

Chapter 9. Pottery Distribution in the Study Area in the Later 4th to early 5th Centuries

I. Assemblage Characterisation and Fabric Distributions

Introduction

A broad spread of sites in the study area was occupied from the early to mid 4th century, but their numbers tailed off substantially from the later 4th into the 5th century. In the second half of the period there are a few significant assemblages based on the small towns and later villas. The sites in the north at Maxey (Gurney 1985), Haddon (Rollo 1994a; J. Evans 2003), Sawtry (JE), and in the Nene Valley contain material for the early–mid 4th century but the best assemblages for the later 4th century are from the villa site at Great Casterton (Gillam 1951; Perrin 1981) and Orton Hall Farm (Perrin 1996), Period 5. Sites are fewer in the central fenland with no groups from the later period at Littleport Camel Road (JE) and only all-site groups from Earith, Langdale Hale (Monteil 2013), Langwood Farm (C. Evans 2003) and Denny Abbey (Millett 1980a). Few good assemblages are present in the south, the best being Teversham (Pullinger and White 1991; JE) Group 2, with reasonable groups to the west at Foxton (Lucas 1997) and Phase IV at Wimpole Lodge (Lucas 1994).

Class C, Shell-tempered wares

Fig. 9.1; Table 9.1

Distribution

Table 9.1 shows the incidence of shell-tempered wares in the later 4th-century groups and Fig. 9.1 maps them. In the north of the study area shell-tempered wares tend to be more common than in the earlier 4th century. At Great Casterton (Corder 1951) shell-tempered wares form 21% (MNR) of the very late 4th-century group. This is a lower figure than on the Nene Valley sites, but there are no data available for earlier periods that would allow the chronological trend here to be judged.

At Orton Hall Farm Period 5 (AD 375–400+) shell-tempered wares rise to 43% (Nosh) compared to 32% in Period 4 (AD 300/325–375). At Chesterton the mid to late 4th-century group from Building 9 (layers 4–5) contains 20% (RE) shell-tempered ware, a relatively low figure for the region, but the highest from the Chesterton sequence (Perrin 1999, fig. 43). As noted earlier this low figure reflects the proximity of the Nene Valley colour-coated ware industry to the Chesterton site. At Werrington (Perrin 1988) the Period 4 group (AD300/325+) amounts to 43.5% (Nosh), a similar level to that at Orton Hall Farm. At Haddon in the 1989 excavations (Rollo 1994a) a similar level, 39.8% (Wt), comes from Phase 6 (mid 4th century), although again the RE figure is much lower at 27.4%. However, this group ends by *c.*AD 360/70, and does not represent much of the period being discussed here.

In the northern Cam corridor at Littleport the latest group comes from Phase 8 (mid 4th century, perhaps ending *c.*AD 360/70). Here shell-tempered wares are only 7%, although this level is much higher than in the 3rd century. The all-site figures from Earith, Langdale Hale (Flavian to 4th century), in the Ouse corridor have a value of 25% (Nosh). Monteil (2013) notes that shell-tempered wares made up 31.5% of the early 4th-century well group (F.871), but no data are available specifically for the later 4th century. In contrast at Denny Abbey in the southern Cam corridor all-site (Flavian to later 4th century) figures are 3.9%. Regardless of the possible gains made by shell-tempered fabrics at Littleport (at the expense of Horningsea) in the early 4th century (see Chapter 8), Horningsea wares continued to dominate the Cam corridor and shell-tempered wares were consequently poorly represented on these sites. This was clearly the case until the settlement at Littleport was abandoned.

On the fen edge at Godmanchester, London Road, shell-tempered ware levels were at 8% (Nosh) in the later 3rd- to early 4th-century Phase 4A, and remained at this level in the mid 4th-century group from Phase 4B. Interestingly, just a little to the north at Huntingdon, Watersmeet (Peachey 2004), shell-tempered wares are much more common, at 35.0% (Nosh) and 41.1% (Wt), in the mid to late 4th-century group from F.2276 *etc.*, and at 21.7% (Nosh) and 29.3% (Wt) in the later 4th-century cemetery there.

On the southern fen edge the 2nd- to 4th-century all-site list from the Cambridge Rowing Lake site produced just 0.9% (Nosh) and 0.7% (Wt) of shell-tempered wares. The other nearby fen edge site of Milton East Waste, with a 1st- to 4th-century all-site list, contained rather more shell-tempered ware at 6.1% (Nosh) and 6.5% (Wt). The higher levels from the latter site may well result from the strong later 4th-century representation in this group.

At Bottisham Tunbridge Hall (Peachey 2012) the data from the mid 4th-century Phase 4 group complete a series which shows the representation of shell-tempered wares rising throughout the early to mid 4th century. Levels rose, if not greatly, to 4.5% (Nosh) and 5.8% (Wt). However, shell-tempered ware levels here were nowhere near as high as in the late villa group from Teversham, dating from the very end of the 4th century and beyond, and the significant rise in shell-tempered wares seems to have taken place in this very late horizon. At Teversham, in Group 2, which probably dates to the last couple of decades of formal Roman rule and possibly later, shell-tempered wares comprise 14.3% (Nosh) and 18.1% (Wt). The assemblage has strong parallels with other very late assemblages (see below) which seem to date after *c.*AD 390. Although the Teversham figure is relatively low compared with the Nene Valley sites, it is much higher than in the earlier Roman groups at this site and is comparable with the shell-tempered ware representation in later 4th-century site groups to the west of Cambridge. Forms in Teversham Group 2 are two storage jars, twenty-eight jars, a bowl and two dishes. Given the reduction in the grey ware component in this assemblage it seems likely that these were the contemporary cooking vessels for this period and that the group dates after the ending of the Horningsea grey ware industry.

On the outskirts of Cambridge at Apollo Way, Kings Hedges (Fawcett 2003) a group spanning the 4th century, but probably with a later 4th-century emphasis, has relatively high levels of shell-tempered wares, with 19% (Nosh) and 32% (Wt). As noted previously, at Cambridge, Castle Hill, shell-tempered wares are present in all of the 3rd- to 4th-century groups, at 6.4% (Nosh) in Group 6, 5.2% (Nosh) in Group 7, 8.4% (Nosh) in Group 8 and 1.9% (Nosh) in Group 9. These data seem to indicate that shell-tempered ware levels were rising at Cambridge in the 3rd or 4th centuries, compared to the Antonine period, the rise probably taking place in the 4th century. Shell-tempered ware levels at Teversham probably give a much better indication of similar levels at Cambridge in the last decades of the 4th century than those from Castle Hill Groups 6–9 which span a much longer period. The Teversham figures also suggest that those from Apollo Way may not be unrepresentative.

West of Cambridge, at Foxton (Lucas 1997) the largely later 3rd- to 4th-century all-site group produced 20.2% (Nosh) shell-tempered wares. Foxton, although at a similar distance from Harrold as Cambridge, has much higher levels of shell-tempered wares than the Castle Hill Groups 6–9 in the 4th century. This may be due to a combination of factors: competition from Horningsea, which was nearer to Cambridge than to Foxton, and probably a greater late 4th-century emphasis in the Foxton group. The effect of the latter can be seen in the very late 4th-century Group 2 from Teversham.

