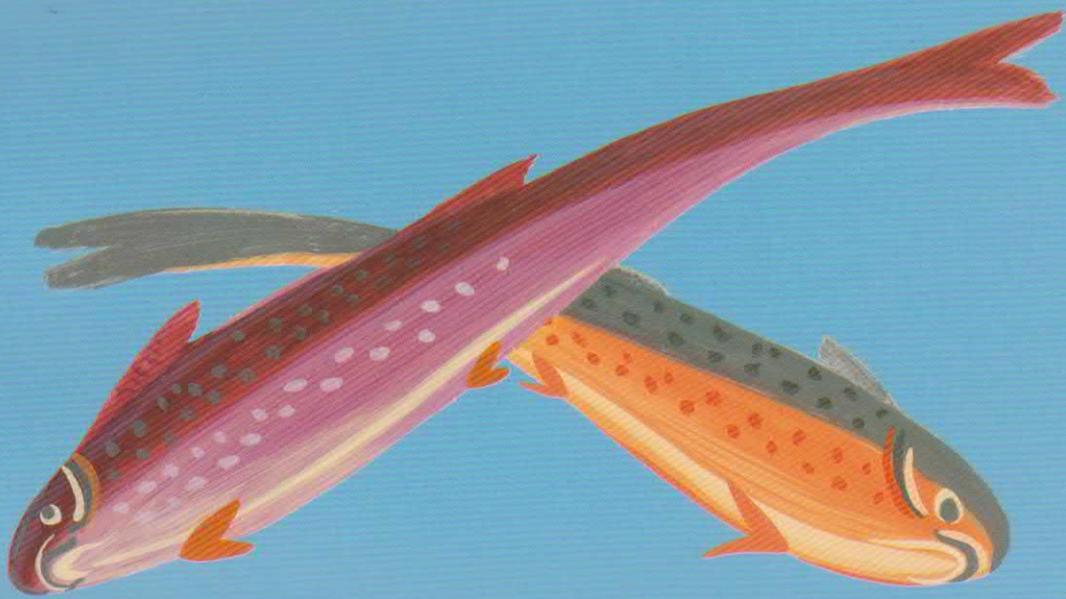


BANCROFT

A LATE BRONZE AGE/IRON AGE SETTLEMENT
ROMAN VILLA & TEMPLE-MAUSOLEUM



R J WILLIAMS & R J ZEEPVAT

VOLUME 2
Finds & Environmental Evidence

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BANCROFT

THE LATE BRONZE AGE AND IRON AGE SETTLEMENTS AND ROMAN TEMPLE-MAUSOLEUM

by

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THE ROMAN VILLA

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VOLUME II: FINDS AND ENVIRONMENTAL EVIDENCE

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THE FINDS

The Coins

J.A. Davies

INTRODUCTION

A total of 741 coins were recovered from excavations at Bancroft villa between 1982–86, including metal detector finds. This is one of the largest assemblages to have been recovered from a Romano-British villa, and exceeds the totals from other major villa collections, which include Barnsley Park (Glos.), Frocester Court (Glos.), Rockbourne (Hants.) and Shakenoak (Oxon.), all of which produced in excess of 500 coins.

The Iron Age and Roman coins total 734, with just three post-Roman issues and four indeterminate pieces present. The coins come from three constituent collections, whose numbers are summarised in Tables 22 and 24, and are separated into chronological 'issue periods' (Reece 1972). The largest is the combined collection of coins recovered during the 1983–86 excavations at the villa, totalling 650, comprising both excavated coins and those recovered by metal detector from areas prior to topsoil stripping, as well as from the spoil-heaps resulting from that operation. An additional collection of ninety-one metal detector finds found between 1982–85, which had previously been identified by the excavator prior to being returned to their finders, have been listed separately (Table 23; Appendix 3,iv). Sixty-two coins from excavations and similar metal detecting operations at the adjacent mausoleum site between 1983–85 are also shown separately (Appendix 3,v). A summary catalogue of the villa and mausoleum finds of 1982–86 (but excluding the ninety-one metal detector finds) is provided below, and a full catalogue appears in Appendix 3,iii. A fourth collection of 284 coins is also listed in Appendix 3,i and ii. These site finds come from excavations at the villa between 1973–78, and have been the subject of a separate report, published in RMK (127–8). Their addition takes the overall total of coins recovered from the villa to 1025, and from both sites to 1087.

Relative numbers of regular and irregular issues of the late third and fourth centuries for both sites are shown in Table 26, while Table 28 lists the fourth-century mint distribution for both assemblages.

THE VILLA SITE

Iron Age

Five Iron Age coins have been found at the villa. This site was situated within the tribal territory of the Catuvellauni. Two bronze issues of Cunobeline, ruler of that tribe between AD.10–40, were found. A single coin of Tasciovanus, the first ruler of the Catuvellauni between c.20 BC. and AD.10, was found during the 1973–78 excavations. The adjacent

tribe of the Trinovantes is also represented by a bronze issue of Addedomaros, who was their ruler at the end of the first century BC.

A Durotrigan bronze stater was found during the 1986 excavation, some considerable distance from the heart of the tribal territory of the Durotriges, which was centred on modern Dorset. However, a number of Durotrigan coins have been found at a similar distance from Dorset, in an arc stretching from the Cotswolds in the west, through to Surrey in the east (Cunliffe 1981, 87).

The two bronzes of Cunobelin are illustrated in Plate 71, 1–2.

Roman

The 409 coins excavated between 1983–86 came from four separate seasons of excavation, each on distinct areas of the site, and must be shown separately for the purposes of analysis. During the 1983 season, fifty-two coins were recovered from an area centred on the site of Building 1. Seventy-eight coins were found in 1984 in the main farmyard area (including Buildings 2, 3, 4 and 9). In 1985, 163 coins were recovered from areas to the north (Buildings 11 and 12) and east of the farmyard, while in 1986, 116 coins were found adjacent to the stream, east of the 1985 excavation (Building 10 and Enclosure 1208).

The coin numbers from those excavations are shown separately in Table 27, again by issue period. Although there are slight differences between the four collections, there are no major contrasts with the combined excavation figures shown in Table 22. Coin loss was remarkably uniform across the site as a whole, and there is no significant difference between the house and its surrounding farm. Minor differences between the combined figures shown in Table 22 and those in Table 27 are a slightly lower loss in issue period XIIIb (330–48), and a higher loss in period XVa (364–78), in 1983. In 1984, the percentage of period XIIIb coinage is somewhat higher, and for XVa it is lower.

The Pattern Of Coin Loss

The pattern of Roman coin loss from the major villa collections has been shown in the form of four histograms (Fig. 130). These summarise the villa coins from the 1973–78 and 1983–86 excavations, the combined villa coin assemblage, and the mausoleum coins, for comparison.

The 1982–86 villa coin list does not open until AD.71, when there is an *as* of Vespasian. The most striking feature of the

ISSUE	PERIOD	1973-78 EXCAVATIONS		1983-86 EXCAVATIONS		1982-85 RETURNEDFINDS		COMBINED	
		No.	%	No.	%	No.	%	No.	%
I	(to AD41)	—	—	—	—	—	—	—	—
II	(41-69)	—	—	—	—	—	—	—	—
III	(69-96)	—	—	3	0.5	—	—	3	0.3
IV	(96-117)	—	—	2	0.3	—	—	2	0.2
V	(117-38)	—	—	—	—	—	—	—	—
VI	(138-61)	—	—	1	0.2	—	—	1	0.1
VIIa	(161-80)	—	—	3	0.5	—	—	3	0.3
VIIb	(180-93)	—	—	—	—	—	—	—	—
VIII	(193-222)	—	—	—	—	—	—	—	—
IXa	(222-38)	—	—	1	0.2	—	—	1	0.1
IXb	(238-59)	1	0.4	1	0.2	—	—	2	0.2
X	(259-75)	7	2.7	21	3.5	4	5.1	32	3.5
XI	(275-94)	11	4.4	31	5.4	—	—	42	4.6
XII	(294-317)	1	0.4	2	0.3	—	—	3	0.3
XIIIa	(317-30)	22	8.8	58	10.0	4	5.1	84	9.3
XIIIb	(330-48)	166	67.4	281	48.0	53	68.0	500	55.2
XIV	(348-64)	12	4.8	77	13.3	6	7.7	95	10.5
XVa	(364-78)	18	7.2	84	14.5	11	14.1	113	12.6
XVb	(378-88)	—	—	3	0.5	—	—	3	0.3
XVI	(388-402)	10	4.0	13	2.3	—	—	23	2.5
		248		581		78		907	
Iron Age		1		3		1		5	
1st-2nd cent.		2		1		0		3	
3rd-4th cent.		31		60		10		101	
Illegible		2		4		1		7	
Post-Roman		0		1		1		2	
TOTAL		284		650		91		1025	

TABLE 22: Chronological summary of the villa finds.

combined site list is the very small number of finds which date from the early years of Roman Britain. Just three per cent of identifiable coins from the 1983-86 excavations date from prior to 259. There is a complete absence of pre-259 coinage from the metal detector collections, and just a single *as* from the 1973-78 excavations.

Coin numbers increase from all Romano-British sites after 259, coinciding with the use of small module, base metal *antoniniani* in the province generally. This increase in coin loss reflects the availability of small *aes* coins for everyday transactions, unlike earlier years when small *aes* (AE3/4) did not circulate in Britain. The increased coin loss at Bancroft in the late third century does not represent a high proportion of the overall assemblage, and is low by comparison with other sites in Britain (Reece 1972, fig. 1).

Coin loss at the villa remained low until the Constantinian period, but increased significantly after 317. The years between 317-78 saw much heavier coin loss, with exceptionally high loss between the years 330-48. It was to these same years that a hoard of seventy-six *folles* belongs, emphasising

the major period of occupation at the site (King 1981). A second, smaller hoard of sixteen *folles* found in 1984, although containing predominantly coins of this period, may have been deposited later (see below). Coin loss continued after 378, but was subsequently lighter, through to the end of the fourth century.

The overall pattern of coin loss is shared closely between the 1983-86 excavation finds, the 1973-78 finds, and the metal detector collections. The metal detector assemblages are completely representative of the excavated groups. The main episodes of coin loss, and the close similarity of the constituent collections, can be seen clearly by separating the coin numbers into four chronological phases, as employed by Reece (1984). The comparative totals are shown in Table 25. The percentage of coins before 259 (Phase A) is no more than three percent of any collection. There is a low but consistent percentage between 259 and 294 (Phase B). The percentages from 294 to 330 onwards (Phase D) dominate the assemblages in each case, ranging between 78% and 90% of the total. Reece has provided useful background data of British coin loss, against which new site collections can be com-

ISSUE	PERIOD	No.	%
I	(to AD41)	—	—
II	(41–69)	—	—
III	(69–96)	2	3.7
IV	(96–117)	—	—
V	(117–38)	—	—
VI	(138–61)	2	3.7
VIIa	(161–80)	—	—
VIIb	(180–93)	—	—
VIII	(193–222)	—	—
IXa	(222–38)	—	—
IXb	(238–59)	—	—
X	(259–75)	1	1.9
XI	(275–94)	1	1.9
XII	(294–317)	1	1.9
XIIIa	(317–30)	—	—
XIIIb	(330–48)	14	26.4
XIV	(348–64)	7	13.3
XVa	(364–78)	14	26.4
XVb	(378–88)	—	—
XVI	(388–402)	11	20.8
		53	
Iron Age		1	
1st–2nd cent.		0	
3rd–4th cent.		7	
Post–Roman		1	
TOTAL		62	

TABLE 23: Chronological summary of the mausoleum finds.

ISSUE	PERIOD	No.	%
I–IXb	(before AD259)	NO COINS	
X	(259–75)	11	5.2
XI	(275–94)	9	4.3
XII	(294–317)	1	0.5
XIIIa	(317–30)	21	10.0
XIIIb	(330–48)	111	52.6
XIV	(348–64)	24	11.4
XVa	(364–78)	27	12.8
XVb	(378–88)	2	0.9
XVI	(388–402)	5	2.4
		211	
Iron Age.		0	
1st–2nd cent.		1	
3rd–4th cent.		29	
TOTAL		241	

TABLE 24: Chronological summary of villa metal detector finds from 1983–86 excavations.

pared (1972 and 1984). A characteristic of rural sites has been to show that coins of Phase D heavily outnumber those of Phase B (Reece 1984, 11–12). Despite the very high percentage of Phase D coinage, the ratio of Phase D to Phase B shows Bancroft villa to lie within the typical range for Romano-British rural sites in this respect.

Comparison With Other Sites

The pattern of coin loss recorded from Bancroft villa compares closely with that from other excavated villas in Britain. The low volume of coin loss up to the mid third century has been recorded from other villa sites, notably in the west of Britain, including Barnsley Park, Frocester, Chedworth (Glos.) and Atworth (Wilts.) (Reece, forthcoming), and Witcombe (Davies, forthcoming). The very sizeable mid-Constantinian peak of coin loss is also found at Barnsley Park, Gatcombe (Avon), Rockbourne, and Chilgrove (W. Sussex), exceeding 45% of identifiable coins at each of them (Reece, forthcoming).

The late fourth-century coin loss at Bancroft contrasts with the situation recorded from villas to the south-east, in Hertfordshire. Known country houses in the Verulamium area were abandoned earlier in the fourth century. At Gadebridge and Boxmoor occupation ended soon after 350, and after 364 at Northchurch and Park Street, while Gorhambury was in decline before the reign of Magnentius, *ie.* 340–45 (Neal 1978, 52).

The 1984 Coin Hoard

This group of sixteen coins (Table 30) was found in Pit 637, located in the farmyard area to the north of Building 2. There was no evidence of a container, but the pit also contained a large quantity of fourth-century pottery, representing at least six different vessels (Fig. 289.1096–1105). Also present was a zoomorphic brooch (Fig. 137.55).

The date range of the coins is between 321 and 364, although eleven form a more cohesive group of *folles*, of the years 332–48. Although a hoard consisting of all sixteen coins and buried sometime between 354–64 is entirely possible, it is also possible that some of the issues may be intrusive. In either case, this is a very small mid fourth-century hoard, and deposits of that date frequently total several thousand coins.

The chronological distribution of the coins in question is summarised in Table 29. This date range closely resembles that seen in a group of hoards from Coleshill, Appleford, Rheinzabern and Metternich, in which approximately 60% of the coins of the years 330–48 are of the Two Victories type (Burnett 1979, 44). However, those hoards are much larger, containing between 1700 and 4050 coins each.

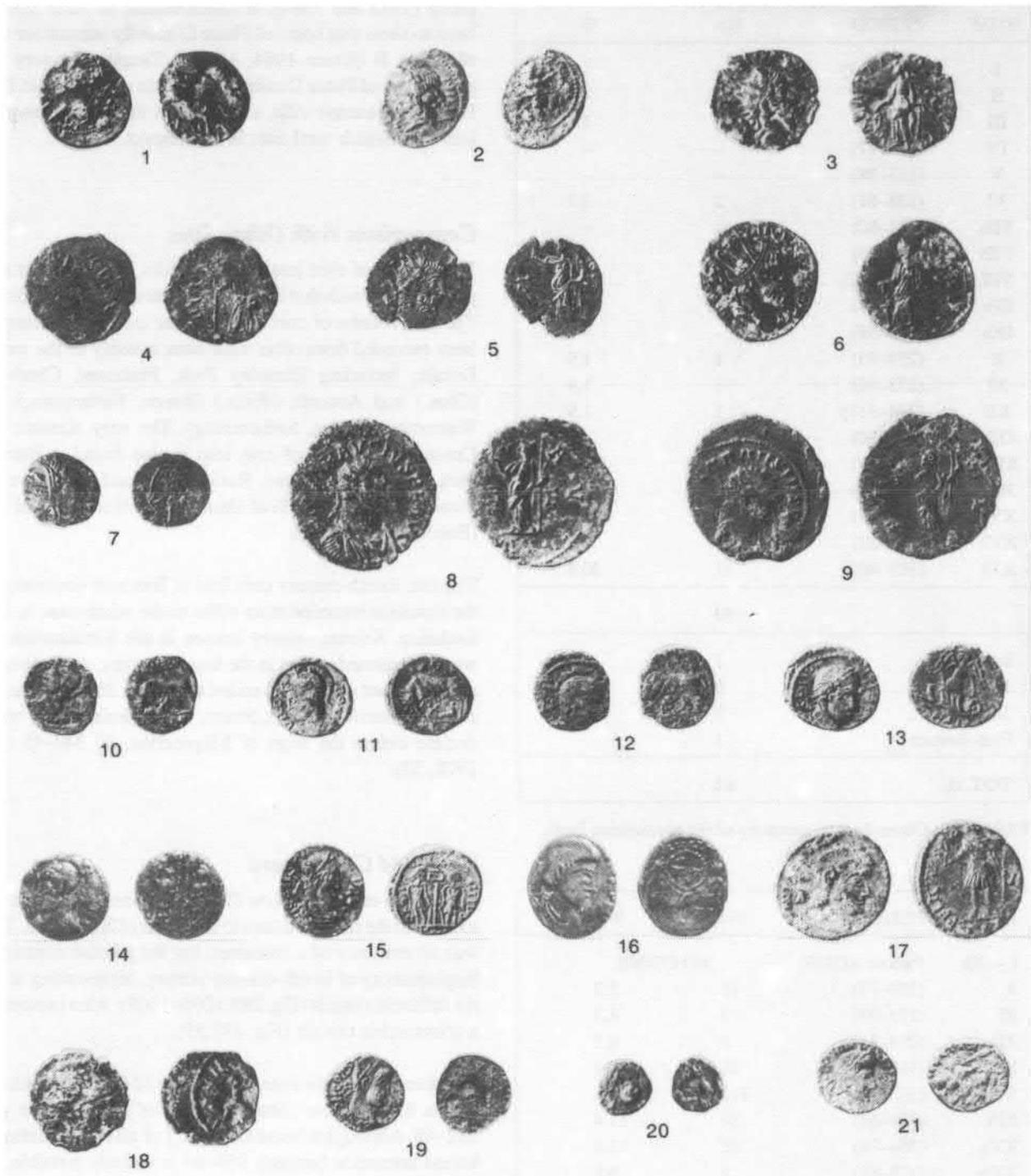


Plate 71: A selection of Iron Age and Roman copper-alloy coins from the 'mausoleum' and villa sites (*scale 1:1*).

KEY TO PLATE 71

(V = Villa finds, M = Mausoleum finds)

IRON AGE

- 1 Cunobelin (V1,SF436)
- 2 Cunobelin (V2,SF220)

BARBAROUS RADIATES

- 3 Tetricus I, *Laetitia Avg* (V48,SF1234)
- 4 Tetricus I, *Fides Militvm* (V54,SF229)
- 5 Tetricus I, *Pax Avg* (V49,SF1097)
- 6 Victorinus, *Pietas Avg* (V47,SF356)
- 7 Tetricus II, *Spes Avgg* (V64,SF1348)

CARAUSIUS

- 8 *Pax Avg* (V39,SF1115)
- 9 *Pax Avg* (V40,SF319)

FOURTH CENTURY

- 10 *Vrbs Roma* (V327,SF1264)
- 11 *Vrbs Roma* (V332,SF557)
- 12 Obv. House of Constantine, Rev. Wolf and twins (V323,SF1335)
- 13 Obv. House of Constantine, Rev. Victory on prow (V337,SF400)
- 14 Obv. *Constantinopolis*, Rev. *Gloria Exercitvs*, 2 standards (M19,SF45)
- 15 House of Constantine, *Gloria Exercitvs*, 1 standard (V358,SF1263)
- 16 Magnentius, *Victoriae DD Avg et Caes* (M27,SF140)

- 17 Magnentius, *Felicitas Reipvblice* (V443,SF495)
- 18 *Fel Temp Reparatio*, fallen horseman, overstruck on *Constantinopolis* (V454,SF500)
- 19 Fallen horseman (V450,SF410)
- 20 Fallen horseman (V452,SF475)
- 21 Fallen horseman (V471,SF961)

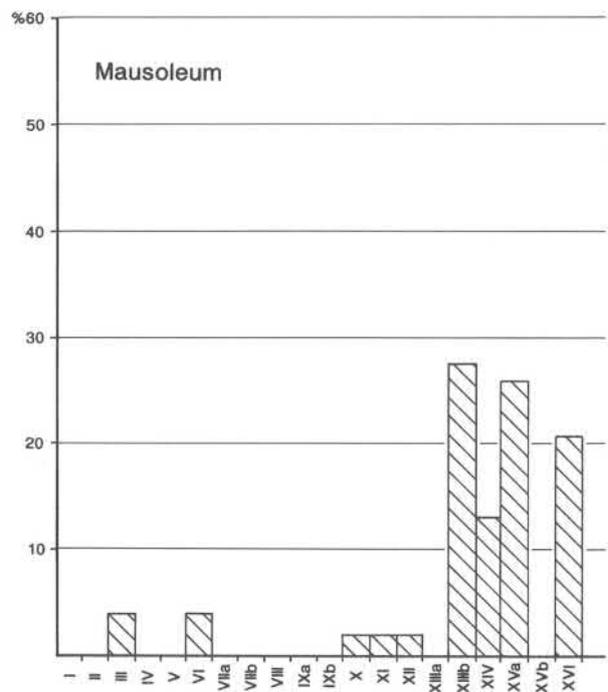
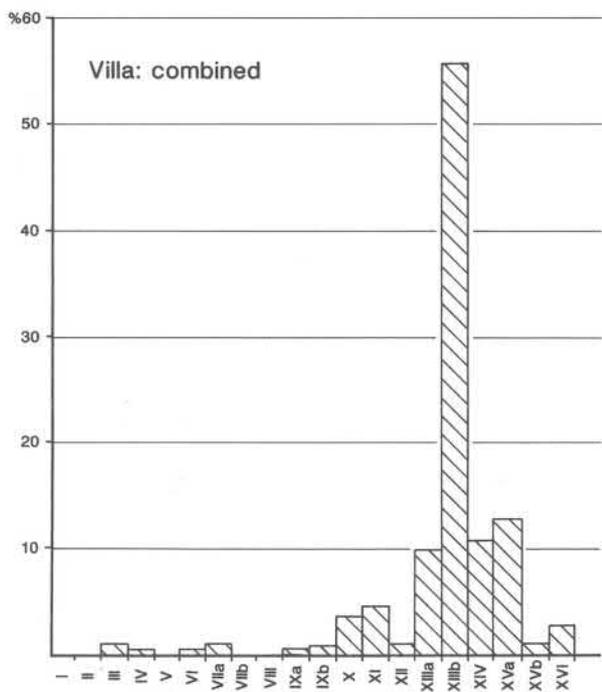
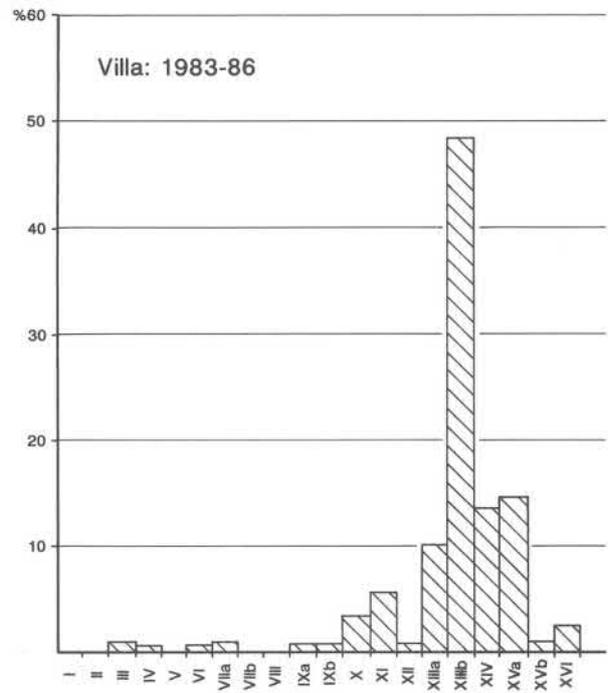
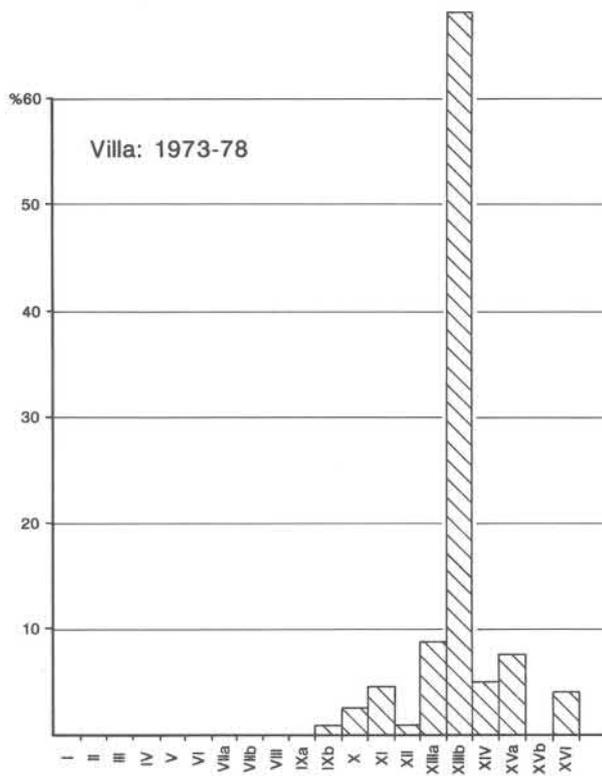


Figure 130: Histograms of the pattern of coin loss by issue periods for the various villa and 'mausoleum' site coin assemblages.

	1973-78 FINDS		1983-86 FINDS		1982-86 RETURNED FINDS		COMBINED	
	No.	%	No.	%	No.	%	No.	%
PHASE A (to AD 259)	1	0.4	11	1.9	–	–	12	1.4
PHASE B (259-294)	18	7.3	52	9.0	4	5.1	74	8.6
PHASE C (294-330)	33	8.9	60	10.3	4	5.1	87	10.0
PHASE D (330-402)	206	83.4	458	78.8	70	89.8	734	80.0

TABLE 25: Relative numbers of villa coins, separated into four phases.

ISSUE	PERIOD	1983		1984		1985		1986		COMBINED	
		No.	%	No.	%	No.	%	No.	%	No.	%
I	(to AD 41)	–	–	–	–	–	–	–	–	–	–
II	(41-69)	–	–	–	–	–	–	–	–	–	–
III	(69-96)	–	–	2	2.6	1	0.7	–	–	3	0.8
IV	(96-117)	–	–	–	–	2	1.4	–	–	2	0.5
V	(117-38)	–	–	–	–	–	–	–	–	–	–
VI	(138-61)	–	–	–	–	1	0.7	–	–	1	0.3
VIIa	(161-80)	1	2.0	1	1.3	1	0.7	–	–	3	0.8
VIIb	(180-93)	–	–	–	–	–	–	–	–	–	–
VIII	(193-222)	–	–	–	–	–	–	–	–	–	–
IXa	(222-38)	–	–	1	1.3	–	–	–	–	1	0.3
Xb	(238-59)	–	–	1	1.3	–	–	–	–	1	0.3
X	(259-75)	–	–	1	1.3	6	4.3	3	2.9	10	2.7
XI	(275-94)	6	12.0	4	5.2	5	3.6	7	6.7	22	6.0
XII	(294-317)	1	2.0	–	–	–	–	–	–	1	0.3
XIIIa	(317-30)	5	10.0	9	11.7	12	8.7	11	10.6	37	10.0
XIIIb	(330-48)	21	40.0	43	55.8	60	43.5	46	44.2	170	45.8
XIV	(348-64)	6	12.0	8	10.4	26	18.8	13	12.5	53	14.4
XVa	(364-78)	10	20.0	6	7.8	21	15.2	20	19.2	57	15.5
XVb	(378-88)	–	–	–	–	–	–	1	1.0	1	0.3
XVI	(388-402)	1	2.0	1	1.3	3	2.2	3	2.9	8	2.2
		51		77		138		104		370	
Iron Age		1		1		0		1		3	
1st-2nd cent.		0		0		0		0		0	
3rd-4th cent.		0		0		22		9		31	
Illegible		0		0		1		3		4	
Post-Roman		0		0		1		0		1	
TOTAL		52		78		162		117		409	

TABLE 27: Summary of coin numbers from the 1983-86 villa excavations (excludes detector finds).

THE MAUSOLEUM SITE

The pattern of coin loss from the mausoleum site has differences from that defined for the main villa collections. A total of sixty-two coins were recovered from the site, both from excavation and from metal detecting carried out in a similar way to that undertaken on the villa. These coins are summarised chronologically in Table 23, and are represented by a histogram in Fig. 130. A detailed list of the coins appears in Appendix 3,v.

There is a single Iron Age coin in the mausoleum assemblage. Roman coin loss started at the same time as the villa, again with *asses* of Vespasian. Mid second-century coins are also present, in common with the villa site. However, the proportion of these earlier types is greater than from the vicinity of the house.

Subsequent loss trends correspond to those noted from the villa coins. Loss became more regular after 260, but re-

ISSUE	PERIOD	REGULAR		IRREGULAR		TOTAL
		No.	%	No.	%	
XI	(275–94)	8	25	24	75	32
XII	(294–317)	3	100	0	–	3
XIIIa	(317–30)	58	100	0	–	58
XIIIb	(330–48)	185	62	112	38	297
XIV	(348–64)	36	43	48	57	84
XVa	(364–78)	97	98	2	2	99
XVb	(378–88)	3	100	0	–	3
XVI	(388–402)	24	100	0	–	24

TABLE 26: Relative numbers of regular and irregular coins: late third and fourth centuries. Includes all finds, 1983–86, villa and mausoleum.

	XII		XIIIa		XIIIb		XIV		XVa		XVb		XVI	
	294–317		317–330		330–348		348–364		364–378		378–388		388–402	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
London	1	50.0	10	21.7	–	–	–	–	–	–	–	–	–	–
Amiens	–	–	–	–	–	–	6	27.3	–	–	–	–	–	–
Trier	–	–	25	54.3	91	79.1	11	50.0	–	–	–	–	–	–
Lyons	1	50.0	3	6.5	10	8.7	3	13.6	14	25.9	1	50.0	–	–
Arles	–	–	4	8.7	8	7.0	–	–	31	57.4	–	–	7	70.0
Rome	–	–	1	2.2	2	1.8	1	4.5	–	–	1	50.0	–	–
Aquileia	–	–	1	2.2	–	–	–	–	6	11.1	–	–	3	30.0
Siscia	–	–	1	2.2	1	0.9	1	4.5	3	5.6	–	–	–	–
Heraclea	–	–	1	2.2	1	0.9	–	–	–	–	–	–	–	–
Const'inople	–	–	–	–	2	1.8	–	–	–	–	–	–	–	–
Total identifiable	2		46		115		22		54		2		10	
Uncertain mint	1		12		70		14		43		1		14	
Irregular:	as Trier				25		3		0					
	as Lyons				10		1		0					
	as Arles				2		1		1					
	unidentifiable				76		43		1					

TABLE 28: Fourth-century mint distribution, from villa and mausoleum coins, 1983–86 (excluding returned metal detector finds).

mained light until the Constantinian period, when it increased substantially. Heavy loss continued through the Valentinianic period. The second contrast with the villa coins comes at the end of the fourth century, when coin loss was appreciably heavier than at the villa.

The spatial distribution of the coins from the site also deserves comment. Over 50% (29) of the identifiable coin assemblage on the site was recovered from the area of the circular shrine (p.107), twenty coins from stratified contexts within the building and nine from the fieldwalking and detector survey prior to excavation. Taken as a votive deposit, this group spans the period 330–402, distributed as shown in Table 31.

From this evidence it appears that the shrine was constructed about 340, and remained in use into the early years of the fifth century. Indeed, from the coin distribution, the shrine was the focal point of activity on the site in the last two decades of the fourth century.

Also worthy of comment is the single coin (Appendix 3v, no.10) recovered from the lower rubble fill (Context 68) of the *cella* of the temple-mausoleum. This was a relatively unworn bronze of Constantine I, dated to 332–33, probably lost not many years after its issue date. Whilst the evidence of a single coin must be treated with some reservation, it does suggest that the date for the demolition of the temple-mausoleum could be about 340.

<i>Issue period</i>	<i>% present</i>	<i>No. present</i>
320–330	6.3	1
330–335	6.3	1
335–341	12.5	2
341–346	6.3	1
347–348	43.8	7
350–364	25.0	4

TABLE 29: Chronological distribution by issue period of the coins in the 1984 coin hoard.

<i>Issue period</i>	<i>date</i>	<i>No.</i>	<i>%</i>
XIIIb	330–48	7	24.1
XIV	348–64	5	17.3
XVa	364–78	7	24.1
XVb	378–88	–	–
XVI	388–402	10	34.5

TABLE 31: Chronological distribution by issue period of the twenty-nine coins from Shrine 15 on the mausoleum site.

<i>No</i>	<i>Issuer</i>	<i>Type</i>	<i>Denom.</i>	<i>Ref.</i>	<i>Date</i>	<i>Mint</i>	<i>Dia.</i>	<i>Cat.no</i>
1	Constantine II	DN CONSTANTINI MAX AVG,VOT/XX	Fol.	RIC7: obv. as 232, rev. as 228	321	Arles	18	108
2	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:537	332–33	Trier	16	148
3	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	RIC7:590	335–37	Trier	16	168
4	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:186	347–48	Trier	17	192
5	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:186	347–48	Trier	15	193
6	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:195	347–48	Trier	16	198
7	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:196	347–48	Trier	14	202
8	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:84	347–48	Rome	17	231
9	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	–	335–37	–	15	268
10	H. of Constantine	Victory on prow Hybrid	Irreg.	–	341–46	–	16	337
11	Constans	VICTORIAE DD AVGG Q NN	Irreg.	As RIC8:77	347–48	As Arles	15	401
12	H. of Constantine	VICTORIAE DD AVGG Q NN	Irreg.	–	347–48	–	12	404
13	Magnentius	VICTORIAE DD NN AVG ET CAE	–	RIC8:125	350–53	Lyons	16	426
14	Magnentius/Decentius	SALVS DD NN AVG ET CAES	–	–	351–53	–	22	433
15	H. of Constantine	FEL TEMP REPARATIO, FH	Irreg.	–	354–64	–	8	449
16	Constantius II	FEL TEMP REPARATIO, FH	Irreg.	As RIC8:189	354–64	As Lyons	13	450

TABLE 30: Catalogue of the coins from the 1984 hoard.

SUMMARY CATALOGUE, VILLA AND MAUSOLEUM

(Excludes 1982 metal detector finds)

IRON AGE

- | | | |
|---|-------------|----------------|
| 2 | Cunobelin | Mack: 242,248. |
| 1 | Addedomaros | Mack: 273. |
| 1 | Durotriges | Mack: 318. |

PERIOD III, AD 69–96

- | | | |
|---|-----------|--|
| 3 | VESPASIAN | RIC 2: 486, as 764.
BMC 2: as 810. |
| 2 | DOMITIAN | RIC 2: 326a, indet. <i>dupondius</i> . |

PERIOD IV, AD 96–117

- | | | |
|---|--------|--|
| 2 | TRAJAN | RIC 2: 459, indet. <i>sestertius</i> . |
|---|--------|--|

PERIOD VI, AD 138–161

- | | | |
|---|----------------|--------------|
| 1 | ANTONINUS PIUS | RIC 3: 22. |
| 1 | Faustina I | RIC 3: 1091. |
| 1 | Faustina II | RIC 3: 1405. |

PERIOD VIIa, AD 161–180

- | | | |
|---|-----------------|--|
| 2 | MARCUS AURELIUS | RIC 3: 962, indet. <i>sestertius</i> . |
| 1 | Faustina II | RIC 3: as 1408. |

PERIOD IXa, AD 222–238

- | | | |
|---|-------------------|---------------|
| 1 | SEVERUS ALEXANDER | RIC 4: as 32. |
|---|-------------------|---------------|

PERIOD IXb, AD 238–259

- | | | |
|---|----------|------------------------------|
| 1 | Salonina | Indet. <i>antoninianus</i> . |
|---|----------|------------------------------|

PERIOD X, AD 259–275

- | | | |
|---|-------------|--|
| 4 | GALLIENUS | RIC 5: as 159, as 280, indet. <i>antoninianus</i> (2) |
| 6 | CLAUDIUS II | RIC 5: 15, as 87, 100, 109, as 110.
Robertson: 33. |
| 1 | POSTUMUS | Elmer: 299. |
| 6 | VICTORINUS | Elmer: 653, 654, 683, 741, 743, indet. <i>antoninianus</i> . |
| 4 | TETRICUS I | Elmer: 765, 771 (2), as 786. |
| 1 | | Indet. <i>antoninianus</i> . |

PERIOD XI, AD 275–294

- | | | |
|----|--------------------|---|
| 1 | TACITUS | RIC 5: 121. |
| 1 | PROBUS | RIC 5: as 183. |
| 4 | CARAUSIUS | RIC 5: 121, indet. <i>antoninianus</i> (2), irregular <i>antoninianus</i> . |
| 2 | ALLECTUS | RIC 5: 32, as 66. |
| 24 | Barbarous radiates | Claudius II (1); <i>Divo Claudio</i> (1), Victorinus – <i>Invictus, Pietas Aug</i> ; Tetricus I/II – <i>Fides Militum, Hilaritas Aug, Laetitia Avg, Pax Avg</i> (4), <i>Salus Avgg, Spes</i> (6), <i>Victoria Avg</i> (2), indet.; illeg., (3). |

PERIOD XII, AD 294–317

- | | | |
|---|-----------------|----------------------------------|
| 1 | RIC 6, London | 127. |
| 1 | RIC 6, Lyons | 259. |
| 1 | Uncertain mint: | CI, <i>Soli Invicto Comiti</i> . |

PERIOD XIIIa, AD 317–330

10	RIC 7, London	159, 191, as 215, as 239, 257, 258, 279, 287, 292, 296.
3	RIC 7, Lyons	129, 133, as 133.
25	RIC 7, Trier	134, 209, as 209, 264, 300, 303, 327, 368 (2), 369, as 371, 429, 439, as 439, 441 (2), 452, as 454, 456, 461, 475, 479, 484, 504 (2).
4	RIC 7, Arles	232/228, as 269, 305, 313.
1	RIC 7, Rome	287.
1	RIC7, Aquileia	79.
1	RIC 7, Siscia	132.
1	RIC 7, Heraclea	100.
12	Uncertain mint:	CI, BT (3); Crispus, BT; H of C, BT (2); CI, <i>Sarmatia Devicta</i> ; H of C, <i>Caesarvm Nostrorvm</i> ; CII, <i>Providentiae Caess</i> ; H of C, <i>Providentiae Augg/Caess</i> (3).

PERIOD XIIIb, AD 330–348

49	RIC 7, Trier	518 (2), 520 (2), as 520, 521, as 521, as 522, 523, as 523, 525, as 525, 527 (4), 528, 529, 530 (3), 537 (3), as 537, 539 (2), 542 (3), 543 (2), as 543, 545, 547, 548, as 555, 559, 561, 586, as 586 (2), 589, as 590 (2), 592, as 592 (2).
42	RIC 8, Trier	55, 56, 78 (3), as 78, 79, 81, 83, 91, 102 (2), as 180, 182 (2), as 182, 183, as 183, 184, 186 (5), 188, 195 (2), as 195 (2), 196 (5), as 197, 198, as 199, as 203, 204, 205, 206, 210, as 236, 247, 252, 263, 266, 270, 281.
7	RIC 7, Lyons	44, as 62.
2	RIC 8, Lyons	H of C, GE2.
1	Illeg., Lyons	347, 350, 370, 372, 383, 392.
6	RIC 7, Arles	56 (2).
2	RIC 8, Arles	354.
1	RIC 7, Rome	84.
1	RIC 8, Rome	237.
1	RIC 7, Siscia	111.
1	RIC 7, Heraclea	21, 22.
2	RIC 8, Const'inople	H of C, GE2 (15); H of C, GE1 (24); H of C, GE? (2); Cp (5); VR (4); Helena, PP (3); Theodora, PR (2); H of C, 2V (14).
69	Uncertain mints:	H of C, GE2 (22); H of C, GE1 (37); Cp (19), VR (13); Helena, PP; Theodora, PR; H of C, 2V (14); H of C, illeg.
112	Irregular:	
2V	(14); H of C, illeg.	<i>Hybrids</i> : H of C/Cp; H of C/VR; Cp/GE2; Cp/VR.

PERIOD XIV, AD 348–364

6	RIC 8, Amiens	9, 11, 17, 27, 31, 34.
11	RIC 8, Trier	212, 219, 226 (20), as 226, 228 (2), 232, 233, 234, 260.
3	RIC 8, Lyons	125, 183, 192.
1	RIC 8, Rome	140.
1	RIC 8, Siscia	as 350.
14	Uncertain mints:	H of C, FTR, galley; H of C, FTR, hut (2), H of C, FTR, FH (3); Magnentius/Decentius, <i>Salus DD NN Aug et Caes</i> (3); Magnentius/Decentius, other (3); Julian Augustus, VOT/X/MVLT/XX; H of C, legend within wreath.
48	Irregular:	Cs II, FTR, galley (2); Magnentius (5); H of C, FTR, FH (41).

PERIOD XVa, AD 364–378

14	RIC 9, Lyons	as 10a, 20a (5), as 20a, 20c; VI, GR (2); H of V, GR (2); Valens, SR; H of V, SR.
30	RIC 9, Arles	7a (3), as 7a (2), as 9, as 9a (2), 9b, as 9b, 15 (7), 16a (3), 16b, 17b, 19a, as 19a, 19b (2), 19c; VI, GR; VI, SR; H of V, SR.
6	RIC 9, Aquileia	2b, 11a (2), as 11a, 12b (2).
3	RIC 9, Siscia	14a, as 14a, 15b.
43	Uncertain mints:	GR (18); SR (22); GR/SR (2); illeg.
2	Irregular:	Valens, SR; VI, GR.

PERIOD XVb, AD 378–388

1	RIC 9, Lyons	30.
1	RIC 9, Rome	65.
1	Uncertain mint:	Gratian, VOT/XV/MVLT/XX.

PERIOD XVI, AD 388–402

7	RIC 9, Arles	30, as 30 (4), 30d, as 30e.
3	RIC 9, Aquileia	58, 58a; H of T, SR.
13	Uncertain mints:	H of T, <i>Victoria Auggg</i> (8); H of T, <i>Salus Reipublicae</i> (3); H of T, illeg. (3).

OTHER ROMAN COINS

1	Illegible 1st – 2nd century.
67	Illegible 3rd – 4th century.
4	Uncertain.

POST-ROMAN ITEMS

1	Nuremburg jetton.
1	Charles I, Rose Farthing token.

Reference works cited in catalogue:

Mack	Mack, R.P., <i>The Coinage of Ancient Britain</i> , London (1953).
RIC 1–9	Mattingly, H., Sydenham, E.A., Sutherland, C.H.V. and Carson, R.A.G., <i>Roman Imperial Coinage</i> , London (1923 ff).
BMC	Mattingly, H., <i>Coins of the Roman Empire in the British Museum</i> , vol. 2, London (1930).
Robertson	Robertson, A.S., <i>Roman Imperial Coins in the Hunter Coin Cabinet IV, Valerian to Allectus</i> , Oxford.
Elmer	Elmer, G., 'Die Münzprägung der gallischen Kaiser in Köln, Trier und Mailand', <i>Bonner Jahrbucher</i> 146 (1941), 1–106.

Abbreviations used:

	CI	Constantine I		
CII	Constantine II	VR	<i>Vrbs Roma</i>	
Cs II	Constantius II	2V	<i>Victoriae DD Avgg Q NN</i>	
H of C	House of Constantine	PP	<i>Pax Pvblica</i>	
VI	Valentinian I	PR	<i>Pietas Romana</i>	
H of V	House of Valentinian	FTR	<i>Fel Temp Reparatio</i>	
H of T	House of Theodosius	FH	Fallen Horseman	
BT	<i>Beata Tranquillitas</i>	GR	<i>Gloria Romanorum</i>	
GE2/1	<i>Gloria Exercitus</i> , 2 or 1 standards	SR	<i>Secvritas Reipvblicae</i>	
Cp	<i>Constantinopolis</i>			

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The Artefacts

INTRODUCTION

Excavations at Bancroft produced a wealth of artefacts relating to all facets of life on both sites. The reports which follow cover in detail a selection of those assemblages; a full catalogue is retained in the site archives.

On site, objects were catalogued irrespective of type in single numerical small-find sequences, one for each site, on object record sheets based on those developed by the Central Excavation Unit. These sheets were designed for input into the 'Delilah' computer database system, but lack of time and (at the time) the necessary hardware prevented this.

The conventions used in this volume for describing the various categories of finds are broadly similar to those used in other Milton Keynes reports (eg. Mynard and Zeepvat 1992; Williams 1993). Following the description of each object are details of its site catalogue number and provenance. These are abbreviated, and can be translated as follows:

V/91/52; destruction, Building 6.

Villa/object no. 91/context 52; context description.

Objects from the mausoleum site are prefixed 'M'.

Objects prefixed 'NI/ni' are not illustrated. The following abbreviations are used in the text:

dia.	diameter	ext.	exterior
g.	grammes	int.	interior
th.	thickness	max.	maximum

All measurements are given in metric units.

Table 32 (below *et. seq.*) lists the illustrated artefacts in relation to their provenance and phasing. It should be stressed that the phasing relates to the date of the context in which objects were found, and not to the date of the object. Further related information appears in Appendix 4, which lists objects by context, and Appendix 5, which lists them by phase (see above note).

TABLE 32

Catalogue of the illustrated artefacts (1-450) by site, in publication number sequence with the relevant context number and period/phase information added.

	<i>Publ. No.</i>	<i>Cntx. No.</i>	<i>Phase No.</i>
MK343			
Leather shoes	409	1	?
	410	2	?
MK345			
Copper alloy nail cleaner	113	†	3I
THE MAUSOLEUM			
<i>Brooches</i>			
Colchester brooches	1	465	2b/3I
	2	601	2b
	3	508	2b/3I
	4	1	?
	5	60	3I
	6	879	3I
	7	600	?
Colchester derivative brooches	8	1	?
	9	831	2b
Headstud brooch	10	60	3I
Late La Tène type brooches	11	21	3V
	12	1	?
	13	815	4
	14	177	2b/3I
	15	176	2b/3I

	<i>Publ. No.</i>	<i>Cntx. No.</i>	<i>Phase No.</i>
Rosette brooches	16	465	2b/3I
	17	465	2b/3I
Langton Down brooches	18	421	3II
	19	147	3V
	20	465	2b/3I
	21	508	2b/3I
	22	885	3I
Unclassified brooches	23	512	2b/3I
	24	512	2b/3I
Aesica brooch	25	600	?
Hod Hill brooches	26	601	2b
	27	1	?
Plate brooches	28	518	2b/3I
	29	465	2b/3I
	30	1	?
Penannular brooch	31	56	3V
Unclassified brooch	32	518	2b/3I
<i>Copper alloy objects (unless otherwise stated)</i>			
'D' section bracelets	67	39	3I
	68	150	3II
	69	45	3I
Silver ring	86	†	?
Hairpins	105	39	3I
Nail cleaner	112	465	2b/3I
Tweezers	117	711	3I
Ligula	121	879	3I
Vessel foot?	138	1	?

	<i>Publ.</i> <i>No.</i>	<i>Cntx.</i> <i>No.</i>	<i>Phase</i> <i>No.</i>
Hollow rivet?	145	465	2b/3I
Strap/button-and-loop fastener	146	1	?
Button	149	1	?
Horse pendant	152	1	?
Mount?	164	469	2b/3I
Mount?	165	469	2b/3I
Iron objects			
Latch lifter	192	465	2b/3I
Key	200	73	3II/3III
Key	201	73	3II/3III
Bucket handle mount	206	37	3I
Cauldron hook	210	603	3I
Knives	212	830	2b
	213	39	3I
	225	512	2b/3I
Loop-headed spike	235	421	3II
Spear/boltheads	251	1	?
	252	39	3I
	253	39	3I
	254	1	?
	255	1	?
	256	45	3I
	257	1	?
	258	5	3II
	259	815	4
	260	1	?
	261	427	3II
	262	1	?
	263	49	3V
	264	56	3V
	265	1	?
Sockets	266	1	?
	267	1	?
	268	1	?
Collar ferrule	283	21	3V
Unidentified	299	465	2b/3I
Coffin nails	300	145	4
	301	159	4
	302	460	3V
	303	460	3V
	304	460	3V
Lead objects			
Steelyard weight	308	600	?
Bone objects			
Comb	336	70	3II/3III
Tube	343	472	4
Glass			
Beads	379	463	2b/3I
	381	465	2b/3I
	382	465	2b/3I
	383	195	3I
	385	44	3I
	387	39	3I
Pottery objects			
Disc	391	765	4
Graffito sherd	392	94	4
Fired clay			
Mould fragment	393	433	1b
Daub	394	278	1b
Disc	395	390	1b
Cylindrical weight	396	303	1b

	<i>Publ.</i> <i>No.</i>	<i>Cntx.</i> <i>No.</i>	<i>Phase</i> <i>No.</i>
Triangular weight	397	176	2b
Plate/kiln bar	398	181	3I
Plate	399	196	2b
Perforated plates	400	595	2b
	401	176	2b
	402	155	2b
Unidentified	403	152	3I
Stone objects			
Gaming board	418	431	4
Bangle	420	437	1b
Mace head	424	1	?
Spindle whorls	425	197	2b
	426	815	4
	427	726	4
	428	176	2b
	429	506	2b
Saddle querns	432	485	3I
	433	275	1b
Rotary querns	434	149	3I
	435	589	2a
Worked flints			
Scrapers	440	1	?
	441	38	?
	442	126	2a
THE VILLA			
Brooches			
Colchester brooches	33	457	3IV
	34	†	?
	35	†	?
	36	†	?
	37	737	3IV
Colchester derivative brooches	38	737	3IV
	39	†	?
	40	†	?
	41	822	3IV
	42	†	?
	43	†	?
	44	288	3V
	45	1004	3II
Late La Tène type brooch	46	372	3IV
Langton Down brooch	47	417	3/II
Aucissa-Hod Hill brooches	48	834	3II
	49	663	3V?
	50	736	3V
	51	†	?
Plate brooch	52	†	?
Penannular brooches	53	504	3II/III
	54	965	3II
	55	637	3V
Small long-brooch	55a	†	?
Copper alloy objects (unless otherwise stated)			
Ribbon-strip bracelets	56	89	3V
	57	†	?
	58	735	3V
	59	466	3V
	60	1069	3V
	61	736	3V
	62	1071	3V
	63	1	?
	64	52	3V
	65	466	3V
	66	866	3IV
'D' section bracelet	70	†	?

	<i>Publ.</i> <i>No.</i>	<i>Cntx.</i> <i>No.</i>	<i>Phase</i> <i>No.</i>
Crenellated bracelets	71	76	4
	72	637	3V
	73	928	3V
Cable bracelets	74	54	3II
	75	735	3V
	76	931	?
Ribbon-strip rings	77	52	3V
	78	23	4
	79	72	3V
	80	†	?
	81	78	3IV
	82	1002	3II
Crenellated rings	83	736	3V
	84	737	3V
Bezel rings	85	675	3I
Plain round rings	87	†	?
	88	262	3I
	89	824	3II
	90	551	3V
	91	†	?
Split rings	92	360	?
	93	736	3V
	94	954	3IV
Earrings	95	512	3V
	96	607	3V
Buckles	97	†	?
	98	1	?
	99	†	?
	100	†	?
	101	†	?
	102	†	?
	103	†	?
	104	1091	3V
Hairpins	106	551	3V
	107	504	3II
	108	736	3V
	109	207	3II
Nail cleaners	110	1105	3V
	111	466	3V
Tweezers	114	1	?
	115	824	3II
	116	1105	3V
Toilet spoons	118	931	?
	119	909	3V
Ligula	120	504	3II
Needles	122	626	?
	123	462	3III
	124	362	3V
Pins	125	1000	?
	126	185	3V
Seal box lid	127	†	?
Spoons	128	1	3v
	129	52	3v
	130	901	3v
	131	207	3II
Skillet handle	132	66	3V
Vessel foot	133	339	3V
Escutcheon	134	459	4
Sheet fragment	135	607	3V
Handle	136	†	?
Handle fitting	137	†	?
Chains	139	781	3IV
	140	1191	3V
Boss	141	62	3V
Studs	142	1105	3V
	143	604	?
	144	†	?

	<i>Publ.</i> <i>No.</i>	<i>Cntx.</i> <i>No.</i>	<i>Phase</i> <i>No.</i>
Garter hook	147	†	?
Button	148	†	?
Harness fittings	150	1004	3II
	151	†	?
	153	525	3I
Miscellaneous objects	154	815	3V
	155	899	3V
	156	†	?
	157	736	3V
	158	176	4
	159	7	4
	160	735	3V
	161	551	3V
	162	737	3V
	163	626	?
Cockerel figurine	166	1	?
<i>Iron objects</i>			
Woodworking saws	167	1004	3II
	168	1002	3II
Chisels	169	11	3V
	170	573	3V
Drill bit	171	1069	3V
Awls	172	62	3V
	173	384	3II
	174	181	3III
Adze/axe blade	175	197	3II
Socketed tools	176	1	?
	177	207	3II
Reaping hooks	178	1004	3II
	179	27	3II
Small hooks	180	834	3II
	181	27	3II
Sickles	182	27	3II
Scythes	183	675	3I
Shears	184	777	3V
Pitch fork	185	1	?
'U' shaped object	186	616	?
Bridle bit	187	834	3II
Linch pins	188	834	?
	189	739	3IV
	190	910	3III
Locks and keys	191	1053	3IV
	193	461	3V
	194	735	3V
	195	12	3V
	196	735	3V
	197	625	3II
	198	735	3V
	199	736	3V
Socketed hook	202	735	3V
Flesh hook?	203	735	3V
Pendant candleholder	204	1061	4?
Bucket handle	205	910	3III
Barrel hoop	207	1004	3II
Swivel loop	208	496	3V
Swivel hook	209	1116	3V
Window grille	211	1069	?
Knives	214	910	3IV
	215	496	3V
	216	735	3V
	217	23	4
	218	637	3V
	219	737	3V
	220	1	?
	221	231	3IV
	222	424	3II?

