 442014 and 443008 contained FL27 and FL39. The low incidence of sandy fabrics (38 sherds weighing 548 g, probably representing a single vessel) again suggests that this group of features should be dated to the Bronze Age/Iron Age transition.

The suggested chronology of flint-tempered Iron Age ceramics being replaced by sandy fabrics is supported by the sherds from intervention 435074, ditch 430082. This feature is dated to the Middle Iron Age, and contains only a single flint-tempered sherd in FL39, along with 74 sherds in QU28.

The ceramics from these pit groups and ditch are too abundant to be chance inclusions or accidental deposition, but the fragmentary condition and random distribution of sherds throughout the feature fills suggests that it results from simple refuse disposal rather than more from more formal depositional practice. The vessel forms from these features include large, open, carinated bowls, best typified as serving rather than cooking vessels. None of the vessels have any sooting or burning on the exteriors.

#### Discussion

There are two main problems in understanding the change from Late Bronze Age to Early Iron Age assemblages at Stanstead. The first is practical, and lies in distinguishing between Late Bronze Age and Early Iron Age fabrics when only featureless body sherds are represented. There is a *general* trend away from flint as the main tempering agent throughout the Late Bronze Age and Early Iron Age, and an associated increase in the proportions of sand- (and, in the Early Iron Age, shell-) tempered wares, but only shell is unique to the later period. Forms could be of more assistance in separating the two periods, but as with the Late Bronze Age assemblage, much of the Early Iron Age material is too fragmentary to allow forms to be reconstructed. In ceramic terms, the Early Iron Age is under-represented.

The second problem is chronological. We may expect that the Late Bronze Age plainware assemblages were reaching the end of their currency by 750 cal. BC (Needham 1996, 136), placing the change from plain to decorated Post-Deverel-Rimbury around the traditional Late Bronze Age to Early Iron Age transition. At Stanstead, there are no dated assemblages in the 10th or 9th centuries, and 11th and 8th century assemblages rely on the extremes of the 95% confidence range. It is possible therefore that fully Late Bronze Age assemblages are distinguished by their absence, making the understanding of the change to the Early Iron Age almost impossible.

In terms of the 'style zones' of Early Iron Age pottery identified by Cunliffe, the diagnostic Essex material in this earliest Iron Age belongs to either the Kimmeridge-Caburn or West Harling – Staple Howe groups of 700 - 600 BC, both typified by bipartite bowls and sharply shouldered jars with finger tip or nail impressions

(Cunliffe 1991, 66-8). These are succeeded by the Darmsden-Linton type (Cunliffe 1991, 76), of 600 - 400/300, typified by carinated tripartite bowls (Sealey 1996, 47) with grooved shoulders and (sometimes) footring bases. Other bowl forms and shouldered decorated jars occur (Cunliffe 1991, 76).

Cunliffe states that "the ceramic development of eastern England is surprisingly illunderstood" (*ibid.*), and this situation is exacerbated by the radiocarbon plateau of 800 -400 cal. BC, which has the effect of flattening chronologies and rendering temporal sequences invisible.

These three factors (lack of diagnostic forms, chronological uncertainties, poorlyunderstood regional traditions) combine to make the transition from the Late Bronze Age to Early Iron Age almost impossible to detect within the ceramics. The currently available radiocarbon dating is limited by being based on only two determinations. Pit 423113 on the M11 site dated to 790 – 410 Cal. BC (NZA23239), and contained 231 sherds weighing approximately 3.5 kg, which represented a round-shouldered coarse jar. The profile and fabric (FL35) are both more comfortably Late Bronze Age than Early Iron Age. Pit 436091, also on the M11 site, dated to 800 – 520 cal. BC (NZA23240), and contained a small assemblage of 59 sherds weighing 542 g in four fabrics (FL27, FL39, FL40 and QU31), all of which are soundly Early Iron Age types.

These chronological peculiarities are paralleled on the Stansted Project excavations' Social Club site (Havis and Brooks 2004 and above), where two adjacent pits gave dates of 1130 - 800 and 790 - 410 cal. BC. The ceramics from the latter include both plain and decorated Post-Deverel-Rimbury styles, and are therefore Earliest Iron Age, as the determination allows; the assemblage from the former however contains Darmsden-Linton, and is therefore dated some centuries too early (Brown 2004).

Parallels for this material are found across the whole of Essex, although not in any great quantity (Sealey 1996, fig 1). Brown noted the emergence of shell-tempered fabrics in the Early Iron Age at North Shoebury (1995a, 83), seen at both Stansted and in small quantities elsewhere (Sealey 1996), perhaps indicating similarities across the county, although the lack of haematite-coated wares from Stansted belies the seeming uniformity between assemblages. Drury suggested that groups characterised by Darmsden-Linton forms centred on the 5th century (1980b), with a date range of c 650 – 350 BC (Sealey 1996). Darmsden-Linton forms span the Early Iron Age: at Lofts Farm, an assemblage of such pottery was found in the upper fill of a Bronze Age well (Brown 1988), which Sealey has suggested dates to the late 7th century (1996, 47). Similar ceramics were found at the Stansted Airport Social Club Site, amongst an assemblage of contemporary pottery paralleling Darmsden-Linton forms (Brown 2004), where the forms suggested late developments of the 4th century (Sealey 1996, 47).

