

**The Roman Pottery and Ceramic Building Material from field-survey in the environs of Aldborough (*Isurium Brigantum*) during the 1980s and 1990s**

by

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with contributions from J.M. Mills and Martin Millett

**Introduction**

by Martin Millett

During the period from 1987 and 1989–97 an extensive field-walking survey was undertaken in the vicinity of the Roman town at Aldborough, North Yorks. Sponsored by the YAS's Roman Antiquities Section (henceforth RAS) and led by Colin Dobinson it subsumed a smaller area which had been field-walked in 1987 by students from the Department of Adult and Continuing Education at the University of Leeds (led by Jennifer Price). The report on this work [*Archaeological field-survey in the environs of Aldborough (*Isurium Brigantum*)*] by Colin Dobinson, Rose Ferraby, Jason Lucas, Martin Millett and Lacey Wallace is published in the *Yorkshire Archaeological Journal* Vol. 90 for 2018 (DOI 10.1080/00844276.2018.1457615)]. Distribution maps are included in that publication.

This paper presents more extended reports on the pottery and ceramic building materials recovered from the survey, complementing the *Yorkshire Archaeological Journal* paper. It is accompanied in the archive by full sets of the finds data from the survey.

*Note:* throughout the text the following abbreviations are used and in the illustrations:

Nosh = number of sherds

Wt = weight

MNR = minimum number of rims

MNV = minimum number of vessels

EVE = estimated vessel equivalent

**The University of Leeds survey (1987)**

The work led by Jennifer Price was undertaken in 1987 it covered an area in the field immediately outside the North Gate of the town, overlying and to the east of the Roman road than runs north towards the bridge across the river Ure that has been identified in the geophysical survey. This area forms part of a field (9577SW) which was also later surveyed more extensively by Colin Dobinson's team (see below). The area surveyed was divided into 10m by 10m squares, laid-out from the southern

boundary. The finds bags show that the squares were labelled with numbers 0–12 and letters A-E. Although the records are missing we have concluded that the grid squares were numbered sequentially from West to East, with letters used from South to North, with the survey thus covering an area 130m by 50m. Only pottery and ceramic building material were retained and these had been washed and bagged by volunteers, and then stored until studied for the current project. There was no evidence that any finds had been lost or discarded, so we have worked on the basis that these data are complete. However, samian ware from this work had mostly been separated from the individual grid bags containing the other sherds, and was boxed separately without the sherds being given grid labels, so its distribution cannot now be assessed.

**The Pottery from the University of Leeds survey (1987)** by Jeremy Evans with a contribution from J.M. Mills

Some 1750 sherds weighing 16.480kg of Roman pottery were presented for examination, including 240 sherds of samian ware, weighing 0.710kg. The average Roman sherd weight is 9.4g and the average percentage of rim is 5.8%. These figures are relatively low, as might be expected in a field-walking collection, a range of 10-20g being more usual for a lowland zone urban site.

All of the samian ware from this collection was unmarked. Apart from those sherds separated from the coarse pottery by this author, the samian ware was all in a single box in bags labelled 'ALD XMI'. There is no other obvious origin for this material except from this field-walking, and there are far too few samian sherds for their number to be credible if this material is not included in the overall assemblage from the survey. Apart from the samian the coarse pottery sherds were marked with their grid square numbers. However, the marking was not entirely consistent as to whether the grid letter or the grid number came first.

*Dating evidence*

Figure 1 shows the overall date distribution of rimsherds from this assemblage. There is little evidence of first-century activity, and nothing that specifically requires a first-century date. There is a single Flavian–Trajanic rustic ware sherd and just four sherds of South Gaulish samian ware. Activity apparently picks up in the Hadrianic period, although this is mainly material with a Hadrianic–Antonine span, and activity peaks in the early period in the mid–late Antonine period. Activity then falls somewhat to a plateau through most of the third century before rising to a peak at the

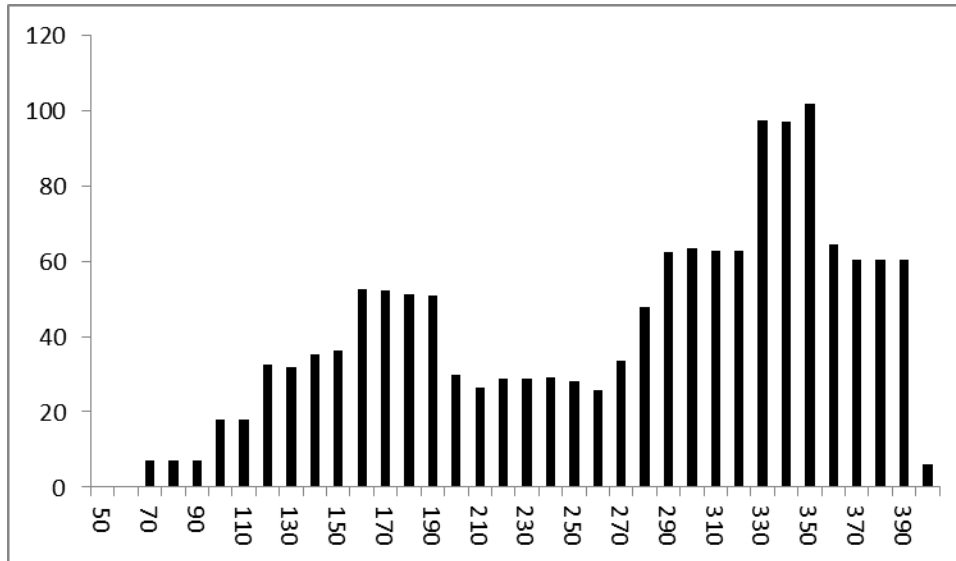


Figure 1: Aldborough 1987 survey. Date distribution by RE of Roman coarse pottery, with a date range of less than 200 years, excluding samian

end of the third. This continues at a similar level through the earlier fourth century, with a peak mid-century, after which levels fall back to the level in the earlier fourth. The method appears to be exaggerating the amount of later fourth-century material by smoothing out material with a generic fourth-century date across the latter half of the century. The calcite gritted ware forms suggest this, with three earlier fourth century S-bend types, three other early–mid fourth century types, seventeen mid fourth-century proto-Huntcliff types, but only three later fourth-century Huntcliff types; on a site with a decent level of later fourth-century activity the Huntcliff types would normally outnumber all the others.

However, there is something a little odd about the frequency, or rather the lack of frequency of Huntcliff types from the whole of the Aldborough site. This author would expect them to be very common within the walled area of the town, where both logic, and the pretty strong late fourth-century coin list (Mackay 1981), would suggest the focus of late fourth-century activity should lie. However, Snape *et al.* (2002, 104) point out “Calcite gritted ware does not appear to be as common at any period at Aldborough as it was at York or Malton, which is reflected in the low numbers of Huntcliff type rims in the fourth century deposits. The 1930s excavation report mentions only five examples (Myres *et al.* 1959, 58), while the 1964 excavation report has only one illustration, incorporating sherds from several different vessels (Jones 1971, fig. 12, no. 116).”

Figure 2 shows the date distribution of *mortaria* from the site. This shows an absence of first-century types, and does pick up the mid–late Antonine peak seen in

the samian ware to some extent, followed by a major early third-century fall, rising again in the second quarter of the century and continuing at a plateau until the later third century when there is a rise to a level maintained throughout the earlier fourth century, there is then a further rise in the mid fourth century and levels continue at that heightened level to the end of the fourth century. This plot is at odds with Fig. 4 in showing its highest peak in the later fourth century. In terms of the rim forms there are six Crambeck *mortaria* which are earlier fourth century or which have a date range that includes the earlier fourth, compared with four with an exclusively later fourth-century date. The distribution of the Crambeck *mortaria*, and of the sherds of possible Crambeck parchment ware (although these are not well defined amongst material where surfaces are often heavily eroded), does show some tendency for them to be more frequent nearer to the defences (particularly in row A) although this should not be overstated.

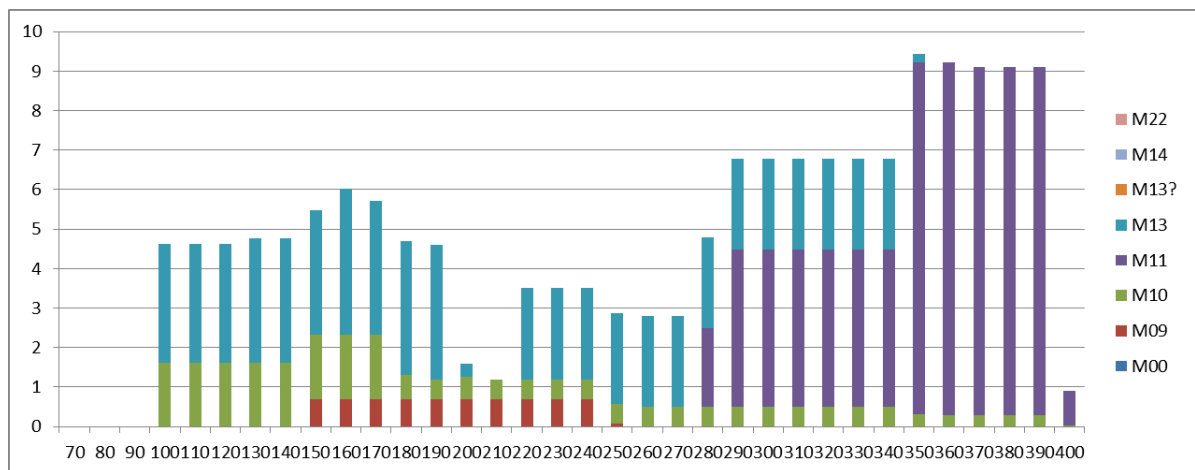


Figure 2: Aldborough 1987 survey. Date distribution for *mortaria* by RE showing proportions from different *mortaria* sources.

As Snape *et al.* (2002, 104) point out, in the walled area late Crambeck wares appear to be reasonably represented, despite the weaker evidence for late calcite gritted wares. Thus, on the present evidence there is a small problem with later fourth-century dating evidence here. All the regional evidence (eg. Evans 1985) would suggest calcite gritted wares should be common here in the later fourth century, and their poor representation should be chronologically significant, but the evidence from previous excavations in the town, although not of good quality, suggests the pattern at Aldborough may deviate from the regional background.

