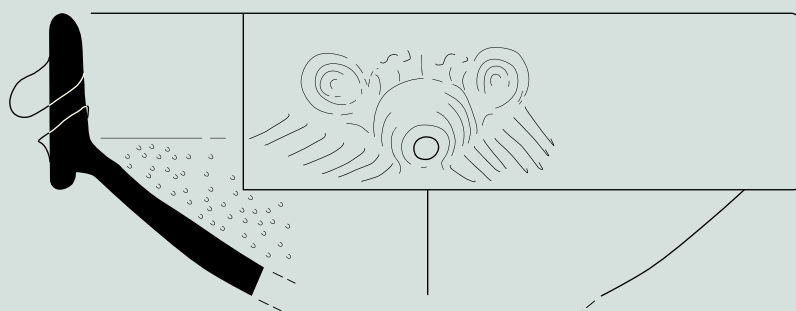


WINCHESTER

A CITY IN THE MAKING

Archaeological excavations between 2002 – 2007
on the sites of Northgate House, Staple Gardens and the former Winchester Library, Jewry St



Section 1.2

The Roman Pottery

by Edward Biddulph and Paul Booth

Section 1.2

The Roman Pottery

by Edward Biddulph and Paul Booth

Introduction

Just over 10,000 sherds weighing 176 kg were collected from deposits phased to the Roman period. The reported material represents a little over half the total of Roman pottery recovered from the two sites, the selection being made on stratigraphic rather than ceramic criteria. An estimated 6600 Roman sherds occurred in medieval and later deposits at Northgate House and about 2000 sherds in similar contexts at the Discovery Centre. This material was scanned very rapidly at the assessment stage of the project but, with the exception of occasional pieces of intrinsic interest, is not noted here. In addition some 142 sherds with an average weight of 2.3 g were recovered from soil samples from Roman contexts at Northgate House. These were noted but not recorded in detail. The Northgate House site had a marginally bigger stratified assemblage, 6000 sherds as opposed to the Discovery Centre's 4000 sherds. There was a difference in chronology, too; both sites had substantial late Roman components, but the Discovery Centre assemblage contained 1st and 2nd-century material that Northgate House lacked. Both sites produced large, well-dated groups and between them the sites offer a more or less complete sequence of pottery supply to Winchester's areas of occupation within the city wall. The pottery was generally in good condition; sherds were fairly fresh and often of reasonable size (the average sherd weight was 17.5 g, and even omitting amphorae amounted to 15.6 g) and surfaces were well-preserved, allowing assessment of wear and the survival of use-related deposits such as soot.

The pottery was recorded using Oxford Archaeology's standard recording system for late Iron Age and Roman pottery (Booth 2007). The assemblage was sorted within context groups into fabrics and then into 'sherd-families' – collections of sherds belonging to the same vessel – or simply a mass of undiagnostic body sherds. Each sherd-family or fabric group was quantified by sherd count and weight (in grammes) and, when rims were available, by minimum number of vessels based on rim count (MV) and estimated vessel equivalence (EVE), which records the surviving

percentage of a complete rim. (EVEs are given here as percentages; a vessel that has half its rim surviving would be recorded as 50 EVE (50%), which can also be expressed as 0.5 EVE.) Fabrics were identified using a series devised for Winchester pottery (Matthews and Holmes, forthcoming), with some modifications and additions (see below). Vessel types were recorded using standard OA codes but were cross-referred to established regional typologies where possible. More detailed data were recorded for vessel rim forms in most cases. Decoration was not recorded in detail for all sherds, but was noted on many and was recorded systematically for all rim sherds. Data on aspects of use and reuse were also recorded (see further below).

A selection of illustrated sherds is shown in Figures 1 to 6.

Assemblage composition

A total of 109 fabrics was identified. Fabric quantifications are provided in Table 1. Full fabric descriptions, summarised below, can be found in Matthews and Holmes (forthcoming). Occasionally during recording, fabrics were encountered that did not exist in the fabric series. Where these were extra-regional or continental imports, a code was devised based on the fabric's code in the National Roman Fabric Reference Collection (Tomber and Dore 1998), though in the case of East Gaulish samian, which exists in that reference collection as a number of factory-specific codes, a generic 'EG' suffix was added to the Winchester code for unsourced samian ware (TUS). More significantly, the decision was taken to record grey wares at a broad level and treat the codes ZF, ZM and ZC as general fine, medium, and coarse grey wares respectively, unless a sherd obviously belonged to one of the more specific categories. This enabled the recording to be carried out at a reasonable pace without excessive recourse to the microscope. A modification to the fabric coding was then implemented to allow systematic recording of the presence of iron oxides, which seemed to be a significant feature (see further below). The existing definition of fabric ZM in the Winchester series includes iron oxides, but the recording of the present assemblages required a generalised medium sandy fabric code with no additions. Consequently ZM was used in this way, and the suffix 'Z' was added to denote fabrics in which iron oxides, characteristically distinct rounded dark brown to black inclusions, were present (and ZF and ZC were treated in the same way). Finally, a very general fabric code ('A', 'J', and so on) was added to most fabric groupings to encompass usually

very small or otherwise unidentifiable sherds that could not be accommodated in any other category.

The presentation of the fabrics below and in Table 1 follows a sequence of major ware classes used routinely in the Oxford system. This is broadly comparable to the groupings established in the Winchester fabric series, but some modifications have been made for ease of analysis. Samian ware has been extracted from the Winchester fine wares group and treated as a separate category, and black-burnished ware has similarly been separated out from the reduced coarse wares. Conversely, mica dusted wares have been grouped with the other fine wares and pink, red, orange and buff fabrics, defined as separate groups in the Winchester series, have been combined as an oxidised coarse ware group (although the individual fabric identifications and definitions are of course retained).

Samian ware

TCA	Central Gaulish samian ware, Lezoux (Tomber and Dore 1998, 32)
TCB	Central Gaulish samian ware, Les Martres de Veyre (Tomber and Dore 1998, 30)
TCC	Central Gaulish samian ware, 1st-century Lezoux (Tomber and Dore 1998, 31)
TSA	South Gaulish samian ware, La Graufesenque (Tomber and Dore 1988, 28)
TUS	Miscellaneous samian ware
TUS(EG)	East Gaulish samian ware, all sources (Tomber and Dore 1998, 34-41)

Fine wares

RF	Orange fabric with dense fine sands and occasional medium quartz grains; common iron oxides and mica plates.
RFB	Pinkish orange fabric with fine sand, iron oxides, grey ware and mica-dusted surfaces
T	Un sourced or uncertain fine colour-coated fabrics
T(EPO)	C�ramique � l'�ponge (Tomber and Dore 1998, 56)
TBC	Central Gaulish black colour-coated ('Rhenish') ware (Tomber and Dore 1998, 50)
TBF	Miscellaneous fine wares of uncertain origin
TCR	Colchester colour-coated ware (Tomber and Dore 1998, 132)
TF	New Forest colour-coated ware; oxidised iron-rich fabric (Fulford 1975a, 25, fabric 1b)
TFC	New Forest colour-coated ware, fabric 1c (Fulford 1975a, 25)
TGA	Orange-red fine grained micaceous fabric with fine grit and bright red ferrous inclusions
TGC	Cologne colour-coated ware (Tomber and Dore 1998, 57)

THT	East Gaulish black colour-coated ('Rhenish') ware (Tomber and Dore 1998, 60)
TLA	Lyon ware (Tomber and Dore 1998, 59)
TN	Terra Nigra (Tomber and Dore 1998, 15)
TO/TOR	Oxfordshire red/brown colour-coated ware (Young 1977, 123)
TR	New Forest colour-coated ware; reduced iron-rich fabric (Fulford 1975a, 24-5, fabric 1a)

Amphorae

A	Un sourced or uncertain amphora fabric
A(LIP)	Liparian amphorae, Richborough 527 fabric (Tomber and Dore 1998, 99)
ACE	Camulodunum 186 fabric (Peacock and Williams 1986, 120-123)
ADA	Dressel 20 fabric (Peacock and Williams 1986, 139-140)
ADAR	?Late version of Dressel 20 fabric with red/brown core
ADB	Dressel 2-4 fabric (Peacock and Williams 1986, 105-106)
AFN	African cylindrical amphora fabrics (Peacock and Williams 1986, 158-165)
AMB	?Eastern Mediterranean amphora fabric. Hard micaceous fabric with brown outer surface and light orange inner surface and core.
APA	Gauloise 4 fabric (Peacock and Williams 1986, 142-143)
APB	Gallic amphora fabric, probably belonging to the Gauloise series (Tomber and Dore 1998, 93)
ASS	Southern Spanish amphora fabric, usually Dressel 20 and Dressel 23 (Tomber and Dore 1988, 87)

Mortaria

J	Un sourced or uncertain mortarium fabric
JHA	Hard, granular, greyish-cream fabric. A Hampshire product.
JHC	Hard fabric, too fine to be considered granular. A Hampshire product.
JHD	Similar to JHC, but pale brown to orange-brown in colour. A Hampshire product.
JMA	Oxfordshire white ware (Young 1977, 56)
JMI	Rhineland. Hard cream fabric with pale pinkish-orange core.
JMU	Oxfordshire white-slipped oxidised ware (Young 1977, 117)
JMV	New Forest red-slipped ware (Fulford 1975a, 25; fabric 1b)
JMW	Oxfordshire red colour-coated ware (Young 1977, 123)
JMY	New Forest parchment ware (Fulford 1975a, 26; fabric 2a)
JPR	Uncertain origin. Soft cream fabric
JRB	Rhineland. Self-coloured, smooth, hard and slightly micaceous cream fabric, sometimes with pink core.

White wares

U	Un sourced or uncertain white ware fabrics
UF	Fine white ware, occasional iron oxides
UF(NO G)	North Gaulish fine white ware (Tomber and Dore 1998, 74-77)
UFA	Fine white fabric with internal colour-coat; possibly identical to Cirencester fabric 21 (Rigby 1982, 156) and Exeter fabric 105 (Holbrook and Bidwell 1991, 139).
UFN	New Forest parchment ware (fine), fabric 2b (Fulford 1975a, 26)
UM	White ware with medium sands and common iron oxides
UMP	New Forest parchment ware (sandy), fabric 2a (Fulford 1975a, 26)

Oxidised wares

Red wares

NF	Micaceous fabric with moderate fine sand and iron oxides
NFA	Micaceous fabric with fine sand; possibly originally mica-dusted.
NFB	Red fabric with fine sand and iron oxides
NM	Micaceous fabric with medium sand and occasional iron oxides

Pink wares

V	Un sourced or uncertain pink fabrics
VF	Fine pink ware with common iron oxides
VMB	Pink ware with medium sands and iron oxides with a yellow or buff slip

Orange wares

WAA	Orange fabric with dense fine transparent sands, scattered medium sand, common iron oxides and white slip
WC	Orange fabric with medium and coarse sand
WF	Dense fine transparent sands and common iron oxides
WFA	Orange fabric with sparse fine sand and iron oxides
WFB	Orange fabric with fine sand, iron oxides and white slip
WFC	Micaceous orange fabric with fine sand, iron oxides and white slip
WFF	Orange fabric with fine sand and small soft limestone fragments
WFJ	Orange fabric with fine sand, iron oxides and black or grey exterior slip
WM	Orange fabric with medium sand and iron oxides
WMA	Dense medium sands, transparent, clear or iron-stained red; common iron oxides and white slip
WMG	Moderately micaceous orange fabric with medium sand, iron oxides and grey core
WMN	Orange fabric with medium sand, iron oxides, grey core and external slip
WO	Oxfordshire oxidised ware, fabric 1 (Young 1977, 185)

Buff wares

Y	Un sourced or uncertain buff wares
Y(PNKGT)	Pink grogged ware (Tomber and Dore 1988, 210)
YC	Buff fabric with medium to coarse sand and iron oxides

YF	Buff fabric with fine sand
YFA	Micaceous pinkish buff fabric with sparse fine and medium sands and iron oxides
YFD	Buff fabric with fine sand, iron oxides and grey core
YFP	Buff fabric with fine sand and distinctive pink internal surface
YM	Buff fabric with dense medium sands and common iron oxides
YM(OVW)	Overwey ware (Tomber and Dore 1998, 146)
YMD	Buff fabric with medium sand, iron oxides and grey core
YMZ	As YM, but with additional iron oxides

Reduced (grey and black) wares

Z	Un sourced or uncertain grey wares
ZC	Coarse sandy grey ware
ZC(MAY)	Mayen ware (Tomber and Dore 1998, 70)
ZCZ	As ZC, but with additional iron oxides
ZF	Fine grey ware
ZFB	Very pale greyish white fabric with grey/white slipped surfaces; sparse fine sands
ZFE	Fine grained micaceous fabric with oxidised internal surface
ZFG	Grey fabric with fine sands, iron oxides, grog and oxidised slip
ZFZ	As ZF, but with additional iron oxides
ZH/ZHA	Shell-tempered ware
ZM	Medium sandy grey ware
ZM+	Fabric ZM with additional sparse/moderate large sub-rounded pale grey inclusions
ZME	Medium-grained grey ware with common chalk inclusions
ZMF	Buff fabric with pinkish surfaces, commonly finger-wiped; dense sands and common iron oxides. Storage jar fabric.
ZMJ	Medium-grained grey ware with scattered grog-tempering
ZMO	Medium-grained moderately micaceous fabric
ZMR	Medium-grained fabric with scattered flint and grog
ZMT	Medium-grained fabric with dark grey core, oxidised surfaces and margins, and occasional grog
ZMU	Slightly micaceous medium-grained buff fabric with scattered flint and grog. Storage jar fabric.
ZMZ	As ZM, but with additional iron oxides

Black-burnished ware

ZMA	Black-burnished ware, category 1 (Tomber and Dore 1998, 127)
-----	--

Grog-tempered wares

SG	Dark grey fabric with abundant fine sand and common grog and iron oxides (includes Tomber and Dore 1998, 139)
SGA	Moderately to heavily grog-tempered fabric with iron oxides and a sandy texture. Reserved for storage jars.
SGD	Moderately grog-tempered fabric with iron oxides and fine to medium sands

Wares in the Iron Age tradition

XF	Handmade fabric with fine sand and common flint
XM	Handmade fabric with medium sand and common flint

Samian ware took a 3% share of the whole assemblage (Table 2). The majority of samian was identified as Central Gaulish ware from Lezoux (TCA). The factory was responsible for platters or dishes (mainly Drag. 31 and 31R, supported by Drag. 18/31, 36, and Lud. Tg types), cups (Drag. 33, O&P pl. lv, 13, and Drag. 27), plain (Drag. 38) and decorated bowls (Drag. 37), and mortaria (Drag. 45). These products arrived after AD 120 until 200, although a small amount of micaceous Lezoux samian reached Winchester in the later 1st century in the form of Drag. 27 cups. Les Martres de Veyre was the only other Central Gaulish source (fabric TCB). Its products usually arrived during the early 2nd century, though its occurrence at the Discovery Centre site only was confined to a residual Drag. 27 cup. South Gaulish samian from La Graufesenque (TSA), typically dating from the mid 1st to the early 2nd century, contributed a smaller proportion than Lezoux. As with the Lezoux assemblage, South Gaulish platters and dishes were well-represented. Interestingly, Drag. 18 strongly outnumbered Drag. 15/17, pointing to a chronological aspect to the assemblage composition; export of the latter type declined after *c* AD 70, while that of the former increased, suggesting that the main period of South Gaulish supply to the town was Flavian. Drag. 27, 33 and 35 cups were recorded (Drag. 27 being best represented), while bowls were limited to Curle 11 and the decorated Drag. 29. East Gaulish samian (TUS(EG)) arrived from a number of factories from the mid 2nd century until *c* 240. Its vessel types had already been seen in Central Gaulish samian – Drag. 31 and 31R dishes, Drag. 33 cups, Drag. 38 bowls, and Drag. 45 mortaria – but these were also joined by the Drag. 30 decorated bowl, and the Drag. 40 cup. A further piece of samian, an over-fired and pimply sherd from a Drag. 33 cup, is likely to be a British product from Pulborough, made during the mid 2nd-century.

The remaining fine wares, accounting for almost 12% of the assemblage by sherd count, but as much as 16% of EVEs, were dominated by New Forest products. Two main fabrics were distinguished: an oxidised fabric (Fulford 1975a, fabric 1b; here TF) reserved largely for open forms, and a reduced fabric (Fulford 1975a, fabric 1a; TR) in which closed forms were available. In reality, the distinction between the two was not always clear-cut; fabric 1a can also be oxidised (Fulford 1975a, 24), and the two groups might be better regarded as points within the continuum of a single fabric (Tomber and Dore 1998, 141). For the purpose of recording the Northgate House and Discovery Centre pottery, the basic correlation of open forms with fabric TF and closed forms with fabric TR was generally maintained, though a certain amount of overlap was observed.