# Middle Iron Age (Fig. 17.7, nos 33-38)

Middle Iron Age pot amounted to 1,569 sherds weighing 10,731 g, recovered from SG (51 sherds weighing 425 g), NP (100 sherds weighing 1, 554 g), MTCP (120 sherds weighing 1,626 g), M11 (345 sherds weighing 2,192 g), and LTCP sites (953 sherds weighing 4,585 g).

By the Middle Iron Age the sand-tempered tradition of the Early Iron Age had become exclusive: all 18 fabrics have quartzite or quartz sands as the predominant temper (QT1; QU33 – QU48 and QU51). This pattern of succession is seen across Essex, with sites in the north lacking the Glauconite temper found in the south of the county (Sealey 1996, 50).

The Middle to Late Iron Age transition is difficult to identify within the ceramics, and an arbitrary division in terms of the change from sandy to grog-tempered fabrics has been used to separate the Stansted material.

Amongst the quantities of featureless body sherds are some which support the Middle Iron Age date indicated by the fabrics through comparison of forms present in larger assemblages. The primary comparanda are from Little Waltham (Drury 1978), with other parallels amongst the assemblage from Woodham Walter (Rodwell 1987). The majority of identifiable vessels are rounded or shouldered jars or bowls. Several are of Drury's Form 1 or 2: one shouldered sherd in fabric QU33 and two in QU37, and single rims in fabrics QU34, QU35 and QU36. QU34 is also present as a Form 8 rim. Identifiable sherds in fabric QU37 are from Form 14, 15b and c and 16 bowls. Rims are of varied form: simple upright, bevelled, everted, 'T'-sectioned and thickened types occur. Bases are flat and simple: no footring or pedestal forms were noted. The only discernible form from M11 is a round-bodied bowl with an open rim.

Few sherds are decorated. A body sherd in fabric QU35 has faint comb decoration, while a rim in the same fabric has shallow impressions along its top. Sherds in QU36 have faint incised horizontal lines on the body and/or rim. Sealey notes that decorated vessels are a scarce in Middle Iron Age assemblages (1996).

A number of sherds from Southgate have either lightly tooled or more deeply incised and scored. This latter technique is characteristic of the East Midlands Scored ware tradition (previously referred to as Trent valley AB ware and Ancaster/Breedon ware) introduced in the 4th century BC (Elsdon 1993, 2). The identifiable vessel of this type is a large jar in a coarse fabric. The types of scoring – ranging from light wiping, probably with a pad of vegetable matter, to heavy incision – underlies the difficulty in determining whether the technique is decorative, functional or both. Some examples seem to be decorative, whereas others are more likely to be roughened to aid handling.

# Distribution

# <u>MTCP</u>

On the MTCP site most sherds were either intrusive in earlier features or residual in later ones. Only one Middle/Late Iron Age feature contained any quantity of contemporary pottery: intervention 323025, ditch 344347 held 59 sherds, including the entirety of fabric QT1 and five sherds in a light sandy fabric (QU48) from a small vessel apparently a crucible. Burning on the exterior and slag-like residues on the the interior support this interpretation.

# <u>M11</u>

On the M11 site much Middle Iron Age pottery was residual or intrusive, but a significantly larger quantity was recovered from features associated with the Iron Age settlement. Much of this material came from ditches and gullies, with only a low incidence occurring in pits. No particularly notable groups were identified, and the assemblage has the appearance of normal domestic rubbish.

# <u>LTCP</u>

On the LTCP site, just under one-third of the assemblage (268 sherds weighing 1091g) was recovered from features associated with the Middle-Late Iron Age settlement in the western field of the LTCP site (three roundhouses with surrounding ring gullies, some pits and linear features). The remaining sherds were recovered from the fills of later features, most of which formed parts of Late Iron Age enclosure ditches around the Middle Iron Settlement, and from Mid-Late Iron Age pits further to the east.

One of these latter features (pit 136129) stood out from the bulk of the ceramics from the LTCP site both in terms of the number and weight of pottery it contained. 129 sherds weighing 704 g were recovered. 119 of these (690 g) represented a single vessel in QU39. 109 were plain body sherds (some with a gentle shoulder), many of which had a burnt deposit adhering to the interior. Only ten sherds derived from the rim, which was plain, upright, and flattened with internal and external rolling in places. While undoubtedly a single vessel, the pot was not complete at the time of deposition: there are no base sherds in the assemblage, too few rims, and the surviving sherds are in too poor a condition to have been deposited as either a whole or newly broken vessel. Eight small, featureless, and moderately abraded sherds (7 g) from a second vessel in QU36 were also present. The deposit was sealed with a layer of burnt material containing a burnished body sherd and a fragment of a plain upright rim (together weighing 7 g) of a third vessel in QU40.