The site samian list (see below) clearly indicates minimal activity on the site before the Hadrianic era, with just 1.3% (Nosh) in the entire samian collection. J.M.

Mills (below) notes that the earliest samian is Flavian and the assemblage is predominantly mid–late Antonine in date. The plotted date distribution of the samian ware (MNV) shown on Fig. 3 does not pick this up clearly, because of the limited number of pieces with a specific mid–late Antonine date compared with the large number with a generic Hadrianic–Antonine date, but it does emphasize the dearth of pre-Hadrianic material. There can be little doubt that there was minimal activity on this site before the mid Antonine period.

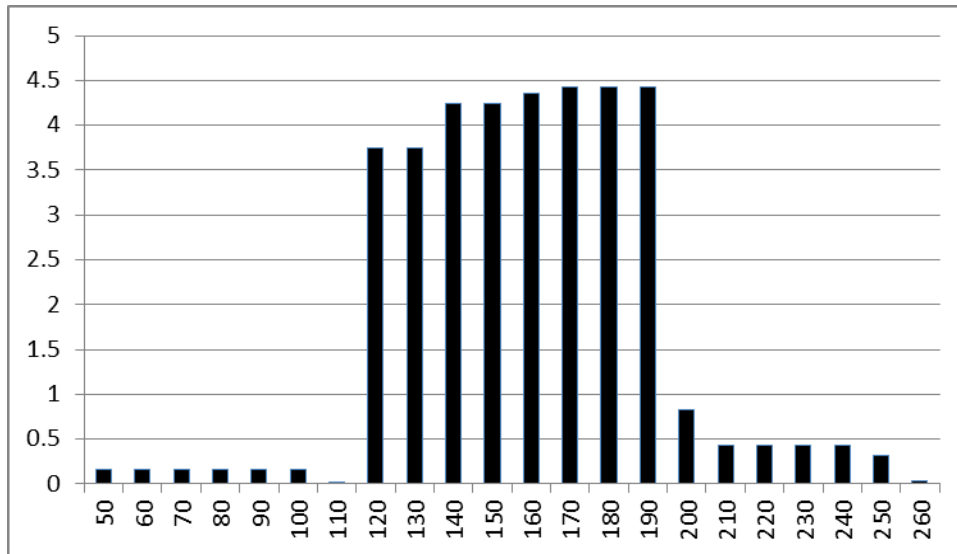


Figure 3: Aldborough 1987 survey. Date distribution of samian ware by MNV

Activity on any scale on the site appears to end around the middle of the fourth century. Strong activity in the earlier fourth century is clearly demonstrated by the high levels of Crambeck grey-ware (R09) from this area, 9.3% (Nosh). But later fourth-century types are much rarer. Sherds of probable Crambeck parchment ware are few but because of surface erosion identification of these is far from certain. They also tend to group in row A, nearest to the town wall, suggesting most are a rubbish scatter from inside the town. On balance it seems likely that any substantial activity in the area ended in the range c. AD 350–60.

The 1989–97 survey in the same area (below, Table 14, Fig. 9) shows a similar plot with activity picking up in the Hadrianic–early Antonine period, but the first major peak is the mid–late Antonine one, followed by a third-century trough and a late third-century rise to an early–mid fourth-century peak, with a decline in the latter half of the fourth century.

*Collection bias*

The likelihood of collection bias is discussed in some detail in the context of the 1989–97 field-walking collection (below). Compared to that assemblage there actually seems to be less bias in this. Samian ware levels are lower, and greyware levels higher, although the lower levels of samian ware, at least in part, are likely to reflect the generally later chronological range of material in this assemblage. The higher levels of colour-coated wares, particularly Nene Valley colour-coated ware, in the 1987 assemblage also suggest that these are more likely to be real differences reflecting the site's chronology than changes in collection bias.

The average sherd weight of the samian is 3.0g, an even lower figure than the 3.8g from the 1989–97 field-walking. In contrast the average coarseware sherd weight is 10.4g (11.5g in the 1989–97 assemblage). As noted below this tends to suggest that the samian ware was more assiduously collected, although it is generally true that the average samian sherd weight from excavated samples tends to be lower than the average coarse pottery sherd weight (eg. at Worcester Magistrates Court – Evans forthcoming a – the overall Roman pottery average sherd weight is 17.9g but that of the samian ware is 11.5g).

#### *Fabric supply*

The information on fabric classes and ware types from this assemblage is presented in Table 6, and discussed alongside the 1989–97 field-walking material below.

#### *The Samian from the 1987 survey* by J. M. Mills

##### Quantity and Condition

The samian, a total of 240 sherds weighing 710g, was, as might be expected from a field-walking collection, generally quite abraded and comprised in the main small sherds and chips. Only 17 sherds weighed 10g or more, the largest weighing 35g. Approximately half of the sherds (by count) weighed 2g or less, accounting for less than 20% of the total weight – many were very small sherds indeed. Given the limitation small sherds impose on identification, especially on form identification, it is astonishing that most were assigned to a production centre based on fabric, some are queried in the database indicating an uncertain identification, but in the tables below these are included with the more confidently identified sherds as they are not a significant element (<5%) of the assemblage.

##### Production Centres

Samian was identified from the three main production areas of South, Central and East Gaul. The particular centres identified include: La Graufesenque in South Gaul

(SAMLG), Lezoux (SAMCG) in Central Gaul, and Rheinzabern (SAMRZ) in East Gaul. The range of fabrics is limited, but adds to the evidence from other field-walking (below) which indicates constant access to the samian market from the mid-late first into the third century AD. As with 1989–97 field-walking material Central Gaulish samian dominates the samian assemblage (Table 1).

#### Dating and Range of Forms (Table 2)

The close dating framework for most collections comes from decorated and stamped wares, however, for this group more general trends based on the date ranges for each production centre and range of forms identified provide the basis of the dating. The earliest sherds are from first-century South Gaulish vessels, most likely dating from the Flavian period. The only forms identified are a cup (Dr 27) and the base of a dish (Dr 15/17 or 18).

Clearly the majority of the samian, over 90% by count and weight, came from Central Gaul, specifically the kilns around Lezoux which produced vessels for export from about AD120 until the end of the second century. When looking at the range of forms identified from Lezoux and the style of most of the decorated vessels it seems that much of the Central Gaulish material belongs to the second half of the century. Only two plain-ware vessel stamps were noted, one, Anailus, is of late Hadrianic or early Antonine date; the other of late second century date, although Hartley and Dickinson (2008, 321–23) suggest that this potter, Celsianus, may have produced vessels for export into the third century AD. There are 17 sherds (total weight 64g) from decorated bowls and two from Déchelette 72 jars, and a further two sherds from closed vessels, probably also Form 72. Few of these sherds have enough decoration extant to enable the workshops to be identified: there are possible examples of vessels from the Cerialis ii-Cinnaumus ii workshop, Docilis, Albucius, Cinnamus ii, and Doeccus. One fragment of a Déchelette 72 has a scrap of cut-glass decoration. A range of dates from late Hadrianic through the Antonine period are indicated which complements the evidence from the plainwares and stamped fragments. There are no Dr 27 cups and the contemporary dish, Dr 18/31, is represented by two examples, these two forms were current until about AD160. Low numbers of these forms in comparison with Dr 33 cups and the later dish form Dr 31 and its rouletted counterpart Dr 31R usually indicates a late second century focus to activity. A single sherd from a samian lamp is an exceptional find and is described separately below. Characteristically 'late' vessel forms present here are cup and dish forms Walters 79/79R and 80 and two possible examples of gritted *mortaria*; forms which were introduced into the samian repertoire after about AD160 or 170. This is also the

period when the bulk of East Gaulish samian began to arrive. East Gaulish samian was imported until the middle of the third century. A few sherds (5) are from plain vessels made at Rheinzabern, one is from Trier, and additionally a further five sherds are likely to be from kilns in East Gaul, but could not be assigned to a specific kiln site. The sherds are small and cannot be more closely dated than suggesting they were produced at the end of the second or early in the third century AD.

### Samian Lamp

A single sherd, apparently a spout from a moulded lamp in a Central Gaulish fabric was recovered from Grid A4. The sherd comprises the projecting spout and rim around the forward edge of the wick aperture, but the upper surface of the piece is missing. The hole itself seems to have been made by pushing a pointed or tapering tool down into the lamp; the point of the tool pushing into the clay in the base of the lamp. Without the upper surface present it is hard to see that there was actually a clear channel into the body of the lamp. A tiny section of the flat surface next to the wick hole survives suggesting the size of the wick hole is c. 7 x 9mm. Close inspection shows that the very end of the spout is quite worn, but because this find is from field-walking this might be post-depositional abrasion rather than use-wear. The underside is in good condition, very rounded with a moulded collar at the neck which may be reflected as a notch on the upper surface of the lamp. The small section of the main body which survives is smooth and very rounded. It is tempting to suggest that this might be part of a moulded lamp similar to the 'African head' lamp now in the Museum of London (Oswald and Price 1920, pl. XXXV, 7); the form of this fragment with the collar or moulding below the wick aperture suggests that this is not from a disc lamp, however, the fragment is really too small to be certain of its exact form. Another 'African head' lamp was found at Alcester, it was made at Lezoux in Central Gaul and is of Antonine date (Dickinson 2001, 187, fig. 123, 33). The wick aperture of the London example is very elongated and in that respect the Aldborough lamp differs by having a smaller aperture. Samian lamps are uncommon finds (Willis 2005, 8.5) both in Britain and in the wider Empire; Willis suggests that lamp finds have a relationship with settlements relatively low down the social scale. It is possible that this is not the case, Alcester is a fort site, and although it may have been abandoned earlier in the second century a military presence may have had a continuing influence on the settlements. Most lamps appear to be Antonine in date and it is likely that this example is too.

### Conclusion



This samian adds to the results from the material from 1989–97 field-walking at Aldborough (below). With the exception of the rare find of a fragment of a samian lamp the material fits in well with that material. The vast majority of the samian collected was from Central Gaul and is predominantly Antonine (and later?) in date. The possible influence of a military presence noted in the 1989–97 material, evidenced by a high proportion of decorated vessels, may also account for the presence of the lamp.

#### Samian Potters' Stamps

Each entry gives: potters' name (i, ii etc., where homonyms are involved), die, form, production centre (fabric), reading, date, [grid number].