At Wimpole Lodge, shell-tempered wares levels rose slightly to 17% (RE) in Phase IV (AD 360+) compared to 16% (RE) in Phase III (AD 300–360). Further west at Little Paxton shell-tempered wares amounted to 22.7% (Nosh) in the mid 4th-century group from Phase 8, which perhaps ended *c.*AD 350–70. South of Little Paxton at Little Barford (1st to mid 4th century), shell-tempered wares provided 31.0% (Nosh) of the total assemblage.

Forms

Most of the forms in use in the later 4th century have been discussed in Chapter 8 as they emerged around the middle of the 4th century. One further type not discussed previously, however, is the standard form of developed beaded and flanged bowl. At Orton Hall Farm it does not appear until Phase 5 (late 4th to early 5th century; Perrin 1996, nos 494–5, 555 and 605). Perrin observes that ‘There are other flanged varieties... so close in form to those occurring in LNVCC that direct imitation seems likely... The Nene Valley colour-coated ware copies in the flange bowls are good evidence for continued local production of shell-tempered wares in the Nene Valley in this period’ (Perrin 1996, 174). The type, however, is absent from Chesterton (Perrin 1999), Great Casterton (Corder 1951) and Haddon (Rollo 1994a), although it may be present at Werrington (Rollo 1988) where a straight sided flanged bowl from layer 97 is referred to but not illustrated. The type is not found on any of the sites examined in this study in south Cambridgeshire and Bedfordshire. Perrin (1996) is no doubt correct that this type does demonstrate continued shell-tempered ware production in the Nene Valley area, but it does not do so on any great scale.

East Yorkshire calcite gritted ware

Just as occasional pieces of Crambeck grey ware reached the Nene Valley, Orton Hall Farm has also produced an example of East Yorkshire calcite gritted ware of Huntcliff-type form from Phase 5, dated after

AD 375 (Perrin 1996, 177, no. 513). Like the Crambeck grey ware this represents an occasional vessel from the area where the east coast trade was offloading goods, which was picked up by returning crew, rather than any form of organised pottery trade. Again, of course, it does seem to show that the east coast trade was still operating at this late period as these pieces are most unlikely to have arrived by overland routes, whereas the Nene Valley wares exported from the area might have been distributed by road at this time.

Kilns and Sources

Once more the sources of the shell-tempered wares in the study area appear to have been the kilns at Harrold (Brown 1994), as throughout, with another source or sources in the Nene Valley. The Nene Valley sources seem to have remained in production in this period, if perhaps on a lesser scale than earlier in the Roman period.

Class F, Fine wares

Although the general picture for this period may be fairly clear there is a very limited number of good groups. Assemblages of the latter part of the later 4th century are restricted to those from Great Casterton, Orton Hall Farm Period 5, Wimpole Lodge Phase IV and Teversham Group 2. Two of these, the Great Casterton and Teversham groups, probably date after *c.*AD 390 and belong to a horizon of very late groups across the Midlands which have similar characteristics. Other examples are to be seen in Alcester defended area Trench 2 Period D (J. Evans 1996a), or Gloucester, New Market Hall (Hassall and Rhodes 1974). All of these groups are characterised by very high fine ware levels, often over 50%, with coarse wares being provided predominantly by southern shell-tempered ware, probably largely from Harrold (see above).

Nene Valley colour-coated wares (F01, F02)

Distribution

Tables 9.2–9.3

In the north of the study area at Chesterton the late 4th-century group from Building 9, layer 4–5 (Perrin 1999, 64) contained a massive 52% (RE) of Nene Valley colour-coated wares, representing a considerable increase on previous periods. Levels remained stable at Orton Hall Farm (Perrin 1996) where 32% of the Phase 5 group (AD 375–400+) was in this fabric. At Werrington (Mackreth 1988) the overall 4th-century group from Period 4 included 26.6% (Nosh) and 30.0% (Wt) Nene Valley colour-coated ware. At Haddon (Rollo 1994a) levels were also high, with 31.1% (Wt) and 42.5% (RE) from the mid 4th-century Phase 6 group. North of Chesterton the Great Casterton villa provides a good very late group with a very high 58.6% (MNR) of Nene Valley colour-coated ware. Nene Valley material was also recovered from Huntingdon, Watersmeet (along with Oxfordshire colour-coated ware and Hadham oxidised wares).

In the central fens there are no groups of this date from Littleport, and only all-site groups of very limited value from Langdale Hale, Langwood Farm and Denny Abbey (see Table 8.3 for details). At Bottisham Tunbridge Hall (Peachey 2012) the Phase 4 group of mid to later 4th-century date contained 4.9% (Nosh) and 5.9% (Wt) of Nene Valley colour-coated ware. This relatively low figure is typical of rural sites in this area in the mid 4th century. In contrast, in the vicinity of Cambridge there is a good assemblage (Group 2) from Teversham villa (Hinton Fields) probably dating *c.*AD 390+. This contained 27.3% (Nosh) of Nene Valley colour-coated wares, a much higher figure than seen previously in southern Cambridgeshire.

At Castle Hill there are four groups (6–9) of 3rd- to 4th-century date, all extending quite well into the 4th century. These produced Nene Valley levels of 14.6%, 14.3%, 1.4% and 14.0% (RE). Group 8 had relatively low fine ware levels and higher levels of Oxfordshire and Hadham fine wares than the others; the latter feature might suggest a later emphasis than the other groups. Alexander and Pullinger (1999, 62) report on a group from the town wall rampart back, which by definition post-dates the construction of the defences – this contained ‘43 sherds of red polished ware and 283 sherds of late 3rd to 4th colour-coated ware’, *i.e.* forty-three sherds of Hadham/Oxfordshire (13%) and 283 Nene Valley sherds (87%), suggesting that Nene Valley colour-coated wares were still the dominant fine ware here in the mid 4th century or later.

Table 9.3 shows fabric proportions of vessels from Castle Hill Groups 6–9 (by MNR and RE) which are likely to date to the late 4th century. This will not be entirely accurate as it has been created by deleting all fabrics likely to be residual by that date and all forms which likewise are probably residual. It almost certainly over-represents the shell-tempered wares slightly, since they are all allocated to this group, and likewise the Hadham and Oxfordshire wares. Nene Valley forms not likely to be contemporary have been deleted, but some long-lived forms such as simple rimmed dishes will be over-represented, as are the mortaria. This

suggests that the incidence of Nene Valley ware in very late 4th-century levels at Cambridge might have been as high as 30%, a level comparable with that at Teversham.

West of Cambridge, at Foxton, the all-site group, dated AD 270-400+, contains only 5.8% (Nosh) and 5.5% (Wt) Nene Valley colour-coated wares and Hadham wares outnumber them. These are low levels for Nene Valley products and it seems clear that they were suffering from competition from the Hadham kilns here. At Wimpole Lodge in Phase IV (AD 360-400+) Nene Valley colour-coated ware levels are also fairly low at 10% (RE), a fall from Phase III, with Hadham ware, Oxfordshire ware and 'Harston ware' providing a further 13% of the assemblage. Again it looks as if Hadham ware, in particular, was providing competition to the Nene Valley producers here. Further west, the Little Paxton (Evans 2011) site ended in the mid 4th century, whilst at Little Barford the only data are all-site figures (1st to mid 4th century). Here Nene Valley colour-coated ware comprises 6.1% (Nosh) and 3.3% (Wt) of the assemblage.

