

12. THE MORTARIA

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12.1 Introduction

One hundred and twenty-eight mortarium sherds were found during the excavations of 1975–8 at Croy Hill. In total they weigh 6,305g. They are from at least five identifiable, different sources and up to perhaps three unidentified ones. The sources include potteries at Mancetter-Hartshill in Warwickshire; Colchester (with one sherd possibly from Brampton in Norfolk); Corbridge; Bearsden or Balmuildy; an uncertain source in north-east Scotland or possibly north-east England; and one clearly local source which is likely to be Croy Hill itself. It is not possible to point to specific sources for sherds in Fabrics 9 and 10, but they are consistent with manufacture in Scotland. The notable increase of evidence for pottery production in Scotland since 1976 (Hartley 1976; 2016; Breeze 1986; Swan 1999; 2002; Gaunt 2016; Gillings 2016) makes this the preferred option, but macroscopic examination alone is not sufficient to claim this with complete certainty.

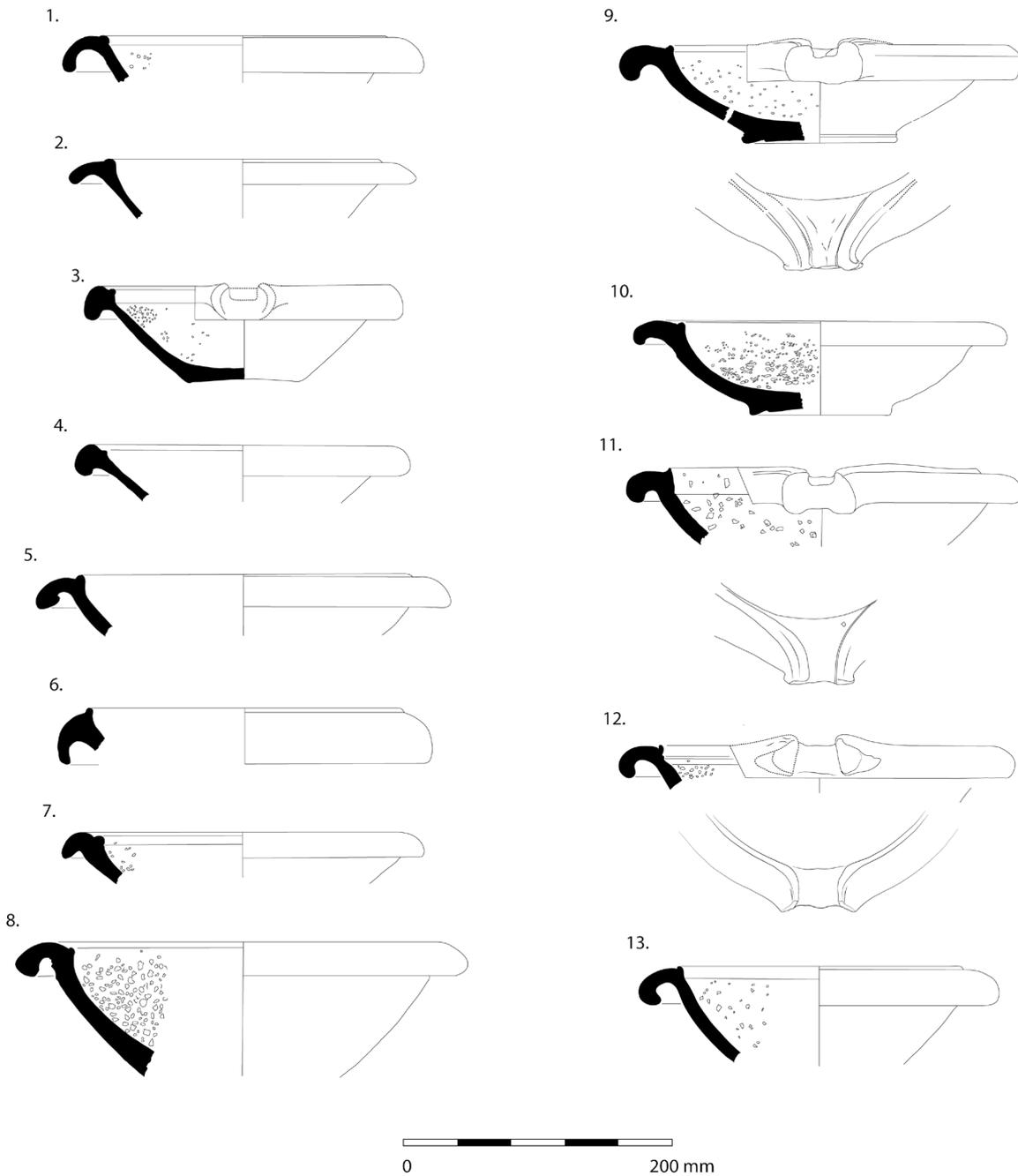
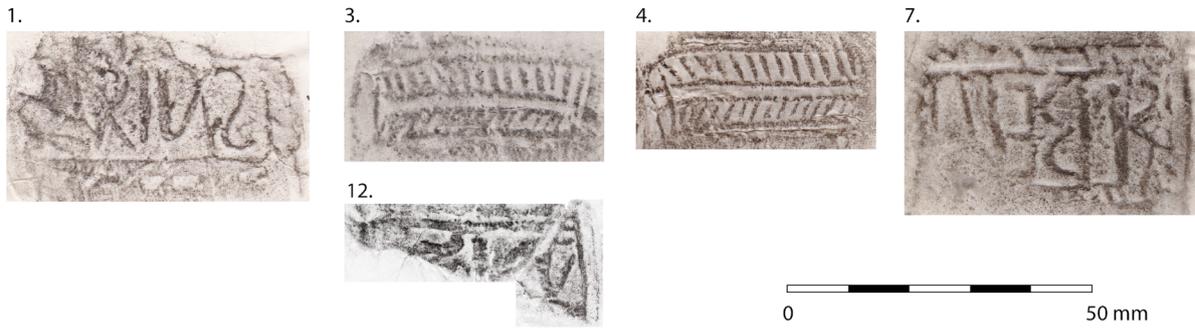
Table 12.1 lists mortarium totals from different sources and in different fabrics, giving totals for the