# <u>SG</u>

With the exception of four sherds weighing 8 g, all of the Middle Iron Age pottery from the Southgate site came from pit 504011. Portions of at least five vessels were present, spread throughout the vertical extent, including large rim and body sherds from a coarse Scored Ware jar and other finer vessels with well-finished surfaces.

# NP

Small quantities of pottery in moderate and poor condition came from ditches, probably representing accidental inclusions or casual discard. Two gully segments contained a similarly small quantity, including five sherds from a short-necked jar in good condition, likely to represent deliberate discard.

The most significant groups came from pit 508021 and tree-throw 508013. The former contained four large sherds (118 g) from two vessels of indeterminate form. The latter had a much larger assemblage (76 sherds weighing 1,287 g) containing portions of seven vessels, including four short-necked and two round-shouldered jars.

The condition of this assemblage ranges from good to poor, suggesting that it represents a collection of redeposited middened material.

#### Discussion

As Rodwell notes, "the dating of pottery of the Middle to Late Iron Age is still notably imprecise" (1987, 38). Drury suggested that Middle Iron Age forms developed early in the 3rd century, or slightly before (1980b), and typifies the ceramics as predominantly sand-tempered, with decoration limited to vertical scoring or rare finger impressions on rims (*ibid*.). Sealey places Middle Iron Age ceramics in the period c 350 – 50 BC (1996). The Stansted material conforms to this pattern, and contains almost none of the shell-temper noted on the A120 (Every 2007), which is more common in the south of the county. At the other end of the sequence, Rodwell identifies the emergence of grog-tempered fabrics as indicating transitional Mid-Late Iron ceramics, around the first half of the 1st century BC (1987, 37), prior to the emergence of wheel-thrown grog-tempered 'Belgic' ceramics (Sealey 1996).

#### **Fabric Descriptions**

CH1 moderate, poorly sorted to fine coarse chalk; sparse voids and mice [Middle Iron Age]

FL23 moderate, well sorted flint and quartzite temper, moderate iron and some sand probably naturally occurring [Early Iron Age]

FL26 common, medium to very coarse, poorly sorted, sub-angular to angular calcined flint temper [Peterborough Ware]

FL29 sparse to moderate, coarse to very coarse, moderately well-sorted, sub-angular to angular calcined flint temper; sparse, medium to coarse, moderately well-sorted, sub-rounded iron minerals probably naturally occurring [Early Neolithic Plain Bowls]

FL30 very common, medium to coarse, moderately sorted, sub-angular calcined flint temper; some coarse sand probably naturally occurring [Deverel-Rimbury coarse]

FL31 common, fine to coarse, moderately well-sorted, sub-angular calcined flint temper, often well finished [Deverel-Rimbury fine and coarse]

FL32 moderate, coarse to very coarse, moderately well sorted, sub-angular calcined flint temper [Deverel-Rimbury coarse]

FL33 very common to abundant, coarse to very coarse, moderately sorted, sub-angular and angular calcined flint temper [Deverel-Rimbury coarse]

FL34 moderate, coarse to very coarse, moderately sorted, sub-angular calcined flint temper; sparse, coarse to very coarse, moderately sorted, sub-rounded grog temper [Late Bronze Age]

FL35 common, coarse to very coarse, poorly sorted, sub-angular calcined flint temper; sparse mica probably naturally occurring [Late Bronze Age]

FL36 common, coarse to very coarse, moderately sorted, sub-angular calcined flint temper; some iron minerals and quartz sand probably naturally occurring [Late Bronze Age]

FL37 sparse, coarse to very coarse, well sorted, sub-angular calcined flint temper; sparse mica probably naturally occurring [Late Bronze Age]

FL38 common, coarse, well sorted, sub-angular calcined flint temper [Late Bronze Age]

FL39 sparse to moderate, medium to coarse, well sorted sub-angular calcined flint temper; some sand and mica probably naturally occurring [Early Iron Age]

FL40 sparse to moderate, medium to very coarse, moderately sorted sub-angular calcined flint temper; some mica probably naturally occurring [Early Iron Age]

FL41 moderate, medium to very coarse, poorly sorted sub-angular calcined flint temper; sparse mica probably naturally occurring [Peterborough Ware]

FL42 moderate, medium to very coarse, poorly sorted sub-angular calcined flint temper; sparse quartz sand and mica probably naturally occurring [Peterborough Ware]

FL43 sparse, coarse, well sorted, sub-angular calcined flint temper; sparse, coarse to very coarse, well sorted, sub-rounded grog temper; sparse quartz sand probably naturally occurring [Middle Bronze Age]

FL44 moderate, coarse to very coarse, moderately sorted, sub-angular calcined flint and quartzite temper; moderate quartz sand and sparse iron minerals probably naturally occurring [Early Neolithic Plain Bowls]

FL45 sparse to moderate, coarse to very coarse, moderately sorted, sub-angular to angular calcined flint and quartzite temper; moderate quartz sand probably naturally occurring [Early Neolithic Plain Bowls]

FL46 sparse to moderate, fine to very coarse, moderately sorted, sub-angular calcined flint temper; moderate quartz sand probably naturally occurring [Early Neolithic Plain Bowls]