Fabric TF was inevitably dominated by bowls. Flanged hemispherical bowls (Fulford 1975a, type 63) were well-represented, though deep curving-sided or carinated bowls (Fulford types 67, 68, 70, 73, 74, 75 and 76), loosely based on samian form Drag. 37, were available. Other forms deriving from samian prototypes included a dish (Fulford type 59), based on the samian Drag. 31, and a copy of the Drag. 33 cup (Fulford type 60). Beakers, usually folded, were recorded in the fabric, though rarely. The vessel class was, of course, much more commonly associated with fabric TR, and indeed 90% of fabric TR vessels by vessel count (MV) were beakers. Most of these were folded, comprising Fulford types 27, 42 and 49, which were also available in a stoneware variant (fabric TR ST in the archive records, but subsumed with fabric TR here). Other beakers included bag-shaped and globular forms. Flagons were another important class. A flask (Fulford type 8), disc-necked flagons (types 11 and 13), and jugs (types 17 and 22) were recorded. Overall, TR was much the most significant individual fine ware fabric, amounting to 70% of all the fine ware sherds and a slightly lower percentage of EVEs.

As with the mortaria (see below), the Oxford industry provided the only serious challenge to the dominance of the New Forest fine ware potters. In reality, though, the competition was limited, since Oxford workshops supplied mainly the market for open forms. Oxford red colour-coated ware (TO/TOR) was present almost exclusively as bowls and dishes. These were similar to New Forest products and included deep dishes and hemispherical flanged bowls based on samian prototypes (Young 1977, types C47 and C51), necked bowls (Young types C74 and C75), and deep, straight-sided bowls (Young type C81). These products arrived well into the 4th

century. Other fine wares made minor contributions to the assemblage. *Terra nigra* (TN) was among the earliest, arriving before AD 70; a bowl (*Cam 52*) was identified, though base sherds suggest that platters were also available. The fabric may have been joined by Lyon ware (TLA), although the only occurrence of that fabric was residual. Fine ware TGA also arrived during the later 1st century; its origin is uncertain, but could have been imported. Small quantities of mica-dusted wares (RF, RFB) were presumably also of early Roman date. These were similar to some of the red wares (see below), being fine oxidised fabrics, but were separated by their deliberate surface-coating of mica. Five of the eight sherds were recovered from early Roman groups; the only form identified, a dish or bowl, belonged to one of the three – and probably residual – remaining pieces from late Roman deposits. The source of the mica-dusted ware is unknown. Matthews and Holmes (forthcoming) speculate on a Chichester origin, but local manufacture is possible.

Colchester colour-coated ware (TCR) and Cologne colour-coated ware (TGC) reached Winchester from the 2nd century. A roughcast beaker and a 3rd- or 4th-century pentice beaker (*Cam 395*) were recorded in the former, while bag-shaped beakers with barbotine decoration were seen in the latter. So-called ‘Rhenish’ wares (Symonds 1992) from Central (TBC) and East Gaul (THT) were the best-represented of the imported fine wares. The wares were available as beakers from the late 2nd to first half of the 3rd century, although all were found in late Roman deposits. The latest import was a hemispherical flanged bowl in *Céramique à l'éponge* or marbled ware (T(EPO)), deposited after AD 350.

One further fine ware sherd is worthy of note. This is a glazed fragment from a post-Roman context at Northgate House (and therefore not in Table 1) in a fine oxidised fabric, perhaps from the Sussex or southern central English groups defined by Arthur (1978, 308, 312). The decoration is of raised barbotine curving lines under the reddish-brown glaze.

Amphorae accounted for 2.5% of the entire assemblage by sherd count and 13% by weight. Much of this material originated in Southern Spain (ADA, ADAR, ASS). The last of these fabrics suggests the presence of fish sauce amphorae, while a single rim confirms that a Dressel 20 olive oil container was present, and fabrics encountered suggest that its late Roman successor, Dressel 23, was also represented (Carreras Monfort and Williams 2003). Indeed, a relatively large proportion of the sherds assigned to fabric ADA were not classic examples of early Dressel 20 fabrics.

The almost complete absence of rim sherds exacerbated this problem, and overall it is very difficult to determine what proportion of the amphora sherds occurring in late Roman contexts might have been contemporaneous rather than simply residual. Gallic amphorae (APA, APB), typically containing wine, were relatively numerous, though not as common; no rims were recorded. The vessels shared the chronology of Dressel 20, although most incidences were residual. The only other rim that was recorded belonged to a Richborough 527 (group 2b) amphora made in Lipari during the late 2nd or first half of the 3rd century (Borgard and Cavalier 2003, 97). A stamped body sherd (Fig. 6, no. 135) also belonged to this vessel; the stamp is unclear, but its faint letters appear to correspond to the lettering on a stamp found in London, deciphered as HEL VINI, though no interpretation can be offered (Tomber 2003). The remaining material, apart from that unidentified to type or fabric, comprised body sherds from late Roman African cylindrical amphorae (AFN) and, also assigned on the ground of fabric, an Italian Dressel 2-4-type vessel (ADB).

Mortaria comprised only 1% of the assemblage by sherd count, although they were slightly better represented by other measures. Two regions were responsible for most vessels that reached the site. Oxford potters sent white ware mortaria (JMA), usually bead-and-flanged types (Young 1977, types M18 and M22), white-slipped oxidised vessels (JMU; Young 1977, types WC7 and 8), and red colour-coated products (JMW; Young 1977, types C97 and C100). Almost all vessels were deposited after AD 250. The New Forest industry provided much of the competition for the Oxford potters in the late Roman period, producing its own red colour-coated vessels (JMV; Fulford 1975a, type 81) and white ware vessels (JMY; Fulford 1975a, types 102, 103, 105 and 106). Oxford products were, overall, better represented than those of the New Forest, but the difference was not large. Hampshire potters contributed a smaller proportion of mortaria. Vessels in sandy cream-coloured fabrics (Hartley and Tomber 2006, 90), were largely confined to wall-sided types, although the profile occasionally varied to become more hammer-headed. The vessels were recovered from 4th-century deposits. Two Rhineland fabrics (JMI, JRB) were also identified; a hammer-headed mortarium dating to the late 2nd or early 3rd century was present in each of these.

The representation of white wares was very similar to that of mortaria. Here, however, New Forest products were dominant. The fine parchment ware (UFN) was found mainly in 4th-century deposits. Three forms were recorded: a bead-and-flanged

bowl (Fulford 1975a, type 86), a bowl with an internal flange around the rim (Fulford type 89), and a carinated bowl (type 90). The range of forms in the sandy New Forest fabric (UMP) was marginally wider; bowl types 86 and 89 were again represented, but a jar (type 64), lid, and dish were also recorded. In addition fragments of at least three candlesticks (type 96) were noted at Northgate House, in contexts NH2290 and NH4412 (possibly two different vessels in the latter) plus a further residual piece in a medieval context (NH1102). Other sandy white wares (UM) largely consisted of undiagnostic body sherds of unknown source. The few forms that were identified included a lid-seated jar from a mid-2nd century deposit and a jar from a late Roman deposit; the latter had a black surface, but otherwise is consistent with the New Forest fabric. Fine white wares (UF) were available in the late 1st century as butt-beakers that may have been imported from Gaul (as UF(NO) had been), and in the 4th century as bowls. Another fine fabric (UFA), dating to *c* AD 60/70, was similar to one identified at Cirencester and Exeter and so a source in south-western England is likely.

Oxidised wares were a rather heterogeneous group, containing many fabrics of which only one (YC) was at all significant in numerical terms. Together these fabric totalled 4.7% of the assemblage by sherd count. They were slightly better represented in terms of weight (owing to the contribution of fabric YC), but only amounted to 2.8% of EVEs. The oxidised material included a very small amount of usually micaceous fine red wares (NF, NFA, NFB). Much of this was found in later 1st-century deposits. One form, a butt-beaker, was recognised. Taken together, the form and fabrics are likely to represent local manufacture of continental-inspired table wares. A single sherd of a sandier fabric (NM), retrieved from a late Roman deposit, was also seen.

Pink wares also made a very minor contribution to the assemblage. These were generally found in late Roman deposits, with the exception of six sherds from a mid/late 1st-century group; these may belong to a butt-beaker. Orange wares were better represented, accounting for 1.3% of the assemblage by sherd count. This group comprised a range of fine and moderately sandy fabrics of uncertain source. Reasonably local production is presumed, but it is feasible that some wares arrived from further afield. Forms included flagons, narrow-necked jars, folded beakers and curving-sided bowls. One particular bowl imitated the decorated samian form Drag. 37. The exception to the mass of unsourced pottery was a wide-mouthed jar (Young

1977, type O27) in Oxford oxidised ware (WO). All orange ware was recovered from late Roman deposits. Buff fabrics were the largest component of oxidised wares, and accounted for 3% of the entire assemblage. Most pottery was assigned to coarse, moderate or fine sandy wares. The coarse fabric (YC) was something of a heterogeneous category; it was mainly reserved for storage jars, which were found in deposits dated across the Roman period. The moderately sandy fabric (YM) was similarly wide-ranging in date; a globular jar and bowl or girth beaker were recorded in early Roman groups, while a jar and a dish were recovered from late Roman deposits. A late Roman beaker was seen in fine buff ware (YF). Other fine fabrics were available (YFD, TFP), but sources are uncertain. The origins of two fabrics are better known. The presence of pink-grogged ware (Y(PNKGTT)) was remarkable, since this is the first record of this fabric so far south-west of its north Buckinghamshire/south Northamptonshire heartland (Taylor 2004, fig. 3). The fabric was found in the form of a wide mouthed jar – recovered from a late Roman deposit (NH1328 at Northgate House) – that had probably long been separated from the goods that it may have carried from its region of origin (cf. Taylor 2004, 65). Overwey/Portchester D ware (YM(OVW)) was also recorded. While the fabric does not exist as a separate entity in the Winchester fabric series, it has been found in the town; the fabric was recorded at the Brooks site in deposits dated after AD 350 (Matthews and Holmes, forthcoming). Overwey ware was seen at both the Northgate House and Discovery Centre sites in 4th-century groups (congregating around the mid 4th century) in the standard rilled oval-bodied necked jar form (eg Lyne and Jefferies 1979, 43, type 3C.11).

All ware categories were fairly minor components of an assemblage dominated by grey wares, which accounted for 59.5% by sherd count. It is notable that the proportion of reduced wares by weight (48.8%) was rather less than for sherd count, suggesting that some grey ware fabrics were relatively well fragmented, but their representation by other measures was fairly consistent. Medium sandy grey ware (ZM), available throughout the Roman period, was the single largest group. Well over half of the identified vessels were jars, of which three types dominated: globular and bead-rimmed jars, which were characteristic of the early Roman period, the mainly later Roman everted-rim cooking-pot type jars that were based on black-burnished ware prototypes, and the standard oval-bodied necked jars that were ubiquitous throughout. Dishes and platters were reasonably well represented. Platters dating to

the early Roman period were similar in form to those produced by the Alice Holt/Farnham industry (Lyne and Jefferies 1979, class 6). Dishes included plain-rimmed, dropped flange, and to a lesser extent bead-rimmed types, all copying black-burnished ware forms. Bowls were less common, but still formed a significant component. These divided into curving-sided 'Atrebat' bowls (Lyne and Jefferies 1979, class 5) of later 1st and early-2nd century date and late-Roman straight-sided dropped flange bowls, the latter being deeper versions of the dishes. Lids, tankards or handled bowls, and a strainer (this last represented only by a body sherd) were also recorded. Sandy grey ware with additional iron oxides (ZMZ, see above) had many of the same forms as fabric ZM, but the emphasis was different. Narrow-necked jars, for example, barely present in fabric ZM, were more numerous in ZMZ. Cooking-pot type jars were more common, too, while globular or bead-rimmed jars were scarce. Similarly, platters were poorly-represented, while plain-rimmed and dropped flange dishes remained important. Flagons, not appearing in ZM, were present in ZMZ. The reason for the differences is likely to be chronological; while both fabrics were available throughout the period of occupation at the Northgate House and Discovery Centre sites, fabric ZMZ had a comparatively weak early-Roman element. Fabric ZM was much better represented in this period. The significance of these differences is not altogether clear given the paucity of evidence for local coarse ware production in the Winchester region, but the data may shed some light on the question of the relative importance of the two major regional grey ware suppliers to Winchester, the Alice Holt and New Forest industries, both industries known for the general similarity of their grey ware fabrics, as well as a considerable overlap in typological range. Iron oxides are not characteristic of the fabrics of the Alice Holt industry (Lyne and Jefferies 1979, 18; Malcolm Lyne pers.comm.), and while they are not referred to in descriptions of New Forest reduced wares (Fulford 1975a, 85), examination of the present assemblage suggests that vessels whose fabrics contain iron oxides are in typological terms closely consistent with the New Forest repertoire. A tentative distinction may be made, therefore, on the basis of the presence of iron oxides. Fabric ZM, as defined here, is likely to include Alice Holt products, and these may comprise a substantial proportion of sherds in this fabric. Equally, fabric ZMZ, distinguished by the presence of iron oxides, fairly certainly does not include Alice Holt vessels and may contain a high proportion of New Forest products. The contribution (if any) of more local, analogous industries remains unknown.

Fine grey wares (ZF) took a smaller share of the grey-ware assemblage, though the range of forms was little different from that produced in the medium sandy fabrics. Oval-bodied necked jars, cooking-pot type jars, narrow-necked jars, plain-rimmed and dropped-flange dishes were recorded. These vessels were also available in fine grey wares with additional iron oxides (ZFZ), but a chronological division is evident here too, as fabric ZFZ included 3rd/4th-century folded beakers (as opposed to a 1st-century butt-beaker seen in ZF), and higher proportions of late Roman cooking-pot type jars and dropped-flange bowls. Coarse grey wares (ZC) were largely confined to jars, including storage jars and cooking-pot type jars. Storage jars only were identified in coarse grey wares with iron oxides (ZCZ). The chronological difference between the fabrics is less clear here, though fabric ZM included a bead-rimmed jar normally seen in early Roman groups.

A number of vessels in fabrics ZF, ZM and ZC (with or without iron oxides) were burnished on external surfaces or given black or white slips. Particular associations were noted between forms and treatment. Burnishing was recorded on straight-sided bowls/dishes but never on cooking-pot type jars. Black slips were seen on both vessel classes, while white slips were present on cooking pots, but rarely on bowls/dishes (see eg Lyne and Jefferies 1979, 18 for discussion of variation in slip colour on grey wares). These apparent associations are likely to stem from the origins of the forms. The jars and bowls/dishes imitated black-burnished ware category 1 (BB1) vessels, and the surface treatments would have given them a more authentic appearance; Tomber and Dore (1998, 127) note the surface wiping and slip particularly characteristic of later Roman BB1 jars. Other BB1-style vessels, mainly straight-sided plain or flanged rim dishes, were available in fabrics ZME, JMF and ZMJ.

Remaining fabrics of note included shelly ware (ZH/ZHA), which was found in late Roman deposits and may have reached the town from the Midlands, probably Harrold (Brown 1994; Tomber and Dore 1998, 115). Late Roman Mayen ware (ZC(MAY)) from the Eifel/Rhine area of Germany (Tomber and Dore 1998, 70) was represented by a single vessel, a lid-seated jar. Fabrics ZFG, ZMR, and ZMU were minor elements of the assemblage; these were recovered from deposits dated to the second half of the 1st century AD. Fabrics ZFE and ZMO were similarly poorly represented, but their contexts give them mid Roman dates. Fabrics ZFB and ZMT had no reliable typological or chronological associations.

Remarkably, the relative proportions among the main BB1 imitation grey ware vessels reflected the composition of the BB1 assemblage at the Northgate House and Discovery Centre sites. As with ZM and ZMZ fabric groups, the range of BB1 (fabric ZMA) vessels was dominated by dishes and bowls and had comparatively few cooking-pot type jars. Dishes were typologically more varied and included plain-rimmed vessels (eg Gillam 1976, type 83), incipient bead-and-flanged dishes (eg types 42 and 43), and dropped flanged dishes (types 45-49). Bead-rimmed or flanged dishes, usually 2nd or 3rd century in date, were scarce. Much of the BB1 deposition occurred after *c* AD 250.

Handmade grog-tempered wares (SG, SGA, SGD), accounting for 13% of the pottery assemblage by sherd count, were dated entirely after *c* AD 270. Vessels were mostly based on Dorset black-burnished ware prototypes, so everted-rim cooking pots, dropped flanged dishes or bowls, and plain-rimmed dishes were common. Storage jars, lids and medium-mouthed jars were also seen, but in small numbers. The ware group should be identified with Hampshire grog-tempered ware found in some abundance at Portchester, Bitterne, other parts of Winchester, and across the region. Various manufacturing sites are likely to have existed in the region; large centres may have been responsible for production initially (Fulford 1975b, 291), but this moved to locally-distributing household workshops towards the end of the Roman period (Lyne 1994; Matthews and Holmes, forthcoming).

Pottery supply

A number of key ceramic groups were selected from the entire Roman-period assemblage to provide a picture of the changing pattern of pottery supply to Northgate House and the Discovery Centre sites. The selected context groups generally contained a wide range of forms and fabrics and were well-dated to one of the four stratigraphic phases (Phases 2.1-4); occasionally it was possible to sub-divide these periods into narrower ceramic phases (Table 3). Summary descriptions of the vessel type codes used in the quantified tables are given in Table 4.