minimum numbers of vessels, the number of sherds, the weight and the surviving rim percentages. The spreadsheet (Table 12.2) provides tabulated details for individual sherds. Only illustrated mortaria are discussed in more detail (12.4, below). Some of the totals may appear surprising: the numbers for Colchester are high compared with those for Mancetter-Hartshill because more than three quarters of archive no. 1 (Illus 12.1, no. 3) survived.²⁰ The weight of the mortaria from Colchester would otherwise be low because, apart from possible differences in original clay weights, the Mancetter-Hartshill mortaria survived well in wet and acid conditions, while Colchester mortaria deteriorated and even disintegrated because of their high calcium content.

Because the total number of mortaria from these excavations is small and there are clear variations in rim profile and fabric, it is possible to indicate the minimum number of vessels from different sources with a fair degree of accuracy. They come from at least 38 vessels, but the true total will be somewhat larger. The 12 mortaria selected for illustration (Illus 12.1, nos 1–10, 12–13) are shown in their fabric groups and represent all the rim profiles present. The additional mortarium illustrated (Illus 12.1,

Table 12.1 Mortarium totals by fabric and source

Fabric	Fabric variant	Source	Minimum vessels	Sherds	Wt (g)	% rim
1		Mancetter-Hartshill after <i>c</i> AD 130	7	19	1,253	99
2		Colchester	11	48	1,685	180
2		Brampton, Norfolk?	1	1	85	12
3		Corbridge	1	1	220	21
4		N-E England or N-E Scotland	1	2	150	4
5		probably Croy Hill	2	4	630	19
5	variant	probably Croy Hill	1	4	115	0
6		probably Croy Hill	1	12	478	32
6	variant	probably Croy Hill	1	3	105	0
7		probably Croy Hill	1	13	485	36
8		probably Bearsden	7	13	775	38
9		probably Scotland	3	5	289	12
10		probably Scotland	1	1	35	10
			38	108	6,305	463



Illus 12.1 Mortaria stamps and rim profiles. The numbers on the stamps correspond with the profile drawings



Illus 12.2 Colchester mortarium (Archive no. 1) (© Amanda Clydesdale)

no. 11; Illus 12.3), which does not feature in Table 12.2, was presumably found by George Macdonald in his excavations in 1931 (see 1.2, above) and is now in the National Museums of Scotland (NMS), Edinburgh (FR469 1933.128). This has been included because it is technically a waster and is unlikely to have been used; it also falls within the same category as the mortaria in Fabrics 6 and 7 in rim profile and fabric, and can be attributed to the same workshop.

Other mortaria in NMS from earlier excavations at Croy Hill (not published here) include two made at Colchester (FR417 and FR854) and two from the Mancetter-Hartshill workshops, one with a stamp of the potter Figobateus (FR467), the other an unregistered fragment. The stamped mortarium is presumably that which Macdonald refers to in his report as not yet deciphered (1932: 266).

Table 12.2 Catalogue of mortaria (available to download here: <https://doi.org/10.9750/issn.2056-7421.98.1-199>)

12.2 The mortarium fabrics

12.2.1 Fabrics produced outside Scotland

► Fabric 1: Mancetter-Hartshill potteries in Warwickshire

No exploration has been made in neighbouring parts of Leicestershire on the other side of Watling Street. The full extent of the industry is unknown, but there is no evidence for any link with the 1st-century military site in Mancetter village that pre-dates the industry, or of any link with the late enclosure known as *Manduessedum* that straddles Watling Street (Tomber & Dore 1998: 189; Mahany 1971: 25–6 with a note by Graham Webster).