	<i>Publ. No.</i>	<i>Cntx. No.</i>	<i>Phase No.</i>
	223	461	3V
	224	763	3IV/V
	226	496	3V
Water-pipe collars	227	218	3V?
	228	218	3V?
	229	461	3V
Ring-headed pin	230	504	3II
Wall hook	231	68	3II
Hooks	232	182	4
	233	735	3V
Loop-headed spike	234	901	3V
'T' staples	236	736	3V
	237	66	3V
Joiners dogs	238	881	3I
	239	910	3IV
	240	813	3V
	241	332	3V
Cleat	242	926	3V
Double spiked loops	243	735	3V
	244	736	3V
	245	964	3II
Spearheads	246	735	3V
	247	735	3V
	248	544	3V
Catapult boltheads	249	347	3II
	250	573	3V
Childs bracelet?	269	1004	3II
Finger ring	270	551	3V
Buckles	271	601	3II
	272	735	3V
	273	735	3V
Styli	274	805	3IV
	275	555	3V
	276	895	3V
	277	559	3V
Ferrules	278	618	?
	279	769	3IV
	280	931	3V
	281	1	?
	282	355	3I
Rings	284	496	3V
	285	901	3V
	286	1117	3II
	287	637	3V
'L' shaped bracket	288	121	3IV
Fittings	289	56	3V
	290	1	?
	291	496	3V
	292	801	3II
	293	910	3IV
Spike	294	854	3II
Sheet	295	688	2b
Ring headed pin?	296	910	3IV
Washer	297	910	3IV
Swivel hook?	298	657	3II
Lead objects			
Weights	305	†	?
	306	†	?
	307	551	3V
	309	551	3V
	310	1	?
Die	311	551	3V
Gaming counter	312	901	3V
Repair plug	313	716	?
Tripod	314	1	?
Unidentified object	315	1064	3II

	<i>Publ. No.</i>	<i>Cntx. No.</i>	<i>Phase No.</i>
Hook	316	336	3V
Papal bull	317	1	?
Tank fragments	318	1095	3V
	319	1095	3V
Bone objects			
Hairpins	320	182	4
	321	814	?
	322	496	3V
	323	551	3V
	324	1110	3V
	325	973	3II
	326	6	4
	327	736	3V
	328	131	3IV/V
	329	290	3IV
	330	735	3V
	331	1	?
Needles	332	618	3V
	333	1103	3V
Awl	334	1122	3V
Combs	335	35	4
Handles	337	847	3V
	338	1178	3IV
	339	1095	3V
Ferrules/dice boxes	340	11	3V
	341	1095	3V
Decorated plaque	342	1	?
Handle?	344	12	3V
Antler 'plate'	345	1195	3V
Glass			
Cast and ground vessel	346	608	4?
Blown jugs	347	525	3I
	348	901	3V
	349	466	3V
Handles	350	1	?
	351	589	3II
	352	459	4
	353	176	4
Funnel rim flask	354	736	3V
Flask	355	47	3V
Blue-green bottles	356	924	3IV
	357	625	3II
Pale green bottle	358	347	3II
Beaker	359	347	3II
Bowl	360	545	3I
Bowl?	361	831	3I/3II
Bowl	362	1	?
Beaker	363	1	?
Beaker	364	1137	3V
Beaker	365	76	3V
Beaker/cup	366	219	3IV/3V
Beaker	367	33	4
Bowl	368	459	4
Base fragments	369	861	?
	370	504	3V
	371	513	4
	372	207	3II
	373	24	3IV/3V
	374	347	3II
	375	422	3II
	376	1195	3V
Unidentified vessel	377	1071	3V
Tessera	378	735	3V
Beads	380	257	3I
	384	866	3IV

	<i>Publ. No.</i>	<i>Cntx. No.</i>	<i>Phase No.</i>
	386	735	3V
Pottery objects			
Counters	388	12	3V
	389	1	?
Spindle whorl	390	12	3V
Wooden objects			
Spatula	404	1105	3V
Stopper	405	1105	3V
Bung	406	1156	3III
Bowl fragments	407	1196	3V
Unidentified	408	1196	3V
Leather			
Shoe fragments	411	1103	3V
	412	1110	3V
	413	1110	3V
	414	1123	3V
	415	1133	3V
	416	1168	3V
	417	1196	3V

	<i>Publ. No.</i>	<i>Cntx. No.</i>	<i>Phase No.</i>
Stone objects			
Bracelet	419	620	3V
Statuette base	421	2	4
	421	175	4
Carved marble fragment	422	1	?
Mace head	423	571	3I
Whetstones	430	614	3V
	431	1004	3II
Rotary quern	436	1	?
Millstone	437	316	3IV/V
Worked flints			
Flaked axe	438	489	3I
Polished axe	439	735	3V
Scraper	443	1	?
Knives	444	1	?
	445	1	?
	446	1	?
Arrowheads	447	1	?
	448	245	3V
	449	1	?
	450	675	3I
† Objects from topsoil (mainly metal detector finds).			
? Phase uncertain.			

TABLE 32: Catalogue of the illustrated artefacts (1–450) by site, in publication number sequence with the relevant context number and period/phase information added.

THE BROOCHES

D.F. Mackreth

Introduction

Excavations at the Bancroft villa and mausoleum sites in 1983–86 recovered a total of fifty-five brooches, twenty-three from the former and thirty-two from the latter, including two made of iron. In addition to these, seven brooches from earlier excavations at the villa have been reported on jointly by the writer and P. T. Marney, which have been published in RMK (128–33). These are as follows;

RMK no.	Brooch type	Context
1	Colchester	Room 5, Building 7.
7	Colchester	unstratified.
8	Colchester Derivative	unstratified.
10	Colchester Derivative	fill, Ditch J (444).
13	Nauheim Derivative	destruction, Building 1.
15	Hod Hill	unstratified.
17	Plate	unstratified.

The Mausoleum

Colchesters (Fig. 131)

- 1 The brooch has been distorted to form a ring with the wings

and spring bent back and the catch-plate protruding into the interior space. The estimated overall height is c.58 mm. At least half the spring is missing, and the minimum number of coils would have been six. The hook is also bent back but seems, if complete, to have been of moderate length. The wings and the bow are plain, the latter having a rounded section. The catch-plate is damaged, but has the remains of a row of three square-cornered piercings which probably formed part of a fretted layout.

M/175/465; Cremation 4.

- 2 The lower bow with the catch-plate is missing. The estimated overall height is not less than c.60–65 mm. The spring has eight coils and an axis bar through the middle. Iron corrosion where the pin should have been suggests that it had been broken and replaced by a piece of iron wire wound round the copper-alloy axis bar inserted especially for the purpose. The hook straightens out to run along the head of the bow for a short length. The wings are plain as is the bow, which has a rounded front and facets down the back corners.

M/187/601; upper fill, Pit 608.

- 3 The surviving length is 38 mm. The spring has six coils. The hook is thin and just lies on top of the chord. However, the condition of the brooch suggests that there has been some surface loss and the hook should have been longer, but not by much. The wings appear to be plain, so does the bow which has a thin oval section. The catch-plate is incomplete and some of the lower bow is missing, due to corrosion loss. There is no good evidence that the catch-plate had been pierced.

M/158/508; upper fill, Ditch 94/95 (Cremation 13).

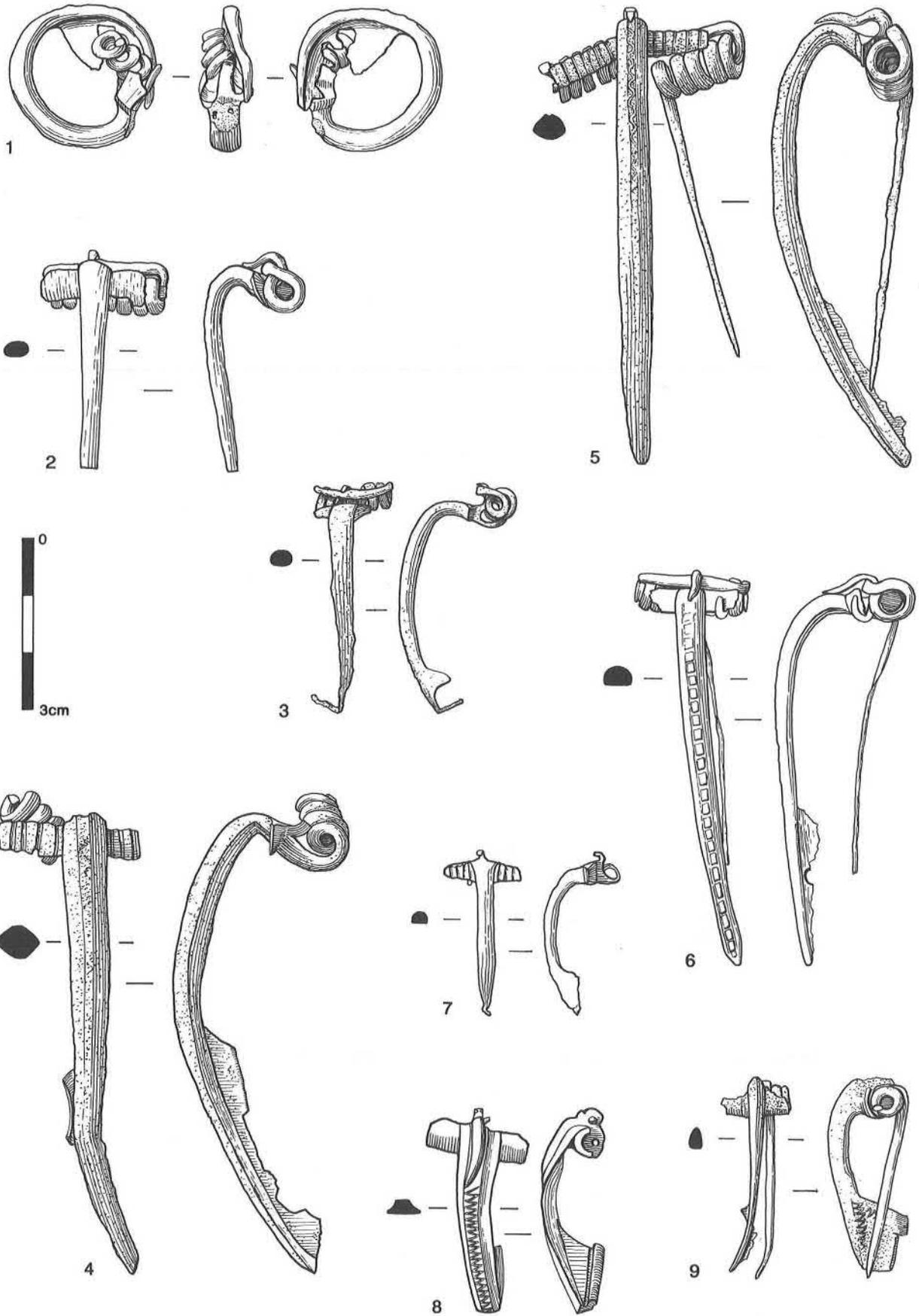


Figure 131: Colchester type brooches 1-7; Colchester derivative type brooches 8-9, scale 1:1.

4 83 mm overall length, without the hook. The spring had a minimum of ten coils. The chord, half the spring and the hook are lost. The complete wing and the surviving part of the other both show that each had alternating wide shallow flutes and deep grooves. The bow has a marked "kick" at its head. The apparently plain bow has a marked hexagonal cross-section. Most of the catch-plate is missing, but the way in which the flap of the upper part is folded over, and the edge below that, suggest that there had been a set of piercings, probably with squared corners and possibly with fretting between.

M/68/1; topsoil.

5 80 mm overall length. The spring has twelve coils. Half the spring, including the pin and the chord, is separate, but the chord is jammed into the attached coils. The hook is long and runs along the head of the bow and just over the turn down. The surface of the brooch is finely pitted by corrosion, markedly impairing the clarity of the decoration. Both wings have wide shallow flutes, each divided from the next by a deep groove. The bow has a hexagonal section. Down the front face is a recessed wavy ridge, probably formed by distorting a straight ridge with a punch used alternately on each side. The catch-plate has nearly all gone, but the edge of at least one squared-cornered piercing is visible.

M/72/60; upper fill, Ditch 60.

6 70 mm overall length. The spring of eight coils was broken in antiquity and repaired by mounting the broken pin and spring on an inserted axis bar and securing it by bending the end of the last coil under the wing. The hook is thin and moderately long without turning down the front of the bow. The wings are plain. The bow is thin and generally rounded with a sunken row of large beads. Most of the catch-plate is missing, leaving part of a piercing which seems to have been circular.

M/208/879; fill, Ditch 60.

7 About 29 mm overall length. Only the start of the spring survives. The hook is broken, but indications on the corroded head of the bow suggest that it had been very long. Each wing has a series of close-set vertical grooves. The bow appears to be plain, but has clearly lost a lot of its original surface. The catch-plate is damaged, and there may be part of the periphery of a circular hole.

M/192/600; topsoil.

The Colchester derives from a continental brooch with precisely the same spring-fixing arrangement and fundamentally the same style of bow and wings. The differences between the two basic patterns are small but significant. The hook on the earlier continental original is usually broad and only just touches the bow, which tends to be flat and thin with a straight profile. The British style is longer and always thin, and is coupled with a more sturdy bow with a curved profile. There are variations within the continental group, but a sight of Feugère's Type 14a (Feugère 1985, pls. 90–2.1190–1217, except 1198–9 and 1204 which belong to the early development of the "Langton Down") shows that the profiles do not suit the British style, and that the catch-plates are very long and hardly ever display the markedly triangular character of British examples. Although the continental version is obviously at least Augustan in date, it is hard to tell whether its initial form was earlier than then: the earliest one known to the writer comes from Dangstetten (Fingerlin 1972, 217, *Abb.* 9.7) and in that collection it would not be wise to insist

that its origins must be earlier, but its beginning should lie in the last quarter of the first century BC. British brooches close to the continental type (eg. Partridge 1981, 141, fig. 69.24) are probably near the separation of the British style from the original.

Close dating in Britain rests on the evidence from the King Harry Lane cemetery (Stead and Rigby 1989) and, in the following analysis, those made from iron or obviously heavily corroded have been ignored. Plain examples basically like 1–3: phase 1, G242, G296, G359 (the drawing is not clear); phase 2, G13, G58, G128, G143, G152, G238, G399; phase 3, G15, G37, G39, G47, G59, G86, G112, G124, G182, G448. Those with decorated wings (4): G93, G202, G206, G312, G346, G397, G410, G424; phase 2, G152, G259, G339, G361, G420; Phase 3, G204, G387, G398. Brooches with decoration on both bow and wings (5): phase 2, G42, G231 (with continental type); phase 3, G205 (with "Aucissa" variety), G230. Those which fall into the writer's general category of "Small-Late" Colchesters (7), no other designation having been arrived at yet: phase 3, G233, G450; phase 4, G28, G431. There were none with beaded bows like that on 6.

The King Harry Lane evidence can be summarized fairly easily. Plain examples increased in number up to phase 4 where there seem to have been none. The next most common category of Colchester is the one with decorated wings, and here the greatest number is in phase 1, tailing off to 3 in phase 3, there being again none in phase 4. Those brooches with decoration on both wings and bow were always rare, and nothing much can be made from the occurrence of two in both phase 2 and phase 3. The "Small-Late" group more or less bears out its description: none in phases 1 and 2, and four divided equally between phases 3 and 4. The only brooch which unequivocally betrays signs of a Derivative type came from phase 3 (G450) and there was only one Colchester Derivative in the whole cemetery, also from a phase 3 burial (G316). No morphological study has been carried out to see whether or not the "Small-Late" group arises naturally from the main run, but the main impression is that its appearance was fairly sudden and almost certainly the product of the change in the manufacturing technique of the Colchester: the casting of a brooch in an almost finished state instead of a crude blank requiring much forging. On the evidence set out above, the Colchester was either not in use effectively in phase 4, or the use of the cemetery had been reduced drastically by then; and this was indeed so: there being only fourteen burials assigned to that phase. This means that there is not a fair sample; the absence of plain Colchesters is not significant and there were more being deposited in phase 3 than before. This evidence should mean that plain Colchesters were to be seen in common usage in the period immediately following the close of phase 3.

The dating given to the phases identified at King Harry Lane (*ibid.*, 84) is: Phase 1, 1–40; Phase 2, 30–55; Phase 3, 40–60; Phase 4, 60+. On plain statistical grounds more than half of the burials should be post-conquest. What is extraordinary is that there is only one Colchester Derivative and no ordinary

Hod Hill, the latter a type in use in great numbers from the conquest to AD.70, both types were found a distance of no more than 500 m, at most, down the road in Verulamium. It is inconceivable that a terminal date as late as 60+ should produce such a serious imbalance in brooch types in use between the two sites. No amount of socio-economic argument can possibly explain it away. The answer is that the dating given to the cemetery is too conservative. It is admitted that the earliest burials could have been as early as 15 BC. (*ibid.*, 83). The samian report expresses surprise that more samian was not found (*ibid.*, 113), there being three vessels dating to before 25, none in the period 25–50 and two dating 45–60 (*ibid.*). An adjustment of fifteen years is suggested by the writer, giving the following dating: Phase 1, 15 BC.–AD.30; Phase 2, 20–40; Phase 3, 35–50/55; Phase 4, 45+. Even this is not satisfactory, but would serve to cover the evidence from the brooches at least, providing that there had been a severe tailing off in the use of the cemetery from the moment of conquest. The terminal date from Phase 3 has been set at 50/55, as that seems to be the optimum term to the use of those Colchesters surviving in use after the end of manufacture.

As for the brooches from the Mausoleum site, 1–3 are not perhaps likely to go back as early as 15 BC., but could run from the beginning of the first century AD. to c.50/55. In the cases of 4–6, matters are not so simple. The evidence could be used to show that large decorated brooches were passing out of use before the making of plain ones was abandoned. However, it is more than likely that there was a decrease in the percentage of decorated ones out of the total made decreased. The beaded bow of 6 is an aberration and reminds one of the bead-row down the front of an Aucissa, but could have been derived from one of the many types that fill the span between the Alesia and the name-type which stands at the end of the sequence. The profile suggests a date in the first quarter of the first century. The other two may well have passed out of use before the conquest.

The dating for 7 is, apart from those from the King Harry Lane cemetery, better than is indicated, as many of the examples recorded by the writer have yet to be published: Baldock, AD.25–50 (Stead and Rigby 1986, 112, fig. 43.64); Skeleton Green, pre-Roman (Partridge 1981, 136, fig. 68.17); Verulamium, c.AD.49, AD.44–58 (Frere 1972, 114, fig. 29.5; Frere 1984, 21, fig. 5.17); Colchester, AD.43–61, c.45 and later, AD.61–c.65 (Hawkes and Hull 1947, 310, pl. XC.25; 313, pl. XCII.63; 310, pl. XCI.32–3); Hod Hill, before AD.50 (Brailsford 1962, 7, fig. 6.C9; Richmond 1968, 117–9); Longthorpe, Cambs., before c.AD.61/65 (Frere and St Joseph 1974, 44, fig. 21.4.5; fig. 23.2); Baldock, mid-late first century (Stead and Rigby 1986, 112, fig. 43.63); Wroxeter, not before c.AD.55/60 (Atkinson 1942, 204, fig. 36.32). In terms of the usual kind of evidence, the result is overwhelming: such “Small-Late” Colchesters behave normally with few to show their development before the conquest, but most indicating the time by which they had passed out of use: c.50/55–60/65.

Colchester Derivatives (Fig. 131)

8 36 mm overall length. The spring had been held to the body of the brooch by means of an axis bar through its coils and the lower of two holes in a plate behind the head of the bow, the chord passing through the upper. The wings are plain and curved to seat the spring. The plate behind the head is carried over the top to form a skeuomorph of the hook of the Colchester. Beneath this and running down the central face is a line of rocker-arm ornament. Each side of this strip is relieved by a concave face. The catch-plate is solid and provided with a pin-groove.

M/115/1; topsoil.

The spring-fixing arrangement is one of the three principal successors to that of the Colchester and replaces the Colchester itself in its homeland. The greatest density in the distribution runs from Northamptonshire into Essex. There is a thinner spread into Kent and thence to central southern England, and there are extensions up into Lincolnshire and westwards towards Wroxeter. One characteristic which marks the type is that there are two distinct ranges of size: 35–45 mm, and 57–68 mm. There are other sizes, but so few that the compression of practically every known brooch into either one of these ranges is remarkable. However, some element of sizing can be detected amongst late Colchesters and also in the Late La Tène group to which the Rosette and Langton Down belong. The period during which “Small-Late” Colchesters came into being can only really be in the last years before the conquest. Not only does the date-range suggest this, but the only Colchester Derivative from Skeleton Green is a variety of the defined type to which the present brooch belongs. The Skeleton Green brooch (Partridge 1981, 137, fig. 69.25) came from an ambiguous context in that the layer containing it merged with one sealed beneath the flood (*ibid.*, 35).

The rest of the dating of this Derivative type is instructive: Bromham, Beds., AD.5–35 (Tilson 1973, 53, fig. 28.278); Colchester, AD.43–61, AD.49–61, AD.61–c.65 (Hawkes and Hull 1947, 311, pl. XCI.36.37.38); Verulamium, up to c.AD.55 (Wheeler and Wheeler 1936, 207, fig. 44.22), AD.55–61, Boudican destruction (Richardson 1944, 91, fig. 4.3); Derby, c.AD.55–80/5 (Mackreth 1985, 281–3, fig. 123.1); Verulamium, AD.75–95 in redeposited Boudican fire debris (Frere 1984, 23, fig. 6.24); Chichester, Flavian (Mackreth 1978, 279, fig. 10.26.27); Nettleton, Wilts., AD.69–117 (Wedlake 1982, 125, fig. 52.46); Fishbourne, c.AD.75–80 (Cunliffe 1971, 104, fig. 39.33); Richborough, AD.80–100 (Bushe-Fox 1926, 43, pl. XII.2), AD.80–120 (Bushe-Fox 1932, 77, pl. IX.10); Baldock, AD.90–120 (Stead and Rigby 1986, 112, fig. 44.73). These are the standard type, like 8. Variations are few: rocker-arm ornament was alternatively applied to the concave faces of the bow; or a groove down the central fan; mouldings can be used on the wings; beading or cross-cuts on the pseudo-hook or bow make an occasional appearance. The dating of such variants is: Colchester, AD.43–50/55, c.AD.50/55 (Crummy 1983, 12, fig. 6.48 and 50), AD.61–65 (Hawkes and Hull 1947, 311, pl. XCI.39); Verulamium, AD.49–60 (Frere 1972, 114, fig. 29.6) AD.60–61, Boudican fire (Frere 1984, 23, fig. 6.21), AD.60–75 (Frere 1972, 114, fig. 29.8);

Baldock, AD.50–70, (Stead and Rigby 1986, 112, fig. 44.79); Fishbourne, c.AD.75–80 (Cunliffe 1971, 104, fig. 39.31); Baldock, AD.70–90 (Stead and Rigby 1986, 112, fig. 44.77); Verulamium, AD.130–50, 150–70 (Frere 1984, 23, fig. 6.23 and 25).

In both instances there is broad similarity. The dating of the Bromham brooch can be rejected as it is too early, before the parent late Colchester had really developed. The Fishbourne examples come from the construction of the palace and, like many of the other brooches, belong to the displaced soil forming the levelling of the site and so were most probably residual. Those dating after 100 must also have been residual in their contexts. The emphasis on the first twenty years after the conquest suggests that survivors in use after manufacture ceased continued to about AD.75/80.

- 9 The spring had been held as that on 8. The wings are plain and flat. The plain bow is scarcely wider than the plate behind its head, being much deeper than wide, and tapers to a pointed foot. The catch-plate is as wide as the bow, and has a line of rocker-arm ornament down the edge of the bow and another across the top.

M/205/831; fill, Pit 608.

Two examples of this local type were recovered from the villa site, and the discussion in the report on the brooches from that (36, 37) concluded that the dating should lie within the first century, although published dated examples are very few.

Headstud (Fig. 132)

- 10 The spring is now missing, but had been mounted on a loop behind the head of the bow. The loop itself was cast as a projection and then bent to lodge its end under the top of the hollowed head of the bow. The size of the loop shows that there had been a rolled sheet tube through the spring which housed the ends of the wire, forming a loop-and-collar arrangement attached to the brooch. The chord of the spring had been held by a forward-facing hook, now broken, on the head. Each wing has three steps up to the bow which has, on its head, a circular stud with what looks like a small boss surrounded by an annular groove. Down each side of the bow is a step and in the centre is a series of lozenge-shaped cells with infilling triangular ones down each side. No enamel survives. The foot-knob consists of two cross-mouldings under two more at the base of the bow. The catch-plate is solid and its top edge sweeps in a marked curve up the back of the bow.

M/116/60; upper fill, Ditch 60.

Both sprung- and hinged-pins were used on the Headstud, though the latter were more common. The sprung-pin is typologically earlier, but the demonstration that it was so is not easy: Wall, Staffs., c.60–85 (Gould 1964, 43, fig. 18.3); Corbridge, Red House Baths, two examples, 75–90/95 (Daniels 1959, 156, Nos. 10–11); Colchester, 80/85–c.100 (Crummy 1983, 13, fig. 9.65). The Wall brooch has enamel laid in a continuous strip, but is otherwise of the same basic design as 10. A brooch from Honley, Yorks was found with a hoard whose latest coins dated up to 72/73 (Richmond 1925, 14, figs. 2 and 2a). It lacks either enamel or a stud, but

is otherwise recognizably of the same family. Its likely early date is shown by the presence of a separately made foot-knob and a pair of brooches from the Red House Fort at Corbridge take the typology of the type back as the spring arrangement on these is that of a Colchester. Both of these date to 75–90 (Hanson *et al.* 1979, 61–62, fig. 21.1.2) and both have moulded wings clearly ancestral to the present style. The presence of curved wings more commonly found on Colchester Derivatives occurs on one without a stud from The Lunt which, otherwise, matches 10 well. The date of The Lunt example is before 75 (Hobley 1969, 66, fig. 19.9). The question of whether the presence of the stud is essential is difficult. On the whole, while brooches like 10 can be placed at about 75, it is perhaps more realistic to see sprung-pin versions as belonging to the last quarter of the first century, with very few running into the second: the small number of sprung-pin Headstuds suggests that the latter had a relatively brief *floruit*.

Late La Tène Types (Fig. 132)

All three have integral four-coil internal-chord springs.

- 11 There are signs that the brooch had been forged from rolled or folded sheet metal. The bow is thin, its upper part widening towards the base before sweeping in to taper to a pointed foot. The upper bow has a deep groove down each side. Most of the catch-plate is missing.

M/14/21; upper layer, Shrine 15.

- 12 Made from forged rolled or folded sheet metal, the bow is plain, has a thin rectangular section, and tapers to a pointed foot.

M/69/1; topsoil.

- 13 The brooch was almost certainly forged. The bow has an oval section, tapers to a pointed foot, and shows extensive traces of finishing by hand.

M/198/815; secondary silt, Ditch 94/95.

These three brooches belong to a large group whose ancestors are the *Drahtfibel* and the Nauheim. If these three had to be assigned to either of these, then 11 would descend from the Nauheim and 12 and 13 from the *Drahtfibel*. The difficulty is that brooches like the present ones are generally found in the early Roman period, and it is hard to trace the steps between the parent types, which belong to the first century BC., and these. All three were made by forging folded or rolled sheet, a technique found in the south-west before the conquest. However, although there are no grounds for thinking that the technique belongs only to pre-Roman times, and there is nothing in the simple style of 12 and 13 to indicate a date, they could lie anywhere in the first century up to the last two decades. The relationship of 11, with its distinctive design, to the Nauheim is problematical, as the Nauheim has a more or less constant taper to a pointed foot. The similarity lies only in the broad face and in the grooves down the sides, and no other relationship presents itself. The dating of this and very closely related patterns provides only a little help: Verulamium, mid first century AD. (Wheeler and Wheeler 1936, 204, fig. 23.3); Chichester, Claudian-Neronian (Mackreth 1978, 280, fig. 10.26.12); Fishbourne,

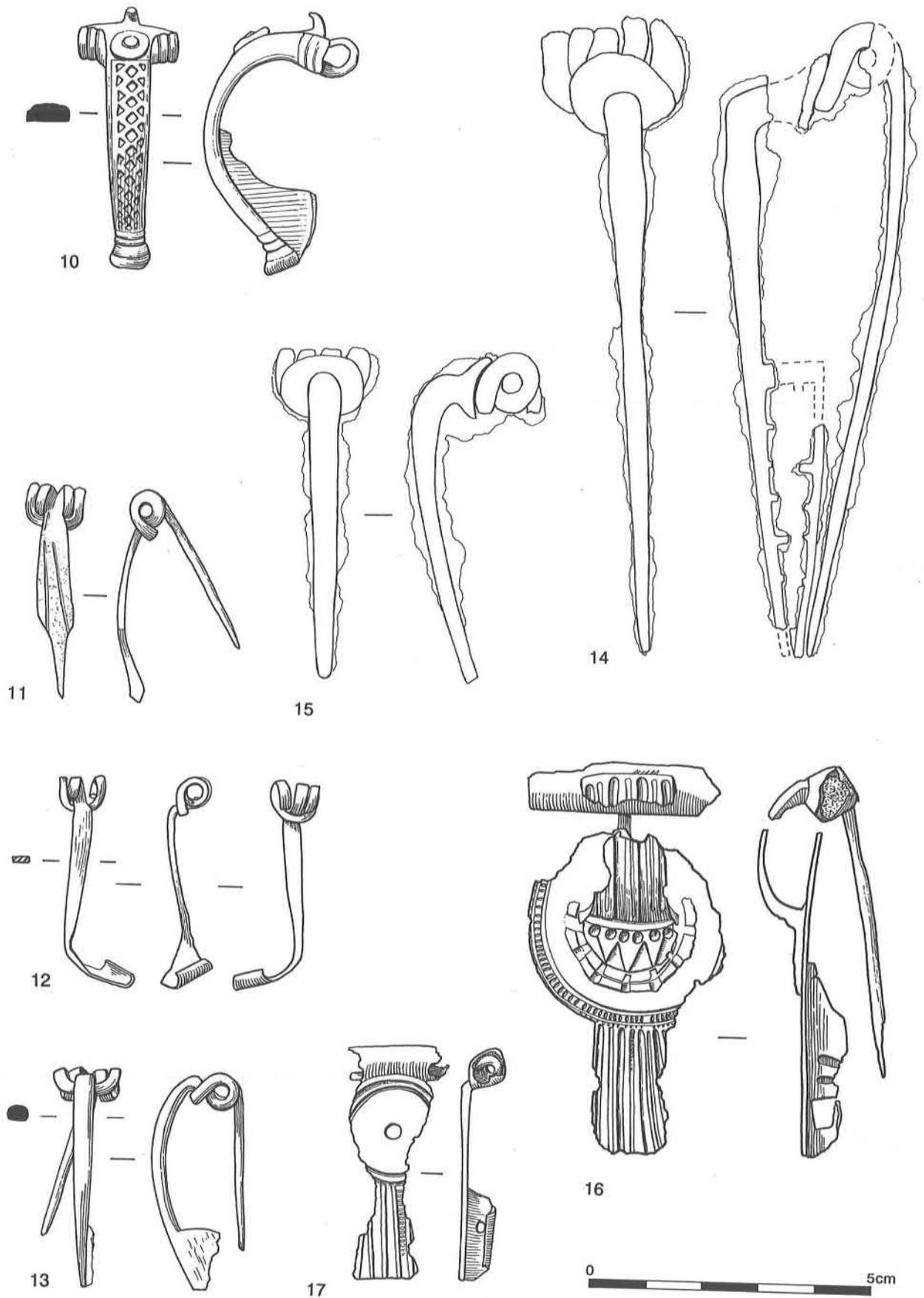


Figure 132: Headstud brooch 10; Late La Tène type brooches 11-15 (14 and 15 are made from iron and have been drawn from X-rays); Rosette brooches 16-17, scale 1:1.

43-c.75, (Cunliffe 1971, 100, fig. 36.1–3), c.75–80 (*ibid.*, 100, fig. 36.3). Although none is published from a guaranteed pre-conquest context, and the dating seemingly runs from the Conquest to c.75, it is possible that the style had come into being before then. The bias of the distribution is from Wiltshire through to Sussex, the Bancroft one being an outlier. There is no good evidence to suggest that **13** should run into the last two decades of the first century, but the other two could have done.

14 *Iron*. A large brooch in many pieces, but probably c.113 mm long. The spring has five coils, three on the left and two on the right when the brooch is viewed from the front, and an internal chord. The head expands to form a protective plate over the front of the spring, rather like a trumpet head. The radiograph suggests a slight thickening under the sharply bent head, but no evidence that this is ornamental. The main part of the bow is almost straight in profile and, as far as can be seen, plain. The catch-plate is tall and the fragments indicate that it had been narrow and was certainly finely fretted, possibly with one or two dog-leg bars in the upper part. The radiograph seems to show that the brooch had been made in two parts which had been welded together by forging. Just above the thickening there is every appearance of there being a central deep socket in the top of the lower bow into which a peg at the end of the upper bow had been inserted.

M/462/177; Cremation 1.

15 *Iron*. The head and upper bow of a brooch very similar to the last: there are only four coils and there is no sign on the radiograph of any thickening or decoration at the top of the bow just beneath the trumpet-like expansion. A small fragment strongly suggests a similar fretted catch-plate.

M/462/176; Cremation 1.

The chief features to note are the expansion of the head to cover the front of the spring, the sharp bend at the head of the bow, the almost straight profile of that in profile, the fretted catch-plate of one and the near certainty that the other also had the same. The detail that both are made of iron is irrelevant as the quality of the work removes any need to take it into account. Direct, dated parallels are very few: King Harry Lane cemetery (Stead and Rigby 1989), phase 1, G270, two examples (with imported Colchester); phase 3, G124. Two of these brooches, one in each grave, have mouldings at the top of the bow. Therefore, the profile and the style of the catch-plate must be pressed into service. The following are those graves in the same cemetery which provide parallels for each. The given examples are mainly from Colchesters for profiles and a minimum of four rows of fretting for catch-plates. *Profile*: phase 1, G75, G296, G312, G346, G397; phase 2, G128, G143, G231, G339 (continental import), G238, G360. *Catch-plate*: phase 1, G202 (three examples), G296, G397; phase 2, G143; G231 (continental import). No example comes from a phase later than 2. On the published dating, this means that none is later than 55 in deposition. On the suggested revised dating given after 7, this would mean that no example from this cemetery would be later than 40. As the upright bow and fretted catch-plate are early in the general sequence of Colchesters, and the trumpet head coupled with mouldings is an older style yet, it should be presumed that the trumpet head at least should be

placed before 20, if not before the very end of the first century BC. In terms of Stead's (1976) discussion of the brooches found with what may be called Aylesford Culture burials, **14** clearly belongs to the group assigned to the Aylesford phase as opposed to the succeeding Lexden phase (*ibid.*, figs. 1–3, *passim*), despite the lack of mouldings on the bow. For want of better information, Stead placed the earlier phase in the second half of the first century BC., and the Lexden phase in the first half of the first century AD. (*ibid.*, 412). The discussion here and after 7 has done nothing to revise this conclusion. If anything, the suggested revision to the dating of the phases of the King Harry Lane cemetery emphasises it in the sense that there could never have been a clear-cut division between the two cultural phases, hence the phase 1 examples may well have been survivors in use after the end of manufacture.

Rosettes (Fig. 132)

16 The spring is hand-forged and trapped in a casing formed by closing round it two flaps cast on the head of the brooch. Much of the surface of the casing is damaged, but traces can be seen of a panel defined by at least one line along the front, enclosing close-set incised lines "radiating" from the head of the bow. The bow is well arched with a flute across the top and bottom. Between lies vertical decoration of three broad ridges, separated by flutes, each having a groove down its centre. There is a small ridge down each side. The base of the bow sits at the top of a raised circular area in the middle of a disc at the head of the foot. The top of the platform has six punched dimples, and under these are three triangular points in relief. The rest of the disc has a buried circumferential ridge, with hand-cut cross-cuts and the remains of an applied pierced repoussé plate inside that. The fantail foot has a splayed version of the decoration on the bow, save for the partial preservation of small beading in the central hollows of the ridges. The catch-plate is very narrow. There is one piercing with square corners, and only the cuts for the top and bottom of another above. The brooch has been cast in one.

M/149/465; Cremation 4.

17 The spring is housed like that of **16**. The spring-case is plain. There is no bow as such, and the disc and fantail are shaped from a flat plate offset from the spring-case by a simple step. The disc has two bordering grooves and a central hole: the latter would have been for a stud to hold a repoussé sheet boss (see **26**). The fantail foot has four flutes in one of which are the remains of a bead-row. It should be assumed that all had once had the same decoration. The catch-plate has the same narrow form as that of **16**, but with a single circular hole.

M/151/465; Cremation 4.

Of the two, **16** is the earlier. It is not profitable here to establish the earliest date by which the Rosette, in some form or other, had come into being, and then to trace the gestation of the common form represented by **16**. The seeds were there in the middle of the first century BC. (Allen 1972; Rieckhoff 1972), but the early stages are not easy to trace. The two illustrated from Dangstetten are instructive (Fingerlin 1972, 217, *Abb.* 9.1 and 2). They roughly conform with the two from Bancroft. However, the one closest to **16** has a Colchester-style spring arrangement, and the separation of the disc from a thin bow and foot suggests that, by the beginning of

the last decade of the first century BC., there was little sign of the best-known designs coming into being. The other brooch also shows a lack of similarity in detail to 17, although the spring-case had begun to develop. However, the presence in the same collection of a Langton Down with a fully formed case may suggest that the less developed Rosette from the site could be a survivor rather than actually represent the current stage of development. The Dangstetten brooch is an example of Feugère's Type 15, which can be as early as 45–30 BC. (Feugère 1985, 269), but it seems likely that it persisted into the early years of Augustus. The true successor of Feugère's Type 15 is his Type 19a, and here belongs to his Type 19a2, as the disc and fantail are part of a single plate. The British dating is again derived from the King Harry Lane cemetery (Stead and Rigby 1989). There, the fully developed Rosette like 16, and including those with lozenges instead of discs, had the following distribution through the phases: phase 2, G14, G53, G73, G353; phase 3, G9, G15, G68, G86, G118, G370. The cemetery also produced a few of the earlier Rosettes and immediately related brooches in which the disc was made separately from the rest of the body: phase 1, G199, G206, G242, G287, G325, G397; phase 2, G66 (*a lé Léontomorphe*), G218 (including two *Léontomorphes*), G231. From this it can be seen that there is a clear progression from the earlier brooches which occur in greatest number in phase 1 to the later ones which are most prominent in phase 3. The dating of the phases of the King Harry Lane cemetery has been considered in the comment after 7 and, applying the suggested revision, the earlier style was passing out of use in phase 2, 20–40, while those like 16 reached their apogee in phase 3, 35–50/55. However, the very small number of Rosettes of any kind which come in with the army is a reasonable guarantee that they had basically passed out of use as well as manufacture by c.40.

17 belongs to Feugère's Type 20a1 or b. The paucity of brooches like 17 does not allow much of an opinion to be formed on the evidence from the King Harry Lane cemetery: phase 2, G67, which, on the suggested revised dating, would place the three items in the period 20–40. The rest of the dating in Britain is reasonably good: Bagendon, 20/25–43/45 and 43/45–47/52 (Clifford 1961, 175, fig. 32.2); Colchester, 44–60 (Niblett 1985, 116, fig. 74.22, M3 and C6), 54–60 (*ibid.*, 116, fig. 74.24, M3 & C6), 49–61 (Hawkes and Hull 1947, 316, pl. XCIV.81), 60–80 (Crummy 1983, 8, fig. 3.17); Baldock, 50–70 (Stead and Rigby 1986, 113, fig. 46.100). The evidence seems to point fairly conclusively at c.35–55/60 for the period when the brooch was passing out of use, although it may still have been in manufacture at the beginning of that range. What is striking is the type of site producing examples: none is important only in the early Roman period, all have pre-conquest occupation. The British evidence supports Feugère's conclusion, admittedly relying on British evidence to some measure, that the type runs into Claudian-Neronian times.

Langton Down (Fig. 133)

All five brooches have or had their springs mounted as that in 16.

- 18 The spring-case has remains of two grooves at each end. The bow is set off from the spring-case by a cross-moulding. Down the bow are three pairs of ridges, with an extra one introduced on each side to fill out the splayed head. The sides of the bow flare outwards slightly to the base, which is carelessly squared off. The profile of the bow is straight, except for a forward curve at the top. The catch-plate is broken, but has part of a single large piercing.
M/134/421; upper fill, Ditch 2.
- 19 The ends of the spring-case are damaged, but it can be seen that there had been a panel across the front defined by two grooves. The bow has a moulding across its top. There are three mouldings down the front, the middle one being larger than the others, with an extra one at the top on either side where the head of the bow widens. The sides of the bow are damaged and the bottom edge may be missing. The catch-plate is damaged, but had one large piercing.
M/1/147; Shrine 15.
- 20 The badly damaged head only of a brooch whose form was close to that of either of the previous two.
M/152/465; Cremation 4.
- 21 The badly corroded upper half of a brooch basically similar to 18 and 19, but probably without the cross-moulding at the top of the bow.
M/162/508; lower fill, Ditch 94/95 (Cremation 12).
- 22 The spring-case is plain. The bow is thin, rising from a poorly defined rectangular base on the front of the spring-case. The plain bow rapidly narrows and tapers to a pointed foot. The catch-plate is triangular, with a large similarly shaped hole, the upper edge being the same width as the bow, narrowing on the inside so that the path of the pin is not impeded.
M/210/885; fill, Ditch 60.

Only 22 does not belong either to the normal reeded pattern or to a close variant of that. A Langton Down from Dangstetten (Fingerlin 1972, *Abb.* 9.2) is carefully moulded and finished and shows that the type had developed fully by the last decade of the first century BC. Similar crispness marks the earliest Langton Down at Skeleton Green: 10 BC.-AD.20 (Partridge 1981, 133–4, fig. 71.43). Clarity of detail is frequently the mark of Rosettes earlier than 16, and can often be found on that type as well. None of the examples from the Mausoleum site displays such sharpness, and only 18 is clearly of the standard reeded type: 19 has a simplified cross-section. 20 is really only a fragment and may have been like 18, while 21 seems simpler and to lack the moulding across the top of the bow. All these can be said to belong to the standard run of Langton Downs. Once again, we turn to the King Harry Lane cemetery (Stead and Rigby 1989) and, in the list which follows, those which are reeded like 18 are marked "R", the rest are lesser examples which would suit 19–21: phase 1, G71R, G413R; phase 2, G255R; phase 3, G41, G68R, G156R, G184. This group can be contrasted with those whose bows are beaded and reeded: phase 1, G97, G287, G309; phase 2, G361; phase 3, G370. The first group shows either a general persistence throughout the life of the cemetery, or a slight increase towards the end. The examples with beading bear out the general observation that there is a loss of detail in manufacture somewhere in the second or third decade of the first century AD.

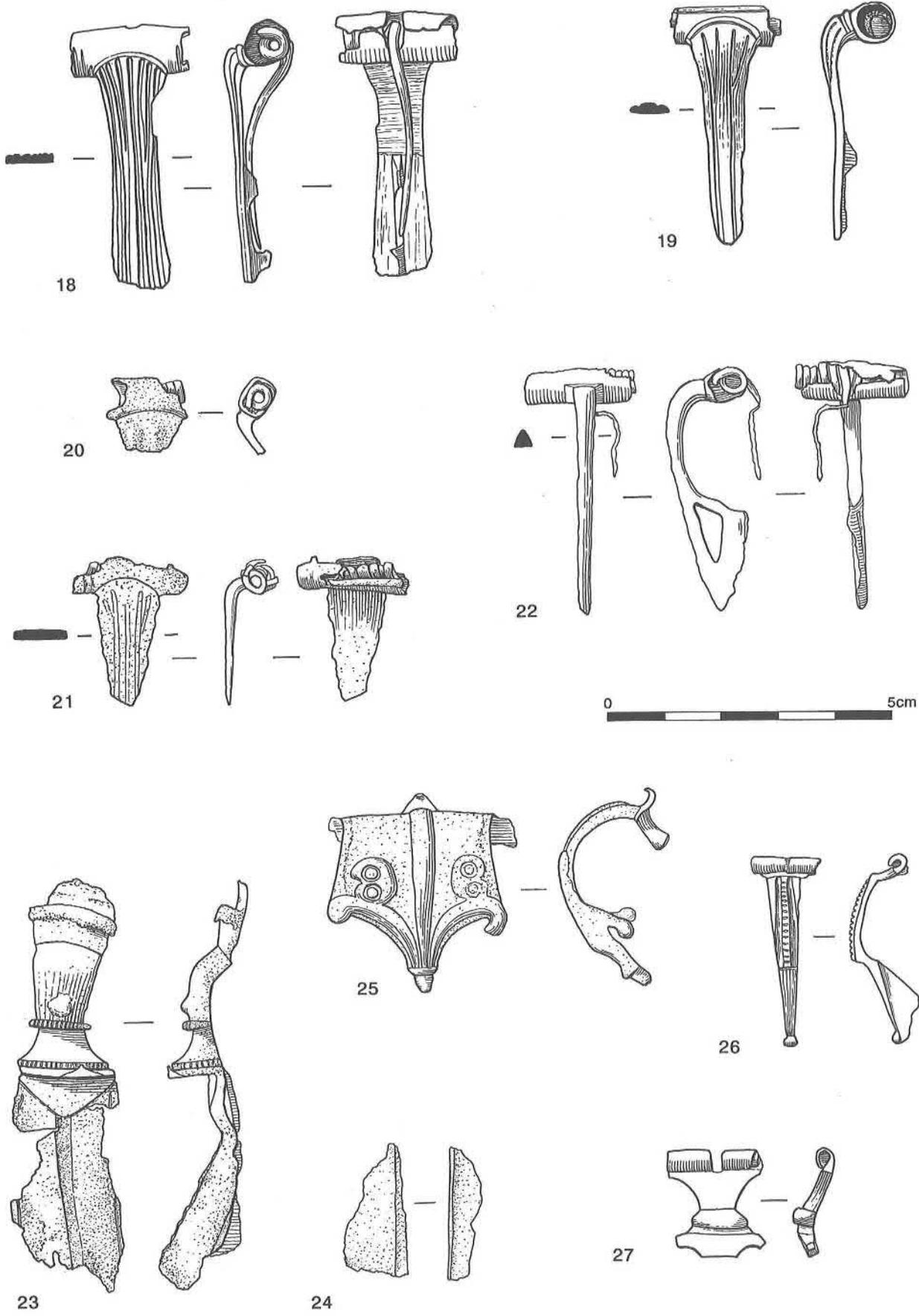


Figure 133: Langton Down brooches 18-22; Unclassified 23-24; Aesica brooch 25; Hod Hill type 26-27, scale 1:1.

Continental dating is not particularly good. The best, at Augst (Riha 1979, 91–101, *Tafln.* 14–19.318–524) suffers from a high degree of residuality and no dating amongst the illustrated ones. The tables summarising the dating of the reeded design, Langton Down being used as a general term for a class (*ibid.*, 99), reveal that the bulk belongs to the bracket of late Augustan to Claudian. But if varieties are considered, the Langton Down as defined by Wheeler (Wheeler and Wheeler 1932, 71–74, fig. 10), Riha's 4.4.1, has a narrower range which could suggest an end-date before Claudius, those dated 50–100 being residual. But there are not really enough for such a restricted range to be asserted.

In Britain the picture is perhaps a little better: Baldock, 1–25, apparently a finely finished piece (Stead and Rigby 1986, 113, fig. 45.87); Colchester, 10–43 (Hawkes and Hull 1947, 319, pl. XCIV.94), one found with a pair of good Rosettes, and others of the same suite, but dated to Claudian times on poor evidence, are probably earlier (Hull 1942, 61, fig. 1.6), 43/44–61 (Hawkes and Hull 1947, 319, pl. XCIV.98; pl. XCV.102), 49–61 (*ibid.*, pl. XCV.101); Hod Hill, before 50, possibly pre-Roman on this site (Brailsford 1962, 8, fig. 7.C29; Richmond 1968, 117–9); Chichester, mid-first century (Mackreth 1978, 286, fig. 10.28.50). If Augst and Britain are united, then *c.*10/20–55/60 would cover all, especially if the suggested revision (see 7) to that dating of the phases of the King Harry cemetery is applied.

22, by contrast, does not belong to a well established variety of the overall type. Its bow is very narrow, and the way in which it joins the spring-case is uncommon. Also, the profile of the bow is more curved than is usual, and makes the catch-plate more exaggeratedly triangular than the normal shape, and so more British in manner than would be expected of a continental brooch. The writer has not come across a good parallel and, despite the suggestion of British habits in the profile and catch-plate, would not care to suggest that it could have been made here: there are not enough other examples showing similar traits to provide any backing. The only Langton Down like 22 in the King Harry Lane cemetery came from an unphased burial, G306, and was found with a "Late-Small" Colchester. The date of 22 is consequently hard to fix, but its end-date should be no later than the main reeded series, although it may have come into being at a later time.

Unclassified (Fig. 133)

23 The spring and the spring-case, similar to that on the Rosette and Langton Down, are either missing or very damaged. The rest of the brooch falls into two parts, the upper having a small slightly trumpet-shaped bow at the top rising from a sharp and prominent cross-cut horizontal moulding. Beneath that, the brooch spreads out in a concave curve to a step down to what seems to be a plain version of the cross-moulding above. The lower part of the brooch steps back to the flat face of a triangular raised area at the top of a fantail foot. This is damaged and distorted, but seems to have had a groove down each side and a wide flute down the middle.

M/178/512; Cremation 9.

24 With the pieces of 23, a fragment of foot with the ridge of the damaged catch-plate which cannot be part of 23. The pattern of the fragment suggests very strongly that it came from a pair to 23.

M/178a/512; Cremation 9.

Although little is left of the second brooch, enough survives to suggest that it was a pair to the first. The brooch type is more common in a smaller and more crude looking form (eg., Brailsford 1962, 8, fig. 8.C43). There is a close similarity between the form of 23 and the repoussé-plate covered piece from a phase 3 burial in the King Harry Lane cemetery (Stead and Rigby 1989, 334, fig. 135, 240.2), and another from Bignor (Frere 1982, 177–9, fig. 26.5). The group forms Feugère's Type 18a, and those he illustrates demonstrate the diversity of detail to be expected (Feugère 1985, pls. 101–2.1324–1333), two displaying slight influence from the *Léontomorphe* Brooch (*ibid.*, 1332–3), as does one from the King Harry Lane cemetery (see above). Dating is thin. Feugère relied on the examples from Augst where the picture is a little ambiguous, possibly because there were so few in comparison with both the Rosette and the Langton Down; one was found with Tiberian pottery (Riha 1979, 108, *Taf.* 22.577), otherwise the best favoured period was *c.*50–75 (*ibid.*, 108–9; *Tafln.* 21–2.574–593, *passim*). The British evidence provides slightly greater clarity: Skeleton Green, *c.*15–40 (Partridge 1981, 134, fig. 71.48); Colchester, one of three, said to be early Claudian, but the grave group as a whole could be earlier (Hull 1942, 61, fig. 1.7); Verulamium, 35–50 (Frere 1984, 25, fig. 7.34); Hod Hill, before 50 (see above); Bagendon, 43/45–47/52 (Clifford 1961, 176, fig. 32.9); Colchester, pre–43–60, 44–60 (Niblett 1985, 116, fig. 74.17–8, M3 and C5); Longthorpe, Cambs., before 65 (Frere and St. Joseph 1974, 44, fig. 23.6); Colchester, 61–65 (Hawkes and Hull 1947, 319, pl. XCV.113). There seems to be a good terminal date, 60/65, and the group as a whole probably developed from *c.*25/30. That this is reasonable is shown by the use, on several examples, of repoussé plates which seem to be a mark of post-Augustan times. For instance, not counting the pierced discs of the classic patterns, they are found on Rosettes whose discs and fantails are a shaped single plate and on which any trace of bow has gone. There should be little doubt that, from the range and type of site from which brooches of all forms related to 23 come, many were bought over by the army, and this means that their survival in use should be seen as running into the first and second decade after the conquest.

Aesica (Fig. 133)

25 Only the upper part of a two-piece version is present. The fragment has been squashed. How the sprung pin had been mounted is none too clear: there is no evidence for plates at the end of the wings and there had never been a plate like that on 8. There is, however, a forward-facing hook for the chord. It is possible that the spring had been part soldered into position, the increase in corrosion products behind the left-hand wing would suit this and match the use of solder in the Rearhook system. No ornament survives on the wings. The bow is broad at the top, splays out to a boss on each side and then curves back to the centre, where there is a small cross-moulding at the top of the peg which once united the missing

disc and fantail plate to the bow. There is a ridge down each side to the boss and a broad ridge down the centre. At the bottom on either side is a pelta in relief with two circular recesses, each with a boss in it, giving the impression of spirals at the ends of the turned borders. The bottom edge of the plate has a wide ridge.

M/188/600; topsoil.

Since the writer published a note on the Aesica Type (Mackreth 1982), little has been found which seriously challenges the conclusions made there. The only result of more recent work has been to emphasise the extraordinary eclecticism of the type when it comes to form married to decoration and pin-fixing habits. The most extreme example to come to light since 1982 comes from Osmanthorpe, Notts. (Mackreth forthcoming a). Its spring is housed in a proper casing, it is enamelled and has the remains of beaded white metal trim. It did not come from a stratified context, and it is the materials used for the extra ornament which provide the only means of dating it. Normally, enamel is found from *c.*75 onwards, especially colours like the deep blue used here. A recent survey of the dating evidence for the use of white metal trim shows that brooches with it were being committed to the ground from *c.*125 to about 225 (Mackreth forthcoming b). The Osmanthorpe brooch is, unusually, a three-part casting, the bow being riveted to the central disc and to the spring-case, while the foot is missing. We have here a paradox: the form of the brooch is very close to the Rosette style to which 16 belongs, much closer than the bulk of Aesicas, yet its date would seem to be in the first half of the second century at best. As for the present example, it too has a novel feature: the forward-facing hook. These are not unknown, but are usually part of the Polden Hill method (e.g. Leeds 1911, 406 and fig.). On 25, however, there is no sign of any pierced plate at the ends of the wings, while there may be a trace of there having been solder to "fix" the spring as on the Rearhook type (Mackreth 1991, 122, fig. 112.12). 25 was clearly a two-part casting and was also of relatively large size. Dating for the Aesica is no better now than it was in 1982: it is still governed as much by the development of the spring-fixing arrangement as by anything else. In the present instance, it might be argued that the method used was experimental and that the brooch is early. While that may be the case, the available range is still from *c.*40–60/5. The decoration does not help, as no other Aesica recorded by the writer has the same scheme.

Hod Hill (Fig. 133)

All have or had the axis bar of their hinged pins housed in the rolled-over head of the bow.

26 The upper bow has three vertical ridges divided by flutes. The central ridge is beaded. The lower bow is stepped back, flat and tapering to a simple foot-knob.

M/186/601; upper fill, Pit 608.

27 The upper part only, there is a cross-moulding below which is part of a curved element which might have expanded to run round a void on each side.

M/70/1; topsoil.

For comments, see after 51.

Plate (Fig. 134)

28 The pin is hinged, being mounted between two long projections with rounded ends. The plate is circular, thin, and has a central hole for an iron pin which fastens the high relief repoussé plate to the front. The pin seems to have an ornamental end, but corrosion hides the details. The applied plate rises in three stages, the lower two being rounded steps with a slight depression between, the top stage is a beaded annulus. The centre of the plate has a sunken flattened boss through which the iron pin protrudes. The catch-plate has lost its return.

M/168/518; Cremation 10.

Although plainly a single plate with applied pressed relief ornament, the addition of a fantail foot would place this brooch in the same family as the Rosette. Such pronounced relief is rare in Britain: there is one from a phase 3 burial in the King Harry Lane cemetery (Stead and Rigby 1989, 290, fig. 99. 68.4), and another with a sprung pin from Colchester (Crummy 1983, 8, fig. 3.17). They appear to be rare on the continent in either the Rosette or plain circular plate form, and so are basically undated by direct association. Resorting to straightforward typology, the hinged pin and the reduction of the whole Rosette to a single plate, and by extension including the present brooch, show that the basic form is late. The lack of examples should point to a short production run and a date of, say, 30–40 for manufacture should not be far from the mark, with examples continuing in use for another twenty years and this would suit the example from the King Harry Lane cemetery, if the suggested revision to the published dating is adopted (see after 7).

29 The pin is hinged. The plate is round, having within a central recess a hole which once may have held red enamel, surrounded by two annular ridges held in place by a short pin with a boss on top. At the top and bottom of the plate, as defined by the axis of the pin, is a poorly designed projection with a groove across the base.

M/142/465; Cremation 4.

Generally related to the last, the prime indication of this is the plain thin disc, and the stud mounted in the middle, surrounded by concentric decoration. None appears to have been published from pre-conquest contexts in this country, but none should be expected after *c.*60–70.

30 The pin is hinged. The design consists of a central vesica with recesses, probably for enamel. The reserved ground is made up of a diamond top and bottom, each containing a cross. In the spaces on each side is a solid lozenge. Each point of the vesica is the base for curved arms which return either side to join the main plate in a "duck's head" shape, containing a sunken berried rosette. Between these terminals on each side is a round projection with a repeat of the rosette. Above the pin is an extra arm to form a loop. The catch-plate runs down behind a projection, shaped to form a bulbous moulding with a waisted section beneath.

M/64/1; topsoil.