FL47 moderate to common, fine to very coarse, moderately sorted, sub-angular to angular calcined flint temper; some sand probably naturally occurring [Deverel-Rimbury coarse]

FL48 sparse, fine to coarse, well sorted, sub-angular calcined flint temper; sparse mica and iron minerals probably naturally occurring [Deverel-Rimbury fine]

FL49 common, fine to coarse, well sorted, sub-angular calcined flint temper; moderate iron minerals probably naturally occurring [Deverel-Rimbury coarse]

FL50 sparse to moderate, fine to very coarse, poorly sorted, sub-angular calcined flint temper; iron minerals probably naturally occurring [Deverel-Rimbury coarse]

FL51 sparse to moderate, fine to coarse, well sorted, sub-angular calcined flint temper; some quartz sand and mica probably naturally occurring [Deverel-Rimbury fine]

FL52 common, fine to very coarse, well sorted, sub-angular calcined flint temper; moderate iron minerals probably naturally occurring [Deverel-Rimbury coarse]

FL99 calcined flint; crumbs too small to identify

GR4 moderate, fine to medium moderately well sorted, sub-rounded grog, sparse medium to coarse sub-angular calcined flint temper; some quartz sand probably naturally occurring [Beaker]

GR5 moderate, fine to medium moderately well sorted, sub-rounded grog, sparse medium subangular calcined flint temper; some quartz sand probably naturally occurring [Beaker]

GR6 moderate, fine to medium moderately well sorted, sub-rounded grog, sparse medium subangular calcined flint temper; some voids [Beaker]

QT1 moderate, coarse to very coarse, moderately sorted sub-angular quartzite temper; sparse iron minerals and mica probably naturally occurring [Mid – Late Iron Age]

QU26 moderate fine quartz sand probably naturally occurring; moderate, coarse to very coarse, moderately sorted, sub-angular quartzite/calcined flint temper [Late Bronze Age]

QU27 moderate fine quartz sand probably naturally occurring; sparse, coarse to very coarse, poorly sorted sub-angular to angular quartzite/calcined flint temper [Late Bronze Age]

QU28 sparse, fine to very coarse, poorly sorted, rounded to sub-rounded quartz sand probably naturally occurring; sparse voids probably organic temper [Early Iron Age]

QU29 sparse, fine to medium, moderately sorted sub-rounded quartz sand and some mica probably naturally occurring; sparse voids probably organic temper [Early Iron Age]

QU30 sparse, very fine to fine, well sorted sub-rounded quartz sand probably naturally occurring [Early Iron Age]

QU31 moderate, fine to medium, moderately sorted sub-rounded to sub-angular quartz sand probably naturally occurring; sparse to moderate, coarse to very coarse, moderately sorted sub-angular calcined flint temper [Early Iron Age]

QU32 moderate, medium to very coarse, moderately sorted, sub-angular quartzite and calcined flint temper; sparse mica probably naturally occurring [Late Bronze Age]

QU33 sparse, very fine to fine, well sorted, sub-rounded quartz sand probably naturally occurring [Middle Iron Age]

QU34 sparse, very fine to coarse, moderately sorted, sub-rounded quartz sand and sparse iron minerals probably naturally occurring; sparse, coarse to very coarse, well sorted sub-angular quartzite temper [Middle Iron Age]

QU35 sparse, very fine to fine, well sorted, sub-rounded quartz sand probably naturally occurring; sparse, medium to very coarse, moderately sorted, sub-rounded quartzite; sparse voids [Middle Iron Age]

QU36 sparse, very fine to medium, well sorted, sub-rounded quartz sand probably naturally occurring; sparse voids [Middle Iron Age]

QU37 sparse, very fine to medium, well sorted, sub-rounded quartz sand and sparse very coarse subrounded quartzite probably naturally occurring [Middle Iron Age]

QU38 common, fine, well sorted sub-rounded quartz sand and sparse mica probably naturally occurring, sparse, coarse, sub-angular quartzite [Mid-Late Iron Age]

QU39 moderate, fine, well sorted, sub-rounded quartz sand and sparse iron minerals probably naturally occurring; moderate voids; sparse, coarse, sub-angular quartzite temper [Mid-Late Iron Age]

QU40 moderate, fine, well sorted, sub-rounded quartz sand and some iron minerals probably naturally occurring; moderate, coarse, well sorted, sub-angular quartzite temper [Mid-Late Iron Age]

QU41 sparse, fine, well sorted, sub-rounded quartz sand, sparse mica, sparse iron minerals probably naturally occurring [Mid-Late Iron Age]

QU42 sparse, fine, well sorted, sub-rounded quartz sand and sparse mica probably naturally occurring; sparse voids [Mid-Late Iron Age]

QU43 sparse, fine, well sorted, sub-rounded quartz sand and sparse mica probably naturally occurring [Mid-Late Iron Age]

QU44 sparse, fine, well sorted, sub-rounded quartz sand and sparse mica probably naturally occurring; sparse voids; sparse, coarse, moderately sorted, sub-angular shell and calcined flint temper [Mid-Late Iron Age]

