

Chapter 7. Pottery Distribution in the Study Area in the 3rd Century

I. Assemblage Characterisation and Fabric Distributions

Introduction

Almost all the sites in the study contained assemblages of 3rd-century material. In the north, most sites in the Nene Valley and western fen edge contained significant assemblages of this period: Maxey (Gurney 1985), Orton Hall Farm (Perrin 1996), Haddon (Rollo 1994a; J. Evans 2003), Tort Hill East and West (Hancocks 1998; JE), Norman Cross (Hancocks *et al.* 1998) and Chesterton (Perrin 1999). In the central fenland and Ouse valley the sites at Stonea (Cameron 1996), Littleport, Camel Road (JE), Haddenham Shrine (Lucas 2006a), West End, Haddenham (Peachey 2005), Langwood Farm (C. Evans 2003a) and Langdale Hale (Monteil forthcoming) all had assemblages of this period. The sites at Godmanchester, London Road (Hancocks 2003), High Fen and Denny Abbey (Millett 1980a) all had 3rd-century assemblages. In the south this period was well represented at Cambridge, Castle Hill (Hull and Pullinger 1999; JE) and the nearby sites at Newmarket Road (JE), Bottisham Tunbridge Lane (JE) and Teversham (Pullinger and White 1991; JE). The Old Tillage at Waterbeach (JE), the Cambridge Rowing Lake (JE) and Milton East Waste (JE) all produced material of this date. To the west the sites at Foxton (Lucas 1997), Little Paxton (Jones 2011), Little Barford (Lucas 1997) and Wimpole Lodge (Lucas 1994) contained sizeable 3rd-century assemblages.

Class B, Black burnished wares

Fig. 7.1; Tables 7.1–3

BB1 (B01)

Table 7.1 shows the presence of BB1 on 3rd century (and later) sites, the data being mapped in Fig. 7.1. In the Nene Valley BB1 is absent from Maxey, but at Orton Hall Farm (Perrin 1996, 142) it is noted as present in Period 2 (AD 175–225/250). Perrin further notes that in Period 3 (AD 225/250–300/325) ‘vessels in BB1, BB2 or similar wares account for around 1% of the Period 3 pottery. The BB1 forms include cooking pots, flanged bowls, for example No. 320, and plain rimmed dishes like Nos 286 and 390’ (Perrin 1996, 154). At Haddon (J. Evans 2003) BB1 represents a mere 0.1% of all the stratified pottery by count. Previously (Rollo 1994a) it was not recorded before the 4th-century Phase 6, where it appeared at 0.3% by weight, but the 1999 excavations showed that it first appears in Phase 4 (later 2nd–mid 3rd century) at 0.2%, and it is present again in Phase 5. At Tort Hill West (Hancocks *et al.* 1998) BB1 occurs at a level of 0.3% by count in the whole site assemblage, whilst Phase 3B (3rd to 4th century) contained 3.2% by count.

At Tort Hill East BB1 is present, amounting to 0.4% by count of the total site assemblage and 0.3% by count in Phase 2b (mid 3rd to early 4th century). At Norman Cross BB1 amounts to 0.9% by count of the total site assemblage (later 2nd to later 3rd century) and 1.0% by count of the Phase 2 (3rd century) group. BB1 is absent from the small 2nd- to 4th-century group from Vinegar Hill (Ellis *et al.* 1998).

In the central fens BB1 is probably present at Stonea Grange (see Chapter 6.I). However, it is absent from the 3rd-century phases at Littleport, and indeed the 4th-century ones, although it is present in unstratified contexts, giving an overall site occurrence by count of 0.04%. BB1 is also absent from the Haddenham Shrine site assemblage dated to the 3rd to earlier 4th centuries and from West End, Haddenham (Peachey 2005). However, it does appear in the fieldwalked collection from Langwood Farm, Chatteris, at 0.3% by RE.

BB1 is absent again from the Flavian to later 3rd-century collection from High Fen, and also from the Flavian to later 4th-century collection from Denny Abbey. On the western fen edge BB1 is absent from the later 2nd- to mid 3rd-century group at London Road, Godmanchester, but appears at the level of 1% by count in the later 3rd- to early 4th-century assemblage from Phase 4a there.

In the vicinity of Cambridge the fabric does occur in the later 2nd- to mid 3rd-century Group 3 from Teversham at 0.6% (Nosh) and 0.4% (Wt). It is absent from the all-site 2nd- to 4th-century list from the Cambridge Rowing Lake site, and is barely present at the Horningsea kiln site at Waterbeach Old Tillage at

0.02% (Nosh), and is absent from the Antonine Phase 1 there. In Phase 3a, 3rd to early 4th century, it is present, but in minimal quantities.

BB1 is but slightly commoner on the Flavian to 4th-century all-site list from Milton East Waste at 0.1% (Nosh), but this does not demonstrate its presence in the Hadrianic–Antonine period. At Cambridge, Castle Hill BB1 is consistently present in the 3rd- to 4th-century groups 6–9 at 0.2%, 0.4%, 0.1% and 0.7% by count respectively. This is something of an increase on its 2nd-century presence and the fabric does not seem to have appeared here before the Antonine period (see Chapter 6.I).

West of Cambridge the overall site collection from Foxton, dated largely AD 270–400, produced 0.2% BB1 by count. Further west at Wimpole Lodge BB1 is absent from Phase I dated AD 180–240 and amounts to 1% (MNR) of the Phase II assemblage dated AD 240–300. West again, BB1 is absent from the 3rd-century Little Paxton Phase 6, but first appears there in Phase 7A, also of 3rd-century date, at 0.5% by count, and again in the later 3rd to early 4th-century Phase 7B also at 0.5% by count. A little to the south of Little Paxton at Little Barford BB1 appears in the overall site collection, dated from the 1st to mid 4th centuries, at 0.7% by count.

Turning to the form types represented in the assemblages, at Cambridge, Castle Hill the BB1 seems to be predominantly of 3rd- to mid 4th-century date. The earliest piece is a single flange rimmed bowl of Hadrianic–Antonine date (Fig. App. 3.2, B01.3). There are no 2nd-century type groove rimmed dishes, nor any early jars. There are eight simple rimmed dishes (B01.5D1.1), almost certainly of 3rd- to mid 4th-century date (although the type does occur rarely in the 2nd century), one jar (B01.2) of mid 3rd- to mid 4th-century date and five developed beaded and flanged bowls (B01.4), of later 3rd- to 4th-century date. Thus the stratified material provides no clear evidence of material arriving before the Antonine period and, like the date distribution of the forms, suggests that most pieces are of 3rd- to 4th-century date.

A functional analysis of the BB1 from the Castle Hill groups shows that jars are very rare, with a single example, while table wares (bowls and dishes) make up the vast majority of the small group, although which predominates depends on the method of quantification. This functional breakdown is very unusual for BB1. Williams (1977, table 3) shows figures for the Antonine Wall where jars outnumber bowls and dishes by 324/374 to 279 and in northern England the ratio is about 1:1 in 15 groups from 3rd- and 4th-century sites across the region, 99 jars to 101 dishes and bowls (Evans 1985). Normally BB1 jars seem to have been attractive as cooking vessels, as the evidence of sooting on northern vessels demonstrates (Evans 1993, fig. 14). In Cambridgeshire shell-gritted wares seem to have fulfilled this function well, and presumably at much lower cost, so that BB1 dishes and bowls, functions not well represented in shell-gritted wares, are the dominant forms in the BB1 assemblages.

This pattern is fairly typical of an assemblage on the eastern edge of the BB1 range (see below). Here jars form a small proportion of the assemblage because of local competition for cooking pots. However, the BB1 table wares, which are also in the same fabric, with a high resistance to thermal shock, like the jars, tended not to face the same level of local competition, as few of the local kilns producing cooking pots produced quantities of tableware forms. BB1 table ware forms at Castle Hill tended to replace BB2 vessels of similar type after the latter ceased to be produced (see Chapter 10, Fig. 10.28).

Similarly at Orton Hall Farm in Period 4 (4th century) BB1 vessels included residual, both early to mid 3rd-century incipient beaded and flanged bowls (Perrin 1996, nos 468–9), and in Period 5 (later 4th to 5th century) the (residual) illustrated forms include an oval ‘fish dish’ (Perrin 1996, no. 564), a developed beaded and flanged bowl (Perrin 1996, no. 532), and a simple rimmed dish (Perrin 1996, no. 594), again all table wares.

At Sawtry (Hancocks *et al.* 1998, app. 3), Tort Hill West produced a developed beaded and flanged bowl and Tort Hill East three simple rimmed dishes (probably 3rd to mid 4th century), a developed beaded and flanged bowl (later 3rd to mid 4th century) and two flange rimmed dishes or bowls (Hadrianic–Antonine). Again these are all table ware forms.

At Godmanchester, London Road, Hancocks (2003, 213–4, app. C1) lists the BB1 forms represented as nine dishes, three bowls and two jars, again a table ware dominated assemblage. Similarly at Wimpole Lodge Lucas (1994, 49) notes that all the forms present are bowls or dishes. Illustrated forms include a Hadrianic–Antonine flange rimmed bowl, a 3rd- to 4th-century simple rimmed dish (Lucas 1994, nos 23–24) and a later 3rd- to mid 4th-century developed beaded and flanged bowl (Lucas 1994, no. 70). At Little Barford no quantified information is available on the forms occurring in BB1, but BB1 dishes are mentioned from Pits 38 and 206.

At Little Paxton the only forms represented are two simple rimmed dishes of 3rd- to mid 4th-century date. West of the study area a similar functional composition is seen in the Milton Keynes region, where the forms represented in the published groups comprise two jars, four dishes and two bowls (Marney 1989, fig. 48) *i.e.* 25% jars and 75% dishes and bowls. At Towcester, Alchester Road (Brown and Woodfield 1983, 79) table

wares were again dominant. Table 7.20 shows a functional analysis for the whole BB1 assemblage excluding Phase 2 and for Phase 2 separately. It is clear that table wares dominate the BB1 assemblage, but whilst there is a third of jars in the Phase 2 assemblage, in all other periods they are insignificant. As in Bedfordshire, Buckinghamshire, Northamptonshire and Cambridgeshire table wares are dominant here, the only partial exceptions being the assemblages from Phase 2 where BB1 levels are unusually high and the presence of military involvement in the construction of the defences has been suggested (a situation mirrored at Silchester; *e.g.* Fulford 1984, Group 2.3).

Fig. 7.1, compared with Fig. 6.3, shows a considerable extension of the eastern limits of BB1 distribution in the course of the 3rd century, and several of the site sequences suggest that this development principally took place in the later 3rd century. To the west of the study area, on rural sites in the Milton Keynes area (Fig. 7.2), BB1 first appeared in the later 2nd century. It then peaked in the earlier 3rd century, declined in the mid 3rd and rose again in the later 3rd to early 4th century, before disappearing by the mid 4th century.

At Towcester BB1 levels appear to have declined in the 3rd to 4th centuries (Brown and Woodfield 1983, 79), but this is because of the anomalously high levels there in the 1st–2nd centuries, and levels actually remain stable at around 3.5%. Fig. 7.3 shows BB1 occurrence by phase at Alchester (Booth *et al.* 2001, app. 4). Here BB1 levels rose consistently to peak in the mid 4th century. A similar picture in terms of BB1 supply to Alchester can be seen at the small town of Asthall (Booth 1997), a little to the west of Alchester (Fig. 7.4), but rather than a gradual rise, as in Cambridgeshire there is a step change in the 3rd century. This change, seen across much of the eastern distribution edge here, is strongly mirrored in the marketing of BB1 in northern England (Evans 1985). There levels on sites in the 2nd century are usually well below 20%, but by the later 3rd century many sites have BB1 levels of around 40% or more (Evans 1985; Evans 2004). It suggests some improvement in the industry, perhaps in production methods, which enabled it to compete even more effectively in distant markets.

In discussing BB1, competition does seem to be quite the appropriate term. Unlike other coarse wares (Evans 2005) there is evidence of the urban marketing of BB1. In Northamptonshire levels of BB1 supply run at between 0 and 4% on rural sites (Griffiths 1989, fig. 2), with higher values only occurring in villas (Great Weldon and Piddington, 20.9% and 10.5% respectively, by count) and the enigmatic site at Ringstead, 21%, and on urban sites at Towcester (8.3% and 7.6%). These data suggest evidence of both urban marketing of BB1 in the higher levels of the fabric from Towcester (Griffiths 1989), and of its disproportionate acquisition at a number of villa sites.

Evidence of the urban marketing of BB1 is found in Warwickshire (*cf* Evans 1996a; 1999; 2005), with the much stronger representation of the fabric at Alcester than among of the neighbouring rural sites in the Arrow Valley. Evidence for south-western Britain has been discussed by Allen and Fulford (1996). In terms of this study the evidence on the eastern edge of the BB1 distribution is equivocal. Some of the higher BB1 levels come from the small town sites at Godmanchester and Wimpole Lodge, but BB1 is virtually absent from Littleport and its levels at Cambridge do not exceed those of most of the rural sites.

BB2 (B11)

Table 7.3 shows the distribution of BB2 in the study area on sites of this period and in whole-site lists. Once more BB2 is absent from most of the Nene Valley sites. The exception is Orton Hall Farm where Perrin notes its presence in Period 3 (AD225/250–AD300/325) stating that ‘BB2 is only represented by bowls and dishes, including nos 321–2’ (Perrin 1996, 154). It is absent from the western fen edge sites at Sawtry, Haddon and Norman Cross and from London Road, Godmanchester.

Again, however, the situation is different in the central fens, where BB2 is consistently present through every phase at Littleport at levels of around 3–5%. This continues in the 4th-century deposits here, suggesting considerable disturbance of earlier material throughout the sequence. The fabric is also present on some other central fenland sites. It might be present at Stonea, but the material is more probably Horningsea (Chapter 6.I). It is present at 0.9% of the total site assemblage at Earith, Langdale Hale (Monteil forthcoming). It is, however, absent from the Haddenham Shrine and Langwood Farm, Chatteris, High Fen and Denny Abbey. However, it does appear in ceramic Phase 1, of later 2nd- to mid 3rd-century date at West End, Haddenham (Peachey 2005) close to the Cam.

On the western fen edge BB2 remains absent from Godmanchester, London Road (Hancocks 2003). In the Cambridge region it is present at Bottisham Tunbridge Lane in Phase 5 as noted above, but absent from Newmarket Road, Teversham Group 3, Waterbeach Old Tillage, Cambridge Rowing Lake and Milton East Waste. At Cambridge, Castle Hill BB2 is present at 3% (MNR) in the late Antonine to early 3rd-century Group 5 from the shrine, as discussed above, but it only appears at 1.2% and 1.3% in the 3rd- to 4th-century Groups 6 and 7 respectively, and is absent from the similarly dated Groups 8 and 9. To the west BB2 makes

up 1.2% (by count) of the predominantly later 3rd- to 4th-century group from Foxton (Lucas 1997) and it first appears at Wimpole Lodge (Lucas 1994) in Period II (AD 240–300) at 2%. Further west it is absent from Little Paxton and the material claimed from Little Barford (Lucas 1997) is of dubious attribution.

There is no real difference between the distribution of BB2 in the early 3rd century and in the Antonine period that can be ascertained from the evidence here. The thin scatter of material in the south-west of the study area and at Cambridge is essentially the edge of the Essex distribution of BB2. The only unusual feature is the material at Littleport, and with it a small scatter in the central fenland. The relatively high levels at Littleport would seem to reflect the fact that this site was a small town, located on the River Cam, with BB2 being shipped down the river from Cambridge or Great Chesterford, or up river from the coast.