The writer has come across no parallel for this brooch. The question which arises is whether or not it is Roman. The points in favour are the shape of the projection hiding the catch-plate, and the way in which, on the back, the top edge

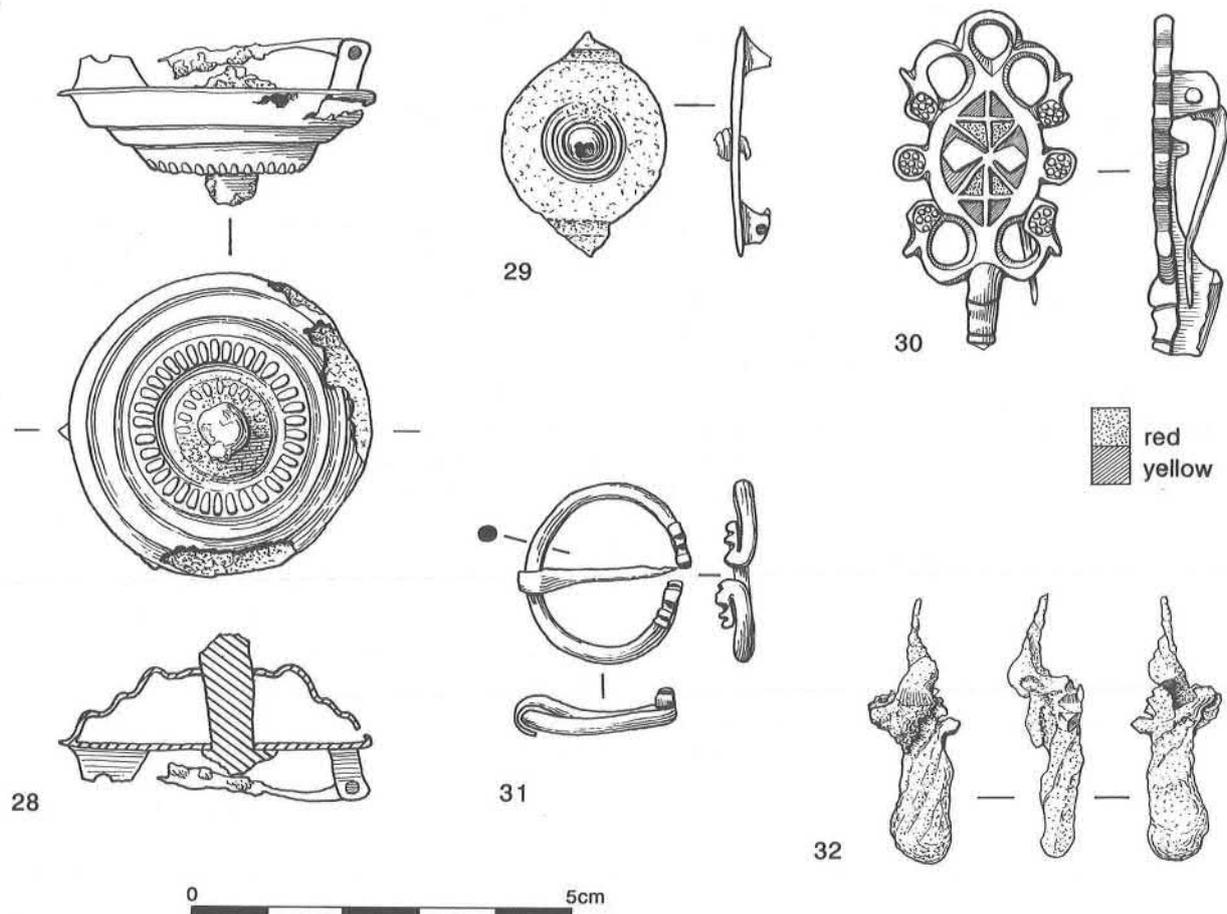


Figure 134: Plate brooches 28–30; Penannular brooch 31; Unclassified 32, scale 1:1.

of the catch-plate is run up as a shallow ridge to end in a small projection. Given that it is Roman, the likely date is somewhere in the second century.

Penannular (Fig. 134)

31 The ring has a circular section. Each terminal is turned back along the top of the ring, and each has a deep flute with a shallower one near the end. The pin has a slight hump.

M/27/56; basal layer, Shrine 15.

The terminals are neatly made, and so there can be no confusion over what the craftsman was trying to do. However, the extra groove towards the end of each terminal is unusual. It would be tempting to see in this a tendency towards zoomorphism, but there is no other evidence than the shape of some zoomorphic penannulars to suggest this. The date range is likely to be first and second century, unless the extra groove proves to be a sign of a later date.

Unclassified (Fig. 134)

32 A solidified mass of once nearly molten metal. There is a pin sticking out of one end, and traces of there having been a spring. However, where the bow would have been is now a straight-sided elongated blob, with nothing to show what the original form may have been. No comment.

M/182/518; Cremation 10.

The Villa

Colchesters (Fig. 135)

33 The spring is missing, except for part of the chord trapped under the hook. This is barely long enough to lie flat on the head of the bow. The damaged wings appear to have been plain. The bow is also plain with a rounded front, a chamfer down each back edge, and the marks of forging along the upper part of the back. The catch-plate was forged cold, and has three square-cornered piercings cut by hand to form a crude version of a proper fret.

V/258/457; destruction, Building 2.

34 The spring has six coils. The hook runs only a short distance along the head of the bow, which is plain, like the wings. The section of the bow is generally rounded. The catch-plate has three crude roughly rectangular holes punched through it.

V/1374/+; unstratified.

35 The brooch is in very poor condition, having lost all the spring save for its start. The bow is distorted and most of the catch-plate is missing.

V/1371/+; unstratified.

36 Only the start of both hook and spring survive. The brooch is damaged by corrosion and this has obscured the ornament on the better preserved wing, on which it is certain that some form of fluting is present. The bow is broad in proportion to its depth and down its centre are two grooves which die out before the pointed foot is reached. Most of the catch-plate is



Figure 135: Colchester type brooches 33-37; Colchester derivative type brooches 38-41, scale 1:1.

missing.

V/1370/+; unstratified.

- 37 The spring has eight coils. The hook has lost its end, but once was long enough to run down the top of the bow. The wings are damaged, but show clear signs of having flutes separating buried ridges. The bow is corroded, but had been thin with a rounded front and back. Only the top of the catch-plate is present.

V/491/737; fill, Ditch 744.

A detailed discussion will be found after 7. Abstracting from that, 33–35 were more common in phase 3 than before and the absence of a marked kick at the head of a relatively straight profile to the bow suggests that these should be assigned to the general period 30–50/55. 36 belongs to a very small proportion of the overall output of Colchester brooches in which decoration occurs on both wings and bow. Little can be said about the date: the brooch is not early and its date may well be parallel with that of 33–35. 37 is a member of the writer's "Small-Late" group and none in the King Harry Lane cemetery is earlier than 20–40, to use the revised dating suggested by the writer (see 7).

Colchester Derivatives (Fig. 135)

- 38 A large brooch whose spring was held to the body by means of a pierced plate behind the head of the bow: the axis bar through the coils passed through the lower of two holes, the chord being held in the upper. The plain wings curve to seat the spring. The plate behind the head is carried up over the top to form a skeuomorph of the Colchester's hook. Down each side of the bow is a concave face, the surface between being rounded, but the bow looks as though it is very worn and the central area had probably been like that of 39. The catch-plate has a large almost triangular hole. There is a flange on each side of the top, interrupted to allow the pin to be seated in a pin-groove.

V/492/737; soil spread east of trackway.

- 39 A repeat of the last, only with the remains of the rocker-arm ornament down the flat central face below the skeuomorph hook. The catch-plate has a pin-groove and the piercing has changed to a circle above a truncated triangle.

V/1368/+; unstratified.

The spring-holding system used here is one of the three which succeeded that of the Colchester. The other two are the Polden Hill method, largely confined to the western parts of England, and what may be called the Rearhook, which belongs almost exclusively to the lands of the Iceni and the immediately adjacent lands. The hinged pin has pre-conquest origins, and was the preferred system in the south-west. The Rearhook and the Polden Hill methods had evolved by 50 (Brailsford 1962, fig. 10, C100-C101, fig. 6.C13; Richmond 1968, 117–9) and a brooch from Skeleton Green having the same system as 38 and 39 is probably earlier (Partridge 1981, 137, fig. 69.25). The brooch was not securely stratified under the flood silts, but this and only one Hod Hill severely limits the end-date of the collection, which should have closed in the period 40–45 at the latest. The brooch resembling the two here must have been made before the arrival of the Roman army. The flanges along the top of

the catch-plate of 38 can be paralleled on the Langton Down, the Nertomarus form (eg. Cunliffe 1971, 100, fig. 38.2) 22 and 47. These had ceased to be made by the time of the conquest. Flanges on the catch-plate belong essentially to large brooches in this group. The dating of other brooches mainly of a similar size and of the same family as 38 is reasonably consistent: Colchester, c.50/55 (Crummy 1983, 12, fig. 6.48); Baldock, 50–70 (Stead and Rigby 1986, 112, fig. 44.79); Verulamium, residual in the period 60–75 (Frere 1972, 114, fig. 29.8). Three may not seem to be very many, but with the other indications, they almost certainly serve to show that the style passed out of use between 60 and 70 at the latest. As for 39, a recent review of the dating evidence (Mackreth forthcoming b) concluded that the type had largely passed out of use by 75/80.

- 40 The spring was held as those in the previous two brooches. The upper hole is immediately above the short plain wings and the plate is hardly narrower than the plain bow. The catch-plate is not offset from the bow, and has a line of rocker-arm ornament down the edge of the bow and another across the top.

V/1337/+; unstratified.

- 41 A repeat of 40, there is an offset on each side of the bow along the catch-plate. The lower hole in the plate behind the head, however, was not closed. This could have been a casting fault, but may have been intentional. The catch-plate is too damaged to see if there was a line of rocker-arm decoration along its top in addition to that along the side of the bow.

V/650/822; fill, Ditch 808.

Both 40 and 41 belong to the same group, whose chief characteristics are the plain wings and very narrow bow, the placing of the hole for the chord over the wings, or even further forward, and the decoration on the catch-plate. The area of distribution shows that production was somewhere in southern Northamptonshire and the immediately contiguous areas. However, examples travelled further west as a specimen from Wroxeter shows (Hildyard Collection, 192), but the chief extension is down the Nene Valley. Dating is limited: Quinton, 50–60 (Friendship-Taylor 1979, 135–7, fig. 63.471) and one from Mancetter should not be any later (Scott, to be published). These may be the earliest ones known as other dating, largely unpublished (eg. Odell excavations, B. Dix), suggests that the *floruit* continued to the end of the century at the least.

- 42 While very like the last two, the bow here is wider and the catch-plate is offset in the normal fashion. The brooch is completely plain.

V/1373/+; unstratified.

Unfortunately, completely plain brooches offer little in the way of dating, and all that can be said is that this piece probably belongs generally to the second half of the first century.

- 43 The pin consisted of a piece of wire wound round an axis bar cast in the wings, there being a wide gap to accommodate several coils. The backs of the wings were moulded in imitation of a spring. Their fronts were plain except at the very end

of each, where there was a buried ridge notched to look like beading. The brooch lost almost all of its right wing in antiquity, and seems to have been repaired by drilling a hole through the stump of the wing to seat the bent end of the pin-wire. The bow is broad with rounded sides and back. Down the centre runs a pair of ridges, again notched to resemble beading. V/1372/+; unstratified.

This brooch is obviously a hybrid: it has no bilateral spring, but the moulded back of the wings was intended to give an impression of one. An almost exact parallel is, unfortunately, unprovenanced (Hattatt 1982, 168, fig. 71a.175b). Again, the end of the pin-wire is poked through a hole in the right-hand wing. Therefore, either 43 was not repaired, or both were. As, apart from 44 and its relatives, there is a small but persistent group of undated brooches using the same style of pin arrangement and belonging broadly to East Anglia and the East Midlands which does not rely on fastening the pin-wire in this way, it may be that 43 and the other were experimental. If so, a date-range of c.45–65 may be appropriate. In any case, the date should be before 75.

44 The brooch is small, and the axis bar of the pin is housed in circular-sectioned wings each with a moulding at its end. The pin is formed from wire wound round the axis bar as in the last brooch, the end being bent to bind on the back of the bow when the pin was depressed. The bow is broad at the top, with a shallow triangular boss defined by grooves with cross-cuts down the sides, and tapers to a simple conical foot-knob with a moulding across the top.

V/193/288; Wall 25, Room 12, Building 1.

The brooch belongs to a well-defined family employing a narrow range of motifs to form a series of designs. The triangular boss and the foot here can be combined with a beaded ridge on the head (Down and Rule 1971, 83, fig. 5.14) or a fantail foot decorated with three dot-and-circle elements (Wheeler and Wheeler 1936, 206, fig. 43.19). Rarer patterns have an upper bow which tapers outwards towards the bottom, with a beaded ridge and a fantail foot (Peterborough Museum, L286). One from Brixworth has the triangular boss combined with a lug on either side of the bow, each with a dot-and-circle, above a double step across the bow (P.J. Wood, excavation). The distribution covers central England from the Welsh Marches to the Fens, and from the southern point of the Pennines into Hertfordshire. There are a few outliers. The dating is poor, but within its limitations fairly consistent: Verulamium, before c.150 (Wheeler and Wheeler 1936, 206, fig. 43.17–18); Derby, Antonine (Mackreth 1985, 285, fig. 125.12); Leicester, before 220 (Kenyon 1948, 249, fig. 80.10). These point to the second century and before c.150/175, which is the basic limit for all British bow brooches.

45 The axis bar of the hinged pin is housed in wings with a circular section. The surviving wing has six ridges. The bow is thick, wide and humped over the wings. The back is rounded, the front has a step down each side with a curved face between. Down the centre of this runs a thin ridge with traces of beading at the top: wear has probably removed beading from the rest. The foot is squared-off. The catch-plate has two small circular holes.

V/783/1004; destruction, Building 10.

Not belonging to any readily definable group, there is little to point to either its homeland or its date. The way in which the flat faces on either side of the bow embrace the wings is reminiscent of some styles of Polden Hill, but the overall bow, including the section, is perhaps best paralleled amongst the short-lived Rearhook Colchester Derivative found mainly in Norfolk. The holes in the catch-plate suggest a first-century date, possibly before c.75.

Late La Tène Type (Fig. 136)

46 The spring has the usual four coils and internal chord and was probably cold forged, although the bow may have been cast. The bow has a rounded front and back and a series of long cross-cuts down the middle. Unusually, the foot has a slight forward-facing projection.

V/223/372; floor makeup, Room 8, Building 1.

The round section of the thin bow points ultimately to the *Drahtfibel* as having been the ancestor of this brooch. However, descendants of both the *Drahtfibel* and the *Nauheim* have an undistinguished career, and it is hard to date any of the intermediate steps between those and their ultimate descendants. In this instance, the foot almost certainly dates after the conquest, and the brooch may be as late as the last two decades of the first century.

Langton Down (Fig. 136)

47 The spring is missing, but had been housed in a case formed by folding round it flaps cast along the top of the head. The front of the case may have had poorly formed ridges at its ends. The bow is plain with a rounded front, facets down the back edges, and is set off from the spring-case by a moulding. The foot is slightly rounded. The catch-plate has a flange along both sides of the top, only swept back along the inside to accommodate the pin. There is a large trapezoidal piercing divided by a bar, now broken.

V/231/417; lowest floor makeup layer, Room 8, Building 7.

One from the King Harry Lane cemetery (Stead and Rigby 1989), with two lines of incised Vitruvian scroll, came from a phase 2 burial, G157, and one from Baldock dated to the first quarter of the first century AD. (Stead and Rigby 1986, 113, fig. 45.87). If the suggested revision to the dating of the phases of the cemetery (see 7) is looked at, phase 2 would be 20–40 and this would suit the Baldock example better than the published range of 30–55. Apart from that, there is no good evidence for the dating of this variety which was always uncommon in Britain.

Aucissa - Hod Hills (Figs 136, 137)

All had the axis bar for the hinged pin housed in a rolled-over head.

48 The head-plate has a single shallow flute across it while the bow has a wide one down the middle with, on either side, a buried chevron formed of straight bars. The lower bow with the catch-plate is missing.

V/668/834; yard makeup, north of Building 9.

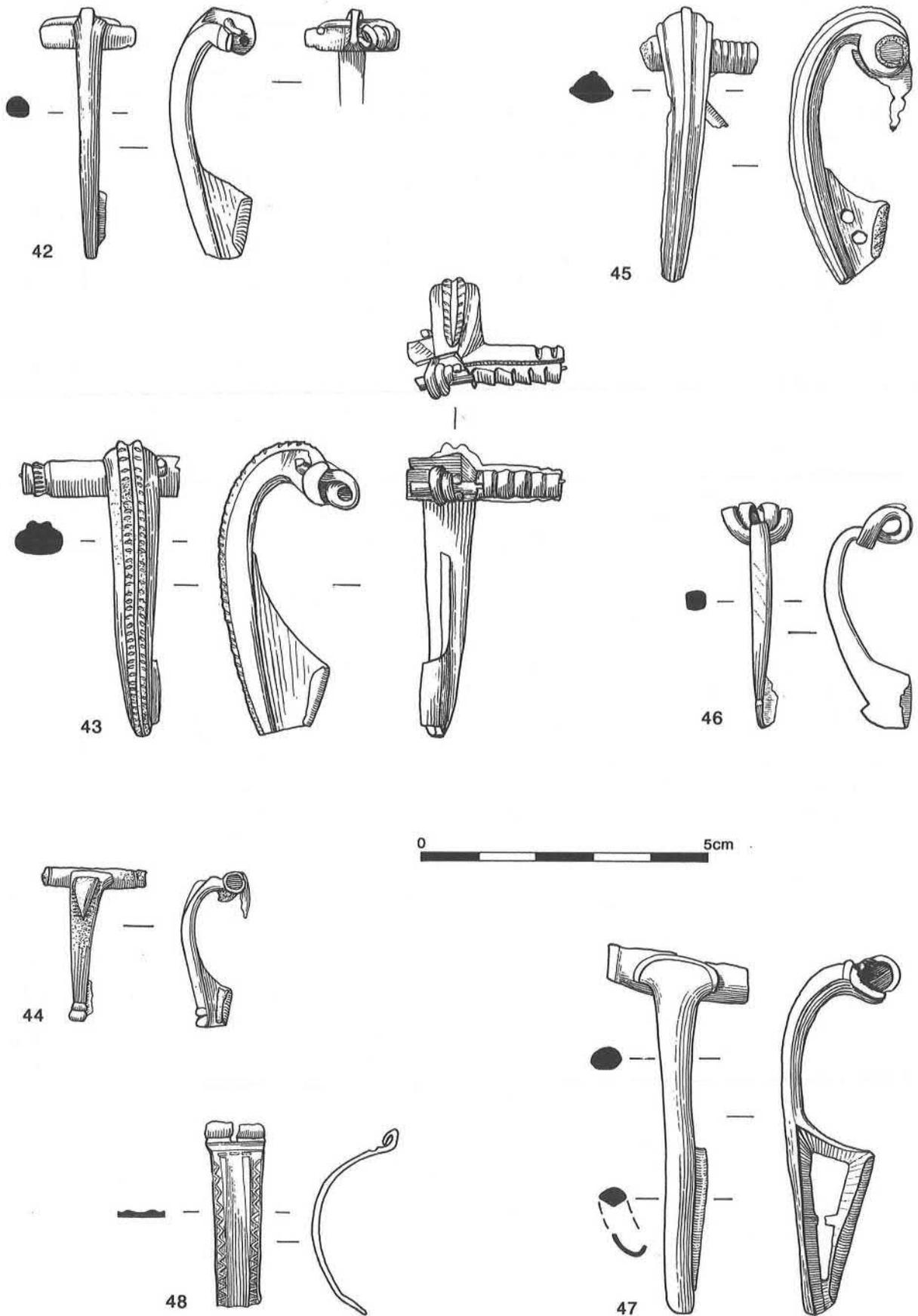


Figure 136: Colchester derivative type brooches 42-45; Late La Tène type brooch 46; Langton Down brooch 47; Aucissa/Hod Hill brooch 48, scale 1:1.

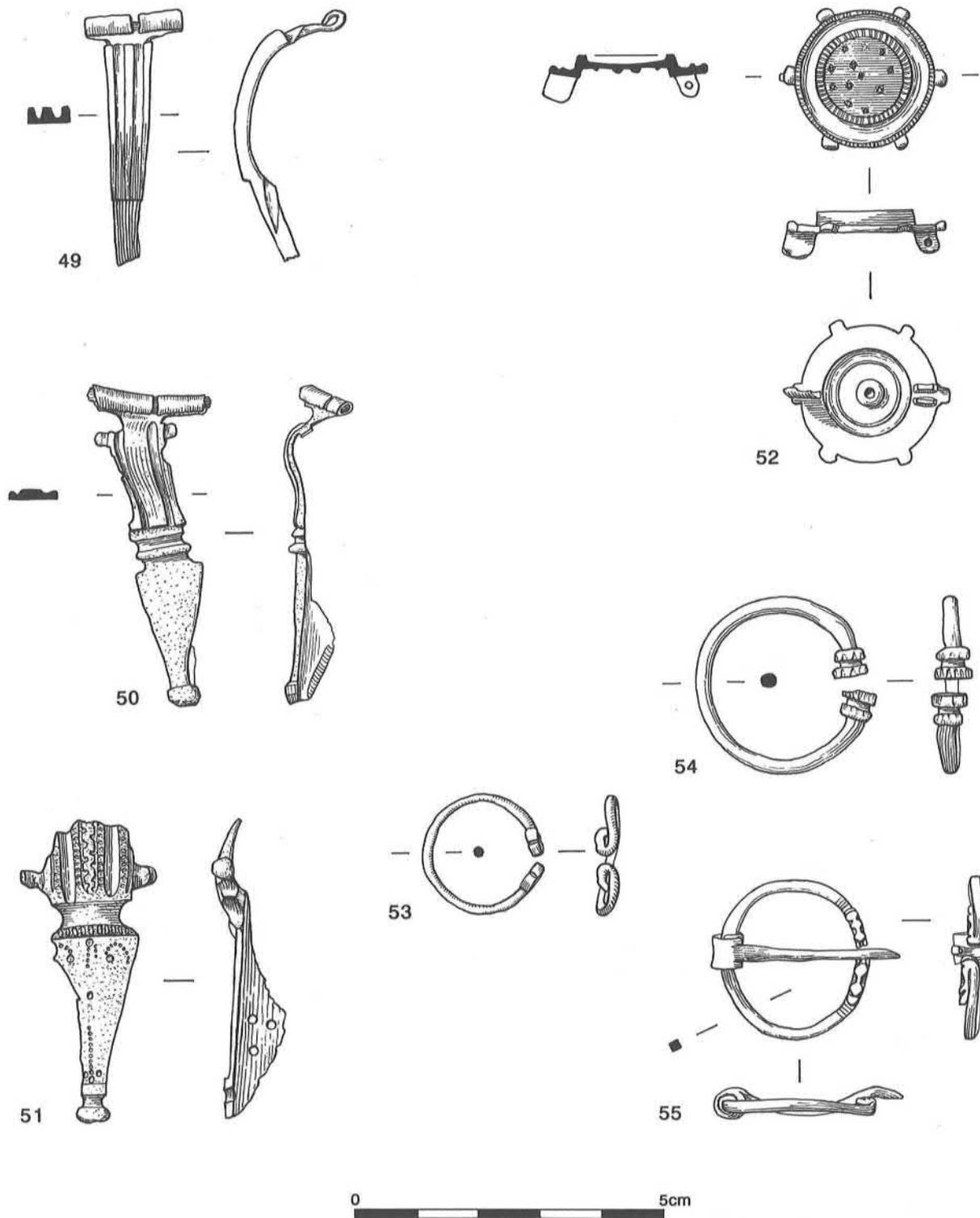


Figure 137: Aucissa/Hod Hill brooches 49-51; Plate brooch 52; Penannular brooches 53-55, *scale 1:1*.

49 The upper bow has three prominent vertical ridges separated by deep flutes. The lower bow is plain, tapering to the break. The foot is lost.

V/422/663; soil spread east of Building 4.

50 The upper bow has a wide, but shallow, ridge in the middle with a very narrow one down each side. There is a small wing on each side at the top. The lower bow, separated from the upper by two cross-mouldings, is broad at the top, flat and

plain and tapers to a simple foot-knob.

V/631/736; soil spread east of trackway.

51 The head is lost. The upper bow has a broad panel with four marked vertical ridges all cross-cut to look like beading. Between the central pair is a ridge distorted by using a punch to form a wavy line. At the bottom on each side is a simple wing ending in a boss. The lower bow is offset from the upper by a fluted waist and has a notched cross-moulding under

which is a repeat of the lower part of 50. On the flat surface are the remains of a design carried out in punched dots, which seems to have had a central line with a scroll of some form on each side. The design is articulated by using larger punched dots at intervals.

V/1369/+; unstratified.

48 is neither an Aucissa nor a Hod Hill, being based on an example of one of the parallel designs of the Aucissa which also contributed to the range of designs found on Hod Hills. In other words, the Hod Hill is the result of development from a series of brooches deriving from the Alesia (Duval 1974). The Alesia itself had a rolled-under head for the axis bar of the hinged pin, and the earlier derivative stages had the same. The later ones reversed this to produce the rolled-over head of the Aucissa and its relatives, and hence its appearance in the host of Hod Hills. The decorated head-plate of the Aucissa series disappears in its progeny, and the absence of one on 48 strongly suggests that it is a transitional design of short duration. Considering that the Hod Hill had developed by 43, it is surprising that none has been published from a secure pre-conquest context: the only Hod Hill from Skelton Green was ambivalent in its stratification (Partridge 1981, 141–2, fig. 72.55). This detail throws up the unique condition of one published from Baldock, where it was dated to the first quarter of the first century AD. (Stead and Rigby 1986, 120, fig. 47.112). The brooch must be wrongly attributed, as it would predate most examples of its parent type. The Hod Hill arrived in great numbers at the conquest, and its distribution in Britain shows effectively that it was passing out of use between c.60 and 70, very few indeed surviving beyond the latter year. 48 is possibly no later than c.55/60.

Plate (Fig. 137)

52 The pin was hinged. The plate is circular with a raised notched border and six equi-spaced bosses outside that. The central area of the brooch is a raised circular pedestal, also with a notched border, largely filled with enamel. This consists of a pale blue matrix with squares of millefiori also having a pale blue matrix with a quincunx of white squares in the middle.

V/1367/+; unstratified.

The hinged pin, notched borders and the precision of its finishing including the turning of the hollow behind the pedestal, point to this brooch having been made on the continent. Dating is exiguous, as precise parallels are few and not necessarily to be expected in great numbers. Such brooches belong essentially to the second century.

Penannular (Fig. 137)

53 The ring is only 19 mm across. The section is round. Each terminal is turned back along the top of the ring and each has a groove across its centre.

V/438/504; silting over trackway, east of Building 9.

Simple penannular brooches like this are difficult to date with precision. It is also doubtful if the number, between one and three and possibly more, of grooves across each terminal is a useful chronological indicator. Single groove: Hod Hill,

earlier than 50 (Brailsford 1962, 12, fig. 11.E11; Richmond 1968, 117–9); North Cerney, Glos., Claudian-Neronian (Mackreth 1988, 51, fig. 24.26); Camerton, later than 150 and 150–200 (Wedlake 1958, 234, fig. 54.63–4). Two grooves: Bagendon, 43/5–47/52 (Clifford 1961, 184, fig. 36.9); Waddon Hill, Stoke Abbott, Dorset, c.50–60 (Webster 1960, 97, fig. 7.21–2; Webster 1981, 62, fig. 59.13); Longthorpe Cambs, c.45–65 (Frere and St. Joseph 1974, 46, fig. 24.15); Prestatyn, 70s–160 (Mackreth 1989, 98, fig. 40.28); Verulamium, 80–150 (Wheeler and Wheeler 1936, 210, fig. 45.39); Caerleon, Hadrianic-Antonine (Wheeler and Wheeler 1928, 166, fig. 14.23); Somerton, Bradley Hill, fourth century (Leech 1981, 214, fig. 16.7). Three grooves: Longthorpe, Cambs., c.45–65, two examples (Frere and St. Joseph 1974, 46, fig. 24.14; Dannel and Wild 1987, 87, fig. 21.12); Carlisle, late first century 105/115 (Mackreth 1990, 113, No.28). The bias of the available dating is from the middle of the first century into the second.

54 The ring has a circular section. Each terminal is made up of two bold discs, with cross-cut edges, divided by a deep flute. V/744/965; destruction, 'sauna'.

Single disc terminals are not common, unless the normal form is actually a knurled knob, usually of biconical form when well-shaped. Restricting the range to forms like those on the present brooch, the dating is: Cirencester, 50–85/110 (Wacher and McWhirr 1982, 92, fig. 25.17); Newstead, c.80–200/10 (Curle 1911, pl. LXXXVIII.15; Hartley 1972, 54); Leicester, 90–100 (Kenyon 1948, 252, fig. 82.10); Baldock, 120–150 (Stead and Rigby 1986, 122, fig. 49.157); Mumrills, c.140–165 (Macdonald and Curle 1929, 555, fig. 115.7); Ravenglass, c. 200–350/370 (Potter 1979, 69, fig. 26.11). The dating suggests that the pattern is post-Conquest, but is not really third century or later.

55 The brooch was made from forged rolled or folded sheet. The pin has a slight hump, and is fastened to the ring by a sleeve made from a wide flap at the head of the pin. The ring is flat top and bottom, the sides are rounded. Each terminal is folded back along the top of the ring and has a zoomorphic appearance, achieved by creating a pair of ears at the gap and chamfering the edges to form the upper head and the snout. There is a further part which may be careful shaping of the lower face rather than an attempt at a wide tongue. Next to the terminals on the top surface of the ring is a short series of faint cross-lines.

V/413/637; fill, Pit 637.

Much has been made of zoomorphic brooches, their development and their post Roman dating. However, their ultimate development has nothing to do with the present example, the truth being that their development within the Roman period is poorly understood, and even their dating lacks clarity. While this may be because their development lay in times for which archaeological dating is not really available, their origins are definitely within the Roman period. Part of the problem is well represented by a brooch from Moulton, Northants. (Hunter and Mynard 1977, 134, fig. 19.262) and assigned there to phase 4, which was dated from the late third century through the fourth and possibly into the fifth. The

discussion of the brooch itself emphasised possible developments in the fifth to seventh centuries (*ibid.*, 106, 134). However, there was nothing on the site which gave such a late end-date, unless it was the brooch itself, but this was not brought forward to support the suggestion (*ibid.*, 106). A cruder version with a rectangular-sectioned ring from Verulamium belongs to the late fourth century (Kenyon 1953, 259, fig. 12.12) and here it is almost certainly the section of the ring which is of importance. Otherwise the dating is weak: Barton Court, Oxon, late Roman (Miles 1986, 5, D10, fig. 103.7); Milton Keynes, early-mid fourth century (RMK, 133, fig. 41.18). In the present case, the form of the terminals is good, but this is not enough by itself. However, the presence of close-set grooves across the ring can be seen as a trait which was to develop, and there is the sleeve at the end of the pin. The latter is not all usual on Roman brooches and is only to be found, occasionally, on brooches with reasonably well-formed zoomorphic terminals (Kenyon 1948, 252, fig. 82.9; Kilbride-Jones 1980, 148, fig. 52.4, 6, 7, 10 and 13; Wheeler 1924, 137–8, fig. 59; Scottish sites being excluded). On balance and despite the very weak dating evidence, the form of the terminals, the grooving on the rings, and especially the sleeve round the ring for the pin, point not only to a fourth-century date, but a late one at that. However, other evidence is required before this brooch could be assigned to the fifth century.

Author's note: This brooch was found with a hoard of sixteen bronze coins, with a date range of 321–64, probably deposited post–350.

In addition to the brooches reported on by D.F. Mackreth, six brooch pins were recovered from the two sites. None was complete, nor could any be related to any of the above brooches.

Acknowledgements

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1. Dr Grace Simpson, who kindly provided details of material from South Cadbury.
2. Lady Pauline Richmond-Brown for allowing me to study the Hildyard collection.

SAXON SMALL LONG BROOCH

(Fig. 138)

This object was recovered by metal detector from the villa after the site had been backfilled in 1987. The following report is based on comments supplied by Martin Howe. The drawing is based on a sketch by Paul Woodfield, as the brooch was retained by the finder and cannot now be traced.

55a Trefoil-headed small long brooch, copper alloy. The faceting is nicely worked, and the brooch as a whole is neatly made and well in proportion for one of its type. Interestingly, it is devoid of punched ornament, a common feature on this class of brooches. The nearest parallel is one from Abingdon, now in the Ashmolean Museum. Length 61 mm.

V/-/+; metal detector find.

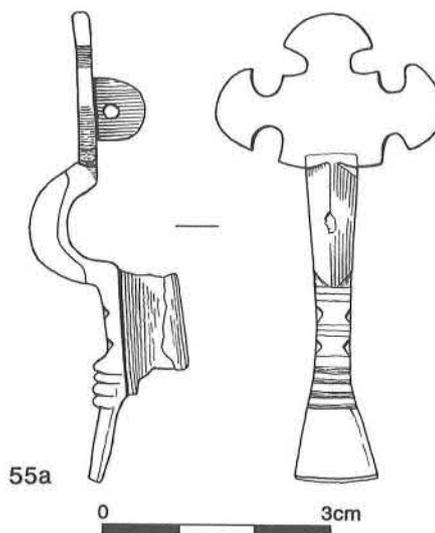


Figure 138: Saxon copper-alloy small long-brooch 55a, scale 1:1.

Trefoil-headed brooches are arguably the most common in the Anglian area. Their distribution, although centred on the Lark and Nene valleys, is quite even across the region, so the discovery of one in the Milton Keynes area is not unusual. What is unusual is that this brooch comes from a villa; the only other examples from Roman sites are from forts, namely Malton (Corder, undated) and Longthorpe (pers. comm. M. Howe). However, it would be wrong to consider this brooch on its own as evidence for continuous occupation of the site. From its type and decoration, this brooch appears to date from the first half of the sixth century, or possibly from the late fifth.

OBJECTS OF COPPER ALLOY, SILVER AND GOLD

Tora Hylton and R.J. Zeepvat

Bracelets (Figs 139–141)

The 1983–86 excavations at Bancroft produced thirty-one bracelets and bracelet fragments in addition to the three from earlier excavations reported in RMK (nos 21, 25, 28). Of these, the majority of securely stratified examples were recovered from fourth-century contexts.

The bracelets described below can be separated into four broad groups, according to their basic structure; ribbon-strip, 'D' section, crenellated and cable.

Ribbon-strip

These were the most common type of bracelet found, there being thirteen examples, eleven of which are illustrated. These were made of flat strip, typically 1–2 mm thick, and 3–9 mm high, 3–4 mm being the usual height range. Both closed and open examples were noted, the latter being more common. Fastenings consisted of an eye in one end locating

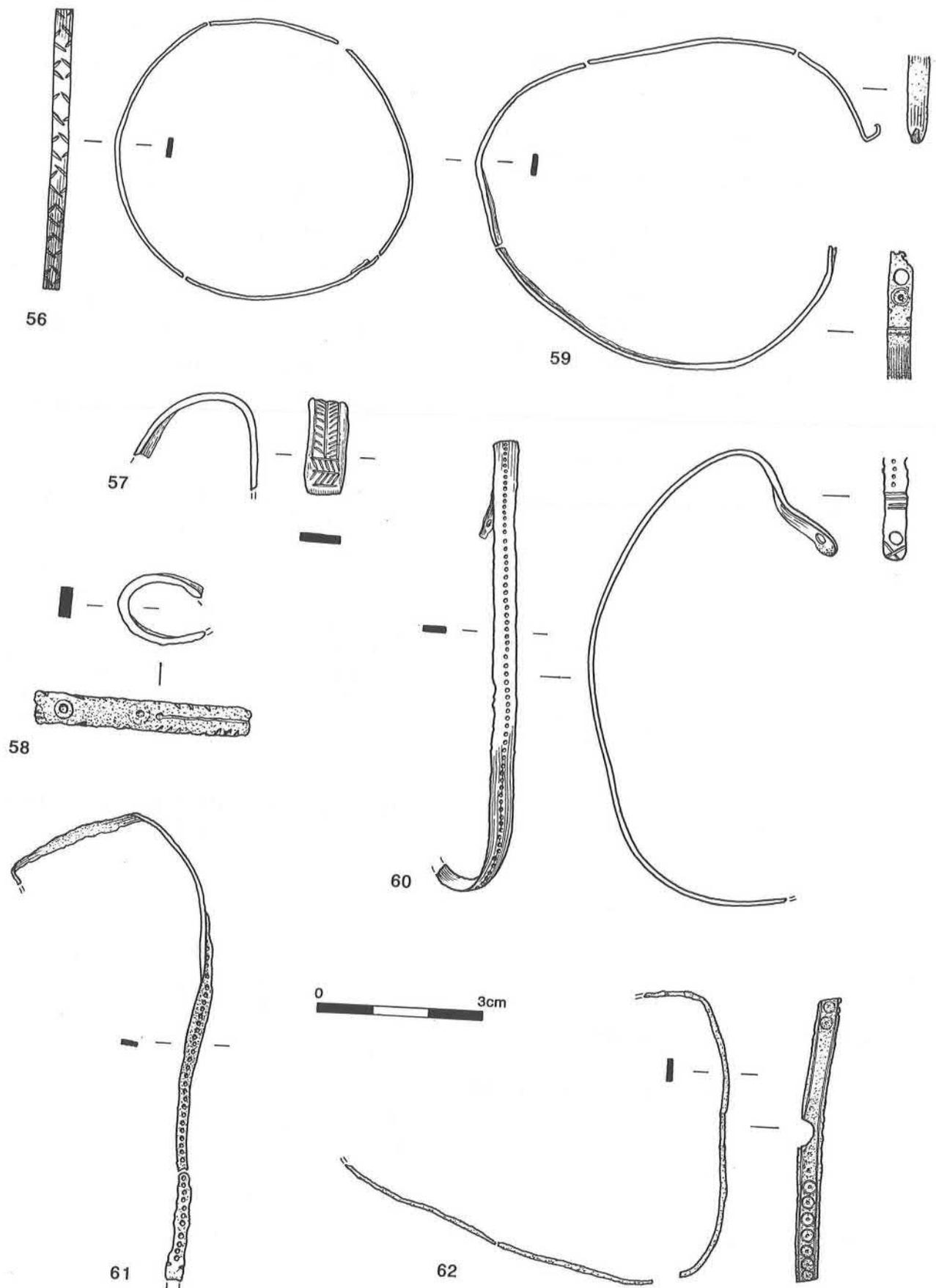


Figure 139: Copper-alloy ribbon-strip bracelets 56-62, scale 1:1.

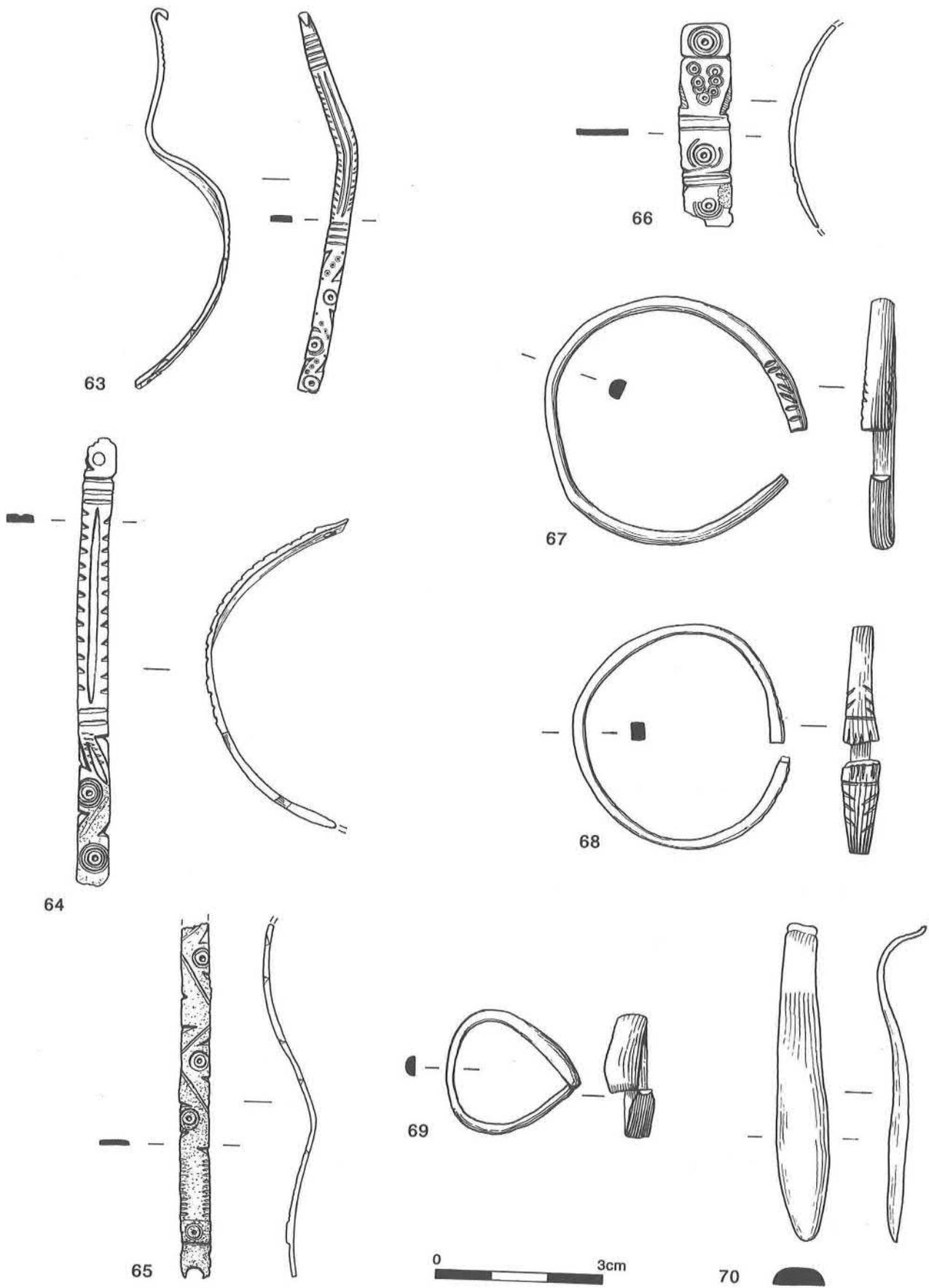


Figure 140: Copper-alloy ribbon-strip bracelets 63-66; 'D' section bracelets 67-70, scale 1:1.

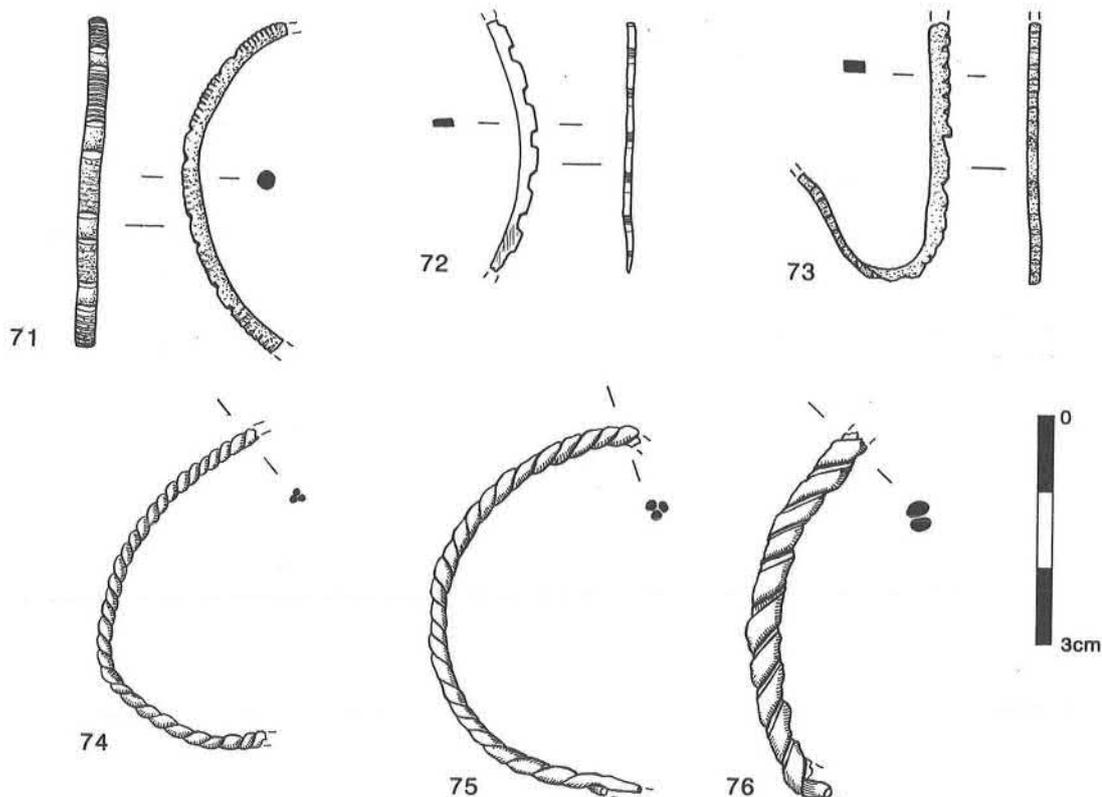


Figure 141: Copper-alloy crenellated bracelets 71-73; Cable bracelets 74-76, scale 1:1.

over a tapered hook at the other, perhaps explaining why such bracelets were easily lost! Decoration, found only on the outer face, was varied, with incised line, chip carving, and ring-and-dot techniques all being employed. RMK no.21 also falls into this group.

- 56 Bracelet, four fragments, continuous loop with soldered lap joint. Decoration consists of pairs of opposed chevrons. Height 3 mm, dia. 60 mm approx.
V/106/89; soil spread north of Buildings 1/7.
- 57 Penannular bracelet fragment with terminal end. Decoration consists of two incised marginal grooves, within which is a herringbone motif, with a central incised line. At the terminal end, the same design is used transversely. Length 37 mm, height 7 mm, th. 1 mm
V/1147/+; unstratified.
- 58 Bracelet fragment. Although extremely corroded, there is evidence of a central longitudinal groove, ring-and-dot markings and light chip carving along both edges. Length 40 mm, width 5.5 mm.
V/552/735; soil spread east of trackway.
- 59 Bracelet, four fragments, badly corroded. Hook-and-eye terminals, the eye terminal decorated with a single ring-and-dot marking, with single opposing chip carved notches separating it from two transverse grooves. Height 4 mm, approx. dia. 70 mm.
V/285/466; soil spread over trackway, east of Building 9.
- 60 Bracelet, with perforated terminal end. Decoration consists of a central row of punched dots running the length of the bracelet. The eye is flanked on the terminal end side by an incised cross and on the other by four incised transverse grooves. Length 143 mm, height 4 mm, th. 1 mm.
V/831/1069; fill, Enclosure 1208.
- 61 Bracelet fragments similar to 60, with hooked terminal end. Decoration consists of a central line of punched dots. Length 116 mm, height 3 mm.
V/616/736; soil spread east of trackway.
- 62 Bracelet, three fragments. Decorated with two marginal incised grooves enclosing a central area containing a row of continuous ring-and-dot motifs, separated into two groups by a blank central section. Length 127 mm, height 4 mm, th. 1 mm. The decoration is identical to that on another ring from Bancroft (RMK no. 43).
V/835/1071; fill, Enclosure 1208.
- 63 Bracelet fragment tapering at one end, to a terminal hook. Starting at the hook, decoration consists of five or six transverse incised lines, followed by two central incised lines flanked by chip carving, terminating at four further transverse lines. Beyond is a section of alternate chip carving, producing a zig-zag pattern, containing ring-and-dot motifs and lines of punched dots. Height 4 mm.
V/1a/1; topsoil.
- 64 Bracelet fragment with eye terminal. Similar decoration to 63, though with a single central line in the first panel, and in the second the punched dots are replaced by incised lines. Length 81 mm, height 5 mm, th. 1 mm.
V/91/52; destruction, Building 6.
- 65 Bracelet fragment with pierced terminal end. From the terminal, a single ring-and-dot on a slightly raised panel leads to a plain area bounded by slight chip carving, which is followed by a panel of chip carved zig-zag decoration with ring-and-dot markings and incised lines, similar to 63 and 64. Length

67 mm, height 5 mm.

V/286/466; soil spread over trackway, east of Building 9.

Bracelets 63–65 are of a similar design to one found in a third or fourth-century inhumation on the inner relief road at Colchester (Crummy 1983, 45, fig. 47.1732).

66 Bracelet fragment. Multiple motif decoration, divided into square and rectangular panels by two transverse grooves. The squared panels contain a central ring-and-dot motif, sited within a larger ring. The rectangular panel contains a series of seven smaller ring-and-dots in a rough 'V'. Length 40 mm, height 9 mm.

V/671/866; destruction, Building 11.

'D' Section

Six examples were found at Bancroft, of which four are described below. These were all penannular bracelets, largely undecorated, except at the terminals, which in some examples (eg. 70) are shaped like a snake's head. The only complete bracelet in this group (68) evidently belonged to a child, judging by its size. RMK no. 28 also appears to fall into this group, and is unusual in that it has body decoration, in the form of incised crosses.

67 Bracelet fragment with thickened terminal. Decoration consists of tiny incised grooves sited on the extreme outer edges, close to the terminal. Height 3.5–5.0 mm.

M/30/39; silt layer, Ditch 60, below Causeway 43.

68 Bracelet. Undecorated body, widening out towards the decorated terminals. Motif consists of three marginal oblique incised grooves and one transverse groove, terminating with four tiny linear markings along the extreme ends of the terminals. Int. dia. 36 mm.

M/51/150; fill, Gully 170.

69 Bracelet fragment. Undecorated body, widening out towards the terminal. Height 5–6.5 mm.

M/19/45; fill, Ditch 60.

70 Bracelet terminal. Undecorated, and slightly flattened to form a snake's head. Length 60 mm, max. height 10 mm. Similar to RMK no. 31, and an example from Gadebridge (Neal 1974, 139, fig. 60.158).

V/1260/+; unstratified.

Crenellated

Only three of this bracelet type were found, and all are illustrated below. These bracelets were formed from round or rectangular section rod, usually linked by a riveted or soldered lap joint, and were decorated along the outer edge with either notching, a raised carved 'gear-tooth' pattern, or a combination of both. All the Bancroft examples are fragmentary. RMK no. 25, which belongs to this group, has unusually widely-spaced diagonal notched decoration.

71 Bracelet fragment, circular section. Decoration consists of regularly spaced groups of nine narrow transverse grooves, bounded by larger single grooves, separated by undecorated areas. Length 50 mm.

V/143/76; destruction, Building 8.

72 Bracelet fragment with evidence of a lap joint. Its outer surface is crenellated. Height 2 mm, width 1 mm. Mid fourth century.

V/414/637; fill, Pit 637.

73 Bracelet fragment, broadly-spaced transverse notched decoration on outer edge. Length 58 mm, height 2 mm, th. 1 mm.

V/740/928; fill, Ditch 930.

Cable

Fragments of eight cable bracelets were found at Bancroft, of which three are described below. These were made from two or three strands of wire twisted together, either formed into hook terminals or with decorative ferrule penannular terminals (Crummy 1983, 38). No terminals survive on the Bancroft examples.

74 Bracelet fragment, three circular-sectioned strands, twisted together in a clockwise direction. Th. 2 mm. Late second century.

V/65/54; destruction of baths, Building 7.

75 Bracelet, three fragments. Three circular-sectioned strands, twisted in a clockwise direction. Th. 2.5 mm.

V/556/735; soil spread east of trackway.

76 Bracelet fragment. Two circular-section strands, twisted together in an anti-clockwise direction, then hammered. Th. 4 mm.

V/738/931; soil spread south of Building 12.

Rings (Figs 142–143)

Of the twenty-five rings or ring fragments found at Bancroft, nineteen of which are described below, about half could be positively identified as finger rings, usually through a combination of shape and decoration. Two of this group (82, 86) were of silver, the rest of copper alloy. Whilst some of the remaining, largely undecorated, rings could have been finger rings, others, from their size, must have fulfilled other functions, such as harness or belt fittings, or as suspension fittings on tools or vessels. Also to be considered with these objects are the nine rings from Bancroft already described in RMK (135, fig. 42), seven of which were finger rings.

As with the bracelets described above, the ring assemblage can be divided into a number of broad groups, based principally on form; ribbon-strip, crenellated, bezel, plain round, and split.

Ribbon-strip

As with the ribbon-strip bracelets, these were formed from flat strip, typically 5–6 mm high and 1.0–1.5 mm thick, joined with a soldered lap joint. All of this type were finger rings, and most are decorated. Of the seven found, six are described below. Three of the rings described in RMK (nos 37, 43, 44) also belong to this group.

77 Finger ring fragment, rectangular section, undecorated. Height 3.5 mm, int. dia. 21 mm, th. 1 mm.

V/92/52; destruction, Building 6.

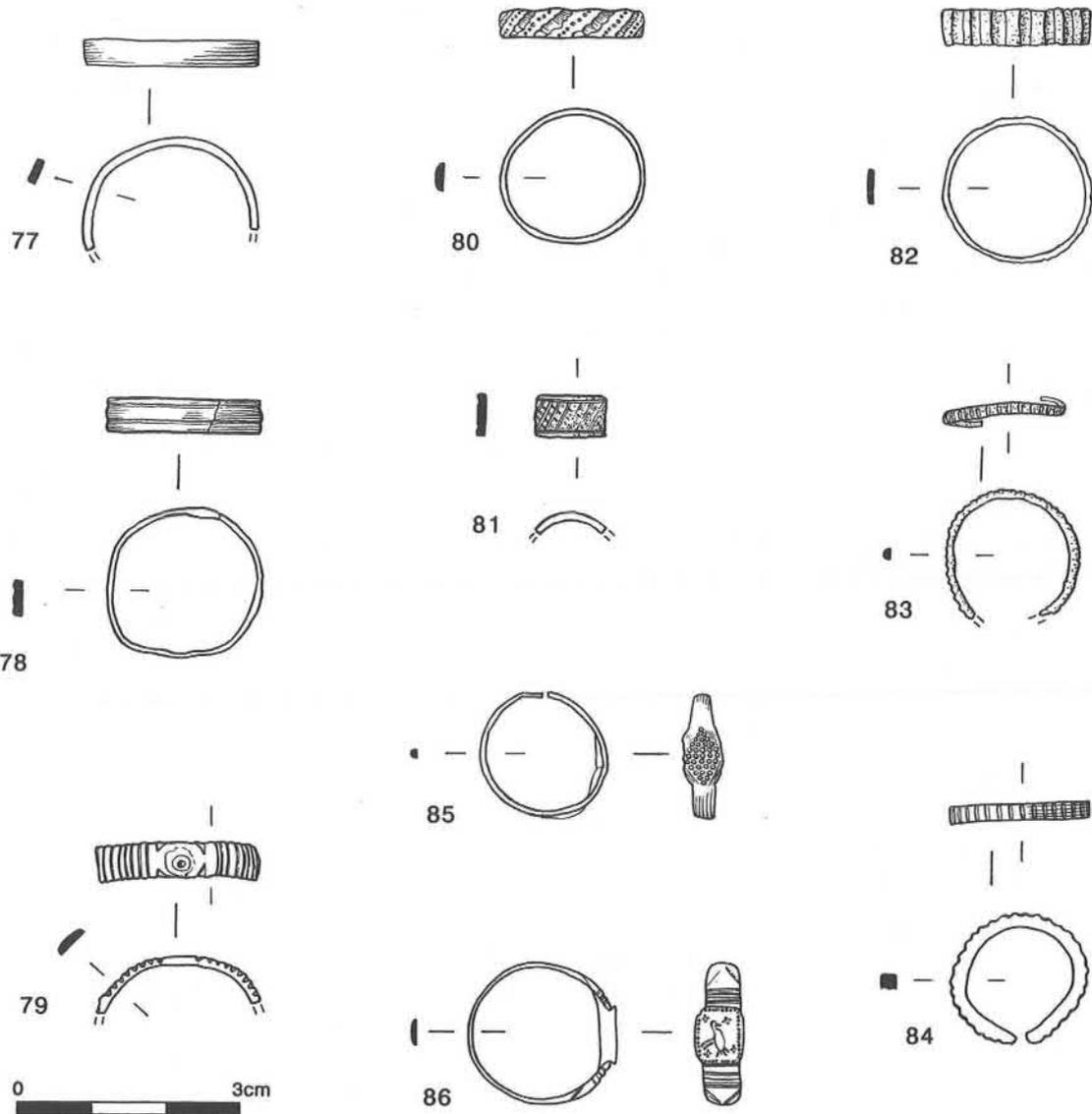


Figure 142: Copper-alloy ribbon-strip finger rings 77-82; Crenellated finger rings 83-84; Bezel finger ring 85; Silver finger ring 86, scale 1:1.