QU45 sparse, fine, well sorted, sub-rounded sand and frequent coarse iron minerals probably naturally occurring; sparse grog temper [Mid-Late Iron Age]

QU46 moderate, fine, well sorted, sub-rounded quartz sand and some mica probably naturally occurring; sparse to moderate, coarse, moderately sorted, sub-angular calcined flint temper [Mid-Late Iron Age]

QU47 frequent iron minerals, sparse voids; sparse fine well sorted quartz sand and coarse subangular quartzite [Mid-Late Iron Age]

QU48 frequent, fine, well sorted, sub-rounded quartz sand and some iron minerals probably naturally occurring; sparse, very coarse, sub-angular calcined flint temper [Middle Iron Age]

QU49 moderate quartz sand probably naturally occurring; sparse to moderate, fine to coarse, moderately sorted sub-angular calcined flint temper; sparse mica probably naturally occurring [Late Bronze Age]

QU50 moderate quartz sand probably naturally occurring; sparse, fine to medium, well sorted subangular calcined flint temper; sparse iron minerals and mica probably naturally occurring [Late Bronze Age]

QU51 abundant, fine, well sorted, sub-rounded quartz sand and moderate iron minerals probably naturally occurring; sparse, coarse, moderately sorted, sub-angular calcined flint temper [Middle Iron Age]

QU52 moderate quartz sand probably naturally occurring; sparse to moderate, coarse to very coarse, moderately sorted sub-angular to angular calcined flint temper [Early Neolithic Plain Bowls]

QU53 moderate very fine to fine quartz sand; some iron minerals; sparsely micaceous [Middle Bronze Age]

QU54 very fine sand; moderate voids; sparse quartzite [Middle Bronze Age crucible]

QU55 fine sandy fabric; sparse fine to very coarse, moderately sorted, sub-angular calcined flint temper [Middle Bronze Age]

QU56 sandy; sparse calcined flint; iron minerals [Middle Bronze Age crucible]

QU57 moderate, very fine to fine quartz sand probably naturally occurring; sparse voids; sparse, medium to coarse, moderately sorted calcined flint temper [Early Iron Age]

QU58 moderate, very fine to medium, well sorted sub-rounded quartz sand probably naturally occurring; sparse voids; occasional very coarse poorly sorted flint pebbles [Middle Iron Age]

SH2 common, medium to very coarse, well sorted shell temper [Early Iron Age]

SH3 moderate, medium to very coarse, well sorted shell temper; moderate, medium to coarse, well sorted, sub-angular quartzite [Early Iron Age]

# List of Illustrated Vessels (Figures 17.1, 17.3-17.4, 17.7)

#### Early Neolithic (Fig. 17.1)

- 1. Two joining sherds from a rolled, flat-topped rim from a neutral bowl. Smoothed exterior surfaces; fabric FL29. PRN 339. Context 995107.
- 2. Rim sherd from carinated, necked bowl; fabric FL44. PRN 907. Context 1737.
- 3. Rim with post-firing perforation from probably carinated bowl; fabric FL44. PRN 910. Context 506.
- 4. Rim from probably carinated bowl; fabric FL44. PRN 911. Context 506.
- 5. Rim from probably neutral undifferentiated bowl; fabric FL44. PRN 912. Context 506.

#### Middle Neolithic (Fig. 17.1)

- 6. Rim and body fragments of a Mortlake-type vessel; fabric FL26. PRN 121-123. Context 436071. The rim and interior surface immediately below have whipped cord maggots arranged transversely and horizontally; the concave neck has infrequent sub-circular impressions on the exterior.
- 7. Rim and body sherd of a ?Mortlake-type vessel; fabric FL41. PRN 751. Context 320003. Fingernail impressions on the exterior, rim, and interior immediately below the rim.
- 8. Upright very slightly thickened rim from a Middle Neolithic vessel of unknown type; fabric FL42. PRN 785. Context 316034.

#### Early Bronze Age (Fig. 17.1)

9. Probable Beaker sherd with comb and cord impressions; fabric GR4. PRN 341. Context 913905.

#### Middle Bronze Age (Fig. 17.3)

- 10. Rim and body sherd from bucket-shaped jar. Rim has finger-nail impressions on the top, and finger-tip impressions on the outside. An applied horizontal cordon on the body has similar finger-tip impressions; fabric FL32. PRN 1539-40. Context 309114
- 11. Rim and body sherd from bucket-shaped jar. An applied horizontal cordon on the body has finger-tip impressions; fabric FL32. PRN 1541. Context 309114
- 12. Fragments of a plain bucket-shaped vessel; fabric FL32. PRN 1368-9. Context 303013
- Rim with post-firing perforation and incisions on top, from thin-walled jar; fabric FL30. PRN 1020. Context 309107
- 14. Rim from large jar, finger nail impression on top; fabric FL32. PRN 1085. Context 309083
- 15. Sherds from a small over-fired metalworking crucible with a pinched spout; fabric QU54. PRN 1030. Context 309105
- Rim sherd from small closed vessel, finger-nail impressions on outside; fabric FL30. PRN 1080. Context 309083
- 17. Rim sherd from large bucket-shaped jar, finger-nail impressions on rim top, finger-tip impressions on exterior; fabric FL32. PRN 1084. Context 309083
- Body sherd with applied cordon, diagonal finger-nail impressions; fabric FL32. PRN 1095. Context 309082
- 19. Small knobbed cup; fabric FL33. PRN 1311, 1313. Context 303035
- 20. Body sherds from an Ardleigh-type jar, with profuse finger-tip and other impressed decoration on both surfaces; fabric FL33. PRN 1183. Context 319026
- 21. Globular vessel. Decorated at maximum girth by incised chevrons between multiple horizontal lines; fabric FL31. PRN 946-8. Context 312026