1. Anailus i, 2a, Lezoux, a flat-based cup. [A]NAIL[L̄ F]. c. AD125–145/50 (Grid B2)
2. Celsianus, 2a, Lezoux, Drag 31. [CELSIANI]. Despite only the last letter (ligatured MA) surviving the smallness and neatness of the letter-cutting makes this identification possible. c. AD 160–200? (Grid D3)

#### Decorated Samian

Many of the decorated sherds recorded are small and have only a very small amount of the decoration extant. The 15 decorated sherds and chips weigh only 64g, and as a consequence very few sherds had any describable or identifiable decoration remaining, and none is worthy of illustration. (Note: O = Oswald 1936–37 and Rogers = Rogers 1974)

1. SAMCG, Dr 37. Scrap of body with pygmy O.696A and vine Rogers N4 and the legs of an unidentifiable animal. The vine and pygmy were used by both the Cerialis ii-Cinnamus ii group and Paternus III; hence a late Hadrianic – early Antonine date is expected for this piece (Grid C0).
2. SAMCG, Dr 37. Body sherd with scrap of ovolo, possibly Rogers B223 with bead row and a scrap of a double-bordered medallion, perhaps Rogers E21. Both ovolo and medallion were used by the Cinnamus workshop. c. AD150–80. (Grid A3).
3. SAMCG, Dr 37. Body sherd with repeated impressions of the edge of leaf Rogers J146 and the rear of a horse running left, perhaps O.1904, although the tail seems rather shorter than normal. Probably attributable to Albucius. c. AD145–75 (Grid A3).
4. SAMCG, Dr 30. Scrap, with part of a putto (perhaps O.440) within a narrow panel and a medallion in the next. Possibly the work of Doecus, or other late second century potter; a late Antonine date is probable (Grid E4).

5. SAMCG, Dr 37. Scrap from the lower edge of the decorated zone of a free-style bowl, the only extant figure is the goat O.1842 which was used by several Antonine potters. There is a plain ridge at the base of the decorated zone (Grid B13).
6. SAMCG? Dr 37. Scrap with a vertical panel with wavy dividers. Fragments of two small double rings survive, of a similar size to those used by Docilis (Stanfield and Simpson 1958, fig. 24, 20). Hadrianic to early Antonine (Grid B0).
7. SAMCG, Dr 37. From the lower edge of the decorated zone, a sherd with the rear end of a dog, the back legs of a large cat and part of a spiral or curly S and a ridge at the base of the decorated zone. Not enough to suggest anything other than an Antonine date (Grid C1).
8. SAMCG, Dr 37. Scrap with a naturalistic leaf. The leaf is the shape of a beech leaf, but no suitable parallel was found. Hadrianic or Antonine (Grid C7).
9. SAMCG, Dr 37. Scrap from a free-style bowl of animals, and possibly a human figure too. Probably Antonine (Grid B2).

#### *Functional analysis*

Table 3 shows the functional analysis from the 1987 assemblage, compared with that from the 1989–97 field-walking material. As in that, jar levels are very low, indeed at the lower end of the urban range (Evans 1993; 1995) comparable with groups from York and Carlisle. In comparison tableware levels are high, and indeed notably higher than in the 1989–97 assemblage. Even given the possibility of a little under-representation of jars because they tend to occur mostly in the darker (less easily retrieved fabrics) compared with bowls (more of which will be samian or oxidized) there is little doubt that both these collections have strongly urban/military characteristics. This is not as obvious as it may appear, since on many urban sites liminal sites which may have an artisanal or agricultural character tend to have functional characteristics more akin to basic level rural sites. The high tableware levels suggest higher-status activity taking place on this area than across that of the 1989–97 field-walking in general.

In both assemblages levels of drinking vessels are high, around 13%, a level appropriate for urban or military sites, but in the 1989–97 assemblage much of this comprises cups whereas on the 1987 site the vast majority is in beakers. This is probably largely chronological as most of the cup forms are samian ware vessels, whereas most of the beakers are Nene Valley colour-coated wares of later second to later fourth century date. Flagons are relatively scarce in the 1987 assemblage compared with the other, again this is likely to be chronological, as most flagons are of first–second century date, whereas most of the 1987 assemblage is of later

second to mid fourth-century date. Lids are also less frequent in the 1987 than in the 1989–97 assemblage, again this is probably chronological as they are more generally first–second century in date.

*Mortaria* comprise 3.4% (Nosh) of the assemblage. This would appear a reasonable level, but the weight figure is high at 8.9%, as are the 8.7% (MNR), and the 8.4% (RE). This problem is comparable to that in the 1989–97 assemblage where *mortaria* represent 4.1% by Nosh but 15.0% by minimum numbers of rims and 15.3% by RE. As noted below these high numbers may result from differential preservation as *mortaria* rimsherds are notably robust. Levels in the 1987 collection are, however, notably lower than in the 1989–97 one, this, again, may simply reflect the chronology of the group with more later Roman, tableware type *mortaria* in this collection, compared to more, earlier food preparation type vessels in the 1989–97 assemblage.

*Amphorae* are reasonably represented at 0.9% (MNR) and 1.9% (RE), levels only a little below the 1989–97 assemblage despite the largely later date range of the 1987 collection, perhaps suggesting most of the *amphorae* here arrived in the Antonine period to the early third century. Other forms are represented by a single tazze flange in a white-slipped oxidized fabric from grid B3.

The overall level of finewares from the 1987 assemblage is high, at 18.7% (Nosh) and 8.7% (Wt). This is even higher than the 12.7% (Nosh) and 6.0% (Wt) from the 1989–97 assemblage. This would tend to suggest that the site was of urban or military character, the former being the more probable. Amongst the 82 samian ware forms identified 23 are from decorated forms. Giving the proportion of decorated samian ware as 28%. This is a high level and very comparable with the 28% of Central Gaulish decorated ware in the 1989–97 assemblage. Willis (2005) provides much comparative evidence suggesting this level is consistent both with military sites and major civil sites.

### *Conclusions*

The dating evidence suggests there was no substantial occupation in this area before the mid Antonine period. It seems likely that this may have some bearing on the discussion by Snape *et al.* (2002) of the date of the town defences. The site is defined by the road north from the North Gate and the east-west defensive ditches and it seems reasonable to suppose that its development post-dates the layout of these. Snape *et al.* note (2002, 59): “The broad date range for the primary defences, suggested as the second half of the second century (Charlesworth 1971, 159), can now be further refined. The weight of the evidence points to a mid-Antonine *terminus*

*post quem*. However, for reasons discussed below, the actual construction could have taken place at a much later date. It is in this context that the stratified coin, now more certainly identified with Julia Domna, assumes greater importance.”

Also, “At Aldborough there was nothing to show that buildings had been demolished to make way for the defences; those found beneath the rampart may have been abandoned some decades earlier. Thus although the bulk of the finds indicate a *terminus post-quem* of c. AD150 for the construction of the defences at Aldborough, it would be cavalier to dismiss the two later finds as contamination. They could be taken to indicate that work on the defences started in the late second or early third century and continued down to the AD 240s” (Snape *et al.* 2002, 60).

The evidence from the 1987 field-walking would seem to reinforce the evidence of the defences being constructed c. AD 150/60, and cast doubt on the proposed long chronology based on a couple of insecure finds.

Similarly the date of the abandonment of the 1987 field-walking site would seem very likely to be related to the date of its being cut by the late outer defensive ditches. This in turn seems likely to be related to the construction of the bastions/external towers. The date of this is clearly in the middle of the fourth century (or later), and not earlier. Surprisingly, as at Catterick, where the Catterick north settlement ends around the middle of the fourth century, there seems to be an end of extra-mural activity in the later fourth century, and the 1989–97 field-walking (below) suggests this is a pretty general phenomenon and not one restricted to this part of the site.

Discussing the late Roman coinage from Aldborough Mackay (1981) notes “Period 19 is average ... Period 20 (AD 378-88) is represented by 18 coins, three of which are silver, and the bronze total is slightly above average, suggesting that this important administrative centre managed to attract at least some of the period 20 coins needed to keep its economy going. Period 21, however, is represented by just one coin.”

The pottery evidence from the field-walking is fairly clear in pointing to the absence of any pre-Antonine military centre in the Aldborough hinterland examined. In contrast the material reported from within the later walled area does suggest early military activity. The samian ware reported by Willis (2002) from within the walls is a total contrast with the extra-mural assemblages, the former being ‘predominantly Flavian to early Antonine’. He points out that the level of decorated ware in the intra-mural assemblage is consistent with a military supply (Willis 2002, 79).

The pre-Flavian and Flavian material from the site (Snape *et al.* 2002, 103) includes two heirloom pieces, a *mortarium* date AD 40–60 and a sherd of samian Dr

25. Other material comprises a *Terra Nigra* Cam. 58 bowl (AD 30–85), of which there is another example from Binchester (Willis 2010), eggshell *Terra Nigra* (also occurring at Binchester), Lyon Ware, and Pompeian redware. This combination of material would not be found on a non-military site in the region. It is also worth noting that Mackay (1981) concluded “An Agricolan [military] foundation is suggested by the coin list, with period 4 coins strong and periods 3 and 5 much weaker.”

In the absence of quantified data it is probably best not to speculate on the nature of the occupation in the Hadrianic–early Antonine period. Whilst it may well have been military, it is not clear that there is the ceramic evidence to demonstrate this.

Gallic wine *amphorae* are at a notably low level for a site in north-eastern England (excluding Hadrian’s Wall). Not only is this a feature of the extra-mural assemblages, the data provided by Snape *et al.* (2002, table 3) show that this is also the case from the town interior where they only account for 3.1% (Wt) of the *amphorae*, although this is a much higher level than amongst the field-walking material. This might relate to military phases here. Evans (forthcoming b) argues that there are four long-term military supply zones in the north, characterized principally by the presence or near absence of Gallic wine *amphorae*. These consist of Hadrian’s Wall, characterized by absence as Bidwell first observed (Bidwell and Speak 1994); the North-Eastern forts characterized by 10–15% Gallic *amphorae*, the Antonine Wall, which also appears to have a good supply of Gallic wine *amphorae* (Tyers 1996, fig. 67), and the North-West characterized by near absence of Gallic wine *amphorae* (Evans forthcoming b). Aldborough is odd as it seems to fall into the north-western supply pattern more than the north-eastern one. The Pennine fort at Adel also falls into this north-western pattern, but Aldborough is the only site in the Vale of York and the North-East to do so. Nearby at York Gallic wine *amphorae* account for 12.1% (Wt) (Williams 1997, table 175), a more typical figure for the region.