78 Finger ring, rectangular section. Decoration consists of two incised, concentric parallel grooves. The ring is fixed by a soldered lap joint. Int. dia. 19 mm, height 5 mm.

V/23/23; destruction, Building 1.

79 Finger ring fragment, rectangular section. Decoration consists of a single ring-and-dot motif flanked by closely spaced transverse grooves. Height 5 mm, approx. int. dia. 21 mm.

V/90/72; fill, Ditch 447.

80 Finger ring, flattened D-shaped section. Decoration consists of diagonal fluting, giving the impression of clockwise twisting. On each ridge is a line of punched dots. Int. dia. 18 mm, height 4 mm,

V/1379/+; unstratified.

81 Finger ring, four fragments, rectangular section, hatched decoration in between two marginal grooves. Height 6 mm, th. 1 mm.

V/94/78; ash in west bath suite stoepit, Building 1.

82 Finger ring, silver. Flat rectangular section, regular vertical

ribs on outer face. Int. dia. 18.5 mm, height 5 mm. Late second century.

V/776/1002; destruction, Building 10.

Crenellated

Like the crenellated bracelets described above, these were made from round or square section rod, decorated on the outer edge with regularly spaced transverse grooves. Two were found; both are described below. Like the ribbon-strip type, these were also exclusively finger rings.

83 Finger ring, D-section, decoration consisting of regular transverse grooves. Int. dia. 15 mm, th. 1 mm.

V/613/736; soil spread east of trackway.

84 Penannular finger ring, 2 mm square section. Decoration consists of evenly distributed transverse grooves. Int. dia. 14 mm.

V/545/737; soil spread east of trackway

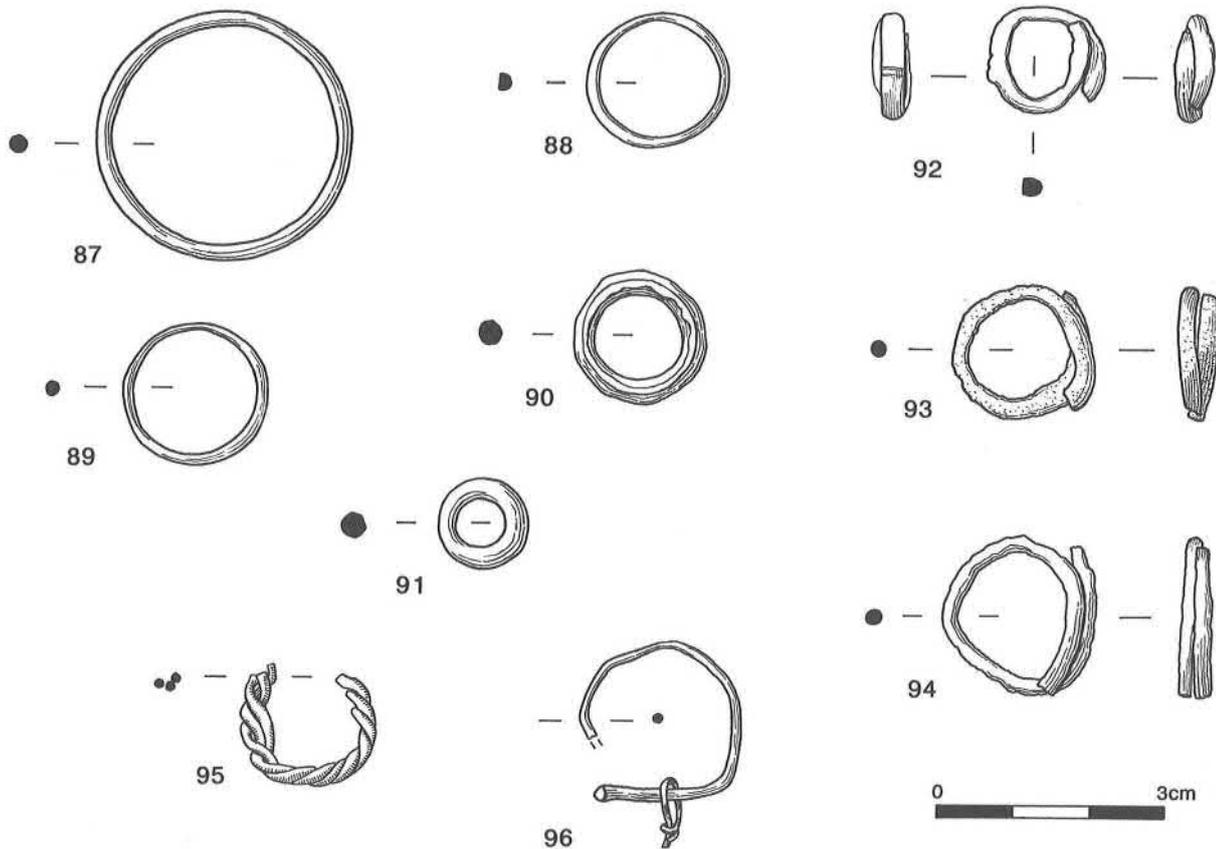


Figure 143: Plain copper-alloy rings 87-91; Split rings 92-94; Earrings 95-96, scale 1:1.

Bezel

As with the above groups, these were also finger rings. Of two copper alloy bezel rings found at the villa, one is described, along with the silver ring found by a metal detectorist at the mausoleum site.

- 85 Finger ring, D-shaped section, widening out to a flattened oval shaped bezel. Decoration consists of closely spaced raised dots, forming a lozenge. Int. dia. 15 mm, height 1 mm. Mid first to early second century.
V/425/675; fill, Ditch 509

Silver Ring (Plate 72)

Martin Henig

- 86 Finger ring, ribbon hoop with three parallel notches on each shoulder, with a 'V' motif below it. The raised rectangular bezel bears the engraved device of a bird, perhaps flying, surrounded by four simple X-shaped stars. Int. dia. 18 mm, bezel dimensions 7.5 x 6.5 mm.
M/185/+; unstratified.

This ring belongs to a well known fourth-century type, distinguished by its raised square (or strictly rectangular) bezel (Henig 1978, 40, fig. 1, type XV). Birds are common devices on such rings, and we may note a 'duck' on a silver ring from Droitwich (Henig 1978, 281, pl. LIX.798), and other examples of birds on silver rings from South Ferriby, Lincs., and Whorlton, Yorks. (*ibid.*, 799, 800), in each case



Plate 72: Silver finger ring 86 with raised bezel bearing the engraved device of a bird surrounded by four stars.

found with silver coin hoards terminating with issues of Honorius. Also of note is a copper alloy ring with a bird on a square bezel from Cirencester, Gloucs. (Henig 1979).

It is very tempting to interpret the stars as the ancient symbol of *aeternitas* (Henig 1978, 106; Henig 1984a; Boardman and Scarisbrick 1977, 29, no.39), and to see the bird which appears to be flying as the Christian dove. Here the silver square-bezel ring from Fifehead Neville, Dorset (now lost) showing a dove, two palms and a Chi-Rho comes immediately to mind.

Plain Round

This was the most common type of ring to be found at Bancroft, and also the most variable in size. This group consists of undecorated circular section closed rings, varying in internal diameter from 6.5–29 mm. Whilst some (88, 89) could from their size have been finger rings, all could have served a variety of purposes. Of nine examples found, five are described below.

- 87 Ring, circular section. Int. dia. 29 mm, ext. dia. 33 mm.
V/1146/+; unstratified.
- 88 Ring, D-section. Int. dia. 16 mm.
V/205/262; fill, Ditch 263.
- 89 Ring, circular section. Int. dia. 16 mm.
V/652/824; trackway, east of Building 9.
- 90 Ring, circular section. Int. dia. 11 mm.
V/333/551; soil spread in farmyard.
- 91 Ring, circular section. Int. dia. 6.5 mm, ext. dia. 10.5 mm.
V/1274/+; unstratified.

Split

These rings are all made from round rod, and are distinguished by their overlapping ends, somewhat similar to the modern key-ring. All are crudely made, and with one exception (92) are undecorated. Four examples were found at Bancroft, of which three are illustrated. From their crude construction and lack of decoration it is unlikely that any of this group were finger rings, irrespective of size, so like the previous group they could have served a variety of purposes.

- 92 Ring, terminals overlapping, with decoration (?) consisting of two closely spaced transverse grooves on the outer face opposite the opening. Int. dia. 9 mm.
V/198/360; fill, Ditch 360.
- 93 Ring, circular section, undecorated, terminals overlapping. Int. dia. 13 mm.
V/612/736; soil spread east of trackway.
- 94 Ring, circular section, undecorated, terminals overlapping. Int. dia. 13 mm.
V/742/954; fill, Ditch 798.

Earrings (Fig. 143)

It is quite possible that some of the rings described above, particularly the plain round type, could have formed part of

earrings, with suitable fittings for suspension. Of the two earrings described below, 95 has been positively identified by comparison with finds from other excavations; 96 because it retains part of the suspension fitting. Both are from fourth-century contexts.

- 95 Earring, constructed from three circular section strands, twisted in a clockwise direction. Similar objects of a contemporary date were recorded at Shakenoak (Brodribb *et al.* 1968, 88, fig. 30, 27 & 28). Dia. 18 mm, th. 2.5 mm.
V/310/512; fill, Ditch 511.
- 96 Earring. Wire loop, from which is suspended a short length of wire twisted into a suspension loop. Int. dia. 18 mm, th. 1.5 mm
V/381/607; soil spread east of trackway.

Buckles (Fig. 144)

All the buckles found during the 1983–86 excavations were unstratified, and therefore can only be dated on stylistic grounds. It is interesting to note that all were found on the villa and, apart from two buckles (97, 101), all dateable examples are of late fourth to fifth-century date. In this context should also be noted the ‘dolphin’ buckle from Bancroft (RMK no. 51).

In addition to the buckles described below, two fragments of D-shaped medieval harness buckles were found, also unstratified.

- 97 Buckle, rectangular, undecorated. At the trailing corners are small ‘wings’, delineated by chip carved notches. The tongue is also cast, attached by a circular ‘claw’. Length 25 mm, width 23 mm. Possibly of Roman date (Marshall 1986, fig. 1).
V/1272/+; unstratified.
- 98 Buckle plate. Central incised design, flanked on either side by bands of rouletting. Measurements 17 × 15 mm. The decoration on this object is heavily corroded, and therefore difficult to identify, but it could possibly belong to Hawkes and Dunning Type 1A, dateable to the late fourth to early fifth centuries.
V/639/1; topsoil.
- 99 Buckle plate, Hawkes and Dunning Type IIA, almost identical to one found at Caerwent (Hawkes and Dunning 1961, 53, fig. 17a.) Plate decorated with an openwork arcade design, made up of two rectangular openings with pierced ovals at the top. In each of the four corners are pierced rivet holes, and around the sides ornamental excrescences. Surface decoration consists of punched ring-and-dot motifs. Four hinge attachments connect the plate to the loop by means of a bolt or pin.
V/1378/+; unstratified.
- 100 Buckle fragment. D-shaped loop, decoration in the form of a stylised dolphin. A punched ring-and-dot motif represents the eye. Probably from a buckle of Hawkes and Dunning Type IIA, late fourth to early fifth century.
V/1345/+; unstratified.
- 101 Buckle, Marshall type 111B, with D-section, circular double loops, and two projecting wings on one side (Marshall 1986).

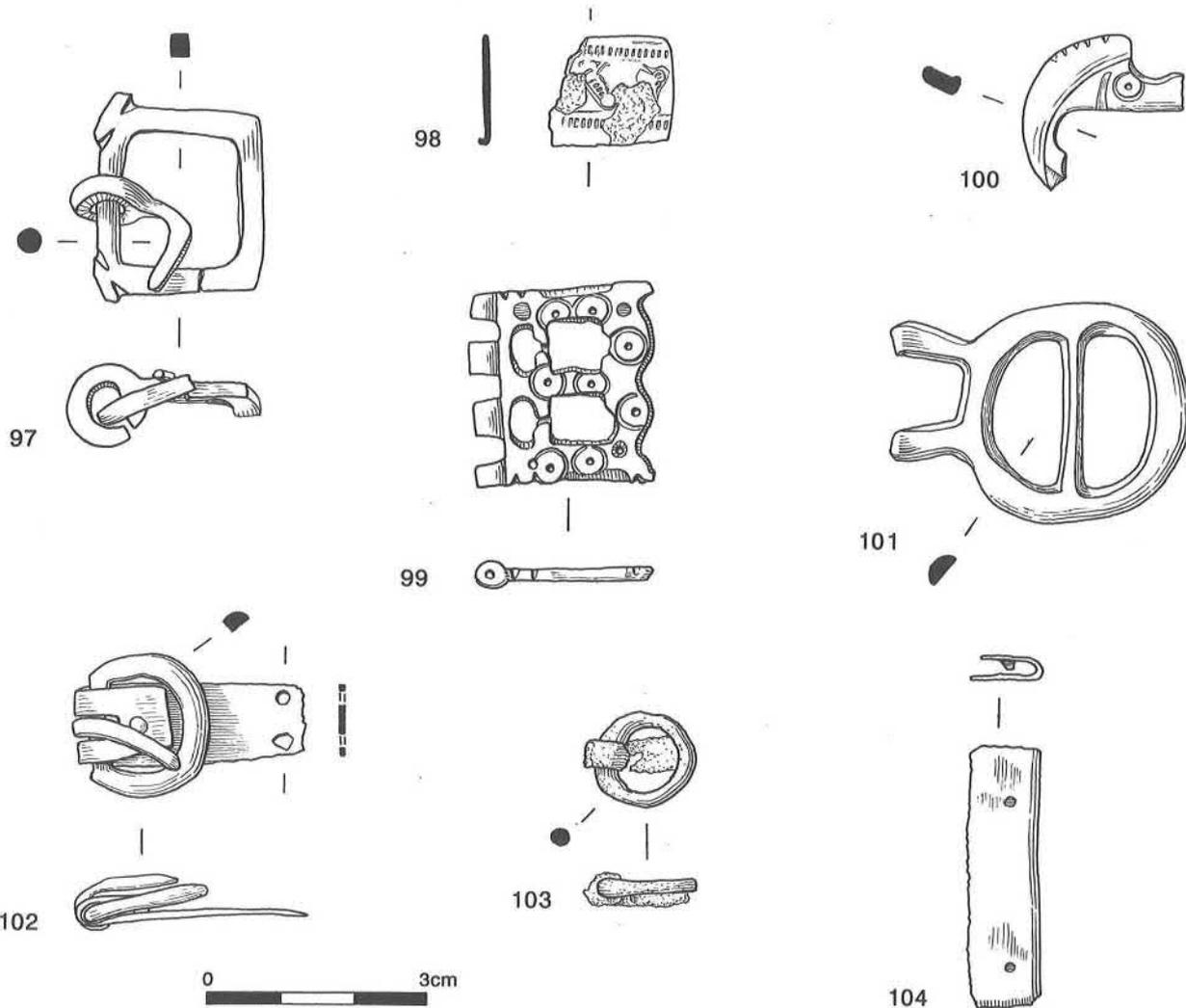


Figure 144: Copper-alloy buckles 97-104, scale 1:1.

There are parallels from Southwark and Crutched Friars, London (Ward Perkins 1967, pl. LXXVII.13, 14). Medieval, c.1350-1700.

V/1101/+; unstratified.

102 Buckle, D-shaped loop, with tongue and tapering belt plate. One end has been folded over to form a hinge and is secured by a rivet. Length 45 mm, width of plate 9-12 mm. A ubiquitous buckle type, which could date from the early medieval period onwards.

V/1102/+; unstratified.

103 Ring, possibly small buckle, with flat iron tongue. Ext. dia. 13 mm Not dated.

V/1315/+; unstratified.

104 Sheet, rectangular, folded lengthways, with two rivet holes at either end. Possibly a strap end or stiffener. Length 35 mm, width 9 mm. Not dated.

V/912/1091; fill, Enclosure 1208.

Hairpins (Fig. 145)

These pins, with their characteristic long shafts and decorated heads, were used as decorative hair pins, or perhaps for fastening garments, though a study of those found at Colchester, particularly in burials, tends to favour the former

function (Crummy 1983, 19). Similar pins were also made in bone; those from Bancroft are described below (Fig. 177, 320-31). Also of note are the copper alloy (RMK, no. 73) and bone (RMK, nos 147, 148, 150-53, 156, 157) pins from earlier excavations at Bancroft. The classifications used below are based on those devised by Nina Crummy (1983, 28-30) and Hilary Cool (1990, 151-172).

Also for possible inclusion in this group, though not illustrated, is a square-sectioned shaft fragment of a gold pin, length 15 mm, from the villa (V/921/1105; fill, Ditch 1104).

105 Hairpin, Crummy 5/Cool 6. Flattened spherical head, faceted, with cordon-and-groove decoration. Circular-sectioned shaft, tapered to a point. Length 94 mm. Second century.

M/33/39; silt layer, Ditch 60, below Causeway 43.

106 Hairpin, Crummy 5/Cool 6. Flattened spherical head with cordon-and-groove decoration. Length 90 mm. For parallel, see Neal (1974, 144, fig. 64.223). Second century.

V/337/551; soil spread in farmyard.

107 Hairpin, Crummy 3/Cool 1C, large spherical head and circular-sectioned shank, cut off with a sharp-edged tool. Length 32 mm, dia. of head 9 mm.

V/437/504; silting over trackway, east of Building 9.

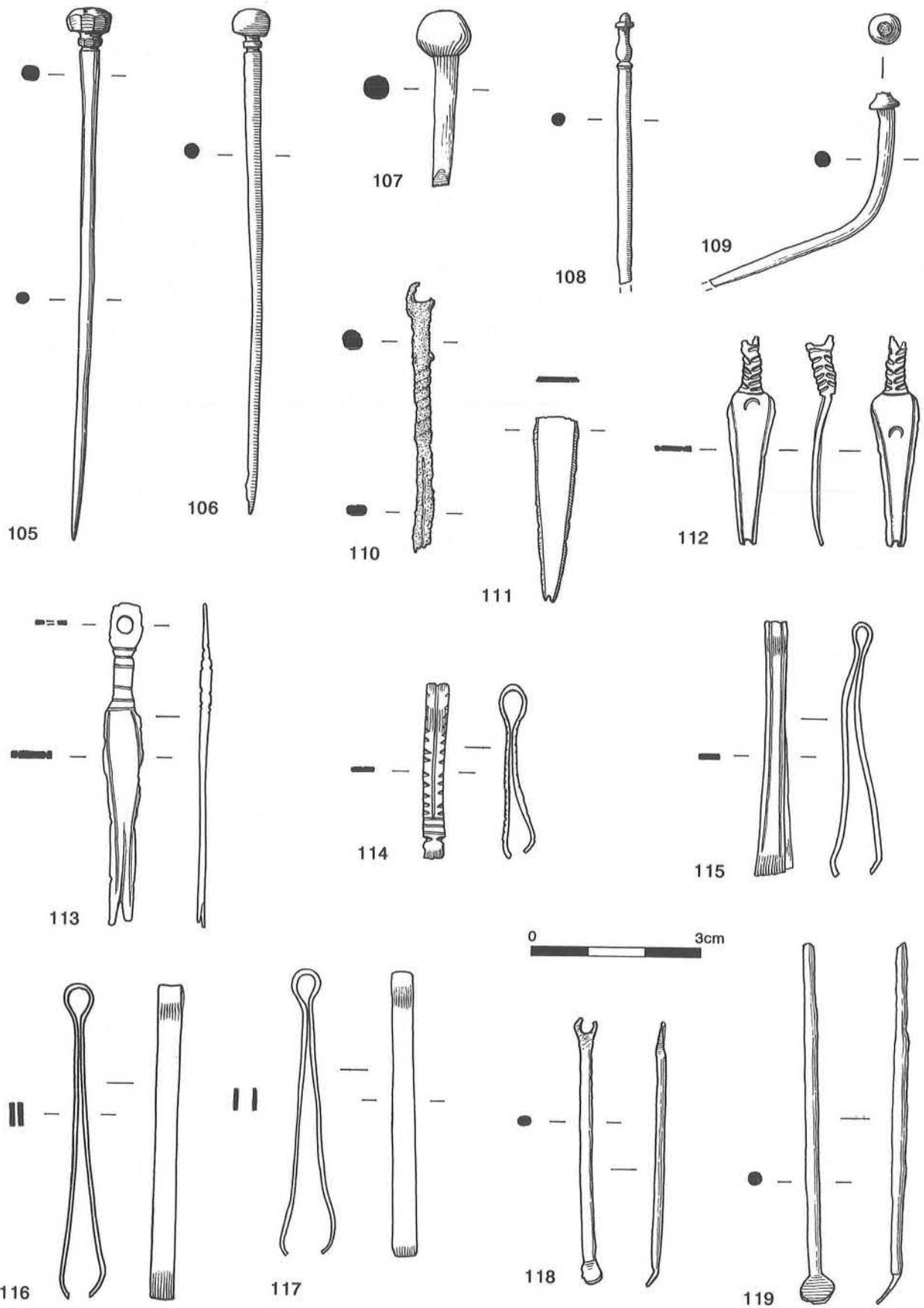


Figure 145: Copper-alloy hairpins 105-109; Toilet instruments 110-119, scale 1:1.

108 Hairpin, Cool 3A. Terminates in a knob and disc with an oval swelling topping a groove and cordon. Length 48 mm, shank dia. 2.5 mm. Similar to a pin from Butt Road, Colchester (Crummy 1983, 30, fig. 31.511), which is described as being similar to Crummy 2, dated to the second to third century.

V/615/736; soil spread east of trackway.

109 Hairpin, with cordon and groove decoration, head missing. Length 52 mm. Possibly of a similar type to 108.

V/171/207; trackway east of Building 1.

Toilet Instruments (Figs 145–146)

Objects 110–119 were components of toilet sets or 'chatelaines', which consisted of a nail cleaner, tweezers and toilet spoon suspended from a ring. No complete sets have yet been found on any sites in Milton Keynes, but the component parts appear frequently; a representative selection was published in RMK, including two nail cleaners (RMK, nos 64 and 67) and a pair of tweezers (RMK, no. 69) from the villa.

In researching these items, it emerges that there appears to be some confusion in the use of the term 'ligula'. The writers have taken this to cover implements with a cup-shaped bowl; those with flat scoops are termed 'toilet spoons', after Crummy (1983, 59).

110 Nail cleaner. Circular section shaft which changes into a rectangular section, with a broken suspension loop at one end. Although badly corroded, there is evidence of twisting on the shaft, and a central incised line on each side of the flattened section leading to the tip, which is missing. Length 47 mm, dia. 3.5 mm. Crummy (1983, 58) dates this type to the mid-late first to early second century.

V/924/1105; fill, Ditch 1104.

111 Nail cleaner, undecorated blade, top section missing. Length 32 mm.

V/283/466; soil spread over trackway, east of Building 9.

112 Nail cleaner. Flat section, with incised marginal grooves. Suspension loop broken, sited at right angles to the plane of the blade, and decorated with deep grooves on four sides, and punched crescent-shaped depressions on either side of blade. Length 37 mm. Dated 50–60.

M/145/465; Cremation 4.

113 Nail cleaner. Flat section tapering blade with incised marginal grooves. Thicker, rectangular section shaft, with five transverse grooves on each side. Pierced rectangular suspension loop, in the same plane as the blade. Length 57 mm. Second century.

MK345; from fill of ditch.

114 Tweezers. Decoration consists of a central groove flanked by regularly spaced notches, terminating just before the tips at

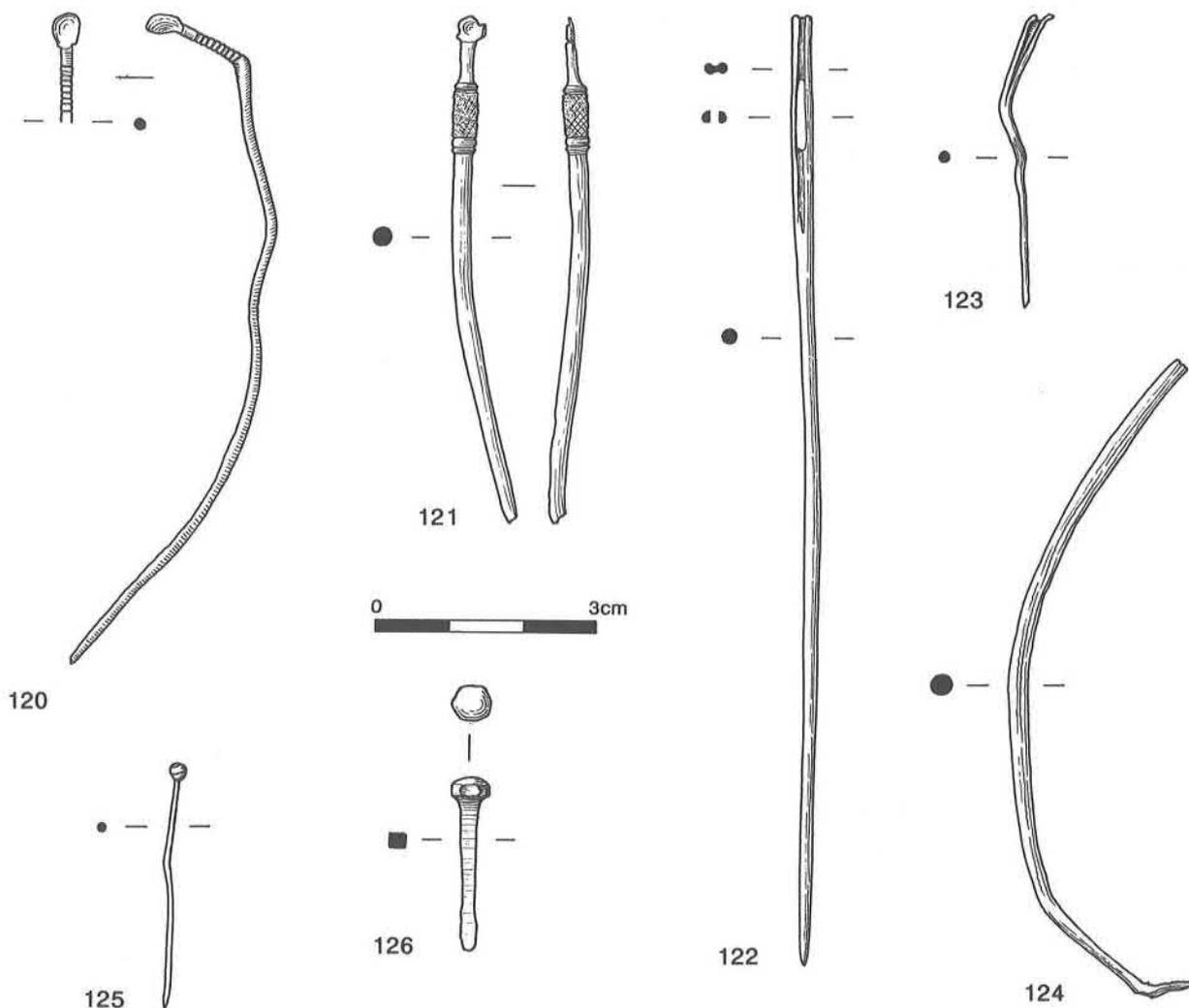


Figure 146: Copper-alloy ligulae 120-121; Needles and pins 122-126, scale 1:1.

three transverse grooves. Length 31 mm, width 4 mm.

V/439/1; topsoil.

- 115 Tweezers, flared tips. Decoration consists of two marginal incised grooves, running from tip to tip. Length 45 mm. For similar examples, see Neal (1974, 140, fig. 62.181) and RMK (137, fig. 43.64).

V/651/824; trackway, east of Building 9.

- 116 Tweezers, in perfect condition, parallel-sided. Terminal ends have been chamfered so that they meet exactly. Length 56 mm, width 4 mm. Similar to 117.

V/907/1105; fill, Ditch 1104.

- 117 Tweezers, undecorated, parallel-sided. Terminal ends have been chamfered so that they meet exactly. Similar to 116. Length 51.5 mm, width 4 mm.

M/193/711; fill, Ditch 632/642.

- 118 Toilet spoon, undecorated round sectioned shaft flattened and pierced at one end for suspension loop, and flattened at the other to form a scoop. Length 47 mm.

V/737/931; soil spread south of Building 12.

- 119 Toilet spoon, undecorated round shaft, top missing. Length 65 mm. For a similar example from Balkerne Lane, Colchester, see Crummy (1983, 60, fig. 64.1907).

V/705/909; soil spread east of Building 11.

- 120 Ligula, neck of scoop decorated with incised concentric grooves for a length of 6 mm. Length 107 mm, th. 1.5 mm.

V/309/504; silting over trackway, east of Building 9.

- 121 Ligula, circular section shaft, slightly tapered. Moulded decoration consisting of a hatched cylinder and bead and groove markings are sited just before the scoop, part of which is missing. Length 70 mm, dia. 3 mm.

M/207/879; fill, Ditch 60.

Needles and Pins (Fig. 146)

These are all identifiable as objects used for sewing, and have therefore been differentiated from the hairpins (see above). No objects in this category have been found previously at Bancroft. In addition to the items described below, fragments of pin or needle shafts have been found at both the villa and mausoleum; these are not illustrated.

- 122 Needle. Marked striations along the groove, probably tool marks signifying that the eye and groove were cut by hand, rather than cast in a mould. Length 129 mm, max. dia. 3 mm.

V/382/626; fill, Pit 696.

- 123 Needle, broken both ends and badly bent. Length 44 mm, dia. 1.5 mm.

V/259/462; soil spread over Yard 697.

- 124 Needle, head missing. Length 106 mm, dia. 2.5 mm.

V/224/362; floor makeup, Room 12, Building 1.

- 125 Pin, circular-sectioned shaft, tapering to a point. Spherical head with possible incised spiral groove. Length 34 mm, shank dia. 1 mm.

V/837/1000; topsoil.

- 126 Pin, spherical head, tapering square-sectioned shaft. Length 23 mm.

V/125/185; rubble and ash layer, Room 11, Building 1.

Writing and Communication (Fig. 147)

In addition to the seal box lid described below, excavations at the villa have produced several iron *styli* (objects 292–295; RMK, no. 290). Professor E.M. Jope kindly commented on the seal box lid.

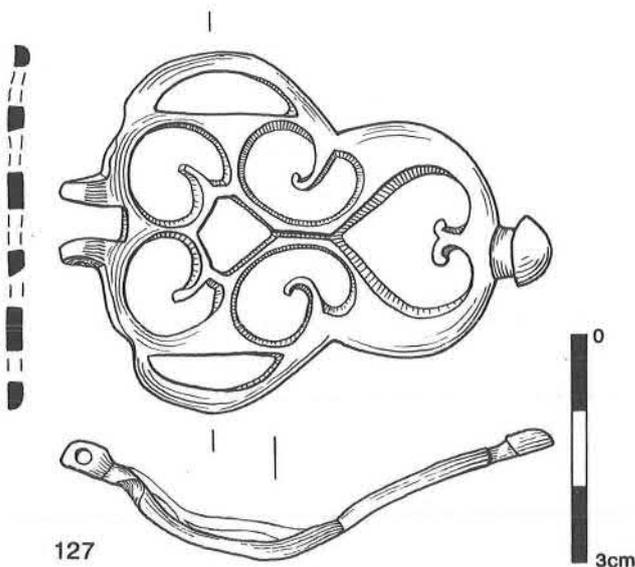


Figure 147: Copper-alloy seal box lid 127, scale 1:1.

- 127 Seal box lid, made up of a florid openwork design, generally accepted to be of second-century date (Bushe-Fox 1949, 75–78; Frisch and Toll 1949, pls. II–V, VIII, XIII). Similar fittings were produced in quantity in the *Rheinprovinz*, and perhaps more widely in the Empire.

V/1366/+; unstratified.

Spoons (Fig. 148)

All the spoons found at Bancroft came from the villa, and were of a similar type, having an oval bowl and a cranked undecorated handle. Also of note are the spoon and two handles from the villa illustrated in RMK (nos 76, 78, 79), the handles both having twisted decoration.

- 128 Spoon handle, with upper part of bowl still present, but folded. Cranked undecorated tapered handle, with extreme end broken. Slightly bent. Length 85 mm.

V/4/1; ash in hypocaust, Room 15, Building 1.

- 129 Spoon handle, two fragments. Upper part of oval bowl, and tapered cranked handle with extreme end missing. Notched decoration at bowl end. Length 86 mm.

V/95/52; destruction, Building 6.

- 130 Oval spoon bowl, broken at point where it joins the handle. Length 33 mm, width 24 mm.

V/721/901; soil spread east of Building 11.

- 131 Cranked spoon handle fragment, undecorated. Length 19 mm.

V/162/207; trackway east of Building 1.

Vessels and Vessel Fittings (Fig. 149)

Also worth noting in this category from the early excavations at Bancroft are a possible cauldron foot (RMK, no. 110) and the foot of a wooden tankard (RMK, no. 111).

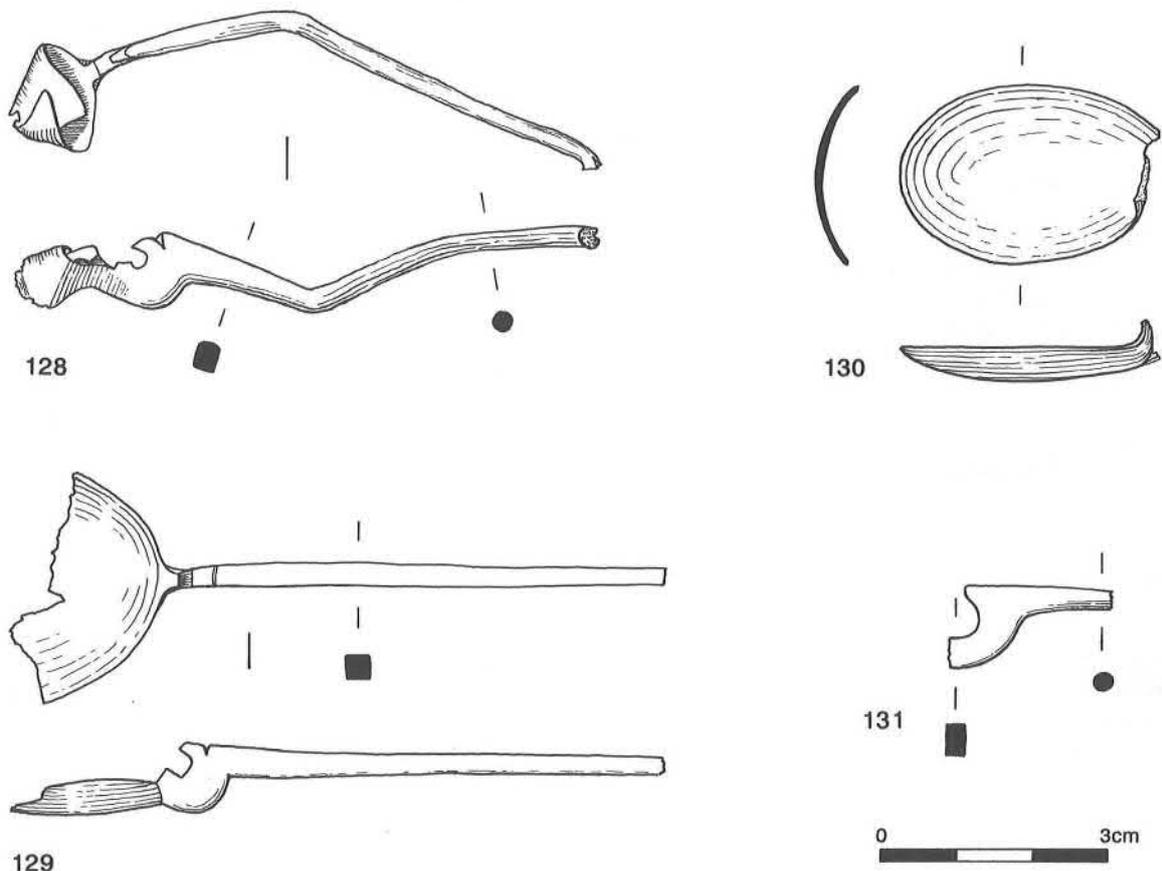


Figure 148: Copper-alloy spoons 128-131, scale 1:1.

132 Skillet or patera handle, tapering from 'horned' end. The upper surface has been cut away, leaving only thin lines of reserved bronze to form the design. Traces of blue and red enamelling are apparent, with three edges of the panel serrated to key the enamel. Max. width 48 mm. Similar to the handle on a skillet from Kirkby Lathorpe, Lincs. (Butcher 1977, 45).

V/93/66; rubble floor makeup, Room 10, Building 1.

133 Foot from a metal vessel. Made from a conical piece of bronze, which has been cut centrally through the apex to the middle. One side is bent outwards to form a right angle, supporting the base of the vessel. The sides of the vertical support have been chamfered. Height 29 mm.

V/221/339; floor makeup, Room 9, Building 1.

134 Escutcheon or mount for bowl. Leaf-shaped object with curled projection at the top, for attaching to a free-moving ring. To this a suspension chain would then be fixed. A similar object was noted at Richborough (Bushe-Fox 1949, pl. XL.156).

V/277/459; destruction, Building 8.

135 Sheet, rectangular, with eight flat-headed rivets made from smaller rolled sheets, of which seven remain. Underside retains signs of wood. Possible repair patch from wooden vessel. Dimensions 45 × 60 mm.

V/372/607; soil spread east of trackway.

136 Handle from a chafing dish or piece of furniture. A similar

example was recorded from Exeter (Allen 1984, 343, fig. 192, 163–164). Medieval.

V/1144/+; unstratified.

137 Circular fitting, used for attaching handles to metal vessels. Late thirteenth to fifteenth century.

V/1273/+; unstratified.

138 Foot of metal vessel or candle holder? Cast fragment, trapezoidal section, with rounded wedge-shaped tip. Width 10 mm. Late medieval?

M/251/1; topsoil.

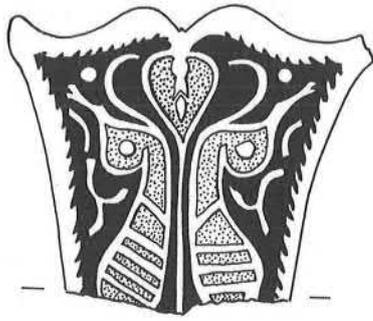
Chain (Fig. 150)

Copper alloy chains were used for a variety of purposes; the suspension of scale pans or metal lamps, for supporting jewellery or amulets worn around the neck, or as jewellery themselves (Crummy 1983, 161). Both the Bancroft examples, from the villa, could have fulfilled any of these functions.

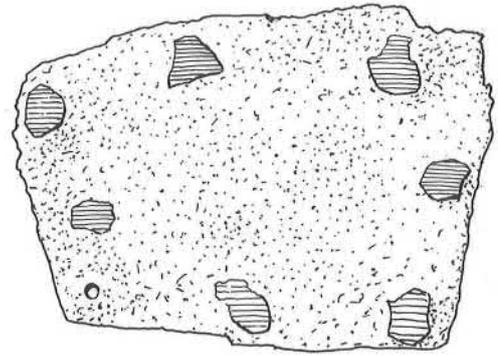
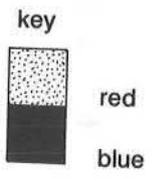
139 Double-linked chain, consisting of forty-seven rounded, unsoldered, circular sectioned links. Used either as an item of jewellery or for suspending a scale pan or similar object. Int. dia. of each link 3 mm. Only part of chain illustrated.

V/640/781; fill, Ditch 773.

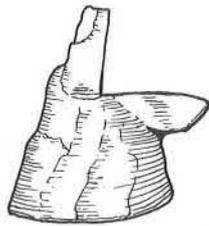
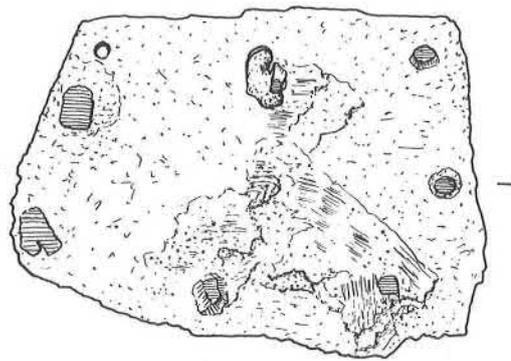
140 Chain, seven links made from flat strips of bronze, beaten



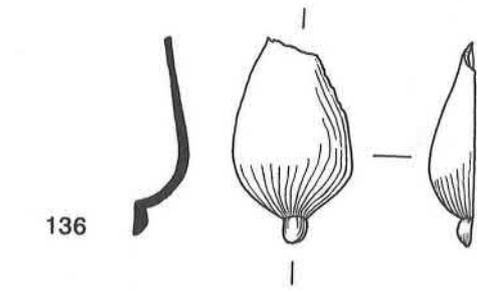
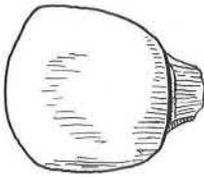
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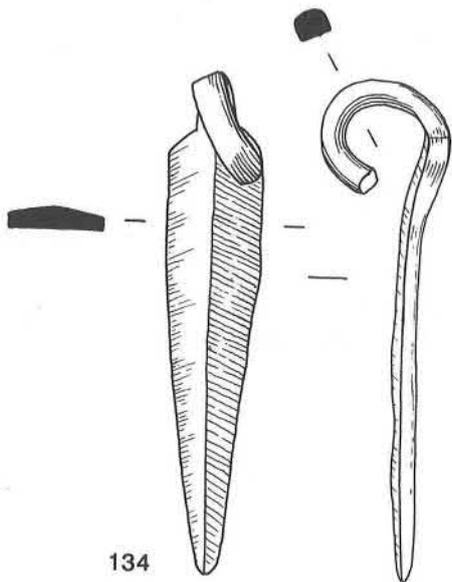
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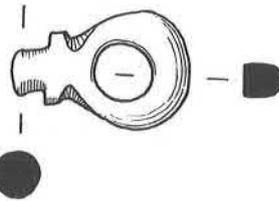
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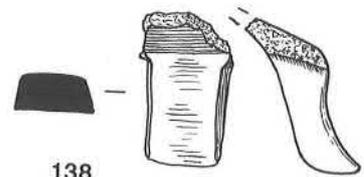
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134



137



138

Figure 149: Copper-alloy vessel fittings 132-138, scale 1:1.

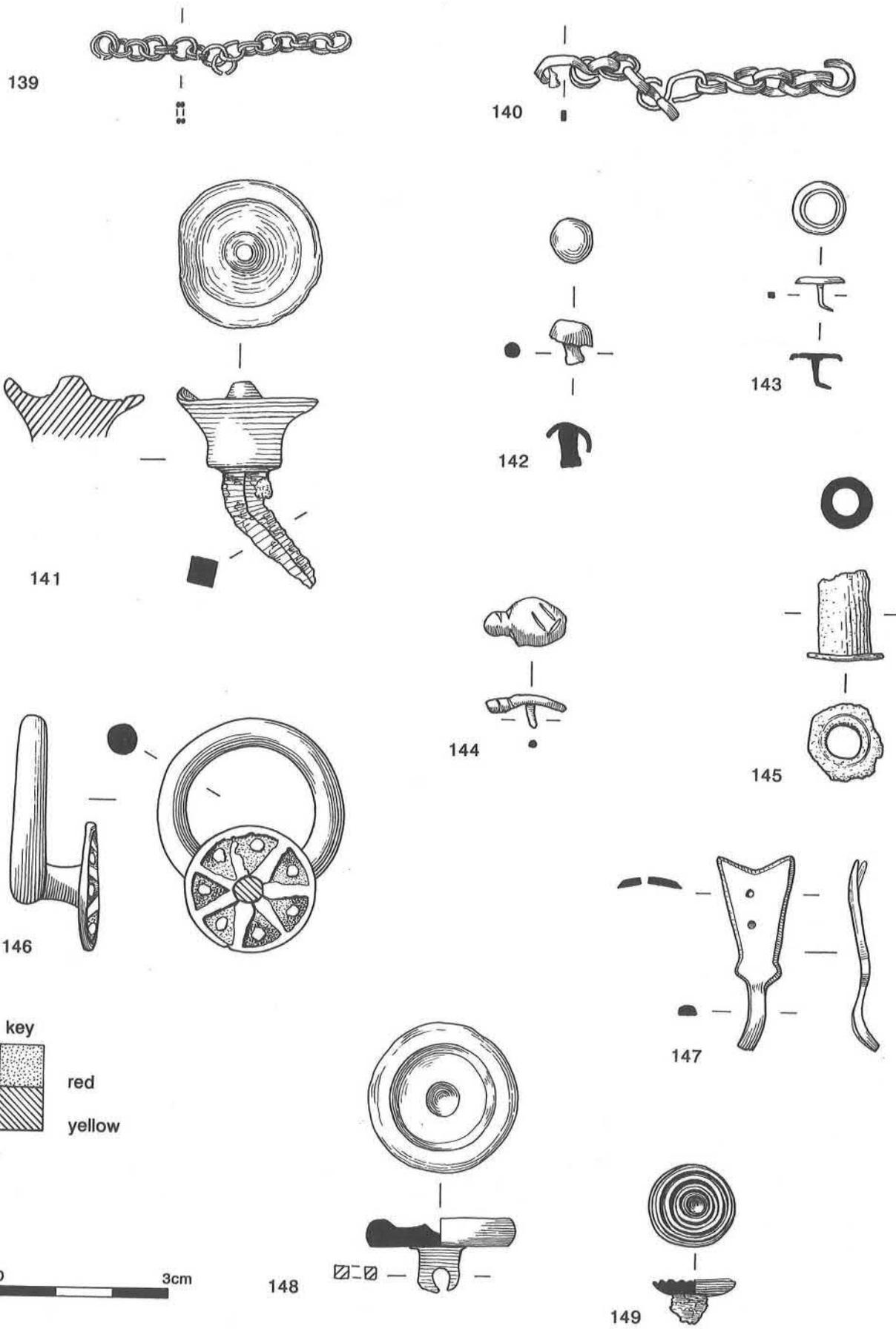


Figure 150: Copper-alloy chains 139-140; Boss 141; Studs and rivets 142-145; Clothing fasteners 146-149, scale 1:1.

into an 'S' shape. Length 11.5 mm, width of strip 2 mm. Function probably similar to 139.

V/943/1191; fill, Enclosure 1208.

Pommels and Bosses (Fig. 150)

141 Knob or pommel, with a squared iron tang. Flared, with concave top and raised centre. Dia. 27 mm. Possibly a lock pin. Similar examples are recorded from Fishbourne (Cunliffe 1971, 115, fig. 46.118) and Wood Corner, Milton Keynes (RMK, no. 87). Unlike these, which were topsoil finds, 141 came from a context sealed by a mid to late fourth-century mosaic.

V/75/62; ash layer, Room 10, Building 1.

Studs and Rivets (Fig. 150)

All of the objects in this category appear to have been used in conjunction with cloth or leather, either for fastening or decoration.

142 Stud, slightly flattened domed head, circular section shaft. Length 6 mm, dia. of head 6.5 mm.

V/922/1105; fill, Ditch 1104.

143 Stud, flattened convex head, square sectioned shaft, incised concentric ring decoration on the top. Length and dia. 9 mm

V/386/604; fill, Ditch 654.

144 Decorative stud, pear-shaped, with random incised markings. Measurements 14 × 9 mm.

V/1145/+; unstratified.

145 Hollow rivet? Cylindrical in shape, with a flanged head. Length 14 mm, int. dia. 6 mm. Mid first century.

M/143/465; Cremation 4.

Clothing and Fasteners (Fig. 150)

Apart from the strap fastener, which is probably pre-Roman, all the objects in this category are medieval, all being unstratified or topsoil detector finds.

146 Strap/button-and-loop fastener. Round flat decorated head. The decoration consists of a seven pointed star, the centre marked by a circular depression filled with yellow enamel. The triangular panels between the points have been cut away, leaving a small raised circular projection, the surrounding field being filled with red enamel. From the rear of the disc, a short projection is linked to a ring, which is set parallel to the disc. Fasteners of this kind were used either for clothing or as harness fittings. Dia. of head 23 mm, ext. dia. of ring 33 mm. A similar class of object is illustrated in Wild (1970, 142, figs. 1 and 2) and Jackson (1990, 38–39), while a similar artefact, identified as part of a late Celtic sword belt, has been discussed by Webster (1990, 294–295). 146, from the enamels used and its similarity to late la Tène examples, is probably also late Iron Age, dating from the early first century AD, rather than early Roman.

M/67/1; topsoil.

147 Garter hook, almost triangular in shape with two perforations. Length 34 mm. Medieval.

V/1143/+; unstratified.

148 Button. Disc, with raised rearward-facing lip. The front is ornamented with an impressed concentric groove and a large

central impressed dot. On the underside is a central flat projection, which is perforated. Dia. 26.5 mm. Medieval or post-medieval.

V/1377/+; unstratified.

149 Button. Flat front face with concentric ring decoration. Rear surface smooth, slightly convex. Iron shaft protrudes from the rear. Dia. 15 mm. Medieval or post-medieval.

M/123/1; topsoil.

Harness Fittings (Fig. 151)

150 Harness fitting. Cast quadrilateral plate, formed into an inverted V-shape, with small rounded terminals on its lower corners. Between these across the upper surface, which shows signs of gilding, run two rows of small punched dots. To the underside is attached a loop. To the upper edge of the plate is attached a fragment of a second, better finished, oval ring. The join between this ring and the plate is covered by a fine, incised herringbone pattern. A similar object has been found at Lullingstone (Meates 1978, 73, fig. 30.158), in a late first-century context. The context which contained 150 was dated to the late second century.

V/784/1004; destruction, Building 10.

151 Harness mount fragment, ends broken off at point of rivet holes. Decoration in the form of four transverse grooves and gilding. Length 45 mm, height 9 mm.

V/1252/+; unstratified.

152 Horse pendant. Flat, disc-shaped, with a perforated suspension loop (Ward Perkins 1967, pl. XXI, 2 and 4). Dia. 33 mm. Medieval.

M/235/1; topsoil.

153 Dome-shaped object. On its concave side, attached to the rim, are two small pierced hinge projections. Sited on either side of these are two parallel, rectangular attachments connected to the rim. Probably part of a harness fitting, similar to that recorded from Canterbury (Hassall 1980). Dia. 22 mm, depth 13 mm.

V/304/525; fill, Ditch 509.

Miscellaneous (Figs 151, 152)

Objects have been placed in this final category for one of two reasons. Either they are recognisable, but cannot be readily included in any of the preceding groups (eg. 156 and 159), or they are not identifiable, despite being obviously all or part of an object.

Of particular note is the 'unfinished' object (154). It was found in a securely stratified Roman context, suggesting that it was made on site, rather than imported.

In addition to the finds described below, the villa produced quantities of rod, sheet and strip fragments, none of which could be identified as part of any particular object. These have been excluded from the report, as it was felt that they added no further useful information.

154 Unfinished object. One end has been roughly rounded, flaring out slightly towards the centre. The remainder consists of a flat, hammered section, with tool markings apparent. Function unknown.

V/656/815; soil spread east of trackway.

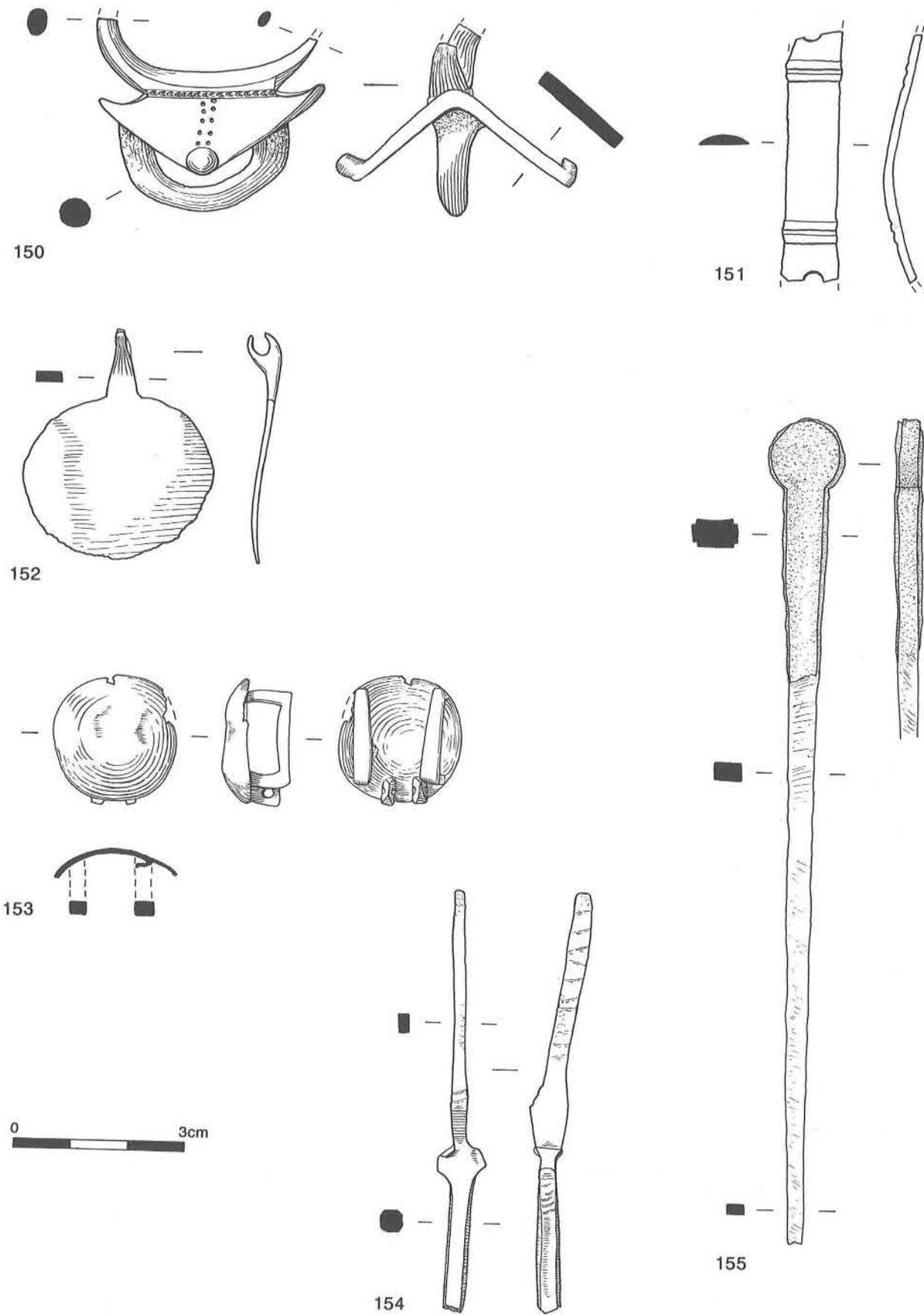


Figure 151: Copper-alloy harness fittings 150-153; Miscellaneous objects 154-155. scale 1:1,

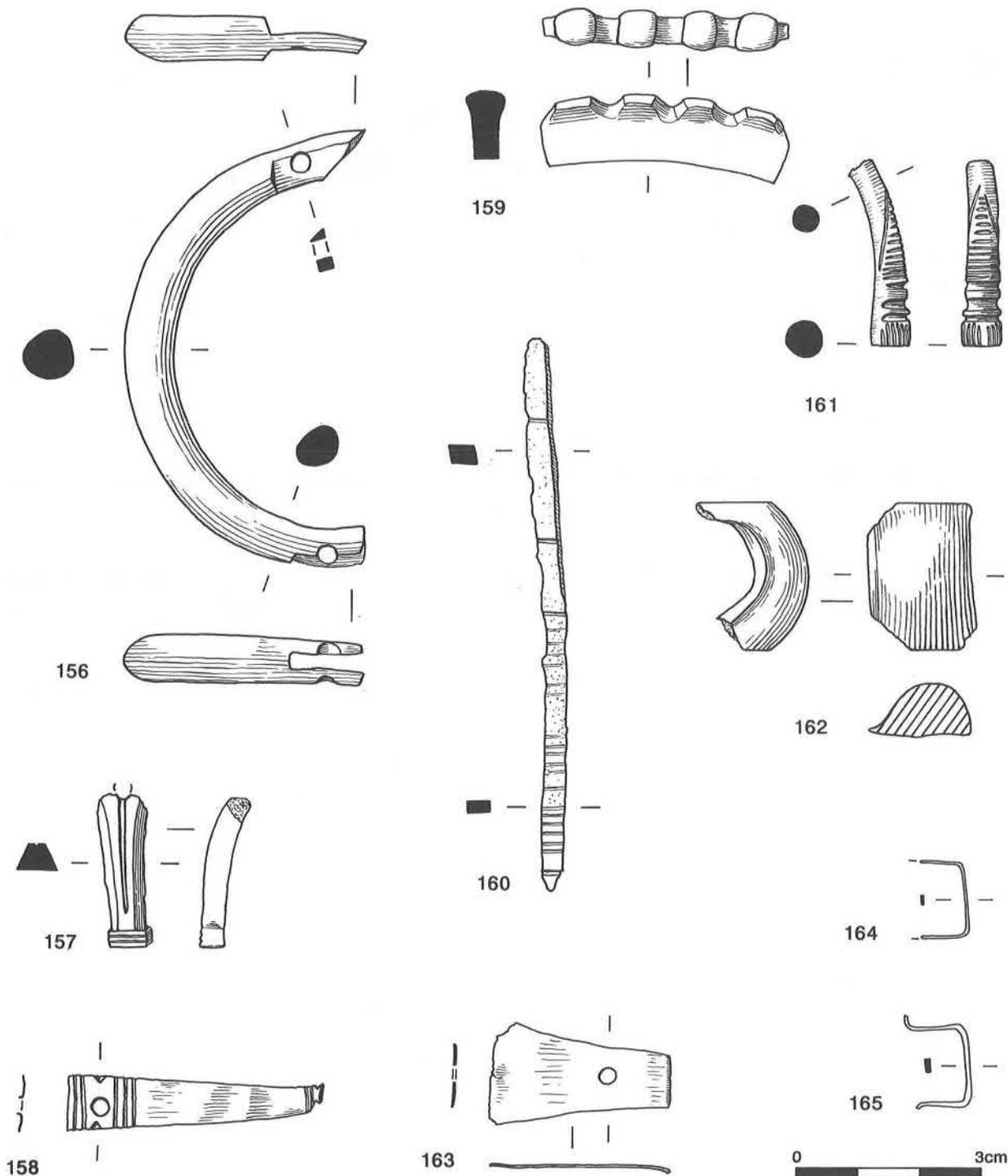


Figure 152: Miscellaneous copper-alloy objects 156-165, scale 1:1.