Phase 2.1: Ceramic phase AD 55-70

A total of six ceramic groups, each containing an average of 0.42 EVEs, were assigned a pre-Flavian date (Table 5); all were from the Discovery Centre site. Little of this material is likely to date before AD 50 or 60. Good indicators included a *terra nigra* Cam 52 carinated bowl, a type that generally reached Britain after *c* AD 55 (Greene 1979, 111), and the so-called 'Atrebatian' curving-sided bowl that was attested at Alice Holt after AD 60 (Lyne and Jefferies 1979, 30). At the same time, butt-beakers and body sherds from a Drag. 15/17 South Gaulish samian platter confine the key-group assemblage to AD 70/80. Overall, the assemblage was dominated by grey wares, which took an 82% share of the key-group assemblage by EVE. Medium-sandy grey ware without iron oxides were commonest, but that with iron oxides also made a significant contribution. Fine grey wares were less important; curiously fine fabrics with iron oxides were better represented than those without. Oxidised wares enjoyed a 14% share of the assemblage by EVE. Vessels were identified in buff and red wares, but a greater range of white ware fabrics, including imported North Gaulish pottery, was evident (the New Forest parchment ware is intrusive). In terms of forms, jars were predominant, accounting for 64%; globular, bead-rimmed, and storage jars were the most important categories; high-shouldered necked jars were present, but in small numbers. Table or dining forms were well-represented too; adding the carinated and Atrebatian bowls to the platters and beakers, these took a share of over 30%.

Phase 2.1: Ceramic phase AD 70-130

The amount of pottery being deposited at the Discovery Centre site increased between the late 1st and early 2nd century (Table 6). Thirteen groups, averaging 0.52 EVEs each, were assigned to this period, although most groups did not extend beyond AD 100. The proportion of grey wares, which continued to dominate the assemblage, was little changed at 85% by EVE. Medium sandy grey ware without iron oxides remained more important than those with. Fine grey wares and coarse grey wares had reduced proportions. Oxidised wares also experienced a drop and only one form based on rims, a fine white butt-beaker, was identified. Surprisingly, given this apparent reduction in finer pottery, samian ware was better represented than in the mid 1st century, though this is part due to the fact that much more samian was reaching Britain after AD 70, and regions across southern Britain saw South Gaulish samian importation peak around AD 75/80 (eg Dannell 1999, fig. 2.1). Samian from South

Gaul was joined by micaceous samian from Lezoux. South Spanish amphorae now arrived alongside containers from southern Gaul. As for forms, jars remained the most important category, though at a slightly lower proportion of 55% by EVE. Globular and bead-rimmed jars continued to be used, but a new type, the oval-bodied necked jar, was emerging as the standard vessel. Curving-sided 'Atrebatian' bowls became more important in the late 1st century, as did platters, which were boosted by samian platters Drag. 15/17, Drag. 18, and Drag. 18/31. Other samian forms – Drag. 29 decorated bowls and Drag. 27 cups – were represented by body sherds only. Beakers saw no change from the mid 1st century and still occurred as (probably residual) butt-beakers in the late 1st.

Phase 2.2: Ceramic phase AD 130-260

Just four ceramic groups, each containing on average 0.27 EVEs, were assigned to the mid Roman period (Table 7). Phase 2.2 saw a drop in the amount of pottery being deposited at the Discovery Centre site and the first appearance of groups, albeit on a very small scale, at the Northgate House site. Its size means that the phase assemblage is unlikely to be fully representative of pottery supply and use during this time, but it provides pointers to some of the key changes from the early to mid Roman periods. Grey wares formed a larger proportion of the assemblage – now 75% – compared with the late 1st/early 2nd century. Medium sandy grey wares without iron oxides were less important as those with iron oxides became predominant, presumably reflecting changes in principal sources. Dorest black-burnished ware, arriving during the mid 2nd century, provided more competition for traditional grey ware producers. Fine and coarse grey wares were present only as body sherds. Oxidised wares were barely represented; only fine buff ware was recorded. Fine wares increased their proportion to 25% by EVE. Much of this included residual South Gaulish samian, but the assemblage clearly shows the emergence of Central Gaul as the main source for samian in this phase. Some fine wares reached the site from Colchester, but the source was a very minor supplier. South Spain and south Gaul continued to supply amphorae. The assemblage became less jar-orientated in this period (reducing to a 25% share) as dishes made a more significant contribution. This was due mainly to the Dorset potters, who supplied bead- or flange-rimmed dishes; these, along with plain-rimmed dishes, were also adopted by the local grey ware producers. Cups were better represented, while the proportion of platters had fallen sharply. Beakers still made

little impact, although poppy-headed beakers had replaced butt-beakers. The small size of the group makes the significance of some of these developments doubtful.

Phase 2.3: Ceramic phase AD 260-350

The relative invisibility of specifically early 4th century ceramic groups at the Northgate House and the Discovery Centre sites – a phenomenon recognised elsewhere in Roman Britain (Going 1993, 101) – means that it is more useful to present data from a larger assemblage spanning the late 3rd to mid 4th centuries (Table 2.8). Seven context groups were assigned to this period; these were generally large (averaging 2.00 EVEs), indicating that much more pottery was being used and deposited compared with previous phases. The proportion of grey wares had fallen a little to 68% by EVE. Medium sandy grey wares with iron oxides were again dominant; the proportion of those without had fallen further from its already low mid Roman level. The amount of Dorset black-burnished ware was also reduced, resulting no doubt from competition from local potters who had responded to the arrival of BB1 and adopted a range of BB1-style forms. Some of these forms were also taken up by potters making grog-tempered wares in several small-scale centres in Hampshire. Oxidised wares were better represented than they had been in the mid Roman period. This was due almost exclusively to the arrival of white ware flagons – possibly local – and New Forest parchment wares. The New Forest industry was responsible too for the increase in fine wares (now 18%), chiefly in the reduced or dark-slipped colour-coated ware, though the red-slipped oxidised fabric was also available. Oxford red colour-coated ware was recorded in this phase, though as body sherds only. Rhenish ware from Central Gaul appears in this phase, but must be residual, since importation of the ware into Britain probably ceased by the mid 3rd century (Greene 1978, 19). Samian ware in this assemblage now included products from East Gaulish factories, which had replaced the Central Gaulish industry as the principal exporter to Britain after AD 200. East Gaulish vessels began to reach Britain by AD 140, but they appear to have been little seen in Winchester until the early 3rd century, and then in small amounts (Lyne, forthcoming). In any case, both East and South Gaulish samian, like the Rhenish ware, were residual by 260 – or, at least, no new samian reached the town at this time – though the latest products may well have remained in use. The range of amphorae expanded in this phase; South Spanish amphorae and the now residual Gallic amphorae were joined by containers from Mediterranean and north African

sources.

Jars had a larger share of the assemblage compared with the mid Roman period, although the proportion of 43% by EVE remains lower than that seen in the early Roman period, suggesting that the figure seen in the previous phase was anomalous; still, the general trend was for a reduction of the proportion of jars through time. Narrow-necked jars – including jars of a type produced at Alice Holt (Lyne and Jefferies 1979, class 1A) – and cooking-pot type jars were the most prolific jar forms; the latter was especially important for potters working in grog-tempered and sandy grey wares. Flagons and beakers had a more significant place in this assemblage compared with previous phases, thanks mainly to the New Forest industry. Mortaria made their first significant appearance during this time. Simple bead- or flange-rimmed dishes continued to be deposited in the late 3rd century, but were replaced by dropped flanged dishes and bowls by the early 4th century; the intermediate incipient bead-and-flanged dishes and bowls were evident after AD 270. Plain-rimmed dishes were current throughout the phase. The dishes with plain or dropped-flange rims were based on BB1 prototypes but were more usually available in local grey ware fabrics. This was due in part to the response of local potters accommodating new forms, but it must also signal the rapid decline of supply from Dorset. Based on the key ceramic groups, it is revealing that no new BB1 is certain to have reached the Northgate House or Discovery Centre sites in the 4th century. This is consistent with the situation at other sites from the town, which saw no significant supplies after the early 4th century (Matthews and Holmes, forthcoming).

Phase 2.4: Ceramic phase AD 350-400

The latest pottery groups had date ranges that began towards the end of Phase 2.3, but belonged to contexts assigned to stratigraphic Phase 2.4 (AD 367-402) (Table 9). In terms of the ceramic chronology, the group were generally broadly dated to the second half of the 4th century, although certain fabrics hinted at deposition after AD 370. Taken together, however, the groups contained elements that suggest that they are coherent as an assemblage and representative of pottery supply during the final decades of Roman-period occupation at the excavated sites. The seven groups selected each on average totalled 3.17 EVEs, suggesting that the amount of pottery available for deposition after AD 350 had increased since the first half of the 4th century.

The proportion of grey wares continued to fall and now stood at 46% by EVE. Compared with the previous ceramic phase, there was little change in the relationship between medium-sandy grey wares with and without iron oxides (those with oxides still dominating). Black-burnished ware category 1 made a token, if not residual, appearance, supporting the view that new supplies of the fabric had ceased some considerable time before the mid 4th century. Fine grey wares were similarly reduced in quantity, while coarse grey wares were unchanged. Despite the general decline of grey wares, a few new fabrics were introduced, notably storage jar fabric ZMF and shell-tempered ware ZH/ZHA. Part of the market share previously taken by sandy grey wares had been taken by Hampshire grog-tempered wares, which, since forming a minor part of the assemblage in AD 270-350, had become more important after 350, its repertoire becoming more diverse in the process. Oxidised wares accounted for 5% of the assemblage. This was down from the previous phase, although new fabrics like Overwey ware were present, and the proportion of New Forest parchment wares remained steady. Fine wares enjoyed increased use during the second half of the 4th century, their share of the assemblage almost doubling since the first half of the century. Oxford red colour-coated ware was better represented in this phase. Data from other Winchester sites suggest that importation of Oxford wares was reaching a peak by the middle of the 4th century (Matthews and Holmes, forthcoming). Still, the proportion of New Forest colour-coated ware beakers and flagons was not significantly different from that of the previous phase, and it appears that consumers avoided closed forms from Oxford, instead preferring New Forest products. H Rees (forthcoming) see this relationship as complementary, though it is important to note that New Forest dishes and bowls were more plentiful than they had been during the late 3rd century and first half of the 4th, pointing to direct competition for certain classes of vessels, especially those deriving from samian prototypes. The New Forest and Oxford industries also competed, on even terms, for the market in mortaria. Samian ware from Central, Eastern and Southern Gaul was recorded in the assemblage, but all occurrences must be residual, as was the East Gaulish Rhenish ware. Other imports reached the site in the form of amphorae; Gallic and South Spanish Dressel 20 amphorae were residual, but southern Spanish potters were also responsible for late Roman olive oil containers, which joined vessels from north Africa. *Céramique à l'éponge* was among the latest imports to arrive; the fabric was otherwise absent from the town, and its occurrence at the Northgate House site may

represent a chance arrival and secondary distribution from sites where the fabric is better known, such as Bitterne in Southampton (Fulford 1977, 46; Matthews and Holmes forthcoming).

Jars remained the single most important category of vessel, taking a share of 44% by EVE, little different from the previous phase. Cooking-pot jars continued to be the best-represented form – it was the principal form of grog-tempered ware – but these were joined by oval-bodied necked jars, which re-emerged in Overwey ware and medium sandy grey ware after disappearing in the mid 2nd century. Narrow-necked jars, including those from Alice Holt, were also recorded, as were storage jars. Dishes and bowls made an important contribution, though the proportion was reduced from the previous phase. Simple bead-rimmed dishes were represented by residual samian fabrics and New Forest and Oxford forms copying samian forms. Incipient bead-and-flanged dishes had almost disappeared, with occurrences probably being residual. Plain-rimmed and bead-and-flanged or dropped flange dishes and bowls were predominant and available largely in grog-tempered wares and medium sandy grey wares that had replaced Dorset black-burnished ware. Some of the market share previously enjoyed by dishes had been taken by deep New Forest or Oxford bowls. These included some of the latest products of those industries, notably stamped bowls (Fulford 1975a, type 75; Young 1977, type C78) that were produced from *c* AD 340 onwards. Beakers and flagons were also better represented, again thanks largely to New Forest potters. Vessels were confined to folded beakers – available in the standard New Forest colour-coated ware and also the stoneware – and jug-like containers that were recorded in the colour-coated fabric and probable New Forest grey ware.

Pottery supply in the late 4th/early 5th century

Despite the presence in the Northgate House and Discovery Centre assemblages of strong late 4th century indicators, such as Overwey ware, *Céramique à l'éponge* and Mayen ware that probably reached Winchester after AD 370 (Lyne, forthcoming), the phased groups cannot show that pottery supply continued into the early 5th century (similarly, the coin list shows only modest representation of the latest types, dated AD 388-402). Malcolm Lyne notes that the supply of New Forest pottery to Winchester declined rapidly in the second half of the 4th century, while Fulford detected typological stagnation in that industry after 350. The latest New Forest products from

the Northgate House and Discovery Centre sites include vessels such as Fulford type 75 that date up to *c* AD 380, but there are a few vessels which could have been later, in particular the colour coated jugs 22 (two examples) and 17, dated *c* AD 340-400 (Fulford 1975a, 48, 50). In particular, Fulford (1979, 223-4) has pointed out the consistently very late dating of the latter type at Lankhills, supported by the evidence of more recent excavations there, which produced two further examples of the type, one probably in a late 4th century grave, the other in a grave certainly dated after AD 388 on coin evidence (Booth forthcoming).

Consumers may have found a replacement for some New Forest types in the Oxfordshire industry, but even then the latest vessels recovered, such as Young type C84, do not necessarily extend pottery supply much later than the third quarter of the 4th century. In early 5th-century deposits at the Brooks site, Lyne found that the proportion of grog-tempered wares declined, while handmade 'sub-Roman' forms in fine sandy fabric emerged. Nothing so clear-cut was seen in the latest assemblages at Northgate House and Discovery Centre, which instead offered a mixed picture; most groups in the latest phase contained Overwey ware or other fabric potentially dating after AD 370, but the proportion of New Forest pottery was generally large (and that of Oxford wares generally low), suggesting deposition not very far after 350; this was regardless of whether grog-tempered wares were well or poorly represented in individual groups. These observations point more convincingly to the final phase of pottery supply occurring between AD 350 and 370/80, with little sign of later arrivals. Malcolm Lyne also notes that Alice Holt grey wares replaced New Forest grey wares in the final decades of the 4th century. Unfortunately, the fabric series used in the recording did not allow the two fabrics to be distinguished with complete confidence (see above).

Pattern of pottery deposition

Pottery was recovered from a variety of deposit types across the site. These included linear features like pits and ditches, structural features relating to street-fronting properties (postholes, beamslots and surfaces), and layers, such as occupation spreads, middens, and 'dark earth' deposits. The amount of pottery deposited in these features – and the type of feature available to receive pottery – varied over time and between sites; examination of these differences provides some insights about the levels of

deposition (and use), changes in the urban landscape, and the treatment of urban rubbish, although it should be borne in mind that there are no data on the relative volumes of excavated material assigned to the various deposit types.

Nine street-fronting structures were identified at the Northgate House site based on the presence of postholes and beamslots or flint and chalk footings and, more typically, chalk and mortar surfaces and floors. If confirmed as such, how the properties were occupied is uncertain, although a function combining a workshop and domestic residence is a possibility. One structure (NH8521) produced evidence of metalworking, while another (NH8520) contained weaving tablets that suggest textile manufacture nearby. Structure NH8522 may have been domestic, since painted wall plaster was recovered from deposits associated with a fire that destroyed the property; smaller amounts of painted wall plaster were also found in structures NH8523 and NH8524. Pottery was found from all structures. The ceramics are a poor indicator of structural use, but a comparison of assemblage composition does reveal some differences between the groups. Most structures (NH8516, 8518 to 8521, 8523 to 8524) contained an almost identical range of pottery (Fig. 7). The main fabrics – black-burnished wares, fine wares, grog-tempered wares and reduced wares – were all represented in reasonably equal proportions. The range of forms, too, was similar across the groups. There were three exceptions: structures NH8517, NH8519 and NH8522. In NH8517, vessels were confined to an oxidised ware flagon and dishes in samian and black-burnished ware, although the mass of body sherds certainly included those belonging to jars. Structure NH8522 also contained a higher than average proportion of dishes (reduced ware and samian), which were joined by samian cups and, to a lesser extent, reduced ware jars (Fig. 8). It is recognised that, in general, assemblages from lower-status settlements are characterised by higher proportions of jars compared with urban and military sites, which saw greater proportions of table wares (Evans 2001). Applying the principle to an individual town, the assemblages from NH8517 and NH8522, different from the usual ceramic composition recorded in the structures, broadly hint at a range of activities – such as continental-style dining – not seen so strongly at the others. Noting also the masonry footings at both structures and the wall plaster in NH8522, the possibility that the structures served domestic residences, rather than, say, craft workshops, seems more compelling. The assemblage from structure NH819 was anomalous since it contained no dishes or bowls (at least those identified by rim), but a single jar and two beakers.

In this case, the small size of the group suggests that the distribution of forms and fabrics is not entirely representative.

Three structures were identified in the Discovery Centre site (CC7003, 7004, and 7049). Some differences between assemblages were detected, but these are likely to be in part chronological. Grog-tempered wares, for example, were recorded only in late Roman groups CC7003 and 7047 (the remaining two groups were early Roman).