### **The Ceramic Building Material from the University of Leeds survey (1987) by Philip Mills**

This report concerns the Roman ceramic building materials recovered during field survey in 1987. There were 1061 fragments weighing 29.506kg (excluding medieval or later material). The assemblage comprised roof tiles in the form of *tegula* and *imbrex*, flue tiles and some possible Roman brick fragments (Table 4).

### *Dating*

There was very little dating evidence in the ceramic building materials. This comprised three fragments of flue tile with scored lattice decoration (Grid 9A), which is probably of first-century date; an unmarked *tegula* with cutaway Warry (2006) type B.6 with a suggested date range of AD100–80; and *tegula* fragments with diagonal cutaways, probably of the same type, from Grids B8 and C4.

### *Function*

Table 5 shows the break down of all ceramic building materials by form. The most common identified form is *tegula*, comprising 9% of the assemblage. The occurrence of *imbrices*, at 7% shows a much higher ratio to *tegula* than is normally noted. This is likely a result of the material deriving from a roof collapse, with the larger pieces of *tegula* removed to make working the land for agricultural purposes easier. The occurrence of flue tiles is lower than for material from the 1989–97 survey (below), but still consistent with the existence of a nearby bathhouse, which is supported by the identification of Roman brick and round brick fragments.

### *Brick*

There is a fragment of a Roman brick from Grid C8, identified by being thicker than *tegula* fragments, as well as a possible thin round brick from the same grid square.

### *Flue tile*

A number of keying patterns were noted on the flue tile fragments:

Key 1.1 – a comb with 5 teeth, each 3 mm wide and 1.5mm apart, c. 2mm deep, used to make two combed lines intersecting at an acute angle (Grids 1A and E7).

Key 1.2 – a comb with 10 teeth, 5mm wide, with a gap of 4.5mm, and 0.5mm deep, intersecting at right angles (Grid E3).

Key 2.1 – a comb with 5 teeth, 3mm wide, with gaps of 6mm, and depth less than 0.5mm used to make two stripes intersecting at right angles (Grid C5).

Key 2.2 – a comb of 8+ teeth with a tooth width of 3mm, 6mm apart, and 1mm deep forming two stripes intersecting at an acute angle (Grids 5A and B2).

Key 3.0 – a scored lattice pattern (Grid 9A, and three from Grid C7).

### *Tegula*

Only one complete *tegula* cutaway was noted of a Warry (2006) type B.6 (AD 100–80), which was unmarked. There were two fragments of cutaways with a diagonal cutaway, which could be from the same type (Grids C4 and B8). Two fragments of nail holes, made prior to firing were noted (from Grids O5 and B3)

### *Imbrex*

A collared *imbrex* with a flaring mouth was noted in Grid C0. An *imbrex* with a wavy line pattern, of two fingers, running longitudinal along the top arris was noted from Grid D3.

Table 4 shows the breakdown by grid of the Roman ceramic building material. The largest quantities by No % were found in Grids B2, C10, C2, E0 and 9A, all with 4% or higher of the total. The largest quantities by weight are from Grids C2, E0 and D3. Table 5 shows the breakdown of forms by grid. It is interesting to note that flue tile, despite being a relatively small component of the assemblage enjoys a wide distribution across the survey area, comparable to the much more frequently occurring *tegula* and *imbrex*.

### *Discussion*

This is a coherent assemblage from a hypocaust structure – probably a bathhouse. The combing on the majority of the flue tile and the *tegula* cutaways would suggest that this structure was constructed in the period of AD 100–80. This date range is further supported by the presence of nail holes in the *tegulae*, a development Warry (2006) suggests starts in the second century AD. The presence of a scored lattice tile is of note as these are usually associated with first-century military sites. The reuse of flue tile in later structures has been noted (cf. Betts *et al.* 1994, die 14, 86) although this still implies the possibility of an earlier hypocaust structure in the vicinity. The majority of the material concentrates on the geophysical anomaly centred on B2/B3, which could be a plausible candidate for a bathhouse, with repeated firing reflected in the strong signal identified there.

### **The Roman Antiquities Section survey (1989–93) led by Colin Dobinson**

The methods used in the fieldwork initiated by Colin Dobinson in 1989 were designed to provide very high-resolution evidence. Rather than collecting the finds by grid, the team recorded the findspot of each and every piece collected, presented as Ordnance Survey co-ordinates.

**The Pottery from the Roman Antiquities Section survey (1989–97) by Jeremy Evans and Philip Mills with a contribution from J.M. Mills**

The Roman pottery from the field-walked sites totals some 1975 sherds of pottery (weighing 18.856kg), including 482 sherds (1.845kg) of samian ware.

### Dating

Figure 4 shows the date distribution of the coarse pottery plotted from the dated rimsherds with a date range of less than 200 years. As might be expected it starts in the Flavian period, rising to a Trajanic peak, after which there is something of a Hadrianic trough before a very strong mid-late Antonine peak. Levels fall off considerably in the early third century and appear to fall a little further through the century, before rising to a peak again in the early–mid fourth century. Levels clearly fall in the latter half of the century, although they are not negligible then.

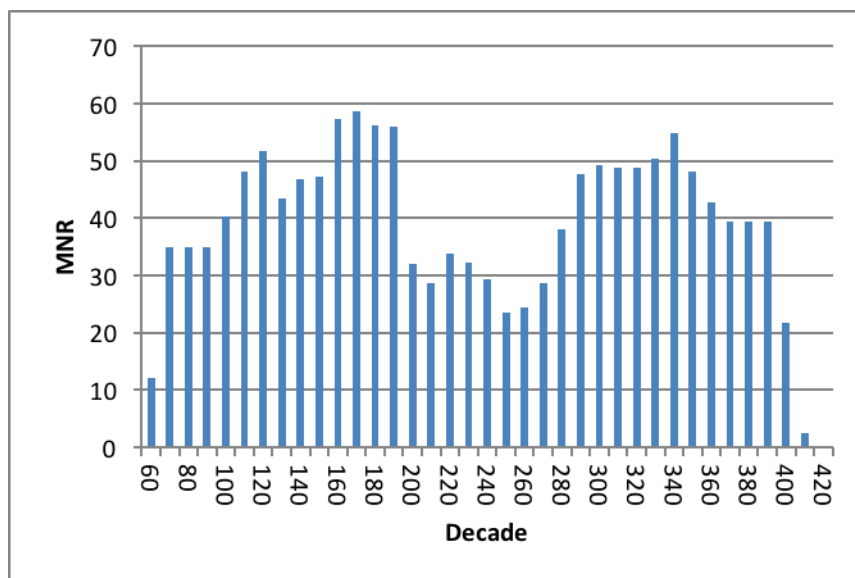


Figure 4: Aldborough 1989–97 survey. Date distribution by RE of Roman coarse pottery, with a date range of less than 200 years, excluding samian.

Figure 5 plots the date distribution of the *mortaria* rimsherds. Most of these can be dated relatively closely and there is a reasonable number of them (50 rimsherds). Very few *mortaria* can be dated to the later first or earlier second centuries, and there is equally little dateable to the Hadrianic era. This period should be dominated by relatively locally made oxidized wares and Verulamium products, but both are absent and it is most unlikely that collection bias is a relevant factor. In contrast there is a massive mid-late Antonine peak. This is reflected in the overall coarse pottery date plot and is pretty certainly a real effect. It may be exaggerated in the *mortaria* a little by its representing the wave of Mancetter products overtaking all the northern markets at this time, and apparently wiping out small local production



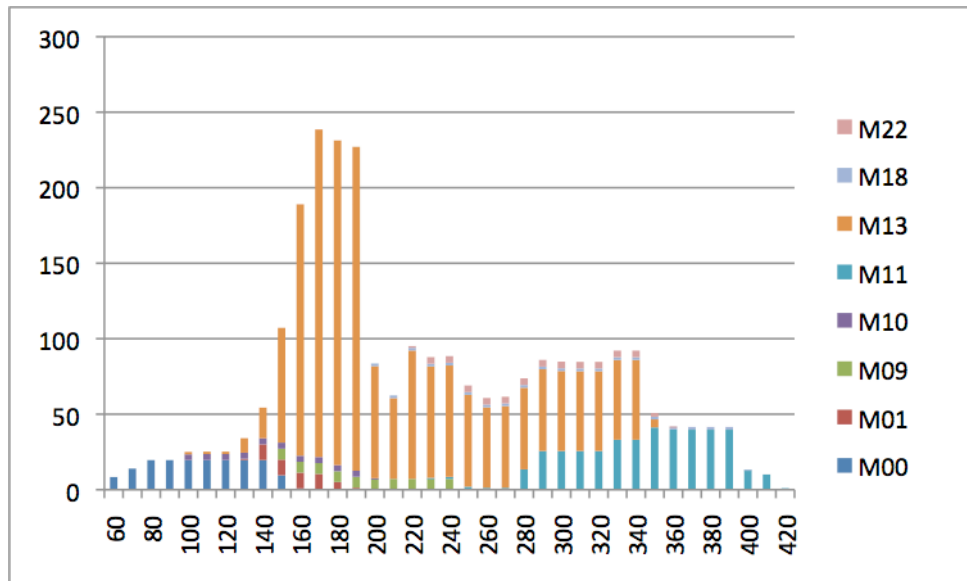


Figure 5: Aldborough 1989–97 Survey. Date distribution for *mortaria* by RE showing proportions from different *mortaria* sources.

centres which had provided much of the supply hitherto. The *mortaria* plot continues to reflect the general coarse pottery plot with a major decline in the early third century and some further decline in the later third century. The rise in the early–mid fourth century is also seen amongst the *mortaria*, although to a lesser degree than amongst the coarse pottery, but the *mortaria* show more clearly a marked decline from the mid fourth century onwards, and a very weak late fourth century presence.