A usually fine-textured, cream fabric, varying from softish to very hard in texture and sometimes with a pink core. Inclusions are usually moderate, sub-angular, ill-sorted, but fairly small grains of transparent and translucent rose quartz along with sparse opaque orange-brown fragments. In fact, the range in fabric is quite wide, from that with scarcely



Illus 12.3 Waster from Macdonald's excavations at Croy Hill: top: interior; bottom: exterior (FR469, both © National Museums of Scotland)

any inclusions (often described as ‘pipeclay’, in pottery terms ‘parchment’) to fabrics with a fair quantity, and to fabrics with hard, ill-sorted black inclusions. There was a distinct difference between the trituration grit being used in these potteries before AD 130 and that being used *c* AD 140: the early 2nd-century mortaria have much more varied trituration grit, the norm being a mixture of quartz and sandstone; the trituration grit in the mortaria dating to *c* AD 140 and thereafter consisting of hard red-brown shale (Dr Roberta Tomber, pers comm) and/or hard blackish fragments (an odd quartz grit may be present, but this is very rare and never part of the ‘mixture’). The change occurred during the decade AD 130–40 and it seems likely that it had already occurred when the Antonine occupation of Scotland took place. Archive nos 5–9; 15–17; 73–4; ?71.

► **Fabric 2: potteries at Colchester, Canterbury or Norfolk (Tomber & Dore 1998: 133–4)**

The self-coloured fabric can range in colour through cream, yellowish-cream to pale brown; it occasionally has a pink core. It was presumably hard when made, but, due to its calcareous nature, it is especially subject to chemical weathering in acid and/or wet conditions. In Scotland, its condition varies considerably from often being slightly softish in texture to disintegrating, or it can have a completely crazed surface. Inclusions are of angular quartz and flint with sparse red-brown fragments. The trituration grit consists of flint and quartz with occasional red-brown fragments. These production centres use geologically similar clays; they are not readily distinguished by macroscopic examination alone and care needs to be taken even with scientific analyses. When mortaria are stamped an assessment can be made based on distribution, and the rim profile can be helpful. The fabric produced at Brampton, Norfolk tends to be more brownish, though Colchester did produce some brownish fabric. The Colchester potteries were by far the most important of these suppliers for the Antonine Wall; the Canterbury workshops were of some importance (see MacIvor et al 1980: 263, table 2, ‘K/C’, 1–4), but none of the Croy Hill examples can be attributed there; Norfolk mortaria are found in Scotland, but very rarely. Archive nos 1, 2, 13, 18–19, 20/21, 22/24, 23, 78–9.

► **Fabric 3: Corbridge (Tomber & Dore 1998: 172)**

Fine-textured, cream fabric with frequent inclusions, mostly quartz, with a few opaque red-brown; all are barely visible at $\times 20$ magnification except for a very few, slightly larger ones. The fabric of this sherd is an unusually fine-textured, smoothed version of the white fabric commonly produced at Corbridge. The surviving trituration grit consists of quartz and sandstone fragments (up to 3–4mm). Archive no. 3.

► **Fabric 4: north-east England or north-east Scotland**

A softish, brownish-pink fabric fired to pale brownish-cream at the surface; no slip survives. The moderate to fairly frequent, ill-sorted inclusions (tiny to medium-sized) are composed of quartz with very moderate red-brown and black fragments. One red-brown (?sandstone) and one quartz trituration grit survives. Archive nos 10 and 11.

12.2.2 Fabrics produced inside Scotland

► **Fabric 5: probably Croy Hill**

A hard, very fine-textured fabric, fired to cream at the surface, but otherwise a brownish-pink; with ill-sorted, sparse to very moderate inclusions, including quartz, red-brown haematite-like fragments and rare black fragments. The trituration grit is frequent and consists of medium to large (2–5mm across), opaque quartz, quartz sandstone, dark red-brown and red-brown sandstone. The surviving orange-brown slip varies from a completely matt orange-brown to one that is dense and almost approaching a glaze in quality and which was clearly the intended slip. This use of a thick orange-brown slip covering all surfaces is in keeping with the other fabrics attributed to Croy Hill – it is not the norm anywhere else on the Antonine Wall (raetian-type mortaria had such a slip but confined to the rims). Archive nos 41; 42; 45; 46 (nos 42 and 45 are likely to be from the same vessel because both sherds show frequent, tiny to small, trituration grit almost as a background to the larger grits).

Dr David Williams has examined no. 41 and comments that the trituration grit also includes ‘a little feldspar, reddish-brown mudstones/shale and quite a few pieces of dark volcanic material (presumably from the local Campsie Fells). At

Croy Hill, there is an exposed sill of hard volcanic dolerite, which could account for the latter, though this is the same for Bar Hill as well. Moreover, in one or two pieces of this volcanic material you can see small white elongated crystals of feldspar, which would point towards the dolerite. The trituration grits are all fairly well-rounded and quite mixed, perhaps suggesting that a handful of mixed gravel was being used.'

► **Fabric 5 variant:**

Archive nos 62–4 (1 vessel) are possibly in a variant of Fabric 5. All are in a fine-textured fabric, more reddish than Fabric 5; they are all base or near basal fragments and have the grey core which can be present at the thick area between side and base. They have traces of a thick, smooth red-brown slip, which appears to have been burnished. Archive nos 56, 57 and possibly 69 have some traces of the thick, smooth red-brown slip. Archive no. 25 is probably in this category, but is too burnt for any slip to have survived.

Dr Williams comments that 'the trituration grits and fabric of the two small sherds, nos 56 and 63, look similar to no. 41. The large quartz grains in the trituration grits here are dull and opaque, in contrast to those in Fabric 6.'