Examining associations between pottery and feature type at a more general level by site through time, it can be seen that deposition in the early Roman period (Phase 2.1) occurred almost exclusively at the Discovery Centre site (Table 10). Here pottery was distributed among a number of feature types; almost 40% by weight was recovered from layers, with the remainder found in pits and ditches and, to a much lesser extent, structural features. Pottery from ditches appeared to be best-preserved, having a mean sherd weight (MSW) of 32 g, compared with between 10 and 15 g for the other features (Table 11). Both sites were occupied during the later 2nd and earlier 3rd century (Phase 2.2), although at a relatively minor level, since overall amounts of pottery were low. Deposition at the Discovery Centre was confined mainly to pits, while Northgate House saw disposal in layers, which contained 65% of that site's assemblage, and pits (25%). Surfaces also received material. Pits at the Discovery Centre continued to contain the best-preserved pottery (MSW = 20 g), but at Northgate House, layers yielded the largest pieces (MSW = 17 g). Occupation intensified during the late 3rd and first half of the 4th century (Phase 2.3), and a much wider array of feature types became available for deposition. Pits remained important at the Discovery Centre site, taking almost 50% of the assemblage for that phase by weight. The other pottery was distributed between layers, linear features, structural and demolition deposits, none receiving more than 20% of the assemblage. Layers and pits each received approximately 40% of the Northgate House Phase 2.3 assemblage. Pottery was also recovered from structural deposits, surfaces and well deposits. The condition of the pottery was uniform across features and sites; the mean sherd weight was about 20 g or higher for most features, the exceptions being Discovery Centre pits (14 g) and Northgate House ditches (11 g). By the late 4th century (Phase 2.4), pottery deposition was concentrated in layers – they contained almost 50% of the Discovery Centre pottery and 70% of that from Northgate House – although pits, structural features and surfaces were still available. The best-preserved pottery at the Discovery Centre site came from pits (MSW = 28 g) and, at Northgate

House, layers (17 g).

Quite what these observations mean is not immediately clear, since the pattern of deposition varied within the sites as new features and structures emerged and others fell out of use. However, some points can be made. Pits saw some of the largest deposits at the Discovery Centre, but at Northgate House layers tended to contain the largest proportions of pottery. The mean sherd weights from layers, averaging at 16 g, were remarkably consistent regardless of site. The condition of pottery from pits seemed more variable and, though averaging 15 g overall, was at times much poorer than that of the pottery from layers. Its consistency suggests that pottery incorporated into layers had a similar depositional history at both sites, undergoing more or less the same episodes of discard and relocation prior to final deposition. The depositional histories of the pottery entering pits was, in contrast, more variable, with clearer differences between sites and phases. In cases where the mean sherd weight was relatively low (for example Phase 2.2 at Northgate House), the pottery may have been relocated into pits from open, unsealed features, like layers and surfaces where weathering and trampling had occurred over a prolonged period of time. Where the mean sherd weight was high (for example Phase 2.4 at the Discovery Centre), the pottery could have been deposited into pits more directly after initial breakage and discard. That said, the increasing importance of layers at both sites in the late Roman period suggests that pottery was being deposited on open middens and less frequently cleared or deposited directly into cut features, although the sherd weights point to new deposits forming to seal earlier layers in relatively rapid succession, since the pottery was not especially abraded.

Evidence of pottery use

Secondary use of pottery

Eighteen pieces exhibited evidence to suggest that they were being used for purposes different from their original function. Almost half of this group was amphorae and almost exclusively south Spanish vessels (Dressel 20 olive oil containers or late Roman versions). All amphorae sherds had been trimmed. This was to produce tesserae (two examples; a third tessera-sized (22 mm x 22 mm) sherd was in grey fabric ZF) or other useful fragments or, from a number of trimmed shoulder sherds, to give presumably complete vessels a new rim with a wider diameter. This last category

may have been required if the amphora was still intended to be used as a container. Similar evidence from the Netherlands points to urinals, tubs, or storage vessels for grain and other dry goods (van der Werff 2003). Elaine Morris (pers. comm.) notes that amphorae trimmed at the shoulder were found at the salt-production site at Lizard, Cornwall (McAvoy *et al.* 1980), and possibly used as saltwater or brine containers. An exact parallel to the largest Winchester example, has been noted very recently by one of the writers at Dorchester-on-Thames (unpublished), where a Dressel 20, complete except for the neck and rim, had been set in a pit. The trimmed neck had been carefully smoothed and the handles cut off and smoothed just above their stumps. Three other similarly cut-down Dressel 20 amphorae have been recovered in recent work at Springhead, Kent (Seager Smith *et al.* forthcoming). Whatever its contents, the round and open shape of the Dressel 20 body made the type ideal for storage (in addition to transportation) in a way that the similarly common Gauloise amphorae did not appear to be. Other trimmed sherds were recorded in sandy grey wares and oxidised wares and, more rarely, New Forest colour-coated ware. The function of these adapted pieces cannot be determined, but a sherd of Central Gaulish samian ware had been cut into a circular piece suitable for a counter. Two sherds, in fabrics YC and YM, had post-firing holes of uncertain purpose but not apparently for riveted repairs (see below).

Wear and repair

Wear, usually internal, provides evidence of vessel use, with the patterns helping to suggest possible functions. Wear data tend to be skewed towards colour-coated pottery, which, compared with unslipped uniformly-coloured coarse ware, better displays eroded surfaces as the slip is worn away to exposed the underlying fabric (it should be noted that the sherds of this assemblage were generally in good condition, allowing reliable identification of wear as opposed to abrasion and attrition of surfaces caused by redeposition or other non-use related factors). Consequently, most examples of wear from the Northgate House and Discovery Centre sites were found on colour-coated fine wares. Six of the twelve worn vessels were in samian ware. Of the two Drag. 33 cups from Central Gaul recorded, the wear pattern on the other cup was unspecified, but the other cup had a ring of wear around the junction of the base and wall that is characteristic of the form and may be related to use as a mixing vessel in which honey was stirred into wine or for a sauce prepared at the table (Biddulph

2008a, 98); interestingly a grey ware bead-and-flanged bowl (Fig. 3, no. 50) was also worn around the edge of the base internally, though this was probably more likely to be through cooking than dining. The bases of two central Gaulish Drag. 45 mortaria were also heavily worn. Three other worn sherds were observed, but could not be identified to form, though one was almost certainly part of a bowl. Overall, the proportion of worn samian seems low; the two cups represent 13% of the total number of Drag. 33s (including vessels without rims), while the two worn mortaria stand against a further five unworn vessels (being a type designed as a heavy-duty mixing bowl). But while the figures suggest that samian tended to be used intermittently or delicately, perhaps because of a perceived prestige value or vagaries of supply, it was clearly used robustly for food preparation on occasion. However, the significance of these observations is uncertain, since useful comparative information is not available. More quantified data are required from a range of other sites to determine normal levels of samian use (at Northfleet villa in Kent, for example, 6% of Drag. 33 cups were worn). Of the other worn vessels, three were bowls in New Forest and Oxford red colour-coated wares, and the base of a New Forest mortarium was eroded.

Some 12 sherds had evidence of repairs. Three of these were Central Gaulish samian, including two fragments from a Drag 37 bowl with a label stamp of DIVIX[TUS, which may well have been regarded as a special piece. The remaining sherds, remarkably, were all from amphorae, having rivet holes with, in two cases, lead rivets still extant. The sherds in question seemed to be predominantly in the later, thinner walled 'Dressel 20' fabric.

Burnt vessels

Pottery function was also determined by evidence of burning. Some 34 vessels (quantification based on rims) were sooted on their external surfaces, presumably after being placed on the hearth. Twenty-three of these were jars, mostly vessels not identified to a specific form but including eight cooking-pot jars, seven of which were in late Roman grog-tempered ware. Nine vessels were bowls and dishes, and included seven in grog-tempered ware, sandy grey wares and black-burnished ware. Internal burnt food residues and limescale were limited to eight vessels, almost exclusively cooking-pot type jars in the same sandy or groggy reduced fabrics. The evidence forms a small dataset, but nevertheless points strongly to the use of certain jars and flat-based dishes and bowls with flanged or bead-rims, plain rims and dropped flanges

– in black-burnished ware or derived from prototypes in that fabric – as cooking vessels. The use of mortaria could also involve the heat of a hearth or the application of heat to ingredients inside them. Three vessels (in Oxford white ware, Oxford red colour-coated ware, and a Hampshire white ware) were burnt internally on the base; in addition one of these was burnt on its external surface and the top of the rim. A flanged bowl in New Forest parchment ware was similarly burnt, suggesting that it served the same function as mortaria. Unsurprisingly, all the candlestick fragments noted (see above) had evidence of burning.

Graffiti

Graffiti were recorded on ten vessels. These are described in the catalogue of illustrated pottery (below; Fig. 6), but it is useful here to consider two that point to a good degree of literacy among some of the town's inhabitants. A New Forest colour-coated beaker was marked [...]AF in good letters, while a black-burnished ware vessel was inscribed, in rather cursive lettering, with [...]VE RN or A[...] (the E appearing to be separated from the R by two points). Both are incomplete, but appear to represent personal names. The former is especially interesting; while it is difficult to expand the inscription any further, it is possible that the F, which is the final letter, stands for '*feliciter*', urging good luck for the user (cf. RIB 2503.352). If so, this recalls the exhortations on so-called motto beakers in Rhenish ware that wish good luck or demand that the user takes drink. The New Forest beaker already in part owed its development to those fine ware products of central and eastern Gaul (cf. Fulford 1975a, 27-8), but the graffito potentially makes that link more explicit.

The pottery in its urban context

Despite the recovery in city excavations over the decades of tonnes of Roman pottery, few assemblages have been quantified in any meaningful way. Data from older reports, confined to illustrated catalogues of vessels from stratified deposits, are of little value for comparative work. Cemetery assemblages offer more hope; counts of (mainly) complete vessels are analogous with quantification by EVE, which, of course, are simply fractions of a whole. The more recently-excavated groups from Winchester's suburbs (Holmes *et al.* forthcoming) are much better and provide suitably quantified data. Nevertheless, the distribution and chronological sequence of

quantified pottery from the city are patchy, and insights into differences of supply, use and status are inevitably limited.

The Discovery Centre site produced 19 groups that belonged to the early Roman period (no such groups came from the Northgate House site). These correspond with the early phase of the earlier Roman key-group assemblage from the northern suburbs at Victoria Road and assemblages from the city defences (Flavian rampart, Jewry Street and Henly's Garage sites). Looking first at broad ware groups (Table 12), we see little obvious difference between the areas. Reduced wares dominate and are accompanied by much smaller proportions of other ware types. Samian is better represented at Victoria Road and the defences than it is at the Discovery Centre, however, and this, along with higher proportions of fine ware and amphorae (especially at the defences), hints at a pattern of supply to parts of the city away from the Discovery Centre area that included higher proportions of continentally-derived or inspired pottery. It is notable that early Roman Gallo-Belgic mortaria, absent from the Discovery Centre, were also recovered from the Victoria Road site and defences. Such differences would be expected to be mirrored in the range of forms present, although this is not easy to confirm, since a complete breakdown of form composition at Victoria Road is not available in the report of that site. However, data are available for grey wares (Table 13). Compared with the Discovery Centre site, jars are less well-represented and beakers, cups and lids better represented in the northern suburbs. The relatively small number of platters seems at odds with the continental emphasis suggested by other pottery in the group, although there may have been little requirement to supply grey ware platters if the class was preferred in samian ware.

The site produced few large 2nd- and earlier 3rd-century groups and there is a striking disparity in assemblage sizes between these sites and others in the city (135 sherds compared with almost 10,000 sherds at Victoria Road and over 4000 sherds from the city defences). It is unlikely that any observed differences in composition would be especially meaningful. However, we can gain a sense of continued difference between the sites by examining the samian ware assemblages. Samian reached the northern suburbs throughout the later 1st and 2nd centuries. Over 300 vessels were recorded from the Victoria Road key groups, of which 15% by vessel count were decorated forms – bowls Drag. 29, 30 and 37, and the jar Drag. 72 (Jones and Dickinson, forthcoming). This compares with 7% at the current site (or 5% by

EVE). The figures are interesting, since samian provides a useful index of status; the proportion of decorated vessels in a given samian group tends to be highest at military sites and major civil centres and lowest at rural settlements (Willis 1998, 105-11). On this basis, the extra-mural part of the city appeared to be better-placed in social or economic terms throughout the 1st and 2nd centuries compared with some areas inside the walls.

The late Roman dataset from the site is rather larger and stands more comfortably alongside other late Roman assemblages from the city. Much quantified material derives from deposits associated with the city defences, in particular from Henly's Garage and Jewry Street. Comparing the proportions of fabrics from the various sites (Table 14), we can see that assemblages from the defences contained higher proportions of amphorae and samian and, conversely, lower proportions of fine wares and late Roman handmade grog-tempered wares. This striking difference points to the two assemblage groups (Discovery Centre/Northgate House sites on the one hand and the defences on the other), deriving, in statistical terms, from separate vessel populations (a view confirmed by a chi-squared test). The reason for the difference could well be chronological and relate to the range of activity along the ramparts. The late Roman occupation at Jewry Street comprised a succession of timber buildings constructed in an area that had been cultivated from *c* AD 200 (which in turn replaced 2nd-century structures). Late Roman buildings were also recorded at Henly's Garage (Rees, forthcoming). Despite this late Roman activity, the defence deposits appear to have contained higher amounts of residual material than might be expected and received relatively small amounts of new pottery, at least compared with the current site assemblages. The samian and much of the amphorae must be residual, but the small proportion of grog-tempered ware – normally an important fabric in late Roman assemblages – is also notable. Moreover, late Roman Oxford and New Forest fine wares took a smaller share of the defence assemblage compared with the Discovery Centre/Northgate House: some 6% by sherd count against 14%. These observations seem to point to more intensive occupation at the current site. In contrast, occupation along the ramparts may have been less dense, or pottery supply intermittent. It is also possible that older pottery used during previous occupation there or incorporated in manuring spreads for cultivation had not been removed when the late Roman occupation began.

While different from assemblages from the city wall, the composition of the late Roman pottery from the site appears to be more comparable to assemblages recovered from the Brooks, a site nearer to the city centre. Table 15 shows reasonably similar proportions of ware groups across the sites. The exception is black-burnished ware, which is substantially better-represented at the Brooks. This is to some extent anomalous; the ware is present in some considerable amount in the late 3rd-century deposit 13397, but the proportion drops to an average of 3% in 4th-century deposits, matching that at Northgate House. The proportions of fine wares – largely confined to Oxford and New Forest products – and grog-tempered wares are at the expected levels, while the proportion of samian ware is consistent with background residual amounts. These sites match each other closely in terms of forms too (Table 16). The proportions of the main classes – jars, beakers and bowls/dishes – are almost identical, while the higher amount of flasks/flagons in the Discovery Centre can be explained by the presence two complete New Forest flagon rims. Interestingly, proportions of vessels from the city defences are not so different, although the slightly smaller amounts of beakers, flagons and mortaria may reflect the comparatively weaker presence of New Forest and Oxford products.

A number of points emerge from these inter-site comparisons. Occupation in the northern suburbs during the later 1st and 2nd centuries admitted a greater amount and range of fine and specialist wares – samian, amphorae, mortaria and fine wares – compared with the current site and so appears to have been different in character. While richly-adorned town houses are known in the suburbs during the late Roman period (Wacher 1995, 301), the excavations from which the pottery was recovered revealed no grand structures but miscellaneous roadside features instead (Rees, forthcoming). However, it is possible that such residences are located close by. Late Roman occupation along the defences was less dense than that nearer the city centre, and its assemblage derived in part from earlier activity. Within the walls, the same range of pottery was reaching the Discovery Centre/Northgate House sites and the Brooks in the late Roman period, suggesting that these sites acquired pottery in a similar way and that they were broadly identical in terms of status and ceramic use.

One further comparison is worth examining here. A number of cemeteries have been excavated around Winchester. Apart from the well-known late Roman cemetery of Lankhills outside the town's north gate, 1st- and 2nd-century graves have been recorded at Victoria Road, while further late Roman burials exist in the northern,

eastern and western suburbs. Differences between burial assemblages and non-funerary groups have long been appreciated. Dining equipment – such as dishes, flagons and beakers – are typically over-represented in burial groups compared with the non-funerary assemblages where jars and other cooking or storage vessels dominate. This is obvious enough when we place the form composition of the Discovery Centre's early Roman key groups against that of the Victoria Road cemetery (Table 17; Matthews forthcoming, table 2.3.3). Forms associated with dining (flagons, beakers/cups, bowls and dishes) take a 41% share of the assemblage at the Discovery Centre, but a massive 92% share at the cemetery. Clearly table wares were preferentially selected for funerary deposition – Matthews suggests that some vessels were made specifically for the funerary market – and were rather scarcer in the domestic setting. This pattern is in fact typical; similar differences are recorded in early Roman non-funerary and funerary assemblages from, for example, Springhead, a roadside settlement in north Kent, and Strood Hall, a rural settlement in Essex (Table 17). There is a crucial difference, however: dishes were as well represented at the Discovery Centre as at the Victoria Road cemetery; in the other non-funerary assemblages, dishes took comparatively smaller proportions. This is of course consistent with the view that proportions of dishes should increase in non-funerary assemblages with higher settlement status (cf. Evans 2001). We may also note that the ratio of non-funerary to funerary samian was closest at Winchester: two samian vessels at Victoria Road to every one vessel at the Discovery Centre, compared with 2.5: 1 at Springhead and 20:0 at Strood Hall. So although the profiles of all funerary assemblages were markedly different from their non-funerary counterparts, Winchester's assemblages shared certain elements, suggesting that there was a degree of convergence with increased site status. That cups, though of no significance in any of the non-funerary assemblages, contributed a significantly higher proportion at Victoria Road compared with the lower-status cemeteries is of additional interest. The vessel class tends to be best-represented in urban cemeteries and high-status burials in southern England (Biddulph 2005, 36; 2008b, fig. 6), and Winchester appears to be consistent with this.