Functional analysis of the BB2 vessels from the Cambridge Castle Hill groups shows that as usual table wares, here mainly bowls (1% MNR, 88% RE), are predominant. The very high levels of bowls here and the absence of jars, much more so than on the northern frontier, does suggest that, as with BB1, local competition in cooking pots has made the jars unsaleable, but that table wares, less commonly produced in local grey wares, still found a niche. Functional analysis of the Littleport BB2 vessels follows a very similar pattern to the Cambridge ones, with 95% bowls, 5% dishes and no jars.

At Cambridge Castle Hill, BB2 (fabric B11) is more common than BB1 in the groups examined, with 32 rim sherds, compared to the 15 in BB1, as might be expected given the much greater proximity of the kilns; in view of this, in many ways the low levels of BB2 are more remarkable. In terms of forms there are four examples of the Antonine bead rimmed bowl (Fig. App. 3.2, B11.1), nine examples of the Antonine straight walled groove rimmed bowl (Fig. App. 3.2, B11.4), a single example of an Antonine slightly bead rimmed dish (Fig. App. 3.2, B11.5), sixteen examples of the early 3rd-century undercut bead rimmed bowl (B11.2) and a single simple rimmed dish (Fig. App. 3.2, B11.3) of mid 2nd- to mid 3rd-century date. Thus the forms suggest that roughly equal quantities of the material reached the site in the later 2nd and earlier 3rd centuries. This is confirmed in Fig. 10.28 which shows the date distribution of the BB1 and BB2 from the groups examined by RE.

At Littleport there were nine examples of the Antonine bead rimmed bowl (Fig. App. 3.2, B11.1), a single example of the Antonine straight-walled groove-rimmed bowl (Fig. App. 3.2, B11.4), and nine examples of the early 3rd-century undercut bead rimmed bowl (Fig. App. 3.2, B11.2), these again giving an even balance between later 2nd- and early 3rd-century types.

Class C, Shell-tempered wares

Fig. 7.5; Table 7.4

Distribution

Table 7.4 shows the incidence of shell-tempered wares in 3rd-century groups and Fig. 7.5 maps them. In the north of the study area shell-tempered wares remained important; on some sites where there is a sequence their levels fell when compared with the Hadrianic–Antonine period (Chapter 6.I), but on others they started to increase again.

At Maxey overall shell-tempered wares fell to 26% (MNR), all RSG, in the early to mid 3rd-century group from F.161 *etc.* By the later 3rd- to early 4th-century group from F.218, levels had fallen further to just 17% (MNR, RSG and Bourne Shelly). At Chesterton, the earlier 3rd-century group from the courtyard layers 3–7, produced a figure of 11% (RE), a little lower than the preceding groups. As noted above levels here are low because the site is in the middle of the Nene Valley pottery production area, which was not producing shell-tempered wares. The figures do, however, suggest that the town had little role in marketing the shell-tempered wares found in the area. At Orton Hall Farm shell-tempered wares amounted to 32% (Nosh) of the Period 2 group (AD 175–225/250) pottery, falling slightly to 30% of the Period 3 (AD 225/250–300/325) group. All of this material was of RSG.

At Haddon the Phase 4 (later 2nd to mid 3rd century) assemblage contained 32.3% shell-tempered wares. However, some of these may be residual as around 26% are classed as LIASG with 3.1% TSG and only 3.0% RSG. Phase 4 (2nd century) in the 1989 Haddon excavations produced a very similar 30.8% (Wt) shell-tempered wares, with LIASG only providing 2.6% (Wt), TSG some 5.7% (Wt), and RSG, 22.3%. Phase 5/6 (3rd–early 4th century) produced some 42.7% (Wt) shell-tempered wares, although the RE figure was only 17.9%. This sequence also lacks residual material, with only 2.1% (Wt) classed as LIASG, 2.3% as TSG and 37.7% as RSG.

At Tort Hill East Phase 2A (later 2nd to early 3rd century) shell-tempered wares made up 21.2% of the assemblage. In Phase 2B (mid 3rd to early 4th century) their proportion rises slightly to 23.3% (Nosh). In

Phase 2B just 6% of these sherds are in wheelmade fabrics C11 and C15, the remaining 18% being in handmade fabrics C12–14 (Hancocks *et al.* 1998). At Norman Cross levels of shell-tempered wares fall in Phase 2 (3rd century or later) to 43.8% (Nosh). Again only 6% of this was wheelmade (Hancocks *et al.* 1998, fabrics C11 and C15), with 38% being handmade (Hancocks *et al.* 1998, fabrics C12, C13 and C14).

Shell-tempered wares remained the dominant cooking pot fabric class across the Nene Valley area in this period. Their decline as a proportion of the assemblage, compared to the previous period, continued on some sites but ceased on others. Since the reason for the decline in the Hadrianic–Antonine period was seen as a further diversification of assemblages as a whole – not competition for another source of cooking and storage vessels, but rather an expansion of the range of activities for which Roman ceramics were used – it follows that this process was coming to an end in the 3rd century.

In the central fenland at Stonea the representation of shell-tempered wares rose to 30.6% (Wt) in Period III/IV, which must date to the later Antonine period, perhaps extending into the 3rd century. Levels then fell back to 21.4% (Wt) in Period IV, and remained around this level at 23.2% (Wt) in Period IV/V. This author (JE) regards Period IV as 3rd century and Period IV/V as perhaps later 3rd century. Jackson and Potter (1996) claimed that Period IV dated AD 220–400, but there is nothing in the published pottery from the excavations that need date beyond the end of the 3rd century, and not much that dates to the second half of the 3rd century. The same is true of the coins and glassware from the excavations (as opposed to the wider fieldwalked and metal-detected material).

At Littleport, Phases 3–5 provide a sequence of 3rd-century groups on the site. Phase 3 contained 10.1% (Nosh) shell-tempered wares, a major fall on the 20.0% in Phase 1. This trend continued throughout the 3rd century, with levels falling to 3.5% by the mid to later 3rd-century Phase 5. This reduction would seem to relate to competition from Horningsea grey wares which rose in significance in the site's supply in the same period. In Phase 3 some 7.0% of the 10.1% was in wheelmade fabrics (C11 and C12) with 2.8% in the handmade C13 and C15.

The all-site assemblage from Earith, Langdale Hale, (Flavian to 4th century) in the Ouse corridor has 25% (Nosh) shell-tempered wares. South-east of Langdale Hale at the Haddenham Shrine the all-site group of 3rd- to early 4th-century date contained 18.1% (Nosh) of shell-tempered wares, a lower but similar level. Lucas (2006a, table 7.26) reports that these are from Harrold, but provides no evidence for this statement. The forms present and whether the material was rilled is not reported, but the only two illustrated jars (Lucas 2006a, fig. 7.38, nos 20 and 21) are not rilled. A kiln producing shell-tempered ware is known from Earith, not far distant from Haddenham. East and a little north of the Haddenham Shrine are two groups from Haddenham West End (Peachey 2005) within the Cam corridor. Here in the Phase 1 group of late 2nd- to mid 3rd-century date shell-tempered wares are of relatively minor significance at 5.7% (Nosh) and 4.4% (RE). These figures rose to 12.0% (Nosh) and 18.0% (RE) in the later 3rd- to later 4th-century Phase 2 group. This, however, is probably irrelevant for this period, as it seems likely that much of this rise took place in the later 4th century.

In the Cam corridor, quantities of shell-tempered wares at High Fen (Flavian to later 3rd century), and Denny Abbey site (Flavian to later 4th century) at 1.7% and 3.9% (Nosh) respectively. Competition from the Horningsea industry in the 3rd century seems to have largely driven shell-tempered wares out of the Cam corridor, but there is no evidence of this from the rather poor data relating to the Ouse. On the fen edge at Godmanchester, London Road, shell-tempered ware levels are modest in Phase 3 (later 2nd to mid 3rd century), at 7% (Nosh) but rise slightly again to 8% in the later 3rd- to early 4th-century Phase 4A, showing a continuous rise from the 2nd century.

In the vicinity of Cambridge on the southern fen edge at Teversham, in Group 3, shell-tempered wares represent only 6.5% (Nosh) of the assemblage of Antonine to early 3rd-century date. However, this does represent a modest increase on the early 2nd-century group 4. Shell-tempered wares of Antonine to early 3rd century at Bottisham Tunbridge Lane have been discussed in Chapter 6 (above).

Shell-tempered wares are unsurprisingly at a low level at the Horningsea production site at Waterbeach, Old Tillage. In the Antonine to mid 4th-century group there they comprise 2.6% (Nosh) and 4.5% (RE), with most (some 2.2% Nosh) being in the reduced wheelmade fabric, C12. Even this small quantity of material is predominantly of later Roman origin, and the Antonine Phase 1 group contains only fabric C12 at 0.1% (Nosh) and 0.1% (Wt), compared to 1.8% (Nosh) and 1.0% (Wt) in the 3rd- to early 4th-century Phase 3a. Shell-tempered ware levels are even lower in the nearby 2nd- to 4th-century all-site list from the Cambridge Rowing Lake site, at 0.9% (Nosh) and 1.0% (RE), with all of this being in C12. At the Milton East Waste site the all-site list of 1st- to 4th-century date contains rather more shell-tempered wares, although the relatively strong later 4th-century emphasis here may account for this. Shell-tempered wares comprise 6.1% (Nosh) and

7.1% (RE) of this assemblage with the wheelmade fabrics C11 and C12 comprising 5.3% (Nosh). At Newmarket Road, Cambridge the early 2nd- to early 3rd-century all-site figure is 0.2% (Nosh).

At Cambridge, Castle Hill, shell-tempered wares are present at a level of 4.3% (Nosh) in Group 4 (Antonine to early 3rd century), and 1.2% (Nosh) in Group 5, the shrine, (late Antonine to early 3rd century). These are followed by Groups 6–9 of 3rd- to 4th-century date range. Shell-tempered wares are present in all of them, 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, but the rise might well have taken place in the 4th century rather than the 3rd.

West of Cambridge, at Foxton (Lucas 1997) the largely later 3rd- to 4th-century all-site group produced 20.2% (Nosh) shell-tempered wares. Here there was a small element of sandy shell-tempered ware, 2.9% (Nosh). This is probably of fairly local origin, given that it does not appear significantly at other sites in the study. No forms are represented in this group, however.

At Wimpole Lodge, shell-tempered wares appeared in Phase I, dated AD 180–240 (Lucas 1994) at a level of 22% (RE). However, in Phase II, dated AD 240–300 this fell to 18% (RE). Further west at Little Paxton shell-tempered wares comprised 21.2% (Nosh) in Phase 6 (late Antonine to mid 3rd century). This fell to 16.7% (Nosh) in the 3rd-century Phase 7A and to 14.4% (Nosh) in the later 3rd- to early 4th-century Phase 7B. In Phase 6 some 12.5% of these sherds were wheelmade and 8.6% handmade and in Phase 7A some 13.8% were wheelmade and 2.9% handmade, the latter being mainly storage jars.

South of Little Paxton shell-tempered ware levels are high, at 31.0% (Nosh), at Little Barford (1st to mid 4th century). North-west of Little Barford, and at a similar distance from the Harrold kilns, and more or less west of Godmanchester at a similar distance again, was the small town of Irchester. Here a few data can be gleaned for the 3rd to 4th centuries (Aird 1984), shell-tempered wares representing over 50% of the assemblage by weight and about 40% by MNR.

Forms

Perrin observes the typological changes in the shell-tempered wares at Orton Hall Farm; ‘Nos 250–7 show the main characteristics of later 3rd century RSG jars. All the vessels have a curved neck and a rounded shoulder with simple rims, many of which are slightly undercut. Most of the vessels have rilled external surfaces... nos 290 and 291 belong to a variety of jar not seen in either Periods 1 and 2, and is, therefore, a 3rd-century type’ (Perrin 1996, 152). These are the necked jars with triangularly-sectioned rims of Class K and AA at the Sawtry sites (Hancocks *et al.* 1998) which became increasingly common in the later 3rd to 4th centuries, but which first appeared at Harrold in the later 2nd-century Phase 3, and on some of the sites in this study in that period (Chapter 6.I). Other types such as the bifid rimmed jars and necked and beaded rimmed jars also appear to continue from the preceding period. A similar range of forms is seen at Stonea where, as noted above, the collection probably did not outlive the end of the 3rd century. The rise of the triangularly-sectioned rimmed necked jar in this period seems to see a harmonisation of form assemblage across the region.

At Harrold the later 3rd-century Phase 4 saw production of everted rising rimmed jars, the commonest type, and the triangularly-sectioned rimmed jars of Class K and AA, reeded rimmed bowls, which started production there in the later 2nd century. Some of these started to devolve into the distinctive form of the later Harrold flange rimmed bowls (*cf* Brown 1994, fig. 32, no. 211).

Kilns and Sources

The overall distribution of the shell-tempered wares in this period (Fig. 7.5) shows that they occurred with considerable frequency on the Nene and Welland Valley sites and in the lower Ouse corridor, but not at Godmanchester. On some sites the gradual fall in shell-tempered ware levels evident in this area since the 1st century seems to have been coming to an end. Low levels of these wares are found in the Cam corridor and in south Cambridgeshire. In the north of the Cam corridor at Littleport shell-tempered wares seem to have been displaced by direct competition from Horningsea grey wares.

Shell-tempered ware levels rise strongly to the west of Cambridge in Bedfordshire, nearer to the kilns at Harrold (Brown 1994). Nevertheless the distributions again tend to suggest production in the Nene/lower Ouse corridor area in north Cambridgeshire as well as at Harrold. The figures from Cambridge and the sites around it suggest that the Harrold kilns were making steady progress in extending their share of the market here, but they seem to be falling back nearer to the kiln site in Bedfordshire.

Sources of shell-tempered wares in this period may be similar to those of the preceding one. However, it may be that some of the Nene Valley and northern sources are reduced in importance and perhaps cease

production altogether. The Bourne kilns do not seem to outlive the century, and fairly distinctive types produced at Harrold begin to be common across the region towards the end of the period.

Class F, Fine wares

Figs 7.6-7.11; Tables 7.5-7.12

Nene Valley colour-coated ware (F01/F02)

Distribution

Table 7.5 shows the distribution of Nene Valley colour-coated wares in 3rd century and all-site groups in the study area. Figure 7.6 maps the occurrence of Nene Valley colour-coated wares in the study area. In the north of the area at Maxey in the early 3rd-century group from F.161 *etc.* (Gurney 1985) Nene Valley colour-coated ware had risen markedly to 22% (MNR) and the later 3rd- to early 4th-century group from F.218 saw a further rise to 31%. At Orton Hall Farm (Perrin 1996) Nene Valley colour-coated ware amounted to 7% (Nosh) of the group from Period 2 (AD 175–225/250), and rose to a considerable 23% in the Period 3 group (AD 225/250–300/325). The increasing production at Chesterton (Perrin 1999) is shown by a further rise in levels from 23% (RE) in the courtyard layers 8–17 (AD 160–200) group, to 30% (RE) in courtyard layers 3–7 (AD 200–250).

South of *Durobrivae* at Haddon (J. Evans 2003) the Phase 4 (later 2nd–mid 3rd century) assemblage produced 13.6% (Nosh) of the fabric. Further south at Sawtry (Hancocks *et al.* 1998), Tort Hill East, Phase 2A (later 2nd to early 3rd century) group produced 4.5% (Nosh) and 1.5% (Wt), whilst Phase 2B (mid 3rd to early 4th century) recorded 18.6% (Nosh) and 7.7% (Wt). At both these sites levels rose compared to the 2nd century and within the 3rd. Similarly the 3rd century (or later) group from Norman Cross Phase 2 produced 23.2% (Nosh) and 10.5% (Wt).