The samian ware, although it can indicate little about the later history of the site, produces similar evidence for its early history (see below). South Gaulish samian, covering the first century, represents a mere 6.9% (Nosh) of the assemblage, a very low figure even for a northern site. Similarly, there is only 0.8% Nosh of material from Les Martres-de-Veyre of Trajanic date, again a very low figure suggesting minimal occupation. Amongst the Central Gaulish material there is a strong emphasis on mid–late Antonine types. There are no Central Gaulish Dr 18 dishes; there are two Dr 18/31 dishes outnumbered by three Dr 31s, usually dated after AD 150. There are three Dr 18/31R dishes to six Dr 31Rs, the latter usually dated to after AD 160. There are just five of the earlier Dr 27 cups to 35 of the later Dr 33 form. A *mortarium* sherd and two Dr 45 *mortaria* sherds are present all dating AD170–200.

Figure 6 shows the date distribution plot of all the pottery rimsherds including the samian ware. The overall picture is similar to Fig. 4, but it appears to indicate a higher level of Trajanic and Hadrianic activity. In reality this seems to be somewhat

misleading as the weight of the samian evidence is mid–late Antonine, but the rim date distribution plot (Fig. 6), with many fewer data points, only indicates the general Hadrianic–Antonine period equally. The addition of the samian ware, with relatively large numbers of well dated rims, causes the early-mid fourth century peak to appear relatively weaker, although the pattern repeats that of Fig. 4 and again there is a marked tail-off in the late fourth century.

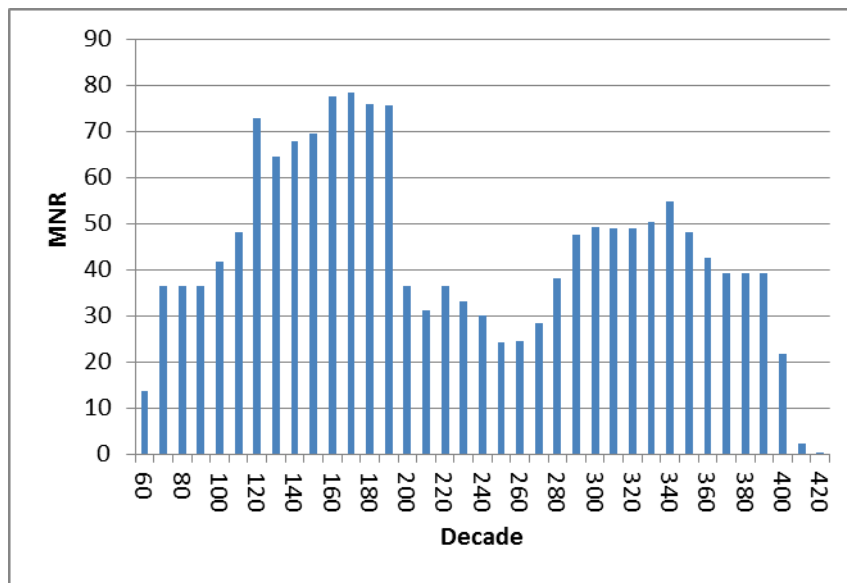


Figure 6: Aldborough 1989–97 Survey. Date distribution by RE of all Roman pottery, with a date range of less than 200 years.

In conclusion all the evidence makes clear that there was a fairly minimal level of occupation on the sites before the Antonine period. At that time the settlement expanded massively, and probably reached its maximum extent, although evidence for that needs to come from the spatial plotting. The intensity of occupation, or at least pottery deposition, seems to have fallen markedly in the third century, picked up a little in the earlier fourth, and tailed-off thereafter.

#### *Collection bias*

There is some expectation that sherd types which are more easily observable in contrast to the soil will tend to be collected more in field-walking. These would be whitewares, oxidized wares, *mortaria*, samian ware, and possibly finewares as being more reflective. There is some evidence in these data that this is the case.

Whitewares at 2.5% (Nosh) do not seem particularly strongly represented compared with other northern sites. However, when it is remembered that the first and earlier second centuries are barely represented, it is quite a strong result against the

regional background. Oxidized wares are problematic, as well as the likelihood that they have been differentially collected it is difficult always to separate Roman oxidized bodysherds from post-mediaeval ones. (The authors would accept that a major element of the O00 group – but not O01 or O10 – could be post-medieval.) Given that oxidized wares are usually of first or earlier second-century date they are probably over-represented against the regional background for a site with this dating profile. When coming to the samian ware, 24.5% (Nosh) is a high figure, although the site is a Cantonal Capital, and the weight figure of 10.0% or 12.8% excluding the *amphorae*, is high but within the range given by Willis (2005), whose mean value for Cantonal Capitals was 8.0% (weight excluding *amphorae*). The average samian sherd weight is 3.8g. In contrast, the average sherd weight of the coarse pottery is 11.5g, or 9.2g with the *amphorae* excluded. This tends to suggest that samian ware was more assiduously collected, although as noted above it is generally true that the average samian sherd weight from excavated samples tends to be lower than the average coarse pottery sherd weight. Other metrics in the samian assemblage confirm it is a high-status assemblage, appropriate to a Cantonal Capital (eg. 27.5% of the Central Gaulish samian, the vast majority of the collection, identifiable to form or vessel class are decorated forms). Thus the samian ware seems a little over-represented in the assemblage but this is not certain.

Turning to the finewares, these are also strongly represented at 12.6% (Nosh) and 6.0% (Wt). They could be over-represented, but the site is a Cantonal Capital and it is not clear that they are. *Mortaria* comprise 4.1% by Nosh of the assemblage. This figure is a little high but would be quite acceptable for this type of settlement. However, something goes very wrong when their proportion is examined by rim measures. They represent 15.0% by minimum numbers of rims and 15.3% by RE. These numbers are not credible for this type of settlement and seem likely to be unrepresentative of the occurrence of *mortaria* in stratified deposits here. The key to this conundrum may well be differential preservation – *mortaria* rimsherds are notably robust, and may well have survived when other more fragile forms have been eroded into minute fragments.

### *Fabric Supply*

Table 6 shows the occurrence by fabric class or fabric of the Roman pottery from the 1989–97 field-walking alongside that from the 1987 work (above). For convenience, the two assemblages are considered together here.

### Class A, *Amphorae*

1987 = 4.3% Nosh; 24.1% Wt

1989–97 = 4.2% Nosh, 20.2% Wt

*Amphorae* are quite strongly represented both the assemblages. These are levels comparable with those from some military sites, although at the lower end of the military range (cf. Evans 2001, fig 11). This would seem appropriate for a Cantonal Capital. The vast majority were from Dressel 20 oil containers as is usual. Gallic wine *amphorae* are present in both assemblages but at low levels, a strong contrast with the position at York where they amounted to 12.1% (Wt) (Williams 1997, table 175), a more usual figure, except in areas where military sites did not regularly receive Gallic *amphorae* (Evans forthcoming b).

#### Class B, Black Burnished wares

1987 = 3.7% Nosh

1989–97 = 3.8% Nosh

Black-burnished wares are not strongly represented at Aldborough, as might be expected. Perhaps surprisingly, but actually typically for the region, the commonest fabric is BB1. Even at York BB1 tends to be commoner than BB2 (Monaghan 1997) although York seems to be the secondary port for the importation of BB2 into the north-east (Evans 1985). The slightly lower levels of BB2 in the 1987 assemblage may reflect the rather later date range compared with the 1989–97 material. In the 1987 assemblage of BB1 seven vessels dated to the range AD 120–200, whilst twelve were dated AD 200–350. In contrast in the 1989–97 assemblage eight vessels fall in the date range AD 120–200, with seven of AD 200–350.

Table 7 shows the functional analysis of BB1 vessels from the 1987 assemblage. The majority are tableware forms in both groups. In assemblages in areas where BB1 is common around half the forms are jars, and it is only at the edges of its distribution that tableware forms come to dominate, presumably because there was less competition from other sources for good cooking vessels in these functional types (ie as a casserole set). The only BB2 form represented is a single bead rimmed bowl.

#### Class C, shell-gritted wares

There are no shell-gritted wares in the collection.

#### Class F, colour-coated and other finewares

1987 = 18.7% Nosh, 8.7% Wt

1989–97 = 12.6% Nosh, 6.0% Wt

Colour-coated finewares are quite strongly represented in the 1989–97 assemblage, and very strongly in the 1987 group, although the level of samian in that is lower so the overall level of colour-coated finewares and samian ware from both collections is very similar. This is much higher than might be expected in most excavated samples. Table 8 shows the incidence of fabric types amongst the two collections as a proportion of the total of finewares in each assemblage. The vast majority are Nene Valley products (F01 and F02), dating from the mid Antonine period to the later fourth. The earlier finewares with brown colour-coats and oxidized fabrics are in the F00 group and amount to only 5.3% (Nosh) of the finewares. This low proportion reflects the fact that throughout the region Nene Valley products are the dominant brown colour-coated wares once they appear and are always commoner than the earlier fabrics and the relatively low level of activity on this site in the earlier period.

Both assemblages are dominated by beakers, (Table 9) reflecting the dominant type imported into the north in the period AD 160–350, in which period most of the Nene Valley wares in these collections are derived. Tableware forms are commoner in the 1989–97 assemblage, reflecting its running into the last half of the fourth century more than the 1987 assemblage.

East Gaulish ‘Rhenish’ ware is represented, with more in the 1989–97 group when compared with the 1987 assemblage. Central Gaulish ‘Rhenish’ ware is also present in the 1987 collection, which also contains a single sherd of Mica dusted ware (F11).

Late Roman minor finewares are represented in the 1987 assemblage by Oxfordshire colour-coated ware (F06) and the sandy oxidized burnished fabric in Dr 38 form (F08) which may well be a Catterick product (Bell and Evans 2002, fabric O21). The major late Roman fabric is Crambeck parchment ware, although as noted above identification can be problematic when sherds are heavily abraded. They are a little commoner in the 1989–97 assemblage than in the 1987 group. Their low level here reflects the other evidence from this group that late fourth century material is poorly represented.

#### Class G, gritted wares

1987 = 8.2% Nosh, 10.7% Wt

1989–97 = 4.3% Nosh, 5.1% Wt

Gritted wares are rather more strongly represented in the 1987 assemblage than in the 1989–97 group. It must be noted that there is a certain spectrum of overlap between reduced mediaeval Northern Gritty wares and the third–early fourth century

Roman gritted wares, although it is believed that the two have been fairly effectively separated.