155 Pair of dividers?. Circular head, with plate of similar shape on either side, and tapering rectangular-sectioned shaft. There is no evidence for a pivot, but the head is very badly corroded. Length 145 mm, width 7.0–2.5 mm.

V/704/899; soil spread east of Building 11.

156 Split hinged ring, possibly part of a handcuff or similar restraining device. Int. dia. 56 mm, th. 8 mm. Post-Roman?

V/1151/+; unstratified.

157 Fitting, cast. Trapezoid cross section, tapered and slightly bowed, with perforation at wider end. Decoration consists of a central longitudinal groove, terminating in two transverse

grooves. Length 25 mm, max. width 8 mm.

V/626/736; soil spread east of trackway.

158 Tapered strip. Decoration consists of two groups of transverse grooves, one of two grooves, the other of three. In between is a plain panel, containing a central perforation and two opposing notches. Function unknown. Length 43 mm.

V/144/176; destruction, Building 8.

159 Fragment, coated in a white metal, curved on inner edge. The outer edge has four flange-like projections. Function unknown. Length 39 mm.

V/36/7; destruction, Building 1.

160 Strip with terminal end. On one side only, decoration consists of transverse incised grooves, unevenly distributed. Function unknown. Length 90 mm, width 3.5 mm, depth 3 mm.

V/530/735; soil spread east of trackway.

161 Decorated terminal end of curved tapering circular section rod. Decoration only on outer surface, with a 4 mm wide band of longitudinal incised grooves at the extreme end, terminating with three wider and deeper transverse grooves. These are followed by a number of transverse incisions, decreasing in length to form a triangle, which has been outlined by two incised grooves. Length 30 mm, dia. 6.5–4 mm. Possibly part of a late Iron Age armband, or a large Saxon penannular brooch.

V/364/551; soil spread in farmyard.

162 Fragment of cast doughnut-shaped object, rough central hole, flattened face on outer edge. Function unknown. Approx. dia. 25 mm.

V/521/737; soil spread east of Building 11.

163 Fitting, tapered strip with pierced hole. Length 29 mm, width 9–16 mm.

V/385/626; fill, Pit 696.

164 Mount? Similar to 165 but incomplete and with no evidence of clenching.

M/157/469; Cremation 8.

165 Mount? Narrow strip bent into a 'staple-like' shape. Both ends bent over as if clenched.

M/156/469; Cremation 8.

Objects 164 and 165 were both found in Cremation 8, associated with the animal bone deposit in the south-east corner of the burial. No other grave goods were found, and their function remains uncertain. Their position in the burial may indicate that they were fittings on a leather or textile bag containing the joints of meat.

The Cockerel Figurine

Miranda Green

166 This statuette of a cockerel was found by a detectorist on the villa site, and is now lost. The statuette measures 38 mm in height, and the bird stands on a small plinth. The figure is well-modelled, with the wattles, body- and tail-feathers clearly visible. From the drawing, the figurine appears to be relatively unworn.

V/-/+; unstratified.

Bronze cockerels are not uncommon in Roman contexts. In terms of general style, the Bancroft figure resembles a silver-washed bronze cockerel from the Gallo-Roman sanctuary of Estrées-Saint-Denis, Oise (Meniel 1987, 24). Other similar Gaulish figurines may be cited, for example at Dalheim in Luxembourg (MHA 1975, no. 30) and at Lyon (Boucher 1976, no. 378). British examples include a cockerel on a plinth, similar to the Bancroft one, at Chesterholm in Northumberland (Birley 1973, 117, pl. XXX) and a fragmentary cockerel at the Brail Wood villa near Great Bedwyn, Wilts. (Green 1976, no.24, pl. III.i).

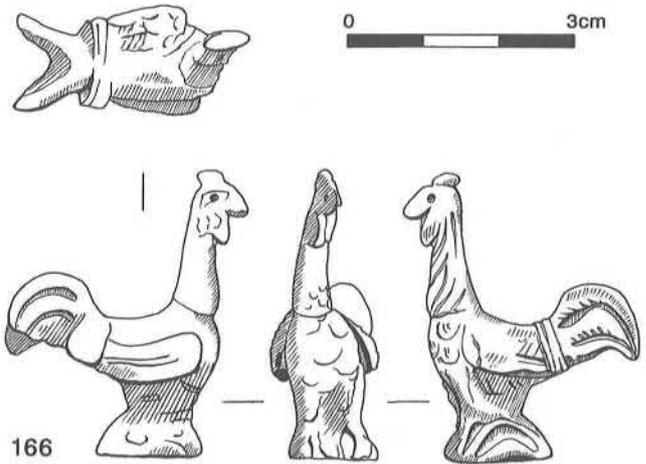


Figure 153: Copper-alloy cockerel figurine 166, scale 1:1.

The cockerel was an attribute of the Roman god Mercury and symbolised the heralding of the new day, in recognition that one of Mercury's roles was that of herald of the gods. Depictions of Mercury frequently show the deity accompanied by a cockerel, a goat or ram (emblems of fertility and prosperity) and a tortoise (which reflected Mercury's mythical invention of the lyre, using a tortoise-shell). In Gaul and Britain, Mercury was particularly revered as a god of commercial and business success. He is portrayed with his cockerel on bronze statuettes at Verulamium (Green *op. cit.*, 207), at Mathay, France (Boucher, *op. cit.*, 164), and at Trier, Germany (Schindler 1977, Abb. 115), to cite but a few.

The presence of a bronze cockerel at Bancroft is of particular interest since it supports the suggestion that a shrine to Mercury existed at the site. In 1973, a small marble sculpture of a cockerel was found during excavations at the villa (Green 1974). This had clearly been broken off a larger carving, probably of Mercury himself. The sanctuary to Mercury at Le Donon in the Vosges contained many stone images of the god, including one where he is accompanied by a cockerel (Espérandieu 1907, 66, no. 4584). Mercury presided over the Uley Roman temple in Gloucestershire; here, in addition to the cult-stature and many small bronze images of the god, a small bronze cockerel was also found (Woodward 1992, 55, fig. 38).

Mercury was perhaps the most popular Roman god to have been adopted by the Gauls and Britons: Julius Caesar comments on the popularity of his cult in Gaul (*De Bello Gallico VI, 17*). He is certainly well-attested in Buckinghamshire. Apart from the Bancroft material, his cult is represented by such objects as the stone carving from Emberton, a bronze ram carrying money-bags from Fenny Stratford, and a bronze tortoise from Little Woolstone (MKAU 1992, 53).

IRON OBJECTS

Caroline Skinner

Introduction

Following the style adopted for other published Milton Keynes excavations, the artefacts in this section have been grouped according to the following function-related categories:

- | | |
|-----------------------|-------------------|
| 1. Craft tools | 7. Structural |
| 2. Agricultural tools | 8. Weapons |
| 3. Transport | 9. Personal items |
| 4. Locks and keys | 10. Miscellaneous |
| 5. Domestic equipment | 11. Nails |
| 6. Knives | |

In addition to physically describing the artefacts recovered, the work undertaken by the writer included plotting all the objects from each category on an overall plan of the site, to see if there was any correlation between types of object and particular structures or features. The results of this exercise demonstrated that no such correlations could be shown.

As with the copper-alloy objects, only a selection of the more complete or particularly interesting iron artefacts is described below; a full catalogue is contained in the Level III excavation archive.

The principal work of reference used in identifying the iron artefacts from Bancroft was Manning's (1985) catalogue of ironwork in the British Museum collections, referred to below as BMC.

Craft Tools (Fig. 154)

This category includes metalworking, masonry, leather working, wool and cloth processing tools. Very few craft tools have survived at Bancroft, but the majority of those that did were found in or around the area of the formal garden fronting Building 1, while three (167, 168, 171) were recovered from Building 10 and Enclosure 1208.

Woodworking Saws

Two types of saw were common during the Roman period. The bow or frame saw had a blade with symmetrical teeth, and a hole at each end to attach it to the handle. The saw was held at both ends, and cut in both directions. The second type, the panel saw, had two rivet holes at one end of the blade for attaching the handle, and raked teeth set to cut only on the backstroke, preventing the saw from jamming under pressure. In contrast, modern panel saws cut on the downstroke. The blade fragments (167, 168) found in Building 10 were too small to positively distinguish their types, though the latter shows signs of raked teeth. Neither shows any evidence of the teeth having been 'set', and the widths of both examples seem too great to have been bow or frame saws.

167 Saw blade, three fragments. One piece, length 34 mm, has a serrated edge. A small hole near the centre, together with the

blade width of 68 mm suggests that it was part of a panel saw. Late second century.

V/999/1004; destruction rubble, Building 10.

168 Large fragment of saw blade, with asymmetric teeth. Length 115 mm, width 64 mm. The teeth are quite irregular, but show signs of graduation towards the back of the blade. Late second century.

V/100/1002; destruction rubble, Building 10.

Chisels

169 Blade of paring chisel. Rectangular sectioned, tapering from 17 to 18 mm. in width. Tip damaged. Length 112 mm. Comparable with one found previously at Bancroft (RMK, no. 268).

V/12/11; upper fill of Fishpond 50.

170 Chisel. Small triangular blade, with short tapering tang. For a similar example, see BMC (24, pl. 11.B44). Length 50 mm.

V/2002b/573; fill, Ditch 511.

Drill Bit

Two types of drill were in use in the Roman period, the bow drill and the strap drill. The bits for these were basically similar, the difference being in the form of drive used.

171 Drill bit. Square-sectioned, slightly tapering stem, long pyramidal head, diamond-shaped tip (damaged). Length 167 mm. Comparable to one found at Hod Hill, Dorset (BMC, 26, pl. 11.B53).

V/829/1069; upper layer, Enclosure 1208.

Awls

These are very difficult to distinguish from punches or carpenter's bits unless very well preserved, the point being the diagnostic feature.

172 Awl. Square-sectioned rod, tapering to damaged tips at both ends. Length 110 mm.

V/70/62; ash layer, Room 10, Building 1.

173 Awl, Manning's Type 3B. Square-sectioned head, tapering to a rounded tip, below which it tapers more gradually to a point. Length 95 mm. A similar tool was found at Hod Hill (BMC, 40, pl. 16.E8).

V/683/384; cobbled yard east of Building 3.

174 Awl? Rectangular-sectioned rod, tapers out each end from the midpoint of the tool. One end slightly more slender than the other. Length 106 mm. There are similarities between this object and one from Hod Hill (BMC, 41, pl. 16.E22), but heavy corrosion made positive identification difficult.

V/136b/181; fill of drain from Room 2, Building 7.

Miscellaneous

Other objects found at Bancroft which fall into this general category are:

175 Adze or axe blade? Fragment with sides having a convex taper (BMC, 17, pl. 8.B12).

V/134/197; fill of aisle ph2, Building 7.

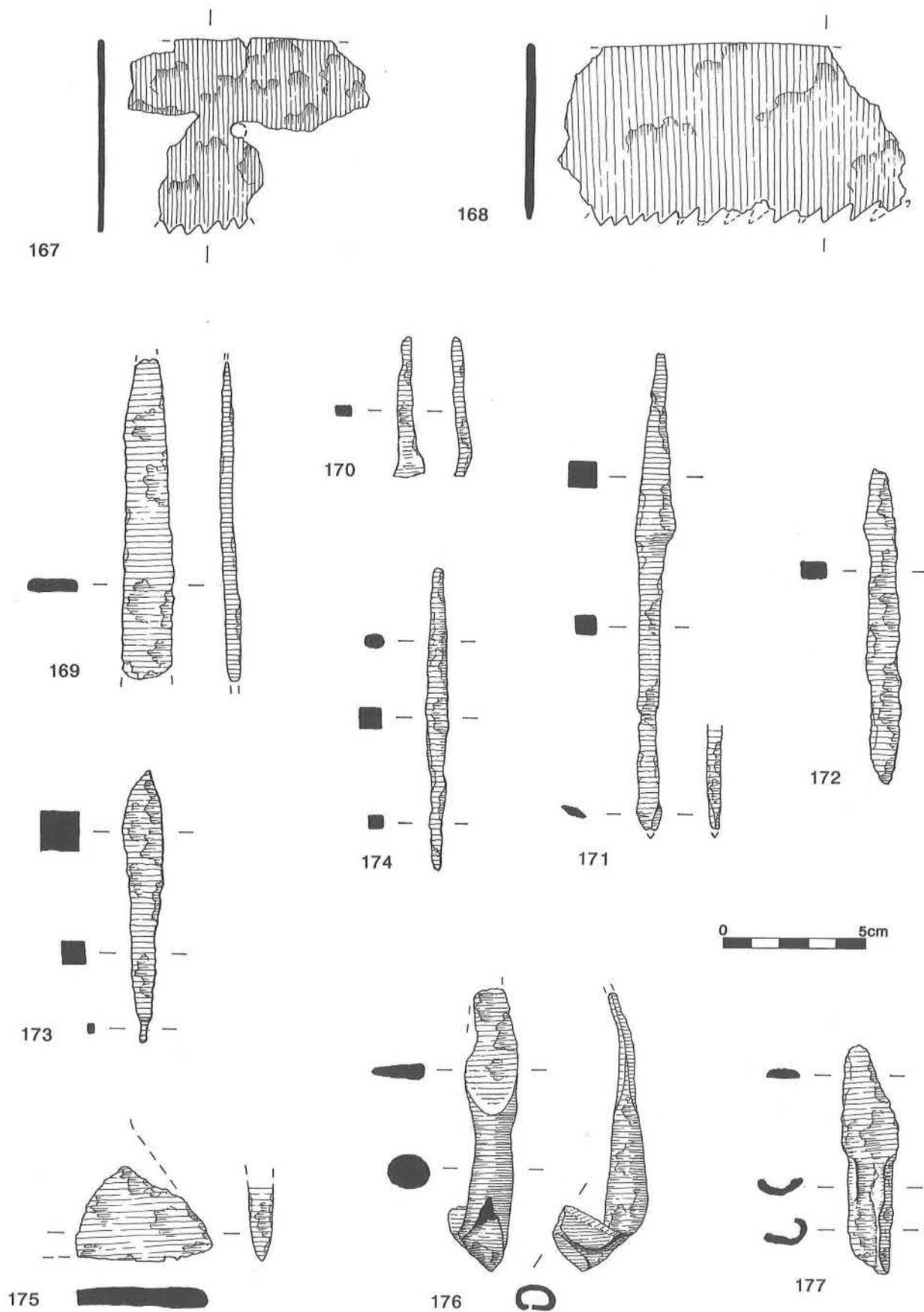


Figure 154: Iron saw blades 167-168; Chisels 169-170; Drill bit 171; Awls 172-174; Unidentified craft tools 175-177, scale 1:2.

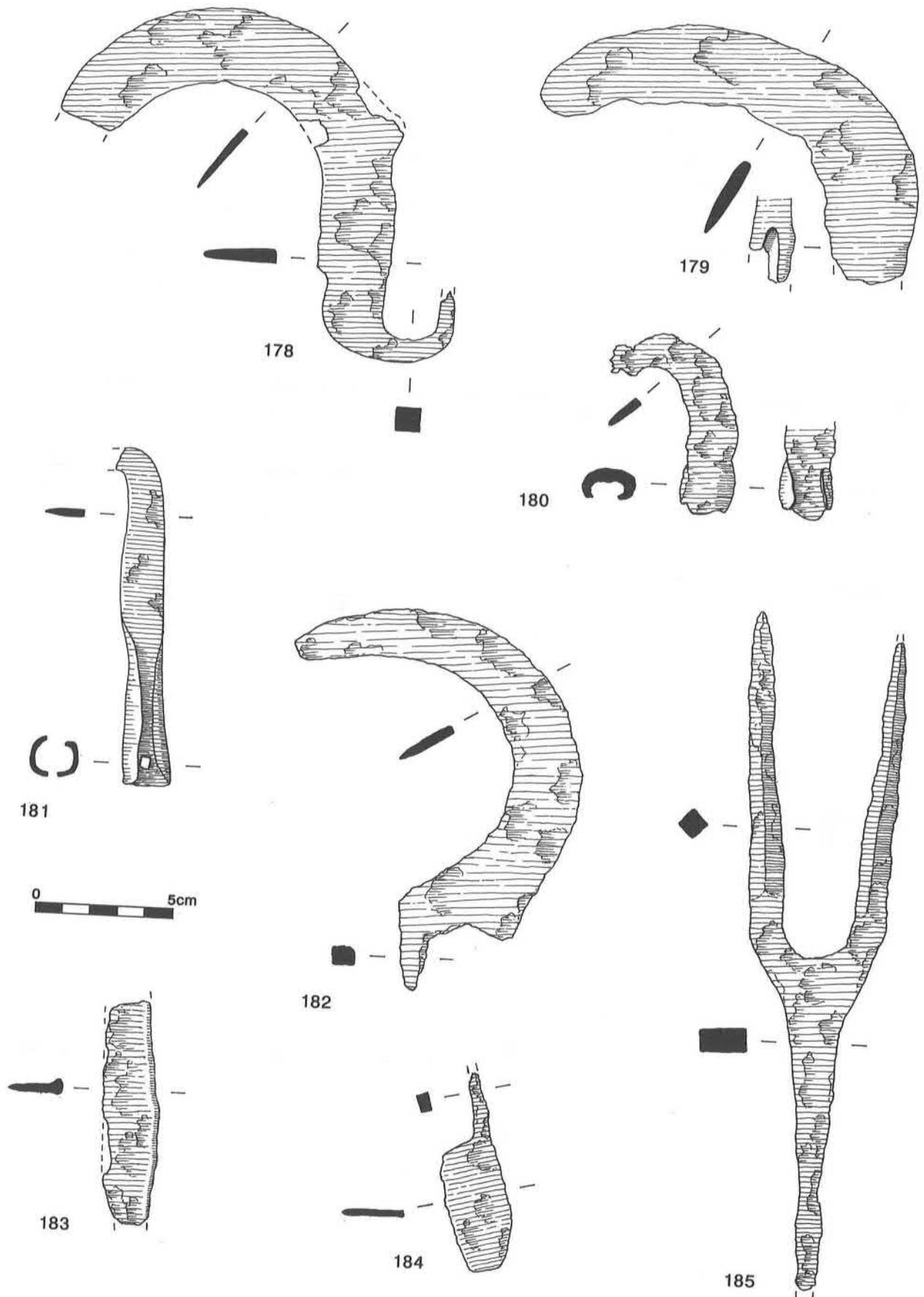


Figure 155: Iron reaping hooks 178-179; Small hooks 180-181; Sickle 182; Scythe 183; Shear blade 184; Pitchfork? 185, scale 1:2.

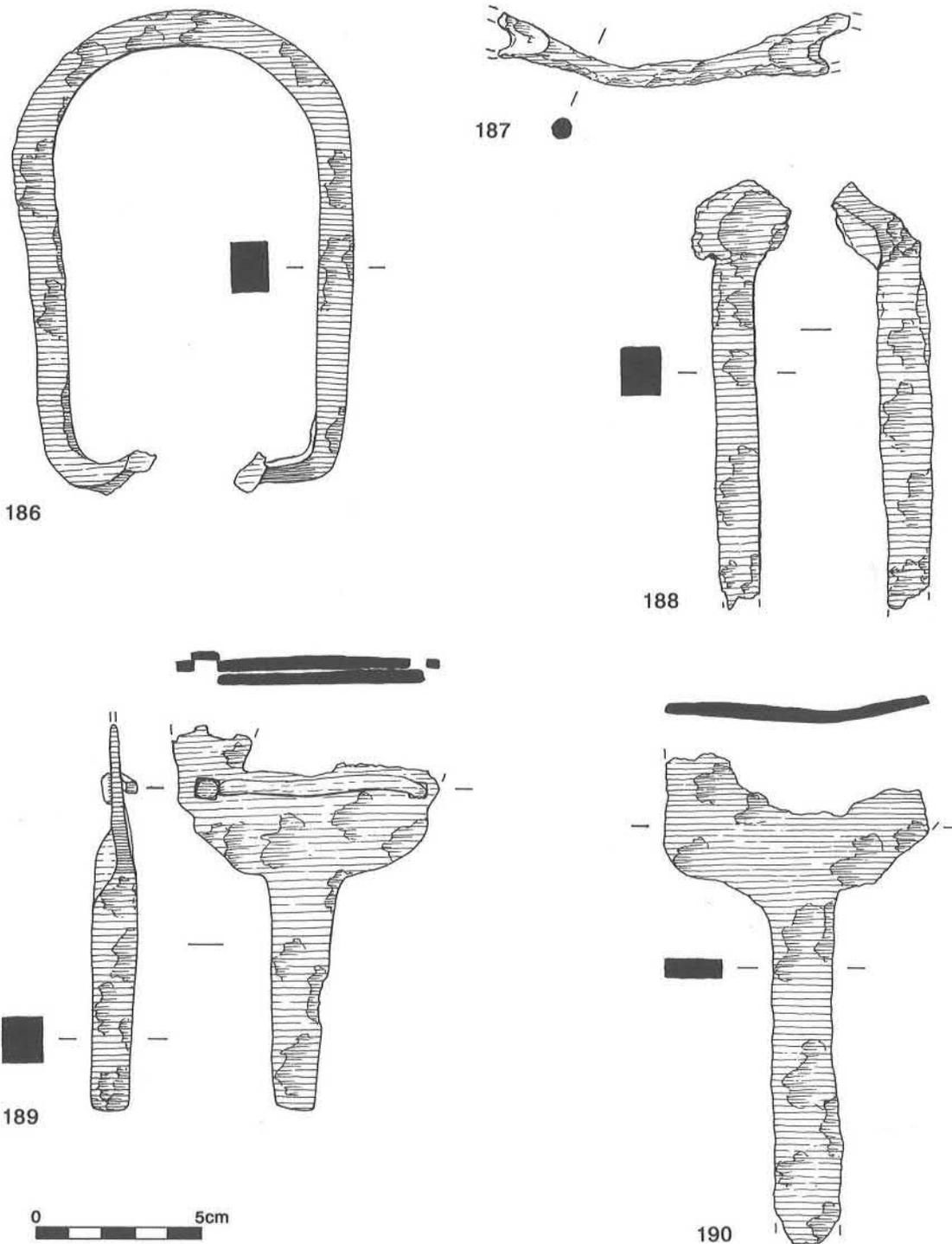


Figure 156: Iron 'U' shaped object 186; Bridle bit 187; Linch pins 188-190, scale 1:2.

176 Socketed tool? Badly damaged, deep socketed ferrule, forming part of a small hook, or a flat-bladed tool. Length 98 mm. V/269/1; topsoil.

177 Socketed tool, Possibly part of a flat-bladed tool. Length 80 mm. V/163/207; cobbled trackway.

Agricultural Tools (Figs 155, 156)

The few identifiable agricultural tools found at Bancroft were dispersed evenly throughout the site. Prominent among these were several different forms of hooked tools.

Reaping Hooks

These were used for cutting cereals by holding the head of a sheaf in one hand, and drawing the blade through the stalks with the other.

178 Reaping hook. Blade almost semicircular, straightening before tang. The tang is set at right angles to the back of the blade, before turning through a further right angle to return to the same alignment as the blade. Length 112 mm. For parallels, see Rees (1979, 525, fig. 173c).

V/794/1004; destruction rubble, Building 10.

- 179 Reaping hook, Manning's Type 2 (BMC, 4). Slightly hooked blade, evidence of socketed handle. Length 145 mm. Possibly Iron Age?

V/41a/27; destruction, Room 5, Building 7.

Small Hooks

This category is taken to include all hooks smaller than reaping hooks, though of a similar form. Their function is unclear, and it is probable that many were made for limited specific jobs. Two examples from Bancroft conform to Manning's Type 2 (BMC, 57, pl. 24.F48); one (180) is illustrated.

In addition to the above objects, three implements identified as pruning hooks found during earlier excavations at the villa have been published (RMK, nos 284, 285, 288), along with a pruning knife (RMK, no. 289).

- 180 Small hook, Manning's Type 2 (BMC, 57, pl. 24.F46-48). Sharply curved, with open flanged socket. Length 66 mm.
V/684/834; cobbled surface in farmyard.

- 181 Small hook. Long open socket, with evidence of a small nail hole at its mouth. The blade curves out slightly from the socket, followed by a straight section before curving into the hook, much of which is missing. Length 122 mm.

V/41c/27; destruction, Room 5, Building 7.

Sickles

These were used with a sweeping action to cut crops, and were constructed with an almost semicircular blade, and much of the weight behind the handle. Only one fragmentary example (182) was found at Bancroft, and conforms to Manning's Type 1 (BMC, 52).

- 182 Sickle. Almost semi-circular blade with tapering tang, most of which is missing. Right-angled shoulder on the back edge of the blade, just above the tang.

V/41b/27; destruction, Room 5, Building 7.

Scythes

Scythes were used for cutting hay, and possibly also cereal crops. Two types are recognised by Manning, though examples found at Bancroft are too fragmentary to classify with any degree of certainty.

- 183 Scythe blade, slightly curved, with a reinforcing ridge running the length of the spine. Length 80 mm.

V/994/675; fill, Ditch 509.

Shears

Manning identifies three main groups of shears, divided by their size and consequently their function. Only one fragment was found at Bancroft.

- 184 Shear blade, conforms in shape to Manning's Type 2, though its size would suggest Type 3 (BMC, 34, pl. 14.D4-6). Straight edge, with back curving in gently towards the tip. Spring is rectangular in section and slightly tapered towards blade. Length 71 mm.

V/642/777; upper fill, Ditch 703.

Miscellaneous

Two objects (185, 186) were described by the excavator as possible pitchforks. The former shows similarities to modern pitchforks, but Roman parallels have proved impossible to find. Additionally, the former was found in a topsoil context, which makes its dating as Roman suspect.

- 185 Pitchfork? From the broken tip, the tang is of rectangular section flaring out towards shoulders from which the prongs extend. The prongs have a lozenge-shaped section, and are 122 mm long. Length 245 mm. Ferrule 281 was found in association with this object.

V/242a/1; topsoil.

- 186 'U' shaped object, rectangular in section, tapering to square sections towards tip of each prong. The last 40 mm of each prong are bent over. Length 150 mm, width 103 mm.

V/371/616; fill, Pit 696.

Transport (Fig. 156)

Only three items, a fragmentary bridle fitting (V/619/736 - not illustrated), a bit (187), and a linch pin (188) could be definitely related to this category of objects at Bancroft. Two objects identified by the excavator as linch pins (189, 190), both recovered from Building 12, are also included, although this identification is questionable as neither relates to known types of Roman linch pins.

- 187 Bridle bit. Circular-section rod, flares out to flattened and pierced sub-triangular terminals. Length 107 mm.

V/690/834; cobbled farmyard.

- 188 Linch pin. Square-section rod, slightly tapered. Flares to head of triangular or diamond shape. Length 130 mm (BMC, 72, fig. 20.2a).

V/690/834; topsoil.

- 189 Linch pin? Square section stem, flares to 'U' shaped head, with rounded and slightly upturned shoulders. Head is pierced by two square holes through which a round-sectioned iron wire passes. Length 102 mm, width of head 82 mm (Manning 1976, 43, fig. 26.194).

V/585/739; destruction, Building 12.

- 190 Linch pin? Similar to 189, but with a rectangular-sectioned stem. The head is heavily corroded. Length 150 mm.

V/726/910; floor make-up, Building 12.

Locks and Keys (Fig. 157)

Excavations at Bancroft produced several examples of each of the major types of Roman keys. The one interesting group of finds in this category, consisting of two padlock keys, two lever lock keys and a lift key were found in the dark soil spreads east of Building 9. Also of interest was the discovery of a spring padlock bolt (197), found in the farmyard area.

- 191 Latch lifter. Thin flat deeply curved blade, tip and handle are missing. Length 144 mm (BMC, 89, pl. 38.O12). Late second century.

V/825/1053; destruction, Building 10.

- 192 Lift key. The stem is rectangular in section, with a loop at one

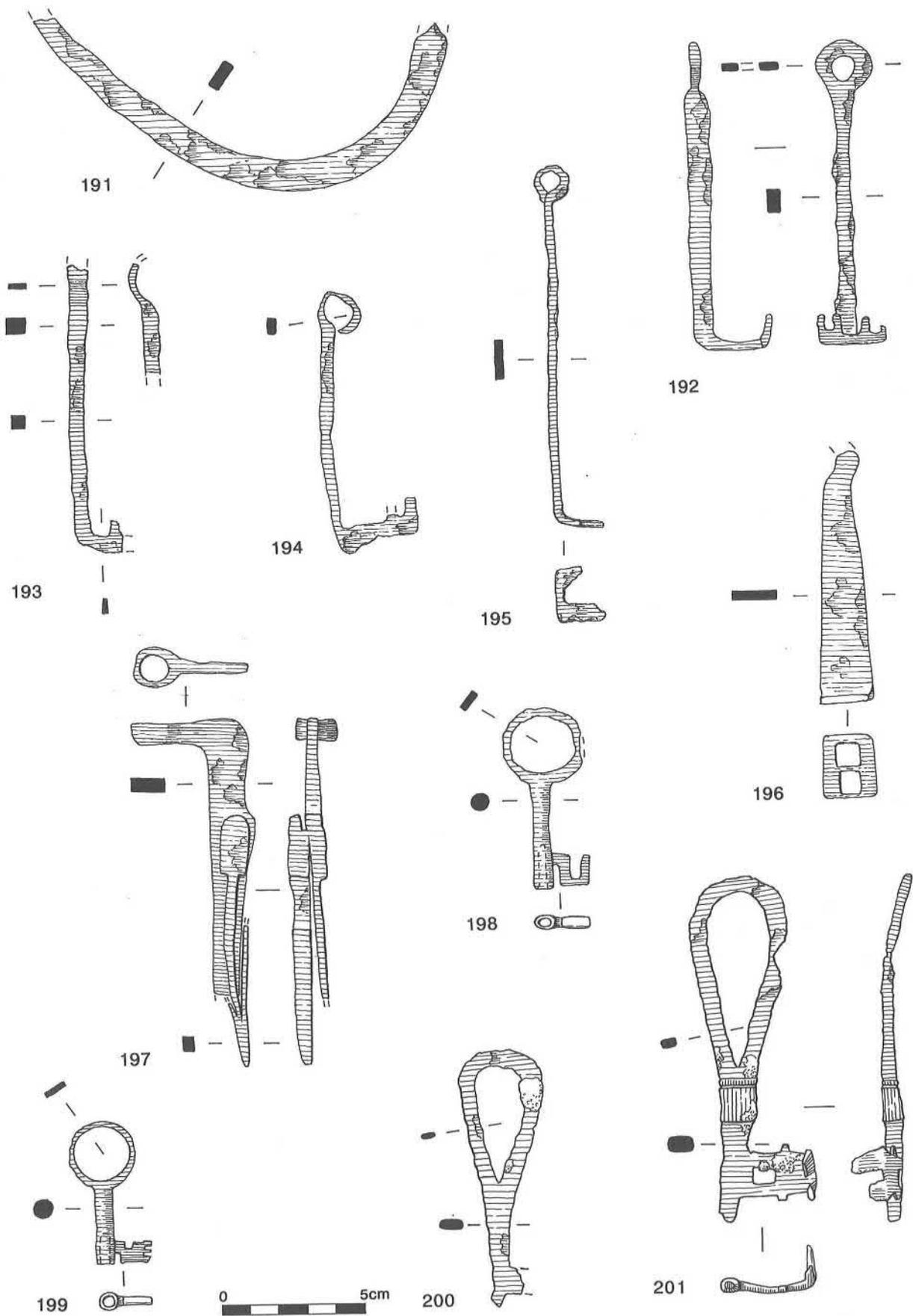


Figure 157: Iron locks and keys 191-201, scale 1:2.

end, turning through a right angle at the other and terminating in a bit with four teeth, two either side of the stem, facing back towards the loop. Length 107 mm. AD.50–60.

M/150/465; Cremation 4.

193 Lift key. 'L' shaped, long tapering stem, remains of rolled terminal at one end. Wards damaged; number of teeth uncertain. Length 101 mm. Similar examples have been recorded from Gadebridge (Neal 1974, 166, fig. 71.390) and Southwark (BMC, 92, pl. 40.O37).

V/272/461; soil spread over farmyard.

194 Lift key. 'L' shaped, rectangular section stem with rolled terminal, only one tooth remaining on wards. Length 90 mm. A similar key is recorded from the Bank of England (BMC, 92, pl. 40.O31).

V/594/735; 'midden' area.

195 Barbed spring padlock key, Manning type 2. Formed from flat, tapered strip ending in a rolled terminal. Wards damaged. Length 125 mm. Similar examples have been recorded from Bancroft (RMK, no.315) and Southwark (BMC, 96, pl. 43.O71).

V/26/12; fill, Fishpond 50.

196 Barbed spring padlock key for lock with two spines. Terminal loop missing. Length 91 mm. A similar example is recorded from Verulamium (Frere 1984, fig. 42.93).

V/540/735; 'midden' area.

197 Barbed spring padlock bolt, with two spines and two springs. The rectangular-sectioned shaft terminates in an upturned ring. Length 121 mm.

V/395/625; cobbled farmyard.

198 Lever lock key. Large circular bow and circular section shank, with deep cuts to either side of the bit. Length 65 mm.

V/546/735; 'midden' area.

199 Lever lock key. Large circular bow, hollow circular section shank, and bit with deep cuts to either side, two on the outer edge. Length 50 mm.

V/614/736; soil spread east of trackway.

200 Lever lock key, Ward Perkins Type 1A (Ward Perkins 1965, 134, fig. 42). Tear-drop shaped bow, tapering to a rectangular-section solid stem. Badly damaged. Length 89 mm.

M/41/73; upper layer, backfill of mausoleum chamber.

201 Lever lock key, Ward Perkins Type 1A (*ibid.*), similar to but larger than 200. Moulded rectangular-section stem. Large rectangular bit, pierced by a square hole, with a small tooth projecting from the midpoint of each edge, and two large teeth curving upwards from the end of the bit. Length 122 mm.

M/42/73; upper layer, backfill of mausoleum chamber.

Near-identical keys to 200 and 201 were found in eleventh-century contexts at Winchester (Goodall 1990, 3733, 3735).

Keys of this type with pear-shaped bows were originally considered by Ward Perkins (1965, 134) to be primarily of pre-conquest date, although one example from King John's house, Tollard Royal, had been dated as late as the twelfth century (*ibid.*). More recently, a number of finds of keys of this type from Winchester have clarified the date range

(Goodall 1990, 1024). The earliest example (*ibid.*, obj. 3731) is dated to the early tenth century, while the latest (obj. 3738) is no later than the mid twelfth century, thus giving a late Saxo-Norman date for this type of key.

The importance of the two Bancroft examples lies in their provenance, in the uppermost fill of the burial chamber of the mausoleum. This overlay a loamy horizon, which in turn sealed the debris from the earliest phase of demolition and robbing, which was dated to the fourth century. It is clear from this sequence that the building was at least partly demolished and robbed in the late Roman period, after which the depression left silted up naturally during the Saxon period, before being levelled in the eleventh or twelfth century.

Domestic Equipment (Figs 158–160)

In addition to the objects described below, the early excavations at the villa recovered a number of artefacts in this category, which are described in RMK (nos 322–28). Of particular note among that assemblage were the fittings from a wooden chest (no. 328).

202 Socketed, 'U' shaped hook of square section with long open socket. Perhaps used as a well-hook, for raising buckets out of a well.

V/533/735; 'midden' area.

203 Flesh hook? Long circular-sectioned stem, slightly tapered and curved over to form a hook. Just above the hook, the stem broadens to a flattened plate 60 mm long, after which it reverts to its original section. The top of the stem is spirally twisted before being flattened into a small spatulate head. Although the hooked teeth common to this object type are missing, it is similar in shape and size to a flesh hook from Tokenhouse Yard, London (BMC, P35). Length 295 mm.

V/539/735; 'midden' area.

204 Pendant candleholder. Long pointed rod, spirally twisted circular-sectioned stem, with several changes in direction along its length. Rectangular-sectioned spike with curved suspension barb. The lower end is square-sectioned, and has been bent back through 180° to form a socket. Length 686 mm.

V/828/1061; peat deposit overlying Enclosure 1208.

205 Bucket handle, formed of square-section rod. Overall length c.540 mm (reconstructed). A similar example, dated to the mid first century, was found at Hod Hill (BMC, 102, pl. 47.P12). This object is probably of second-century date.

V/725/910; floor makeup, Building 12.

206 Bucket handle mount. Flat strip, rounded at one end and pierced. (BMC, 102, pl. 47.P11). Length 43 mm.

M/24/37; upper fill, Ditch 60.

207 Hoop from small tub, barrel or bucket. Evidence of wood remaining on inner surface. Dia. 167 mm, width 28 mm.

V/795/1004; destruction, Building 10.

208 Swivel loop. Sub-rectangular shape, one end being flattened and pierced for swivel. Length 63 mm. A similar, complete object, probably from Gloucestershire, can be seen in the

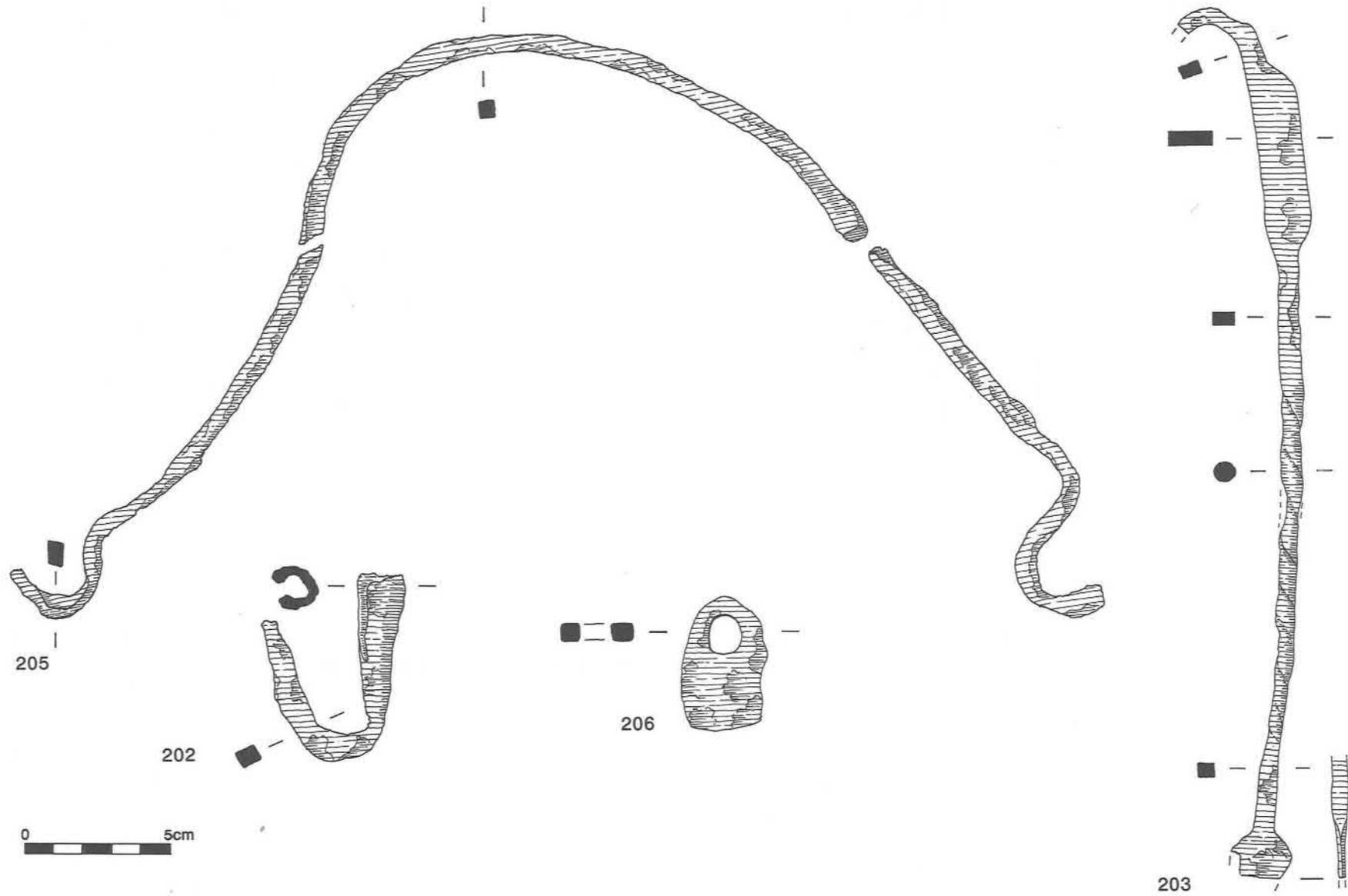
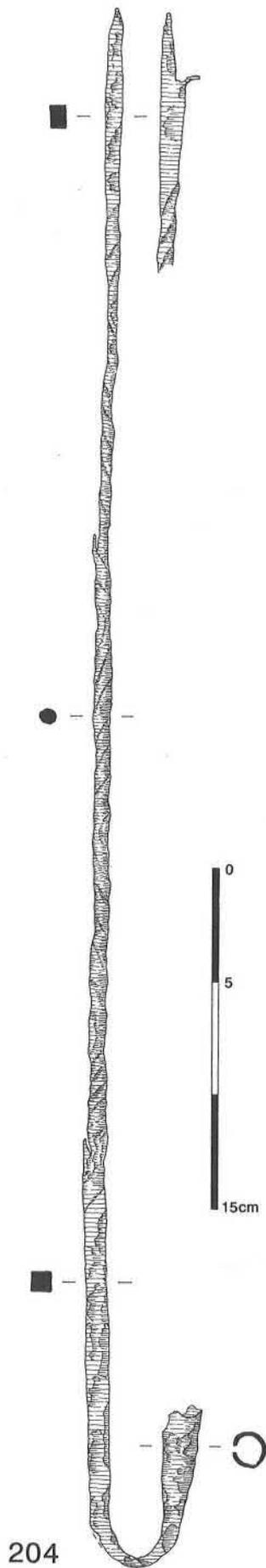


Figure 158: Iron hooks 202-203; Bucket handle/mount 205-206, scale 1:2.



204

Figure 159: Iron pendant candle holder 204, scale 1:2.

Lysons collection (BMC, 138, pl. 64.S5).

V/293/496; soil spread east of trackway.

- 209 Swivel hook. Small pyramidal head. Stem is tapered and waisted below squarish shoulder half way along its length, beyond which it tapers. Length 57 mm.

V/2000/1116; upper fill, Enclosure 1208.

- 210 Cauldron hook. Spirally twisted stem, looped at one end, and forked at the other to form two rectangular sectioned hooks. Length 230 mm. A similar example, probably of Roman date, is recorded from Water Newton, Cambs. (BMC, 101, pl. 45.P9).

M/191/603; fill, Ditch 609.

Window Grille (Figs 161–163)

R.J. Williams

- 211 During the excavation of Enclosure 1208 at the villa (p.154) a group of six large heavily corroded iron 'bars' were found lying together (Fig. 161) as if originally tied in a 'bundle'. The six 'bars' can be divided into two groups; pierced rectangular bars and circular rods.

The three rectangular-sectioned bars (Fig. 162.i-iii) averaged 10×23 mm across and were 420, 592 and 580+ mm long respectively. The ends of each bar had been carefully forged into a splayed rounded flange turned at a right angle to the line of the bar. Each flange had a single small hole in the centre of the widest point. Bar i had been pierced twice and Bars ii and iii three times through their thickness with circular holes, dia. 15–16 mm, equally spaced along their lengths. In each instance the distance between hole centres ranged from 148–154 mm and from 132–148 mm from the centre of the outermost hole to the end of the bar.

The three circular-sectioned rods (Fig 162.iv-vi) averaged 14 mm in diameter and were 560+, 596+ and 500 mm long respectively. All three rods had slightly tapering rounded terminals at one end and two (iv and vi) had pierced flanges at the other, similar to those on the rectangular bars (the flange on v was almost certainly missing or had corroded away).

All the bars and rods, with the exception of i and v, had been bent in one or more places. This is unlikely to have occurred after deposition, given the gauge of the iron, and probably resulted from their forced removal from a structure.

The similarity in diameter between the circular rods and the holes in the rectangular bars indicates that the former had passed through the latter, forming a very strong rectangular or square grille or grating, presumably for a window. The difference in length between bar i and bars ii and iii suggests that at least two such grilles of differing sizes are represented in the group, and that a number of pieces are missing. An alternative reconstruction, in which all the excavated pieces made up a grille fitting into a round-headed opening, is also possible. However, the configuration of the three vertical rods where they meet the shorter horizontal bar, with only two piercings, makes this interpretation unlikely.

Bars ii and iii and rods iv and v are depicted in a reconstruction of a 590 mm square grille (Fig. 163), in which only a single upright is missing, giving twelve rectangular-shaped openings, each $c.140 \times 185$ mm across internally. If an additional horizontal bar is included then the grille would have contained sixteen identical openings, averaging 140 mm sq. internally.

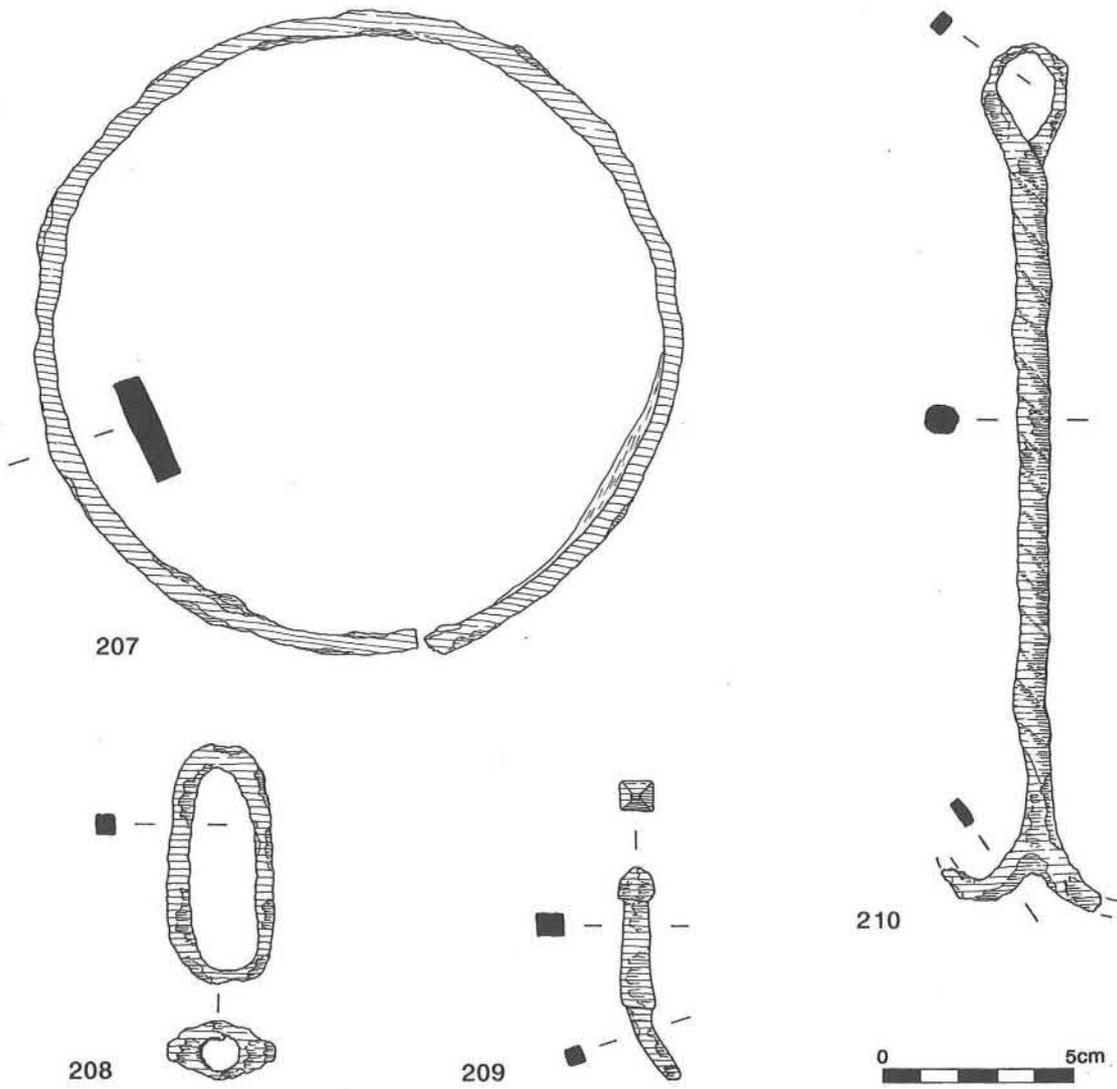
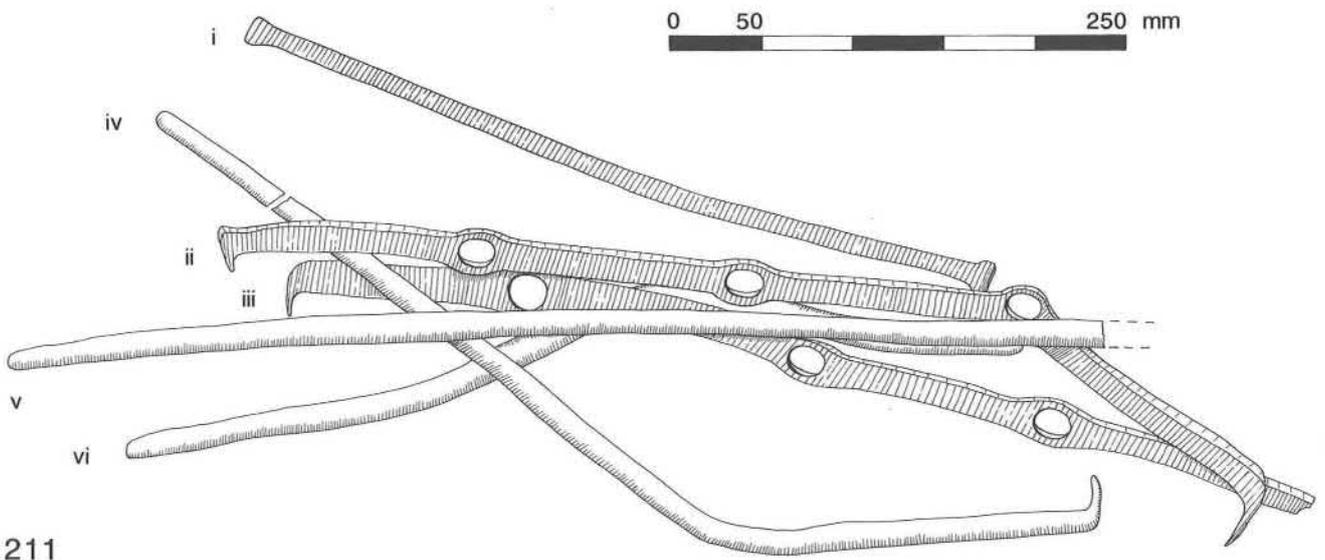


Figure 160: Iron hoop 207; Swivel loop 208; Swivel hook 209; Cauldron hook 210, scale 1:2.