In the central fenland at Stonea (Cameron 1996) Nene Valley colour-coated ware is present in the Phase III/IV group (Antonine-early 3rd century) at 5.7% (Wt). This rises to 10.5% (Wt) in the Phase IV group (3rd century) and remains at 10.0% in the Phase IV/V group (later 3rd century). Similarly at Littleport it provided 0.2% (Nosh) and 0.1% (Wt) of the early to mid 3rd-century Phase 3 group, rising to 5.1% (Nosh) and 8.2% (Wt) of the Phase 4 assemblage (mid 3rd century) before dropping slightly to 3.9% (Nosh) and 1.5% (Wt) in the Phase 5 group (mid to later 3rd century).

There are no phase data for Nene Valley colour-coated ware at Earith, Langdale Hale (Monteil forthcoming), of Flavian to 4th-century date, in the Ouse corridor, the overall site level being 10.3% (Nosh). Similarly the overall (Flavian to 4th century) site level at Chatteris, Langwood Farm (C. Evans 2003a), also in the Ouse corridor, is 11.4% (RE). The all-site list from the Haddenham Shrine (Lucas 2006a), dated to the 3rd to early 4th centuries, has levels of 9.0% (Nosh) and 9.1% (Wt). North-east of here, in the Cam corridor, levels are rather lower at Haddenham, West End (Peachey 2005), where Nene Valley colour-coated ware amounted to 4.4% (Nosh) and 7.7% (RE) in the Phase 1 assemblage, of later 2nd- to mid 3rd-century date. This rose to 5.4% (Nosh) and 17.5% (RE) in the later 3rd- to 4th-century Phase 2 group. Quantities are much lower in the all-site lists from High Fen of Flavian to 3rd-century date, at 1.8% (Nosh), and Denny Abbey, of Flavian to 4th-century date, at 4.6% (Nosh) (Millett 1980a). On the fen edge at Godmanchester, London Road, the Phase 3 group of later 2nd- to mid 3rd-century date produced 6% (Nosh), rising to 9% (Nosh) in the later 3rd- to early 4th-century Phase 4A (Hancocks 2003).

In the Cambridge area, on the southern fen edge at Teversham the Antonine to early 3rd-century Group 3 from the villa had 8.3% (Nosh) and 9.9% (RE) of Nene Valley colour-coated ware. Other sites produced rather less. At the Horningsea production site of Waterbeach Old Tillage, the Antonine to mid 4th-century all-site group yielded 3.8% (Nosh) and 3.9% (RE). This low level does not sit well with the putative role of the site as a trans-shipment point for cargoes coming down the canal and Ouse from the Nene Valley area. The figures from the 3rd- to early 4th-century Phase 3a offer little more encouragement for this view with just 5.3% (Nosh) and 2.7% (Wt). The 2nd- to 4th-century all-site group from the nearby Cambridge Rowing Lake site probably produced less with 1.2% (Nosh) and 1.4% (Wt) of Nene Valley colour-coated ware.

The other local site at Milton East Waste, with a 1st- to 4th-century all-site group, also produced little Nene Valley colour-coated ware, with 3.2% (Nosh) and 2.1% (Wt). The all-site levels from the Newmarket Road group, of early 2nd- to early 3rd-century date, were very low at 0.7% (Nosh). This probably relates to the function of this site, which seems to have been something less than a basic level rural site, perhaps a seasonally or occasionally occupied structure. There are two groups of Antonine to early 3rd-century date from Cambridge, Castle Hill; Group 4 has Nene Valley ware amounting to 11.5% (RE) and Group 5, the shrine, has 1.4% (RE). The low levels from the shrine group are probably explained by its considerable ritual

elements, not representative of a 'normal' use assemblage. Thereafter there are four groups (6–9) of 3rd- to 4th-century date, all extending quite well into the 4th century, although whether their 3rd-century element is residual or not is not very clear. These produced Nene Valley levels of 14.6%, 14.3%, 1.4% and 14.0% (RE). Group 8 (at 1.4%) had higher levels of Oxfordshire and Hadham fine wares than the others.

South of Cambridge a group dating to the first half of the 3rd century from Great Chesterford (Trench VI, pit 13, fill 32) had 6.8% (Wt) Nene Valley colour-coated ware (Martin 2011). Between Cambridge and Great Chesterford the later 3rd- to 4th-century all-site assemblage from Foxton produced 5.8% (Nosh) and 5.5% (Wt) of Nene Valley colour-coated ware, whilst at Wimpole Lodge the Phase II group (AD 240–300) produced 4% (RE) of the fabric, the same level as in Phase I. At Little Paxton, further west, there is a sequence of groups, Phase 6 (3rd century), Phase 7A (3rd century), and Phase 7B (later 3rd to early 4th century), producing respectively 6.5%, 14.1% and 12.6% (Nosh) and 4.8%, 12.2%, and 11.7% (Wt), so that from perhaps the mid 3rd century the site returned consistently to the high levels of consumption of Nene Valley colour-coated ware that it achieved in the later 2nd century. South of Little Paxton the only data from Little Barford 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.

It is clear from the above survey that levels of Nene Valley colour-coated wares on sites in the study area were generally higher than those in the later 2nd century, and on sites where there is a 3rd-century sequence quantities of Nene Valley products tend to rise in the course of the century. The highest levels come from Chesterton, adjacent to the production sites, at 30% in the early 3rd century. A number of sites in the Nene Valley have quantities well over 10% and some over 20%. There is then a slight fall-off as other sites tend to come in around 10%. The 'urban' site at Cambridge does tend to have rather higher levels than sites around it, but this cannot be said of Godmanchester, Wimpole Lodge, Littleport or Stonea, although it can be argued that the Godmanchester and Wimpole Lodge sites from which the data come are peripheral and therefore may not exhibit urban style assemblages.

The key to the increasing use of Nene Valley colour-coated wares appears to be the increased functional range in which they were being produced in quantity. The Orton Hall Farm (Perrin 1996, 179) functional analysis of Nene Valley colour-coated wares shows a major decline in the proportion of beakers amongst these products, from 69% in Period 1 (AD 150/60–175), to 45% in Period 2 (AD 175–225/250) and just 26% in Period 3 (AD 225/250–300/325). This is compensated for by a rise in the level of table wares (dishes and bowls). Thus the Nene Valley industry kept its virtual monopoly of the market for beakers, but added to its market by expanding into that for serving dishes and bowls. Table 7.6 provides the functional analysis for groups which are large enough from the Sawtry sites (Hancocks *et al.* 1998). As at Orton Hall Farm the much wider range of functional types being produced in the 3rd century can be seen here.

Table 10.8 (Chapter 10) shows the functional analysis of the Nene Valley colour-coated ware from Cambridge, Castle Hill, Group 5 (late Antonine to early 3rd century). This is beaker dominated (by MNR), although bowls comprise over a quarter of the material. Table 7.7 shows a similar analysis of the Nene Valley colour-coated wares from Groups 6–9 (3rd to 4th centuries). Here beakers are still quite strongly represented, mainly because of a considerable residual element, but they have ceased to provide a majority of the assemblage, and table wares form nearly half the group, again confirming the considerable change in functional composition of the Nene Valley products being marketed in the 3rd century.

Table 7.8 shows a functional analysis of the recorded material from Haddon (J. Evans 2003). This is largely of later 2nd- to mid 3rd-century date, although there is a little intrusive later pottery. The assemblage is dominated by table wares; in part a consequence of the presence of intrusive material in Phases 3 and 4 and of a small amount of recorded material from Phase 5. Despite this, however, it largely reflects the rapid functional diversification of the assemblage from beakers to a range of table wares and jars in the 3rd century.

Forms

Perrin (1999) discusses the Nene Valley form types in detail and that will not be repeated here. The form assemblage from Stonea (Cameron 1996, figs 151–2) provides a good idea of the range of types in use in the 3rd century. The table ware forms are most commonly bead or flange rimmed bowls or dishes, some simple rimmed dishes, and imitation Dr 36 dishes. Samian ware imitations also include Dr 37 bowls, but not commonly, and rare Dr 30 and Dr 44 forms.

A further wave of non-beaker form types appeared from the later 3rd century. Perrin has described this new range of forms as 'colour-coated coarse wares' for their reproduction of a range of standard coarse wares forms in colour-coated ware, as opposed to a previous repertoire which was largely derived from samian ware. The developed beaded and flanged bowl, albeit of a rather distinctive profile, started to be produced in

considerable quantities, along with many more simple rimmed dishes. Further samian ware forms were added, particularly Dr 38 and Dr 31, forms which were commonly imitated in other colour-coated ware industries.

In the early to mid 3rd-century groups examined in this study, apart from beakers, Littleport Phase 3 (early 3rd century) produced a simple rimmed dish (Fig. App. 3.8, F02.37) and a flange rimmed dish (Fig. App. 3.8, F01.29), Cambridge Castle Hill Group 5 (late Antonine to early 3rd century) produced two flange rimmed dishes (F01.29), a flagon (Fig. App. 3.8, F01.3), and a 'Castor box' (Fig. App. 3.8, F02.36), and Teversham Group 3 (Antonine to early 3rd century) produced two simple rimmed dishes (F01.37) and a necked jar (Fig. App. 3.8, F01.12). At Little Paxton Phase 7 (early to mid 3rd century) non-beaker forms consisted of a grooved simple rimmed dish, and a Dr 36 copy dish. The largely early to mid 3rd-century dating of the flange/bead rimmed dish is strengthened by its relative frequency on the Sawtry sites (Hancocks *et al.* 1998, F11.18 and F12.12). It is relatively common on sites with a strong 3rd-century emphasis.

Fabrics

The Nene Valley colour-coated ware in this study has been recorded in two fabrics: F01, the parchment ware fabric, and F02, a variant to a greater or lesser extent oxidised. Figs 7.7–7.9 present and compare the overall date distribution of vessels in each from this study. Subjectively this author (JE) had gained the impression that F02 was more of a 3rd-century phenomenon. Fig. 7.9 shows that actually the oxidised variant F02 was commoner in the later 3rd to 4th centuries, although it occurred from the start of the industry. One other difference between the two groups is in the functional types represented in them. Some 61% of vessels classed as F02 are beakers, compared to only 30.5% of the vessels in F01. Perhaps this reflects differences in the output of the kiln sites producing this fabric. Cooper (1989) reports fabric 1 and 3 from Park Farm, Stanground, as being oxidised fabrics and perhaps some, at least, of these vessels may have originated there.

Trier 'Rhenish' ('Moselkeramik') (F42)

Fig. 7.10; Table 7.9

Trier 'Rhenish ware' is even rarer than the Central Gaulish variety. Tyers (2003) offers a date range for the fabric in Britain of AD 180–250. In the Nene Valley Perrin (1999) notes that it is 'poorly represented' at Chesterton. It appears to be absent from the other Nene Valley sites. In the central fens, at Stonea, it appears in Phase III (mid to later 2nd century) at 0.05% (Wt), is absent from Phase III/IV (early to mid 3rd century), but reappears in Phase IV (c AD 220–400) at 0.01% (Wt). It is entirely absent from Littleport. In the Ouse corridor it is present in the whole-site list from Langdale Hale, Earith (Monteil 2013) at 0.1% (Nosh). The fabric also appears in the later 2nd- to mid 3rd-century group from West End, Haddenham (Peachey 2005) at 0.1% (Nosh) and <0.1% (Wt). At Godmanchester, London Road (Hancocks 2003, 137, fabric C04), it occurs in Phase 3 (later 2nd to mid 3rd century) at a low level. It is represented by a single funnel-necked beaker.

In the Cam corridor Moselkeramik is absent except in the vicinity of Cambridge; it appears in Teversham Group 3 (Antonine to early 3rd century) at 0.1% (Nosh) and there is a single sherd from Milton East Waste. No sherds of this fabric have been recorded in this study from Cambridge. South of Cambridge, at Great Chesterford (Martin 2011) the fabric occurs in one group from Trench VI, Pit 13, layer 32 (early to mid 3rd century) at 0.1% (Wt). The fabric appears absent from all the sites west of Cambridge in the study area. Tyers (2003) has produced a national distribution map for this fabric (<http://www.potsherd.net/atlas/Ware/MOSL>). This shows a distribution almost identical to that of Central Gaulish black-slipped ware (Central Gaulish 'Rhenish ware') except perhaps for a greater emphasis on the distribution on the Hadrian's Wall frontier. The sparse distribution of Moselkeramik in the study area is consistent with this. As with Central Gaulish 'Rhenish ware' the sites in the study area on which it occurs (Fig. 7.10) are disproportionately urban.

Hadham oxidised ware (F03)

Table 7.10

Hadham oxidised ware (F03) continued to be present on sites in the study area in the 3rd century. In the central fens it first appeared at Littleport in Phase 3 (early to mid 3rd century) at 1.7% (Nosh) and 1.1% (Wt). It then peaked in the following Phase 5 group (mid to later 3rd century) at 19.1% (Nosh) and 10.5% (Wt). In the Ouse corridor the all-site (Flavian to mid 4th century) list from Earith, Langdale Hale (Monteil forthcoming), includes 0.6% (Nosh) and 0.4% (RE) in this fabric, but it cannot be demonstrated that these sherds are from vessels which reached this site in this period. Hadham oxidised ware also appears on the 3rd- to mid 4th-century Haddenham Shrine site assemblage (Lucas 2006a) at 4.0% (Nosh) and 1.1% (Wt). Given its 3rd-century presence at Littleport its appearance at Haddenham may not be limited to the 4th century. In the Cam corridor south of Littleport the fabric is present in the Phase 1 group (later 2nd to mid 3rd century)

from Haddenham, West End (Peachey 2005) at 0.1% (Nosh) and 0.2% (Wt), so here it can be proven to have reached the site before the mid 3rd century.

In the vicinity of Cambridge, Hadham oxidised ware appears in the Teversham Group 3 (Antonine to early 3rd century) at 1.1% (Nosh), 0.4% (Wt). The fabric is present, in very small quantities, at Waterbeach Old Tillage, in the Antonine to mid 4th-century all-site list, at 0.1% (Nosh) and 0.01% (Wt). It does not appear before the 3rd century here, making its debut at 0.1% (Nosh) in Phase 3a, 3rd to early 4th century. At the nearby site of Cambridge Rowing Lake the 2nd- to 4th-century all-site collection included rather more Hadham ware at 1.2% (Nosh) and 4.2% (RE). Again, however, it cannot be demonstrated that any of it is of 3rd-century date, although there is a very strong likelihood of this. Levels are higher again at the Milton East Waste all-site collection of 1st- to 4th-century date, with 2.3% (Nosh) and 6.2% (RE). However, this material includes a substantial component from the last quarter of the 4th century, which probably accounts for the higher levels here than at neighbouring sites.

At Cambridge, Castle Hill, Hadham oxidised ware is present in Groups 6–9 (3rd to 4th centuries) at levels of 1–4% (RE) but these span a large period and no more specific data are available. South of Cambridge at Great Chesterford (Martin 2011) the group from Trench VI, Pit 13, fill 32, (dated AD 200–250) produced 0.6% (Wt) and 1.1% (RE), perhaps a slight increase on the Hadrianic to early Antonine group from Trench IX, Pit 18, fill 3L.

To the west at Wimpole Lodge (Lucas 1994), the Phase II group (AD 240–300) produced 2% (RE), a fall on the 5% from Phase I. Further west at Little Paxton (Evans 2011) Phase 6 (3rd century) produced 0.9% (Nosh) and 0.3% (Wt) and Phase 7A (3rd century) some 0.5% (Nosh) and 0.2% (Wt) rising in Phase 7B (later 3rd to early 4th century) to 3.0% (Nosh) and 1.2% (Wt). This suggests a slightly lower level of supply to the site in much of the 3rd century than in the later 2nd, but with an increase of supply late in the century.