The commonest gritted ware type is East Yorkshire calcite-gritted ware (G01). Its relatively low quantity no doubt reflects the lack of fourth-century activity (Table 10). Amongst the forms there are four early-mid fourth century jar types, two mid fourth-century ones, and five later fourth century ones. Given that outside East Yorkshire the usual pattern is for calcite-gritted wares to become much commoner in the late fourth century (Evans 1985), the Aldborough collection clearly reflects a much-diminished level of pottery deposition in this period. It is also of note Crambeck grey-ware (R09) outnumbers the calcite-gritted ware, this is a feature only of assemblages pre-dating the mid fourth century (Evans 1985). As noted above there are 17 proto-Huntcliff types, of early–mid fourth-century date, compared to three later fourth-century Huntcliff type jars, whereas on a site with continuous occupation to the end of the fourth century Huntcliff types would be expected to be in the massive majority. Dalesware (G03) is also found in the 1987 group, although absent from the 1989–97 assemblage. It is generally rare in the region outside southern East Yorkshire (Evans 1985). Sandy calcite-gritted ware (G02) is present in the 1989–97 group, as well as a sherd of later fourth-century sandy burnished calcite-gritted ware (G04 = Evans 1985, fabric CG007).

Third to mid fourth-century gritted wares (G00, G10 and G100) represent a little more of the 1987 assemblage, compared with the 1989–97 assemblage. This again demonstrates the overall stronger later Roman representation in the 1987. Gritted wares are a common tradition along the Pennine edge in Yorkshire in the third to early fourth centuries from a series of sources chiefly producing a variety of lid-seated jar forms. A possible source is Catterick (Bell and Evans 2002, fabric R5). Jones (1971, figs 9–10) illustrated 22 vessels of this type with bell-mouthed rims from the 'black layer' at the South Gate (probably of early-mid third century date), which may well point to production here, if these are not South Yorkshire products, and group G100 might well be from this source, as might some of the G10 and G00 groups.

#### Class M, *Mortaria*

1987 = 3.3% Nosh, 8.9% Wt

1989–97 = 4.1% Nosh, 12.7% Wt

*Mortaria* are quite well-represented, with more in the 1989–97 collection. As noted above the field-walking collection probably over-represents the *mortaria* as they are relatively indestructible. The 1987 assemblage may over-represent them less

because the field was under the plough for the first time in modern times when it was walked, so there was less chance of other, less robust, sherds having been eroded away. Figures 2 and 5 show the date distributions of the *mortaria* by fabric.

There are very few pre-Antonine *mortaria* from the site, something which reflects the overall chronology. In the 1987 assemblage, earlier Roman material is represented by a few sherds of oxidized *mortaria* (M00), which are probably of second-century date and some of the unidentified whiteware *mortarium* sherds (M10), although about half of these are later Roman. A few of the M10 sherds may have been local Aldborough products but the general scarcity of this local fabric is notable. The lack of a substantial element of the early second-century oxidized fabrics once again suggests the lack of activity in this area before the middle of the century (Table 6). There is a small element of Rhenish material, of later second to mid third-century date, as is common on north-eastern sites. Overall the 1987 assemblage is predominantly of third to mid fourth-century date with a relatively small second-century element.

The main suppliers are Mancetter and Crambeck. Given that the Crambeck sherds (M11) cover a date range of c. 70 years and the Mancetter (M13) ones a date range of at least 160 years the Crambeck material is evidently very strongly represented and testifies to considerable *mortarium* use on the site in the late third to mid fourth centuries. As Table 11 shows, Crambeck levels are higher in the 1987 collection than in the 1989–97 assemblage, where Mancetter fabrics, dominant in this region from the Antonine period until the end of the third century, are much commoner. This reflects a regional picture seen at Catterick (Evans 2002), Piercebridge (Evans and Mills 2008) and Binchester (Evans and Rátkai 2010). In the 1989–97 group Mancetter remains the dominant supplier into the first half of the fourth century when it is replaced by Crambeck. Other late Roman fabrics include a small element of Oxfordshire whiteware, which probably reached the site in the later third to early fourth centuries. What is interesting, and significant for the picture of regional *mortaria* supply, is the very low number of vessels which could be attributed to Catterick or South Yorkshire of later third to early fourth-century date, and the general absence of South Yorkshire products. As Hartley (1973) has long ago pointed-out *mortaria* in the north tend to travel mainly to the north of the production site, towards the frontier. The lack of South Yorkshire products at Aldborough suggests the site was largely beyond its supply range. Therefore, the South Yorkshire tradition *mortaria* from Catterick, Piercebridge, and points north including Vindolanda (Bidwell 1985) are most unlikely to have had a true South Yorkshire

origin, as opposed to being the work of migrant potters working at Catterick or other centres.

#### Class O, oxidized wares

1987 = 12.0% Nosh and 5.7% Wt

1989–97 = 12.4% Nosh, 7.0% Wt

Oxidized wares appear relatively well-represented in both collections (Table 6). They could be over-represented, especially as there appears to be little pre-Antonine material from the site, the period in which oxidized wares might be expected to be commonest. However, most of the forms present are consistent with a later first to second-century date. Exceptions include a third-century Ebor ware Head Pot bodysherd (B2.13 from Field 9577SW).

Table 12 shows a functional analysis of the oxidized wares. Tablewares are strongly represented, as is usual amongst oxidized wares, and flagons are also well-represented. Jars form the single largest group in the 1989–97 group, compared with the dominance of bowls in the 1987 assemblage.

#### Class Q, white-slipped oxidized wares

1987 = 1.7% Nosh, 1.3% Wt

1989–97 = 1.6% Nosh and 1.7% Wt

White-slipped oxidized wares make up a small proportion of both assemblages as might be expected. Forms from the 1987 group included a 'Honey jar' and a tazze flange as well as a flagon.

#### Class R, reduced wares

1987 = 34.5% Nosh, 36.0% Wt

1989–97 = 29.9% Nosh, 28.0% Wt

As usual in northern assemblage reduced wares form the largest single group. The quantity in the 1987 group is notably higher than in the 1989–97 assemblage, probably reflecting they generally later date range of the 1987 material. Although the majority are not attributable to source, a number of possible sources can be determined. The largest of these is Crambeck (R09). The much higher proportion of this fabric in the 1987 collection compared with the 1989–97 one, reflects the strong early fourth-century pottery deposition in that area. This is also reflected in the higher proportion of possible Holme-on-Spalding Moor grey-wares (R11) present in the 1987 assemblage. Although this group is hard to define, and probably fails to



encompass many Holme-on-Spalding Moor products, some of these grey-wares are probably from this source.

Fabric R20 represents coarse sand-tempered grey-wares some of which, may be South Yorkshire products from Doncaster, although this is not confirmed by the presence of any of the most distinctive forms of that industry. Even if these are correctly attributed to this industry their low proportion demonstrates that Aldborough must have been at the very edge of the fabric's northern distribution. The remaining material is mainly the ubiquitous northern sandy grey-wares from many possible sources.

Table 13 shows a functional analysis of the grey-wares from the collection. Unusually a majority are tablewares in the 1987 assemblage. The large component of Crambeck products contribute to this, since Crambeck grey-wares are predominantly in tableware forms, however, tablewares from other sources were also strongly represented. This was also true of the 1989–97 group but to a lesser extent. This no doubt reflects the overall functional analysis of the assemblage from the town, which has a high proportion of tablewares, and a notably low proportion of jars compared with many northern sites, although it would be comparable with early assemblages from York or Carlisle (Evans 1993).

#### Class S, samian

The 1987 assemblage is reported upon above, and the 1989–97 assemblage is dealt with below.

#### Class W, whitewares

1987 = 2.1% Nosh and 1.2% Wt

1989–97 = 2.4% Nosh, 1.4% Wt

Whitewares are relatively common here which probably reflects the site's urban nature. Forms represented are five bowls, a beaker, a jar and a bodysherd from an ungent jar with red painted bands.

#### *The Samian from the 1989–97 survey* by J. M. Mills

##### Quantity and condition

The samian, a total of 482 sherds weighing 1845g, was, as might be expected from a field-walking collection, generally quite abraded and comprised in the main small sherds and chips. Only 46 sherds weighed 10g or more, the largest weighing 42g. Over 68% of the sherds by count weighed 2g or less, accounting for less than 20% of

the overall weight – many were very small sherds indeed. Given the limitation small sherds impose on identification, especially on form identification, it is notable that most of the sherds were assigned to a production centre based on fabric (see Table 14), and 139 sherds were assigned a specific form with a further 55 assigned broadly to cup, bowl etc. (see Table 16 for vessel form sherd count).

#### Production Centres

Samian was identified from the three main production areas of South, Central and East Gaul. The particular centres identified include: La Graufesenque in South Gaul (SAMLG), Les Martres-de-Veyre (SAMMV) and Lezoux (SAMCG) in Central Gaul, and, Rheinzabern (SAMRZ) and Trier (SAMTR) in East Gaul. A single sherd possibly from Montans (SAMMT) in South Gaul was also noted, two sherds, tentatively identified as from Les Martres are noted as possibly from the early second century East Gaulish factory at Chemery-Faulquemont; again the sherd size acts against positive identification. The range of fabrics present indicates constant access to the samian market from the mid-late first into the third century AD which is perhaps not surprising given the importance of settlement in the Aldborough area.

#### Dating and distribution

Given the abraded nature of the samian very few of the decorated wares could be assigned to a specific potter, and although two mould stamps were identified only one was identifiable. Only two plain-ware vessel stamps were noted, and again only one was identifiable. The close dating framework for most collections comes from decorated and stamped wares, however, for this group more general trends based on the date ranges for each production centre and range of forms identified form the basis of the dating. The earliest vessel identified is a scrap from a Dr 29 bowl, possibly of a pre-Flavian date, but the sherd is too small to be certain. The other first-century material is most likely to be Flavian. Although the quantities involved are small, less than 10% of the entire group, the largest South Gaulish sherds occur in the fields to the north of the walled area (Field 0006: 2 sherds weighing 33g; Field 6816: 5 sherds weighing 35g; Field 9577: 6 sherds weighing 27g), perhaps indicating proximity to the earliest activity in the area.