The increased proportions of fine wares evident in Winchester's late Roman groups, due mainly to the expansion of the New Forest and Oxford industries, reduce the degree of difference between funerary and non-funerary assemblages to some extent. The late Roman key groups (see Tables 8 and 9) show much higher

proportions of beakers and flagons compared with early and middle Roman groups. However, their combined proportion of 23% by EVE remains somewhat lower than the 44% and 66% by vessel count obtained for the northern, eastern and western cemetery and Lankhills cemetery respectively (Matthews forthcoming, table 2.3.3). Clearly, drinking-related forms continued to play an important role in funerary assemblages (at least among graves that contained pottery) despite their growing significance in the household.

Catalogue of illustrated pottery

The following ceramic groups and individual pieces illustrate the typological and chronological range of the assemblage. Graffiti and potters' marks and pieces of intrinsic interest are also shown. The dates given refer to context-group dates (not necessarily identical to stratigraphic phasing), and the catalogue is ordered by this chronology.

Occupation layer CC1754, group CC7002. AD 70-95 (Fig. 1)

1. Jar CC, fabric ZM. Burnished on external surface.
2. Jar CD, fabric ZM
3. Jar CD, fabric ZM
4. Jar CE, fabric ZM
5. Jar CG, fabric ZMZ
6. Jar CG, fabric ZMZ
7. Jar CG, fabric ZM
8. Jar CG, fabric ZM. Burnt internally.
9. Jar CG, fabric ZM. Burnished on external surface.
10. Jar CG, fabric ZM
11. Jar CG, fabric ZM
12. Jar CG, fabric ZM
13. Jar CG, fabric ZM. Burnished on external surface.
14. Jar CH, fabric ZM. Burnt externally on shoulder and rim.
15. Jar CN, fabric ZMZ
16. Bowl HC, fabric ZM
17. Bowl HC, fabric ZM. Burnt internally.
18. Platter JC, fabric ZM. Wavy line decoration on external and internal surfaces.
19. Platter JC, fabric ZM
20. Platter JC, fabric ZMZ. Burnished on external surface.

21. Platter JC (Drag. 15/17), fabric TSA
22. Platter JC (Drag. 15/17), fabric TSA
23. Lid L, fabric ZMZ

Levelling layer NH7014, group NH8523. AD 120-130 (Fig. 1)

24. Jar C, fabric ZMZ. Burnished on top of rim.
25. Jar CG, fabric ZM
26. Jar CK, fabric ZM. Sooting underneath rim.
27. Beaker EA, fabric ZMZ
28. Beaker EC, fabric TBF. Black-slipped on rim and shoulder.
29. Platter JC (Drag. 18), fabric TSA

Occupation layer NH1263, group NH8512. AD 270-350 (Fig. 2)

30. Jar CK, fabric ZF (black-slipped). Bands of slip on internal surface of rim, lower part of external surface of rim, and shoulder; slip appears striated through wear.
31. Jar CM, fabric ZM. Cordoned shoulder.
32. Beaker EE, fabric TR. Near-complete vessel.
33. Bowl HB, fabric ZF
34. Bowl HB, fabric ZFZ. Burnished on upper surface of flange.
35. Bowl HB, fabric ZFZ
36. Bowl HB, fabric ZFZ
37. Bowl HB, fabric ZFZ. Burnished on internal surface of base.
38. Bowl HB, fabric ZMA. Faintly-incised arcs on external surface.
39. Bowl HC (Fulford 1975a, type 89), fabric UMP. Patches of paint on external surface.
40. Bowl H, fabric UMP
41. Bowl HC, fabric WF. Burnt on rim and flange and in patches on external and internal surfaces, possibly through firing rather than use.
42. Dish JA, fabric ZMA. Burnished arcs on external surface

'Dark earth' NH4412, group NH8500. AD 270-400 (Fig. 2)

43. Jar CD, fabric ZME

Pit fill NH2623, group NH8524. AD 270-400 (Fig. 2)

44. Beaker E, fabric TCR

Pit fill NH1412, group NH1642. AD 270-400 (Fig. 2)

45. Jar CM (Young 1977, type O27), fabric WO. AD 270-400

Demolition layer NH1328, group NH8516. AD 270-400 (Fig. 2)

46. Jar CM, fabric Y(PNKGT)

Floor NH2510, group NH8523. AD 270-400 (Fig. 2)

47. Jar CJ, fabric ZC(MAY), apparently overfired.

Pit fill NH2239, group NH8524. AD 300-400 (Fig. 3)

48. Jar CK, fabric ZF. Burnished zone above lattice.

49. Bowl HB, fabric ZMA. Decorated with burnished arcs. Traces of soot on external surface.

50. Bowl HB, fabric ZFZ. Worn around edge of base internally.

51. Lid L, fabric ZM

Pit fill NH2369, group NH8524. AD 325-400 (Fig. 3)

52. Jar CD, fabric ZF (black-slipped). The vessel is overfired and its rim distorted; a manufacturing second.

Pit fill NH2300, group NH8524. AD 325-400 (Fig. 3)

53. Flagon, fabric ZF (black-slipped)

54. Jar CK, fabric SG

55. Cup FA, fabric TF. Footring has broken off.

Pit fill NH1395, group NH8516. AD 340-400 (Fig. 3)

56. Jar CK, fabric SG. Tooled burnishing on external surface.

57. Bowl HC (Fulford 1975a, type 70), fabric TF

58. Lid L, fabric SG. Burnished decoration on internal surface.

'Dark earth' CC1629, group CC7005. AD 340-350 (Fig. 4)

59. Flagon BA, fabric TR. White-painted decoration on shoulder.

60. Jar CC, fabric WF, micaceous surfaces.

61. Jar CC, fabric ZMZ. White-slipped external surface; burnished neck.

62. Jar CD, fabric ZM. Burnished on shoulder and top of rim.

63. Jar CD, fabric ZM

64. Jar CD, fabric ZMZ

65. Jar CK, fabric CG

66. Jar CK, fabric CG

67. Jar CK, fabric CG

68. Jar CK, fabric ZF

69. Jar CK, fabric ZM. Burnished lines on shoulder.

- 70. Jar CK, fabric ZM
- 71. Beaker E, fabric TR
- 72. Bowl HA, fabric UMS
- 73. Bowl HC, fabric TF
- 74. Bowl HC, fabric TO/TOR
- 75. Bowl HC, fabric UMS
- 76. Dish JA, fabric ZM
- 77. Dish JA, fabric ZM

‘Dark earth’ CC1579, group CC7005. AD 350-370 (Fig. 5)

- 78. Jar CC, fabric ZMZ
- 79. Jar CC, fabric ZMZ. White-slipped external surface; shallow ?combing on neck.
- 80. Jar CD, fabric YM(OVW)
- 81. Jar CD, fabric ZM
- 82. Jar CK, fabric SK
- 83. Jar CK, fabric SK
- 84. Jar CK, fabric ZMA
- 85. Jar CK, fabric ZMZ. Limescale deposit on internal surface.
- 86. Beaker E, fabric THT
- 87. Beaker EE, fabric TR
- 88. Beaker EE, fabric TR
- 89. Bowl HA, fabric TF. Half-rosette-stamped.
- 90. Bowl HA, fabric TF
- 91. Bowl HA, fabric TF. Rosette-stamped.
- 92. Bowl HA, fabric TO/TOR. Rouletted below plain zone.
- 93. Bowl HB, fabric TF
- 94. Bowl HB, fabric UMS
- 95. Bowl HC, fabric TO/TOR
- 96. Bowl HC, fabric ZMZ
- 97. Bowl HD, fabric TO/TOR
- 98. Bowl HD, fabric ZMZ
- 99. Dish JA, fabric SG
- 100. Dish JA, fabric SG
- 101. Dish JA, fabric SG
- 102. Dish JA, fabric SG
- 103. Dish JA, fabric ZMZ. Burnished arcs on external surface and lattice on internal surface.
- 104. Dish JB, fabric SG
- 105. Dish JB, fabric SG
- 106. Dish JB, fabric SG
- 107. Dish JB, fabric SG. Burnished on external surface.

- 108. Dish JB, fabric ZM
- 109. Dish JB, fabric ZM. Burnished on internal surface.
- 110. Dish JB, fabric ZMZ. Burnished on internal surface.
- 111. Mortarium KC, fabric JMY
- 112. Mortarium KE (Fulford 1975a, type 81), fabric JMV
- 113. Mortarium KE (Fulford 1975a, type 81), fabric JMV
- 114. Mortarium KE (Young 1977, type C100), fabric JMW
- 115. Mortarium KE (Fulford 1975a, type 102), fabric JMY

‘Dark earth’ NH5059, group NH8500. AD 350-400 (Fig. 6)

- 116. Jar C, fabric SG
- 117. Jar CD, fabric ZM (white-slipped)
- 118. Beaker E, fabric TR
- 119. Bowl HB, fabric SG
- 120. Bowl HC, fabric T(EPO). Flange only.
- 121. Bowl HC (Fulford 1975a, type 63), fabric TF
- 122. Dish JA, fabric SG
- 123. Dish JA, fabric ZM (burnished)

Additional pottery of intrinsic interest (Fig. 6)

- 124. ‘Pulley-rim’ flagon B, fabric WM. Orange slip, especially around rim. Context NH1428. AD 270-400
- 125. Beaker E (Fulford 1975a, grey ware type 1), fabric ZF (black-slipped). Context NH5197. AD 300-400
- 126. Bowl HC, fabric WF. Imitation of samian Drag. 37 bowl. Incised lattice below plain zone. Context NH2239. AD 300-400
- 127. Mortarium KD, fabric JMW. ‘Bat-head’ spout. Internal surface below collar is worn through use. Context NH1398. AD 350-400

Graffiti and potters’ marks and stamps (Fig. 6)

- 128. Body sherd, fabric ZMA. Context NH7014. AD 120-130. Graffito incised after firing. ?[...]VE:RN or A[...]. Finger-sized dent in body under the final letter; manufacturing flaw.
- 129. Body sherd, fabric ZFE. Context CC1702. AD 120-150. Lines scored after firing, possibly accidentally.
- 130. Base, fabric SG. Context NH1595. AD 270-400. Post-firing.
- 131. Base, fabric SG. Context NH9716. AD 270-400. Small x-graffito made after firing.
- 132. Body sherd, unidentified amphora fabric. Context NH2239. AD 300-400. Possible post-firing graffito.
- 133. Bowl HB, fabric ZFZ. Context NH1231. AD 300-400. Post-firing graffito.

134. Beaker E, fabric TF. Context NH2344. AD 325-400. Graffito made after firing: [...]AF.
135. Amphora (Richborough 527), fabric A(LIP). Context NH3681. AD 300-400. Potter's stamp, probably HEL VINI
136. Amphora (Dressel 20), fabric ADA. Context NH4435. AD 270-400. Potter's stamp: M AEME
137. Body sherd, fabric ADA. Context NH4754. AD 270-400. Lead rivet, rivet hole and graffito [...]OX incised before firing.
138. Body sherd, fabric ADA R. Context NH2344. AD 325-400. Fragmentary stamp.

References

- Arthur, P, 1978 The lead glazed wares of Roman Britain, in P Arthur and G Marsh (eds), *Early fine wares in Roman Britain*, Brit Archaeol Rep (British Series) **57**, Oxford, 293-355.
- Biddulph, E, 2005 Last orders: choosing pottery for funerals in Roman Essex, *Oxford J Archaeol* **24** (1), 23-45
- Biddulph, E, 2008a Form and function: the experimental use of samian ware cups, *Oxford J Archaeol* **27** (1), 91-100
- Biddulph, E, 2008b The Roman pottery from Pepper Hill, Southfleet, Kent (ARC PHL97, ARC NBR98), in *Ceramics from Section 1 of the Channel Tunnel Rail Link, Kent* (ed. P Booth), *CTRL Scheme-wide Specialist Report Series*, Archaeology Data Service
http://ads.ahds.ac.uk/catalogue/projArch/ctrl/site_list.cfm
- Booth, P, 2007 Oxford Archaeology Roman pottery recording system: an introduction, Oxford Archaeology unpublished guidelines, revised.
- Borgard, P and Cavalier, M, 2003 The Lipari origin of the 'Richborough 527', *J Roman Pottery Stud* **10**, 96-107
- Brown, A, 1994 A Romano-British shell-gritted pottery and tile manufacturing site at Harrold, Beds, *Bedfordshire Archaeol* **21**, 19-107.
- Carreras Monfort, C, and Williams, D, 2003 Spanish olive-oil trade in late Roman Britain: Dressel 23 amphorae from Winchester, *J Roman Pottery Stud* **10**, 64-68.
- Dannell, G, 1999 Decorated South Gaulish samian, in R P Symonds and S Wade, *Roman pottery from excavations at Colchester, 1971-86*, Colchester Archaeol Rep **10**, Colchester, 13-74.
- Evans, J, 2001 Material approaches to the identification of different Romano-British site types, in S James and M Millett (eds), *Britons and Romans: advancing an archaeological agenda*, Counc Brit Archaeol Res Rep **125**, 26-35.
- Fulford, M, 1975a *New Forest Roman pottery*, Brit Archaeol Rep (Brit Series) **17**, Oxford.
- Fulford, M, 1975b The pottery, in B Cunliffe *Excavations at Portchester Castle, Vol I: Roman*, Rep Res Comm Soc Antiqs London **32**, London, 270-367.
- Fulford, M, 1977 Pottery and Britain's trade in the later Roman period, in D P S Peacock (ed) *Pottery and early commerce: characterization and trade in Roman and later ceramics*, London, 35-84.
- Fulford, M, 1979 Late Roman pottery, in G Clarke *The Roman cemetery at Lankhills*, Winchester Stud 3: Pre Roman and Roman Winchester Part II, Oxford, 221-237.
- Gillam, J P, 1976 Coarse fumed ware in North Britain and beyond, *Glasgow Archaeol J* **4**, 57-80.
- Going, C J, 1992 Economic 'long waves' in the Roman period? A reconnaissance of the Romano-British ceramic evidence, *Oxford J Archaeol* **11** (1), 93-117.
- Greene, K, 1978 Imported fine wares in Britain to AD 250: a guide to identification, in P Arthur and G Marsh (eds), *Early fine wares in Roman Britain*, Brit Archaeol Rep (British Series) **57**, Oxford, 15-30.
- Greene, K, 1979 *The pre-Flavian fine wares*, Report on the excavations at Usk 1965-1976, Univ of Wales Press, Cardiff.
- Hartley, K F and Tomber, R, 2006 *A mortarium bibliography for Roman Britain*, J Roman Pottery Stud **13**.
- Holbrook, N and Bidwell, P T, 1991 *Roman finds from Exeter*, Exeter Archaeol Rep No **4**, Exeter.
- Holmes, K and Matthews, C, forthcoming All this of pot and potter: *1500 years of Winchester pottery, excavations 1971-86*, Winchester Museums Service
- Holmes, K, Turner, A, Matthews, C, King A C, Ball R and Rees, H, forthcoming The suburbs, in Holmes and Matthews forthcoming
- Jones, V and Dickinson, B, forthcoming Samian ware, in Holmes *et al.* forthcoming

- Lyne, M A B, 1994 *Late Roman handmade wares in south-east Britain*, unpublished PhD thesis, University of Reading.
- Lyne, M A B, forthcoming Appendix 4: The late Roman pottery supply to Winchester: evidence from The Brooks, in Holmes and Matthews forthcoming.
- Lyne, M A B, and Jefferies, R S, 1979, *The Alice Holt/Farnham Roman pottery industry*, Counc Brit Archaeol Res Rep **30**, London
- Matthews, C, forthcoming Pottery from the later cemeteries, in Holmes and Matthews forthcoming.
- Matthews, C and Holmes, K, forthcoming Fabric list and descriptions, in Holmes and Matthews forthcoming
- McAvoy, F, with E L Morris and G Smith, 1980, The excavation of a muliti-period site at Caragoon Bank, Lizard, Cornwall, 1979, *Cornish Archaeology* **19**, 31-62.
- Peacock, D P S, & Williams, D F, 1986 *Amphorae and the Roman economy*, London
- Rees, H, forthcoming Summary and overview, in Holmes and Matthews forthcoming
- Rigby, V, 1982 The coarse pottery, in J S Wachter and A D McWhirr, *Cirencester excavations I: early Roman occupation at Cirencester*, Cirencester, 153-200.
- Seager Smith, R, Brown, K, Mills, J M, and Biddulph, E, forthcoming Late Iron Age and Roman pottery, in *Settling the Ebbsfleet Valley: CTRL excavations at Springhead and Northfleet, Kent – the Late Iron Age, Roman, Saxon and medieval landscape* (Andrews, P, Biddulph, E, Hardy, A, and Smith, A), Oxford Wessex monograph
- Symonds, R P, 1992 *Rhenish wares, fine dark coloured pottery from Gaul and Germany*, Oxford Univ Comm for Archaeol Monograph **23**.
- Taylor, J, 2004 The distribution and exchange of pink, grog-tempered pottery in the East Midlands: an update, *J Roman Pottery Stud* **11**, 60-66
- Timby, J, Brown, R, Biddulph, E, Hardy, A and Powell, A, 2007 *A slice of rural Essex: archaeological discoveries between Stansted Airport and Braintree*, Oxford Wessex Archaeology monogr. **1**, Oxford and Salisbury
- Tomber, R, 2003 Appendix 3: A Richborough 527 stamp from London, in Borgard and Cavalier 2003, 106
- Tomber, R, and Dore, J, 1998 *The national Roman fabric reference collection: a handbook*, Museum of London Archaeol Services Mono No **2**.
- van der Werff, J H, 2003 The third and second lives of amphoras in Alphen Aan Den Rijn, The Netherlands, *J Roman Pottery Stud* **10**, 109-116.
- Wacher, J S, 1995 *The towns of Roman Britain*, London (2nd ed).
- Willis, S, 1998 Samian pottery in Britain: exploring its distribution and archaeological potential, *Archaeol J* **155**, 82-133.
- Young, C J, 1977 *The Roman pottery industry of the Oxford region*, Brit Archaeol Rep (Brit Ser) **43**, Oxford.