The later 4th-century data, though limited, suggest an even greater expansion of market share by the Nene Valley colour-coated ware industry than in the early 4th century. Levels in the Nene Valley area often exceed 30%. It seems likely that much of this rise took place in the last two decades of the Roman period. Near Cambridge the Teversham Hinton Fields villa group has levels of over 25% and late groups in Cambridge may also have had high levels but the data are not available. West of Cambridge competition from the Hadham ware industry and from Oxfordshire clearly resulted in lower levels of Nene Valley colour-coated ware at sites in south Cambridgeshire and Bedfordshire.

Forms

Perrin notes that 'The late deposits from the Great Casterton villa (Gillam 1951; Corder 1951) and the well at Stibbington (Perrin 1981, 448) indicate that production probably continued into the 5th century and, for the present at least, the pottery from these is the only comprehensive guide to that used by the area's inhabitants at the end of Romanised Britain' (Perrin 1996, 118).

At Great Casterton the vast bulk of the assemblage is provided by Nene Valley colour-coated wares (F01 and F02), totalling 58.6%. These comprise nearly all of the fine wares, as might be expected, given the proximity of the kiln sites. Table 9.5 shows a functional analysis of Nene Valley colour-coated wares in the assemblage. Some 53.7% of them are table wares with a further large element, 17%, of liquid containers. Jars are relatively strongly represented at 22.9%, but beakers and cups are of negligible significance at 4.0%. Table ware levels here are comparable to those at Orton Hall Farm (see Table 12.1), as are the very low late 4th-century beaker levels. Jars are a little more common at Great Casterton, but the main difference between the sites is in the high level of liquid containers at Great Casterton. These two sites contrast quite markedly with the late group at Teversham (Table 9.4) where 84.5% of the Nene Valley colour-coated wares were table wares, principally dishes, as opposed to bowls at Great Casterton and Orton Hall Farm. The dating of the types has been discussed in some detail by Perrin (1981). Also worthy of note at Great Casterton are the 2.0% of lids, generally of the 'coffee pot lid' type. Lids are rare generally in Romano-British contexts after the end of the 2nd century. These lids, with their flanged rims, small diameter and steam holes, seem to be made to fit constricted necked jars, flagons or jugs, suggesting perhaps a new fashion for some form of hot beverage, although clearly one not drunk from ceramic beakers, since these had largely fallen out of use by this date.

Perrin (1981) shows that these groups have a very limited range of forms, consisting of developed beaded and flanged bowls (over a third of the Great Casterton material), simple rimmed dishes, wide-mouthed necked jars, flagons, constricted-necked jars and small lids (with steam holes). Beakers, 'Castor boxes' and imitation samian forms in any numbers seem to have fallen out of production, apart from a few Dr 38 copies. This form range seems consistent with the assemblage from the Teversham Hinton Fields villa Group 2.

One other late feature of note is the use of bossed stamps, perhaps in imitation of Hadham wares. Howe *et al.* illustrate an example from the Stibbington well (1980, no. 74). At Langdale Hale, Earith, Monteil (2013, 93) records a 'few interesting sherds with Romano-Saxon indentations and rouletted crosses'.

Oxfordshire colour-coated ware (F06)

Table 9.6

Oxfordshire ware is found again fairly thinly scattered across the whole of the study area. In the north it occurs in the Great Casterton destruction deposit (AD 390+) at 2.6% (MNR). Forms consist of a Young (1977) type C100 mortarium and eight C51, Dr 38 copy bowls. It is of note that C45, usually the commonest Oxfordshire colour-coated ware type, is entirely absent. As this author (JE) noted in the Alchester report (Evans 2001b, 289), type C51 tends to outnumber type C45 in groups dated after *c.*AD 370, and it is useful to see this confirmed again here. A further example of this can be seen at the Bancroft villa (Marney 1994, table 38) which contains 12 examples of type C45 to 27 of type C51.

At Chesterton, Oxfordshire wares are present, but Perrin (1999) provides no fabric proportions or tabulation of the forms. The presence of types C44, C46, C49, C51, C52, C58, C70, C75, C77, C78 and C100 is noted. Most are 4th-century types. At Orton Hall Farm Perrin (1996, 165) observes ‘The Period 5 material included the first significant quantities of Oxfordshire colour-coated ware and Hadham ware pottery’. It is not quantified, but forms include (Young 1977) type C44/45 (no. 550), type C49 (no. 551), and type C51 (no. 549).

At Haddon (J. Evans 2003) the fabric was present amongst the unrecorded unstratified pottery as a single sherd. The previous excavations (Rollo 1994a) demonstrate that it appeared first in the mid 4th-century Phase 6 group, but at just 0.01% (Wt) and <0.1% (RE). In the Ouse corridor at Earith, Langdale Hale, the fabric occurs in the all-site list (Flavian to 4th century) at 0.2% (Nosh), as discussed above (Chapter 8.I).

In the Cam corridor the all-site list (Flavian to 4th century) from Denny Abbey (Millett 1980a) produced some Oxfordshire colour-coated ware, though only 0.1% (Nosh), but it includes a bowl of Young’s (1977) type C77.2, dated AD 340–400, suggesting, as is usual in the region, that this fabric reached the area in the second half (perhaps the final quarter) of the 4th century.

The mid to later 4th-century group from Phase 4 at Bottisham Tunbridge Hall (Peachey 2012) also produced a small quantity of Oxfordshire colour-coated ware, some 1.0% (Nosh) and 1.1% (Wt). In contrast the later Group 2 at Teversham (AD 390+) contained 13.2% (Nosh) and 10.0% (Wt) of Oxfordshire ware. This would appear to be an exceptional figure, perhaps reflecting the social status of this villa-related site, but it is difficult to be sure without more good groups of this date in the south of the study area. The forms present are; C45 (x6), C49 (x4), C50, C51 (x7), C56/7, C74?, C75 (x23), C78 (x2), C81 (x2), C93, C97 (x10), and C100. As at Great Casterton (above) the Teversham group conforms to the proposal that C51 outnumbers C45 in groups dating after *c.*AD 370 (Evans 2001b, 289). It is also of note that C75 is a common type in this group. Although this form apparently emerged *c.*AD 325, it did not become common before the late 4th century (Evans 2001b, table 7.15). Figure App. 1.27 shows the date distribution of dateable vessels from Group 2. The apparent tailback into the later 3rd century owes much to the long date ranges of many of the Oxfordshire and Nene Valley forms. Figure App. 1.27 shows the date distribution of the occurrences of the Oxfordshire types in the Teversham group. It is clear from this that the vast majority of such types from this group belong to the later 4th century, and this is even more clear when it is borne in mind that Young (1977) offered no closer dating for any type than a start date of AD 350, with most of his 4th-century types having a minimum of a 75 year date span.