#### Late Bronze Age (Fig. 17. 4)

- 22. Small bi-partite plain bowl; fabric QU35. PRN 566. Context 109015
- 23. Everted rim from burnished bowl; fabric QU37. PRN 773. Context 323027
- 24. Short-necked jar with high, rounded shoulder; flat rim with cabled top; fabric FL35. PRN 11-12. Context 423114
- 25. Rim and upper body sherds of plain burnished bowl; fabric QU32. PRN 772. Context 323027
- 26. Rim and neck of short-necked shouldered jar, angle decorated with finger-tip impressions; fabric QU50. PRN 870. Context 334080
- 27. Base of jar; fabric FL37. PRN 478. Context 111038
- 28. Handle from coarse jar; fabric FL38. PRN 68. Context 430063

29. Rim and neck of short-necked shouldered jar, angle decorated with finger-tip impressions; fabric QU50. PRN 871-2. Context 334060

#### Early Iron Age (Fig. 17.7)

- 30. Small jar with pedestal base; fabric QU31. PRN 57. Context 424005
- 31. Flat base, decorated above the wall angle with incised horizontal and diagonal lines; fabric QU39. PRN 255-6. Context 434092
- 32. Sherds from a small vessel apparently a crucible; fabric QU48. PRN 786-7. Context 323027

#### Mid-Late Iron Age (Fig. 17.7)

- 33. Rim sherd from bowl, vertical combed decoration; fabric QU34. PRN 542. Context 132005
- 34. Body sherd with multiple parallel horizontal incised lines; fabric QU36. PRN 578. Context 150029.
- 35. Rim of small bowl; fabric QU40. PRN 677. Context 112052.
- Rim and upper body of vessel, exterior has deep combed curving lines; fabric QU46. PRN 739. Context 151027.
- 37. Body sherd from globular vessel, scored exterior; fabric QT1. PRN 892. Context 323026.
- 38. Short-necked round-shouldered jar, vertical incisions on shoulder and more widely-spaced vertical lines on body; fabric QU42. PRN 715-6. Context 136121.

Table 17.1: Prehistoric pottery totals by site

| Site                      | No. Sherds | Weight (g) |
|---------------------------|------------|------------|
| Long Term Car Park (LTCP) | 1,749      | 9,446g     |
| MTCP (MTCP)               | 3,888      | 30,405     |
| M11 Slip Road (M11)       | 2,136      | 15,804     |
| FLB (FLB)                 | 59         | 228        |
| South Gate Area 1A (SG)   | 153        | 603        |
| Noise Pen (NP)            | 100        | 1,554      |
| Total                     | 8,085      | 58,040     |

Table 17.2: Prehistoric pottery fabrics by chronological period

| Date              | Fabric        | No. sherds | Weight (g) | ASW (g)     |
|-------------------|---------------|------------|------------|-------------|
| EARLY NEOLITHIC   | FL29          | 25         | 96         |             |
|                   | FL44          | 25         | 190        |             |
|                   | FL45          | 56         | 240        |             |
|                   | FL46          | 31         | 62         |             |
|                   | QU52          | 28         | 71         |             |
|                   | Sub-total EN  | 165        | 659        | 3.99        |
| MIDDLE NEOLITHIC  | FL26          | 12         | 92         |             |
|                   | FL41          | 27         | 50         |             |
|                   | FL42          | 19         | 33         |             |
|                   | Sub-total MN  | 58         | 175        | 3.02        |
| LATE NEOLITHIC    |               | 4          | 6          | 1.5         |
| EARLY BRONZE AGE  | GR4           | 1          | 4          |             |
|                   | GR5           | 17         | 29         |             |
|                   | GR6           | 1          | 1          |             |
|                   | Sub-total EBA | 19         | 34         | 1.79        |
| MIDDLE BRONZE AGE | FL30          | 453        | 3,588      |             |
|                   | FL31          | 209        | 962        |             |
|                   | FL32          | 1,132      | 12,145     |             |
|                   | FL33          | 768        | 7,025      |             |
|                   | FL43          | 14         | 66         |             |
|                   | FL47          | 139        | 1,514      |             |
|                   | FL48          | 31         | 179        |             |
|                   | FL49          | 14         | 117        |             |
|                   | FL50          | 20         | 329        |             |
|                   | FL51          | 242        | 1,021      |             |
|                   | FL52          | 51         | 549        |             |
|                   | QU53          | 5          | 16         |             |
|                   | QU54          | 3          | 27         |             |
|                   | QU55          | 11         | 52         |             |
|                   | QU56          | 1          | 15         |             |
|                   | Sub-total MBA | 3,093      | 27,605     | <i>8.92</i> |
| LATE BRONZE AGE   | FL34          | 1          | 25         |             |
|                   | FL35          | 1,082      | 8,474      |             |
|                   | FL36          | 197        | 1,023      |             |
|                   | FL37          | 284        | 2,287      |             |
|                   | FL38          | 93         | 1,062      |             |
|                   | QU26          | 89         | 241        |             |
|                   | QU27          | 60         | 206        |             |
|                   | QU32          | 32         | 92         |             |
|                   | QU49          | 117        | 885        |             |
|                   | QU50          | 74         | 337        |             |
|                   | Sub-total LBA | 2,029      | 14,632     | 7.21        |
| EARLY IRON AGE    | FL23          | 6          | 13         |             |
|                   | FL27          | 92         | 512        |             |
|                   | FL39          | 353        | 1,708      |             |