Overall Hadham ware supply levels in the 3rd century seem fairly similar to those in the 2nd century, with sites around Cambridge and to its west being on the northerly limit of the fabric's distribution. The main exception, however, is the Cam corridor into the central fenland. There is no currently evidence that this area received Hadham oxidised wares in the 2nd century, but it is clear that sites here did so in the 3rd, the pottery presumably being shipped from the Cambridge area.

Oxfordshire colour-coated ware (F06)

Fig. 7.11; Table 7.11

Oxfordshire colour-coated ware does appear to penetrate the study area a little in the 3rd century. It definitely appears in Wimpole Lodge (Lucas 1994) in Phase II (AD 240–300) at 3% (RE), and in Teversham Group 3 (Antonine to early 3rd century) at 0.2% (Nosh), although here it may be intrusive. It is also present in the later 3rd- to early 4th-century group from F.218 at Maxey at 2% (MNR) and at the similarly dated Haddenham Shrine site assemblage (Lucas 2006a) at 0.5% (Nosh) and 0.8% (Wt). A further group from Phase 7B at Little Paxton (Evans 2011) of similar date range also produced 0.8% (Nosh) and 2.2% (Wt) of the fabric. Likewise the Phase 4A assemblage at Godmanchester (later 3rd to early 4th century) included 'a few sherds of possible Oxfordshire red-slipped ware' (Hancocks 2003). At Orton Hall Farm (Perrin 1996) a few sherds of Oxfordshire ware are noted to come from Phase 3 (AD 225/250–300/325). In these groups the presence of the fabric in the 3rd century cannot be ruled out.

New Forest

Table 7.12

Surprisingly, New Forest wares are claimed to provide 0.1% of the assemblage by count at Earith, Langdale Hale (Monteil 2013, 89). These eight sherds are from 'Several beakers... a rouletted example in [5148] and an indented beaker with barbotine decoration in [4463] and a few small fragments from other contexts. A mortarium with an angular flange was recovered in [3747]'. If these sherds are truly of New Forest origin it would be most unusual in this area.

Colchester colour-coated ware (F52)

This has been discussed in Chapter 6.I.

Discussion: colour-coated wares

Nene Valley colour-coated wares dominated non-samian fine ware use in the region in the later 2nd century. The 3rd century saw a general rise in their frequency, particularly in the later 3rd century when a wider range of 'colour-coated coarse ware' types emerged, broadening again the possible market share for these fabrics.

This was followed by the cessation of production of Lower Nene Valley grey wares, the form range of which had been transferred to the colour-coated wares, in the early 4th century (Perrin 1996, 164). Given the limited distribution of the grey wares compared to the colour-coated wares this seems to have been a sensible marketing innovation, which resulted in the colour-coated wares keeping most of the market of the grey wares in the Nene Valley, whilst expanding geographically the area which these types penetrated. Perhaps by converting these types to colour-coated wares the potters persuaded the network of *negotiatores* taking their colour-coated vessels to take their former grey ware range also.

Perrin comments ‘Apparently from the end of the 3rd century or early in the 4th all types previously produced mainly in LNVGW were made exclusively in NVCC. To these was added a full range of imitation samian ware forms, paralleling developments in the Oxfordshire and New Forest industries. There was also, seemingly, a decline from this period in what had previously been the main LNVCC [types], beakers, boxes and flagons, so by the middle of the 4th century at the latest bowls, dishes and jars have become pre-eminent. The actual reason for these changes is uncertain, but must be linked to market factors. There may have been a general change in the types of vessel used and demanded, perhaps influenced by the desire for fine ware replacements for, or equivalent of, samian ware. Other industries, notably Oxfordshire, may have captured new markets causing a retraction in the Lower Nene Valley industry, coupled with a desire to imitate the types now being successfully traded by other industries in what had been lower Nene Valley markets’ (Perrin 1999, 87).

There were some changes in the functional use of pottery in the 4th century, which are discussed below. However, as we have seen there is no decline in Nene Valley markets in the study area in the 3rd century; indeed quite the reverse is the case. There is no evidence that competition from the Oxfordshire industry was impacting on the Nene Valley industry, indeed it is generally unlikely since Oxfordshire products comprised mainly table wares which only covered a small part of the Nene Valley range. This was a product range that the Nene Valley industry moved into in the course of the 3rd century, rather than retreated from under pressure from another producer.

Brown colour-coated wares remained the dominant tradition of fine wares in the 3rd century in the region, particularly with the decline of the East Gaulish samian industries in the third quarter of the century, but redware traditions do appear in the form of Hadham wares and Oxfordshire products. The latter, widely but very thinly spread across the area, do seem to reach some sites in the 3rd century. The former are again largely restricted to the southern edge of the study area, but in this period they seem to have started to be marketed down the Cam corridor from Cambridge into the central fenland.

One other feature of fine ware supply in the 3rd century is the ending of the East Gaulish ‘Moselkeramik’ industry and the related industry at Colchester. The former presumably ceased export along with the East Gaulish samian industry of which it was a part, although local production there continued into the 4th century. The end of the Colchester industry is not easy to explain. Its close connections with the East Gaulish samian industry might possibly suggest that it had the same ownership and was affected by some of the same factors.

Class M, Mortaria

Distribution

The 3rd century saw major changes in the supply of mortaria. As noted in Chapter 6.I, Mancetter-Hartshill vessels, which were probably the dominant type in the mid to later 2nd century across the region, seem to have died out by around AD 220. Their role was supplanted by the Lower Nene Valley industry which reorganised itself for production of reeded rimmed mortaria early in the 3rd century.

To the west of the study area, at Piddington 3rd-century mortarium supply provides an interesting contrast with what happens within the study area (Table 6.13; Rollo 1994b). Here, Mancetter-Hartshill vessels became increasingly important in the early 3rd century, rising to 38% (MNR) of contemporary mortaria from 19% in the Hadrianic–Antonine period. The other major supplier in the earlier 3rd century, also with 38% (MNR) was the Oxfordshire industry, up from 8% in the Hadrianic–Antonine period. The site is closer to Oxford than Mancetter-Hartshill (although well-connected to the latter via Watling Street) but here this did not seem to disadvantage Mancetter-Hartshill. The other main source in this period was the Upper Nene Valley industry, but these vessels only account for 13% (MNR), down from 18% in the Hadrianic–Antonine period. Otherwise there are minor components of Rhineland mortaria in the early 3rd century, 6% (MNR), which do not occur on many sites in the study area. By the latter part of the 3rd century Mancetter-Hartshill’s market share had fallen to 30% (MNR) and Oxford’s had risen to 50%, with a further 9% of vessels from this source in red-slipped fabrics (although this author (JE) suspects that most of the latter were really of 4th-century date, but the method used to produce the tables assigns equal weight to a fabric across its possible production dates).

The only other contemporary fabric is the first appearance of Lower Nene Valley white ware mortaria at just 3% (MNR).

In the north of the study area, at Orton Hall Farm (Perrin and Hartley 1996), in Period 2 (AD 175–225/50) the Lower Nene Valley intensified its market share to 89%, with a single residual Mancetter-Hartshill vessel representing 11% (Table 6.8). In Period 3 (AD 225/50–300/325) Nene Valley products continued to dominate the assemblage at 79% and the second commonest group is Oxfordshire products at 15%, followed by Mancetter-Hartshill and the Lower Rhineland both at 2%. The presence of a Rhenish mortarium is unusual, and they seem much more common in north-eastern England than in the study area. The distribution map offered by Tyers (1996) for Soller vessels might explain this (<http://www.potsherd.net/atlas/Ware/SOMO>), since these vessels appear to have a distribution in and close to London and then are common in the north, strongly suggesting primary importation through London and trans-shipment onto the east coast trade to supply northern military sites. Mortarium usage became more intense at Orton Hall Farm in Period 3 when they represent 6.2% of all forms (Perrin 1996, table 76) compared to 4.8% in Period 2.

At Maxey (Hartley 1985) all of the eleven mortaria not of lower Nene Valley origin were of 2nd-century date. All the later Roman mortaria are Lower Nene Valley products.

At Chesterton (Perrin 1999) Mancetter-Hartshill provided 19% of mortaria in the early 3rd century, compared to 39% in the Hadrianic–Antonine period. A further 10% of mortaria from Mancetter-Hartshill or the Nene Valley are believed by this author (JE) to be largely from the former source (Table 6.10). The Nene Valley industry in contrast provided only 16% of supply in the Hadrianic–Antonine period but this leapt to 62% in the early 3rd century. Since Chesterton was on the edge of the production area, these figures suggest that the Nene Valley potters finally become serious about mortarium production on a reasonable scale in the early 3rd century. Unsurprisingly this reduced the Mancetter-Hartshill market share here considerably. No other major sources are represented, and it may be of note that no Rhenish mortaria occur on the site.

At Haddon, French's excavations produced rather more mortaria which can be assigned to the 3rd century, amounting to 7.3 vessels (Table 6.11). By the early 3rd century here the lower Nene Valley had replaced Mancetter-Hartshill as the chief source, providing 70% of the mortaria, with only 15% of vessels from either Mancetter-Hartshill or the lower Nene Valley. The only other sources of note are the upper Nene Valley at 10%, and Oxfordshire, vessels from which first appear in the early 3rd century, at 5%. By the later 3rd century the lower Nene Valley kilns had consolidated their near monopoly of the market with 88% of the mortaria, the only other clearly-defined source being 5% of Oxfordshire vessels.

Fig. 6.15 (after Hancocks *et al.* 1998, fig 36) shows a date distribution histogram for the material from the Sawtry sites. This indicates a slightly greater use of mortaria in the later 3rd and 4th centuries than in the 2nd century (see also Table 6.12). Mancetter-Hartshill seems to have been the predominant supplier to these sites in the early 3rd century, when it would have had a near monopoly. The situation changed radically in the later 3rd century when local lower Nene Valley mortaria appeared in quantity and none of the Mancetter-Hartshill forms from the site seems likely to date this late. However, Mancetter-Hartshill types from the Sawtry sites are later than on many Nene Valley sites with several collared types (Hancocks *et al.* 1998; M12.3–M12.5 and one reeded hammerhead, M12.6) taking the Mancetter-Hartshill presence well towards the mid 3rd century. Lower Nene Valley mortaria represent 74.6% of all mortaria from the sites, and this industry monopolised supply from the later 3rd century onwards.

In the central fens no data for 3rd-century mortarium supply at Stonea can be retrieved from the report. At Littleport, in the Cam corridor, there are very few mortaria from Phases 3–5. In the early 3rd-century Phase 3 there are only seven mortarium sherds, all of lower Nene Valley origin, whilst in the mid 3rd-century Phase 4 there is a single sherd in M51, a white-slipped oxidised mortarium with some moderate sand temper and common fine rounded calcareous inclusions, of uncertain origin. No mortarium sherds came from the later 3rd-century Phase 5. Apart from these sherds the overall mortarium list from the site indicates a few sherds in the Colchester fabric, M06, which are likely to have reached the site in this period.

At Earith, Langdale Hale in the Ouse corridor (Monteil forthcoming) the commonest mortarium source is undoubtedly the Nene Valley kilns. Since the Mancetter-Hartshill vessels there appear to be of 2nd-century date it seems that the Lower Nene Valley was the principal source in the 3rd century here, supplemented by some Oxfordshire material. Two Oxfordshire forms, Young (1977) type M17 (AD 240–300) and M22 (AD 240–400+), are identified from the site.

At Haddenham Shrine (Lucas 2006a) the 3rd- to early 4th-century all-site group contains 1.1% of mortaria in the assemblage by count and 5.9% by Wt. The commonest fabric type is Lower Nene Valley white ware, at 0.7% by count of the whole-site assemblage and 5.2% by Wt, as might be expected given the proximity of this kiln site and the date of most of the Haddenham material. Other fabrics represented are Mancetter-

Hartshill at 0.1% (Nosh) and 0.3% (Wt) and Cambridgeshire red slipped mortaria, a fabric not encountered thus far in this study, at 0.3% by count and 0.5% by Wt. Although the latter might be presumed to be from the same source as fabrics F04, F041 and F05, the illustrated vessel (Lucas 1997, fig. 7.38, no. 36) is of a 4th-century wall-sided form and appears to have white-painted decoration; this date would be inconsistent with that of the forms of vessels in Fabrics F04, F041, and F05 which appear to be predominantly 2nd century.

At Haddenham, West End, (Peachey 2005) in the Cam corridor, mortaria appear to have provided just 0.7% (Nosh) and 1.4% (Wt) of the later 2nd- to mid 3rd-century group from Phase 1, all being Lower Nene Valley products. In the later 3rd- to 4th-century Phase 2 group there, mortaria still only amount to 0.3% (Nosh) and 1.1% (Wt), again all being lower Nene Valley products. In the Cam corridor at the rural site of High Fen (Millett 1980a), the only mortarium in the 1st- to 3rd-century assemblage is a Lower Nene Valley product. At Denny Abbey (Millett 1980a) in a 1st- to 4th-century all-site collection mortaria only make up 0.4% by count, a very low proportion, with 0.1% of this being lower Nene Valley material and the remainder, 0.3%, Oxfordshire mortaria. Two Oxfordshire mortarium rims are represented, one of Young (1977) type M22 (AD 240–400+) and the other of type C100, dated AD 300–400. Thus later 3rd-century supply is likely to have consisted of Lower Nene Valley material or lower Nene Valley and Oxfordshire.

On the fen edge at Godmanchester, London Road there are very few mortarium sherds. Rollo (2003) suggests that none of the 3rd-century material dates before the mid 3rd century. The majority of the sherds are of Nene Valley origin, while other vessels which could be of this date are from Oxfordshire and the East Midlands.

In the vicinity of Cambridge at Teversham, the Group 3 (Antonine–early 3rd century) assemblage contains only 0.2% mortaria. Three fabrics are represented: Lower Nene Valley, M03, *Verulamium* region, M04, and Colchester, M05, of which only the Nene Valley material, and perhaps some of the Colchester material, is likely to be contemporary in the 3rd century. At Bottisham Tunbridge Lane there is very little material of this date but Lower Nene Valley mortarium sherds (M03) and Oxfordshire (Young 1977) fabric WC (M13), occur in Phase 6.1. Close to Cambridge at the very basic rural site at Newmarket Road (early 2nd to mid 3rd century) the only mortaria are lower Nene Valley sherds.

At Waterbeach Old Tillage the Antonine to mid 4th-century all-site list contains 0.5% (Nosh) and 1.0% (Wt) of mortaria. The largest element was 0.2% (Nosh) of reduced mortaria which are probably of Horningsea origin. These were followed by 0.2% (Nosh) and 0.3% (Wt) of Mancetter-Hartshill sherds and 0.1% (Nosh) and 0.2% (Wt) of Lower Nene Valley sherds, along with just <0.1% (Nosh) and 0.1% (Wt) of Colchester sherds. The Mancetter-Hartshill sherds were probably residual by the 3rd century and the only contemporary sources were the Lower Nene Valley, Colchester and perhaps some of the Horningsea sherds in the early 3rd century (see Form Catalogue, Chapter 3.V).

Mortaria are again fairly uncommon in the all-site 2nd- to 4th-century assemblage from Cambridge Rowing Lake, at 0.5% (Nosh) and 1.6% (Wt). All of the mortaria from the site could have been of 3rd-century date, although the lower Nene Valley and Hadham oxidised mortaria are at least as likely to be of 4th-century date. The most common fabrics were Lower Nene Valley, M03, at 0.2% (Nosh) and 0.4% (Wt), and Hadham oxidised ware, M12, at 0.2% (Nosh) and 0.8% (Wt). These were followed by the Upper Nene Valley at 0.1% (Nosh) and 0.3% (Wt) and Horningsea at 0.1% (Nosh) and 0.1% (Wt).