At Cambridge, Castle Hill Groups 6–9 (3rd to 4th century) Oxfordshire wares range from 1% to 4% in these widely dated late groups, although their date distribution (Fig. 10.35) suggests that most of them were probably deposited in the later 4th century, indicating relatively high levels of Oxfordshire ware here at that date, probably well in excess of 4%. Table 9.3 suggests that these could have been as high as 11%, which in turn may suggest that the high levels at Teversham are not as isolated as they appear.

West of Cambridge the all-site group from Foxton (Lucas 1997) dated AD 270–400+ produced Oxfordshire ware at a level of 0.8% (Nosh) and 0.5% (Wt). Even if most of the Oxfordshire material reached the site in the latter part of its life levels here would still have been low. Similarly at Wimpole Lodge (Lucas 1994) the Phase IV group (AD 360–400+) produced just 2% (RE) of Oxfordshire ware. At Little Barford (Lucas 1997) there are only all-site figures (1st to mid 4th century) with Oxfordshire ware providing 0.2% (Nosh) and below 0.05% (Wt). It is probably significant that on all these sites west of Cambridge, where Oxfordshire ware levels are fairly low, Hadham ware levels are much higher (see below). This area is on the edge of the core distribution of Hadham ware and it appears that here Oxfordshire wares saw some effective competition from this much more local source. Oxfordshire wares are predominantly table ware bowls and Hadham also produced a range of these types, so they were potentially in direct competition.

The gradual rise of Oxfordshire colour-coated ware in the study area mirrors more general evidence of its expanding distribution from the later 3rd century. Evans (2001b, figs 7.7–7.9) shows how quantities rise to a peak in the later 4th century.

Hadham oxidised wares (F03)

Table 9.7

Hadham ware continues to be found in sites across the study area at this date. At Orton Hall Farm in Period 5 (AD 375–400+) Perrin notes that ‘The Period 5 material included the first significant quantities of... Hadham area pottery. Oxidised ware of probable Hadham origin comprised a slightly larger proportion of the pottery than that of Period 4... In Period 5 there are vessels No 514, a Hadham flagon, and Nos 515 and 516, both Hadham ware jars’ (Perrin 1996, 165). At Chesterton (Perrin 1999, 128) Hadham ware forms illustrated are two constricted-necked decorated jar/beakers (Perrin 1999, fig. 76, nos 542–3) and a double handled flask(?)

(no. 544). The fabric is also present at Maxey (Gurney 1985) in the overall site list at 0.1% (Nosh) and <0.1% (Wt) and at Great Casterton (Corder 1951) at 0.9% (MNR).

South of Chesterton the fabric appears at Haddon (Rollo 1994a) in the mid 4th-century group from Phase 6 at 0.3% (Wt) and 0% (RE), although this is a decline on the 1.5% (Wt) and 1.0% (RE) in the later 3rd- to early 4th-century Phase 5/6 there. In the central fens it is present in the all-site list at Langdale Hale, Earith (Flavian to 4th century) at 0.6% (Nosh). Monteil (2013, 89) notes 'The forms in the oxidised fabric include necked beaded bowls, a copy of samian form Dr 31, several examples of the samian imitation Dr 38 and two copies of the samian dish Dr 36'. Hadham ware is also found in the all-site list (Flavian to 4th century) from Denny Abbey (Millett 1980a) at 2.4% (Nosh). Millett's (1980a) fabrics FF, FH and FM are all likely to be Hadham ware. Forms represented (in Millett's fabric FF) are a necked jar with an everted rising rim, a Dr 36 copy bowl, and two developed beaded and flanged bowls; the latter must date to after c.AD 270. The bossed stamp decorated sherd in Millett's fabric FH is very likely to be of late 4th-century date (Millett 1980a). Given that Hadham oxidised ware amounted to 2.4% in the all-site list, the later 4th-century level of this fabric here was probably quite a bit higher.

On the southern fen edge the mid to later 4th-century group from Bottisham Tunbridge Hall (Peachey 2012) produced a comparable amount to Denny Abbey at 2.6% (Nosh) and 1.6% (Wt). Again there is a marked contrast with the slightly later group from Teversham Hinton Fields, where Hadham ware represents a very considerable 22.5% (Nosh) of the assemblage, which was largely composed of table wares. The forms occurring in the Teversham group are listed below:

- B1.1 A Dr 38 copy bowl, perhaps *cf* Tyers 1996, fig. 208, no. 2.
- B2.2 A bowl with a triangularly beaded rim, possibly derived from a Dr 31 copy.
- B2.3 A bowl(?) with an everted, rising, thickened rim.
- B3.1 A bowl with a stubby, slightly everted rim.
- B4.1 A bowl with a flange rim, a Dr 36 copy.
- B4.2 A bowl; with a flange rim, notched on the flange cordon, a Dr 36 copy.
- B5.1 (x2) A bowl or deep dish with slightly beaded rim
- B6.1 A flange rimmed bowl(?) with a wedge-shaped rim.
- B6.2 A beaded and flanged rimmed bowl.
- BK1.1 A beaker with a stubby, straight, everted rim.
- D1.1 (x2) A simple rimmed dish.
- F2.1 A disc rimmed flagon.
- F5.1 A bottle with a beaded rim.
- J1.1 (x12) A necked jar with a triangularly-sectioned wedge-shaped rim.
- J1.2 A necked jar with a triangularly-sectioned undercut rim.
- J1.3 (x5) A jar with an evenly outcurving rim.
- J1.4 (x9) A necked jar with an everted, bifid rim.
- J1.7 (x2) A jar with an everted, bifid rim, the lower cordon of the rim being notched.
- J2.1 A jar with a grooved, squared, beaded rim.
- J3.1 A jar with a straight, everted, rising rim.

All of these Hadham types are probably contemporary at the end of the 4th century.

At Cambridge, Castle Hill, Hadham oxidised ware is present in Groups 6–9 (3rd to 4th century) at levels of 1–4% (RE) but these span a large period. Table 9.3 suggests that Hadham ware may have comprised up to 13% of the late 4th-century material in these groups.

West of Cambridge quantities of Hadham oxidised wares increase. At Foxton (Lucas 1997) the all-site group dated AD 270–400+ produced 12.6% (Nosh) and 8.3% (Wt), suggesting that specifically in the later 4th century the percentage may have been higher than this. At the small town of Wimpole Lodge (Lucas 1994) the Phase IV group (AD 360–400+) produced a level of 8% (RE), a fall on the 14% in Phase III, but still a substantial quantity.

Overall the data again suggest that quantities of Hadham oxidised wares were rising in the last quarter of the 4th century, although the industry was of minor significance as a fine ware supplier except in the south of the study area. The distribution pattern seems to be fundamentally similar to that in the earlier 4th century, but with a general slight intensification. Hadham wares seem to have competed successfully with Oxfordshire and Nene Valley products in their core market area which includes sites such as Foxton and Wimpole Lodge.

Other late fine wares

Products claimed to originate in the late 4th-century Oxford industry offshoot at The Obelisk, Harston (Pullinger and Young 1981) have been identified by Lucas and Monteil at Earith, Langdale Hale, at 0.1% (Nosh) in the all-site (Flavian to 4th century) list. Lucas (1994) also identified this fabric at Wimpole Lodge in Phase IV (AD 360–400+) at 3% (RE) and at Little Barford (Lucas 1997) in the 1st- to mid 4th-century all-site list at 0.2% (Nosh) and 0.1% (Wt). No other worker has successfully identified Harston products on sites in the region. Assuming that Lucas's figures are accurate Harston products were of very minor significance.