It is clear that the majority of the samian, over 80% by count and weight, came from Central Gaul, specifically the kilns around Lezoux which produced vessels for export from about AD120 until the end of the second century. The sherds from Les Martres-de-Veyre of Trajanic–Hadriannic date represent little more than a background presence. A single rim sherd from a Dr 15/17 dish is of interest showing

that this form was in production at Les Martres after it had ceased to be a common form at La Graufesenque. When looking at the range of forms identified from Lezoux and the style of most of the decorated vessels it seems that much of the Central Gaulish material belongs to the second half of the century. There are few Dr 27 cups and the contemporary dish, Dr 18/31, is also poorly represented, these two forms were current until about AD160. Low numbers of these forms in comparison with Dr 33 cups and the later dish form Dr 31 and its rouletted counterpart Dr 31R usually indicate a late second century focus to activity. The other characteristically 'late' vessel form present here is gritted *mortaria* (Dr 45) which was introduced into the samian repertoire after about AD170. This is also the period when the bulk of East Gaulish samian began to arrive. East Gaulish samian was imported until the middle of the third century, and the date ranges for the vessels here extend into the third century, however, nothing likely to be wholly of a third-century date was noted.

The greatest concentrations of second and third century samian occur in Fields 2134 and 9577 – the areas from where the most samian was recovered. These areas are close to both the walled area and the Roman road; and it can be seen that other concentrations, albeit tens of sherds rather than hundreds are also in close proximity to the road.

#### Vessel form

Given the average sherd size a surprising range of forms has been identified. The high count of sherds which could not be assigned to a form is a measure of the small sherd size of this field-walking collection. There can be little discussion of the forms present for the production centres which produced less than 10% of the assemblage as they are not statistically significant. The vessels from South Gaul which broadly belong to the second half of the first century include a variety of cups, dishes, and platters – plain and rouletted – as well as decorated forms. The early decorated bowl Dr 29 is out-numbered by Dr 37 which was introduced around AD 70 and with the exception of a sherd from the flange of a Ritterling 12 or Curle 11 bowl, which if from a Ritterling 12 may be pre-Flavian in date, no other pre-Flavian wares are evident. The vessels from East Gaul, although few in number, include an unremarkable selection of cups, plain and decorated bowls, and a single *mortarium*. Such a range might be expected from any site occupied in the third century.

The vessels from Lezoux are the most numerous with a total of 113 sherds identified to a specific form (Table 16). Cups of Dr 33 and decorated Dr 37 bowls are the most common forms. Both forms are identifiable from quite small sherds which may in part account for the high count; however, cup form Dr 27 is also easy to

identify from small sherds and high numbers were definitely not present, so to some extent the figures may be a true reflection of the relative proportions of vessels. It has been noted above that a high ratio of Dr 27 to Dr 33 usually indicates a late second century bias to an assemblage, the ratio of 1:7 here is indeed high. Plain bowls and dishes are likely to be under represented; small body sherds from these forms are difficult to identify and this is reflected in the relatively high numbers of sherds assigned simply to generic 'dish' or 'bowl' categories. Because of this bias caused by the material being abraded and reduced in size (presumably by ploughing) the relative proportion of forms Dr 18/31 / Dr 18/31R to the later Dr 31 and Dr 31R dishes (1:4.5) is not as marked as that noted for the cup forms. However, it is worth noting that there are no examples of Dr 18/31R whilst six examples of form Dr 31R were recorded.

As the figures stand, 38% (or 41% if the Dr 30 or 37 sherds are included) of the sherds identified to a specific form are from decorated bowls. It is well-documented that military sites and extra-mural settlements often yield more decorated vessels than other site types. Willis (2005) states that the average percentage of decorated forms from excavations on military sites is 27% and higher at 38% on extra-mural settlement sites. Cups also feature highly in these groups, although not usually to the degree noted here. It is not possible to look at the figures in terms of EVE because the small sherd size affects the results making cups a disproportionately large element (c. 56%) of the group. Fortunately, the status of the site is already known so proving a military connection in this way is not necessary, this knowledge does however help explain the prevalence of decorated bowls in this material.

### Conclusion

The samian from the field collection centred on the walled area at Aldborough gives some insight into the nature of the occupation despite much of the material being denuded and abraded. The samian suggests that the first-century focus might be to the north of the area and is probably Flavian in date. The vast majority of the samian collected was from Central Gaul and although there is a limited amount of Hadrianic–early Antonine material the range of forms, stamps and decorated wares suggest that occupation is predominantly mid–late Antonine (and later?) in date. The influence of the military presence in the area is evident from the quantity of sherds from decorated vessels recovered.

Other aspects of the samian ware by Jeremy Evans and Philip Mills

As J.M. Mills notes above, the samian ware is very strongly dominated by Central Gaulish samian ware (84.4% Nosh) and is a strongly mid–late Antonine group. Figure 7 plots the date distribution of the rimsherds, but the data are too few to properly show up the undoubted mid–late Antonine bias.

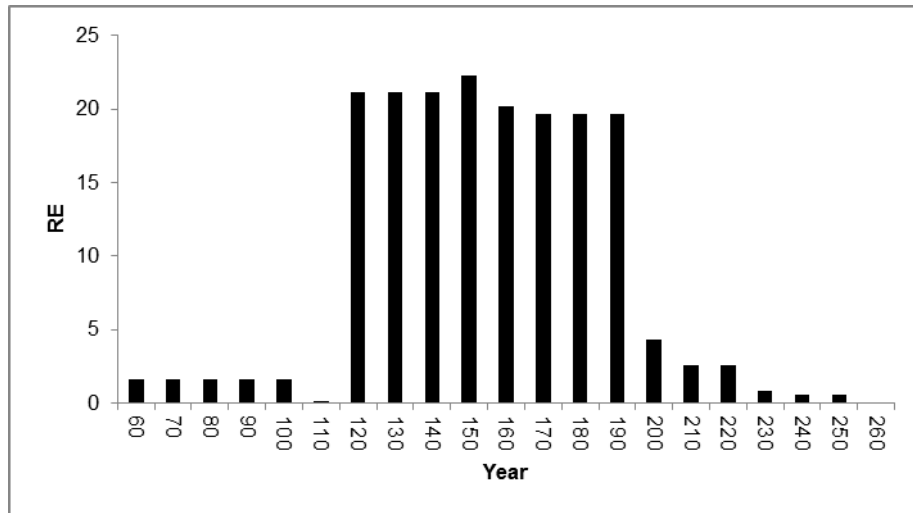


Figure 7: Aldborough 1989–97 Survey. Samian ware date distribution by RE.

The quantity of decorated ware is considerable. Amongst the Central Gaulish ware 31.2% of Central Gaulish samian identified to form or class is decorated, and 41% is decorated amongst types identified to specific forms. Willis (2005, table 35) cites second-century groups from other major civil sites at Southwark, Borough High Street (contexts 91-95 and layer 27) and Exeter Rack Street, with higher levels, but the Aldborough figures are undoubtedly at the high end of the major civil site range. If there is a fort at Aldborough it does not seem to be very obvious in this data. As Wachter (1974) points out one might be expected, but equally to fit in with other forts on this road to the frontier it ought to be occupied in the Flavian–Trajanic period, and as has been noted samian of this period is in very short supply here.

#### *Assemblages by area*

The quantities of pottery from the individual fields are in most cases too small to carry out effective sub-analysis, with the exception of the group from immediately outside the North Gate of the town (Field 9577SW), part of which was also surveyed in 1987 and is discussed above. However, a sub-analysis can be made by grouping fields into broad areas:

- South of the walled area (Fields 4660; 7646S; 7646N; 4130E; 5119S; 4130W; 9245; 6053E; 6587; 1662; 001S; 3000E; 3000W);
- East of the walled area (Fields 9223; 2134S; 2134N; 2134SW);
- North of the walled area (Fields 0006E; 006C; 006W; 9824; 7633W; 6816S; 3100W; 0004E; 0004W; 8696C; 4600S, 9577).

These give four workable groups and their fabric proportions are shown in Table 17 and their functional analyses in Table 18.

To start with the fabric data the East group has relatively high *amphora* levels at 5.4% (Nosh) and 34.5% (Wt). It also has high levels of samian ware with 27.2% (Nosh) and 20.8% (MNR). Oxidized wares are also strongly represented at 16.3% (Nosh). These are likely to reflect relatively strong later first to second-century activity and fourth-century fabrics, Crambeck grey-wares at 1.0% (Nosh) and calcite-gritted wares at 0.5% (Nosh), are weakly represented. Figure 8 shows the date distribution of pottery from this group. It shows a strong second-century peak with a major fall early in the third century, after which pottery quantities gradually tail-off until the end of the fourth. Overall fineware levels are very high east of the walled area at 39.5% (Nosh) and 32.3% (MNR). This is complemented by the functional analysis figures from this area (Table 18). The function figures from all the areas are fairly similar, which gives confidence in their stability, but there are differences. The East area figures are notably strong in tablewares, at 35.9% (MNR), well outnumbering jars at 24.4%. This would correlate well with a high level of finewares. Drinking vessels (cups and beakers) are well represented at 15.3% (MNR).

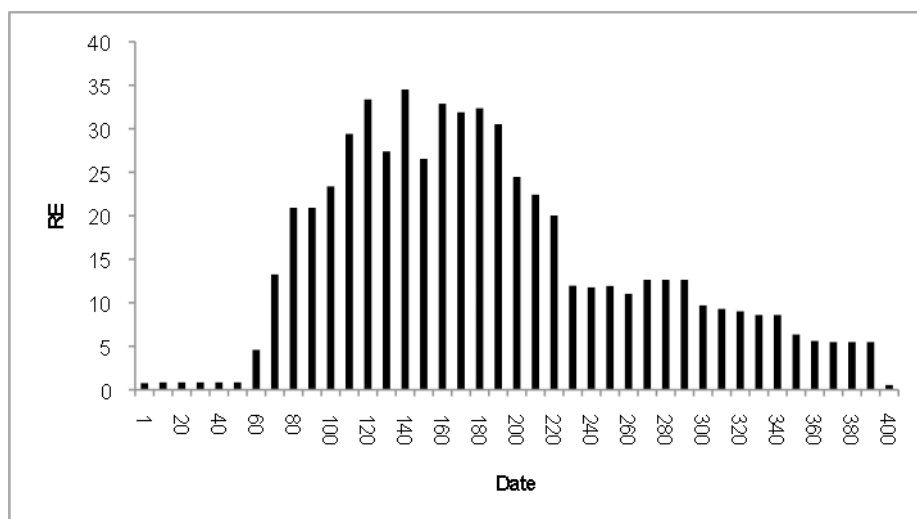


Figure 8: Aldborough 1989–97 Survey. Pottery date distribution for fields east of walled area.