► **Fabric 6: probably Croy Hill**

Slightly micaceous, hard, reddish-brown fabric (2.5YR, 5/8) with hackly fracture. There are fairly frequent, tiny to small inclusions in the matrix (quartz, red-brown with few black), and in the foreground there are fewer and larger, mostly quartz inclusions. The trituration grit is difficult to see because the surface slip is fairly intact, but probably consists of translucent quartz (3–6mm). The self-coloured, surface slip is fairly complete; the external surface and the upper surface of the rim are burnished; underneath the rim the surface has just the self-coloured slip with no burnishing. Most of the fragments in this fabric are from one mortarium. Archive nos 35 (three joining sherds); no. 33 joining nos 34, 39 and 29; nos 52–54; and no. 65 (base sherd) are all likely to be from the same mortarium.

Dr Williams comments: 'In nos 35/65 I cannot see any ?dolerite present in the trituration grits. Instead, these are mostly made up of large angular,

fractured, translucent quartz, which also appears in the fabric of the sherd, together with smallish reddish-brown argillaceous material. The latter gives the two sherds a "soapy feel" similar to the face mask' (10.2, above).

► **Fabric 6 variant:**

Archive nos 30, 58, 59 are in what may be a slight variant of Fabric 6, with some larger quartz inclusions and opaque quartz trituration grit (up to 5mm) with very occasional red-brown fragments. Archive no. 59 is unusual in that the inner half is fired to reddish-brown and the outer half to pinkish-cream. No rim fragments survive in this variant fabric and only the badly pitted trituration surface of the body/base fragment (archive no. 30) survives.

► **Fabric 7: probably Croy Hill**

Pale orange-brown, paler at inside surface; more open and more friable than Fabric 6, but perhaps from a similar clay source. The differences in colour and texture could be due to poor control of the firing conditions or to a slightly different clay being used. The only mortarium in Fabric 7 has a slip discoloured to various shades of matt brown, but in one small area the surviving slip is identical to that red to orange-brown slip which survives on archive nos 41 and 45, which are in Fabric 5. As in Fabric 6 there are tiny inclusions in the matrix with, in the foreground, moderate to fairly frequent random and very ill-sorted quartz (up to 2mm) with hackly fracture, again similar to those in Fabric 6; also very occasional red-brown sandstone and rare black fragments. The trituration grit consists mainly of black rock combined with small quartz particles. Many of the fragments in Fabric 7 join and one can be reasonably certain that all are from one vessel. Archive nos 27, 37, 38, 47, 79, 80.

Dr Williams comments: 'The trituration grits here seem to be almost solely made up of black ?dolerite. The shape of many of these is roughly angular, suggesting that the volcanic material was deliberately crushed before being used. There are plenty of quartz grains and some quartz sandstone scattered throughout in the fabric in all parts of the sherd to suggest that this was a natural component of the clay or was added as a temper and therefore probably not deliberately added as part of the trituration grits. The latter was essentially

the function of the ?dolerite, which in the hand-specimen does not seem to be present in the fabric of the clay – certainly not to the same size as in the trituration grit. This seems to tie up with the thin section results of the “local” pottery, which did not show any volcanic material present (14.2, below). I cannot see any obvious argillaceous material in the fabric of the sherd, which is quite sandy.’

Dr Williams makes the following general comments on Fabrics 5–7: ‘mortarium Fabrics 5 and 6 have argillaceous inclusions in the clay matrix, plus quartz and a little quartz sandstone, all of which are probably in the local Croy Hill clays, though as Bar Hill is very close by this would probably apply there as well. However, the trituration grits between Fabrics 5 and 6 are quite different. Fabric 7 seems different to Fabrics 5 and 6, both in the nature of the trituration grits and in the clay of the sherd.’

For details of mortarium waster FR469, an earlier find from Croy Hill which belongs in the same category as the mortaria in Fabrics 5–7, see 12.3.4, below.

► **Fabric 8: probably Bearsden, but Balmuildy not impossible (see Hartley 2016: 135, fabric 11)**

Soft, fine-textured, micaceous pinkish-brown fabric (7.5YR 6/6), sometimes with a drab core; sparse, ill-sorted inclusions, small quartz, red-brown and rare black, up to 2mm. Much of the trituration grit has fallen out, but what remains indicates that it consisted of mostly milky quartz with some quartz sandstone, red-brown fragments and sandstone. Small traces of cream slip survive. Surface powdery due to contextual conditions. Archive nos 4 (CICV), 28, 32, 36, 40, 48–50, 55, 61, 66, 70.

12.2.3 Other fabrics probably produced in Scotland

► **Fabric 9: may include more than one source. Probably Scotland**

Quite fine-textured, reddish-brown fabric with moderate to fairly frequent inclusions: mainly ill-sorted quartz, tiny and minute black, and rare red-brown. Trituration grit consists of a mixture of quartz, red-brown and other sandstones and ?haematite. Cream slip. Archive nos 31; 67 (perhaps with cream slip); 51 joining 60 (hard, dark red and probably overfired (2.5YR 5/8)).

► **Fabric 10: probably Scotland**

Pale, orange-brown fabric, fired to paler colour at the surface; no evidence of slip; frequent ill-sorted quartz inclusions with some black and red-brown particles; no trituration grit survives. Archive no. 43.