The Harston material from the kiln site in the CUMAA has a good quite glossy red colour coat on a mid yellow fabric which is soft and appears 'clean' and a little 'soapy' with no visible sand temper. Unlike Oxfordshire colour-coated ware it is not micaceous. The Oxfordshire sherds selected for illustration in the present study have been re-checked against this material and none appears to be of Harston origin.

Discussion: late fine wares

Table 9.4 shows a functional analysis of the fine wares from Group 2 at Teversham. Here all three sources meet head on in competition, or partial competition. In the cases of both the Nene Valley colour-coated wares and the Hadham oxidised wares the product range that they delivered to the Teversham site seems to have been dictated by competition from the Oxfordshire industry. The Oxfordshire products from the site, as might be expected, are mainly fine table ware bowls, accompanied by a few table mortaria. This is a reasonably typical assemblage for this industry. The Nene Valley group, however, has a few jars, a few beakers, reflecting the significant decline in the use of this type by the later 4th century (see Chapter 12.III), surprisingly few bowls, and a very large number of dishes. The similar data from Great Casterton (Table 9.5) show what is a much more usual picture (although because it is close to the Nene Valley it may have a few more jars than is usual elsewhere), with bowls as the most common, followed by dishes and jars. A similar picture is seen in northern England (see Chapter 12.III), although beakers may have remained a little more common there. The lack of Nene Valley bowls at Teversham Hinton Fields seems to have resulted from the successful occupation of this niche by the Oxfordshire industry, and to a lesser extent by Hadham oxidised ware. The advantage that the Oxfordshire industry may have possessed is that it produced the most convincing 'samian' ware of all these sources. The Nene Valley succeeded in providing dishes to the assemblage because neither of the other fine ware industries produced them in any quantity.

The Hadham ware assemblage from Teversham is also rather odd in its functional composition, and again this may be a result of competitive pressure from the Oxfordshire industry. It does provide some bowls and seems to be more successful than Nene Valley at this, perhaps because its products were red wares, but most of the Hadham ware vessels acquired on the site were jars, a type in which there was no widely-distributed Oxfordshire competitor. It is possible that these Hadham jars displaced some Nene Valley jars which would otherwise have been used here, although this is harder to judge because Nene Valley jars tend to be a little less common outside the core area.

The evidence from Teversham and the southern Cambridgeshire sites seems to suggest that the Nene Valley industry, at this distance from its centre of production, tended to lose out in direct competition with both the nearer Hadham kilns and especially the Oxfordshire colour-coated wares, despite the fact that the Oxfordshire kilns were nearly twice as far distant. The suspicion must be that this was not because the Oxfordshire products were cheaper, but rather because they were a much more samian-like product.

Class M, Mortaria*Distribution*

Mortarium supply in the later 4th century again shows relatively little change on that in the preceding period in terms of its sources. To the west of the study area at Piddington (Rollo 1994b) in Phase 7 (dated c.AD 310–380+) the Oxfordshire industry remained dominant with 74.2% (MNR) and 70.6% (RE) of the assemblage (Table 6.13). Mancetter-Hartshill remained in second place but fell back to 16.1% (MNR) and 21.7% (RE), well below the level of Oxfordshire white ware mortaria alone. This is again a total contrast to sites in the study area on which Mancetter-Hartshill mortaria are not represented at all. The only other source represented at Piddington in this phase is the Lower Nene Valley at just 9.7% (MNR) and 7.7% (RE).

In the north of the study area, at Orton Hall Farm (Perrin and Hartley 1996), in Period 5 (AD 375–400+) the Lower Nene Valley gained market share from the earlier 4th century at 85% with the remainder of the mortaria coming from Oxfordshire, some 15%, a slight fall on the earlier 4th century (Table 6.8). In Period 5, Oxfordshire forms are represented by eight type M22s (AD 240–400), one type M17 (AD 240–300), a type WC7 (AD 240–400), and a type C97 (AD 240–400). Oxfordshire appears to have been successful as a

supplier of white ware mortaria which must have been in direct competition with the similar Nene Valley products, and there is no suggestion, for instance, that it was exploiting a niche market for colour-coated mortaria. At Maxey, of the eleven mortaria listed by Hartley (1985) all the later Roman mortaria were Lower Nene Valley products. At Great Casterton mortaria comprised 5.0% of the group in the villa destruction deposit (Corder 1951). There were fifteen Lower Nene Valley vessels (88% MNR) one Oxfordshire red-slipped vessel (6% MNR) and one Oxfordshire white-slipped vessel (6% MNR).

The quantities and sources of mortaria in late Roman deposits at Chesterton, Haddon, Sawtry, Earith Langdale Hale, Denny Abbey, Godmanchester London Road, Cambridge Rowing Lake and Milton East Waste have been discussed in Chapter 8, as have aspects of early to mid 4th-century supply at Bottisham Tunbridge Hall (Peachey 2012). In the final phase (Phase 4) at this site, which probably represents the earlier part of the second half of the 4th century, it is of note that the Lower Nene Valley produced only five mortarium sherds, compared with six from Oxfordshire, the other sources, represented by a single sherd, being the 'Nar Valley' and Hadham, both of which only appear in this latest phase.

At Teversham in Group 2 (AD 390–400+) mortaria comprise 2.9% of the group by count and 4.3% by weight. Surprisingly they are dominated by Oxfordshire fabrics at 95.4% by count and 89.6% by RE. The principal mortarium fabric is M11 (amounting to 2.2% of the total assemblage), Oxfordshire colour-coated ware, in which there were ten examples of Young (1977) type C97 and one of C100. The second commonest fabric was M09, Oxfordshire white ware, with four examples of type M22, and the third commonest, M13, Oxfordshire white-coated ware, which produced an example of type WC7. Nene Valley mortaria amounted to only 4.6% by count and 10.4% by RE. Two wall-sided forms were present (M2.1 and M2.2). These may have been contemporary. It is, however, surprising that whilst Nene Valley colour-coated ware was very common in this group, Nene Valley mortaria, which had established a virtual monopoly in the region from the 3rd century, now became a minor element in mortarium supply.

At Cambridge, Castle Hill, mortaria from Groups 6–9 are discussed in Chapter 10.II. Overall Hartley (1999a, table IX.1; *c.*52 rim sherds) shows that in the later 3rd to later 4th centuries the Lower Nene Valley industry was dominant here, with *c.*35 rim sherds comprising 67%. The only other major contributor in this period was the Oxfordshire industry (*c.*15, 29%). Table 6.14 shows a similar picture with 66% (MNR) of Lower Nene Valley mortaria and 31% Oxfordshire products in the later 4th century. These figures represent quite a decline for the Lower Nene Valley industry and an increase for the Oxfordshire one. The Teversham data suggest that by the last decade of the 4th century, Oxfordshire might have overtaken the Lower Nene Valley here.