|                   | FL40            | 23    | 330    |      |
|-------------------|-----------------|-------|--------|------|
|                   | QU28            | 110   | 504    |      |
|                   | QU29            | 161   | 484    |      |
|                   | QU30            | 1     | 8      |      |
|                   | QU31            | 71    | 131    |      |
|                   | QU57            | 39    | 587    |      |
|                   | SH2             | 3     | 15     |      |
|                   | SH3             | 4     | 51     |      |
|                   | Sub-total EIA   | 863   | 4,343  | 5.03 |
| MID/LATE IRON AGE | CH1             | 2     | 12     |      |
|                   | QT1             | 37    | 833    |      |
|                   | QU33            | 10    | 101    |      |
|                   | QU34            | 34    | 171    |      |
|                   | QU35            | 123   | 534    |      |
|                   | QU36            | 273   | 1,333  |      |
|                   | QU37            | 122   | 816    |      |
|                   | QU38            | 58    | 467    |      |
|                   | QU39            | 511   | 2,649  |      |
|                   | QU40            | 47    | 450    |      |
|                   | QU41            | 12    | 65     |      |
|                   | QU42            | 54    | 242    |      |
|                   | QU43            | 30    | 320    |      |
|                   | QU44            | 17    | 119    |      |
|                   | QU45            | 10    | 68     |      |
|                   | QU46            | 103   | 787    |      |
|                   | QU47            | 73    | 461    |      |
|                   | QU48            | 5     | 25     |      |
|                   | QU51            | 4     | 35     |      |
|                   | QU58            | 42    | 818    |      |
|                   | Sub-total M/LIA | 1,569 | 10,731 | 6.84 |
| UNCERTAIN         | FL99            | 287   | 180    | 0.63 |
| TOTAL             |                 | 8,085 | 58,040 |      |

Table 17.3: the development of understanding Neolithic pottery

| Kendrick/<br>Menghin | Leeds<br>(1927)  | Piggott (1932)        | Piggott (195         | 54)                         |                                     | Smith (1956          | )                           |                       | Smith (1974)        | Whittle (1977)             |
|----------------------|------------------|-----------------------|----------------------|-----------------------------|-------------------------------------|----------------------|-----------------------------|-----------------------|---------------------|----------------------------|
| Grimston             | Windmill<br>Hill | or <b>Neolithic A</b> | Western<br>Neolithic | Hembury<br>Windmill<br>Hill | Whitehawk<br>Abingdon               | Western<br>Neolithic | Hembury<br>Windmill<br>Hill | Whitehawk<br>Abingdon | Hembury<br>Abingdon | South-western<br>Decorated |
|                      |                  |                       |                      | Yorkshire                   | E. Anglian<br>Grimston<br>Heslerton |                      |                             | Mildenhall            | Grimston/Lyles Hill | Eastern                    |