12.3 Illustrated mortaria arranged by fabric

12.3.1 Fabric 1: Mancetter-Hartshill potteries (Tomber & Dore 1998: 188–90)

► **Archive no. 5: LCQ 1, trackway drainage ditch, vicus (Illus 12.1, no. 1)**

Three joining rim sherds with red-brown and blackish trituration grit. Worn. Diam 270mm, with stamp of Sarrius.

The partial impression preserves the second half of a stamp from one of the seven dies of Sarrius used in these potteries. His six other dies produce straightforward stamps which present no difficulty in reading or interpretation, but the seventh, which was used for the Croy Hill stamp (Illus 12.1, no. 1), gives a semi-literate reading probably due to errors when making the die: the initial and final S are both retrograde, the A appears as a retrograde N with a dash in the A instead of a bar, the V also appears as retrograde N. Stamps like this represent a curious variant from some normal stamps, which are clearly the same die-type, but without the extra background strokes. These read SARIVS clearly, with just the initial and final S reversed and A with a dash. It was not abnormal for potters to vary between using one or two consonants, e.g. Bruc[c]ius. Many stamps of this die-type were found alongside stamps from his other dies in at least one kiln in the kiln area in Mancetter parish, located south-west of Watling Street and the possibly 4th-century enclosure, *Manduessedum*.

Up to 20 mortaria stamped with the same die are now known in England (excluding his kiln site) from: Aldborough, North Yorkshire (up to 7) (Snape et al 2002: 86–9, nos 1–6 and fig 27, no. 1); Alcester; Birdoswald (2; Richmond & Birley 1930: 187, no. 2, and fig 13, no. 2A, found in the ‘Alley’ and described as an ‘illegible stamp’); Carlisle (McCarthy 1990: 262, no. 14); Chester; Corbridge (2–3); Leicester (2–3; Clay & Pollard 1994: 66 and fig 48, no. 1, fig 56, no. 111); Ribchester (Edwards & Webster 1985: 79–80 and fig 22, no. 354, which

gives the clearest impression of the borders to this stamp); Willington, Derbyshire.

Eight mortaria with the same stamp are now recorded in Scotland, from: Bar Hill (Hartley 1975: fig 49, no. 6); Camelon (2); Carzield; Croy Hill; Strageath (2; Frere & Wilkes 1989: 240, no. 10); Wilderness Plantation (Wilkes 1974: fig 6, no. 12).

In total (including the above and excluding kiln sites), there are up to 108 mortaria stamped by Sarrus in England and up to 17 in Scotland, which are all attributable to his Warwickshire workshops. For details of his work elsewhere see Hartley 2016 and Buckland et al 2001.

Sarrus was perhaps the most important and prolific potter stamping mortaria in the mid-2nd century and is of especial interest because he was involved in production in at least four workshops: his major production was in the Mancetter-Hartshill potteries in Warwickshire, a second one at Rossington Bridge, Doncaster (Buckland et al 2001) a third at Bearsden (Hartley 2016), with the fourth in north-east England, probably at Corbridge; some are likely to have functioned concurrently at some point in his career. The Croy Hill mortarium is in the fabric used at his major workshop in Warwickshire (Mancetter-Hartshill) and stamps from the same die are recorded only on products of that workshop.

The date of his overall production is assessed from the abundance of his work at forts on the Antonine Wall (and his production at Bearsden), its absence from Pennine forts unoccupied *c* AD 140–60, his rim forms and his possible association with Iunius at one of his Mancetter kilns. A stamp at Verulamium is from a deposit dated *c* AD 155–60 (Frere 1972: no. 35), one from a Period 1a deposit at Birdoswald suggests that he was at work before AD 140 (Birley 1930: 187, no. 2, ‘with illegible stamp’). The evidence points to overall activity lying within the period AD 135–70, but it could have ended before AD 170.

Three other mortaria in Fabric 1 are of generally similar type: archive nos 15, 16 and 73.

► **Archive no. 17: QAE, fortlet ditch (Illus 12.1, no. 2)**

A mortarium with shorter, splayed flange, which can be matched in the work of Minomelus and other potters. Diam *c* 260mm; some wear.

12.3.2 Fabric 2. Colchester potteries (Tomber & Dore 1998: 133–4)

► **Archive no. 1: DAD, gully/fence line, land division (Illus 12.1, no. 3 and 12.2)**

Thirty-five joining fragments making up almost the whole of a mortarium with stubby rim of closely similar type to Maxfield forthcoming nos M43 and M44. Diameter 240mm with herringbone stamps. The fabric is powdery and there is dull, yellowish-brown accretion on all surfaces plus some abrasion. There is some wear in the basal area.

The left-facing and fragmentary right-facing stamps are both of herringbone-type from a die used in the potteries at Colchester in the period AD 140–70 (Hull 1963: fig 60, no. 37). Two mortaria with identical stamps have been recorded from other sites in Scotland, from Rough Castle (MacIvor et al 1980: 261 and 263, no. 224); and Camelon (Maxfield forthcoming); ten are known from sites in south and south-east England; two from north-eastern England, from Birdoswald (Period I, not published) and York (SM12 1990.21 2149).