At the Milton East Waste site the 1st- to 4th-century collection contained 0.6% (Nosh) and 2.9% (Wt), again a fairly low level of mortaria. The commonest fabric was Lower Nene Valley (M03) at 0.2% (Nosh) and 0.8% (Wt), followed by *Verulamium* at 0.1% (Nosh) and 1.0% (Wt) and Mancetter-Hartshill at 0.1% (Nosh) and 0.7% (Wt). More minor elements were Colchester, East Anglia, Oxford white ware and Oxford fabric WC, all at less than 0.1% by sherd count and weight. Amongst these fabrics the Colchester, Nene Valley, Oxfordshire white ware and Horningsea fabrics are the only ones likely to be contemporary in the 3rd century.

Mortaria from the groups at Cambridge, Castle Hill are discussed in Chapter 10. Of particular note is a possible Horningsea piece in fabric M21 from Group 6. Overall Hartley (1999a, table IX.1) shows that there was again a change in major suppliers in the mid 3rd century. In the later 2nd to early 3rd century (total c.34 rim sherds), Colchester provided 18 (53%), followed by the upper Nene Valley and the Mancetter-Hartshill industries with four (12%) each. Other vessels are three from the *Verulamium* region (9%), two from the Oxfordshire industry (6%), two from the Rhineland (6%) and one from the Cambridge area, probably Horningsea (3%). The *Verulamium* region products would be residual in the earlier 3rd century. In the early 3rd century Colchester vessels represented 42% of the mortaria on the site, followed by the Upper Nene Valley at 22%, with 16% from Oxford, 11% from the Lower Nene Valley and 9% from the Rhineland. Thus Mancetter-Hartshill vessels had already ceased to be used at Cambridge by the beginning of the 3rd century and, as in the Antonine period, Colchester and the Upper Nene Valley were the dominant sources.

By the mid 3rd century there was a further switch in supply (Hartley 1999a, table IX.1; c.52 rim sherds) with the Lower Nene Valley taking over the dominant role (c.35 rim sherds; 67%), which it maintained until the

end of the Roman period. The other major contributor in this period was the Oxfordshire industry (*c.*15 rim sherds; 29%) with the only other vessel assigned to source being a single Rhenish piece of 3rd-century date. It is of note that Hadham mortaria do not seem to have reached Cambridge, despite the frequency of other Hadham oxidised wares there and, as Hartley (1999a, 201) notes, no products of the Harston kilns appear either. Hartley (1999a, 201) notes that the 3rd-century Oxfordshire forms M17 and M18 (AD 240–300) are restricted to two or at most three vessels (less than 6%), suggesting that most of the Oxfordshire material reached the town in the 4th century. Given the pattern with the colour-coated wares it may well be that most of this actually arrived in the later 4th century. Following the end of the Colchester industry, at Cambridge in the later 3rd century the Lower Nene Valley was the dominant mortarium source with 57% of the group. Oxford was the second major source at 34% with 6% of Rhenish mortaria completing the contemporary supply.

To the west of Cambridge, at Foxton (later 3rd to 4th century) mortaria are apparently scarce in the tabulated later Roman pottery assemblage (Lucas 1997, table 6b) by count, representing only 1.7%, but they amount to 5.6% by Wt and 3.5% by RE. Apart from a few Flavian and pre-Flavian sherds, mortaria were largely absent until the 3rd century. There are two sherds in Lucas' fabric 61. If these are Upper Nene Valley products then they are probably of 2nd- to early 3rd-century date. From the mid 3rd century onwards Hadham redware mortaria dominated supply here. They seem to be rather over-represented in the sherd counts but they also dominate on RE measures and rim count. Three forms are listed, resembling Young's (1977) Oxfordshire forms M18, M23 (two examples) and M22 (three examples), half being later 3rd and half being 4th century. Hadham ware mortaria are absent from Wimpole Lodge to the west, and this seems generally to be close to the limit of their distribution. They are found at Great Chesterford to the south-east, but otherwise only occur at Cambridge Rowing Lake and Little Barford amongst the sites examined here. Despite the frequency of the oxidised wares there, they are absent from the late Teversham group, which is dominated by Oxfordshire and Nene Valley products.

Nene Valley mortaria provide the second most common source in the late Roman period at Foxton at 24% by count, 19% (Wt) with five rim sherds listed in Lucas' (1997) form type series. Throughout most of the rest of the study area Nene Valley mortaria are the dominant late Roman type and the evidence here suggests that the site is at the edge of their core distribution area. Five sherds are in Lucas' coarse red colour-coated ware (8% Nosh, 3% Wt) and three rim sherds are listed. These are all 4th-century copies of Oxfordshire (Young 1977) type M22. The source of this group is unclear, but these vessels are clearly late Roman. They may relate to Lucas' 'Cambridgeshire Red Slipped' mortaria from the Haddenham Shrine. The last late Roman mortarium source is Oxfordshire. Oxfordshire products make up 6% (Nosh) and 6% (Wt) of the mortaria, half being 4th-century colour-coated ware sherds.

West of Cambridge at Wimpole Lodge (Lucas 1994) mortaria are listed for the site as a whole, but unfortunately are not included in the period breakdown table; they are not very common, at 0.9% (Nosh) and 5.3% (RE). Based on form date, overall the principal source was the Lower Nene Valley at 0.4% of the assemblage (Nosh) and 1.6% Wt followed by Oxfordshire (0.2% Nosh, 0.7% Wt) and the *Verulamium* region (0.2% Nosh, 0.2% Wt). Other sources amount to 0.1% by count and 0.2% by Wt. Colchester products will probably have supplied the site in the earlier 3rd century, being replaced in the later 3rd century by the lower Nene Valley, supplemented by some Oxfordshire products. Oxfordshire mortaria from the site include forms M17 (AD 240–300) and M22 (AD 240–400+), the former clearly being of this period.

Further west at Little Paxton (Evans 2011) in the overall site list there are Mancetter-Hartshill and Lower Nene Valley sherds which may date to this period. Mancetter-Hartshill vessels were clearly represented in the early 3rd century here since the only one that could be illustrated (Evans 2011, M02.1) is a hammerhead mortarium, unreeded, with a cordon at the top and bottom of the flange, probably dated *c.*AD 200–220. Lower Nene Valley sherds are the commonest on the site (44% Nosh and 43% Wt), providing seven of the ten rim sherds, and no doubt succeeded Mancetter-Hartshill to monopolise site supply in the mid to late 3rd century.

A little to the south at the rural site of Little Barford mortaria represent around 0.7% of the assemblage by count (2.6% by Wt). The mortaria are only listed on an all-site basis, but 83% of them are likely to be of 3rd- to 4th-century date. A greater frequency of mortaria in the 3rd to 4th centuries, nearly all of them Lower Nene Valley products, seems to be part of the regional pattern. The only Mancetter-Hartshill sherd was of 2nd-century date, suggesting that the 3rd-century mortaria must be mainly Lower Nene Valley products, some 73% of the all-site total by count. In the early 3rd century an occasional ?Upper Nene Valley sherd is present, and in the later 3rd there is a single Oxfordshire type M18 (Young 1977), dated AD 240–300, the only Oxfordshire sherd from the site.

South of the study area, at Baldock (Hartley 1986) a further major change in supply took place in this period (Table 6.17 and Fig. 11.2). The *Verulamium* ware industry came to an end in the late 2nd century, but it was

replaced, not by the Colchester or Upper Nene Valley industries, which were in second and third positions in the later 2nd century, but by the Oxfordshire industry, which leapt from providing 7% of the assemblage in the Hadrianic–Antonine period to 73% (MNR) in the earlier 3rd century. Colchester remained the second largest source, but fell to only 6%, followed by Mancetter-Hartshill on 5%. In the later 3rd century this change was largely consolidated. Oxford remained the dominant supplier at 63% (MNR) although this was a slight fall, with the second place being taken by Mancetter-Hartshill which rose to 16%, surprisingly, with Colchester in third place at 13%.

Discussion: mortaria

At the beginning of the 3rd century Mancetter-Hartshill was the dominant source, particularly in the north and centre of the study area, supplemented by Colchester and the Upper Nene Valley in the south and the Lower Nene Valley in the north. Mancetter-Hartshill then rapidly lost ground, with very few pieces which can be dated after *c.*AD 220. Colchester also declined in this period, with the industry coming to an end by the mid 3rd century. Thus the massive expansion of the Lower Nene Valley industry from the early 3rd century onwards may amount more to filling a vacuum than out-competing other suppliers.

Tyers' Potsherd website (<http://www.potsherd.net/atlas/Ware/MHMO>) shows a general distribution map for Mancetter-Hartshill products which suggests a reasonable market south-east of the kiln site extending into Northamptonshire, Cambridgeshire and Essex. The present study demonstrates that this was a 2nd-century phenomenon which had probably ceased by the AD 220s.

The disappearance of Mancetter-Hartshill vessels from the study area may be paralleled by its loss of markets in its home region by the later 3rd century, where supply at Alcester (Booth 1994; Evans 1996a) and its vicinity switched from Mancetter-Hartshill in the early 3rd century to the slightly more distant Oxfordshire industry by the later 3rd century. By this date Mancetter-Hartshill also seems to have been encountering similar difficulties in its northern markets, where in North-East England it seems to have lost much market share to a Catterick/Piercebridge based Cantley tradition industry in the second half of the 3rd century (Evans and Mills 2009), before losing out across much of the region to Crambeck at the end of the 3rd century. It is of note that Upper Nene Valley products seem chiefly to occur in the south-west of the study area, in Bedfordshire, which was probably being supplied direct from Northamptonshire, and they do not seem to have penetrated much into the rest of the study area,

Despite the fact that its kilns were much further away than those in the Nene Valley, the Oxfordshire industry seems to have established a small market share in the region from around AD 240, perhaps by using the same distribution networks for its mortaria and colour-coated wares.

Class R, Wheelmade reduced wares (grey wares)

Horningsea (R02, R021, R04)

Table 7.13

Distribution

The distribution of Horningsea grey wares in the 3rd century is similar to that in the 2nd (Table 7.13 and Fig. 7.12). In the north of the study area they are absent from the Nene Valley sites. On Ermine Street, however, the fabric does occur at Haddon in the form of a few sherds in the overall 1999 excavated assemblage, amounting to just 0.05% (Nosh). Further south the fabric is absent from most of the Sawtry sites, but body sherds of a Horningsea ware storage jar (R16) are found at the southernmost site of Norman Cross (Hancocks *et al.* 1998) in Period 2, of 3rd- to early 4th-century date.

East of the Nene Valley in the central fens at Stonea (Cameron 1996), Horningsea ware occurs at 2.7% (MNR) in the Antonine to early 3rd-century Phase III/IV deposits, at 9.5% (MNR) in the 3rd-century Phase IV deposits and at 10.4% in the later 3rd-century Phase IV/V deposits. Thus it would seem to be slightly increasing its market penetration here in the course of the century. It might be noted, moreover, that many of the 'other grey wares' appear in forms which would fit the Horningsea repertoire and some of these may also have been from this source.

To the south-east at the Cam crossing of Akeman Street at Littleport, Horningsea wares amount to 45.0% (Nosh) and 51.7% (Wt), in the early to mid 3rd-century Phase 3, levels similar to those in the Antonine Phase 1. Handmade sherds in fabric R021 comprise 20.8% (Nosh) and imitation black-burnished ware in R04 some 2.8% (Nosh). In the mid 3rd-century Phase 4 Horningsea wares comprise 41.9% (Nosh) and 39.3% (Wt) with R021 contributing only 6.6% (Nosh) and R04 1.0% (Nosh), and in the mid to late 3rd-century Phase 5 Horningsea wares amounted to 48.7% (Nosh) and 64.8% (Wt) with 16.5% (Nosh) being handmade sherds in

R021 and 3.9% (Nosh) being R04. Forms (illustrated in Chapter 3.V) consist of a constricted-necked jar (Fig. 3.7, CJ1.1, Phase 3), a bifid rimmed jar (Fig. 3.9, J1.1, Phase 5), a shouldered jar with a grooved rim (Fig. 3.9, J2.5, Phase 5), an imitation BB2 jar rim (Fig. 3.9, J6.6 Phase 4), a necked, cordoned jar (Fig. 3.9, J9.1 Phase 4), four necked jars (Fig. 3.9, J9.3, Phase 3; Fig. 3.10, J10.1, Phase 5, J10.3, Phase 5 and J10.4, Phases 3 and 5), and a medium-mouthed jar (Fig. 3.10, J11.2 Phase 3). Storage jar types were SJ1.1, SJ1.2 (x 3), SJ1.3 (x 3), and SJ2.1 (Fig. 3.8), all in Phase 3. Open forms included a carinated bowl (Fig. 3.12, B1.1, Phase 5, probably residual), a straight walled bowl (Fig. 3.12, B5.1, Phases 3 and 4), a bead rimmed bowl (Fig. 3.12, B5.4, Phase 3), an incipient beaded and flanged bowl (Fig. 3.12, B6.3, Phase 4), and a Dr 37 copy(?) hemispherical bowl (Fig. 3.13, B13.1, Phase 4). There was also a dish with a triangularly-sectioned bead rim and basal chamfer (Fig. 3.14, D2.3 x 2, Phase 3). The dating of the forms has been discussed in Chapter 3.VI.

To the east of Littleport, in a 1st- to 4th-century assemblage from RAF Lakenheath Outdoor Recreation Centre, Horningsea grey wares they comprised 18.3% (Nosh) and 29.6% (Wt) of the total collection with 8.8% (Nosh) being in the burnished group R04. South-east of Lakenheath on the eastern fen edge at Icklingham (C. Tester, pers. comm.), in the 1st- to 4th-century all-site tabulation, Horningsea quantities rapidly fall-off to 7.0% (Nosh) and 15.4% (Wt), while a little further east, near the junction of Icknield Street and the Little Ouse, the Flavian to mid 4th-century all-site collection at Brettenham, Melford Meadows (Rollo 2002) shows that small quantities of Horningsea wares reached beyond the eastern fen edge with 4.0% (Nosh) and 8.1% (Wt).

South of Littleport, in the Ouse corridor, the all-site Flavian to 4th-century group from Earith, Langdale Hale, (Monteil forthcoming) has 15.5% (Nosh) of Horningsea wares. At the Haddenham Shrine, a little to the east of this (Lucas 2006a) and near the Old Tillage, the 3rd- to early 4th-century all-site group contained 52.6% (Nosh) and 50.7% (Wt) of Horningsea wares. At Haddenham, West End (Peachey 2005), in the Cam corridor, Horningsea wares were even more common at 78.6% (Nosh) and 73.7% (Wt) in the later 2nd- to mid 3rd- century group from Phase 1 and 72.4% (Nosh) and 68.0% (Wt) in the later 3rd- to mid 4th-century Phase 2.

To the south in the Cam corridor at High Fen the all-site Flavian to later 3rd-century group contained 92.6% (Nosh) Horningsea wares and at the nearby all-site group from Denny Abbey Horningsea wares amounted to 80.3% (Nosh) (Millett 1980a).

On the western fen edge at Godmanchester, London Road (Hancocks 2003) the later 2nd- to mid 3rd-century Phase 3 group contained only around 1% of Horningsea wares, and a similar level came from the later 3rd- to early 4th-century Phase 4A group.

On the southern fen edge at Teversham, Horningsea wares account for 71.5% (Nosh) and 79.1% (Wt) of the Group 3 assemblage of later 2nd- to mid 3rd-century date, with 4.5% (Nosh) being in the handmade R021 and 0.3% being the black-burnished ware imitation R04. At Bottisham Tunbridge Lane, in the Antonine to early 3rd-century Phase 5, Horningsea wares comprise 59.8% (Nosh) and 35.2% (RE), of which 10.7% were handmade R021 sherds and 3.4% R04 imitation black-burnished ware sherds.