The group outside the North Gate (Field 9577SW) is rather different. This has the highest level of BB1 of the groups, at 5.0% (Nosh), and low level of oxidized wares at 4.9%. It has most of the fourth-century fabrics with 11.1% (Nosh) of Crambeck grey-ware (R09) and 2.7% of calcite-gritted wares. Figure 9 shows the date distribution of rims from this area. It is distinctly bimodal, with a strong mid-late Antonine peak, a third-century trough, and a similarly strong fourth-century peak. There are fewer samian sherds at 20.1% (Nosh) and 20.1% (MNR) but more colour-coated wares at 15.4% (Nosh) and 4.7% (MNR). These give high overall fineware levels of 35.5% (Nosh) but 24.8% (MNR). Again tablewares are strongly represented in the function figures (Table 18) at 43.5% (MNR) compared to 23.5% (MNR) jars. Drinking vessels (cups and beakers) are again well represented at 14.1% (MNR).

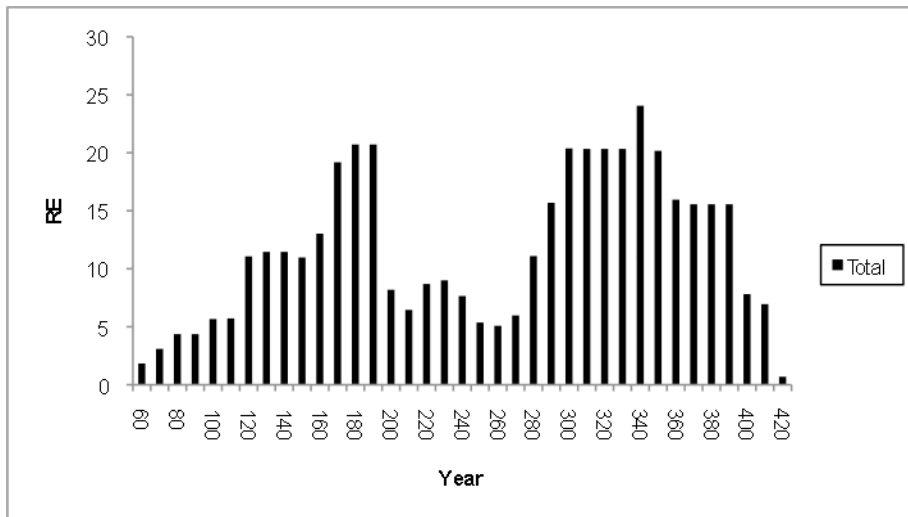


Figure 9: Aldborough 1989–97 Survey. Pottery date distribution the field north of the North Gate.

The North group included a considerable 13.3% (Nosh) of oxidized wares but just 18.5% (Nosh) of samian ware (14.1% MNR) and just 9.2% (Nosh) of colour coated wares and 2.4% (MNR), giving a fineware total of 27.7% (Nosh) and 16.5% (MNR). Fourth-century fabrics are quite strongly represented, with 5.1% (Nosh) of Crambeck greyware (R09) and 5.6% (Nosh) of calcite-gritted wares (G01). The higher proportion of G01 than R09 might suggest a rather stronger later fourth-century emphasis here since it is usually only in that period that calcite-gritted wares outnumber Crambeck grey-wares. Figure 10 shows the date distribution by RE for this area, like the area outside the North Gate, the date distribution is bimodal, but here the second-century peak is a little broader and the fourth-century peak is

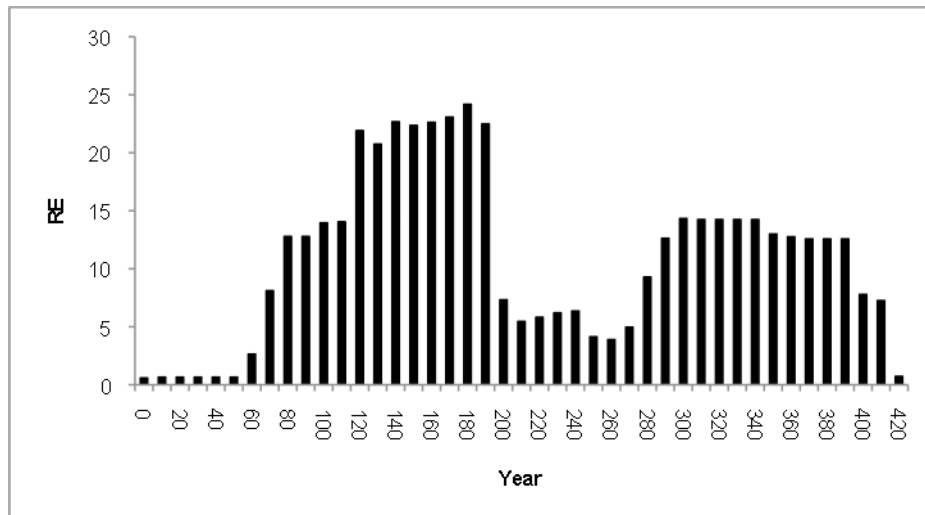


Figure 10: Aldborough 1989–97 Survey. Pottery date distribution for fields north of the walled area

weaker than the second-century one. The functional analysis shows a lower level of drinking vessels, 10.6% (MNR), in this group, and there are also fewer *mortaria*. Tablewares at 34.2% are rather fewer than outside the North Gate and jar levels at 28.2% are higher, although tableware still out-number jars.

The group from South of the walled area is rather smaller than the others, but should be large enough to be reasonably reliable. Samian ware is strongly represented at 35.4% (Nosh) and 24.2% (MNR) of which 6.3% (Nosh) is South Gaulish material, by far the largest figure amongst the groups. Oxidized wares are also strongly represented at 16.7% (Nosh), another indicator of strong levels of early activity. Crambeck grey-wares at 2.6% (Nosh) and calcite-gritted wares (G01) at 2.6% (Nosh) both suggest low levels of fourth-century activity. Levels of *amphora* are also the lowest from the groups, and BB1 is absent. Colour-coated wares at 10.3% (Nosh) are weakly represented. The functional analysis (Table 18) shows that tablewares are relatively poorly represented at 27.3% (MNR) and are only equal to the 27.3% of jars. Drinking vessels, however, are quite strongly represented at 15.2% (MNR). The tableware:jar ratio suggests a more rural style to this assemblage, as does the low *amphora* figure, although not the samian ware levels, or the drinking vessels. The date distribution plot (Fig. 11) shows a distinct Flavian–Trajanic peak derived mainly from the samian ware. This is the only area to do this and just possibly hints at early military activity. The second peak is mid–late Antonine, as is usual throughout the site, which would seem to point to major expansion across the site at this date. The third century is a trough and there is only



a low rise in the early fourth century, but again, unlike the other areas, there is a distinct later fourth century peak.

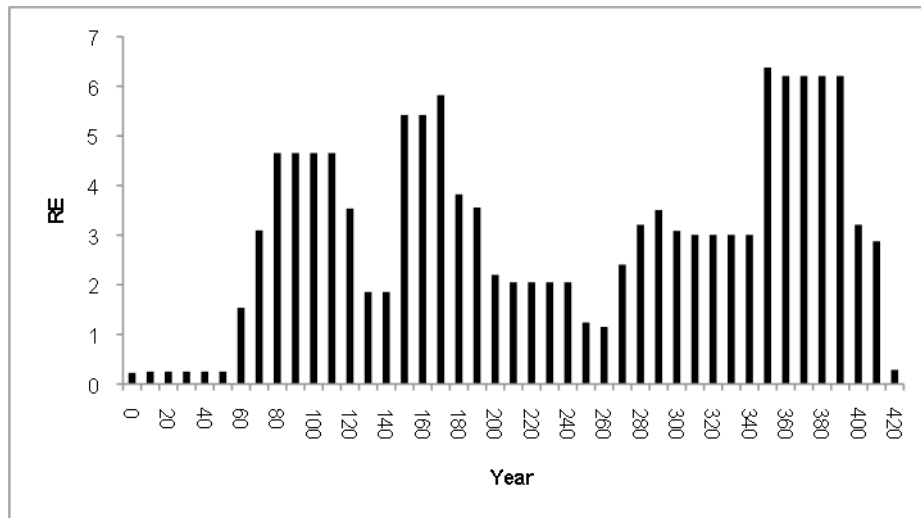


Figure 11: Aldborough 1989–97 Survey. Pottery date distribution for fields south of the walled area.

### **The Ceramic Building Materials from Roman Antiquities Section survey (1989–97) by Philip Mills**

There were 124 fragments of Roman ceramic building material from this survey, which weighed 11.318kg. Table 19 shows the proportion of Roman ceramic building material by field.

#### *Dating*

Most of the material could not be dated more closely than as Roman. However, there was a probable half box-flue-tile from Field 2134S and two possible examples from Field 9577SW which are usually associated with earlier bath-house structures and may have a late first to early second-century date. Two *tegula* lower cutaways of Warry (2006) Type B.6, with a suggested date of AD100–80 were noted: one from Field 9577SW and the other from Field 2134S. Flue-tiles which had wide combed keying seem to be associated with hypocaust structures of the second century and were found in Fields 9577SW and 4139E. A flue-tile with medium toothed combing, perhaps of later second–third century date, was located in Field 6816S.

#### *Function*

Table 20 shows the breakdown of forms by field. The small size of the assemblage would not normally warrant this approach, but it is presented here as a useful

summary. *Imbrices* are usually much rarer in assemblages than *tegulae* (Mills 2006) and especially amongst field-walked material (Mills and Rajala 2011), so their presence in Fields O6E, 2006W, 2134S, 2134SW, 4130E, 9245, and 9577SW are of note. It was observed from the field-walked material from Croughton (Mills 2008) that even for heavily ploughed sites flue-tile clusters around its original structure which implies that there may be a hypocaust structures close to Fields 4130E, 6816S and 9577SW. The half box-flue-tiles from Field 2134S may also be indicative of an earlier hypocaust structure here. The Roman brick from Field 9223, may also have originated from a hypocaust structure.

### *Discussion*

This is a small assemblage of ceramic building material collected from field-walking. There is enough material to suggest the likelihood of tiled Roman structures with hypocausts in Fields 4130E, 6816S and 9577SW.

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