► **Archive no. 2: RAZ, possible construction trench, *vicus* (Illus 12.1, no. 4)**

A mortarium with stubby profile, close to Hull 1963: fig 63, no. 1 and to Maxfield forthcoming no. M44. Diam 230mm with a right-facing herringbone stamp from the same die as archive no. 1 above, but it is a different vessel.

There is evidence for up to seven Colchester mortaria with the stubby rim forms of archive nos 1 and 2, which are all in the same category as Hull 1963: fig 63, no. 1.

► **Archive nos 24 and 22: LAB 1 and LBB 1, trackway drainage ditch, *vicus* (Illus 12.1, no. 5)**

Rim profile with wide, shallow flange turned sharply underneath and up to the body in same category as Hull 1963: fig 63, no. 8, and similar to Maxfield forthcoming, no. M29. Diam 310mm.

► **Archive no. 76: LCO, hillwash over bypass road drainage ditch, *vicus* (Illus 12.1, no. 6)**

A rounded but deep rim with high bead; it differs in form and in the brownish colour from all the

remaining mortaria in Fabric 2. This brownish version of the fabric fits better with production at Brampton in Norfolk than at Colchester, and mortaria made in Norfolk have been recorded in Scotland (eg Rae & Rae 1974: 208, no. 3). Diam 280mm.

12.3.3 Fabric 3: Corbridge potteries (Tomber & Dore 1998: 172)

► **Archive no. 3: LAK 4, trackway drainage ditch, *vicus* (Illus 12.1, no. 7)**

A notably fine-textured mortarium with smooth surface and a stamp of Bellicus. The small, stubby rim with small downturned distal end is one of his typical rim profiles. Diam 270mm.

The incompletely impressed, retrograde stamp with ansate ends is probably left-facing. It reads BE[retrograde followed by partial impressions of three upright strokes; when complete it reads BELLICVSF retrograde for Bellicus *fecit*, with *lambda* LL and with small S and F tucked into spaces next to the ansate end. It is from the single die known for Bellicus. Mortaria of his have now been noted in Scotland from Croy Hill; Mumrills (2); Newstead and Rough Castle; and in England, from Benwell, Chesters Museum (no. 2431/3742), Corbridge (up to 38), and Great Chesters. His distribution on both the Hadrianic frontier and in Antonine deposits in Scotland suggests that his activity overlapped a change in the frontier. Several of his mortaria were found in the Corbridge destruction deposit and some in the deposit immediately earlier (information from the late J P Gillam in 1978; see also Richmond & Gillam 1950: fig 10, no. 94). Bellicus used very distinctive rim profiles that are most unlikely to be earlier than AD 150/155. His workshop produced unstamped mortaria like one at Inveravon (Dunwell & Ralston 1995: illus 23, no. 80). In the past his products have been dated as late as AD 180–200 partly because of the rim profiles produced, but also because of the original late dating of the Corbridge destruction deposit. It is now clear that he was active within the period AD 150–180+. Distribution of his work leaves no reasonable doubt that the workshop was at Corbridge.

12.3.4 Fabrics 5–7: probably Croy Hill

► **Archive no. 41: LBO 1, trackway drainage ditch, *vicus* (Illus 12.1, no. 8)**

Fabric 5; Diam 340mm. All surfaces have some abrasion, but the inside is very badly pitted and even the upper surface of the flange is pitted. Traces of a fine red-brown slip survive under the flange, but the slip surviving on archive no. 45 suggests that it would have covered all surfaces. The body sherd, archive no. 42, shows the fine, polished or burnished quality that was intended. The rim profile is very distinctive and differs entirely from those associated with Fabrics 6 and 7. The trituration grit shows some wear.

► **Archive nos 35; 33, joining 34, 39 and 29; 52–4; and 65 (base): LAK 4 and 2; LAA; LAH 4; LDH 1; LBR 1 and 2, different segments of trackway drainage ditch, *vicus* (Illus 12.1, no. 9)**

Eleven sherds, many joining, which share exactly the same features and are likely to be from the same mortarium (see Table 12.2 for details). Unfortunately the basal fragment does not join, but it again shares all the same features and it is likely to belong to the same mortarium. Diam 300mm.

Fabric 6 with a matt red-brown slip surviving, which has been burnished or polished notably on the exterior, starting below the rim area; the lower limit of the burnishing is not preserved but it would be fairly near to the base. Burnishing in this area tends to occur on mortaria found on military sites.

The flange rises somewhat higher than the bead and then turns down vertically at the distal end, where there is a faint indication of a distal bead. The base has an external groove, but has a unique profile on the underside which has not previously been noted in Scotland or elsewhere in Britain. This type of basal profile will undoubtedly have been in use outside Britain, and one or more of the potters working at Croy Hill is likely to have come from such an area.

The mortarium appears to be unused and the surface on the underside of the base is unworn.

► **Archive nos 27 joining 37; 38; 47; 79; 80: LAH 1; LDB 1 and LAA, different segments of trackway drainage ditch, *vicus* (Illus 12.1, no. 10)**

A mortarium with wide shallow flange made vertical at the distal end in the same way as archive nos 33–5 etc above. Diam 270mm; Fabric 7, with an all-over slip, discoloured to brown except in one small area where it is orange-brown. Approximately half of the base survives and, although it is not identical, it is of the same unique type as archive nos 33–5 etc in Fabric 6 above. All the sherds in Fabric 7 are from the same mortarium. There is some abrasion and there are signs of possible use, but the slip underneath the base shows no indication of any wear.