At Waterbeach, the kiln site on the Old Tillage produced high levels of Horningsea wares as might be expected with 87.5% (Nosh) and 92.7% (Wt), of which 21.8% (Nosh) were handmade sherds in R021. No sherds were recorded in R04, reflecting the fact that identification of this group requires reasonable survival of vessel surfaces, which this assemblage did not yield. In Phase 3a (3rd to early 4th century), Horningsea wares amounted to 85.1% (Nosh) and 89.3% (Wt). Quantities of the handmade fabric R021 were notably high at 18.1% (Nosh) and 45.5% (Wt). These high levels are nevertheless below those of the Antonine Phase 1 group, reflecting other activities on the site as well as pottery production. In both the major Old Tillage phase groups the storage jar fabric R021 is very strongly represented.

At the nearby site of Milton East Waste, in the Flavian to 4th-century all-site group, Horningsea wares amounted to 55.8% (Nosh), of which 14.0% (Nosh) were in the handmade fabric R021 and 0.5% was in R04. At Cambridge Rowing Lake the all-site 2nd- to 4th-century assemblage produced 73.4% (Nosh) and 80.0% (Wt) of Horningsea wares of which 31% (Nosh) were handmade sherds in R021. At Cambridge, Newmarket Road (Evans 2002) some 77.5% (Nosh) of the sherds were Horningsea wares, of which 2.6% (Nosh) were in fabric R04.

At Cambridge, Castle Hill the Antonine to early 3rd-century Group 5 contained 39.7% (MNR) and 24.2% (RE) of Horningsea wares, of which 3.5% (MNR) was in the handmade fabric R021, and 7.6% (MNR) was in R04. Groups 6–9 are all of 3rd- to 4th-century date, and have between 40–46% by MNR (37.8–53.5% by RE). Clearly Horningsea ware levels at Cambridge were fairly consistently around 40% in later Roman groups, well below those on rural sites on the southern fen edge, or further north in the Cam corridor. Consequently it is very difficult to argue that these wares were particularly marketed through the ‘town’. This proves to be fairly usual for coarse ware producers (Evans 2005) where there is very little convincing

evidence of urban marketing; indeed the case of Nene Valley grey wares discussed above (Chapter 6) is probably the best one known to this author (JE). The form composition and functional analyses of the Horningsea wares at Cambridge are discussed elsewhere (Chapters 3 and 10).

South of Cambridge at Great Chesterford (Martin 2011) an early 3rd-century group from Trench VI, context 32, contained 12.5% (Wt) of Horningsea wares. South-west of Cambridge in the later 3rd- to 4th-century all-site group from Foxton, in contrast to Great Chesterford, Horningsea wares made up 64.4% (Nosh) and 69.9% (Wt) of the assemblage, a greater quantity than at Cambridge itself (Lucas 1997). West of Foxton at Wimpole Lodge (Lucas 1994) the Phase 1 group, dated AD 180–240, contained 37% (RE) of Horningsea wares and the Phase 2 group, dated AD 240–300, contained 35% (RE). North-west of Wimpole Lodge at Little Paxton (Evans 2011) the Area A, Phase 6 group, dated late Antonine to mid 3rd century, contained 12.6% (Nosh) and 11.9% (Wt) of Horningsea wares. The succeeding Area A, Phase 7A group, dated to the 3rd century, included 22.8% (Nosh) and 26.1% (Wt) Horningsea wares, whilst the later 3rd- to early 4th-century Phase 7B group contained 22.5% (Nosh) and 19.2% (Wt) of Horningsea wares. Thus, levels of Horningsea wares here seem to have risen markedly in the early 3rd century and then remained at this level for the remainder of the century.

South of Little Paxton, and more or less west-north-west of Wimpole Lodge was the site of Little Barford (Lucas 1997). Here Horningsea wares comprise a considerable 33.1% (Nosh) and 21.7% (Wt) of the 1st- to mid 4th-century assemblage.

Discussion: Horningsea ware

The overall distribution of Horningsea wares in this period is very similar to that in the 2nd century. However, as the evidence from Little Paxton and Stonea, in particular, demonstrates there seems to have been some intensification of marketing within its core distribution. In plan the distribution is very definitely 'crescent'-shaped, extending down the Cam corridor, but also west of the kiln site inland for some considerable distance. The use of water transport down the Cam corridor is not surprising and is seen with a number of other fabrics which reach the Cambridge area at the limit of their distribution, but extend in this direction. The westward extension of the Horningsea distribution remains difficult to explain. Water-based distribution seems unlikely. What does seem clear is that the distribution is constrained to the south by Hadham grey wares and to the north by 'other grey wares' (chiefly R01) for which an origin in the Godmanchester area seems most probable. The full extent of the westward distribution of Horningsea wares is not determined in this study.

The functional analyses of the Horningsea assemblages and their form composition have been discussed in Chapter 3.

Hadham grey ware (R06)

Fig. 7.13; Table 7.14

Distribution

The distribution of Hadham grey ware is shown on Figure 7.13 and listed in Table 7.14. Hadham grey ware is absent from the Nene Valley sites and Stonea. However, it does appear in the early to mid 3rd-century Phase 3 at Littleport at 0.3% (Nosh). It is absent from Phase 4 there, but it appears again in the mid to later 3rd-century Phase 5 group at 0.4% (Nosh). Further south on the Ouse corridor the fabric appears at 0.9% (Nosh) in the Flavian to 4th-century all-site group from Langdale Hale, Earith (Monteil forthcoming). At the 3rd- to early 4th-century all-site group from the Haddenham Shrine (Lucas 2006a) Hadham grey ware (R06) is surprisingly common at 4.1% by count and 4.7% by Wt. Given the evidence from Cambridge, where the fabric did not appear before the Antonine period in the groups examined and was mainly found in the later Roman groups, and Great Chesterford, where Martin (2011) states that the peak of this ware there dates to the 4th century, it is likely that much of this material reached the site in the 4th century. Hadham grey ware is much more common here than on the nearby site at Earith, Langdale Hale, where it comprises 0.9% by count (itself still a high figure), again suggesting some late 4th-century deposition here.

To the east at Haddenham West End (Peachey 2005), in the Cam corridor, Hadham grey ware is present, if barely, at 0.1% (Nosh) in the later 2nd- to mid 3rd-century Phase 1 group, rising to 1.1% (Nosh) in the later 3rd- to mid 4th-century Phase 2 group there. The fabric is absent from the Flavian to later 3rd-century all-site group from High Fen and from the Flavian to 4th-century group from Denny Abbey (Millett 1980a).

On the western fen edge at Godmanchester, London Road (Hancocks 2003), Hadham grey ware is absent from the later 2nd- to mid 3rd-century and the later 3rd- to early 4th-century groups, as it was from earlier groups. On the southern fen edge in the later 2nd- to mid 3rd-century Group 3 at Teversham, Hadham grey

wares amount to 2.5% (Nosh). However, this figure may be overstated as forms consist of five simple rimmed dishes (R06 D1.1), a bead rimmed dish (R06 D3.1), a jar with an everted lid-seated rim (R06 J2.1) and three developed beaded and flange bowls (R06 B2.2). The latter forms are likely to be intrusive or the date of this group extends a little later than the mid 3rd century. At Bottisham Tunbridge Lane in Phase 5, of Antonine to early 3rd-century date, the fabric is absent.

At Waterbeach, Old Tillage, Hadham grey ware is present, but in very low quantities, in the all-site Antonine to mid 4th-century collection, at 0.1% (Nosh). It appears at just 0.1% (Nosh) in the 3rd- to early 4th-century Phase 3a. At Cambridge Rowing Lake, Hadham grey ware amounts to 0.5% (Nosh) and 0.2% (RE) in the 2nd- to 4th-century all-site list and at Milton East Waste, Hadham grey ware amounts to 0.3% (Nosh) and 1.5% (RE) in the all-site Flavian to 4th-century assemblage. At Cambridge, Castle Hill, the Antonine to early 3rd-century Group 5 contained 0.1% (MNR) and 0.1% (RE) of Hadham grey ware. Amongst the succeeding 3rd- to 4th-century groups, Group 6, contained 1.6% (MNR) and 1.5% (RE), in Group 7 Hadham grey ware 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). Forms in Group 5 consisted of a simple rimmed dish (R06 D1.1) and a bead rimmed constricted-necked jar (R06 CJ1.1).

South of Cambridge at Great Chesterford Hadham grey ware becomes considerably more important in this period, rising from 3.7% (Wt) in the late Antonine group from Trench VI, Pit 12 to 12.5% in the early 3rd-century group from Trench VI, Context 32. To the west of Cambridge the fabric accounts for 18.8% (Nosh) and 17.3% (Wt) in the later 3rd- to later 4th-century all-site group from Foxton (Lucas 1997). 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 occurs at 0.5% (Nosh) and 0.3% (Wt) in the late Antonine to mid 3rd-century group from Area A, Phase 6. It appears again at 0.3% (Nosh) and 0.5% (Wt) in the 3rd-century Phase 7A group, rising to 1.1% (Nosh) and 0.6% (Wt) in the Phase 7B group of later 3rd- to early 4th-century date. A little to the south of this site at Little Barford, by contrast, Hadham grey ware forms 7.3% (Nosh) and 4.1% (Wt) of the 1st- to mid 4th-century all-site group reported by Lucas (1997).

Discussion: Hadham grey ware

The distribution of Hadham grey ware in the 3rd century is fairly clear. It can be found in some quantity on sites to the west of Cambridge, but there is a strong south to north fall-off in this area, with the southern boundary of the study area lying just within the core distribution of the fabric. At Cambridge the fabric is present but not common, and it occurs on many but not all of the southern fen edge sites. As with Hadham oxidised ware there is, however, a major extension of its distribution along the Cam corridor which can only be accounted for by the effects of water transport along this river. This effect is not seen with the Old Tillage and the Ouse. The distribution of Hadham grey ware in this period is broadly comparable to that of the Hadham redwares, and they are in roughly balanced quantities, around 1:1 sherds. This is unusual for a fine ware industry where coarse wares normally have a much more limited distribution than the fine ware output, *e.g.* the Oxfordshire industry (Young 1977; Booth *et al.* 2001), the New Forest industry (Fulford 1974), or the Nene Valley industry.

Turning to the forms produced in Hadham grey ware, at Earith, Langdale Hale Monteil (forthcoming) states that 'Hadham reduced wares include plain rimmed bowls and dishes and flanged bowls'. At Wimpole Lodge Lucas (1994, 49) comments 'practically all vessels are bowls or open jars' suggesting that table wares were dominant there. At Cambridge, Castle Hill, a functional analysis of the 17 Hadham grey ware vessels from the RGS groups shows that, surprisingly, 67% of the vessels are table wares, with jars accounting for only 33%. A functional analysis of all the Hadham grey ware vessels recorded in this study shows that again jars form a small minority of the vessels, which are predominantly table wares (Table 7.15). Only half of the vessels in this table come from the Ridgeons Gardens South groups so the remainder of the vessels, largely from rural sites, show the same functional pattern. Given that Hadham grey wares were produced mainly in table ware forms, and were distributed over exactly the same area as the oxidised wares, it appears that they, like the oxidised wares were intended to be fine wares. Forms in this period seem to consist of simple rimmed dishes, bead rimmed dishes, flange rimmed bowls, occasional Dr 31 bowl copies, necked bowls with everted rims (Lucas 1997, fig. 31.40), Cam 307 bowls (Lucas 1997, type B8.1, and jars of Cam types 277, 268A and 268B (Lucas 1997, types J1.4, J2.1 and J2.5; for the latter see fig. 33, nos 66–7)).

Nene Valley grey wares (R21, R22, R23)

Fig. 7.14; Table 7.16

Distribution

Nene Valley grey wares continued to play a major role in pottery supply in the north of the study area in this period (Fig. 7.14). At Maxey (Gurney 1985) they provide 39% (MNR) of the pottery from the early to mid 3rd-century group from F.161 (compared to 13% for 'other grey wares'), and 24% (MNR) of the pottery from F.218 of later 3rd to early 4th-century date, compared to 11% (MNR) 'other grey wares'.

At Orton Hall Farm (Perrin 1996) in Period 2 (AD 175–225/50) Nene Valley grey wares make up 29% of the assemblage, falling slightly to 27% in Period 3 (AD 225/50–300/325). The functional composition of the Nene Valley grey wares changed in this period from an assemblage dominated by jars to one in which jars barely formed a majority of the vessels and table wares were much more important (Table 5.12). In terms of the forms, in Period 2 Perrin (1996, 141) notes 'Nos 227, 238, 245 and 247 are all 3rd-century types. Nos 227, 238 and 247 are essentially wide-mouthed jars or bowls... the large bowl or dish, No 239, and the plain rimmed dish, No 240, are also 3rd-century types'. Period 3 also produced the first example on the site of a developed beaded and flanged bowl in the fabric.

At Chesterton (Perrin 1999) the early to mid 3rd-century group from courtyard layers 3–7 contained 44% Nene Valley grey ware, a similar level to the 47% from the late Antonine group from Building 4, layers 4–5. Once more this urban group has much more of the fabric than nearby rural sites. To the south of Chesterton at Haddon (J. Evans 2003) the 1999 all-site assemblage yielded 17.8% (Nosh) of Nene Valley grey ware, largely from the later Roman deposits, whilst the later 2nd- to mid 3rd-century group from Phase 4 contained 24.4% (Nosh) and 19.3% (Wt) of Nene Valley grey wares, compared to 12.2% (Nosh) and 7.4% (Wt) of 'other grey wares'. The material from the 3rd-century Phase 5/6 from French's excavations at Haddon includes 12.1% (Wt) and 17.4% (RE) of Nene Valley grey ware, compared to 4.9% (Wt) and 4.2% (RE) of 'other grey wares' (Rollo 1994b).

Further south at the Sawtry sites (Hancocks *et al.* 1998) Tort Hill East Phase 2a (later 2nd-early 3rd century) produced 27.2% (Nosh) of Nene Valley grey wares compared to 22.6% (Nosh) of 'other grey wares' and Phase 2b, mid 3rd to early 4th century, produced 14.7% (Nosh) Nene Valley grey wares compared to 31.5% 'other grey wares', some of the latter potentially being residual. At Norman Cross Phase 2 (3rd century), Nene Valley grey wares represented 15.9% (Nosh) compared to 13.3% 'other grey wares'.

In the central fens at Stonea (Cameron 1996) Nene Valley grey ware levels remain stable at 16.8% (Wt) in the early 3rd-century Phase III/IV and rise slightly to 18.0% (Wt) in the mid 3rd-century Phase IV, and to 18.4% (Wt) in the later 3rd-century Phase IV/V. However, they continue to be accompanied by considerable quantities of 'other grey wares', some 24.3% (Wt) in Phase III/IV, 24.4% (Wt) in Phase IV, and 24.6% (Wt) in Phase IV/V. The source of these is not stated; some may be residual and some may include Horningsea ware not separated into that group. Either way it is clear that quantities of Nene Valley wares were falling off with distance from the kiln site quite notably at Stonea compared with more local sites such as Orton Hall Farm, and that the 'other grey wares', dominant in the early 2nd century, may still have provided real competition here.