Roman pottery tables

TABLE 1: QUANTIFICATION OF FABRICS (+ = LESS THAN 0.5%)

Fabric	Sherds	% sherds	Weight (g)	% weight	MV	% MV	EVE	% EVE
<i>Samian ware</i>								
TCA	204	2.0	2309	1.3	63	4.1	3.91	2.7
TCB	1	+	15	+				
TCC	1	+	5	+				
TSA	65	0.6	515	0.3	24	1.6	1.71	1.2
TUS	6	0.1	60	+	1	0.1	0.18	0.1
TUS(EG)	39	0.4	410	0.2	11	0.7	0.69	0.5
<i>Subtotal</i>	<i>316</i>	<i>3.1</i>	<i>3314</i>	<i>1.9</i>	<i>99</i>	<i>6.5</i>	<i>6.49</i>	<i>4.4</i>
<i>Fine wares</i>								
RF	2	+	6	+				
RFB	6	0.1	34	+				
T	1	+	2	+				
T(EPO)	2	+	20	+	1	0.1	0.06	+
TBC	4	+	14	+	1	0.1	0.10	0.1
TBF	7	0.1	28	+	2	0.1	0.18	0.1
TCR	2	+	12	+	1	0.1	0.18	0.1
TF	182	1.8	2300	1.3	48	3.1	3.69	2.5
TFC	1	+	7	+	1	0.1	0.03	+
TGA	1	+	3	+				
TGC	7	0.1	20	+	1	0.1	0.03	+
THT	11	0.1	41	+	4	0.3	0.96	0.7
TLA	1	+	1	+				
TN	4	+	35	+	1	0.1	0.03	+
TO/TOR	124	1.2	1714	1.0	32	2.1	2.32	1.6
TR	835	8.3	9113	5.2	83	5.4	15.86	10.8
<i>Subtotal</i>	<i>1190</i>	<i>11.8</i>	<i>13350</i>	<i>7.6</i>	<i>175</i>	<i>11.5</i>	<i>23.44</i>	<i>16.0</i>
<i>Amphorae</i>								
A	25	0.2	1204	0.7				
A(LIP)	2	+	143	0.1	1	0.1	0.09	0.1
ACE	5	+	475	0.3				
ADA	64	0.6	9108	5.2	1	0.1	0.33	0.2
ADA R	26	0.3	2677	1.5				
ADB	1	+	14	+				
AFN	4	+	397	0.2				

Excavations in Winchester 2002-07: Roman pottery

Fabric	Sherds	% sherds	Weight (g)	% weight	MV	% MV	EVE	% EVE
AMB	2	+	107	0.1				
APA	4	+	93	0.1				
APB	21	0.2	1647	0.9				
ASS	96	1.0	7253	4.1				
<i>Subtotal</i>	<i>250</i>	<i>2.5</i>	<i>23118</i>	<i>13.1</i>	<i>2</i>	<i>0.1</i>	<i>0.42</i>	<i>0.3</i>
<i>Mortaria</i>								
J	1	+	7	+				
JHA	6	0.1	233	0.1	4	0.3	0.35	0.2
JHC	1	+	58	+	1	0.1	0.05	+
JHD	2	+	221	0.1	2	0.1	0.23	0.2
JMA	11	0.1	339	0.2	4	0.3	0.33	0.2
JMI	1	+	36	+	1	0.1	0.05	+
JMU	11	0.1	347	0.2	3	0.2	0.31	0.2
JMV	14	0.1	229	0.1	5	0.3	0.26	0.2
JMW	31	0.3	812	0.5	10	0.7	0.92	0.6
JMY	19	0.2	862	0.5	9	0.6	0.78	0.5
JPR	1	+	91	0.1	1	0.1	0.06	+
JRB	1	+	174	0.1	1	0.1	0.10	0.1
<i>Subtotal</i>	<i>99</i>	<i>1.0</i>	<i>3409</i>	<i>1.9</i>	<i>41</i>	<i>2.7</i>	<i>344</i>	<i>2.3</i>
<i>White wares</i>								
U	1	+	4	+				
UF	18	0.2	111	0.1	2	0.1	0.36	0.2
UF(NO G)	1	+	3	+				
UFA	1	+	5	+				
UFN	33	0.3	973	0.6	10	0.7	1.07	0.7
UM	14	0.1	136	0.1	3	0.2	0.24	0.2
UMP	71	0.7	2303	1.3	13	0.9	1.21	0.8
<i>Subtotal</i>	<i>139</i>	<i>1.4</i>	<i>3535</i>	<i>2.0</i>	<i>28</i>	<i>1.8</i>	<i>2.88</i>	<i>2.0</i>
<i>Oxidised wares</i>								
NF	1	+	2	+				
NFA	5	+	31	+	1	0.1	0.13	0.1
NFB	2	+	5	+				
NM	1	+	5	+				
V	2	+	34	+				
VF	6	0.1	4	+				
VMB	1	+	22	+				
WAA	1	+	15	+				
WC	14	0.1	289	0.2	1	0.1	0.09	0.1

Excavations in Winchester 2002-07: Roman pottery

Fabric	Sherds	% sherds	Weight (g)	% weight	MV	% MV	EVE	% EVE
WF	51	0.5	548	0.3	4	0.3	0.51	0.3
WFA	3	+	20	+				
WFB	5	+	36	+	1	0.1	0.23	0.2
WFC	1	+	14	+				
WFF	1	+	2	+				
WFJ	1	+	2	+				
WM	51	0.5	554	0.3	7	0.5	1.46	1.0
WMA	3	+	64	+	1	0.1	0.50	0.3
WMG	1	+	26	+				
WMN	1	+	2	+				
WO	2	+	78	+	1	0.1	0.16	0.1
Y	1	+	13	+				
Y(PNKGT)	1	+	58	+	1	0.1	0.12	0.1
YC	224	2.2	6936	3.9	2	0.1	0.24	0.2
YF	36	0.3	228	0.1	1	0.1	0.25	0.2
YFA	1	+	5	+				
YFD	3	+	37	+				
YFP	2	+	6	+				
YM	35	0.3	439	0.2	4	0.3	0.16	0.1
YM(OVW)	11	0.1	129	0.1	4	0.3	0.30	0.2
YMD	1	+	4	+				
YMZ	1	+	12	+	1	0.1	0.02	+
<i>Subtotal</i>	<i>469</i>	<i>4.7</i>	<i>9620</i>	<i>5.5</i>	<i>29</i>	<i>1.9</i>	<i>4.17</i>	<i>2.8</i>
<i>Reduced wares</i>								
Z	1	+	16	+				
ZC	210	2.1	4039	2.3	22	1.4	1.33	0.9
ZC(MAY)	1	+	61	+	1	0.1	0.19	0.1
ZCZ	10	0.1	386	0.2	2	0.1	0.08	0.1
ZF	621	6.2	7998	4.5	113	7.4	12.60	8.6
ZFB	6	0.1	42	+				
ZFE	2	+	44	+				
ZFG	1	+	1	+				
ZFZ	356	3.5	5088	2.9	66	4.3	9.39	6.4
ZH/ZHA	10	0.1	123	0.1	1	0.1	0.10	0.1
ZM	2875	28.6	33192	18.9	371	24.3	31.78	21.7
ZM+	8	0.1	244	0.1	3	0.2	0.31	0.2
ZME	11	0.1	169	0.1	1	0.1	0.23	0.2

Excavations in Winchester 2002-07: Roman pottery

Fabric	Sherds	% sherds	Weight (g)	% weight	MV	% MV	EVE	% EVE
ZMF	20	0.2	743	0.4	6	0.4	0.42	0.3
ZMJ	96	1.0	1178	0.7	16	1.0	0.97	0.7
ZMO	1	+	7	+	1	0.1	0.05	+
ZMR	2	+	21	+	1	0.1	0.05	+
ZMT	1	+	38	+				
ZMU	1	+	33	+				
ZMZ	1750	17.4	32466	18.4	271	17.7	25.65	17.5
<i>Subtotal</i>	<i>5983</i>	<i>59.5</i>	<i>85889</i>	<i>48.8</i>	<i>875</i>	<i>57.3</i>	<i>83.15</i>	<i>56.7</i>
<i>Black- burnished ware</i>								
ZMA	257	2.6	4392	2.5	69	4.5	5.28	3.6
<i>Grog- tempered wares</i>								
SG	1184	11.8	24306	13.8	205	13.4	17.21	11.7
SGA	124	1.2	4263	2.4	2	0.1	0.11	0.1
SGD	2	+	54	+				
<i>Subtotal</i>	<i>1310</i>	<i>13.0</i>	<i>28623</i>	<i>16.3</i>	<i>207</i>	<i>13.5</i>	<i>17.32</i>	<i>11.8</i>
<i>'Iron Age' wares</i>								
XF	2	+	22	+				
XM	37	0.4	718	0.4	3	0.2	0.14	0.1
<i>Subtotal</i>	<i>39</i>	<i>0.4</i>	<i>740</i>	<i>0.4</i>	<i>3</i>	<i>0.2</i>	<i>0.14</i>	<i>0.1</i>
TOTAL	10052		175990		1528		146.73	

TABLE 2: SAMIAN. QUANTIFICATION BY EVE (+ = PRESENT AS BODY SHERDS ONLY)

Vessel class	Type	Fabric				Total EVE
		TCA	TSA	TUS	TUS(EG)	
Bowl	Bowl	15	3			18
	Drag30				3	3
	Drag29		14			14
	Drag38	28		18		46
	Drag37	16				16
	Curle11		7			7
Cup	Drag40				7	7
	Drag33	104	9		19	132
	Drag35		8			8
	Drag27g					+
	O&PLV13	36				36
	Drag27	5	18			23
Cup/dish	Drag35/36	4				4
Dish	Dish	5				5
	LudTg	4				4
	Curle15					+
	Drag36	17				17
	Drag18/31	15	4			19
	Drag18or18/31	7				7
	Drag18/31R					+
	Drag18/31or31	3				3
Dish/bowl	Drag31	85			12	97
	Drag31or31R				3	3
	Dish/bowl	6				6
	Drag31R	27			22	49
Mortarium	Drag45	15			3	18
Platter	Drag18	4	95			99
	Drag15/17		8			8
Total EVE		396	166	18	69	649

TABLE 3: LIST OF KEY CERAMIC GROUPS

Stratigraphic phase	Ceramic phase	Context groups
2.1	AD 55-70	CC1661, CC1740, CC1772, CC2370, CC3272, CC3345
2.1	AD 70-130	CC1738, CC1739, CC1754, CC1781, CC1804, CC1805, CC1858, CC2080, CC2158, CC2365, CC3269, CC3345, CC3459
2.2	AD 130-260	CC1702, CC3418, NH6194, NH7612
2.3	AD 260-330	CC1637, CC1697, CC3331, NH1263, NH1380, NH7517, NH7575
2.4	AD 350-410	CC1579, CC1630, CC2185, NH1398, NH3745, NH4718, NH5059

TABLE 4: LIST OF FORMS REPRESENTED IN KEY GROUPS

Form code	Description
<i>Amphorae</i>	
A	Amphorae
<i>Flagons/jugs</i>	
B	Flagons/jugs, general
BA	Small flagons (up to 60 mm rim diameter)
BB	Larger flagons
<i>Jars</i>	
C	Jars, general
CB	Barrel shaped jars
CC	Narrow mouthed jars (rim diameter less than 2/3 girth)
CD	Medium mouthed jars, usually oval-bodied necked jars
CE	High shouldered necked jars
CG	Globular jars
CH	Bead rim jars
CI	Angled everted rim jars
CJ	Lid seated jars
CK	'Cooking pot type' jars
CM	Wide mouthed jars
CN	Storage jars
<i>Jars or bowls</i>	
D	Jar or bowl (a category for types where insufficient survives to allow an estimate of the height:diameter ratio)
CC	Necked jar/bowl
<i>Beakers</i>	
E	Beakers
EA	Butt beakers
EC	Bag shaped beakers
ED	Globular/bulbous beakers
EE	Indented beakers
EF	Poppyhead beakers
EH	'Jar' beaker, usually small examples of cooking-pot jar types
<i>Cups</i>	

Form code	Description
F	Cups, general
FA	Hemispherical cups
FB	Campanulate cups
FC	Conical cups
<i>Mugs/tankards</i>	
GB	Handled mugs/bowls
<i>Bowls</i>	
H	Bowls, general
HA	Carinated bowls
HB	Straight sided (usually flat-based bead and flange-rimmed) bowls
HC	Curving sided bowls
HD	Necked bowls
HG	Globular (not necked) bowls
<i>Bowls or dishes</i>	
I	Bowls/dishes. An indeterminate category, accommodating vessels where insufficient survives to be reasonably sure about the rim diameter:height ratio
IA	Straight sided bowls/dishes
IB	Curving sided bowls/dishes
<i>Dishes</i>	
J	Dishes and platters, general
JA	Straight sided dishes (plain-, bead-, and flange-rimmed)
JB	Curving sided dishes (plain-, bead-, and flange-rimmed)
JC	Platters
JD	Fish dishes
<i>Mortaria</i>	
K	Mortaria, general
KC	Hammer-headed mortaria
KD	Wall-sided mortaria
KE	Tall bead/stubby flanged mortaria
<i>Lids</i>	
L	Lids, general
<i>Miscellaneous</i>	
MB	Candlestick
MG	Strainer

TABLE 5: KEY GROUPS, PHASE 2.1 (AD 55-70). QUANTIFICATION BY EVE. FABRICS TOTTALLING 0 ARE PRESENT, BUT NO RIM SURVIVES.

Fabric	Jar					Beaker	Bowl			Dish	Lid	Total	% total
	C	CE	CG	CH	CN	EA	H	HA	HC	JC	L		
ASS												0	0%
NFA						13						13	5%
TN								3				3	1%
TSA												0	0%
UF												0	0%
UF(NO G)												0	0%
UFA												0	0%
UM												0	0%
UMP							8					8	3%
WF												0	0%
WFA												0	0%
XM					6							6	2%
YC					14							14	6%
YF												0	0%
ZC					23							23	9%
ZF						6						6	2%
ZFZ				18								18	7%
ZM	18	5	34	4					8	28	7	104	41%
ZMR										5		5	2%
ZMZ	7		19	14				4		9		53	21%
Total	25	5	53	36	43	19	8	7	8	42	7	253	-
% total	10%	2%	21%	14%	17%	8%	3%	3%	3%	17%	3%	-	-

TABLE 6: KEY GROUPS, PHASE 2.1 (AD 70-130). QUANTIFICATION BY EVE. FABRICS TOTTALLING 0 ARE PRESENT, BUT NO RIM SURVIVES.

Fabric	Jar								Beaker	Bowl		Platter	Lid	Total	% total
	C	CC	CD	CE	CG	CH	CM	CN	EA	HA	HC	JC	L		
APB														0	0%
ASS														0	0%
NFA														0	0%
NFB														0	0%
RFB														0	0%
TBF														0	0%
TCA														0	0%
TCC														0	0%
TGA														0	0%
TN														0	0%
TSA										5		81		86	13%
TUS														0	0%
UF									18					18	3%
UM														0	0%
WFA														0	0%
WFB														0	0%
XM														0	0%
YFA														0	0%
YFD														0	0%
YFP														0	0%
YM														0	0%
ZC								7						7	1%
ZCZ								5						5	1%
ZF														0	0%
ZFB														0	0%
ZM	76	28	107	13	68	9	11	4		3	59	80	5	463	69%
ZMR														0	0%
ZMZ				15	15	13		7				44		94	14%
Total	76	28	107	28	83	22	11	23	18	8	59	205	5	673	-
% total	11%	4%	16%	4%	12%	3%	2%	3%	3%	1%	9%	30%	1%	-	-

TABLE 7: KEY GROUPS, PHASE 2.2 (AD 130-260). QUANTIFICATION BY EVE. FABRICS TOTTALLING 0 ARE PRESENT, BUT NO RIM SURVIVES.