► **FR469 1933.128 (Illus 12.1, no. 11; Illus 12.3)**

A find from Macdonald's excavations, now in NMS; Diam 300mm; Fabric 7, but with ill-sorted, angular milky quartz trituration grit similar to Fabric 6. Two joining sherds; the spout and enough of the rim survive to show that this mortarium was never stamped. The fabric is very hard and notably overfired, with many waster splits across the flange and the spout and on the exterior. There is a matt brown slip overfired to black in large areas. Slip survives amongst the trituration grit, which is consistent with lack of wear. It is unlikely to have been used and was certainly not suitable for sale. The stubby rim profile is downturned at the distal end and there are the remains of burnishing on the exterior, as with archive nos 33–5 and so on in Fabric 6 above.

12.3.5 Western sector of the Antonine Wall

► **Archive no. 4: LAK 4, trackway drainage ditch, *vicus* (Illus 12.1, no. 12)**

A mortarium with a small, rounded rim with small, neatly moulded spout and a fragmentary stamp of GICV, CICV[or GICA. Diam 240mm; Fabric 8. The fabric is softish and abraded and no trace of slip survives, but this potter normally used a cream slip; no trituration grit survives.

The broken stamp preserves the upper parts of the first three letters of a stamp, which when complete reads GICV, CICV[or GICA retrograde

between unusual upper and lower borders. GICV or GICA retrograde look better than the CICV reading which has usually been preferred. The clearest and most complete published examples of this stamp are from Balmuildy and Bar Hill (Miller 1922: pl xl, B, no. 7; Hartley 1975: fig 49, no. 9). His mortaria have been found only in Scotland at the following sites: Balmuildy (three stamps from two or three vessels); Bar Hill; Bearsden (at least two stamps); Croy Hill; Duntocher; and Old Kilpatrick (two stamps from one to two vessels). All of his stamps are from sites on the Antonine Wall and no stamps have been recorded east of Croy Hill. There is no reasonable doubt that he worked somewhere in the western sector of the Antonine Wall or that his activity lay entirely within the period of the Antonine occupation of Scotland (Hartley 1976: 84–5). On present evidence it is most likely that he worked at Bearsden within the period AD 140–65 (see Hartley 2016: 140–1, nos 32–3).

► **Archive nos 66 and 50: LCG 1 and LBG 3 (not joining), trackway and bypass road drainage ditches, *vicus* (Illus 12.1, no. 13)**

Diam 270mm; Fabric 8, with traces of cream slip. Soft and abraded and many of the trituration grits have fallen out. This notable rim profile with deeply incurved rim has a close parallel at Bearsden (Hartley 2016: 154, illus 7.22.61 and 157, no. 124). There are characteristic grooves below the bead on the inside and in the same area on the exterior, although weathering and the powdery nature of the fabric have reduced their crispness. Archive nos 40, 55, 36, 48 and 61 are from mortaria with a similar profile. They could be from the same mortarium, but a second one could be involved. Archive nos 48 and 61 are the most likely to be from the same vessel.

12.4 Discussion

The sources of mortaria from outside Scotland are very much what one could expect. The sources from within occupied Scotland are coming to be what one can expect. There is substantial and growing evidence that pottery was made at several sites in Antonine Scotland including sites on the Antonine Wall (Hartley 1976; 2016; Swan 1988; Breeze 1986). Similar local production was common at

sites in the north of England in the 2nd century down to and including the early to at least the mid-Antonine period, but it is interesting that production within the occupied area was clearly encouraged. It may have been intended that the area should become as self-sufficient as possible – this would explain the involvement at Bearsden of such a high-profile potter as Sarrus of the Mancetter-Hartshill potteries.

Fabrics 5–7 were undoubtedly produced locally and, although one would like more definitive proof, production at Croy Hill itself is the most fitting explanation. Any doubt could be removed by further work at Croy Hill and by more detailed study of all the pottery at Bar Hill, the only other feasible source. The only mortaria known with certainty to have been produced at Bar Hill are those identified by Hartley (1976: fig 2, nos 24–7) and confirmed by Swan (1999: 420). These are different in every way from the mortaria at Croy Hill.

12.4.1 Colchester

The most important of the suppliers from outside Scotland was the Colchester potteries. This was true for all sites on at least the eastern half of the Antonine Wall. This is reasonable enough since mortaria from Colchester, Canterbury and lesser sources like Brampton, Norfolk came up to the Forth, and to a lesser extent the Tyne, in what must have been very important coastal traffic. Sites in the east like Inveresk, which could have been the port of entry (Thomas 1988), have the largest quantities and the numbers tend to be smaller on sites at the western end of the Antonine Wall, though they are still present: at Bearsden, for example, they represent 4–5% of the total, about ten mortaria (Hartley 2016: illus 7.10–7.15).