To the south-east of Stonea at Littleport, where Akeman Street crosses the Cam, the early to mid 3rd-century Phase 3 assemblage contained only 0.6% (Nosh) Nene Valley grey wares, a decline on the 4.4% (Nosh) in the Antonine Phase 1, but both very low levels. The reason for this seems to be competition from Horningsea, which was the dominant supplier at Littleport, clearly using the Cam as a transport link. In the mid 3rd-century Phase 4 group, Nene Valley grey wares rise again to 3.5% (Nosh), but they are absent from the mid to late 3rd-century Phase 5. Overall they amount to a mere 1% of the total pottery assemblage from the site. East of Littleport the 1st- to 4th-century all-site tabulation from RAF Lakenheath Outdoor Recreation Centre shows just 0.2% (Nosh) and 0.4% (Wt) of Nene Valley grey ware, and a little further east again at Brettenham, Melford Meadows near Thetford the fabric was entirely absent (Rollo 2002). At Mitchells Farm, Icklingham, the 1st- to 4th-century all-site tabulation indicates just a single sherd of Nene Valley grey ware (C. Tester pers. comm.).

In the Ouse corridor, Nene Valley grey wares comprise 2.0% (Nosh) of the all-site list at Earith, Langdale Hale (Monteil forthcoming), many of these sherds probably belonging to this period. The low levels here suggest Nene Valley grey wares were not being transported down the Nene and the Ouse to access southern markets. Back in the Cam Corridor at Haddenham, West End (Peachey 2005) the later 2nd- to mid 3rd-century Phase 1 group contains Nene Valley grey wares at 1.7% (Nosh), falling to 1.0% (Nosh) in the later 3rd- to mid 4th-century assemblage from Phase 2. South of this at High Fen the Flavian to later 3rd-century all-site list produced 0.4% (Nosh) of Nene Valley grey ware, whilst at the neighbouring site of Denny Abbey the Flavian to 4th-century all-site list seems to have produced none (Millett 1980a).

On the western fen edge at Godmanchester, London Road (Hancocks 2003) Nene Valley grey wares were a little more common at 2.5% (Nosh) in the later 2nd- to mid 3rd-century Phase 3 group. There is also 1% of

Nene Valley grey ware from the mid 4th-century Phase 4B assemblage. Since production had ceased by the early 4th century (Perrin 1996; 1999) this figure presumably reflects the situation in the later 3rd or early 4th centuries. The assemblage is dominated by table ware types, suggesting that most of it is of 3rd- to early 4th-century date.

On the southern fen edge, at Teversham, Nene Valley grey ware is barely represented in the later 2nd- to mid 3rd-century Group 3, at 0.2% (Nosh) and 0.2% (Wt). Similarly the 1st- to 4th-century collection from the Milton East Waste site contained 0.8% (Nosh) and 0.1% (Wt) of the fabrics. The Antonine to mid 4th-century all-site group from Waterbeach Old Tillage produced 0.6% (Nosh) and 0.6% (Wt) of these fabrics. They were absent from the Antonine Phase 1 group there, and are just slightly more common than the site average, at 0.7% (Nosh) and 0.9% (Wt) in the Phase 3a group dated 3rd to early 4th century. Cambridge Rowing Lake, an all-site 2nd- to 4th-century collection, produced even less, just 0.1% (Nosh) and <0.1% (Wt).

At Cambridge, Castle Hill, Nene Valley grey ware is absent from the Antonine to early 3rd-century Group 4, and only comprises 0.6% (RE) from the very large shrine group of similar date. In the 3rd- to 4th-century Groups 6–9 it amounts to 1.5% (RE) from Group 6, 2.9% (RE) in Group 7 and is absent from Group 8 and Group 9. Thus it is rather more common than on the surrounding southern fen edge rural sites, but is nonetheless very rare. The forms occurring at Castle Hill (see Chapter 10.II) are mainly of later 2nd- to early 3rd-century date, and it is possible that the occurrence of Nene Valley grey ware here was largely restricted to this date range. South of Cambridge, at Great Chesterford, the fabric is found at 0.2% (Wt) in the early 3rd-century group from Trench VI, context 32 (Martin 2011). As at Cambridge a later 2nd- to early 3rd-century date range seems to be indicated.

West of Cambridge at Foxton (Lucas 1997) the later 3rd- to 4th-century all-site list includes Nene Valley grey wares at 0.7% (Nosh) and 1.1% (Wt). Further west at Wimpole Lodge (Lucas 1994) the all-site list, dated AD 180–400+, appears to lack Nene Valley grey wares entirely. However, at Little Paxton (Evans 2011) the fabric appears in Area A, in Phase 6, late Antonine to mid 3rd century at 2.6% (Nosh), and at 0.5% (Nosh) in the 3rd-century Phase 7A, followed by 0.9% (Nosh) in the later 3rd- to early 4th-century Phase 7B. Nene Valley grey ware appears to be absent at Little Barford (Lucas 1997).

Discussion: Nene Valley grey wares

In this period Nene Valley grey wares largely retain the markets they established by the end of the 2nd century with a slight intensification of their penetration in the core area in the Nene Valley. Their diversification into a wider range of table ware types, as shown by the functional analyses of groups (Chapter 11.III), probably helped in this. However, this did not enable the core market area of the fabric to be extended. Outside the Nene Valley, whether south along Ermine Street to Godmanchester, or east or south into the central fenlands the fall off in quantities of the fabric is very marked. The water transport corridors along the Nene and the Ouse, or the Old Tillage, do not seem to have assisted in extending its distribution, or were not used.

Successful competition from the distant Horningsea industry appears to have closed the Cam corridor to Nene Valley grey wares on any scale whilst ‘other grey wares’, perhaps from Godmanchester or Northamptonshire, seem to have blocked markets to the south on Ermine Street. Given the urban marketing model which has been suggested for this fabric its core distribution, perhaps, reflects the main markets of *Durobrivae*.

Wattisfield grey ware (R33)

Fig. 7.15, Table 7.17

Distribution

Wattisfield grey wares continued to be found in the study area in this period (Fig. 7.15; Table 7.17). In the Nene Valley and on the western fen edge they were absent, as might be expected. However, at Stonea two vessels (Cameron 1996, nos 243 and 296), both described as fine and micaceous, seem likely to equate with the Wattisfield fabric. Both come from early 3rd-century contexts.

To the south-east, at Littleport in the Cam corridor, Wattisfield grey ware is surprisingly well-represented. There is 5.9% (Nosh) from the early to mid 3rd-century Phase 3 group, 2.0% from the mid 3rd-century Phase 4 group, and 0.9% from the mid to late 3rd-century Phase 5 group. The ten Wattisfield grey ware vessels from the total Littleport assemblage were a constricted neck jar, five other jars and four dishes. The assemblage is barely dominated by jars, with a considerable element of dishes. The dishes are of grooved rim (R33.30) or bead rim form (R33.32) of Antonine or later date, whilst the everted-rim jars include at least one which may derive from a 3rd-century black-burnished ware form.

East of Littleport micaceous wares formed 26.2% (Nosh) and 20.4% (Wt) of the 1st- to 4th-century assemblage from RAF Lakenheath Outdoor Recreation Centre (C. Tester, pers. comm.) whilst just a little east of this again at Melford Meadows near Thetford (Rollo 2002) grey micaceous and fine grey micaceous wares of probably Wattisfield origin made up a considerable 65.8% (Nosh) and 33.5% (Wt) in the Flavian to mid 4th-century collection. On the eastern fen edge, at Icklingham the 1st- to 4th-century all-site collection had around 15.3% (Nosh) and 13.0% (Wt) of micaceous grey wares, which probably fall within this group.

South of Littleport, in the Ouse corridor, at Earith, Langdale Hale (Monteil forthcoming), Wattisfield products are present, if barely, at 0.1% (Nosh). At the nearby Haddenham Shrine (Lucas 2006a), however, the fabric appears to be absent. In the Cam corridor at Haddenham, West End, (Peachey 2005), Wattisfield grey wares comprise 0.9% (Nosh) in the later 2nd- to mid 3rd-century Phase 1 group. In the later 3rd- to mid 4th-century Phase 2 group there they also represented at 0.9% (Nosh). South of Haddenham in the Cam corridor they are absent from the all-site group from High Fen, but do appear at 1.9% (Nosh) at the nearby site of Denny Abbey in the all-site Flavian to 4th-century list (Millett 1980a).

On the western fen edge at Godmanchester, London Road (Hancocks 2003), Wattisfield grey ware is absent from the later 2nd- to mid 3rd-century and later 3rd- to early 4th-century phase groups. On the southern fen edge, at Teversham, the fabric is absent from the later 2nd to mid 3rd century Group 3, but it is present in the later 4th-century Group 3 at 0.3% (Nosh), although it may be residual in this group. The only form represented was a developed beaded and flanged bowl (Fig. App. 3.24, R33.28). At Bottisham Tunbridge Lane in Phase 5 (Antonine to early 3rd century) Wattisfield grey ware representation rose again to 13.7% (Nosh), about double the level in the Hadrianic to early Antonine Phase 3. A rise in quantities of Wattisfield grey wares in the earlier 3rd century is consistent with the picture seen across the study area.

At Waterbeach Old Tillage the overall site collection contained just 0.1% (Nosh) and 0.2% (Wt) of Wattisfield grey ware, the particularly low figure (for a fen edge site) reflecting the dominance of Horningsea production material. The fabric was absent from the Antonine Phase 1 group, but appears at 0.1% (Nosh) and <0.1% (Wt) in the Phase 3a group dated 3rd to early 4th century. At Cambridge Rowing Lake the 2nd- to 4th-century all-site group produced 0.1% (Nosh) and 0.1% (Wt) of Wattisfield grey ware. Nearby at Milton East Waste the overall site collection, of 1st- to 4th-century date, contained 0.9% (Nosh) and 0.1% (Wt) of R33. Forms consisted of a flagon, a constricted-necked jar, two jars, three bowls and a dish. Although a small group it is again of note that jars are not the dominant type. The bowls were all developed beaded and flanged bowls (Fig. App. 3.24, R33.28) of later 3rd- century or later date, whilst the everted rimmed jar (Fig. App. 3.24, R33.20) was probably of 3rd-century date.

At Castle Hill, Cambridge, Wattisfield grey ware is absent from Groups 1-4 and appears first in the Antonine to early 3rd century Group 5 at 1.7% (MNR) and 1.5% (RE). It also appears in the 3rd- to 4th-century groups, Group 6 (at 1.4% MNR and 1.3% RE), Group 7 (at 1.3% MNR and 0.7% RE), Group 8 (at 1.2% MNR and 0.5% RE) and Group 9 (at 1.1% MNR and 4.7% RE). The forms occurring at Castle Hill are discussed elsewhere (Chapter 10). South of Cambridge, at Great Chesterford (2011) the fabric is absent from the early 3rd-century group from Trench VI, context 32, as it was from late Antonine groups here. West of Cambridge it appears to be absent from Wimpole Lodge (Lucas 1994), Little Paxton, and Little Barford (Lucas 1997).

Discussion: Wattisfield grey ware

The distribution of Wattisfield grey wares seems to show some slight expansion in the 3rd century in the study area. At Bottisham Tunbridge Lane, the closest site to the source, the quantity of the fabric doubled compared with the Hadrianic to mid Antonine period. Within the study area the fabric's distribution was essentially limited to the southern fen edge and to Cambridge and the Cam corridor (Fig. 7.15). This distribution may reflect the considerable role of the Cam as a transport route to the north into the fens. However, given the high levels of this type of fabric on Norfolk sites on the eastern fen edge what is most surprising is its failure to penetrate the Cam corridor more thoroughly. What material is found in the Cam corridor looks as if it arrived in the Cambridge region and then moved north, rather than coming directly from the eastern fen edge.

A functional analysis of Wattisfield grey ware from the study database shows that jars represent a bare majority of the forms present, with table wares also very strongly represented, particularly for a grey ware (Table 7.18). Although this is dominated by the group from Cambridge the breakdown from the other sites is not very different. The Wattisfield grey ware seems to behave rather more like a fine ware in having high table ware values, as does Hadham grey ware.

Nar Valley (R083–R085)

Vessels identifiable as of Nar Valley origin on the basis of form are occasionally found in the north of the study area (Table 7.17). They appear absent from the Nene Valley sites, but at Stonea, Cameron's (1996) no. 142 is a Nar Valley product from a 3rd-century phase. The Nar Valley fabric is very similar to that of the Horningsea industry; an attempt has been made to isolate it in the assemblages examined, but there is undoubtedly a considerable overlap between Horningsea and the Nar Valley fabrics. This is further demonstrated by the ICPMS analysis (Appendix 4). The single sherd of Nar Valley that was sampled suggests that this group may be successfully separated geochemically from Horningsea products, but Sample 28 from Littleport, which was visually defined as a Horningsea product, looks suspiciously as though it was actually one from the Nar Valley.

At Littleport, sherds probably of Nar Valley origin account for 2% (Nosh) of the total assemblage, but because of the difficulties of definition the fabric may be slightly under-represented in the quantification. The fabric first appears in the sequence at around 2.9% (Nosh) and 7.0% (RE) in the early to mid 3rd-century Phase 3 group. In the mid 3rd-century Phase 4 it rises to 4.5% (Nosh) and 10.6% (RE), whilst in the mid to later 3rd-century Phase 5 it falls to 3.9% (Nosh) and 0% (RE). Forms recorded in R083–R085, which may be Nar Valley, consist of a constricted-necked jar (7%), eight jars (57%) and five dishes (36%). Forms (illustrated in Fig. App. 3.21) are bead rimmed dishes copying BB forms (R083.2 and R083.3; R084.6), a dish (R085.4), a bifid rimmed jar (R083.1), a barrel jar (R084.2), a jar with a triangularly-sectioned rim (R084.3), Icenian rustic jars (R085.1 and R085.2) and a bead rimmed necked jar with a cordoned shoulder (R085.3).

South of Littleport at Earith, Langdale Hale (Monteil 2013), a number of Nar Valley 'Icenian rustic' type jars were recorded from the site, amounting to 0.2% by count. Swan (1981, 147) suggests that this typical decoration emerged during the second half of the 2nd century. Monteil states that 'the most common decoration is parallel barbotine dots or coarse slashing or rouletting on the body'. The type is rare in Cambridgeshire. Hill and Lucas (2003) cite an example from Chatteris and the one referred to above from Stonea. Monteil (forthcoming) notes 'Six examples of jars associated with this fabric were found on the site'.

In the south of the study area a few sherds from Teversham Group 3 (later 2nd to mid 3rd century) amounting to 0.1% (Nosh) in fabric group R084 which could be Nar Valley. Similarly there are a few sherds in group R084 from Cambridge Castle Hill Group 5 (Antonine to early 3rd century) amounting to 0.1% (MNR) and 0.1% (RE) which, again, could be Nar Valley. In both cases the identification is probably unlikely.

'Other grey wares'

Fig. 7.16; Table 7.19

Distribution

'Other grey wares' are found across the study area in varying quantities in this period (Fig. 7.16; Table 7.19). In the north of the study area Nene Valley grey wares tended to become dominant by the late 2nd century, but 'other grey wares' can still provide substantial elements of the assemblages. At Maxey they provide 13% (MNR) of the early to mid 3rd-century group from F.161 and 11% (MNR) from the later 3rd- to early 4th-century group from F.218. At Orton Hall Farm the Period 2 assemblages, dated AD 175–225/50, included 24% 'other grey wares', but many of these may have been of 2nd-century date as Period 3 assemblages, dated AD 225/50–300/325, contained just 10%. The one Nene Valley site from which 'other grey wares' appear to be absent is Chesterton, where the early to mid 3rd-century group from courtyard layers 3–7 contained none.

At Haddon (J. Evans 2003) the later 2nd- to early 3rd-century group from Phase 4 contained 12.2% (Nosh) and 7.4% (Wt) 'other grey wares'. Phase 5/6 there (Rollo 1994a), of 3rd-century date, produced 4.9% (Wt) and 4.2% (RE). South of Haddon at the Sawtry sites (Hancocks *et al.* 1998), Tort Hill East Phase 2A, dated later 2nd to early 3rd century, contained 22.6% (Nosh), whilst Phase 2B, dated mid 3rd to early 4th century, had 31.5%. At Norman Cross the Phase 2 group, perhaps of 3rd-century date, contained 13.3% (Nosh) of 'other grey wares'. The Tort Hill East figures may be affected by residual material, but these sites are close to the southern limit of the core Nene Valley grey ware distribution, and the 'other grey wares' may have been contemporary material.