To the west of Cambridge, at Foxton (later 3rd to 4th century) in the tabulated all-site assemblage, amongst the possibly contemporary material (Lucas 1997, table 6b) Hadham oxidised mortaria dominated supply at 53% (Nosh) and 35% (Wt). Nene Valley mortaria provided the second commonest source in the late Roman period at 28% (Nosh) and 41% (Wt), with Lucas' coarse red colour-coated ware third at 9% (Nosh) and 8% (Wt), and Oxfordshire fourth at 7% (Nosh) and 13% (Wt). Late Roman aspects of the assemblages at Wimpole Lodge and Little Paxton, and the comparative position at Baldock, have been discussed in Chapter 8.

Discussion: mortaria

Again there is no major change in the sources of mortaria across the study area in the later 4th century. Supply continued to be predominantly from the Lower Nene Valley kilns with Oxfordshire providing the only other material of any significance. The evidence from Teversham Hinton Fields may suggest that Oxfordshire did capture some additional markets in the south of the study area in the last decade of the 4th century or early in the 5th and it is possible that very late groups from Cambridge might show a similar picture. One point of note in mortarium supply throughout the study area and beyond, especially in the later Roman period, is the tendency for there to be a dominant supplier at any one place, rather than to see the market split between many suppliers. Since the evidence from potters' shops in the early Roman period (Rhodes 1989) suggests that mortaria, like samian ware and flagons, were distributed through such shops, the evidence for dominant suppliers could suggest that urban sites often had only a single retailer, who in turn tended to deal with a single supplier/wholesaler.

Class R, Wheelmade reduced wares (grey wares)

Table 9.8

Table 9.8 shows the occurrence of grey wares in groups of mid to later 4th-century date in the study area, additional to the data shown in Tables 8.6–8.7 and 8.10–8.12. There are a number of mid 4th-century groups, which seem to end somewhere in the range of the AD 364–78 coin peak and there are many fewer very late 4th-century groups. The latter include Great Casterton, Orton Hall Farm Period 5 (with quantities of residual

earlier material), Chesterton, Huntingdon Watersmeet cemetery, Teversham Hinton Field Group 2, and Wimpole Lodge Phase 4. Amongst these there are two very late groups, one from Great Casterton and one from Teversham, which this author (JE) would suggest date from *c.*AD 390 onwards.

These differences are important because changes in pottery supply in this period seem to come in two phases. The first seems to coincide with the ending of occupation at many of the sites in the study area, probably in the range AD 364–78. The second, which is obvious but even more remarkable, must come early in the 5th century. In the first phase, the most radical change seems to be the ending of the Horningsea industry, and at the same time or a little later the ending or scaling back of the Hadham grey ware industry. The second just sees the end of all Roman pottery production and with it the end of ceramic traditions stretching back for half a millennium in the study area.

Horningsea ware (R02, R021)

Distribution

The distribution of Horningsea grey wares in the later 4th century shows major changes, which suggest that it ceased production within the period. In the north of the study area Horningsea ware still rarely appeared on Nene Valley sites. At Orton Hall Farm in Period 4, dated AD 300/325–375, a storage jar rim (SJ1.1) is illustrated (Perrin 1996, no. 481) and Horningsea ware is stated to make up ‘less than 1%’ of the assemblage. At Chesterton (Perrin 1999) three Horningsea storage jars are illustrated (Perrin 1999, nos 383–5) two from later 4th-century contexts. Two constricted-necked jars from later 3rd- to 4th-century contexts, possible Horningsea products (Perrin 1999, nos 377–8), might also date from late in the period.

On Ermine Street the fabric does occur (barely) at Haddon, but is absent from the mid 4th-century Phase 6 group there (Rollo 1994a). Further south the fabric is absent from the Sawtry sites. In the central fens on the Cam crossing of Akeman Street at Littleport (Table 8.6), in the Phase 7 group, of mid 4th-century date, Horningsea wares make up 64.9% (Nosh) and 56.5% (Wt) of the assemblage, with the handmade fabric R021 providing 17.1% (Nosh) and 30.3% (Wt) and the BB copy fabric contributing 5.7% (Nosh) and 4.3% (Wt). In the final Phase 8 group, perhaps dating to around the third quarter of the 4th century, Horningsea wares comprise 36.1% (Nosh) and 35.4% (Wt) with the handmade fabric R021 contributing 6.3% (Nosh) and 7.2% (Wt) and the BB copy fabric 0.4% (Nosh) and 0.1% (Wt). Figure 8.6 shows the proportions of Horningsea wares at Littleport throughout the sequence. Although the Nosh figures tend to suggest some decline in quantity in the 4th-century groups this is not reflected in the RE figures.

South of Littleport, specifically later 4th-century Horningsea products cannot be separated from the all-site lists for Langdale Hale, Denny Abbey, Cambridge Rowing Lake and Milton East Waste.

On the western fen edge at Godmanchester, London Road (Hancocks 2003) the mid 4th-century Phase 4B group again contained less than 1% of Horningsea wares. Just north of Godmanchester, at Huntingdon, Watersmeet the mid to later 4th-century group from F.2276 *etc* (Peachey 2004) produced 1.4% (Nosh) and 4.7% (Wt) of Horningsea wares, but they were absent from the later 4th-century group from the cemetery ditches.

In the very late Group 2 from the Teversham villa site Horningsea wares only amounted to 14.8% (Nosh) and 20.8% (Wt). This group probably dates to after *c.*AD 390 and the Horningsea grey wares levels here are so low for a site close to the kiln site that it is difficult not to see this material as residual. R021 provides 1.9% (Nosh) and 8.0% (Wt) and R04 some 0.1% (Nosh) and 0.6% (Wt).

The early to mid 4th-century villa estate site at Bottisham Tunbridge Hall (Peachey 2012) provides further data (Table 8.6). In the mid 4th-century Phase 3 Horningsea wares amounted to 85.4% (Nosh) and 82.9% (Wt). In Phase 4 the overall Horningsea figure remains fairly consistent at 82.1% (Nosh) and 77.5% (Wt). The contrast between this group and the nearby one from Group 2 at Teversham Hinton Fields could not be greater. The obvious explanation of the difference seems to be that the Bottisham group closed when Horningsea was still in production, whilst by the time Teversham Group 2 started Horningsea had ceased production. As has been suggested the latter group appears to date after *c.*AD 390, whilst the coin list from Bottisham Tunbridge Hall provides no evidence dating after AD 378 (Crummy 2012).

Horningsea ware levels at Cambridge, Castle Hill were fairly consistently around 40% in later Roman groups, a level well below those at rural sites on the southern fen edge, or further north in the Cam corridor, as discussed in Chapter 8. Examination of Groups 6–9 does not clarify the position with regard to Horningsea supply in the later 4th century. The same is true of assemblages from Kings Hedges, Apollo Way, Foxton and Little Barford.

West of Foxton at Wimpole Lodge (Lucas 1994) the Phase 3 group, dated AD 300–360, contained 30% (RE) of Horningsea wares (Table 8.6). This figure seems to indicate a consistent though moderate decline in

Horningsea supply (from 37% (RE) in Phase 1 and 35% (RE) in Phase 2) before a major fall to 20% (RE) in Phase 4 dated AD 360–400+. This presumably reflects the cessation of production of Horningsea grey ware during this phase, perhaps *c.*AD 370/80. North-west of Wimpole Lodge at Little Paxton (Evans 2011) the mid 4th-century Phase 8 group contained 20.8% (Nosh) and 20.0% (Wt). Quantities of Horningsea wares here seem to have remained at a similar level since the later 3rd century, but there is no clear evidence for the later 4th century.