211
Figure 161: Iron window grille 211, as found *in situ*.

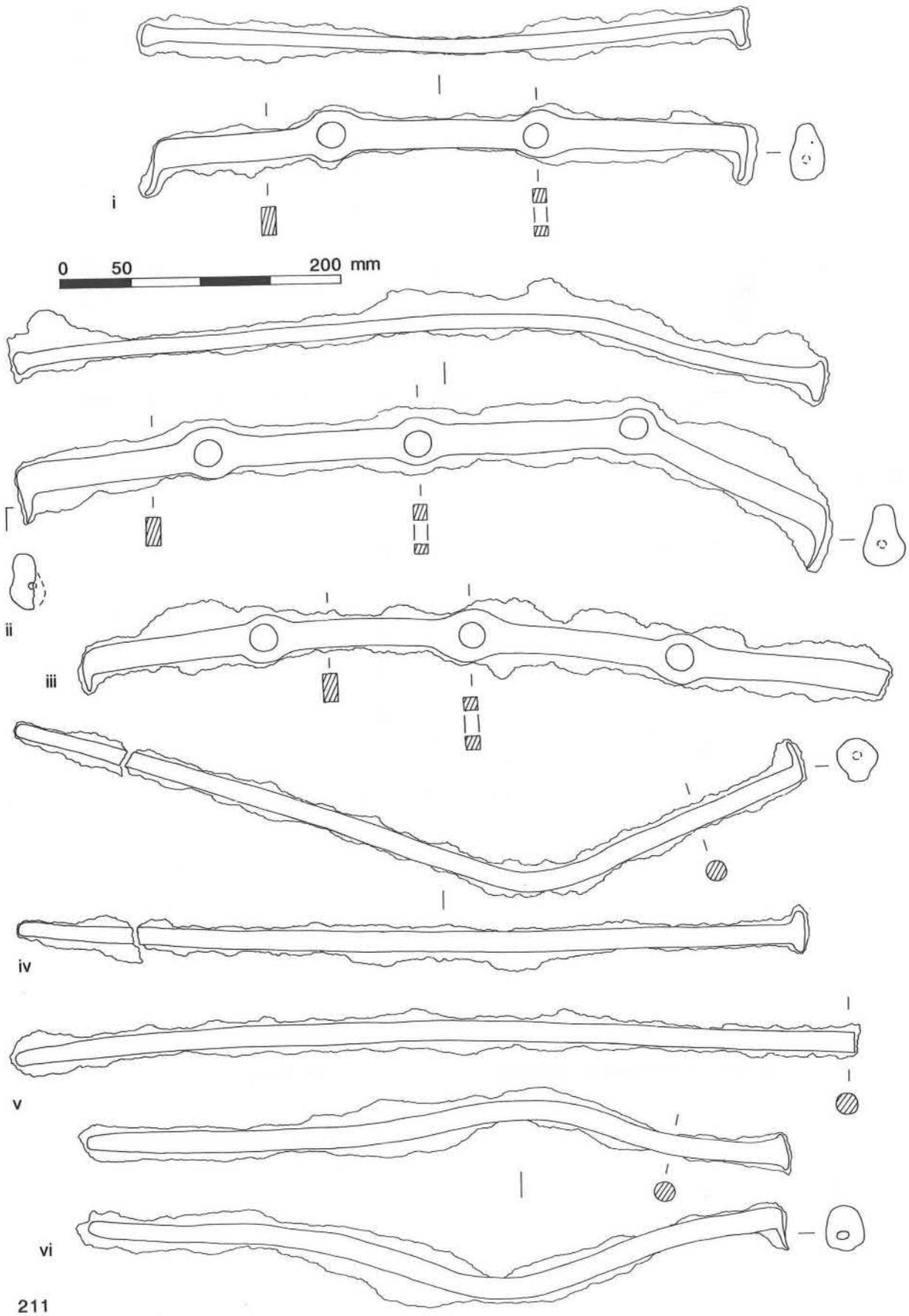


Figure 162: The individual components of the window grille 211, drawn from X-rays.

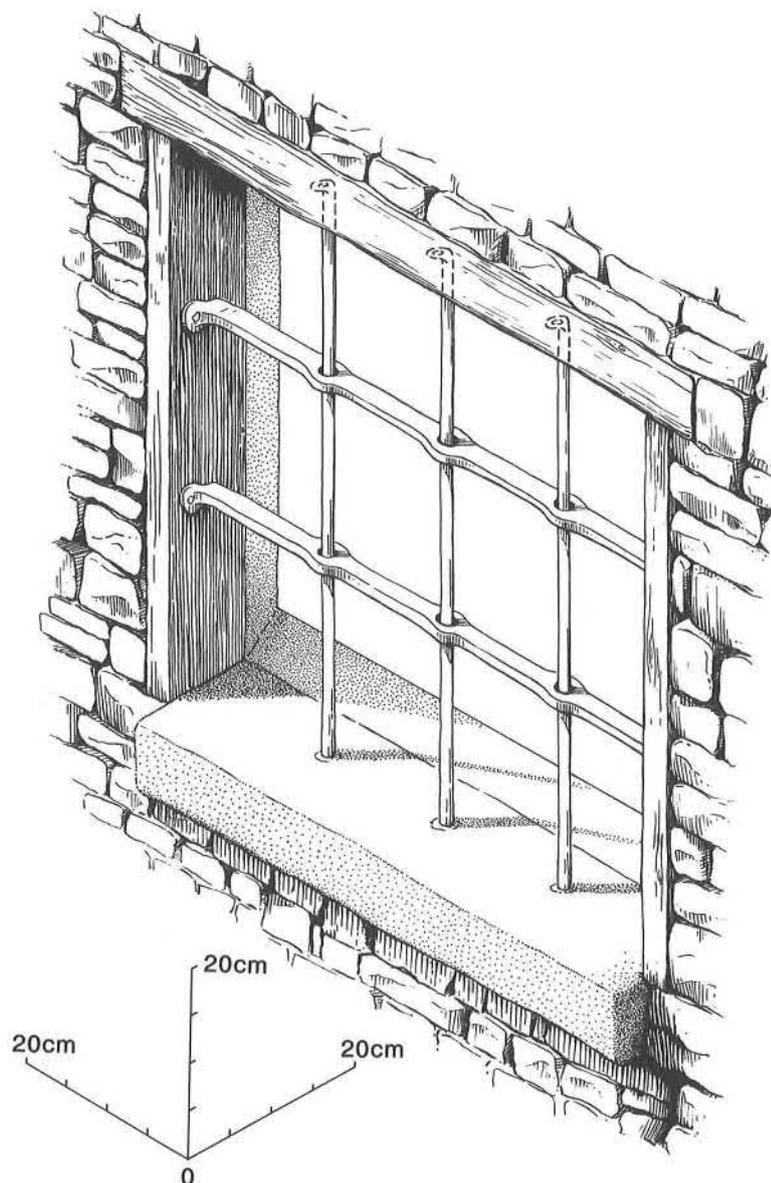


Figure 163: Possible reconstruction of the window grille.

The pierced flanges indicate that the grille had been fixed into a window reveal with a timber lining, although whether the flanges had faced inwards or outwards is impossible to determine. The tapered terminals of the vertical rods would almost certainly have slotted into holes in a stone sill with any surrounding cavity 'flushed up' with cement or lead to leave a tidy finish.

The inclusion of a double pierced bar and a shorter rod (vi) indicates that these were elements of one or more smaller grilles only 420 mm wide.

V/830/1069; upper fill, Enclosure 1208.

Iron window grilles are uncommon in Roman Britain; only sixteen examples were known to Manning and Painter (1967) when they discussed the most completely preserved example in Britain from Hinton St Mary. All of these were of the type made up of flat bars, often with iron crosses rivetted at the intersections to hold panes of glass. Both Manning and Painter (*ibid.*) and Webster in an earlier discussion of Roman windows and grilles (1959) recognised that an alternative form of grille took the form of a grating made up of horizon-

tal flat bars through which round vertical bars passed. This form can still be seen *in situ* at Herculaneum and Pompeii, and is generally considered to have had a primarily south European distribution. To the writer's knowledge 211 is the only example of this type yet found in Britain, although why such a strong geographical bias of the two principal types of grille exists is impossible to determine.

The use to which such grilles were put is also a matter for speculation, although according to Manning and Painter (1967) they were usually associated with strong rooms. At Bancroft villa there is no single room or even building in which such a grille is likely to have been required, although the discovery of the iron-bound chest (RMK, 328) is worth noting in this general context. An alternative but speculative explanation is that the grille(s) had originally been used in the temple-mausoleum in an aperture in the *cella* wall allowing sight of the sarcophagi in the burial chamber (Fig. 123) whilst providing a degree of security (p.241). If this were the case then the grille(s) would have a second-century date, and

the damage would have resulted from their removal in the fourth century. The context in which they were found contained both coins and pottery of the fourth century, and the discovery of worked stone from the temple-mausoleum at the villa strengthens the argument that building materials from the latter were removed for reuse in the fourth-century refurbishment of Building 1 at the villa.

Knives (Figs 164–165)

In all, nineteen knife fragments were recovered from Bancroft; sixteen from the villa and three from the mausoleum. Of these, eight of the former and all of the latter survived to a degree sufficient to allow identification of blade type. The classifications used below are those proposed by Manning (BMC, 109).

Unfortunately, most of the knife fragments from the villa were recovered from soil spreads, which tend to contain a higher proportion of residual material than the sealed fill of features or structural contexts, so their dating is by no means certain. One exception to this is **218**, which was found in Pit 637 with a hoard of seventeen bronze coins, deposited in the mid fourth century. Another is **221**, recovered from floor makeup layers beneath Room 2, Building 1. Five knives or knife fragments are recorded from early excavations at the villa (RMK, 163, figs 54 and 55); only one (no. 311) is stratified.

The mausoleum excavations produced three knife fragments, all of which are illustrated. **212** came from the fill of first-century Pit 607, **213** from the upper fill of enclosure Ditch 60, and **225** from Cremation 9.

212 Knife, Manning Type 8. Blade tip and back broken, making it difficult to decide to what degree the back was angled. Pronounced step between edge and handle. The pommel is expanded, and retains the remains of a white-metal binding, which shows up clearly on the radiograph (Plate 73). No later than c.75, which conforms with the date suggested by Manning (1985, 113).

M/258/830; upper fill, Pit 607.

213 Knife, Manning Type 15. The tang is slightly offset from the back of the blade, and the cutting edge turns up gently from the sloping heel. Length 123 mm.

M/31/39; upper fill, Ditch 60.

214 Knife, Manning Type 11a? Rectangular-sectioned tang, the line of which is continued by the back of the blade. The blade is broader close to tang, and tapers to the point with a straight cutting edge. Blade and tang are both broken. Length 74 mm.

V/732/910; destruction, Building 12.

215 Knife, Manning Type 11b. Blade tip broken. The tang is spirally twisted and ends in a loop. Length 14 mm overall, blade length 68 mm. Similar examples have been recorded from Bancroft and Stantonbury, Milton Keynes (RMK, nos 301, 302).

V/298/496; soil spread north of Building 8.

216 Knife, Manning Type 15. The tang is dropped slightly from the back, while the blade drops considerably from the tang.

The cutting edge follows a convex curve to the tip. Length 78 mm.

V/580/735; 'midden' area.

217 Knife, Manning Type 16. The blade is symmetrical in shape, with both back and edge having a straight taper towards the tip. The tang is on the midline of the blade. Length 212 mm.

V/21/23; destruction, Building 1.

218 Knife, Manning Type 16. Similar to **217**, but with a rounded point. Length 196 mm. Mid fourth century.

V/419/637; fill, Pit 637.

219 Knife, Manning Type 21. The back and blade are parallel, with slightly convex curves to the tip. The tang is on the midline of the blade. Length 87 mm.

V/523/737; soil spread east of Building 11.

220 Socketed knife, Manning Type 22. Straight back, with a downward sloping edge which curves up towards the point. Length 118 mm.

V/998/1; topsoil.

221 Knife, Manning Type 23. The back curves up from the tang to the point. The blade edge drops down from the tang and rises in a convex curve to meet the point. Length 225 mm. Mid first century?

V/180/231; floor makeup, Room 2, Building 1.

222 Knife blade and tang fragment. Length 50 mm.

V/203/424; rubble floor makeup? Room 1, Building 7.

223 Knife or shear blade. The blade edge is straight, dropping down from the tang, while the back follows the line of the tang. Length 82 mm.

V/270/461; soil spread, farmyard.

224 Knife. The rectangular-sectioned tang has been pierced by a single iron rivet, and is aligned with the back of the blade. Length 107 mm.

V/643/763; fill, Ditch 743.

225 Knife or shear blade of narrow triangular form. Length 56 mm.

M/181/512; Cremation 9.

226 Tang, rectangular tapered section, with fragment of tool, probably knife blade, still attached. Length 70 mm.

V/296/496; soil spread over trackway.

Structural (Figs 166, 167)

Water Pipe Collars

Excavations at the villa have produced a total of five water pipe collars, two of which have already been published (RMK, nos 320 and 321). The latter pair were recovered from destruction contexts over Building 1, while the first two described below (**227**, **228**) were found *in situ* in a narrow trench beneath the rectangular 'flower bed' (**218**) at the west end of the fishpond. Unfortunately, the circumstances of this discovery did not allow for recording the distance between the two collars. However, these and the collars from the earlier excavations are all virtually identical in size, with external diameters of 108–110 mm, and could come from the same pipe, probably the outflow from the cold plunge bath in

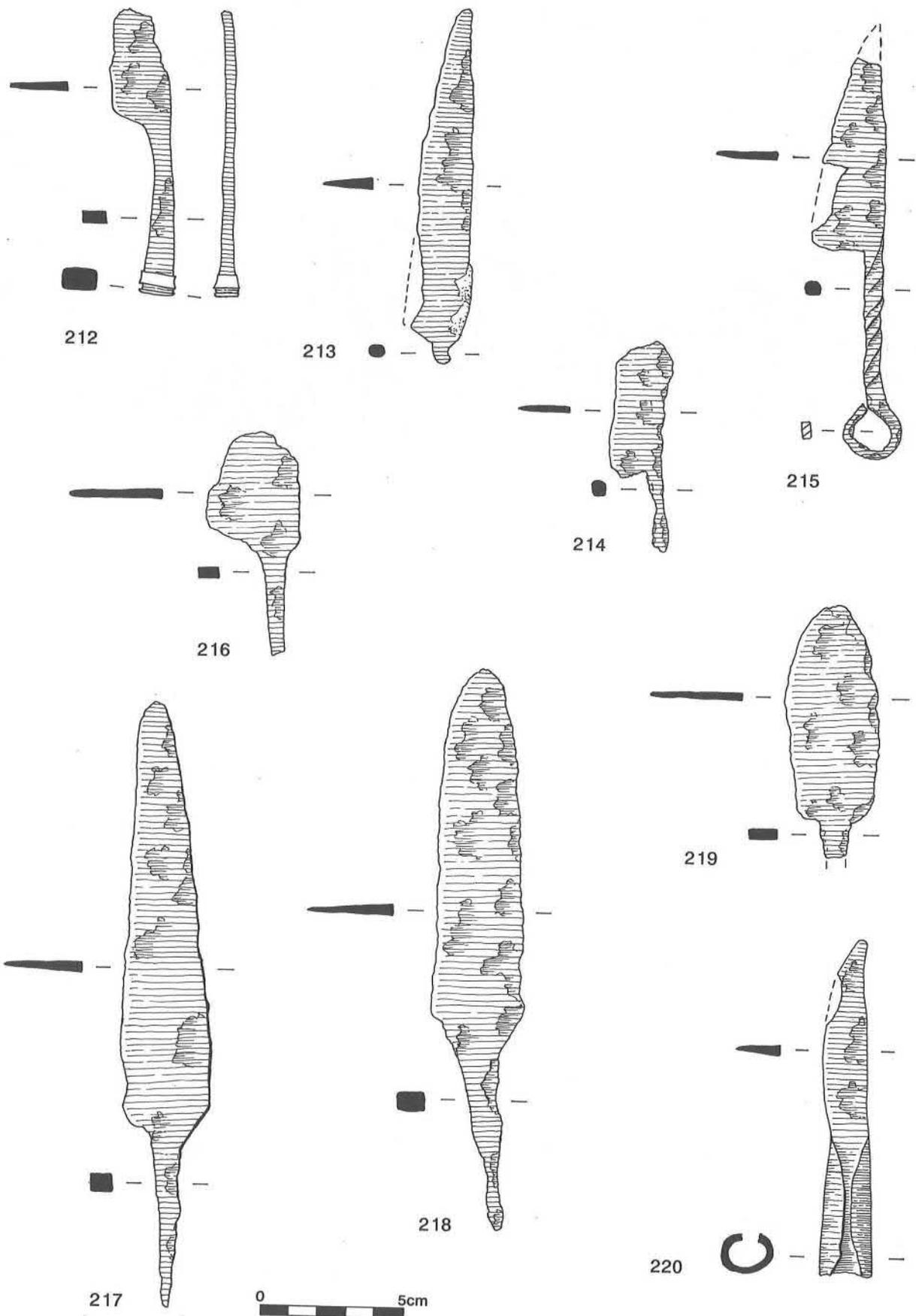


Figure 164: Iron knives 212-220, scale 1:2.

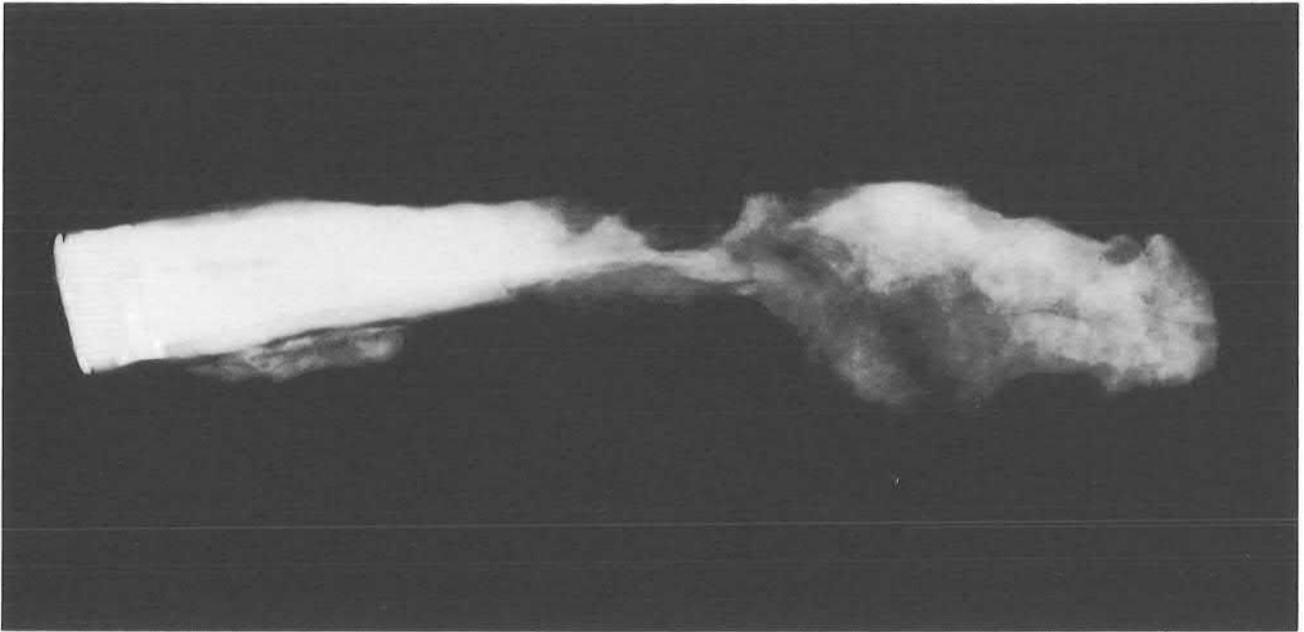


Plate 73: Radiograph of iron knife 212 revealing the 'white metal' band below the pommel.

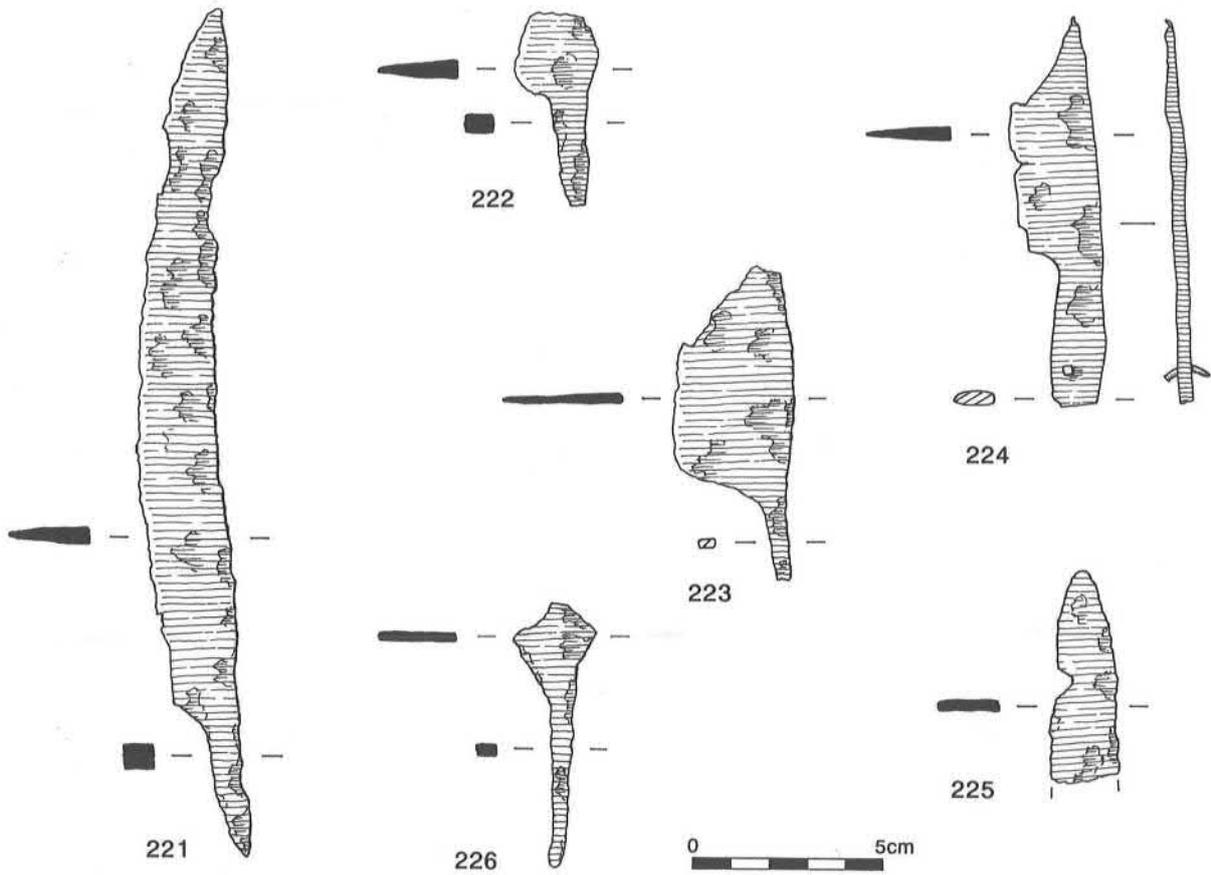


Figure 165: Iron knives 221-226, scale 1:2.

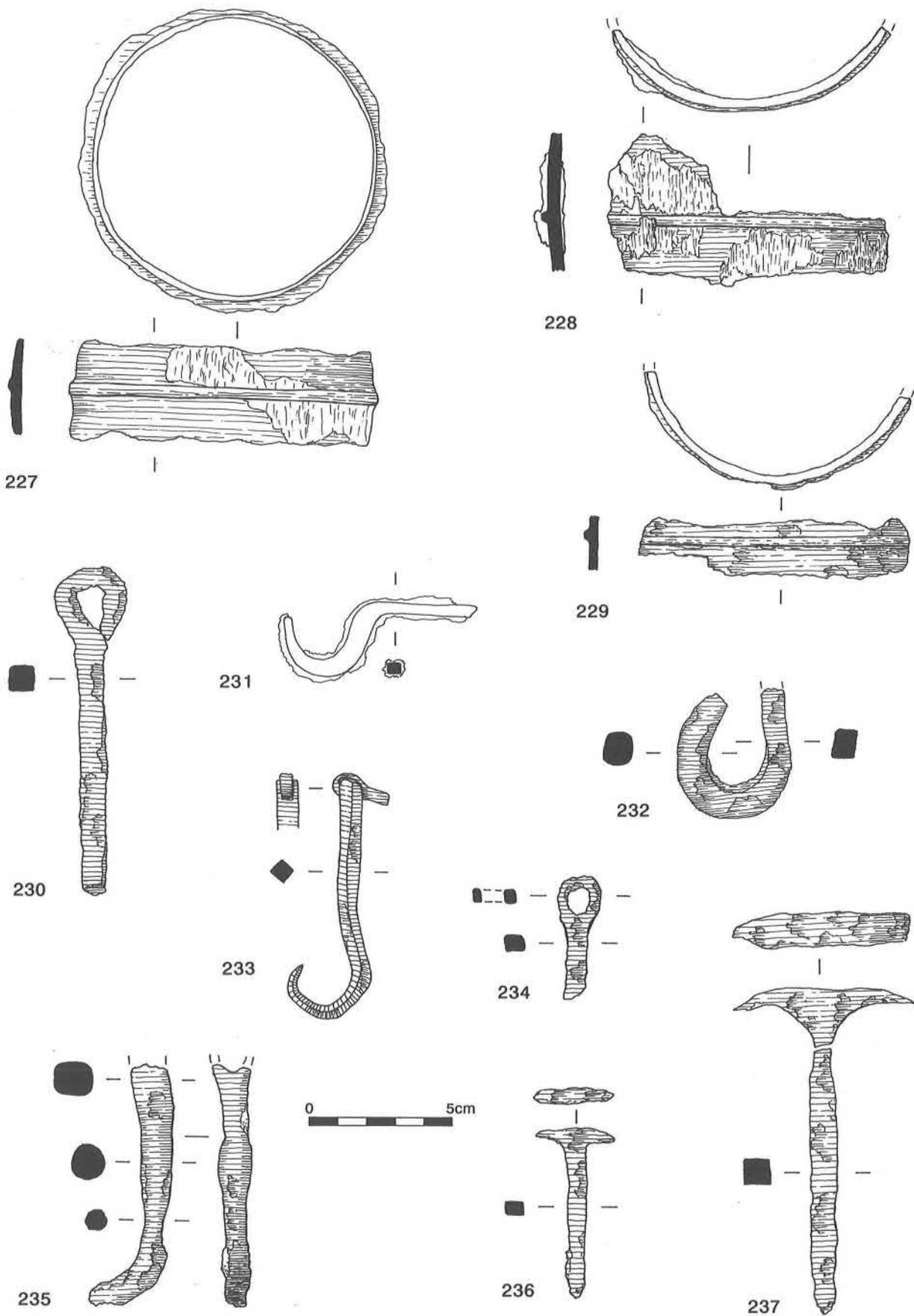


Figure 166: Iron water pipe collars 227-229; Structural pins, spikes, staples and hooks 230-237, scale 1:2.

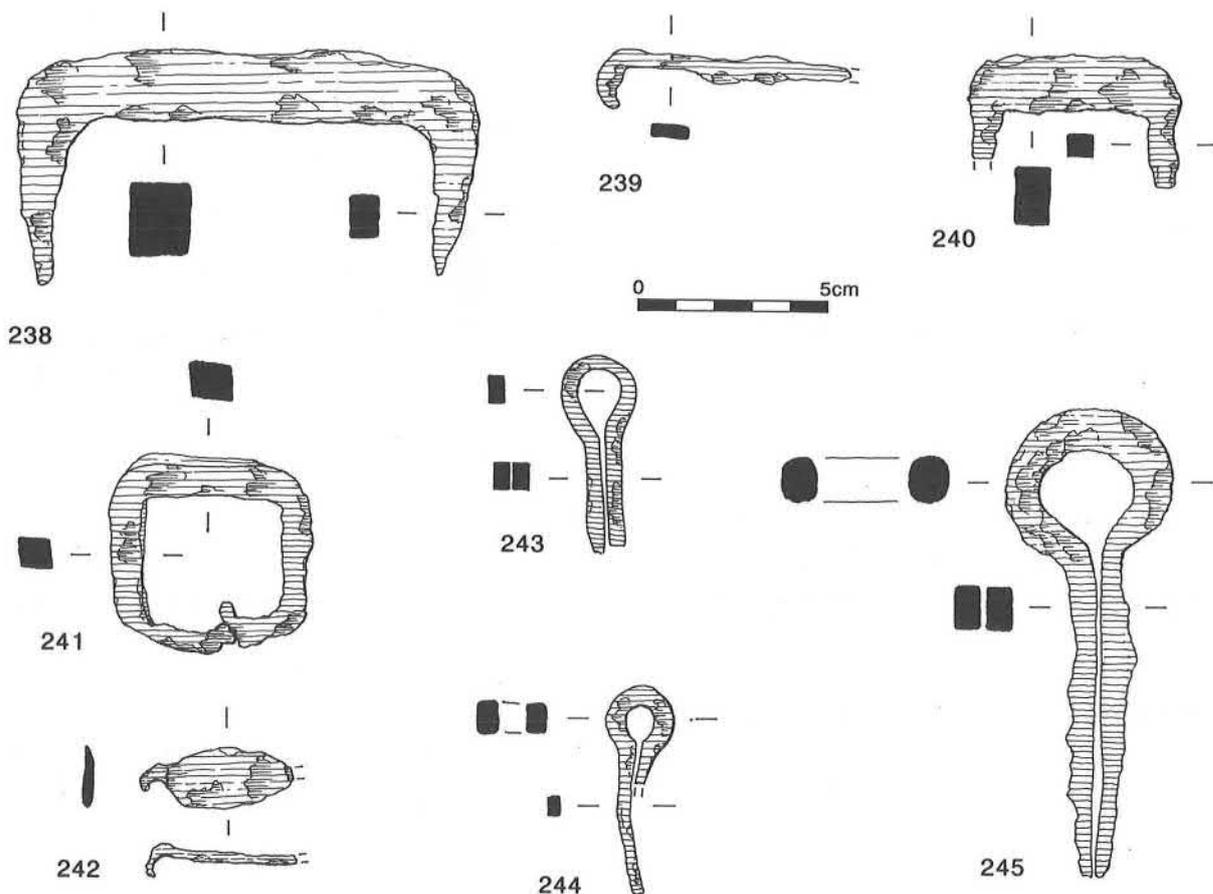


Figure 167: Iron joiner's dogs 238-242; Double spiked loops 243-245, scale 1:2.

Room 17, Building 1. The water and drainage systems relating to Buildings 1 and 7 are discussed in detail elsewhere in this volume (p.209).

227 Water pipe collar. External diameter 108 mm, width 34 mm.
V/169/218; pipe trench, west end of pond.

228 Water pipe collar, traces of wood-grain visible. Diameter 110 mm approx.
V/173/218; pipe trench, west end of pond.

229 Water pipe collar, fragment. Diameter 94 mm approx.
V/273/461; soil spread, farmyard area.

All the objects in the two following groups are commonly found on sites throughout the Roman period. The examples illustrated are a selection of those found at the villa, all from stratified contexts. Similar objects from earlier excavations on the site have already been published (RMK, 170, fig. 60).

Pins and Hooks

230 Ring-headed pin, formed from square-section bar, point missing. (Manning 1976, 43, fig. 26.186). Length 116 mm.
V/991/504; silting on trackway, north of Building 8.

231 Wall hook, 'U' shaped (Neal 1974, 176, fig. 75.523). Length 67 mm.
V/104/68; floor, Room 3, Building 1.

232 Hook. Length 48 mm.
V/135b/182; destruction, Building 1.

233 Hook, made from square-section bar. Length 87 mm.
V/599/735; 'midden' area.

Spikes, Staples, Cleats and Dogs

234 Loop-headed spike. Square-section shaft, point missing, circular loop. Length 43 mm.

V/718/901; soil spread east of Building 11.

235 Loop-headed spike or hook with eye. Round-section shaft, bent at one end and broken at the base of the loop. Length 85 mm.

M/136/421; secondary silt, Ditch 2.

236 'T' staple. Tapered stem, point missing. The crossbar also tapers towards its ends. Length 60 mm.

V/624/736; soil spread east of trackway.

237 'T' staple. Square-sectioned stem, flaring out to the arms. One arm tapers towards its point, the other has a flattened straight edge. Length 113 mm.

V/82a/66; floor makeup, Room 10, Building 1.

238 Joiner's dog. Length 119 mm.
V/689/881; fill, Ditch 882.

239 Joiner's dog. Length 66 mm.
V/733/910; destruction, Building 12.

240 Joiner's dog. Length 55 mm.
V/996/813; soil spread east of trackway.

241 Joiner's dog or staple. The arms on this example have been

clenched towards the centre, indicating the thickness of the materials fastened by it. Width 51 mm, length of arms 65 mm.

V/225/332; floor makeup, Room 12, Building 1.

242 Cleat. Oval-shaped plate with two tangs, one damaged, one missing. Length 40 mm.

V/741/926; fill, Gully 929.

243 Double spiked loop. Bar with tapering spiked arms, folded over at the head to form a loop. Length 53 mm. Similar examples were recorded from Gadebridge (Neal 1974, 177–8, fig. 75.529–41).

V/592/735; 'midden' area.

244 Double spiked loop, fragment. Length 55 mm.

V/618/736; 'midden' area.

245 Double spiked loop. Length 123 mm. Early to mid second century.

V/749/964; destruction, 'sauna' 934.

Weapons (Figs 168, 169)

Two types of weapon were recovered from the villa: spearheads and catapult bolt-heads, a total of five objects. The presence of the former is not surprising; spears were used for hunting as well as for military purposes, though only on one Milton Keynes site, Stantonbury, had any been found previously (RMK, nos 265 and 266). Of more particular interest is the presence of two bolt-heads (249 and 250), which could be taken to suggest a military presence on the site, though the objects come from contexts of widely different dates.

Of the eighteen spear- or bolt-heads found during the excavation of the mausoleum site, seven spearheads (251, 254, 255, 257, 260, 262, 265) and three sockets (266–268) were recovered during the metal detector survey of the site (p.13), immediately above the location of the circular shrine (15). During the excavation of the shrine a further two spear points (263, 264) and a collar ferrule (283), probably from a spearhead, were found in the central pit within that building. The remaining six spearheads or bolts (252, 253, 256, 258, 259, 261) were found in the upper fills of late Roman ditches adjacent to the shrine.

The discovery of eighteen spear or bolt-heads associated with a late Roman shrine is of particular interest. The significance of this discovery is further emphasised by the fact that the villa site produced only five such finds.

Of the eighteen spear or bolt-heads, only 251, 252, 253 and 255 are likely to have been functional spearheads. Many of the others have been described as bolt-heads because of their size, and in particular the small diameter of their sockets. It is equally possible that many of them may have been miniature spearheads, for ritual use. Since bolt-heads themselves are smaller versions of spearheads, the distinction is somewhat blurred. 257 and 258 are perhaps the best examples of forms which are difficult to parallel as bolt-heads, and are much too small to be spearheads, although they are identical to their larger counterparts in every other way.

The deposition of miniature weapons at shrines has been frequently noted, and documented by Green (1975, 1976, 1981) amongst others. More specifically, iron spearheads of similar types have been recorded at shrines at Lamyatt Beacon, Som. (Leech 1986, 303), Brigstock, Northants. (Greenfield 1963, 248–9) and Woodeaton, Oxon. (Goodchild and Kirk 1949). More recently, a group of thirty-three, of third-century date, has been published from a well at Baldock (Manning and Scott 1986, 147–149), and are thought to represent a ritual deposit.

The classification system used below for spearheads is based on Manning's recent re-examination of the Hod Hill spears in the Durden collection (BMC, 161–68).

246 Spearhead, Type Ia. Leaf-shaped blade with rounded shoulders, tip and socket missing. Length 68 mm overall.

V/541/735; 'midden' area.

247 Spearhead, Type Ia. Asymmetric leaf-shaped blade, flat cross-section. Length 56 mm overall.

V/598/735; 'midden' area.

248 Spearhead, Type IV. Blade has slightly rounded, upturned shoulders, and a central ridge runs the length of the blade on both sides, giving a diamond-shaped section. Length 182 mm.

V/323/544; fill, Ditch 511.

249 Catapult bolt-head. Rectangular-sectioned tapered head, socketed for shaft (BMC, 172, pl. 82.V159). Length 99 mm.

V/216/347; trackway east of Building 1.

250 Catapult bolt-head. Narrow pyramidal head, conical socket. Length 76 mm.

V/2002a/573; fill, Ditch 511.

251 Spearhead, Type Ia. Straight tapering blade, tip damaged, with slightly curving shoulders, and closed socket with a nail hole near its mouth. Length 90 mm, est. blade length 65 mm, Blade width 16 mm, socket dia. 12 mm.

M/124/1; topsoil.

252 Spearhead, Type Ib. A triangular blade with blunt edges and flanged socket. Estimated length 95 mm, blade length 60 mm, blade width 23 mm, socket dia. 15 mm

M/34/39; upper fill, Ditch 60.

253 Spearhead, Type IIa. A flat leaf-shaped blade with curved shoulders, flat on one face, with a mid-rib on the other. The socket is badly damaged, but was apparently closed (as in BMC, 165, pl. 78.V84). Blade length 85 mm, overall length 116 mm, blade width 22 mm, socket dia. 15 mm.

M/32/39; upper fill, Ditch 60.

254 Spearhead, Type IIb. Leaf-shaped blade, slightly rounded shoulders, tapering to a long pointed tip. Flanged socket, damaged. Length overall 120 mm, blade length 86 mm, blade width 25 mm.

M/236/1; topsoil.

255 Spearhead, Type IIa/3. Narrow blade with slightly sloping shoulders, diamond section. Closed conical socket. Overall length 165 mm, projected blade length 110 mm, blade width 27 mm, socket dia. 15+ mm

M/238/1; topsoil.

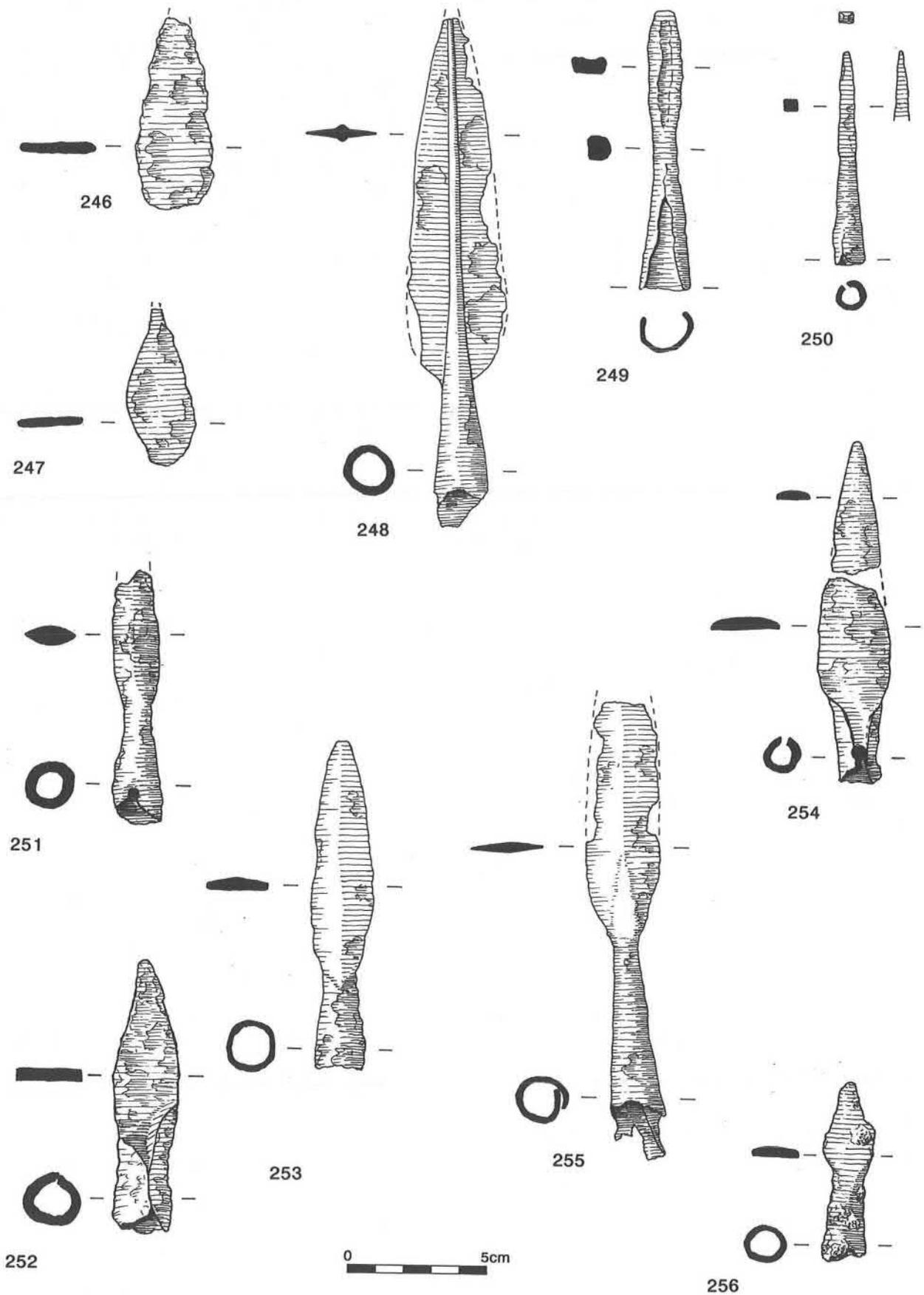


Figure 168: Iron spearheads and bolt-heads 246-256, scale 1:2.

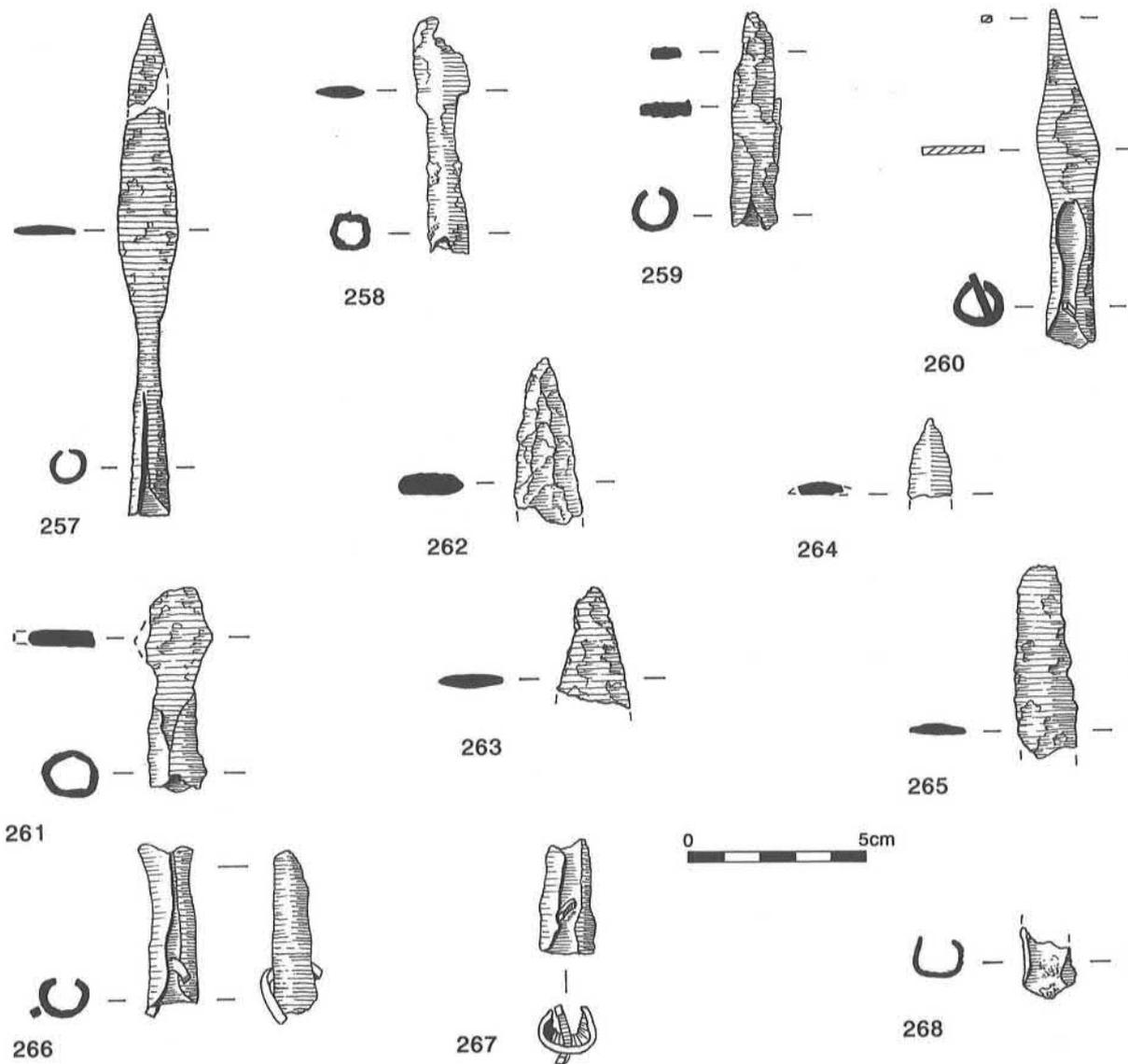


Figure 169: Iron spearheads, bolt-heads and sockets 257-268, scale 1:2.

256 Bolt head, Type IIa. Small diamond-shaped flat blade with closed socket. Length 65 mm, blade length 37 mm, blade width 17 mm, socket dia. 10 mm.

M/118/45; intermediate fill, Ditch 60.

257 Bolt head, Type IIa, or model spearhead. Narrow leaf-shaped blade, flat in section. Socket nearly closed; too small for a functional spearhead. Length 140 mm, blade length 85 mm, max. width 17 mm, socket dia. 9 mm.

M/237/1; topsoil.

258 Bolt head or model spear. Long narrow closed socket, identical to 257. Slightly square upturned shoulders. Most of the blade is missing. Length 67 mm, socket dia. 8 mm.

M/119/5; upper fill, Ditch 5.

259 Bolt head, Type IIa. Closed socket, blade too heavily corroded for positive identification. Length 60 mm, blade length 38 mm, blade width 14 mm, socket dia. 9 mm.

M/202/815; secondary silt, Ditch 94/95.

260 Bolt head, Type IIb. Leaf-shaped blade with rounded shoulders, pronounced long narrow point, flat in section, with blunt

edges. Flanged socket, pierced by nail close to its mouth. Similar to BMC V, 259–261. Overall length 97 mm, blade length 57 mm, blade width 17 mm, socket dia. 12 mm.

M/249/1; topsoil.

261 Bolt head, Type IIb. Diamond-shaped blade, with flanged socket. Length 58 mm, socket dia. 11 mm.

M/135/427; upper fill, Ditch 2.

262 Spear blade fragment, oval in section. Heavily corroded. Length 47 mm, width 18 mm.

M/239/1; topsoil.

263 Spear blade fragment, triangular in shape, with lozenge-shaped cross-section. Length 33 mm.

M/23/49; second layer, Shrine 15.

264 Tip of arrow or spear head. Length 22 mm.

M/26/56; basal layer, Shrine 15.

265 Spear blade, fragment. Length 55 mm.

M/252/1; topsoil.

- 266 Open flanged socket, with nail for fastening shaft still present. Possibly from spearhead or bolt. Length 45 mm, socket dia. 10 mm.
M/240a/1; topsoil.
- 267 Open flanged socket, details as for 266. Length 32 mm, socket dia. 13 mm.
M/240b/1; topsoil.
- 268 Fragment of socket, probably from spearhead or bolt. Length 20 mm, socket dia. 12 mm.
M/256/1; topsoil.

Personal Items (Fig. 170)

Jewellery

To this group should be added an iron bracelet from previous excavations at the villa (RMK, no. 292).

- 269 Child's bracelet? Spirally twisted ring, circular in section, with overlapping ends. Ext. dia. 47 mm.
V/793/1004; destruction, Building 10.
- 270 Finger ring. 'D' section loop, roughly rectangular bezel, heavily corroded. Int. dia. 15 mm.
V/348/551; soil spread, farmyard area.

Buckles

- 271 Buckle? Thin rectangular section rod, probably the hinge bar, with narrow arms projecting from each end. Length 43 mm.
V/374/601; trackway east of Building 9.
- 272 Buckle. Circular loop, flattened on one side, rectangular in section. Dia. 33 mm.
V/558/735; 'midden' area.
- 273 Buckle. Trapezoidal-shaped loop, circular in section. Pin made from flattened rectangular section strip. Length 61 mm.
V/559/735; 'midden' area.

Styli

The classification system used for the *styli* is that proposed by Manning (BMC, 85–87). A Type 1 stylus from the villa has already been published (RMK, no. 290).

- 274 Stylus, Manning Type 1. The eraser is flat, with slightly rounded shoulders. Length 94 mm. Manning dates this type of stylus to the mid first century, though this example comes from a fourth-century context.
V/992/805; junction, Ditches 746 and 766.
- 275 Stylus, Manning Type 1a. A thin stem, tapering to a point at one end, flaring to a large flat eraser at the other. Length 117 mm.
V/995/555; fill, Ditch 511.
- 276 Stylus, Manning Type 2. The stem flares slightly before the drop to the pointed tip. The eraser is flat, and flares slightly to the top. Length 95 mm.
V/713/895; soil spread east of Building 11.
- 277 Stylus, Manning Type 3. Circular section tapered stem, with a concentric moulding in the centre. The eraser flares out with concave sides, rectangular in section, tapering to a chisel edge. Length 138 mm.

Miscellaneous (Figs 170–172)

This group comprises all the remaining identifiable objects from Bancroft that do not readily fall into any of the previous categories. Predominant among these are ferrules, which could be associated with craft or agricultural tools, knives or weapons, and rings, which may be connected with transport, locks and keys, and domestic and structural equipment. Finally, as in RMK, there is a category of objects from stratified contexts that cannot be readily identified, but which probably form part of an artefact, if not being artefacts in their own right.

Ferrules

- 278 Ferrule, tapered. Heavily corroded. Length 92 mm.
V/376/618; fill, Pit 696.
- 279 Ferrule or socketed point. Long open socket with sub-rectangular sectioned spike. Length 184 mm.
V/645/769; fill, Ditch 766.
- 280 Ferrule or socketed point. Long socket with blunt, circular section tip. Length 168 mm.
V/2001/931; soil spread south of Building 12.
- 281 Collar ferrule. Height 35 mm, diameter 30 mm. Found in association with pitchfork 185.
V/242b/1; topsoil.
- 282 Collar ferrule. Height 9 mm, internal diameter 16 mm, th. 4 mm.
V/226/355; fill, Ditch 443.
- 283 Collar ferrule, closed end, ext. dia. 22 mm, int dia. 16 mm. Such items are usually interpreted (Manning 1985, 141) as either bindings from spears or for handles of craft tools. Given the large number of spearheads recovered from the shrine, this example is likely to be one of the former.
M/7/21; upper layer, Shrine 15.

Rings

- 284 Ring, 4.5 mm dia. rod. Ext. dia. 45 mm.
V/299/496; 'midden' area.
- 285 Ring, rectangular section rod, possibly a loop from a bridle bit. Ext. dia. 43 mm, int. dia. 27 mm.
V/717/901; soil spread east of Building 11.
- 286 Ring, square section rod, open tapered ends. Ext. dia. 30 mm approx.
V/908/1117; clay floor, Building 10.
- 287 Ring or chain link. Open at one end, int. dia. 14 mm approx.
V/420b/637; fill, Pit 637.

Other Objects

- 288 Bracket, 'L' shaped, made from flat rectangular section bar, with thickened lozenge-shaped collar. There is ample evidence of woodgrain on the object. Length 97 mm.
V/114/121; ash layer in stokepit, Room 7, Building 1.
- 289 Fitting or strap, consisting of two strips rivetted together, one rivet missing. Function unknown. Length 130 mm.
V/115/56; mortar bedding for mosaic, Room 10, Building 1.

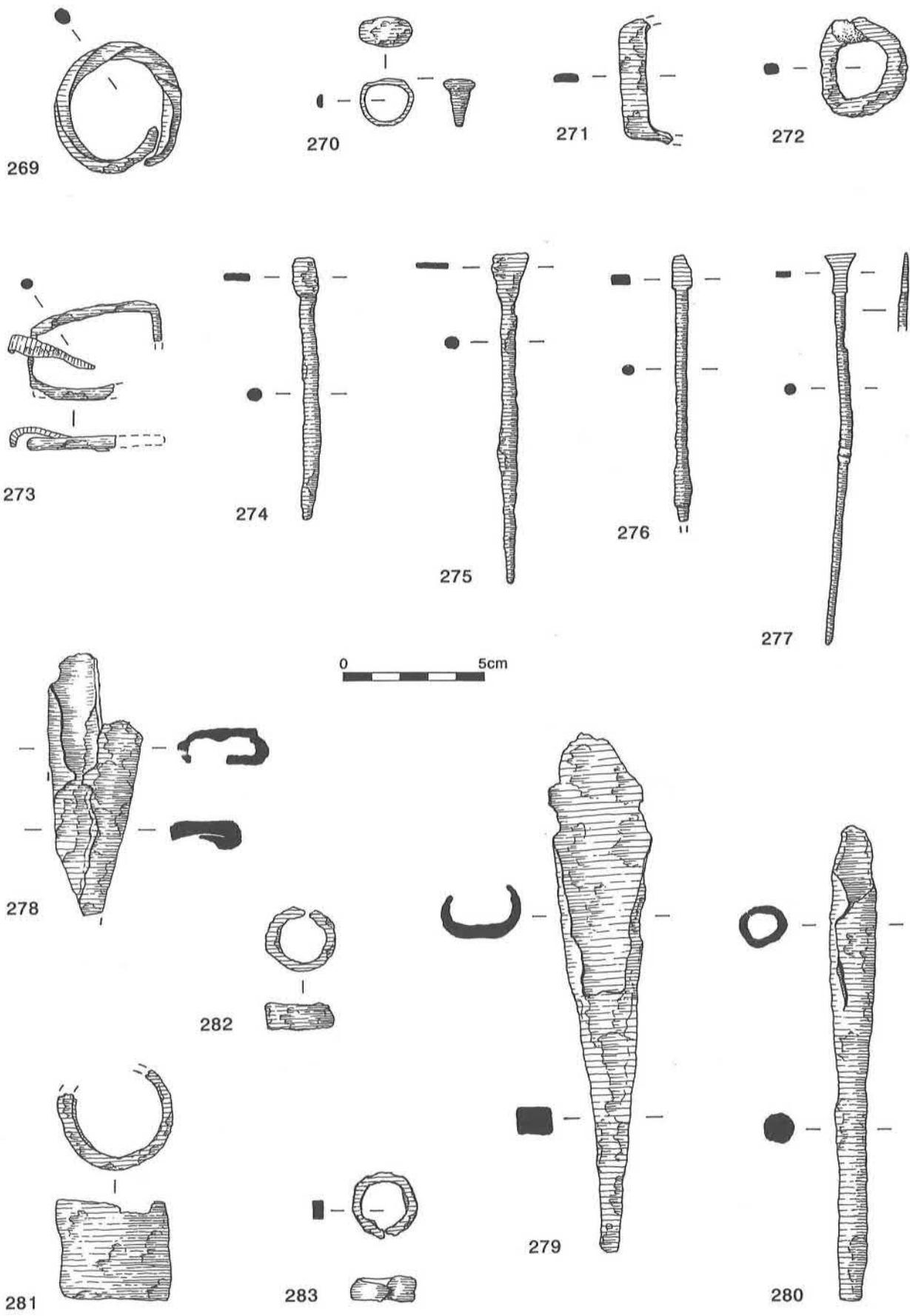


Figure 170: Iron bracelet? 269; Finger ring 270; Buckles 271-273; Styli 274-277; Ferrules 278-283, scale 1:2.