In the central fens at Stonea (Cameron 1996) the Antonine to early 3rd-century group from Phase III/IV contained 24.3% (Wt) of 'other grey wares', the 3rd-century group from Phase IV contained 24.4% (Wt) and the later 3rd-century group from Phase IV/V contained 24.6% (Wt). It should be noted, however, that many of the illustrated forms of these vessels fall within the Horningsea range, and it is not clear that the Horningsea wheelmade fabric was fully defined as a fabric group here. South-east of Stonea at Littleport the Phase 3 group, of early to mid 3rd-century date, contained 12.6% 'other grey wares', of which the chief

component was R01 at 7.3% (Nosh). This falls to 7.7% (Nosh) in the mid 3rd-century Phase 4, with R01 contributing 4.6%, and then falls again to 5.6% (Nosh) in the mid to later 3rd-century group from Phase 5, with R01 contributing 2.6% (Nosh).

At Earith, Langdale Hale (Monteil forthcoming) in the Ouse corridor the Flavian to 4th-century assemblage produced 17.9% (Nosh) 'other grey wares' (and 0.4% of 'Swanpool white-slipped ware'). However, a little to the east, in the Cam corridor, the 3rd- to early 4th-century group from the Haddenham Shrine (Lucas 2006a) produced just 4.1% (Nosh) and 3.9% (Wt). At High Fen the Flavian to later 3rd-century assemblage contained just 2.8% (Nosh) 'other grey wares', while at nearby Denny Abbey the Flavian to later 4th-century collection had just 0.2% (Nosh) of 'other grey wares' (Millett 1980a).

In complete contrast, on the western fen edge at Godmanchester, London Road (Hancocks 2003), the later 2nd- to mid 3rd-century group from Phase 3 contained 12% (Nosh) grey ware assigned to the kiln site at The Parks, with a further 53% (Nosh) of slipped and unslipped unassigned grey wares. Similarly the later 3rd- to early 4th-century group from Phase 4A contained 7% (Nosh) of The Parks grey ware and 52% (Nosh) of slipped and unslipped grey wares.

On the southern fen edge, at Teversham the later 2nd- to mid 3rd-century Group 3 contained just 3.8% (Nosh) of 'other grey wares', of which 2.7% (Nosh) was in the R01 group. Quantities of 'other grey wares' are inevitably very low at the Waterbeach Old Tillage kiln site, where in the Antonine to mid 4th-century overall collection they amount to 1.2% (Nosh) and 0.9% (Wt). In Phase 3a (3rd to early 4th century), they are a little more common at 0.9% (Nosh) and 0.9% (Wt). At Cambridge Rowing Lake 'other grey wares' provided 1.0% (Nosh) and 0.5% (Wt) of pottery in the 2nd- to 4th-century all-site list, of which 0.4% (Nosh) was in R01. At the nearby Milton East Waste site, by contrast, many more 'other grey wares' occurred in the all-site Flavian to later 4th-century collection, totalling 12.4% (Nosh) and 6.0% (Wt). R01 amounted to 2.1% (Nosh) and the commonest fabric was R43, a poorly levigated reduced fabric with some moderate sand and some large angular grey grog and occasional calcareous inclusions, at 4.3% (Nosh).

At Cambridge, Castle Hill, the Antonine to early 3rd-century Group 5 from the shrine contained 9.2% (MNR) and 6.4% (RE) of 'other grey wares', with R01 amounting to 7.7% (MNR) and 4.8% (RE) of this. Groups 6–9 were all of 3rd- to 4th-century date. Group 6 had 12.2% (MNR) and 13.0% (RE) of 'other grey wares', the chief being R01 at 10.2% (MNR) and 10.5% (RE). Group 7 included 10.6% (MNR) and 11.8% (RE) of 'other grey wares', with R01 representing 9.3% (MNR) and 10.5% (RE). Group 8 contained 16.3% (MNR) and 14.0% (RE) of 'other grey wares' with R01 providing 8.1% (MNR) and 7.2% (RE). Group 9 produced a considerable 19.8% (MNR) and 20.5% (RE) of 'other grey wares' with 12.1% (MNR) and 13.5% (RE) being in R01. The fairly fine, slightly calcareous grey ware R11 first appears in Group 5 at 0.6% (MNR) and 0.4% (RE), only represents 0.4% (MNR) and 0.9% (RE) of Group 6, and is absent from Group 7, but it goes on to represent 1.2% (MNR) and 0.9% (RE) of Group 8 and 5.5% (MNR) and 4.2% (RE) of Group 9. The other 'clean' calcareous fabric R12 is only present in Group 8 at 2.3% (MNR) and 2.9% (RE).

The forms and functional analyses of the other grey ware fabrics at Cambridge are discussed in Chapter 10. It is of note that the Cambridge city groups contain many more 'other grey wares' than most of the southern fen edge sites, with R01 dominating. Some of this could be of local origin, but the Godmanchester area might be the nearest more probable source, although parallels can be found further west in Northamptonshire. The R11 group seems comparable with Lucas' (1997) fabric 41 found on sites in the south of the study area to the west of Cambridge.

South of Cambridge at Great Chesterford other sources, not discussed here, provided the majority of the grey wares, forming some 60.5% (Wt) of the early 3rd-century group from Trench VI, context 32 (Martin 2011). South-west of Cambridge at Foxton (Lucas 1997) the later 3rd- to 4th-century all-site group contained 16.0% (Nosh) and 15.8% (RE) of 'other grey wares'. Amongst these 'grey slipware', probably the equivalent of R01, represented 8.2% (Nosh) and 7.0% (RE), with R11, 'fine grey ware' at 3.4% (Nosh) and 3.7% (RE) and Colchester grey ware at 4.4% (Nosh) and 5.1% (RE). At Wimpole Lodge (Lucas 1994), west of Foxton, the Phase 1 group, dated AD 180–240 contained 15% of R11 (Lucas' 1997, fabric 41), apart from the fabrics discussed above, with no 'other grey wares' mentioned. This falls to 15% (RE) in Phase 2 dated AD 240–300 and to 5% in Phase 3, dated AD 300–360, by which time it seems likely to have been residual.

To the north-west at Little Paxton (Evans 2011) the late Antonine to mid 3rd-century group from Area A, Phase 6, had a massive 41.3% (Nosh) and 41.5% (Wt) of 'other grey wares'. R01 was the most significant element at 26.6% (Nosh) and 21.5% (Wt), followed by R11 at 8.0% (Nosh) and 15.1% (Wt), and R12 at 3.7% (Nosh) and 3.7% (Wt). In the 3rd-century group from Phase 7A, there was a similar level of 40.1% (Nosh) and 35.2% (Wt). Again the major component was R01 at 31.4% (Nosh) and 28.0% (Wt), with R11 at 1.4% (Nosh) and 1.4% (Wt), and R12 at 5.5% (Nosh) and 4.1% (Wt). In the later 3rd- to early 4th-century Phase 7B 'other grey wares' fall slightly to 39.7% (Nosh) and 34.5% (Wt). R01 drops markedly to 21.6%

(Nosh) and 18.0% (Wt), whilst R11 rises to 5.1% (Nosh) and 5.0% (Wt) and R12 to 8.6% (Nosh) and 7.3% (Wt). That R01 is not residual in the later Phases is demonstrated by the presence of a developed beaded and flanged bowl (Evans 2011, type B1.1) dating to after *c.*AD 270 amongst the form types. Godmanchester fabric G08.1 matches R01 well, while fabric R11 is similar to the Godmanchester fabric G07.2 (C.J. Evans 2003) and a source in the Godmanchester area is possible.

The final group, to the south of Little Paxton, is the Flavian to 4th-century all-site group from Little Barford (Lucas 1997) where 'other grey wares' amount to 11.2% (Nosh) and 8.2% (Wt). Here R01 (Lucas' 1997 fabric 40) amounts to just 6.2% (Nosh) and 5.3% (Wt), much lower figures than Little Paxton, strongly suggesting that the source of this fabric lay somewhere to the north of these sites. Fabric R11 (Lucas' 1997 fabric 41) contributed 4.7% (Nosh) and 2.7% (Wt). It seems likely that the source of R11 (and perhaps R12, if this is a separate group rather than part of a continuum with R11), found principally in the south of the study area, lies to the west or south of Cambridge, perhaps in Hertfordshire or Bedfordshire.

Discussion: 'Other grey wares'

Overall in the north of the county 'other grey wares' tended to be replaced by Nene Valley grey wares through the course of the century. The source of these remains unclear. Some, at least seem to have come from the north. Others might have been local or come from Northamptonshire. In the Cam corridor and on the southern fen edge 'other grey wares' were rare, although more common at Cambridge. Here there clearly was some local production, but much of the material may have come from the vicinity of Godmanchester. Given the distribution of the often grey/black-slipped sandy grey wares, particularly in the R01 group, it would appear that many of these originated in the Godmanchester area, although some could have come from further west.

Class S, Samian ware

Fig. 7.17

Table 7.20 shows the proportions of East Gaulish samian wares in assemblages from the study area. The overall proportion of samian ware in assemblages has been discussed in Chapter 6.I (Table 6.29). For the most part levels of East Gaulish samian ware as a proportion of the total samian ware assemblages are quite low, and consequently quantities in overall site assemblages are very low. This is typical of the national picture where throughout the province the importation of samian ware appears to have reduced substantially after the cessation of production of Central Gaulish samian ware dated *c.*AD 200. Quantities of Central Gaulish ware, however, clearly remained in use for a considerable period after this.

The sites with relatively high levels of East Gaulish samian are Langdale Hale, Earith (Monteil forthcoming), Haddenham West End (Peachey 2005), Denny Abbey (Millett 1980a), Waterbeach Old Tillage, Milton East Waste, Cambridge Castle Hill, Wimpole Lodge (Lucas 1994) and Little Paxton (Evans 2011). Amongst these, Haddenham West End, Waterbeach Old Tillage and Wimpole Lodge did not start before the mid to late 2nd century, and, therefore, might be expected to contain mainly late samian ware. However, the lists from Langdale Hale, Milton East Waste, Denny Abbey, Castle Hill and Little Paxton are much longer and the peak in this period must reflect higher than usual samian usage at this time. At Castle Hill it may be that being an urban or semi-urban site enabled it to gain better access to supplies.

The quantities of East Gaulish ware from most of the sites, except Castle Hill (see Chapter 6.I) are too low to tabulate form occurrences in the fabrics meaningfully. The occurrence of form types and decorated wares at Castle Hill is discussed in Chapter 10.II. As usual decorated ware levels in East Gaulish ware are lower than those for Central Gaulish ware (*cf.* Bell and Evans 2002).

Tyers' Potsherd map of East Gaulish samian ware distribution (Fig. 7.17), now somewhat outdated, shows that there is a clear concentration around London which was again a major centre of redistribution for the fabric. As has been observed for a long time, East Gaulish samian wares tend to be more common on the eastern side of the country, and particularly so on some east coast sites. This has been confirmed by Willis (2005, 6.7.3) as has the view that supplies tended to be stronger on military sites. Willis has suggested that most of the samian ware in use in the 3rd century was actually an ageing stock of Central Gaulish material with new East Gaulish material only representing about 12% of the material in contemporary use. There is no reason to believe that the data from the study area are inconsistent with these trends

Class W, White wares

Few white wares are likely to be contemporary in this period. Nene Valley cream wares seem to have continued in production in small quantities, but probably on a smaller scale than previously, whilst production of Verulamium region wares seems to have ceased.

II. Summary of Pottery Supply in the 3rd century

Overall most of the major patterns of pottery supply and distribution seen across the study area in the 2nd century are repeated in the 3rd. There are few major changes and radical breaks. One of the notable changes is in relation to amphora supply, with contemporary amphorae virtually disappearing from the study area. This, however, is part of the province-wide pattern that seems to have seen a sudden end to the importation of Spanish olive oil and a failure to replace this with any other source (*e.g.* Funari 1996). The reason for this is not easily explained but it is a clear material fact and it does not seem likely that importation in barrels replaced the amphora supply. Thus in Cambridgeshire, as throughout the province, olive oil seems to have dropped out of urban diets in particular in the 3rd century. The other major break, again a province-wide phenomenon, is the massive decline in the importation of samian ware after *c.*AD 200. This may indicate the collapse of the national network of *negotiatores* which had previously distributed Central Gaulish samian ware.

Otherwise ceramic patterns remained fairly stable. BB2 disappeared from the market in the later 2nd century, but the evidence from Cambridge in particular (Chapter 10) suggests that it was largely replaced by a little more BB1, although this was at the limit of its distribution and largely restricted to table ware forms. Shell-tempered wares remained a significant element of pottery assemblages in the period in the Nene and Welland Valleys, although still in declining quantities on many sites, at least in the earlier part of the century. They are also a significant element in assemblages on sites to the west of Cambridge moving towards the kiln site at Harrold (Brown 1994). They decline as a proportion of the assemblage compared to the previous period on some sites but not on others. Since the reason for this decline in the Hadrianic–Antonine period was seen as reflecting further diversification of assemblages as a whole, rather than the result of competition from other sources of cooking and storage vessels, then it follows that this process seems to have been coming to an end in the 3rd century. The distributions again tend to suggest production of shell-tempered wares in the Welland/Nene/lower Ouse corridor area in north Cambridgeshire as well as at Harrold. The figures from Cambridge and the sites around it suggest that the Harrold potters were making steady progress in extending their share of the market here, but they seem to have been falling back nearer to the kiln site in Bedfordshire. The Bourne kilns did not apparently outlive the century, and fairly distinctive types produced at Harrold started to be common across the north of the region towards the end of the period.

Overall fine ware levels in assemblages in the region increased during the 3rd century. By far the most significant fine ware in the region in this period, as in the later 2nd century, was Nene Valley colour-coated ware, quantities of which tend to rise in the course of the century. Other aspects of this development have been discussed above. Amongst other fine wares Hadham oxidised ware may have been one of the more significant. Moselkeramik is occasionally found across the study area and there is an equally small number of pieces of 3rd-century Oxfordshire red colour-coated ware.

The 3rd century saw a major change in mortarium supply across the region. This came to be dominated by products of the Lower Nene Valley industry, eventually supplemented at low levels by Oxfordshire vessels. The marginalisation of Mancetter-Hartshill products after the early 3rd century is notable.

In terms of grey wares, these were, as usual, the most important fabric class in most assemblages in the region. There were three significant blocks of these. In the north of the study area the Nene Valley grey ware industry largely retained the markets it had established by the end of the 2nd century. In the fens and south of the study area the overall distribution of Horningsea wares in this period is very similar to that in the 2nd century, but again there seems to have been some intensification of marketing within its core area. The third major grey ware group in the study area are the ‘other grey wares’. In the north of the county these tended to be replaced by Nene Valley grey wares through the course of the century. They are commonest on the western fen edge in the vicinity of Godmanchester and on the southern fringe of the study area. Given the distribution of the often grey/black slipped sandy grey wares, particularly in the R01 group, it would appear that many of these originated in the Godmanchester area, although some could have come from further west. It seems likely that the calcareously tempered grey ware R11 (and possibly also R12) found principally in the south of the study area, originated to the west or south of Cambridge, perhaps in Hertfordshire or Bedfordshire. Minor grey ware groups include Wattisfield grey wares and Hadham grey wares; it is notable that the repertoires of both industries included a high proportion of table wares.