| Strat. |        | Coar   | Coarsewares Finewares |         |              | Finewares |         |                |  |
|--------|--------|--------|-----------------------|---------|--------------|-----------|---------|----------------|--|
| Group  | Fabric | Sherds | Weight                | Vessels | Fabric       | Sherds    | Weight  | Vessels        |  |
|        | FL30   | 3      | 20                    | 1       | FL51         | 4         | 6       | 1              |  |
| 309076 | FL31   | 3      | 8                     | 1       | OU55         | 4         | 4       | 1              |  |
|        | FL32   | 8      | 40                    | 1       |              |           |         |                |  |
|        | FL 33  | 2      | 34                    | 1       |              |           |         |                |  |
|        | FL 30  | 20     | 84                    | 2       | FI 31        | 5         | 17      | 1              |  |
|        | FL 32  | 125    | 596                   | 2<br>4  | FL 48        | 1         | 12      | 1              |  |
| 309077 | FL33   | 5      | 241                   | 2       | FL51         | 14        | 77      | 3              |  |
| 507011 | FL35   | 1      | 7                     | 1       | 1251         | 14        | ,,      | 5              |  |
|        | FL47   | 1      | 50                    | 1       |              |           |         |                |  |
|        | FL30   | 39     | 364                   | 7       | FL31         | 3         | 14      | 2              |  |
|        | FL32   | 127    | 1.314                 | 11      | FL48         | 11        | 86      | $\overline{2}$ |  |
|        | FL33   | 22     | 83                    | 1       | FL51         | 11        | 114     | 1              |  |
| 309081 | FL47   | 29     | 313                   | 4       | FL52         | 1         | 3       | 1              |  |
|        | FL50   | 1      | 48                    | 1       |              |           |         |                |  |
|        | QU53   | 4      | 12                    | 1       |              |           |         |                |  |
|        | FL32   | 3      | 238                   | 1       | FL31         | 2         | 9       | 1              |  |
| 309088 | FL33   | 84     | 900                   | 5       | FL48         | 2         | 2       | 1              |  |
|        |        |        |                       |         | FL51         | 2         | 16      | 1              |  |
|        | FL30   | 2      | 17                    | 1       | FL31         | 3         | 5       | 1              |  |
| 309092 | FL32   | 3      | 29                    | 1       | FL51         | 2         | 56      | 1              |  |
|        | FL33   | 1      | 5                     | 1       | QU55         | 2         | 16      | 1              |  |
|        | FL30   | 6      | 54                    | 2       | FL31         | 14        | 44      | 2              |  |
| 309099 | FL32   | 32     | 168                   | 2       |              |           |         |                |  |
|        | FL47   | 3      | 16                    | 1       |              |           |         |                |  |
|        | FL32   | 3      | 40                    | 1       |              |           |         |                |  |
| 309105 | FL33   | 9      | 149                   | 3       |              |           |         |                |  |
|        | QU55   | 1      | 11                    | 1       |              |           |         |                |  |
| 309113 | FL30   | 12     | 90                    | 3       |              |           |         |                |  |
|        | FL32   | 12     | 67                    | 2       |              |           |         |                |  |
| 309114 | FL32   | 187    | 3,837                 | 2       | FL51         | 1         | 9       | 1              |  |
| 309115 | FL32   | 4      | 90                    | 1       |              |           |         |                |  |
| 309126 | FL30   | 1      | 4                     | 1       | FL31         | 5         | 5       | 1              |  |
|        | FL30   | 2      | 18                    | 1       | FL31         | 1         | 3       | 1              |  |
|        | FL32   | 75     | 437                   | 2       |              |           |         |                |  |
| 309127 | FL33   | 1      | 5                     | 1       |              |           |         |                |  |
|        | FL47   | 19     | 180                   | 3       |              |           |         |                |  |
|        | FL50   | 6      | 204                   | 1       |              |           |         |                |  |
|        | FL30   | 7      | 20                    | 1       |              |           |         |                |  |
| 200129 | FL32   |        | 36                    | 1       | _            |           |         |                |  |
| 309128 | FL33   | 4      | 69                    | 1       | _            |           |         |                |  |
|        | FL4/   | 1      | 4                     | 1       |              |           |         |                |  |
| 200120 | FL99   | 2      | 9                     | 1       | EI 21        | 1         | 2       | 1              |  |
| 309130 | FL30   | 2      | 83                    | 1       | FL31<br>FL51 | 1         | 5<br>12 | 1              |  |
|        | FL32   | 109    | 1,328                 | 4       | FLJI         | Э         | 13      | 1              |  |

Table 17.4: Fabric group totals by stratigraphic group in waterhole 309075



| Atmospheric data from Sturver et al. (1998); OxCal v3.9 Bronk Ramsey (2003); | cub r:4 sd:12 prob usp[chron] |       |         |    |       |
|--|-------------------------------|-------|---------|----|-------|
| Orsett BM-1213 4741±113BP  |                               |       |         |    |       |
| Orsett BM-1214 4533±112BP  |                               |       | + + +   | _  |       |
| Orsett BM-1215 4585±82BP   |                               |       | +++-    | _  | + + + |
| Orsett BM-1377 4620±43BP   |                               |       | + + +   |    |       |
|  |                               |       |         | _  |       |
| Orsett BM-1378 4726±74BP   |                               |       |         |    |       |
| Waltham HAR-1087 5120±130BP  |                               |       | + + +   | -  |       |
| Bradwell-on-Sea HAR-6617 4690±70BP   |                               |       |         | -  | + + + |
| The Stumble OxA-2298 4780=80BP   |                               |       | +++     | -+ | + + + |
| The Stumble OxA-2299 4675±70BP   |                               | · · · |         |    |       |
| Stansted NZA-20960 4741±35BP   |                               |       | + + +   |    | + + + |
| Stansted NZA-20918 4883±35BP   |                               |       | + + + + | -+ | + + + |
|  |                               |       |         |    |       |

5500CalBC 5000CalBC 4500CalBC 4000CalBC 3500CalBC 3000CalBC 2500CalBC

Calibrated date

Figure 17.2: Essex Early Neolithic pottery dates



Figure 17.3: Selected Middle Bronze Age pottery (details in the catalogue)



Figure 17.4: Selected Late Bronze Age pottery (details in the catalogue)



Figure 17.5: Period fabric type assemblages



Figure 17.6: Chronology of settlement