Fabric	Jar			Beaker	Cup	Bowl	Dish - bead/flanged			Dish - plain	Platter	Total	% total
	C	CC	CK	EF	FC	HC	J	JA	JB	JB	JC		
APB												0	0%
ASS												0	0%
TBF												0	0%
TCA					13							13	12%
TCR												0	0%
TSA					9						5	14	13%
WM												0	0%
XM												0	0%
YF												0	0%
ZCZ												0	0%
ZFB												0	0%
ZFE												0	0%
ZM						8			6			14	13%
ZMA								22				22	21%
ZMO	5											5	5%
ZMZ		12	10	9			4			4		39	36%
Total	5	12	10	9	22	8	4	22	6	4	5	107	-
% total	5%	11%	9%	8%	21%	7%	4%	21%	6%	4%	5%	-	-

Excavations in Winchester 2002-07: Roman pottery

Total	100	50	157	150	17	3	36	149	56	28	27	86	16	5	4	35	20	79	55	249	11	14	26	3	29	1405	-
% total	7%	4%	11%	11%	1%	0%	3%	11%	4%	2%	2%	6%	1%	0%	0%	2%	1%	6%	4%	18%	1%	1%	2%	0%	2%	-	-

Excavations in Winchester 2002-07: Roman pottery

ZFZ				47						47								4								98	4%	
ZH/ZHA																											0	0%
ZM				87		34	2								31		52	38									244	11%
ZMA								10																			10	0%
ZMF				11													21										32	1%
ZMJ				6														5									11	0%
ZMZ		30	13	87	138	83		110	8					6	7		6	24	20	6							538	24%
Total	30	130	13	439	151	125	2	227	14	222	143	19	32	50	153	17	31	12	151	133	32	16	5	26	39	8	2220	-
% total	1%	6%	1%	20%	7%	6%	0%	10%	1%	10%	6%	1%	1%	2%	7%	1%	1%	1%	7%	6%	1%	1%	0%	1%	2%	0%	-	-

TABLE 11: MEAN SHERD WEIGHTS (GRAMMES) BY SITE AND FEATURE TYPE. CC = DISCOVERY CENTRE; NH = NORTHGATE HOUSE.

Feature type	Phase 2.1		Phase 2.2		Phase 2.3		Phase 2.4		Overall MSW
	CC	NH	CC	NH	CC	NH	CC	NH	
Demolition	-	-	-	-	20	-	-	-	20
Layer	11	-	12	17	21	20	17	17	16
Linear	32	-	-	-	20	11	13	-	19
Pit	10	-	20	3	14	17	28	15	15
Structural	14	-	4	1	21	24	14	11	13
Surface	-	-	-	13	39	23	-	9	21
Well	-	-	-	-	-	13	-	-	13

TABLE 12: COMPARISON OF WARE GROUP FROM EARLY ROMAN GROUPS (AD 43-130). QUANTIFICATION BY SHERD COUNT. (NON-CC DATA FROM HOLMES *ET AL.*, FORTHCOMING, TABLES 2.2.7, 2.4.2, 2.4.3, 2.4.5, 2.4.13, 2.4.14).

Ware group	Discovery Centre	Northern suburbs	City defences
Amphorae	2%	3%	15%
Black-burnished ware	0%	1%	0%
Fine wares/mica-dusted wares	1%	2%	1%
Oxidised/white wares	9%	9%	2%
Prehistoric (flint-tempered) wares	1%	1%	2%
Reduced wares	82%	76%	73%
Samian	4%	9%	7%
Total	858 (100%)	2195 (100%)	495 (100%)

TABLE 13: COMPARISON OF GREY WARE VESSELS FROM EARLY ROMAN GROUPS (AD 43-130). QUANTIFICATION BY EVE. (SUBURBS DATA FROM HOLMES *ET AL.*, FORTHCOMING, TABLE 2.2.25).

Vessel	CC	Northern suburbs
Beakers	1%	4%
Bowls	9%	19%
Cups	0%	2%
Jars	68%	64%
Lids	2%	9%
Platters	21%	1%
Total	744 (100%)	955 (100%)

TABLE 14: COMPARISON OF WARES FROM LATE ROMAN GROUPS (AD 260-410). QUANTIFICATION BY SHERD COUNT. (NON-CC/NH DATA FROM HOLMES *ET AL.*, FORTHCOMING, TABLES 2.4.11-13).

Ware group	Discovery Centre	Northgate House	City defences, Well F38	City defences, other deposits
Amphorae	3%	3%	4%	7%
Black-burnished ware	1%	3%	4%	4%
Fine wares	18%	13%	4%	9%
Grog-tempered ware	13%	20%	3%	9%
Mortaria	2%	1%	1%	1%
Oxidised wares	2%	3%	2%	2%
Prehistoric wares	0%	0%	0%	1%
Reduced wares	58%	53%	77%	60%
Samian	1%	2%	6%	6%
White wares	2%	1%	0%	1%
Total	1120 (100%)	926 (100%)	1268 (100%)	2289 (100%)

TABLE 15: COMPARISON OF WARES FROM LATE ROMAN GROUPS. QUANTIFICATION BY EVE. (THE BROOKS DATA (GROUPS 13397, F1684, F1466, F1342) FROM LYNE, FORTHCOMING, TABLES A2.4.2-5).

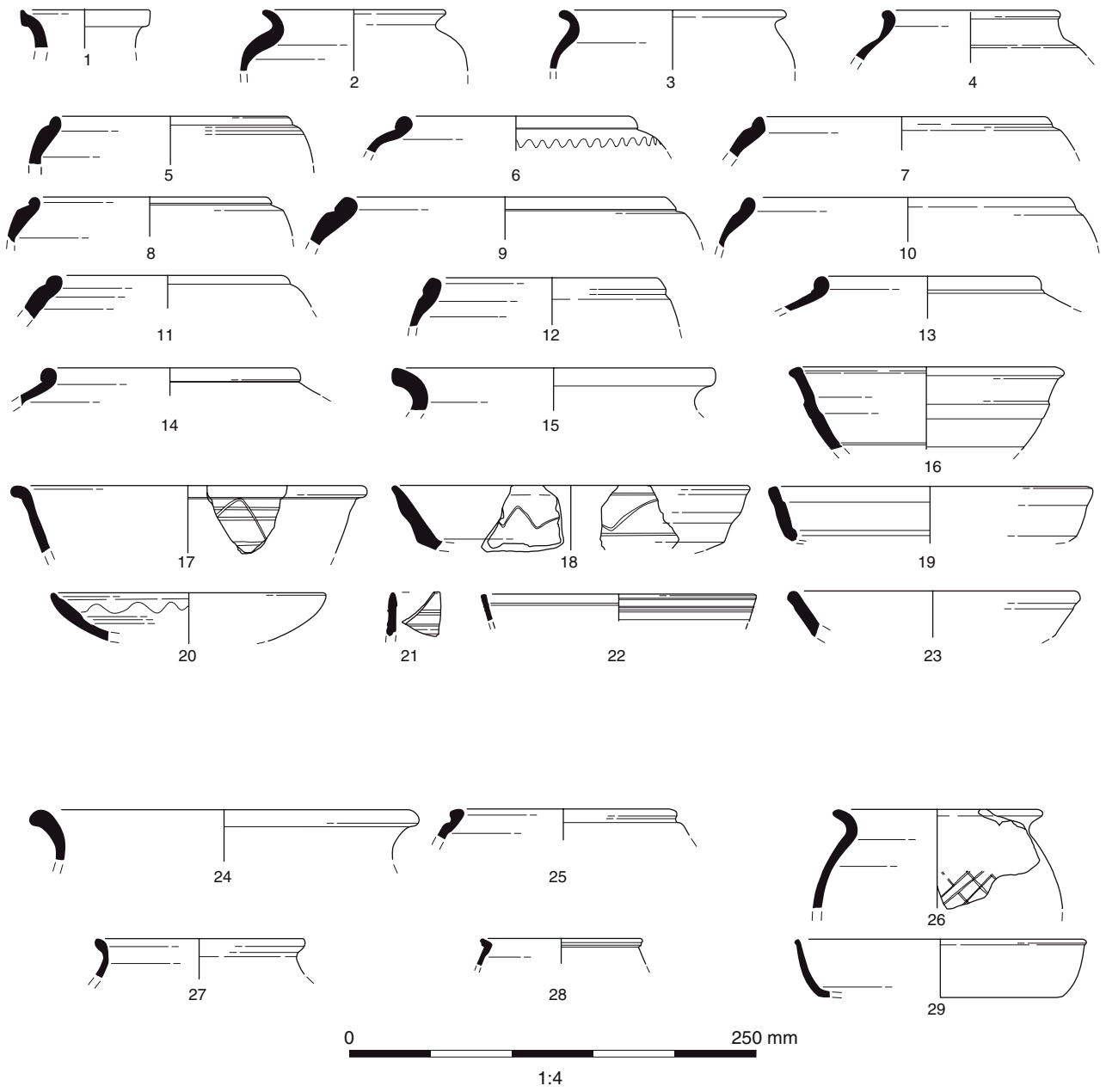
Ware group	The Brooks	Discovery Centre	Northgate House
Black-burnished ware	16%	1%	3%
Fine wares	15%	30%	19%
Grog-tempered wares	8%	11%	9%
Mortaria	0%	4%	4%
Oxidised/white wares	4%	4%	5%
Reduced wares	55%	47%	59%
Samian	1%	3%	1%
Total EVE	26.18 (100%)	1534 (100%)	2091 (100%)

TABLE 16: COMPARISON OF VESSEL CLASS FROM LATE ROMAN GROUPS. QUANTIFICATION BY EVE. (THE BROOKS DATA (GROUPS 13397, F1684, F1466, F1342) FROM LYNE, FORTHCOMING, TABLES A2.4.2-5; DEFENCES DATA (QUANTIFIED BY RIM COUNT) FROM HOLMES *ET AL.*, FORTHCOMING, TABLE 2.2.36).

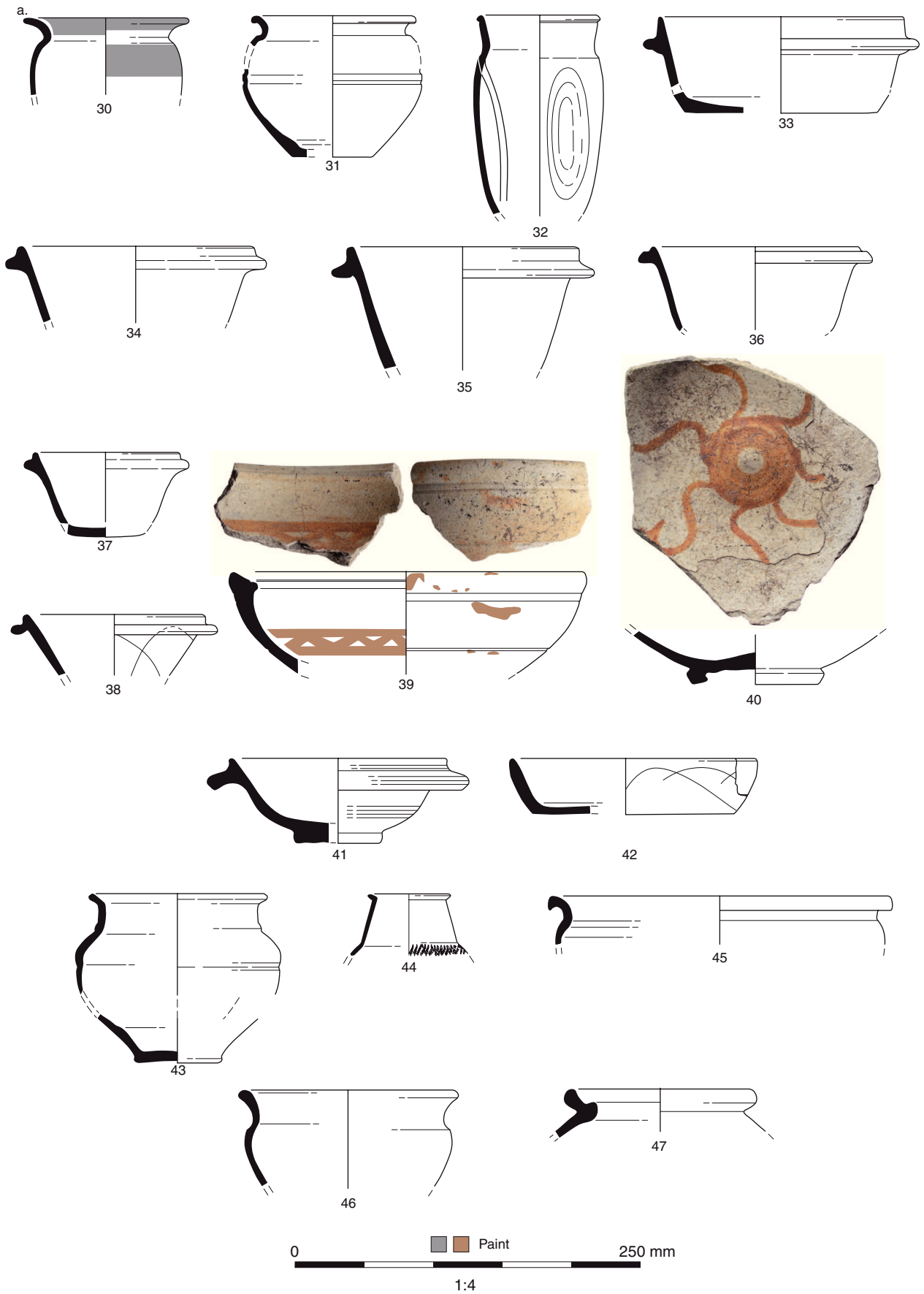
Vessel class	The Brooks	Discovery Centre	Northgate House	City defences
Beakers	12%	12%	14%	11%
Bowls/dishes	33%	25%	33%	35%
Cups	1%	1%	0%	0%
Flasks/flagons	6%	15%	4%	1%
Jars	43%	42%	44%	51%
Lids	3%	1%	1%	1%
Mortaria	2%	4%	4%	1%
	26.18	1534	2091	1365
Total EVE	(100%)	(100%)	(100%)	(100%)

TABLE 17: COMPARISON OF NON-FUNERARY AND FUNERARY ASSEMBLAGES BY VESSEL CLASS. QUANTIFICATION BY EVE OR VESSEL COUNT. DATA FROM MATTHEWS FORTHCOMING, APPENDIX 2 (VICTORIA ROAD); SEAGER SMITH *ET AL.* FORTHCOMING (SPRINGHEAD); BIDDULPH 2008b (PEPPER HILL); TIMBY *ET AL.* 2007, TABLES 3.2 AND CD-ROM TABLE 4.23 (STROOD HALL).