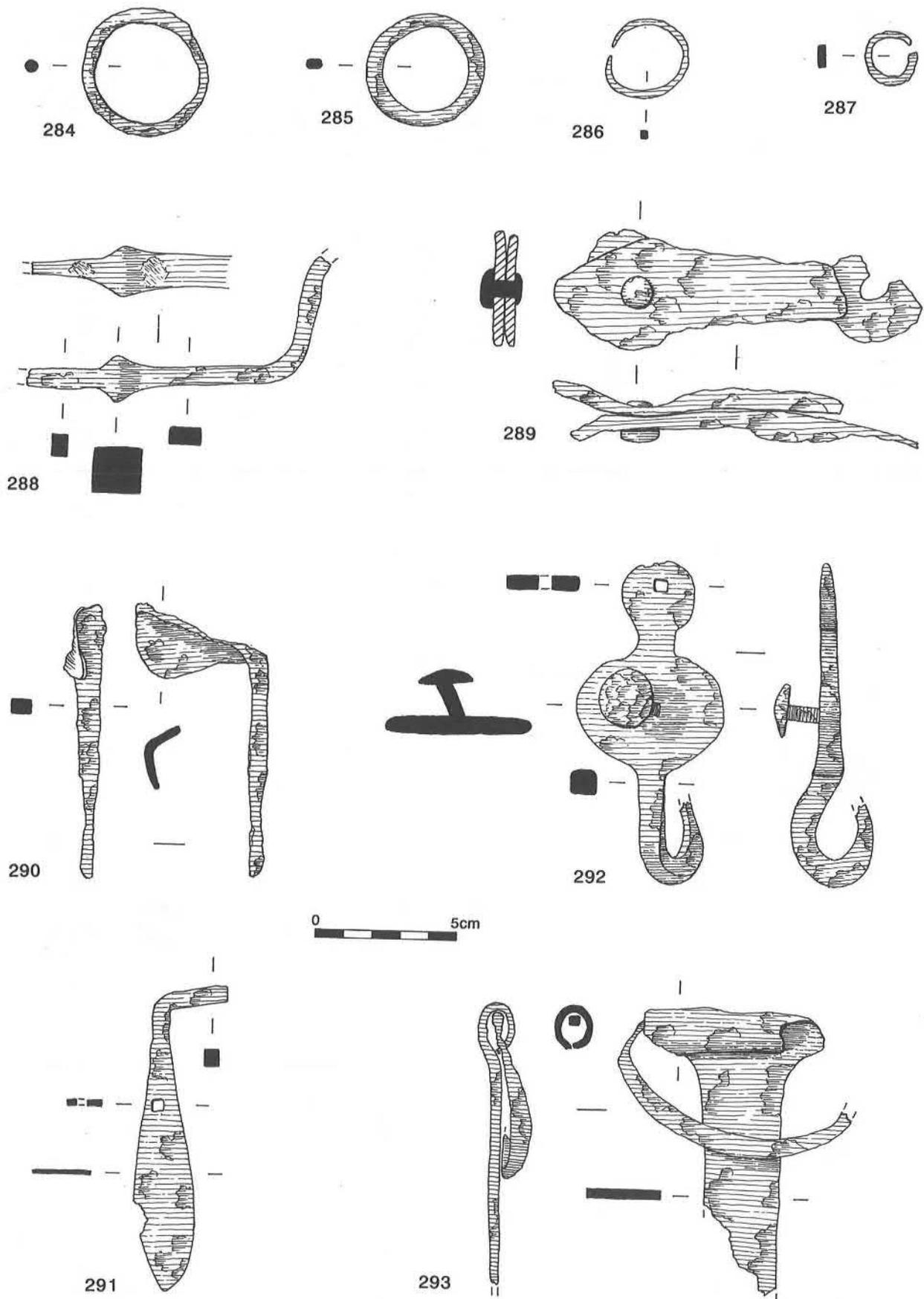


Figure 171: Iron rings 284-287; Other unidentified iron objects 288-293, scale 1:2.

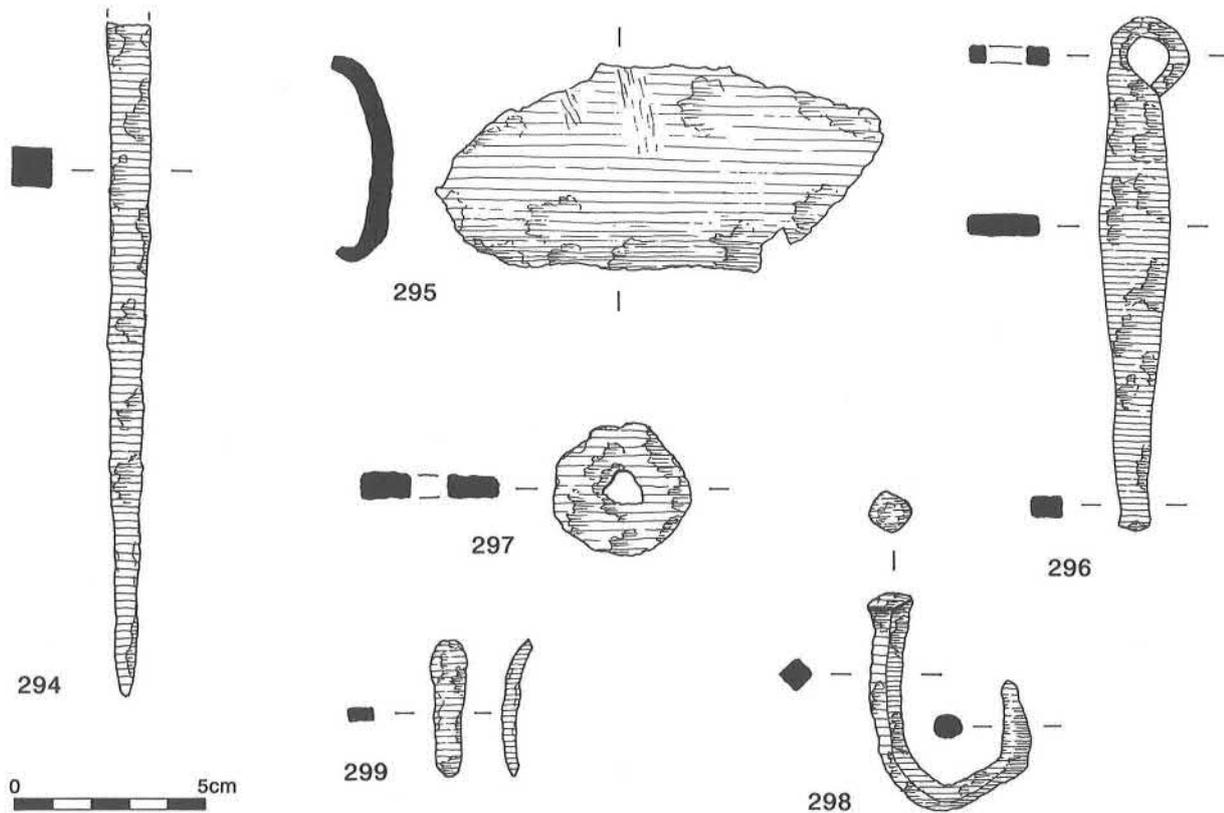


Figure 172: Miscellaneous iron objects 294-299, scale 1:2.

- 290 Fitting. Long tapering stem, right angle at base of stem leading to flattened area, curved up at one side to form a wing. Length 80 mm.
V/245/1; topsoil.
- 291 Fitting. Leaf shaped terminal, pierced by rivet, attached to square section rod, bent in an 'L' shape. Part of a hinge? Length 109 mm.
V/294/496; soil spread north of Building 8.
- 292 Fitting. Hook, possibly originally a closed loop, of square section rod, attached to a flat figure-of-eight-shaped plate. Both lobes have been pierced and a large round-headed rivet or nail survives in the lower lobe. Function unknown. Length 114 mm.
V/685/801; upper fill, Enclosure 795.
- 293 Fitting. 'T' shaped plate, with the cross-piece rolled over to form a loop through which passes a sub-circular ring of square-section rod. Length 104 mm.
V/728/910; destruction, Building 12.
- 294 Spike, tapering square section rod. Function unknown. Length 178 mm.
V/686/854; farmyard, north of Building 9.
- 295 Sheet, rolled. Evidence of woodgrain present on inner surface. Length 117 mm.
V/431/688; fill, Ditch 529.
- 296 Ring-headed pin? Rectangular section stem, expanding to a leaf shape below a loop at the head. Length 134 mm.
V/729/910; destruction, Building 12.
- 297 Washer, ext. dia. 34 mm, int. dia. 10 mm.
V/731/910; destruction, Building 12.

- 298 Swivel hook? Square section shaft, bent into hook, with flattened square head. A similar object from the villa has already been published (RMK, no. 323). Length 59 mm.
V/421/657; farmyard, north-east of Building 4.
- 299 Fragment, rectangular section, slightly tapered. Wide end slightly curved, and flattened to a narrow edge. Function unknown. Length 36 mm.
M/148/465; Cremation 4.

Nails from the Villa Site

A total of 1291 nails were recovered from stratified contexts at the villa. These were sorted according to the type series suggested by Manning (BMC, 134-37) and recorded in tabular form, as part of the Level III archive. In addition, the distribution of nails on the site was plotted on an overlay to the site plan, to see if there was any correlation between quantities and types of nails, and their location on site. As on other sites excavated in Milton Keynes, no conservation was undertaken on the nail assemblage beyond mechanical cleaning to aid identification.

Types

Of the nails recovered, 572 (44.3%) were too incomplete, corroded or distorted through use to be positively identified. Of the remaining assemblage, the vast bulk (92%) consisted of nails of Type 1b, most of these measuring less than 70 mm. From studies of nails from other Romano-British sites, Manning has noted that this type and size of nail is by far the most common, a fact which reflects their general usefulness. Only five examples of the larger Type 1a were found on the site.

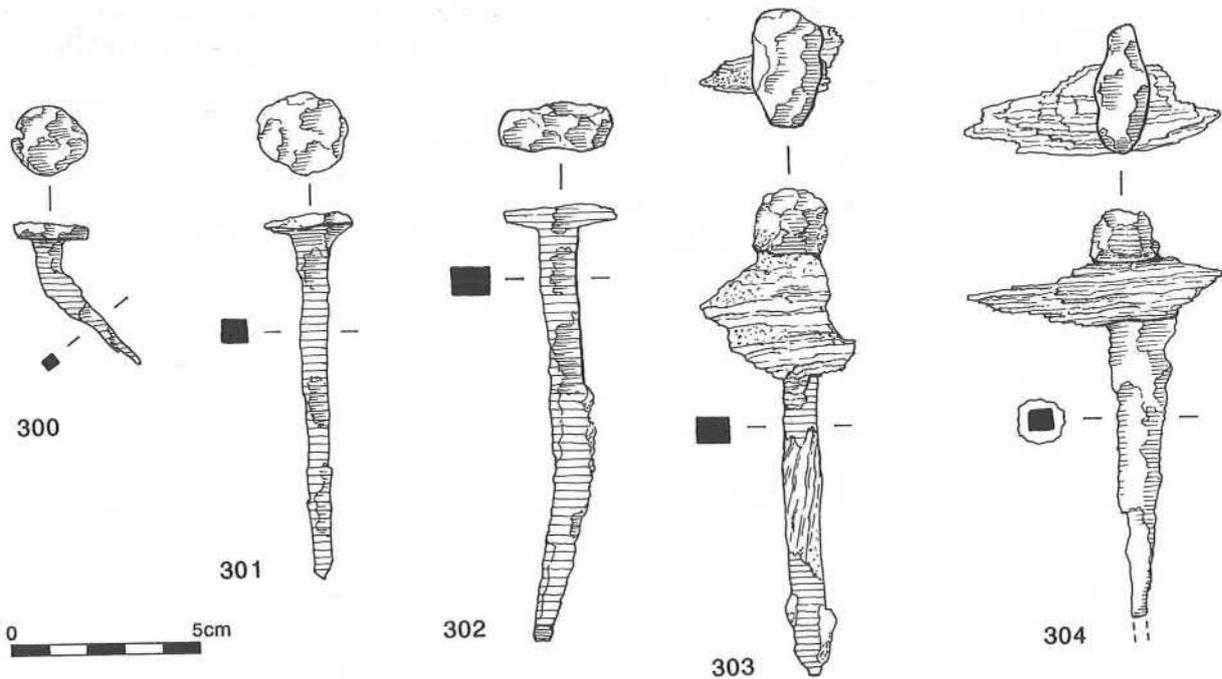


Figure 173: Iron coffin nails 300-304, scale 1:2.

Of the remainder of identifiable nails, the most common (3.4%) was the domed Type 8, a type probably used in upholstery work. Of the T-shaped Type 3, 13 (1.81%) were recovered. There were less than 10 each of Types 2, 4, 5 and 6, and no examples of Types 9 and 10. The apparent absence of this latter type, the hobnail, is surprising, though a fourth-century hobnailed shoe (409) was recovered from the waterlogged area north of Building 10.

Distribution

The largest assemblage of nails found at the villa came from contexts comprising the fourth-century midden (p.196). Given the large quantities of both domestic and building refuse found in this area, this comes as no surprise. Of the 270 nails from these contexts, nearly half (126) were unidentifiable. The bulk of the remaining assemblage (88%) consisted of nails of Type 1b. Nearly half (10) of the Type 8 nails found at Bancroft came from this area; could this indicate disposal of an unwanted item of furniture?

Other areas found to contain large quantities of nails were; Building 1 (120 from destruction contexts, 68 from structural contexts); Enclosure 1208 (120); the trackway (81); the pond (77); Building 10 (59); and the farmyard area (53). In each case, Type 1b nails predominated, and the relative quantities of nail types present varied by only a few percent. Interestingly, very few nails were recovered from the agricultural buildings, with the exception of Building 10.

Iron Coffin Nails from the Mausoleum Site (Fig. 173)

R.J. Williams

Of the nine excavated inhumations (p.115ff), only three graves in the line of eight burials contained iron nails, whilst

the more isolated Grave 9 contained at least twenty-two, many of which were still *in situ*.

Grave 1

This contained three small nails (not illustrated) with square shanks, all of which were headless, either by manufacture or by the effects of corrosion. All three were lying horizontally in the centre of the north side of the grave (Fig. 57), corresponding to the edge of a darker stain which was interpreted as the remains of a wooden coffin.

Grave 4

This contained eight nails of identical type, concentrated at the head end. The nails are all 50 mm long with square shanks and pronounced rounded heads, up to 22 mm dia. (300). Slight evidence of wood grain indicated a plank thickness of 28 mm.

Grave 7

This contained three large nails, sited in three of the corners. The only complete example (301) is 96 mm long with a rounded head 25 mm across. The slight evidence of wood grain in the corrosion products indicated a plank thickness of 32 mm.

Grave 9

Twenty-two large coffin nails, averaging 125 mm long with 'T' shaped heads were discovered during the excavation of this burial. Thirteen of these remained *in situ*. Three nails (302, 303, 304), used for fastening the lid, sides and base respectively, have been illustrated. A detailed examination of the location of the nails within the grave and the surviving wood-grain impressions on them has enabled a detailed reconstruction of the coffin to be attempted (p.112, Fig. 54).

The remaining four graves in the line of eight contained no coffin nails or other fittings. The survival rate of iron in Graves 1, 2 and 7, together with the quality of excavation,

makes it unlikely that any nails had either entirely corroded away or were missed during excavation. However, the disposition of the bones in the graves, together with the evidence of stone packing, suggests that most of the burials had been in wooden coffins.

The use of various construction methods including jointing, pegging and binding of planks has been frequently alluded to in the study of large late Roman cemetery groups. The uneven use and varied distribution of the nails within the graves probably indicates that nails were used as an additional strengthening or fixing where the above techniques were unsuccessful. The discovery of nails at only the sides or head end is not uncommon, and was a feature of many of the graves at Cirencester (McWhirr *et al.* 1982, 88). It has also been generally recognised, and stratigraphically demonstrated at the Lankhills cemetery (Clarke 1979, 341), that the number of nails used in coffin construction declined during the second half of the fourth century.

LEAD OBJECTS

Sonia Bird

Weights (Fig. 174)

This was the most common category of lead artefact found at Bancroft, the villa producing all but two of the seven objects described below. Unfortunately, like most lead weights from other Milton Keynes sites (RMK, nos 146–7), the majority were unstratified metal detector finds, so little can be said with regard to their dating. The first two objects (305, 306)

could be identified as weights or spindle whorls; both fall into the optimum weight range for the latter (RMK, no. 143).

305 Weight or spindle whorl. Doughnut-shaped. Weight 25 g, int. dia. 22 mm, height 11 mm.

V/1104/+; unstratified.

306 Weight or spindle whorl. Thick perforated disc. Weight 25 g, int. dia. 7 mm, ext. dia. 22 mm, height 7–8 mm.

V/1198/+; unstratified.

307 Weight, for scale balance? Truncated cone with partly flanged base, in which is a small square hole. Weight 18 g, height 16 mm, base dia. 18 mm, top dia. 7 mm.

V/321/551; soil spread in farmyard.

308 Steelyard weight with inset copper alloy suspension loop. Weight 50 g, (approx. 2 Celtic *unciae*). Dia. 25 mm.

M/195/600; unstratified.

309 Steelyard weight, globular, with iron rod through centre. Weight 50 g, (approx. 2 Celtic *unciae*). Dia. 23 mm.

V/362/551; soil spread in farmyard.

310 Steelyard weight. Roughly biconical, with iron suspension rod through centre. Weight 44 g, dia. 21 mm, height 31 mm.

V/986/1; topsoil.

Other Objects (Figs 174, 175)

311 Die, 12–13 mm cube, with face values punched as dots on each side. Badly corroded; only the impressed dots on the '6' face can be seen. A similar die, of fourth-century date, was recovered from earlier excavations at the villa (RMK, no. 203).

V/363/551; soil spread in farmyard.

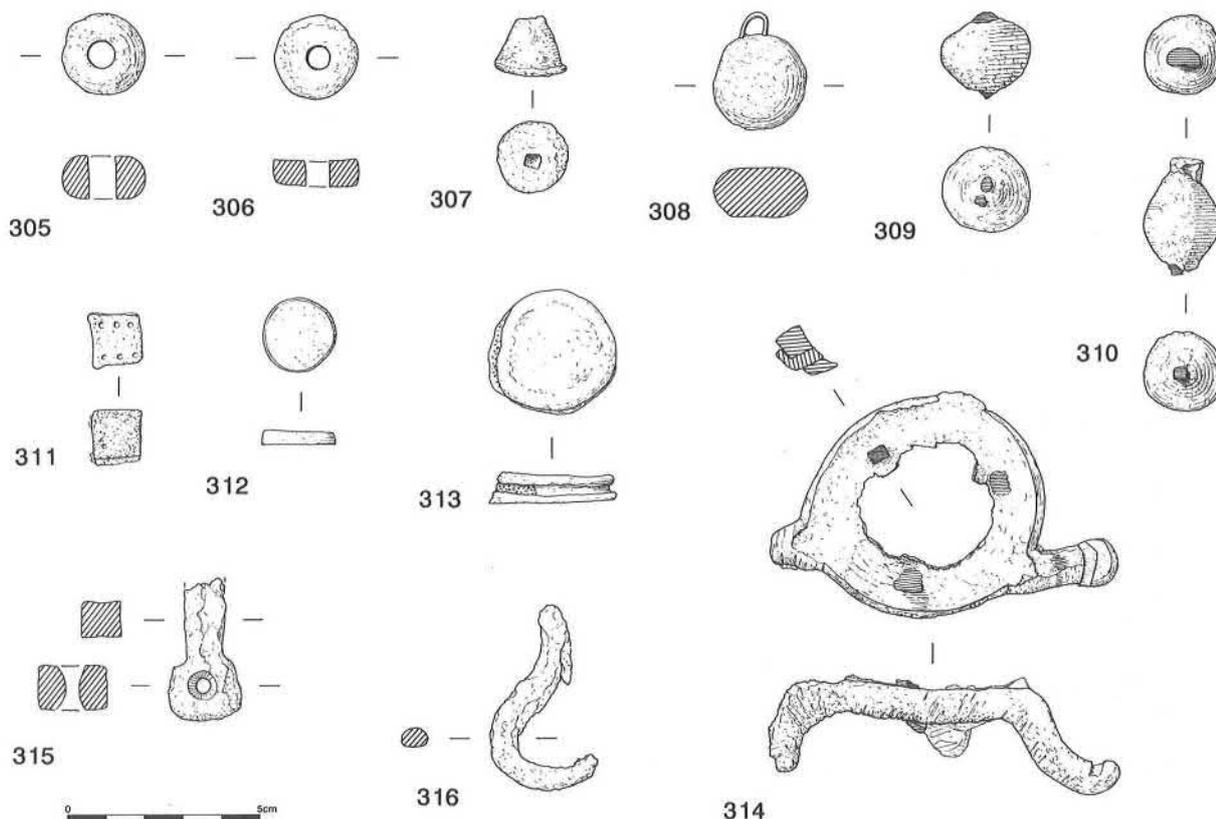


Figure 174: Lead weights 305–310; Die 311; Counter 312; Repair plug 313; Miscellaneous objects 314–316, scale 1:2.

312 Gaming counter. Flat disc, dia. 19 mm, th. 3.5 mm.

V/706/901; soil spread east of Building 11.

313 Repair plug for pot base. Rough waisted disc, with remains of light red-brown shell-tempered pot (Marney 1989, Fabric 1), th. 2.5 mm, adhering to about one-third of the waist. One side very flat, the other more irregular. Dia. 32 mm, height 5–9 mm.

V/440/716; fill, Ditch 732.

314 Small roughly-made tripod, two legs broken. Legs alternate with three iron rivets, for fastening to the base of the object which it supported. There are random knife cuts along the outer face between two legs, probably made during its removal from the latter. Height 28 mm, dia. of ring (ext.) c.60 mm, (int.) c.33 mm.

V/524/1; topsoil.

315 Banjo-shaped fragment. Well-made circular hole, dia. 4 mm, through head. Neck broken. Length 36 mm, neck width 10 mm, head width 17.5 mm, th. 9–11 mm.

V/838/1064; cobbled floor, Building 10.



317

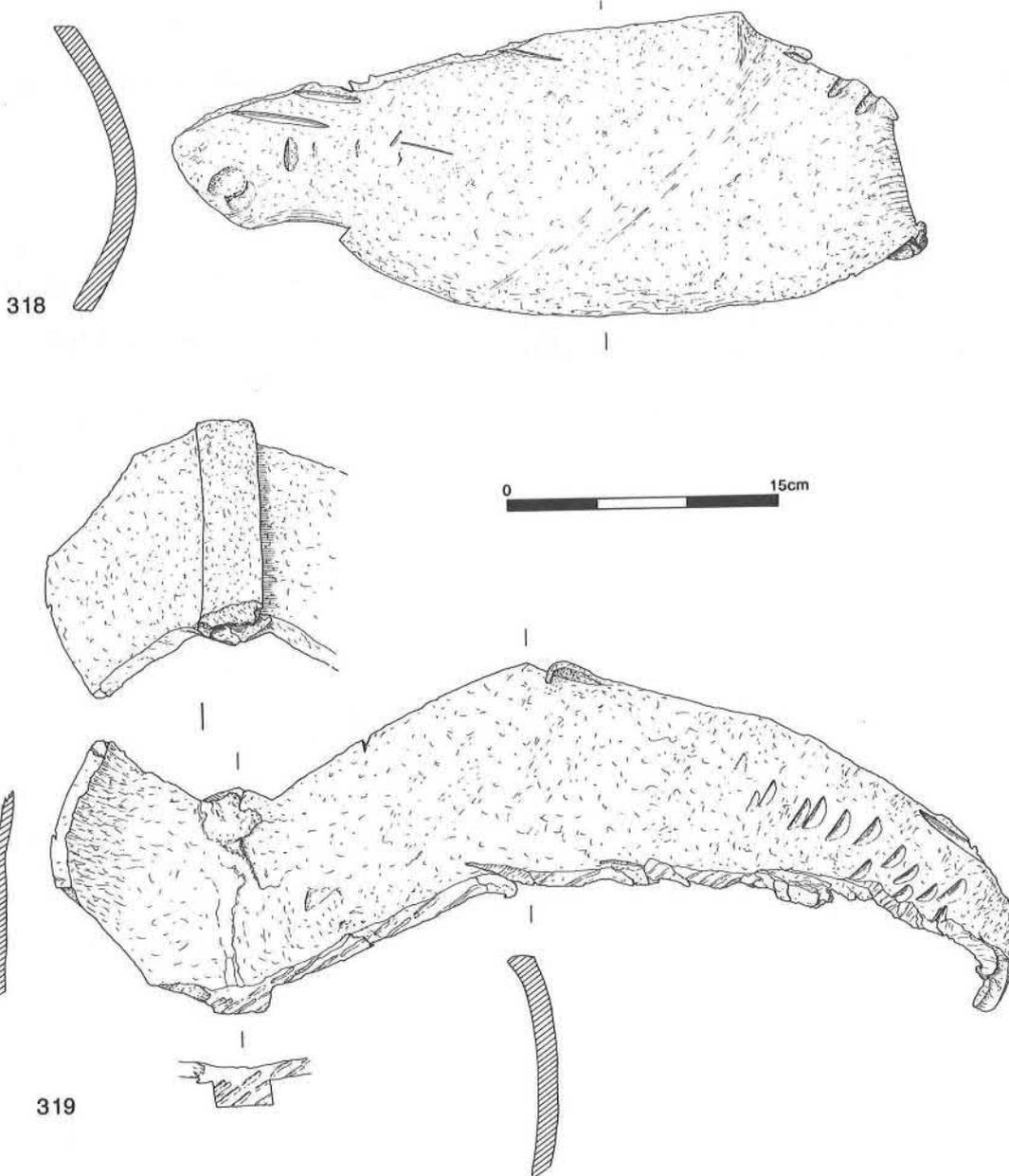
Figure 175: Lead Papal bulla 317, scale 1:1.

316 Roughly made hook with flat back and rounded front. Length 49 mm.

V/213/336; soil spread north of Building 7.

317 Papal bulla of Pope Eugenius III, 1431–47, with the heads of Ss Paul and Peter in relief on one side. Some lead seals of this type were attached by means of a cord to documents issued by the Papacy. Although Bradwell Priory is less than one kilometre south of the villa, and the monks almost certainly used the ruined buildings as a source of building materials, it is difficult to explain how such an object came to be found in topsoil overlying the villa.

V/2012/1; metal detector find.



318

319

Figure 176: Lead sheet fragments 318-319, scale 1:4.

Structural (Fig. 176)

As with other similar Roman sites, Bancroft produced large quantities of scrap lead, mainly sheet fragments, the bulk of which was recovered from the villa. Most of this was probably originally used for structural purposes, as flashing or waterproof lining.

Of particular note were two very large sheet fragments, each weighing over six kilograms, which are described below (318 and 319). Both had evidently been cut up with a sharp-edged tool, such as an axe or bolster chisel.

A recent study of circular lead tanks (Guy 1981) recorded only twelve complete examples of this type of object. Guy concluded that such tanks, decorated with a Chi-rho monogram, may have had a Christian religious function, while those without such decoration probably served other function. More recently, in the discussion of a tank from Oxborough, Norfolk, Guy (1989, 237) suggests that many of the tanks may have been simply decorated water containers. The fourth-century date for the ditch (1104) from which the Bancroft fragments were recovered is in keeping with the dating of other such tanks. In the absence of any other evidence of Christianity at the villa, 318 and 319 have been identified as part of a large water tank, possibly part of the water supply and distribution system of the villa during the fourth century (p.209).

318 Large sheet fragment. Weight 6.38 kg, max. length 430 mm, max. width 185 mm, th. 12 mm.
V/916/1095; fill, Ditch 1104.

319 Large sheet fragment with rectangular section strengthening rib on one side. Weight 6.03 kg, length 595 mm, width 125 mm, th. 12 mm.
V/917/1095; fill, Ditch 1104.

WORKED BONE OBJECTS

Sonia Bird

Hairpins (Fig. 177)

Like the metal hairpins described above, these pins with their large, sometimes elaborately carved heads, were almost certainly used as decorative hairpins. Fragments from seventeen bone hairpins, eleven of which are described below, were found at the villa. A further eight examples, also from the villa, appear in RMK (nos 141–2). As in RMK, the classification used for this category of object is based on that formulated by Nina Crummy (1983, 19–25).

The most common pin type found at Bancroft, taking both present and past finds into account, is Type 3, with five examples. Although five examples of Type 5 are also recorded, two are of a distinct variant attributed to that type by the author and not present in Crummy's type series. Of the other identifiable groups, Types 4 and 6 are each represented by a single pin. In addition to these, excavations at the villa have produced a number of more elaborate pins, including

examples with axe-shaped (RMK, no. 156), flame-shaped (RMK, no. 153) and zoomorphic (330) heads. There is also one possible pin blank (331).

Although all the pins described below were recovered from securely stratified contexts, all except one were of fourth-century date, and therefore add nothing to the chronology proposed by Crummy. However, the one exception to this (325), a Type 6 pin, was found in a context dated to the early to mid second century. The date of appearance of Type 6 pins suggested by Crummy from examples found at Colchester, Chichester and Shakenoak is c.200.

320 Type 3 pin, head A, shaft broken. Length 28 mm, shaft dia. 3 mm. Two similar pins are published in RMK (nos 147, 148).
V/142/182; destruction, Building 1.

321 Type 3 pin, head C. Swollen shaft, point broken. Length 54 mm, shaft dia. 2.5–4.5 mm.
V/655/814; fill, Ditch 814.

322 Type 4 pin, stained brown. Ring-and-dot decoration roughly placed on each of the five lozenge-shaped faces of the head. Shaft slightly swollen. Length 70 mm, shaft dia. 2.0–4.5 mm.
V/292/496; soil spread north of Building 8.

323 Type 5 pin. Head conical, slightly off-centre, above a single reel. Shaft slightly swollen, square-sectioned above waist. Length 73 mm, shaft dia. 1.5–3.0 mm. A similar Type 5, but with a faceted head, is published in RMK (no. 151).
V/336/551; soil spread, farmyard.

324 Type 5? pin, stained brown. Apparently a variation on this group, with a large head, consisting of small reel surmounted by a conical head, and decorated by two narrow circumferential grooves around its base, with twisting incised lattice pattern above, diminishing in size towards the top. Very marked swollen waist, faceted shaft, point broken. Length 96 mm, shaft dia. 2.5–6.5 mm.
V/842/1110; silting in 'lake' area.

325 Type 6 pin, stained pale green just below head. Head consists of finely carved 'cotton reel', set in from the top of the shaft, surmounted by small biconical knob. Tapering, slightly bowed shaft with broken tip. Length 82 mm, shaft dia. 3.0–3.5 mm. Dated to the early to mid second century (see discussion, above).
V/746/973; destruction, 'sauna' 984.

326 Finely carved ivory-coloured pin. Swollen waist. Small flat rectangular head with three horizontal grooves and final flat area incised vertically once on one side, twice on the other. Length 60 mm, shaft dia. 2.5–4.0 mm.
V/13/6; destruction, Room 15, Building 1.

327 Bowed pin, head and shaft broken. Swollen waist, D-section shaft. Flattened head with cancellous bone on convex side; the lower larger area is shouldered and topped by rough flattened knob. Length 73.5 mm, shaft dia. 3.5–5.0 mm.
V/637/736; soil spread north of Building 8.

328 Finely carved pin. Swollen waist, tip missing. Flat circular head with central perforation, dia. 4 mm, and sixteen radial incisions. Length 55 mm, shaft dia. 3–5 mm. Possibly a variant on the sun wheel, similar to the wooden 'Taranis'

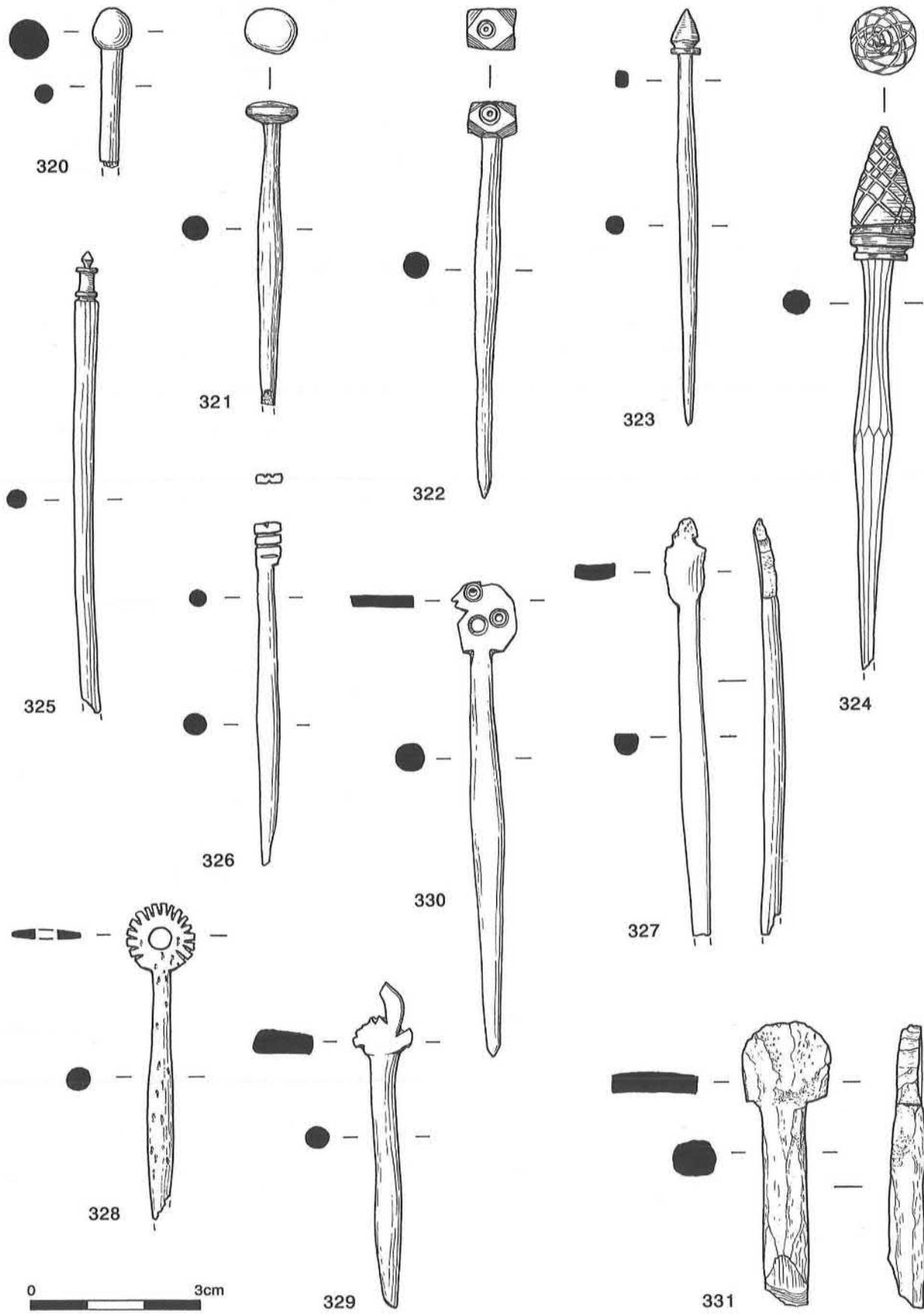


Figure 177: Bone hairpins 320-331, scale 1:1.

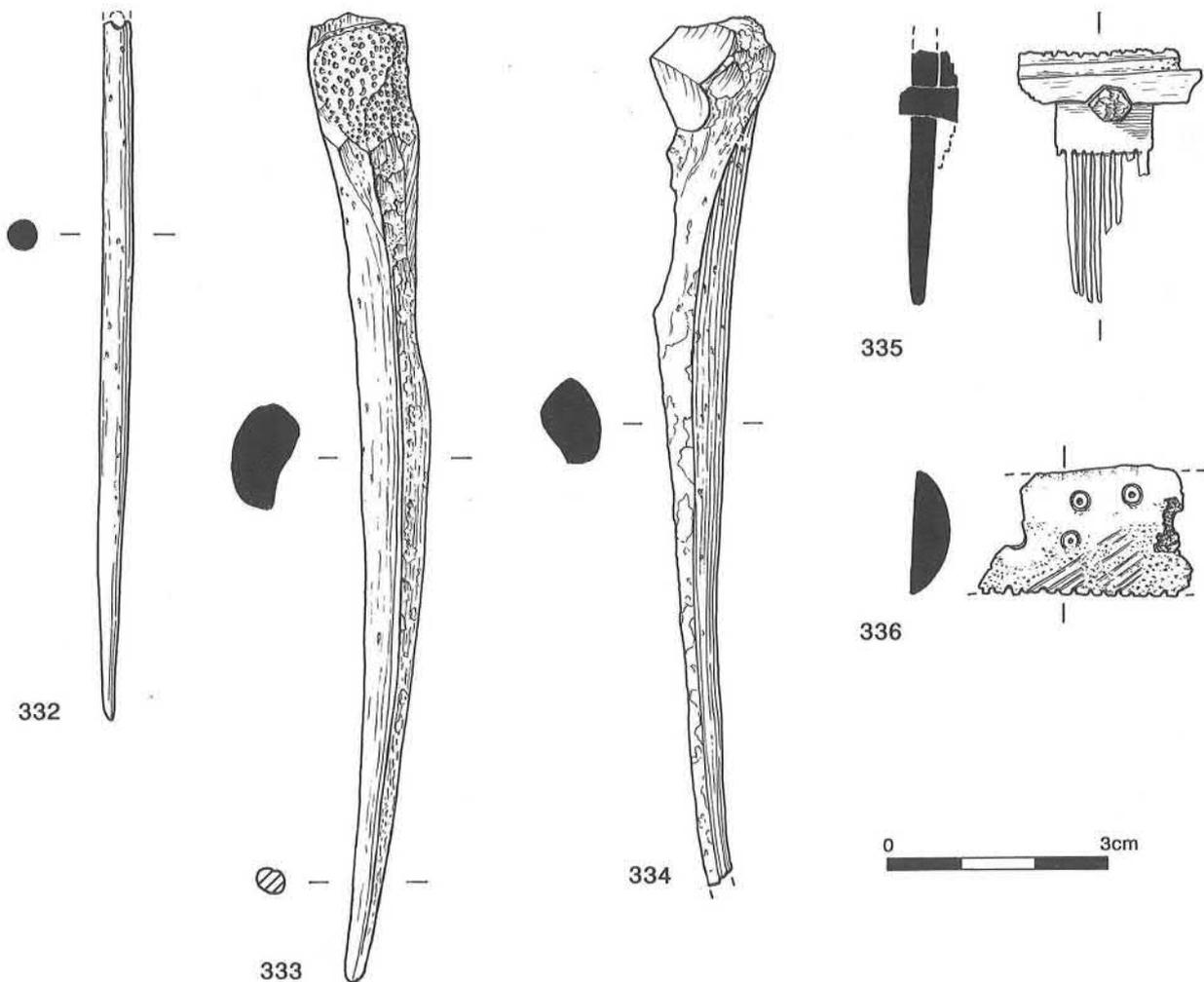


Figure 178: Bone needle 332; Awls 333-334; Combs 335-336, scale 1:1.

- wheel found at Wavendon Gate, Milton Keynes (Williams *et al.*, forthcoming).
V/110/131; fill, Pit 131.
- 329 Pin, head and shaft broken. Flat head, elaborately carved in a pierced 'flower bud' shape. Roughly carved shaft, slightly waisted. Length 57 mm, shaft dia. 3.0-4.5 mm.
V/178/290; Wall 22, Room 11, Building 1.
- 330 Zoomorphic pin. Flat head, shaped as animal profile, possibly a horse? Decoration consists of perforation, dia. 2 mm, flanked on back and front by ring-and-dot above and to one side. Shaft crudely carved, swollen. Length 84 mm, shaft dia. 2.5-5.5 mm.
V/551/735; soil spread east of trackway.
- 331 Pin blank, broken shaft. Spatulate head, possibly intended for a shape similar to 329 or 330. Swollen waist. Length 50 mm, shaft dia. 5-7 mm.
V/236/1; topsoil.
- Needles and Awls (Fig. 178)**
- 332 Needle, probably Crummy Type 1a (Crummy 1983, 65, fig. 66), head missing. Stained green. Possibly of first or second-century date. Length 95 mm, dia. 4 mm.
V/388/618; fill, Pit 696.
- 333 Awl, tip missing. Bowed. Tapering point with cancellous bone at roughly shaped upper end. Length 131 mm. Late fourth century.
V/910/1103; fill, Ditch 1104.
- 334 Awl, similar to 333, tip missing. Length 118 mm. Late fourth century.
V/911/1122; silting in 'lake' area.
- Combs (Fig. 178)**
- Fragments of two plates from composite bone combs were recovered from destruction contexts in Building 1 in earlier excavations at the villa (RMK, nos 173, 174).
- 335 Comb fragment. Part of a composite double-sided comb with one hexagonal-headed iron rivet still in place. The plate is narrow, has a stepped profile and is slightly scarred from tooth-cutting. The teeth are finely and evenly shaped. Length 24 mm, height 34 mm. Th. (plate) 2.5 mm, (centre) 3 mm. A similar example, dated to the fourth century or later, was found at Balkerne Lane, Colchester (Crummy 1983, 56, 1851).
V/61/35; destruction, Building 1.
- 336 Comb fragment in poor condition. Part of a 'D' section plate of a composite comb. Probably single-sided, as scars from tooth-cutting are visible only on one edge. Parts of the holes

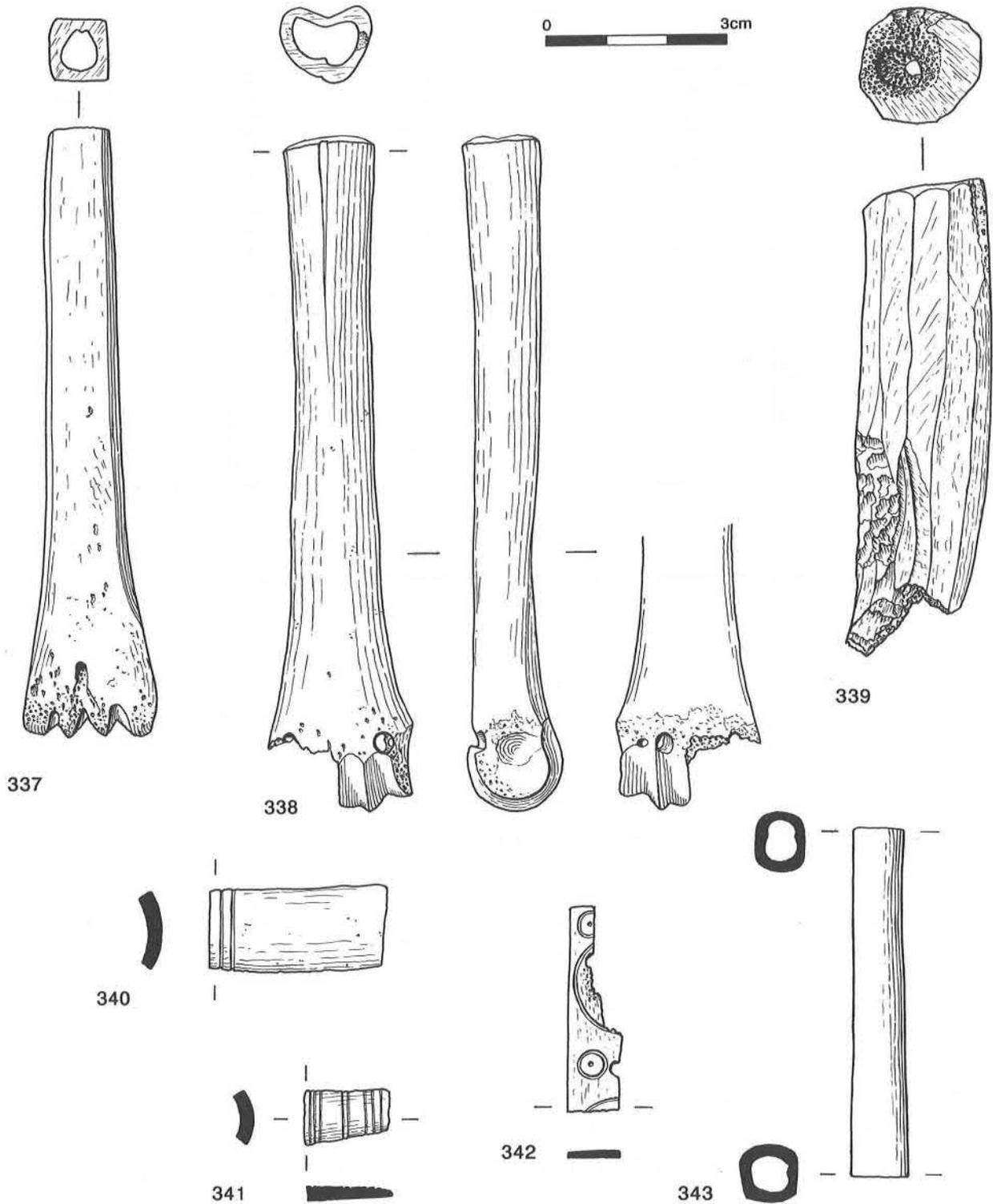


Figure 179: Bone handles 337-339; Miscellaneous objects 340-343, scale 1:1.

for iron rivets, at 23 mm centres, are visible at either end of the fragment. Decoration consists of three ring-and-dot marks, and traces of seven parallel diagonal grooves near the cut edge. Length 28.5 mm, width 15-17 mm, max. th. 5 mm. M/37/70; destruction material in *cella* of mausoleum.

Handles (Fig. 179)

337 Handle, similar to 338. A polished slightly squared sheep metapodial, stained brown. The lower end has been sawn off and hollowed to a depth of 78 mm. Length 99 mm, max th. 20 × 13 mm. Such handles were common throughout the Roman

period; both examples illustrated here were recovered from fourth-century contexts.

V/681/847; soil spread over and east of trackway.

338 Handle, similar to 337. A polished, slightly worked sheep metapodial. The upper end has been sawn off and hollowed to a depth of 31 mm. The lower end has been pierced transversely twice at a slight angle. On one side there is a further smaller hole which shortly joins the main one. Length 112 mm., max. th. 24 × 16 mm.

V/926/1178; fill, Ditch 1056.

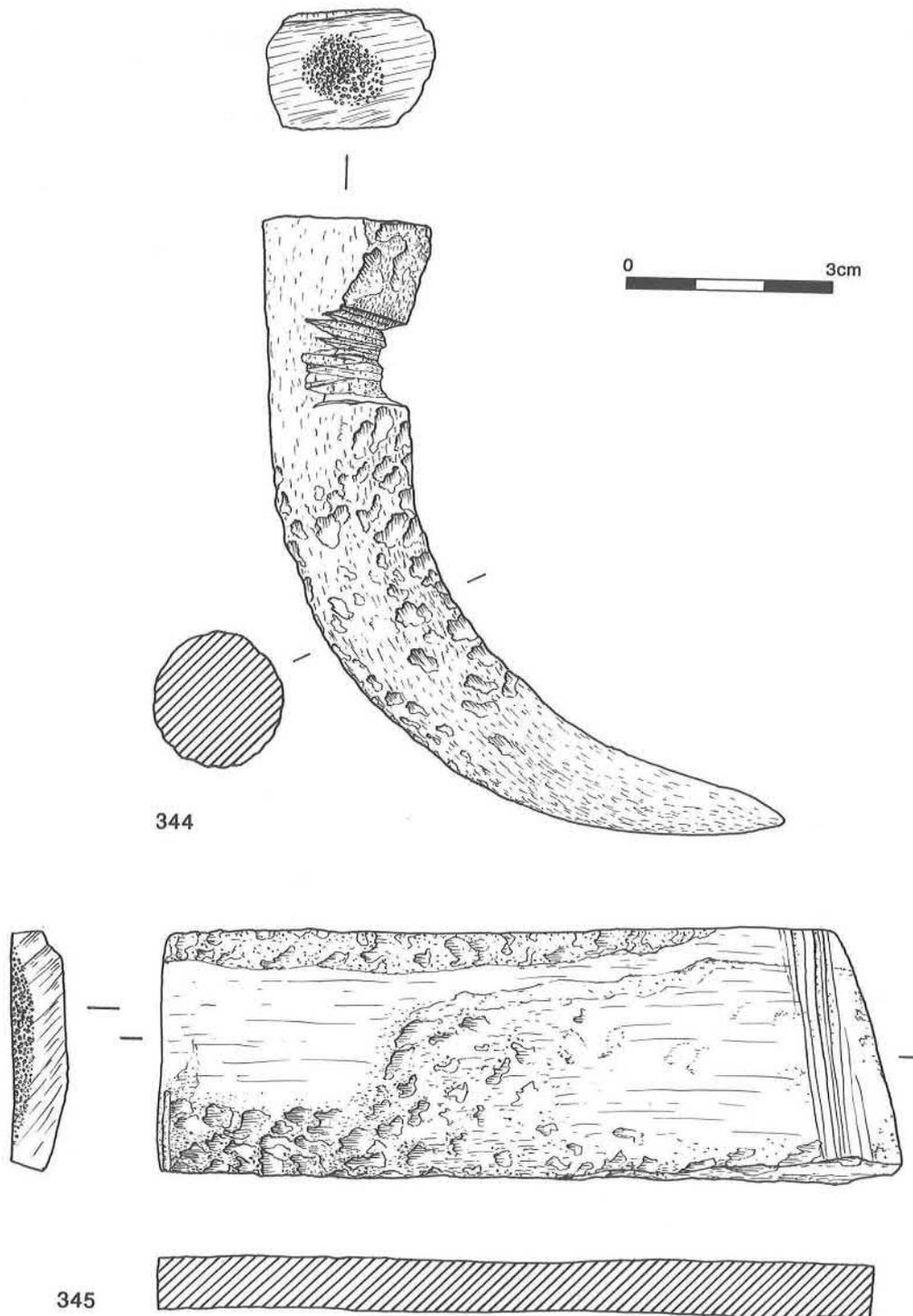


Figure 180: Antler objects 344-345, *scale 1:1*.

339 Handle fragment. Antler, one end sawn off, and roughly trimmed over most of surface. Hollowed for tang, though not centrally. Stained brown. Length 76 mm, dia. (ext) 18–20 mm, (int) 6 mm, narrowing to 3 mm.

V/906/1095; fill, Ditch 1104.

Miscellaneous (Figs 179, 180)

340 Ferrule or dice box. Flat curved strip with two parallel grooves at one end. Broken off at the other end along the line of a further groove. Length 29 mm, width 13 mm, th. 2 mm.

A more complete example of this type of object was found previously at the villa (RMK, no. 177).

V/11/11; upper fill of fishpond.

341 Ferrule or dice box? Flat curved strip, one end broken. Decorated by eight parallel grooves, arranged 3/2/3. Stained brown. Length 14 mm, width 9 mm, th. 1.0–2.5 mm.

V/905/1095; fill, Ditch 1104.

342 Decorated plaque fragment, possibly a tablet for weaving braid (Crummy 1981, 67). Thin flat strip decorated by large incised circles, each 17 mm in dia., alternating with pairs of

small ring-and-dot marks. Between the two circles and inside one of them are 2.5 mm dia. perforations. Length 33.5 mm, width 9 mm, th. 0.5–1.2 mm. Similar plaques, both of fourth-century date, have been found at Bancroft (RMK, no. 167) and Little Woolstone, Milton Keynes (RMK, no. 166).

V/239/1; topsoil.

343 Tube, possibly part of a handle? Length 58 mm, ext. dia. 9.5 mm, int. dia. 6 mm.

M/141/472; lower fill, Ditch 94/95.

344 Handle or point of implement. Antler tine, roughly squared on three sides for 35–45 mm from its broad end, which has been cut almost perpendicular to the long axis. On the unsquared (concave) side, several rough cuts have been made, forming a notch 4 mm deep and 11 mm wide. The point is very smooth. Length 115 mm.

V/29/12; intermediate fill of fishpond.

345 Flat trapezoidal plate of antler, broken into two pieces. Sawn and roughly smoothed on all sides. There is a band of irregular grooves near one end. Length 99–108 mm, width 35–37 mm, th. 7 mm approx.

V/941/1195; fill, Enclosure 1208.

THE GLASS

Denise Allen

The assemblage comprises 128 vessel glass fragments, 128 window glass fragments, nine beads, and one tessera (catalogued items represented by more than one fragment are counted as one).

Of the vessel glass, fifty fragments are blue-green, thirty-four colourless, thirty-one pale green, seven yellow-green, and one each are olive green, brown and emerald green. As a general rule, natural blue-green glass was widely used during the first three centuries AD for containers and tableware. During the fourth century it was largely replaced by pale green and yellow-green glass. Strong colours represented here by emerald green, brown-green, brown, and, again, yellow-green, belong mainly to the first and early second centuries. Colourless glass became popular for tableware during the Flavian period, and was used almost exclusively for this during the second and third centuries.

Thus the earliest vessels represented on the site comprise the cast emerald green fragment (346), which is pre- or early Flavian, the jug/jar fragments (347–49), which belong to the second half of the first or first half of the second centuries, possibly two bowl rims (359–60), which may be of the same date, although their forms do recur during the late Roman period, and the blue-green bottle fragments (356–57 and following list). The latter total only thirteen fragments, which is a relatively low percentage of the assemblage when compared with sites whose main period of occupation was during the first two centuries AD. Several of the beads are also characteristic of the earlier Roman period: those of melon type (379–80), which date to the first or possibly early second century, and the melted bead with inlaid spirals (381), which was probably made in the pre-Roman period, but can be paralleled by other first-century finds.

There is no identifiable tableware of the good quality colourless glass that was in widespread use during the second and third centuries, although some may remain amongst the thirty-four largely indeterminate fragments of colourless glass. Most recognisable types belong to the later third and fourth centuries, and the bubbly pale green and yellow-green glass of this late period is well represented. Catalogued pieces include the flask rim (355), the pale green bottle (358), beaker rim fragments (363, 364, and probably 366 and 367), the body fragment decorated with wheel-cut lines (368), and probably two base fragments (372 and 376). The decorated body fragment (368) is the finest of these pieces, and represents quite an uncommon find of a fourth-century product of the Cologne glasshouses.

Window glass is well represented on the site, including both the cast variety of the first three centuries AD, and the late Roman blown variety. Fragments of the latter are most numerous, and show most variation in colour and quality, although most are various shades of pale green, olive green, or blue-green.

Vessel Glass (Figs 181, 182)

Cast and Ground

346 Fragment of the base and footring of a bowl or plate of emerald green glass; flaking white iridescent weathering. Lower part of side extant, curving into flat base with high moulded footring; all surfaces rotary-polished. Footring dia. c.110 mm.

V/415/608; fill, Ditch 527.

Glass vessels made by casting rather than blowing were quite common in the north-western provinces during the first century AD, most of them having been imported from Italy. Those in strong monochrome colours, of which emerald green was one of the most popular, were probably made until the early Flavian period. The original shape of the vessel represented here is most likely to have been a bowl or plate with flaring rim, with or without an overhang (*cf.* Wheeler 1930, 122–3, fig. 42.4, for a complete example of the former; Charlesworth 1959, 38–40, fig. 3.3, for an example of the latter).

Blown

Jugs, Flagons and Flasks: Blue-Green and Coloured

347 Two body fragments of a jug or possibly a jar, of clear blue-green glass. Globular body, with part of two vertical optic-blown ribs extant. Max. dia. 140 mm.

V/306/525; fill, Ditch 509.

348 Base fragment, probably of a jug, of clear blue-green glass. Apparently rounded-conical body, slightly concave base. Dia. c.140 mm.

V/724/901; soil spread east of Building 11.

349 Base fragment, probably of a jug, of brown-green glass; thick flaking patches of whitish iridescent weathering. Slightly concave base. Dia. c.140 mm.

V/284/466; soil spread east of trackway.

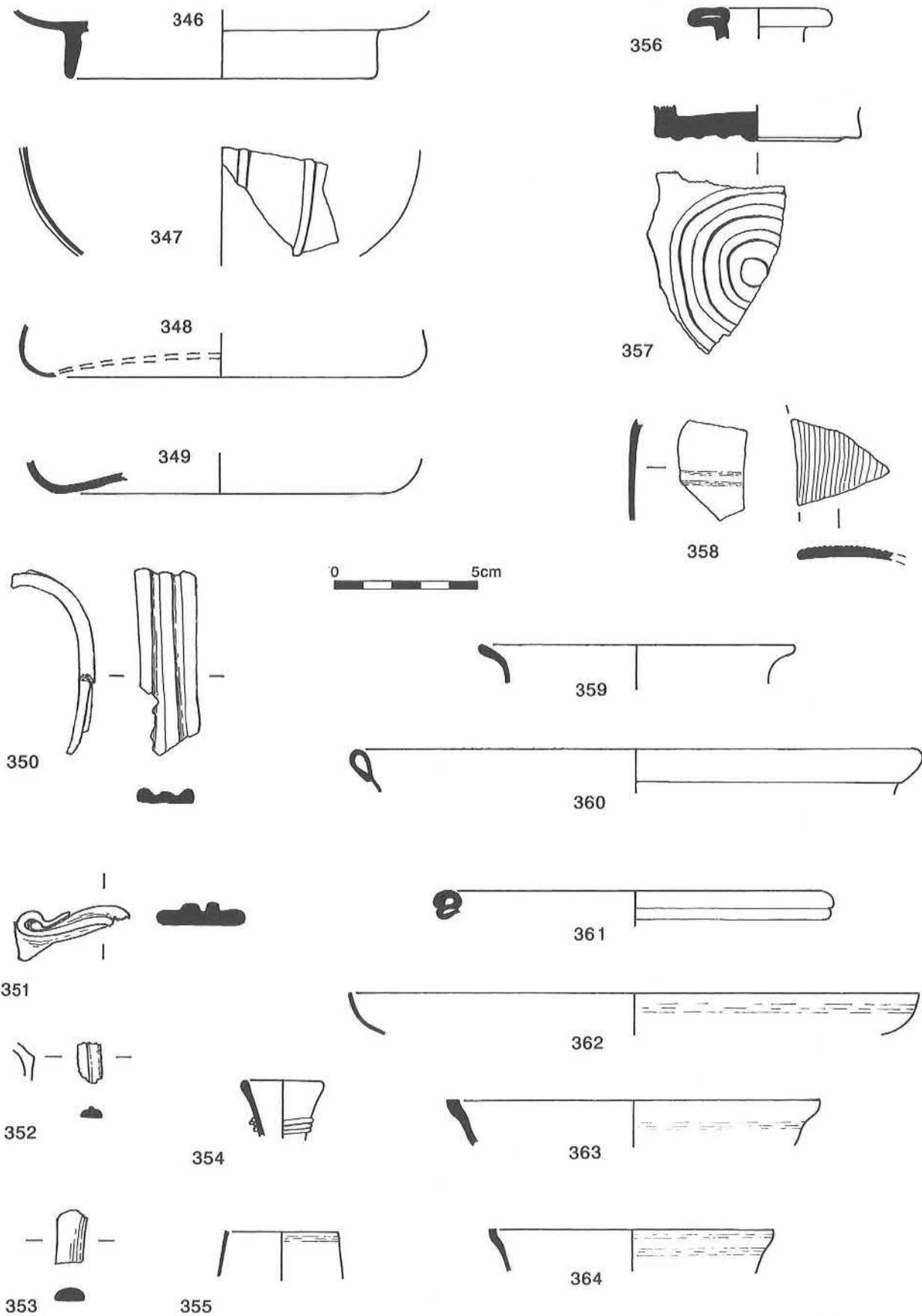


Figure 181: Glass vessels 346-364, scale 1:2.