12.4.2 Mancetter-Hartshill

The Mancetter-Hartshill potteries in Warwickshire were next in importance among external suppliers. It is probably true to say that they were never the most important suppliers to any site on the Antonine Wall, but their products are always present, usually in fair numbers. In this respect Croy Hill is unusual in having only two stamps (Sarrus and Figobateus, an old find (FR467)), but

there are many other fragments, whereas there is only one sherd (Bellicus) which can be attributed to Corbridge with confidence.

12.4.3 Corbridge

Mortaria from the workshops at Corbridge are relatively uncommon in Scotland, which is surprising given the fact that Corbridge was on the doorstep compared with either Colchester or the Mancetter-Hartshill potteries. The most important single production in north-east England within the period AD 115+ to AD 160+ was that associated with stamps of Anaus. He was involved in more than one workshop, consecutively or simultaneously; one of these was in the Tyne area where Paul Bidwell has now found evidence for extensive pottery production which can be assumed to have included Anaus (pers comm); it has always been accepted that Anaus worked at Corbridge and it is not unreasonable to believe that he was involved in the Tyne area too (Maxfield forthcoming, 'Mortarium Stamp M18'; Hartley 2012: 105–7, 'Discussion of Anaus'). One or more of his workshops, in the Tyne area or at Corbridge, must have been active during the Antonine occupation of Scotland. No stamps of Anaus have been found at any site on the Antonine Wall and only five have been recorded from anywhere in Scotland (Camelon (2); Cramond; Loudon Hill; Newstead). The reason is not clear, but it must be significant that all five are from only one of the at least 12 dies associated with him.

The real paucity of mortaria of Anaus in Antonine Scotland, their distribution, and the presence of stamps from only one die, cannot be explained, but the relative paucity of mortaria of Bellicus is readily understandable – his workshop was not in existence when the Antonine Wall was constructed. The workshop cannot have started before *c* AD 150 or even later, and other suppliers and probably local productions were already in place before this date. Nevertheless, Bellicus, who undoubtedly worked at Corbridge, has four mortaria at sites at the eastern end of the Antonine Wall and one at Newstead; there is also an unstamped mortarium at Inveravon that was made in his workshop. This means that his workshop did establish a foothold in the supply chain servicing sites in eastern Scotland and on the eastern half of the Antonine Wall.

12.4.4 Probably Croy Hill

The mortaria of outstanding interest are six in Fabrics 5–7 (36 sherds), plus an earlier find (FR469; 1933.128), which is technically a waster. This makes seven mortaria in all which can be attributed to a local workshop. These mortaria have unusual characteristics in common. They have traces of a substantial red-brown slip that appears to be misfired on the mortaria in Fabrics 6–7. Traces of burnishing survive on parts of the exterior; such burnishing is rarely found, and then possibly only at military sites. The most unusual feature is the treatment of the underside of the two surviving bases; these have a profile never recorded before on mortaria in Britain; no parallels elsewhere are immediately to hand (Illus 12.1, nos 9 and 10).

Fabric 5 may be a finer version of one of the coarser Fabrics 6 and 7, with coarser elements removed by filtration at the workshop. The mortaria in Fabrics 6–7 have unusual rim profiles. The slip on the mortarium in Fabric 7 (Illus 12.1, no. 10) is misfired and that on the mortarium in Fabric 6 (Illus 12.1, no. 9) may be. The slip on the earlier find (FR469) is clearly overfired, the fabric is very hard and there are many waster splits across the flange and the spout, and on the exterior. The vessel might be usable but would be unlikely to be ‘traded’.

Small patches on the mortaria show the type of thick orange-brown slip intended to cover all surfaces. This was not the norm anywhere else on the Antonine Wall (raetian-type mortaria had such slip only on the rim). We can be virtually certain that the mortaria in Fabrics 5–7 were never stamped. Only one of the mortaria (Illus 12.1, no. 8, archive no. 41) shows real signs of any use, and that very little.

Wherever they were made, other types of coarse ware in addition to mortaria would also have

been produced. Specialisation in the production of mortaria was probably beginning to take off in the Mancetter-Hartshill potteries in the late 2nd century and was certainly normal there in the 3rd century; there may have been some specialisation at Colchester in the Antonine period and to some extent at Corbridge, workshops whose mortaria were traded over a wide area, but it is most unlikely to have occurred at small workshops which served a limited area. Unusually for mortaria attributed to the same workshop in the same period, the trituration grit used is not consistent.

The sherds in Fabrics 5–7 from the recent excavations are thought to be from only six mortaria and the number of sherds (36) and the weight (1,813g) may appear disproportionate, but this results from the substantial nature of the vessels and from having initially large sherds which have suffered considerable fragmentation in antiquity.

Taking the similarities and unusual features into consideration plus the overfired condition of some of the vessels, the waster cracks and the lack of normal use, it is certain that these mortaria were made locally, probably at Croy Hill itself. Production at Croy Hill would not be out of place and a probable kiln (without pottery) has been identified (see 5.3 and 5.6, above).

12.4.5 Cicu[...] of Bearsden or possibly Balmuildy or perhaps starting at Balmuildy before working at Bearsden (see Hartley 2016)

The other prominent source of mortaria made in Scotland is the workshop at Bearsden or Balmuildy, which is well represented. For further details of these potters see Hartley 2016. It is worth noting that Cicu[...]’s stamps have so far been recorded only at sites on the Antonine Wall.