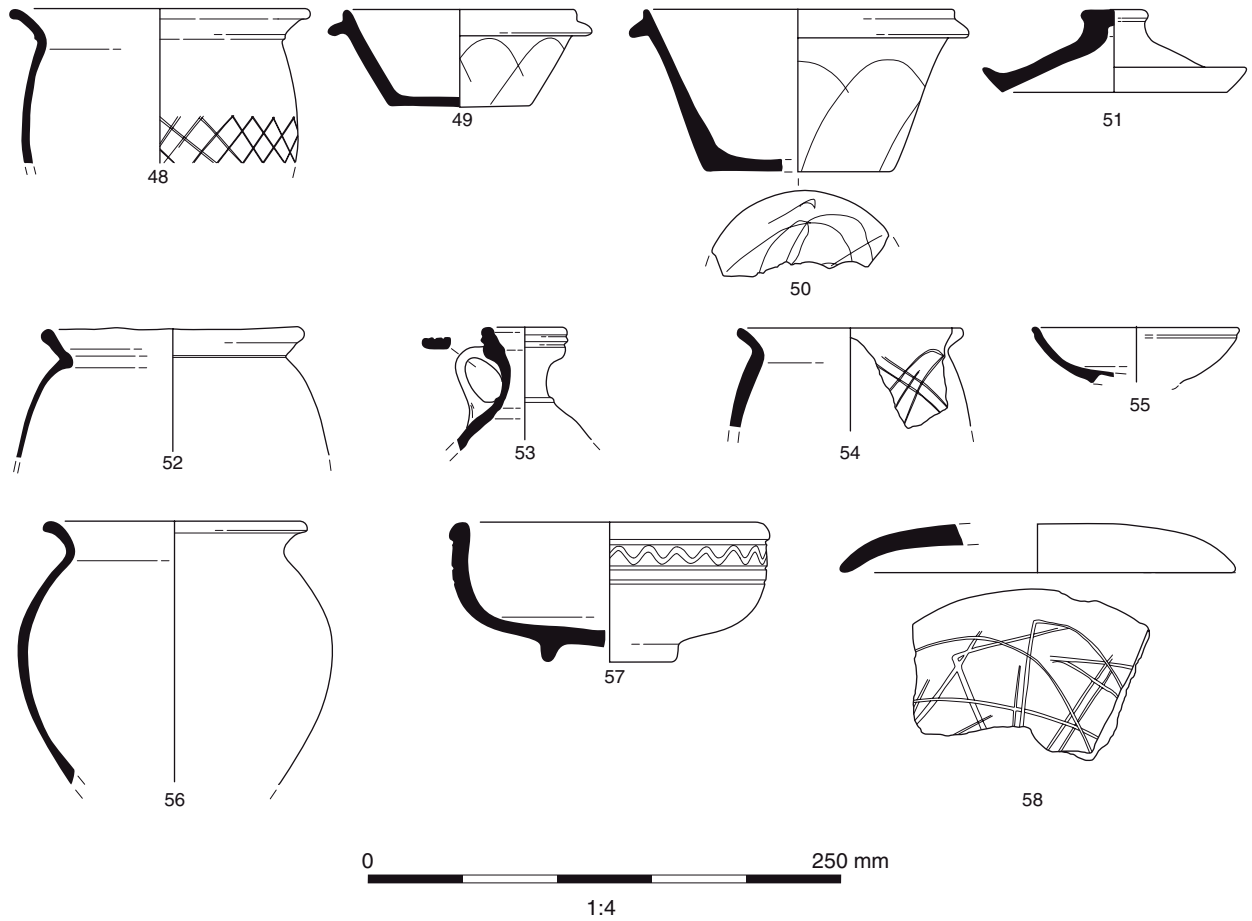
Vessel class	Discovery Centre	Victoria Road cemetery	Springhead (town)	Springhead-Pepper Hill cemetery	Strood Hall settlement	Strood Hall cemetery
Beakers	4	16	9	28	7	24
Bowls	10	7	19	5	2	2
Cups	0	22	0	3	0	7
Dishes/platters	27	27	12	22	0	26
Flagons/flasks	0	19	2	28	0	28
Jars	58	6	51	10	79	11
Lids	1	2	7	3	0	0
Other	0	1	0	1	12	2
Total	100%	100%	100%	100%	100%	100%
% assemblage that is samian	9	18	4	10	0	20



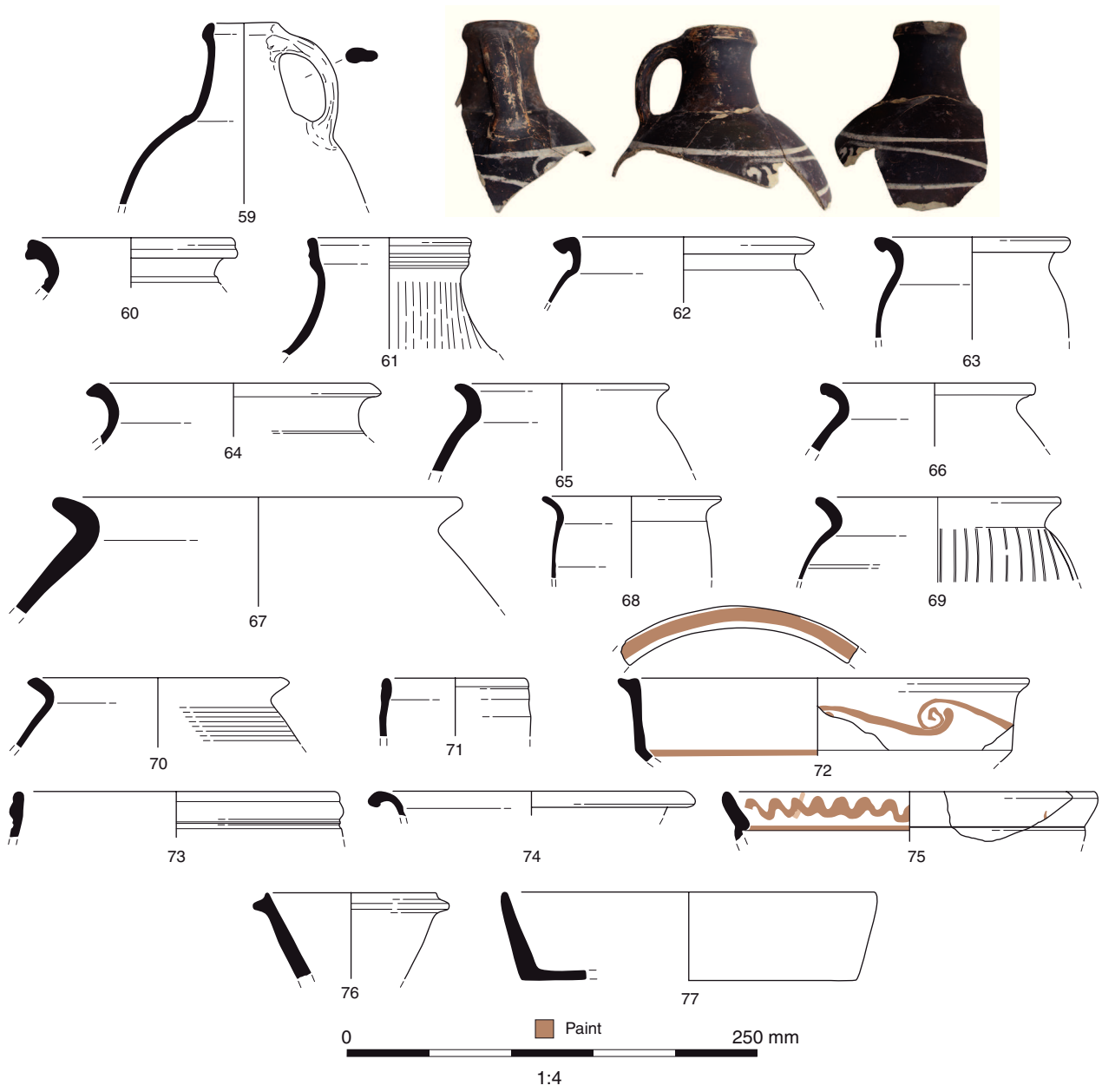
Section 1.2 Figure 1: Phase 2.1, AD 70–130 (1–29)



Section 1.2 Figure 2: Phase 2.3, AD 260–350/400 (30–47)



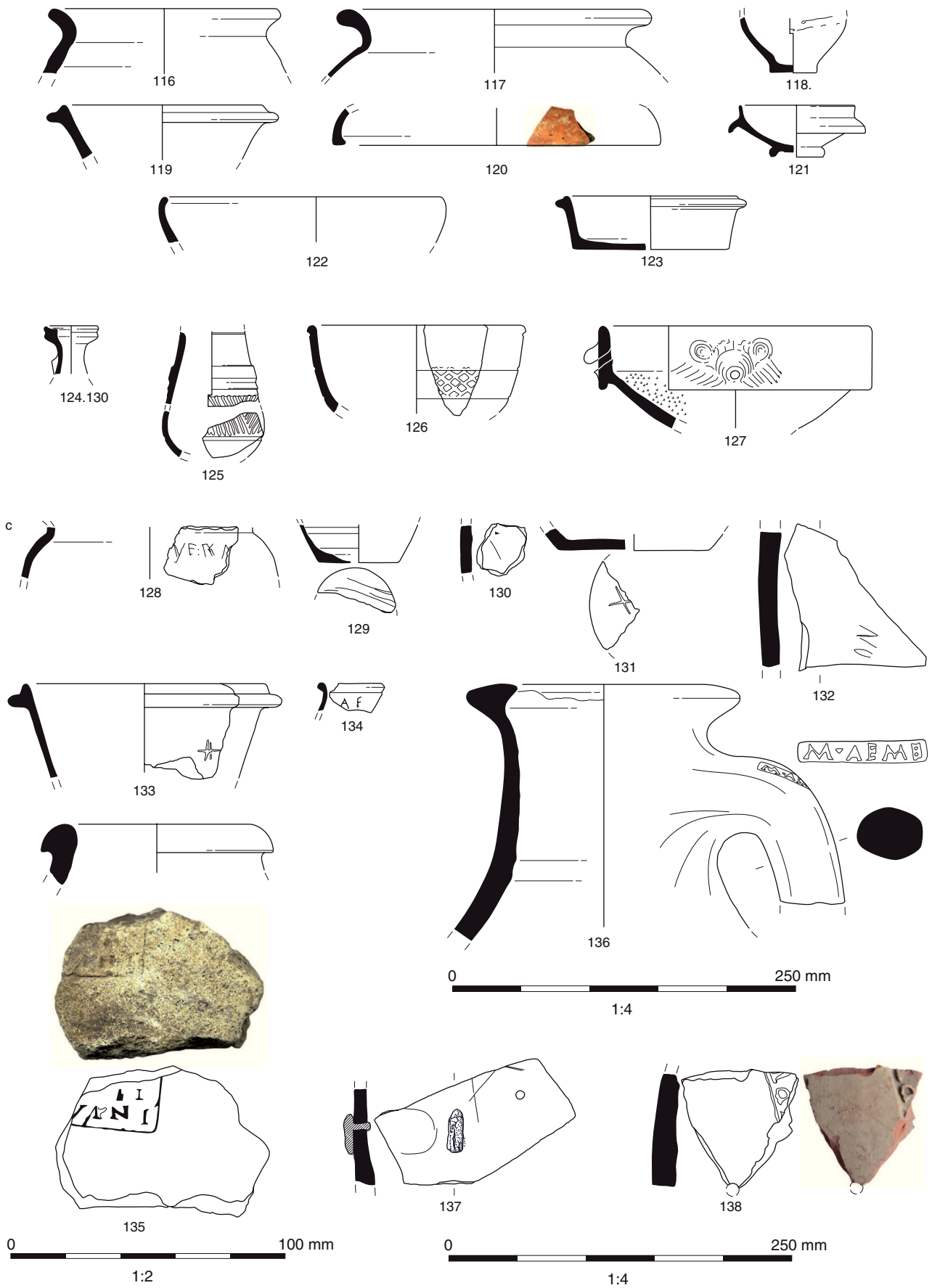
Section 1.2 Figure 3: Phase 2.4, AD 350–400 (48–58)



Section 1.2 Figure 4: Phase 2.4, AD 350–400 (59–77)



Section 1.2 Figure 5: Phase 2.4, AD 350–400 (78–115)



Section 1.2 Figure 6: Phase 2.4, AD 350–400 (116–123) and pottery of intrinsic interest, graffiti and potter’s stamps and marks (124–138)

Figure 7: Roman pottery: Proportions of jars and bowls/dishes from Northgate House structures. Quantification by eve

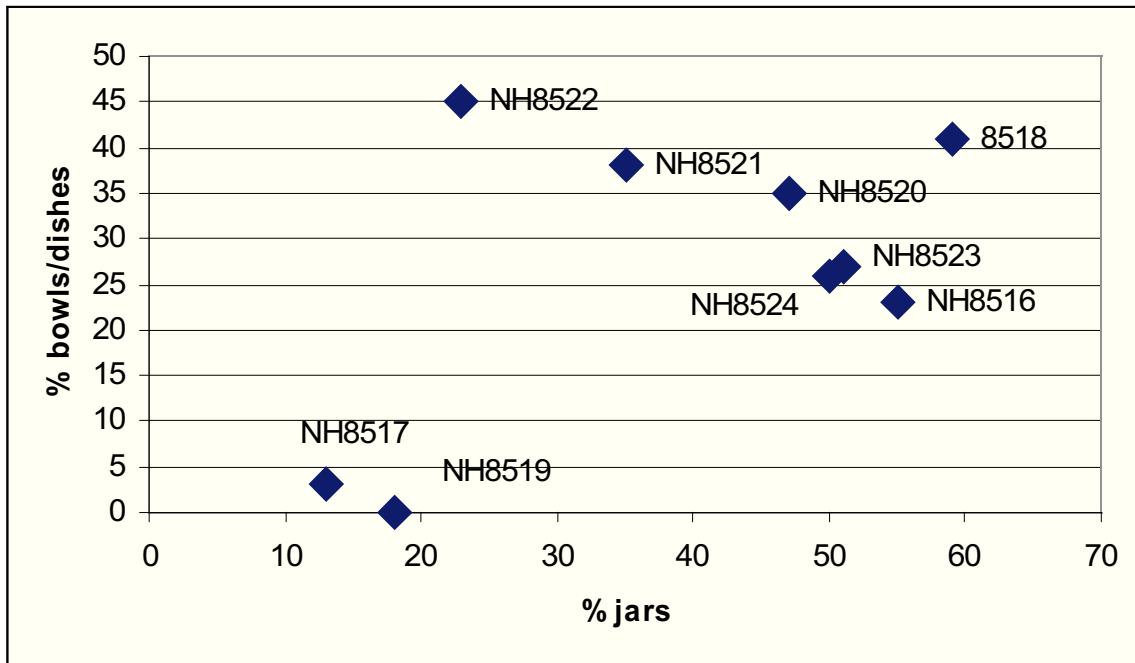
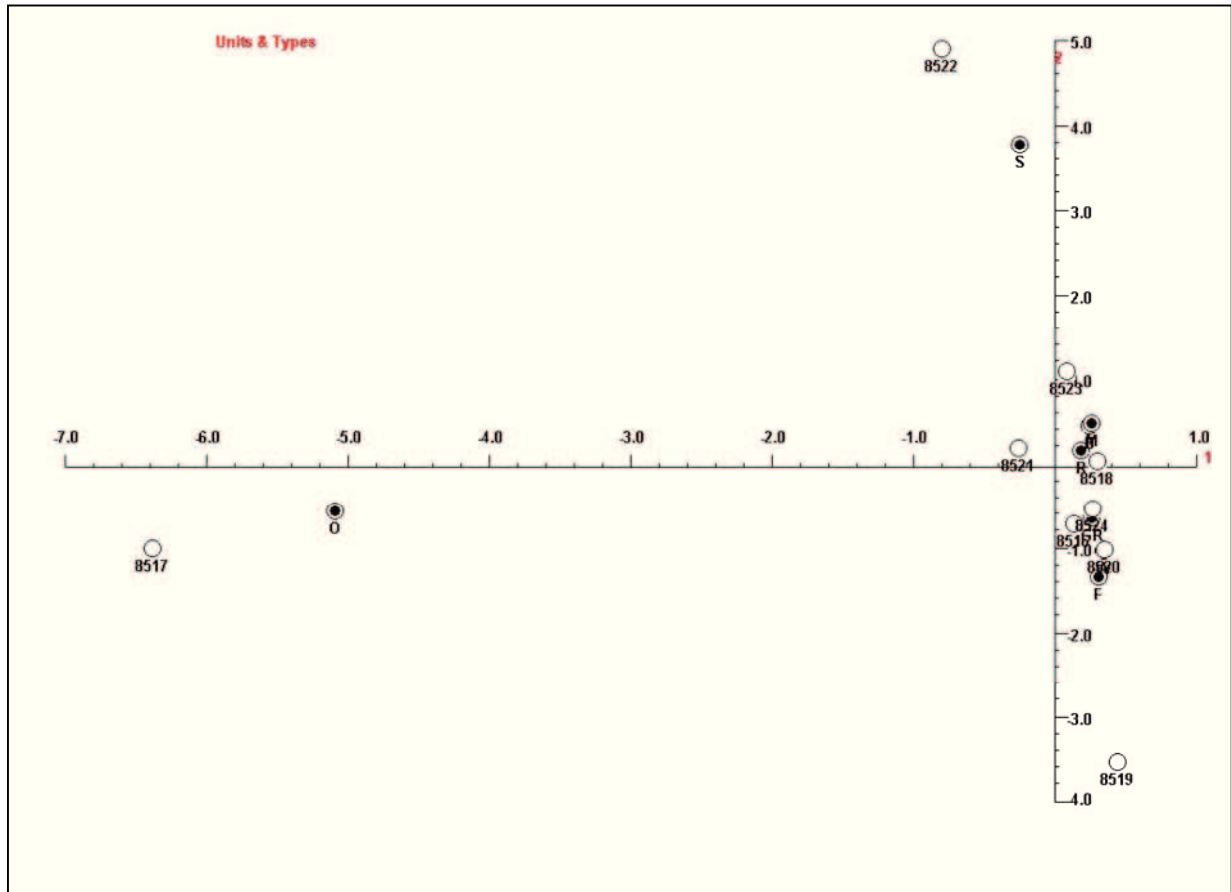


Figure 8: Roman pottery: Correspondence analysis plot showing the relationship between structures and ware groups (b = black-burnished, f = fine ware, gr = grog-tempered, m = mortaria, o = oxidised, r = reduced, s = samian, w = white ware). The axial intersection represents the average profile across the assemblage. The structures that cluster at the intersection (NH8516, NH 8518, NH 8520, NH 8521, NH 8523, NH 8524) contained assemblages that are closest to the average in terms of ware group composition and are similar to each other. Structures NH 8517, NH 8519 and NH 8522 deviate from the average to lesser or greater extents.



WINCHESTER

A CITY IN THE MAKING

Archaeological excavations between 2002 – 2007
on the sites of Northgate House, Staple Gardens and the former Winchester Library, Jewry St

This is one of the
19 specialist reports
provided with
the above publication

Oxford Archaeology
Monograph

ISBN 978-0-904220-62-9