Discussion: Horningsea ware

Aspects of later Roman Horningsea distribution and the demise of the industry have been discussed in Chapter 3, alongside functional analyses of the Horningsea assemblages and their form composition.

Hadham grey ware (R06)

Distribution

Hadham grey wares were again apparently absent from the Nene Valley sites. They were also absent from Phases 6–8 at Littleport, suggesting they had ceased to be available here in the early 4th century. In contrast, as discussed in previous chapters, Hadham oxidised wares were present at Great Casterton, Chesterton and on several other Nene Valley sites.

On the Cam corridor at West End, Haddenham (Peachey 2005), in the later 3rd- to mid 4th-century Phase 2 group (Table 8.7), Hadham grey ware makes up 1.1% (Nosh) and 1.2% (Wt) compared to 0.1% (Nosh) in the preceding period. The fabric is absent from the all-site Flavian to 4th-century group from Denny Abbey (Millett 1980a).

On the western fen edge at London Road, Godmanchester, Hadham grey ware is absent from the mid 4th-century Phase 4B group as it was from earlier groups. Just north of Godmanchester at Watersmeet, Huntingdon, the mid-later 4th century ditch system F.2276 *etc* produced 2.1% (Nosh) and 3.0% (Wt) of Hadham grey ware, although the fabric was absent from the later 4th-century cemetery group from that site.

On the southern fen edge at Milton East Waste in the all-site Flavian to 4th-century assemblage (Table 8.7), Hadham grey ware amounts to 0.3% (Nosh) and <0.1% (Wt). Similarly at Cambridge Rowing Lake in the 2nd- to 4th-century all-site list Hadham grey ware amounted to 0.5% (Nosh) and <0.1% (Wt).

At Teversham, Group 2 provides an assemblage which dates to the last decades of the Roman period. As discussed earlier, Hadham oxidised wares usually seem to occur in similar proportions to Hadham grey wares in all the earlier groups. Here, however, Hadham oxidised wares amount to 22.5% (Nosh) of the assemblage and the grey ware to merely 1.5% (Nosh). It is likely that by the date of this group Hadham grey ware had ceased production or its production had at least been considerably scaled back. It may be of note that Hadham oxidised ware can be identified in the Great Casterton collection, but that the grey ware cannot.

At Cambridge, Castle Hill, amongst the 3rd- to 4th-century Groups 6–9 (Table 8.7), Group 6 contained 1.6% (MNR) and 1.5% (RE) Hadham grey ware, in Group 7 it was absent, in Group 8, there was 5.8% (MNR) and 5.9% (RE) of the fabric, and in Group 9, some 3.3% (MNR) and 2.9% (RE). To the west of Cambridge in the later 3rd to later 4th century all-site group from Foxton (Lucas 1997) the fabric accounts for 18.8% (Nosh) and 17.3% (Wt). West of this at Wimpole Lodge (Lucas 1994) Hadham grey ware is not listed in the individual phase/fabric summaries, but a figure is given for the site as a whole (dating AD 180–400+) of 4.4% (Nosh) and 3.3% (Wt). Further north-west at Little Paxton the fabric is absent from the mid 4th-century Phase 8 group, although it had been present earlier. A little to the south of this site at Little Barford in the 1st- to mid 4th-century all-site group reported by Lucas (1997), Hadham grey ware forms 7.3% (Nosh) and 4.1% (Wt) of the assemblage (Table 8.7).

Discussion: Hadham grey ware

In the later 4th century the data are limited but a general pattern may be discerned. In the mid 4th-century groups Hadham grey ware seems to have had a similar distribution to that in the early 4th century, although some markets may have been lost, as absence at Little Paxton could suggest. However the important Group 2 assemblage from Teversham Hinton Fields indicates that Hadham grey ware may have ceased production by the latest decades of the 4th century, perhaps being replaced by expanded production of the oxidised wares. Going (*pers. comm.*) accepts that Hadham grey wares may have ceased or reduced production before the end of the industry as a whole.

Nar Valley (R083–R085)

The occurrence of Nar Valley vessels in the study area were discussed in Chapter 8.I. At Littleport in the mid 4th century the fabric amounted to 2.2% (Nosh) and 1.6% (Wt) in Phase 7, and 7.4% (Nosh) and 7.6% (Wt) in the final mid 4th-century group from Phase 8 (Table 8.11). These quantities suggest that the fabric was, if anything, slightly more common in the mid 4th century than earlier here.

Wattisfield grey ware (R33)

There is no good evidence that Wattisfield grey wares were in contemporary use in the study area in this period.

'Other grey wares'

Fig. 9.2

Distribution

'Other grey wares' are found across the study area in varying quantities in this period (Fig. 9.2). In the north of the study area at Orton Hall Farm (Perrin 1996) 'other grey wares' were only 6% of the Period 4 group, dated AD 300/325–375 and this fell to 5% in the Period 5 group dated AD 375–400+. However, this material is at least partly contemporary, unlike the greater quantity of residual Nene Valley grey ware. Perrin notes 'Only a small proportion could be identified as late grey ware of the East Midlands type. Much was of late 1st to early 2nd-century date deriving from early levels disturbed during activities in Periods 4 and 5... The hemispherical flanged bowl, including nos 537, 587 and 615, is a common East Midlands and Lincolnshire type (Todd 1968, fig. 1, no 6; Darling 1977[b], fig. 3, nos 43–8), and was also made at Swanpool (Webster and Booth 1947, fig. 4, type D19–23). It occurred locally at Great Casterton in the late 4th to early 5th-century drier deposit (Corder 1951, fig. 24, no. 3), and at Chesterton. The bowl, some examples of which are flanged, including No. 559, does not occur in large numbers on Nene Valley sites, probably because it would have been in direct competition with the locally made colour-coated varieties' (Perrin 1996, 175). The presence of a little Crambeck grey ware has already been discussed.

North of the Nene Valley at Great Casterton grey wares make up 12.2% (MNR) of the assemblage, again suggesting a northern source for the grey wares supplied to the Nene Valley. A bare majority of these are jars, of which almost one third, a very high proportion, are constricted-necked jars or jugs, *i.e.* liquid containers. These, in particular, have strong parallels in Lincolnshire.

At Chesterton 'other grey wares', which had been absent since the 2nd century, reappear in the mid to late 4th-century groups (Perrin 1999, fig. 43), with 2% coming from the group from Building 9, layer 4–5. Again lid-seated jars with notched cordons on their rims which have strong parallels in Lincolnshire (*cf* Horncastle; Samuels 1983, no. 158) are found (Perrin 1999, nos 381–2).

At Haddon the mid 4th-century Phase 6 group had 6.3% (Wt) and 6.9% (RE) of 'other grey wares', the site ending before the last decades of the 4th century (Table 8.12). In the central fens at Littleport the mid 4th-century Phase 7 group produced 1.1% (Nosh) and 0.7% (Wt) of 'other grey wares', but this rose to 15.1% (Nosh) and 9.1% (Wt) in the mid 4th-century group from Phase 8, with R01 contributing 6.3% (Nosh) and 4.8% (Wt). The Phase 8 collection, which includes votive material which appears to reflect the abandonment of the site, seems to include much more residual material.

On the western fen edge at Godmanchester, London Road (Hancocks 2003) the mid 4th-century group from Phase 4B contained 9% (Nosh) of The Parks grey ware and 46% (Nosh) of slipped and unslipped grey wares. This is a small decline on the preceding phase again but 'other grey wares' remain the majority fabric type here. Grey ware production clearly continued here in the first half of the later 4th century, but it is not clear about the position at the end of the century since the site ended before then. Just north of Godmanchester at Huntingdon, Watersmeet (Peachey 2004) the mid to later 4th-century group from Ditch system F.2276 *etc* contained 27.9% (Nosh) and 18.3% (Wt) of 'other grey wares', while the later 4th-century group from the cemetery ditches contained 39.1% (Nosh) and 39.7% (Wt) 'other grey wares'. Peachey (2004) suggests that some of these grey wares are residual, but since their quantity is considerably larger than in the F.2276 group it does tend to suggest that the Godmanchester industries continued production into the latter part of the 4th century.

'Other grey wares' were present, in varying quantities, at a number of sites with some 4th-century occupation, but there is not enough evidence to determine their significance, if any, in the second half of the century. This is the case at Earith Langdale Hale, Denny Abbey, Cambridge Rowing Lake, Milton East Waste, Bottisham Tunbridge Hall, Cambridge Castle Hill and Foxton. These groups have been discussed in Chapters 7 and 8.

At Teversham Group 2, which dates to the latter part of the late 4th century and beyond, 'other grey wares' are of very minor significance at 0.9% (Nosh) and 0.9% (Wt), of which the largest component is 0.7% (Nosh) of fabric R01. At Wimpole Lodge (Lucas 1994), the Phase 4 assemblage, dated AD 360+ contained 9% (RE) of fabric R11 (Lucas' (1997) fabric 41). This is probably residual in this phase, as in Phase 3, however, given that it was much better represented in Phases 1 and 2. To the north-west at Little Paxton (Evans 2011) in the mid 4th-century Phase 8 group the proportion of 'other grey wares' rises slightly to 40.1% (Nosh) and 29.4% (Wt). Fabric R01 falls very slightly, from levels in the later 3rd- to early 4th-century Phase 7B group, to 20.4% (Nosh) and 14.4% (Wt). Fabric R11 falls to 2.5% (Nosh) and 2.8% (Wt). This suggests that the slight rise in Phase 7B was probably of residual material and tends to confirm the evidence from Wimpole Lodge that R11 was residual by this period. In contrast fabric R12 rises again on Phase 8 to 15.4% (Nosh) and 11.6% (Wt), suggesting that this group is indeed independent of R11. Its distribution suggests an origin to the south, or west, of the study area.

Discussion: 'other grey wares'

In the latter part of the century small amounts of 'other grey wares' still seem to have been introduced to sites in the north of the study area. In the Cam corridor and on the southern fen edge, by contrast, there is nothing that need be contemporary, whilst west of Cambridge, there is again nothing which needs be contemporary in Phase 4 from Wimpole Lodge, although grey wares were probably in contemporary use in the Godmanchester area, and production there may have continued for a time.

Class W, White wares

White wares remain very rare in this period, essentially restricted to a very few later Nene Valley cream ware vessels, usually with orange painted decoration, and a few vessels of Oxfordshire parchment ware.

II. Summary of Pottery Supply of the Later 4th century

Pottery supply in the later 4th century can be divided into two phases. In the first phase, patterns continue much as they had up until the mid 4th century. The second phase saw a radical change and the small number of very late 4th-century groups fall into a pattern seen on sites of this date across the Midlands, Gloucestershire, and from Hampshire to Kent. This was followed by a complete absence of pottery from some time in the early 5th century.

There is little need to repeat the discussion for the early 4th-century supply which characterises the pottery distributions of the first half of the period (Chapter 8.II). In the latter half of this period shell-tempered wares continued to become more common, and would seem to be the main coarse ware replacement for Horningsea wares in the south of the study area and the Cam corridor. Fine wares tended to expand their market share, gaining ground less by competition amongst themselves than by displacing coarse wares, with overall fine ware quantities rising in some areas to unprecedented levels, compared to the rest of the Roman period here. Nene Valley wares expanded their market share, with a very limited type range by the end of the Roman period, but one which, notably, includes closed flagons/jugs with steam vented lids which would seem to be designed for some novel hot beverage. Oxfordshire wares modestly expanded their markets in this period, but do not seem to have generally made much progress. The exception is at Teversham, and possibly Cambridge, where Oxfordshire mortaria seem to have replaced Lower Nene Valley ones in this period. Hadham oxidised ware also expanded in this period, although in part this may be just because the oxidised wares seem to have replaced the grey wares, production of which either ceased or was seriously scaled back. Hadham wares are found across the study area, but they only appear in significant quantities in the south of the area. Here, Hadham wares seem to have competed successfully with Oxfordshire and Nene Valley products in their core market area which includes sites like Foxton and Wimpole Lodge.

Mortarium supply in the latter part of this period seems to have remained relatively stable. Throughout the vast majority of the study area the Lower Nene Valley industry remained dominant, although the minority position of the Oxfordshire industry strengthened slightly. In the south of the study area the Oxfordshire industry seems to have captured supply at Teversham, and just possibly at Cambridge, whilst Hadham seems to have dominated at Foxton.

After a long period of stability grey ware supply in the later 4th century went through major changes. Around *c.*AD 370/380, with few prior indications of any trouble in store, the Horningsea industry ceased production. The evidence from Teversham, in particular, suggests that no grey ware industry replaced Horningsea; instead the latest markets were left to a combination of fine wares and Harrold shell-tempered ware. The reasons for the end of the industry are not clear, but its demise does appear to be sudden. One possible cause might be the

old question of flooding. Lucas' (2006c) re-dating of sites in the Willingham Fen area does not bear out the suggestion of major flooding in the early 3rd century, but does leave open the possibility of a major episode at the end of the Roman period. A further possibility, euphemistically referred to as 'coastal planning blight', is discussed further in Chapter 12.XII. Given the demonstrated role of the Cam as a trading and transport corridor its use for coastal raiding would be a possibility.

The only grey ware industry which survived in the region was in the vicinity of Godmanchester, which seems to have lasted until the end of the century although it may have reduced its scale of production slightly. In the north of the study area Lincolnshire grey wares also served the Nene and Welland valleys to a minor extent. In the south of the study area Hadham grey wares had probably ceased or scaled back production by the second half of this period.

Thus in the last decade of the 4th century and perhaps the first decades of the 5th, fine wares became much more common than in any preceding period, and in many areas local grey wares had ceased to be available, being replaced by Harrod (or other sources of) shell-tempered wares. These developments are consistent with a much wider pattern of the latest pottery use in the Midlands, Gloucestershire and the south.