347–9 most likely represent a group of jugs and jars very commonly found in the north-western provinces during the second half of the first and first half of the second centuries, and probably produced somewhere in the Seine-Rhine region (Price 1978, 74). The jugs have long cylindrical necks, angular ribbed handles, and conical, globular, or occasionally discoid bodies, often decorated with vertical or spiral optic-blown ribs. Those with conical bodies may have a base ring, or a simple slightly concave base, as represented by **348** and **349** (cf. Isings 1957, 72–3, forms 55a and b). The jars typically have globular, vertically ribbed bodies which are identical to those of the globular jug variant, and body fragments like **347** could therefore be from either form.

350 Fragment of a handle of pale blue-green glass; thick brown and silvery iridescent weathering. Curved, three-ribbed handle, width 22 mm.

V/3/1; topsoil.

351 Fragment from upper part of a handle of blue-green glass. Flat-sectioned with two raised ribs, folded over where it adheres to vessel neck, of which a small fragment survives. Width of handle c.30 mm.

V/390/589; fill, Ditch 572.

352 Small handle fragment of blue-green glass; flaking whitish iridescent weathering. Curved handle, with D-shaped section, and irregular rib running around outside. Width of handle c.8 mm.

V/263/459; destruction, Building 8.

353 Small handle fragment of blue-green glass. Curved, with D-shaped section. Width 9 mm.

V/155/176; destruction, Building 8.

None of these handle fragments is sufficiently diagnostic to allow close identification or dating.

354 Rim fragment of a flask or jug of blue-green glass. Rim slightly flared, and fire-rounded and thickened, with self-coloured spiral trail applied beneath, not quite horizontally: part of four strands extant. Rim dia. c.30 mm.

V/649/736; soil spread east of trackway.

Funnel rims with applied trail beneath are most often seen on jugs and flasks of a wide variety of forms from the late second to early fourth centuries.

Jugs, Flagons and Flasks: Colourless

355 Rim fragment, probably of a flask, of colourless glass; thick flaking brown and silvery iridescent weathering. Rim broken off flat and ground smooth, with faint horizontal wheel-incised lines beneath. The neck expands slightly downward. Rim dia. c.40 mm.

V/68/47; fill of fishpond.

Globular glass flasks with necks tapering upward were made during the second half of the third and the fourth centuries (Isings 1957, 121–2, form 103), and it is probably to this form that **355** belongs.

Bottles: Blue-Green

356 Rim fragment of a bottle of blue-green glass. Rim folded outward, upward and inward, to form horizontal lip, dia. c.50 mm.

V/739/924; destruction, Building 12.

357 Base fragment of a square bottle of blue-green glass. Blown into a square-sectioned body mould: design in relief on base comprises three somewhat flattened concentric circles with central dot. Width of sides c.70 mm.

V/416/625; cobbled farmyard.

Also:

ni Prismatic bottle body frag.

V/264/459; destruction, Building 8.

ni Prismatic bottle body frag.

V/340/557; fill, Ditch 511.

ni Prismatic bottle base frag, slightly burnt.

V/347/551; soil spread, farmyard area.

ni Prismatic bottle body frag.

V/531/735; soil spread east of trackway.

ni Prismatic bottle body frag.

V/647/756; fill, Ditch 708.

ni Cylindrical bottle shoulder frag.

V/657/829; fill, Ditch 744.

ni Square bottle body frag.

V/677/857; fill, Ditch 839.

ni Prismatic bottle body frag.

V/712/899; soil spread east of Building 11.

ni Bottle shoulder frag.

V/723/910; destruction, Building 12.

ni Prismatic bottle base frag.

V/919/1130; fill, north walled garden.

ni Square bottle base frag., with three concentric circles.

M/199/815; Secondary silt, Ditch 94/95.

Interestingly, two of these fragments, V/416/625, from the villa, and M/199/815, from the mausoleum, join!

Blue-green glass bottles were used a great deal for containing and transporting a wide variety of liquids during the first two centuries AD (Charlesworth 1966). Rim and handle shapes were consistent, but the bodies could be round, square, hexagonal, rectangular or octagonal in cross-section, the first of these being referred to as 'cylindrical', and the rest, when the precise shape cannot be identified, as 'prismatic'. The square bottle was the longest-lived, with production spanning the second half of the first and the second centuries. Cylindrical and hexagonal bottles disappeared from use early in the second century, and rectangular and octagonal bottles seem to occur only in second-century contexts.

A total of thirteen fragments is listed and catalogued here, of which one is recognisably cylindrical, three are square, seven are 'prismatic', and two have indeterminable body shapes.

Bottles: Pale Green

358 Many fragments of a bottle of pale green glass: pinhead bubbles within the metal, patchy brown weathering. Cylindrical body, with bands of faint horizontal wheel-incised

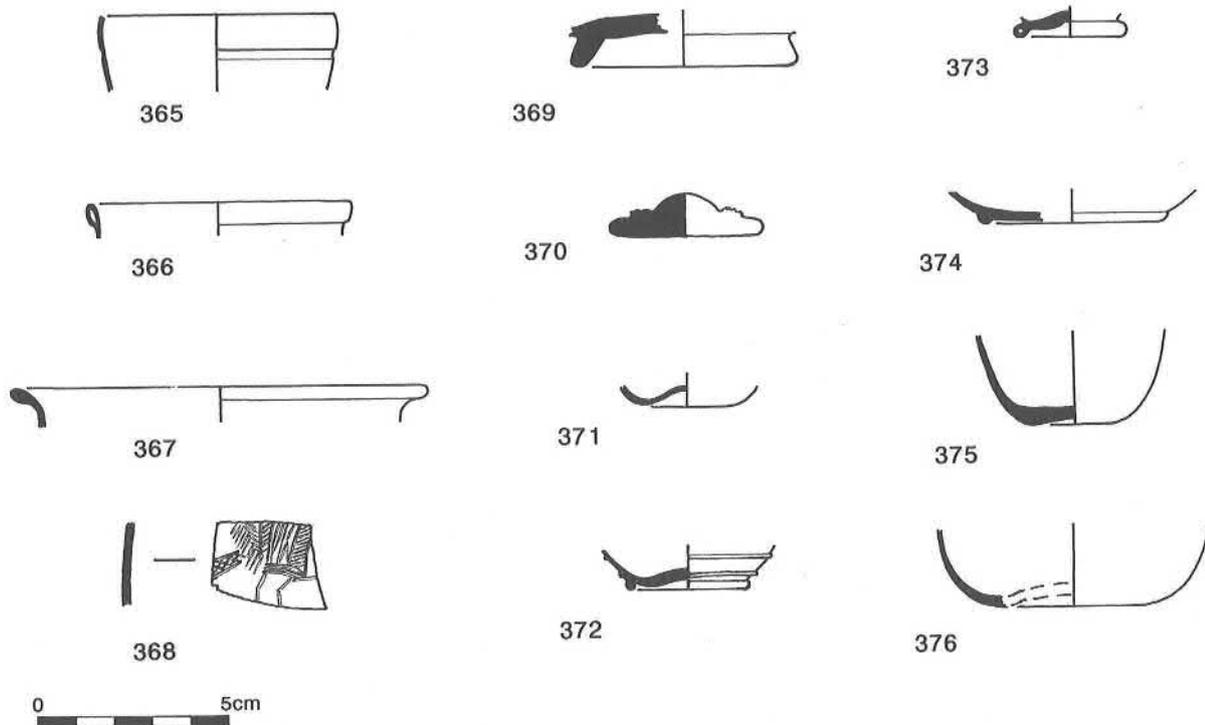


Figure 182: Glass vessels 365-376, scale 1:2.

lines; multi-ribbed handle. Body dia. c.150 mm.
V/200a/347; trackway east of Building 1.

Also:

ni Many body and handle fragments of the same or a very similar vessel.
V/156/199; trackway, east of Building 1.

During the mid to later Roman period the blue-green bottles of the first two centuries were replaced by cylindrical vessels of pale green or colourless glass, the bodies often decorated with bands of horizontal wheel-incised lines, and with one or two multi-ribbed handles (Isings 1957, forms 126-7). They were much less common than their earlier counterparts. Most belong to the later third and fourth centuries, and the pale green metal with pinhead bubbles of 358 is typical of this period. However, it is probable that the one-handed variety, at least, first appeared during the later second or earlier third century. There is an example from a grave of 150-250 at Hauxton Mill, Cambridge (Harden 1957, 12ff., fig. 6, pl. IIIb.2), and others have come from burials of the same period at Esch in the Netherlands (van den Hurk 1973, 225, III.28; *id.* 1975, 78-9, IV.6-9, figs 12-13; *id.* 1977, 103, V.15-16, fig. 19).

Beakers, Bowls and Cups: Blue-Green and Coloured

359 Rim fragment of a beaker of clear brownish-green glass. Rim outflared, and fire-rounded and thickened. Dia. c.110 mm.
V/200b/347; trackway east of Building 1.

Insufficient remains of this piece to allow close identification or dating. The colour and clear metal are somewhat typical of, though by no means exclusive to, the first and early second centuries.

360 Rim fragment of a bowl of yellow-green glass; some bubbles within the metal. Rim folded outward and downward, forming hollow tube. Dia. c.200 mm.
V/324/545; fill, Ditch 509.

Bowls with tubular rims occur throughout the Roman period. One group with cylindrical body, often ribbed, and applied footring, was particularly popular during the later first and earlier second centuries (Isings 1957, 59-60, form 44a-b), but similar vessels have also come from late Roman contexts at Portchester (Harden 1975, 369, fig. 197.8) and a fifth-century burial at High Down, Sussex (Price 1977, 158, 8).

361 Rim fragment of a ?bowl of blue-green glass; now rather shattered. Rim folded outward, upward, inward, upward, outward and downward slightly again, forming a double hollow tube. Dia. c.140 mm.
V/658/831; fill, Ditch 792.

The formation of this rim is unusual, and no exact bowl parallels are known to me. It is possible that the fragment belongs to a bulbous or globular jar (*cf.* Isings 1957, form 67a), the rims of which were folded in a variety of ways, although these usually incorporated a wider lip. Its date in this case would be first to second century, but the identification is by no means certain.

362 Rim fragment of a bowl of pale blue-green glass; surfaces slightly iridescent. Rim outflared, broken off flat and ground smooth, faint horizontal wheel-incised lines beneath. Rim dia. c.200 mm.
V/261/1; topsoil.

Insufficient remains of this to allow close identification.

363 Rim fragment of a beaker of clear yellow-green glass. Rim outflared and broken off flat, faint horizontal wheel-incised

lines beneath. Rim dia. c.130 mm.

V/582/1; topsoil.

- 364 Rim fragment of a beaker of clear yellow-green glass. Rim outflared and broken off flat, faint horizontal wheel-incised lines beneath. Rim dia. c.100 mm.

V/918/1137; fill, Enclosure 1208.

Flaring rims, broken off and left unpolished, or only slightly polished, are typical of the fourth century, as is the yellow-green colour of **363** and **364**. Their most likely form was a conical beaker, with or without a base-ring. Complete vessels are frequently found in late Roman graves, for example at the Lankhills cemetery in Winchester (Harden 1979, 213–15, class IIA-B, fig. 27), and fragments are quite common on settlement sites. There are several rims amongst previous finds from Bancroft (RMK, 12, fig. 33.6).

Beakers, Bowls and Cups: Pale Green and Coloured

- 365 Rim fragment of a beaker of greenish-colourless glass; brown and iridescent weathering. Rim inturred slightly and ground smooth, wide horizontal wheel-cut groove beneath. Rim dia. c.650 mm.

V/77/76; silt overlying stokepit, west bath suite, Building 1.

- 366 Rim fragment, probably of a beaker or cup of pale green glass; many pinhead bubbles within the metal. Rim folded outward and downward, forming tubular collar. Dia. c.70 mm.

V/176/219; mortar mixing pit south of porch, Building 1.

- 367 Rim fragment of a beaker of greenish-colourless glass; many pinhead bubbles within the metal. Rim outflared and fire-rounded and thickened. Dia. c.110 mm.

V/45/33; destruction, Building 1.

None of these fragments is sufficiently diagnostic to allow close identification, but the metal with pinhead bubbles of **366–7** suggests a late Roman date.

- 368 Body fragment, probably of a bowl, of greenish colourless glass. Outer surface decorated with a series of short wheel-cut lines: the surviving part shows ?lower part of a tunic, with a human leg beneath.

V/265/459; destruction, Building 8.

This fragment is almost certainly part of a fourth-century bowl decorated with a wheel-cut figured scene. Several distinct cutting styles can be distinguished amongst these vessels, some of them having been discussed in detail recently, with reference to fragments from Lullingstone Villa (Cool and Price 1987, 113–18). The decoration on **368** corresponds most closely to that on vessels with figured scenes built up from sharp wheel-cut lines. These fall into two groups: one in which some areas are infilled by abrasion, making them appear matt, and the other in which a similar effect is achieved by pointillé shading (*ad loc* 117–8). There is no clear sign of either technique on **368**, suggesting that the fragment belongs to the pointillé group, on which there tends to be less shading. The group includes two hemispherical bowls, one from Colliton Park, Dorset (Harden 1969, 64–5, fig. 8) and one from Amiens (Harden 1987, 230–32, 129).

Both show dancing maenads and satyrs in a single frieze, with a central basal medallion with a bust of Dionysus. The bowls are not identical to each other, and none of the figures matches the fragment here, which perhaps shows a human leg emerging from clothing (?a tunic). Another fragment possibly belonging to this group was found at Lullingstone (Cool and Price 1987, 130, fig. 54.141). The probable place of origin for all these vessels is Cologne.

Base Fragments – Vessel Types Uncertain

- 369 Base fragment of blue-green glass. Pushed-in solid base ring, dia. c.60 mm.

V/675/861; topsoil.

- 370 Base fragment of blue-green glass. Produced by forming a pushed-in solid base-ring, then completely flattening the base, so that the inside forms a low dome. Base dia. c.40 mm.

V/303/504; soil spread east of trackway.

- 371 Base fragment of pale blue-green glass; thick silvery iridescent and brown weathering. Concave base, dia. c.30 mm.

V/308/513; destruction, Building 8.

- 372 Base fragment of yellow-green glass; many pinhead bubbles within the metal. The base is slightly concave, with applied coil base-ring, joined to further spiral trailing above. Base-ring dia. c.32.5 mm.

V/159/207; trackway east of Building 1.

- 373 Base fragment of greenish-colourless glass; flaking whitish iridescent weathering. Pushed-in tubular base-ring, with centre pushed in to low point with pontil mark on underside. Base dia. c.30 mm.

V/47/24; fill of Drain 427.

- 374 Base fragment of colourless glass. Applied coil base ring, dia c.50 mm.

V/200c/347; trackway east of Building 1.

- 375 Lower body and base fragments, some joining, of colourless glass; thick whitish iridescent and brown weathering. Sides taper downwards to a very slightly concave base, dia. c.25 mm.

V/199a/422; soil and mortar layer, Room 1, Building 7.

- 376 Two joining fragments from a base of pale green glass; many pinhead bubbles within the metal. The sides apparently taper down to a concave base, dia. c.50 mm.

V/939 & 940/1195; fill, Enclosure 1208.

Most of these fragments are likely to have come from various beakers or cups, although some may represent flasks or small jugs. Their forms cannot be closely identified, but the bubbly metal and colours of **372** and **376** suggest a late Roman date.

Miscellaneous (Fig. 183)

- 377 Fragment of pale green glass; many pinhead bubbles within the metal. Part of a curved solid dome is extant, possibly formed by folding, since there appears to be a linear depression in one side. One broken edge shows evidence of flattening, possibly where there was some form of attachment. Part of another flat edge survives opposite the curve of the dome. Max. height 18 mm; max. width 33 mm.

V/834/1071; fill, Enclosure 1208.

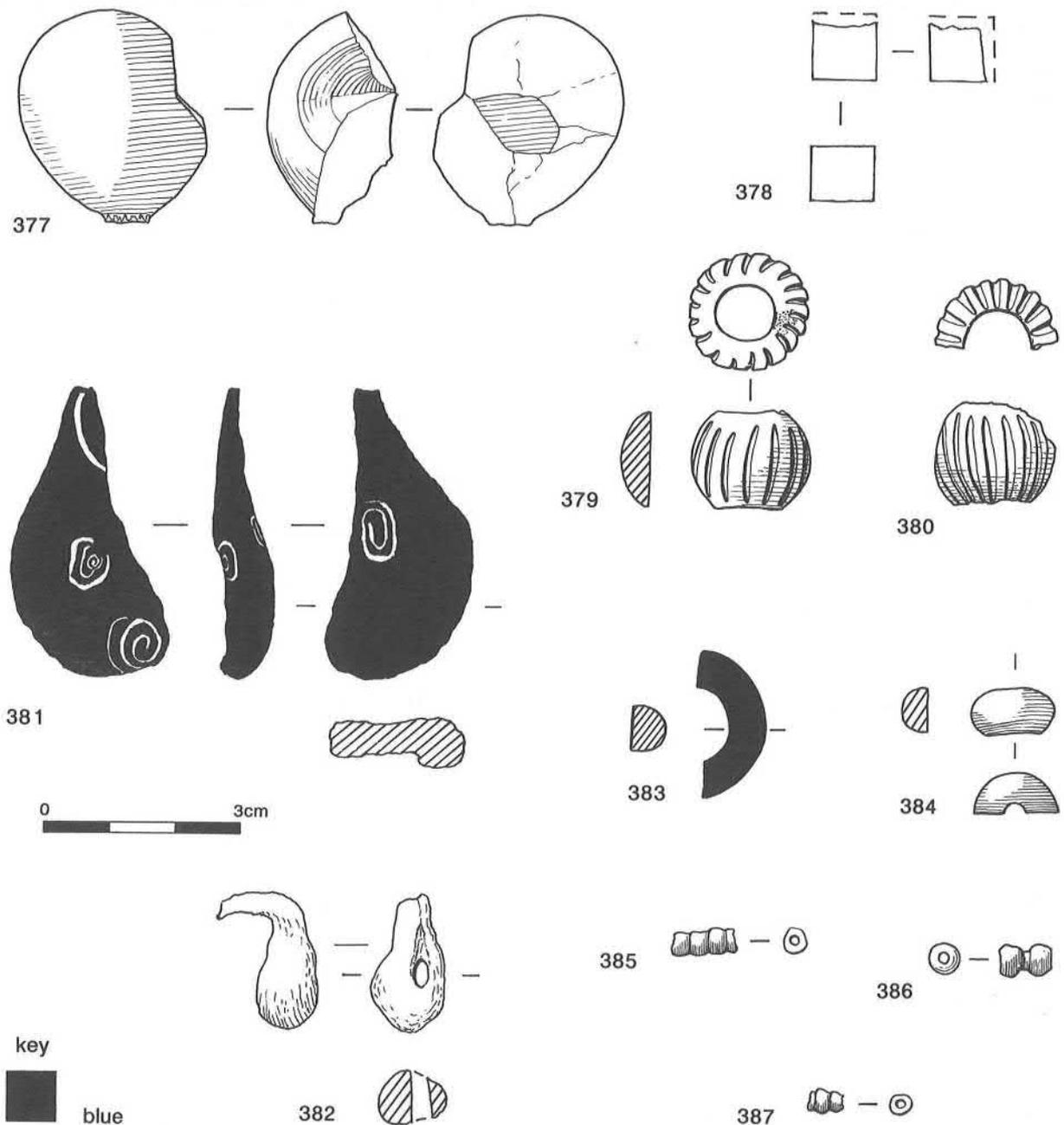


Figure 183: Unidentified glass object 377; Tessera 378; Faience beads 379-380; Glass beads 381-387, scale 1:2.

Insufficient remains of this curious piece of glass to be certain of its original form. It may be part of a large folded handle, or a domed base, or a knobbed handle of some sort.

378 Tessera of blue-green glass. Apparently cubic; one side, which is squarer and with a rougher surface than the rest, is probably the one which was exposed on the floor. Dimensions 9 × 8 × 8 mm.

V/532/735; soil spread east of trackway.

Glass tesserae occur quite often in mosaics, particularly those of the later Roman period. Boon (1970, 18) cites the earliest example known to him as blue-green glass tesserae in a late second-century floor at Silchester. The great majority belong to the later third and fourth centuries.

Two blue-green glass tesserae have already been recorded from Bancroft, from destruction layers over Building 1 (RMK nos 253, 254). These were slightly larger examples, and were tentatively assigned to the pavement in Room 8, although none remain in situ.

Beads (Fig. 183)

379 Complete melon bead of turquoise faience. D-shaped section, divided into eighteen segments. Height 15 mm, dia. 18 mm. M/161/463; Cremation 2.

380 Approximately half a melon bead of turquoise faience. Height 15 mm, dia. 19 mm. V/192/257; fill, Ditch 263.

Melon beads were extremely popular during the first century, occurring much less often in earlier second-century contexts.

381 Melted bead of blue glass. Shape completely distorted by fire, but evidence of at least four spirals of opaque white glass still evident. AD.50–60.

M/147/465. Cremation 4.

This was presumably a bead of Guido's 'Oldbury Type': large annular beads of dark blue glass with marvered white or yellow spirals, often on small bosses (1978, 53–7, Class 6). They were Iron Age in manufacture, but Guido cites a number of survivors into the Roman period, and indeed one or two which were rediscovered and reused in Saxon times. Most of those from Roman contexts belong to the first century, but one from Chichester was apparently found with objects of late Antonine date.

382 Melted bead of yellow-green glass. Circular perforation still apparent, but shape completely distorted by fire. AD.50–60.

M/144/465; Cremation 4.

383 Approximately half an annular bead of dark blue glass. D-shaped section. Dia. 22 mm, height 7 mm.

M/120/195; primary silt, Ditch 60.

384 Approximately half an annular bead of blue-green glass. D-shaped section. Dia. 13 mm, height 7 mm.

V/710/866; interior, Building 11.

385 Segmented bead of green glass; four segments extant. Length 9 mm, dia. 4 mm.

M/13/44; upper fill, Ditch 60.

386 Segmented bead of green glass; two segments extant. Length 8 mm, dia. 4 mm.

V/581/735; soil spread east of trackway.

387 Segmented bead of green glass; two segments extant. Length 5 mm, dia. 3 mm.

M/22/39; upper fill, Ditch 60.

Little can be said about beads 383–387, except that they are common Roman types which cannot be closely dated. Guido discusses small segmented beads like 385–387, and cites many examples (1978, 91–3). They are particularly common in third and fourth-century contexts.

Window Glass

Roman window glass can be divided into two types. The first, described as 'matt-glossy', was made by casting in a shallow tray of stone, clay or wood, the undersurface bearing marks from contact with the tray giving it a matt appearance. It was in use to about 300. Late Roman window glass was made by blowing a cylinder of glass, cutting it open, and allowing it to flatten as it cooled. Hence both surfaces are glossy, and the panes tend to be thinner than those made by casting. Characteristics of both types have been discussed by Boon (1966). There are a very few instances of blown window glass occurring in earlier Roman contexts, at Berkeley Street, Gloucester (Price, Cool and Allen, forthcoming) and at Exeter (Charlesworth 1979, 230), but the

great majority belongs to the fourth century. Both types of window glass are included in this assemblage, the former totalling thirty-four fragments, and the latter ninety-four fragments, all from the villa excavations.

A detailed catalogue of the window glass from the villa is given in Appendix 6.

POTTERY OBJECTS

Nicola A. King

The pottery fabrics referred to below are those described by Marney (1989).

Counters (Fig. 184)

388 Counter made from a body sherd of Oxford ware (Fabric 24). Irregular circular shape, dia. 35–38 mm. Red/orange colour coat covers outside of sherd and is slightly worn in the centre. On the inner side the colour coat has been worn away in a strip approx. 6 mm wide, leaving a central red dot, dia. 20–22 mm. It is possible that this was done intentionally to distinguish the sides of the counter.

V/30/12; fill of fishpond.

389 Counter made from the base of an Oxford ware beaker (Fabric 24). Circular, dia. 47 mm, th. 11 mm. The remains of the body have been trimmed away.

V/237/1; topsoil

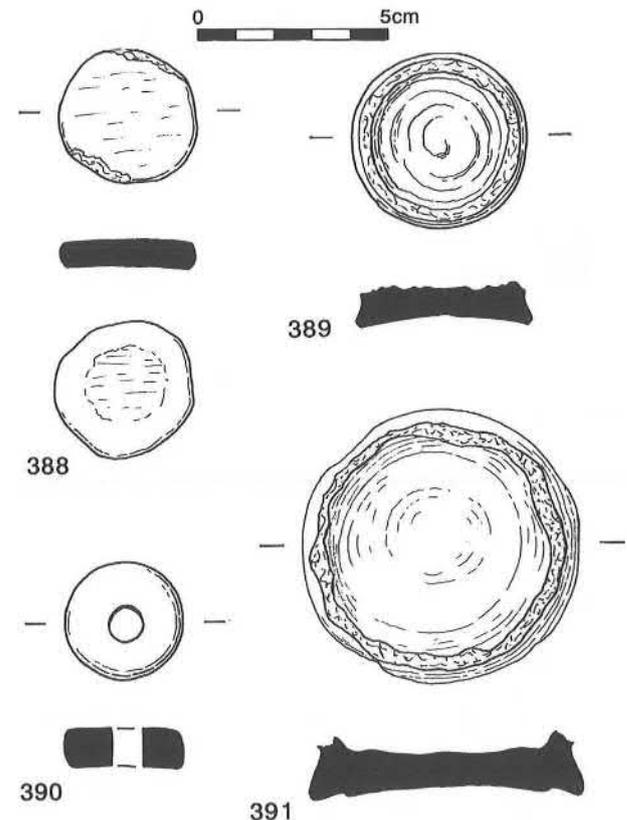


Figure 184: Pottery counters 388–389; Spindle whorl 390; Disc 391; scale 1:2.

Spindle Whorl (Fig. 184)

A samian example is known from previous excavations at the villa (RMK no. 191). Two lead objects (305, 306) have also been identified as weights or spindle whorls.

- 390 Spindle whorl made from a base of Hadham ware (Fabric 37). Red slip on one side. Dia. 31 mm, th. 10–11 mm, weight 13 g. The hole, dia. 8 mm, is slightly off-centre. The edges of the sherd have been rounded, perhaps to prevent the snagging of thread.

V/31/12; fill of fishpond.

Other (Fig 184)

- 391 Base of an Oxford ware vessel with the body carefully chipped away to leave a complete disc, dia. 73 mm.

M/-/765; fill of Sunken Featured Building 604.

Since this object was found in the fill of an early Saxon building it is unlikely to be purely residual, but may have been collected and used by one of the occupants.

POTTERY GRAFFITO (Fig. 185)

Mark Hassall

- 392 Sherd from the base of a samian bowl, perhaps a Drag. 37, which has been subsequently burnt. A graffito cut within the footring reads: IRRICV[...].

M/169/94; Ditch 94/95.



Figure 185: Graffito base sherd 392, scale 1:2.

This is presumably part of a personal name. The first 'I' is shorter than the other letters, and though it appears to have been deliberately produced could have been an abandoned first attempt at the upright stroke of the letter 'R' which follows. The final letter, of which only the top of a stroke sloping downwards and to the right survives, could be part of a 'V' or an 'A'. If the reading given here is correct, then a possible parallel would be IRRICO (CIL II 2843, from Numantia, Spain) cited by A. Holder in the *Altceltischer Sprachschatz* (1986), where it is qualified as possibly Iberian, but where, again the reading is uncertain.

FIRED CLAY

R. J. Williams

10 kg of fired clay fragments were found in about one hundred contexts at the mausoleum site, representing thirty-four different features (excluding individual postholes within Building 500) of all periods. Because of the small

amount of material, and the fact that much of it derived from features of early date, the assemblage was weighed and catalogued according to fabric and type.

The fabrics were often quite mixed, but were catalogued on the basis of the dominant inclusions. One fabric which had no visible inclusions is thought to have been made from Oxford clay, which could have derived from the excavated bases of the deeper ditches. The limestone and/or chalk and shell fabrics are very similar to natural inclusions found in the local Boulder clay, which covered much of the site. The sandy fabric is also nearly identical to the orange sandy clay head deposits which survived in pockets overlying the Boulder clay. Only the vegetable inclusions suggest the deliberate addition of tempering material, in this case probably chaff or chopped grass.

Where recognisable, the fragments were divided into wall daub, flat unperforated clay plates or 'bricks', perforated clay plates, clay weights and amorphous fragments/pieces with only a single smoothed face. For discussion purposes the results of this analysis are presented by period division. A fuller version is contained in the Level III site archive.

Late Bronze Age/Early Iron Age (Fig. 186)

3.5 kg derived from the postholes and palisade trenches of Building 500 and the dark soil fill of Hollow 340, of which 87% was in the sandy gritty fabric and the remainder in the shelly and the limestone fabrics.

Hollow 340 contained the largest single concentration (1.4 kg) lying in Layer 452 (Fig. 21). All of the fragments were amorphous and may have been the remains of a crude hearth or oven base which had been disturbed. A single shell-tempered fragment, 393 from Layer 433, may be part of a clay mould for bronze working (Needham 1980).

Of the sixty-one postholes representing the structure of Building 500, only fourteen contained fired clay fragments (Fig. 19). Four outer postholes contained insignificant amounts and none was found in the middle postholes, although small amounts were recovered from the palisade trenches. Most of the fired clay recovered from the structure was contained in ten of the ring of twenty inner postholes. Comparison of the incidence of fired clay with other materials including pottery and animal bone demonstrates a concentration of refuse from Postholes 313 to the north and 286 to the south, with a particular concentration in Postholes 286, 303, 306 and 390, all of which also contained significant quantities of pottery (p.25).

Most of the clay was in the form of small amorphous nodules, but Posthole 278, the inner south entrance post, contained 420 g of burnt wall daub made in the sandy fabric. One large fragment, 85 × 60 mm across (394), has one smoothed face and the impressions of four rods on the other side. From the impressions it is clear that the rods, which had not been split, had been woven alternately around the 'sails' rather than in clusters. Postholes 286 and 264 also contained frag-

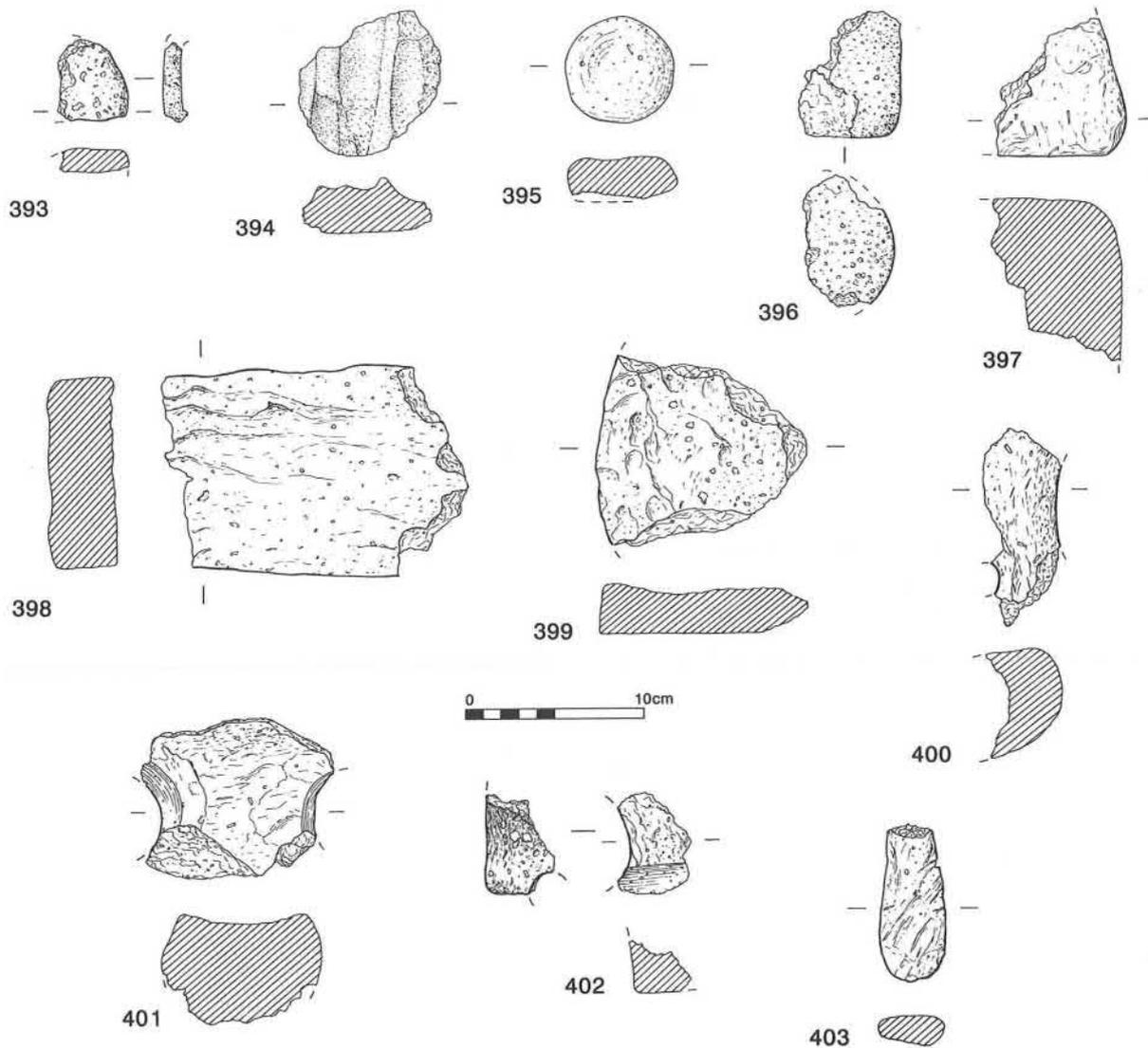


Figure 186: Objects of fired clay 393–403, scale 1:4.

ments of what may have been either flat clay plates or the sides of loomweights.

The two illustrated objects, 395 and 396, were found in Postholes 390 and 303 respectively. 395 is disc-shaped, 60 mm dia., with one concave and one convex face and rounded edges. It is damaged on one face but otherwise appears to be complete, and is well made in a buff sandy fabric. This bun-shaped object seems too small to have been used as a weight, but no other plausible explanation can be offered for its use. 396 is in a similar fabric, but is much more cylindrical, up to 70 mm high and with a diameter of 80 mm. This is almost certainly the lower part of a cylindrical clay weight of typical middle to late Bronze Age type, which generally predate the triangular type (Bradley *et al.* 1980, 244).

Iron Age

Surprisingly, only 190 g of fired clay was recovered from eight of the penannular house ditches (101, 164, 210, 262, 347, 620, 634 and 643) and 65 g from one of the postholes of the Four-post Structure 324. The fragments were all too

small to be identified, and most had been made in clay with either no inclusions or with shell and sand tempers.

Early Roman (Fig. 186)

Most of the 5 kg of fired clay dating from this period derived either from Pits 156, 197, 595, 607, 608 and 849, which formed a group in the south-east corner of the site, Ditch 632/642 and Ditch 60, with lesser amounts from Ditches 474 and 609. No single fabric was dominant, the fabrics being present in the following proportions; limestone/chalk 39%, no inclusions 35%, shell 22% and sand and vegetable 2% each. Apart from there being no dominant fabric, there was also no correlation between any fabric or object category. No wall daub was identified, and it may be significant that the sandy clay used for this function at the earlier period (Fig. 186.394) is hardly represented.

Three probable triangular clay weights were identified. Two, from layers 743 in Ditch 632 and 196 in Pit 197, were identified on the basis of their perforations, which were 17 and 13 mm dia. respectively. The third (397), from Layer 176

in Pit 197, appears to be the lower corner of a very large example.

Fragments of what are commonly referred to as clay plates or 'Belgic bricks' were found in Ditches 60, 474 and 632 and Pits 197, 595, 607 and 608. Most were between 28–38 mm thick, well made with squared edges and at least one very flat face, although none was sufficiently complete for its full dimensions to be recorded. Two fragments, from Layer 181 (398), Ditch 60, and Layer 196 (399), Pit 197, are of particular interest. 398, made in the limestone fabric, is 38 mm thick and very bar-like. Although both ends are broken it tapers in width from 115 to 100 mm and bears a striking resemblance to a kiln bar, although there is no other evidence of pottery production on the site. 399 is only 26 mm thick, and is made in the shelly fabric. The curved edge indicates it may have been a circular clay plate, dia. c.250 mm. One face is very flat, whereas the other together with the edge is irregular and covered with finger marks.

Perforated clay oven plates were found in Pits 595, 849 (400) and Layers 176 (401) and 155 (402) of Pit 156. The unillustrated fragment from Pit 595 was very small with a single perforation, dia. 50 mm. 400, made in a sandy fabric, is of the Danesbury type 2 (Poole 1984, 118) with a large central hole surrounded by smaller holes. In this example the plate is 55 mm thick with a projected central hole diameter of 140 mm and a small hole 15 mm in diameter, set 35 mm back from the inner edge. 401, made from clay with no inclusions, is more irregular, 60 mm thick with the remains of two holes c.55 mm across set 70 mm apart, and may be an example of a type 1 plate (*ibid.*) covered by small holes of similar size. 402, made in a shelly fabric, is very fragmentary, with one large perforation c.70 mm dia. and a smaller hole, 12 mm dia., formed at a right angle.

Unperforated clay plates of both circular and rectangular forms and oven plates have been previously recorded in Milton Keynes at the late Iron Age and 'Belgic' sites of Hartigans (Williams 1993) and Wavendon Gate (Williams *et al.*, forthcoming) and are now a well-documented artefact type on sites of the first millennium BC.

A small spatular-like clay object (403) was found in Layer 152, Ditch 60. Although it had been made of clay with no inclusions, the surface was covered by grass-stalk impressions. Whether it was a waste fragment or perhaps even a child's toy is a matter for speculation.

WOODEN OBJECTS (Fig. 187)

Nicola A. King; *wood identification* by Rowena Gale.

All the objects in this category were recovered from waterlogged deposits in the area of Enclosure 1208 at the villa, along with quantities of wood fragments, ranging from twigs to larger sections of roundwood, as well as a variety of worked pieces. A report on the unworked wood appears elsewhere in this volume (p.587).

Prior to the preparation of this report, the wooden objects had been conserved by freeze-drying, so the following descriptions contain measurements relating to their condition before and after conservation.

404 Spatula. The blade has a roughly triangular longitudinal section. The thinner edge is blackened. Tool marks on the flat side of the blade suggest the use of a chisel or similar tool. The handle is roughly circular in section, changing to oval at the end. Cut marks are visible at the junction of blade and handle, and suggest the object was whittled into shape. Carved from Pomoideae, sub-family of Rosaceae (hawthorn/apple/pear/whitebeam/rowan/wild service). Pomoideae woods are strong, hard and close grained, and are therefore suitable for small tools, handles and cogs. Overall length 378 mm. Blade length 63 mm, width 40 mm, th. 14 mm max., tapers to 1–2 mm at tip. Handle dia. 15 mm. Excavated length 389 mm, width of blade 42 mm. A shrinkage of less than 3% in length and about 5% in width occurred during freeze-drying. Late fourth century.

V/914a/1105; fill, Ditch 1104.

The following four objects are all of *Acer* sp. (maple), a fairly hard, strong, even-grained wood which is difficult to split, and is therefore suitable for carving and turning. Another feature of maple is that it is non-toxic and does not impair the taste of food, making it suitable for use with food products.

405 Turned cylindrical wooden knob or bung. The flat upper surface has an indentation c.5 mm dia. in the centre, probably resulting from attachment to the lathe. The body is decorated with incised parallel lines and grooves. At the junction of the knob and stem some knife marks are visible. The stem appears hand cut and the end is cut squarely across the grain of the wood, suggesting the object is complete. No evidence is visible for the method of fixing the knob, thus the suggested function is as a decorative knob or bung. Overall length 87 mm, length of knob 50 mm, dia. 37 mm, dia. of bung 15 mm. Excavated length 87 mm, dia. 40 mm, stem 15 mm dia. Therefore shrinkage of c.7.5% in width, none in length, occurred during freeze-drying. Late fourth century.

V/915/1105; fill, Ditch 1104.

406 Hand-carved irregular polygonal tapered knob or bung. The narrow end is flat with a central small hole, c.5 mm dia. and 4 mm deep. The wide end is rounded and decorated with a central flattish circular area, c.20 mm dia., surrounded by an incomplete raised strip. There is also a central shallow hole, about 6 mm dia. and 3 mm deep. The presence of this indentation suggests that the object was turned on a lathe before being carved by hand. The sides are irregularly faceted. Length 50 mm, width 43 mm max., 30 mm min. Late fourth century.

V/2011/1156; fill, Ditch 1155.

Small wooden bungs are commonly found in waterlogged contexts on Roman sites. It has been suggested (Caruana 1992, 75) that they were probably used for stopping flagons.

407 Six fragments, probably from a small bowl or plate. The largest piece is from the edge of the object, length 65 mm, width 65 mm, th. 12 mm. Warping of the wood prevents an estimate of the circumference. Fourth century.

V/945/1196; fill, Ditch 1104.

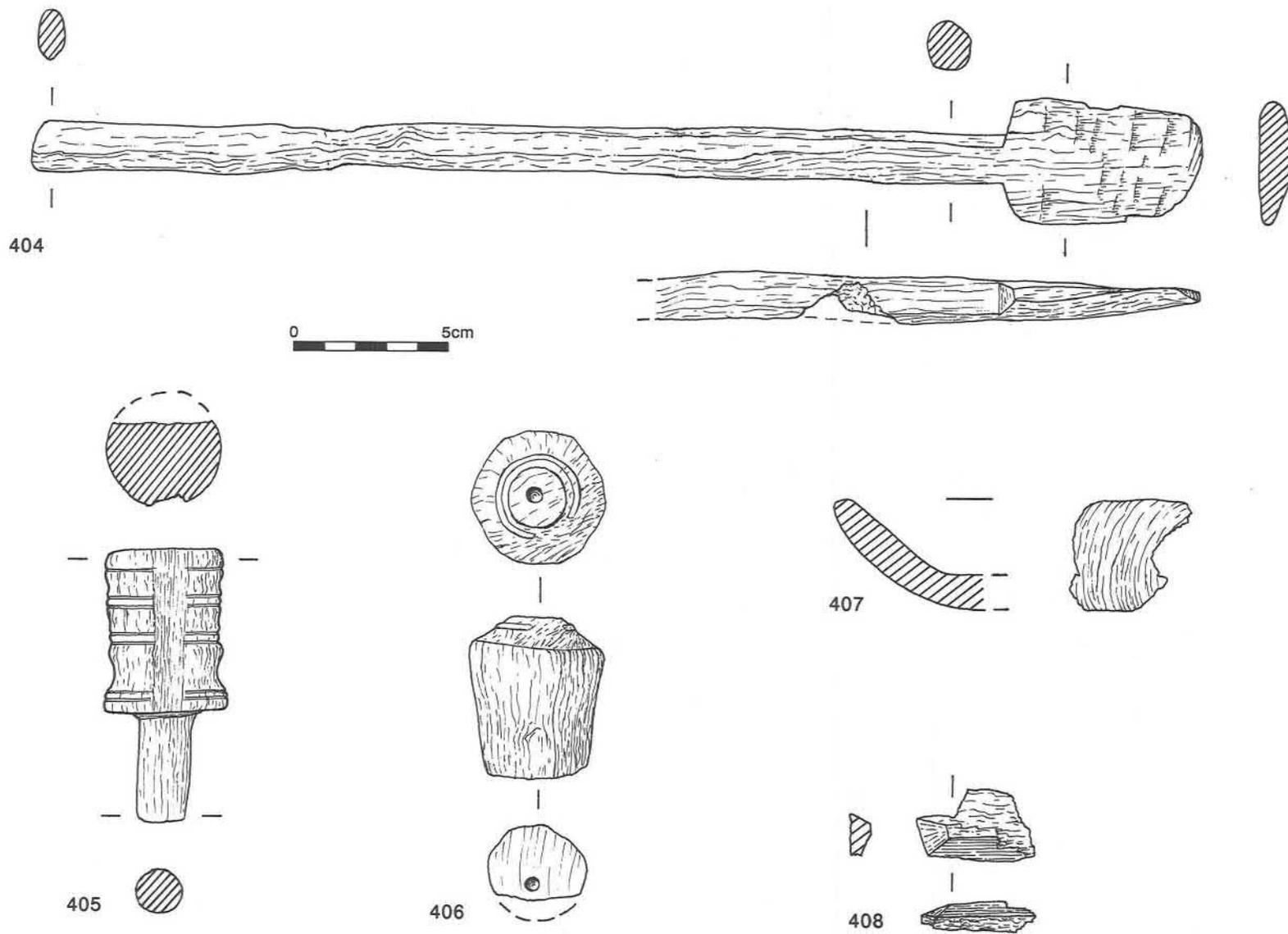


Figure 187: Wooden spatula 404; 'Knobs' 405–406; Other wooden fragments 407–408, scale 1:2.

408 Four fragments of lozenge shape. The largest piece has bevelled edges. Function unknown. Length 34 mm max., width 23 mm, th. 9 mm. Fourth century.

V/987/1196; fill, Ditch 1104.

LEATHER (Figs 188, 189)

June Swann

All the material described in this section was recovered from waterlogged deposits in the area of Building 10 and Enclosure 1208. 409 and 410 were found in the course of a watching brief on the construction of the 'wildlife' pond alongside the stream in 1984, hence the MK343 site number. Part of a shoe found in the same area in 1980 has already been published (RMK, no. 358).

Whilst all the following material has been commented on by Ms Swann, initial descriptions of Objects 411–417 were prepared by Nicola King.

409 Part of a man's leather shoe, left foot. Forepart upper with wide lasting margin. The toe is damaged, probably worn through. The upper may have been one-piece, with seam at inside waist, but no stitch holes now remain. The sole is missing, revealing a central midsole with remains of packing each side. Fragments remain of thonging which held the layers together. There are impressions of hob nails under the forepart sole, possibly in five rows, the centre row of which appears to continue under the heel seat, with some nails also around the edge.

The upper overhangs the narrow rounded toe of the insole. It appears to have contemporary cuts at the little toe, presumably to ease pressure. It has the remains of centre front decoration, produced by a single row of fine tunnel-stitching leading into a row of larger holes, suggesting that the centre front may have been cut, overlapped and thonged, for decoration.

Riveted construction was used throughout the Roman period, sometimes associated with thonging of layers, but the centre front decoration does not appear until the fourth century, as seen on examples from Skeldergate, York, and Portchester (Ambrose 1975). Together with the one-piece upper, this form of construction becomes a feature of Dark Age footwear.

MK343:2/1; unstratified.

410 Three-layer bottom unit, right foot, with blunt pointed toe. Thonged and nailed, with five or six rows of nails in the forepart grading into three at the heel seat. A fragment of upper remains at the inside waist and round the triangular stiffener. It has a wide lasting margin and two rows of narrow thonging through it for attachment. The out-sole is missing. There are no features remaining to date it closely within the Roman period.

MK343:2/2; unstratified.

NB. Although the circumstances of discovery of 409 and 410 made their precise stratigraphic location impossible to determine, it is probable that, like most of the shoe fragments described below, they were recovered from the fill of the Roman 'lake' area (p.154).

411 Fragment of shoe sole, max. dimensions 60 × 60 mm, is of two layers, with three thongs threaded through one layer. The

thongs are flat in section, and 5 to 6 mm wide. A second, similar sole fragment, 25 × 25 mm, with hobnail holes, was also found in this context, along with thirty-three fragments of flat leather, and five fragments of narrow lace or thong, 2 to 3 mm squared and up to 10 mm in length. Fourth century.

V/2003/1103; fill, Ditch 1104.

412 Lozenge-shaped fragment, 125 × 60 mm max. One cut edge is folded over 15 mm, with three whipstitches, but not attached to the under-surface. The fold is slit in three places, 25 mm and 15 mm apart, and there is the remains of a thong protruding from another hole, 2 mm wide. On the opposing side a wider thong is interwoven. A nail hole suggests this may be reused material in a sole.

V/2006b/1110; silting in 'lake' area.

413 Part of midsole, with irregular crossed thonging. Max. dimensions 95 × 33 mm. One thong runs longitudinally.

V/2006c/1110; silting in 'lake' area.

414 Twelve fragments of worked leather, probably parts of a shoe.

a) Irregular fragment, max. dimensions 155 × 55 mm. Part of the side of an upper, possibly including backpart (not illustrated).

b) Insole and midsole, forepart to waist, max. overall dimensions 160 × 80 mm. The midsole is approximately 15 mm narrower, and has a line of central thonging approximately 6 mm wide, looped towards the toe and folded back upon itself. The slits through which it passes are at intervals of 10, 30, 10 and 40 mm. There are also holes suggesting a hobnailed repair at the tread, and impressions of other hobs.

c) Three fragments of sole with hobnail holes and impressions for thonging, for a sole. Dimensions: 70 × 65 mm, 55 × 35 mm, 45 × 40 mm. Largest illustrated.

V/2007/1123; silting in 'lake' area.

415 Leather and a detached copper-alloy eyelet. Part of the upper of a finely decorated shoe of net pattern, probably a girl's, extending from heel seat to waist, and including part of the sole. Max. dimensions 115 × 50 mm. There is a T-shaped back seam, indicating moccasin construction, with 5 mm stitch length. The upper has broken along the lower edge of the decoration, which commences approximately 65 mm from the back seam. The fineness of the punching indicates high quality, and while examples of this type dating from the third and fourth centuries have been found at Hardknott (Charlesworth and Thornton 1973) and Portchester (Ambrose 1975), they are more usually of second-century date.

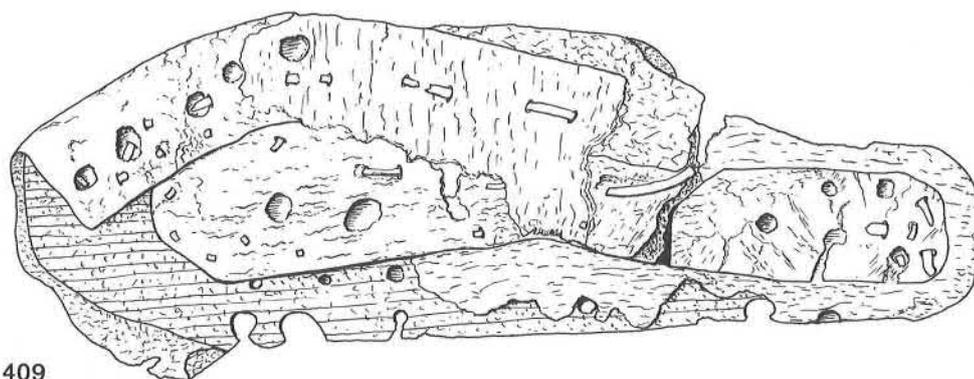
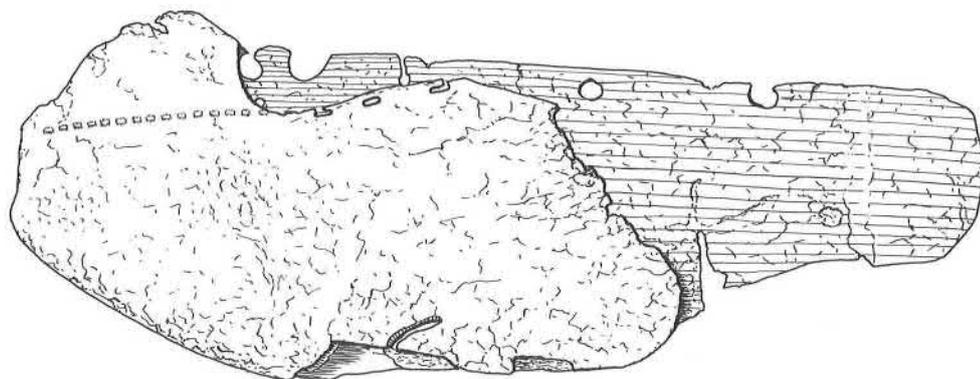
V/2008/1133; silting in 'lake' area.

416 Fragments of a shoe, including seven with evidence for working.

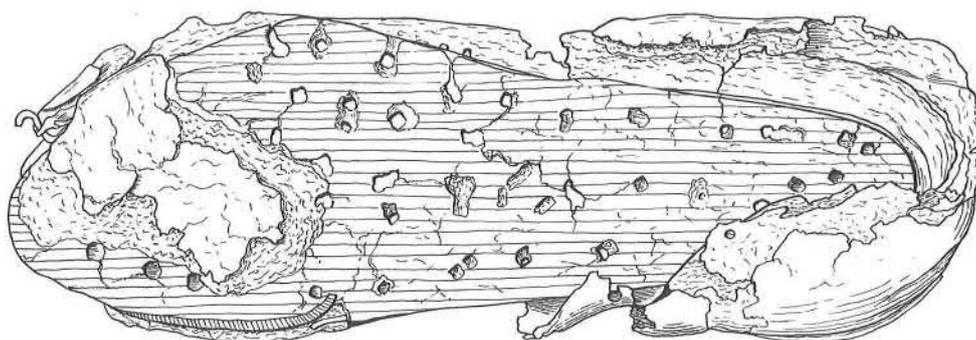
a) Seat to forepart waist of a sole, with central shank approximately 110 mm long. Layers and part of the upper are attached with thonging 5 mm wide. One hobnail survives through the shank and sole. Parts of the insole survive, including the part over the hobnail.

b) Heel stiffener with seat lasting margin. Length approx 120 mm, width 70 mm, with two rows of holes, the finer near the edge at 5 mm stitch length, and beyond larger holes, probably from nails, at 25 mm distance. Top edge peaked centre back (not illustrated).

c) Three sole fragments with hobnail holes. Dimensions; 110 × 85 mm, 80 × 60 mm, 60 × 50 mm. Largest fragment illustrated.

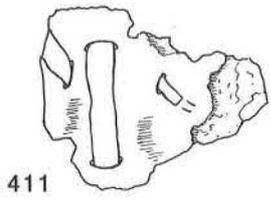


409

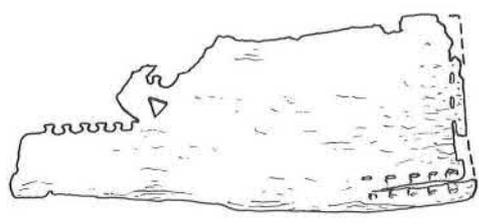


410

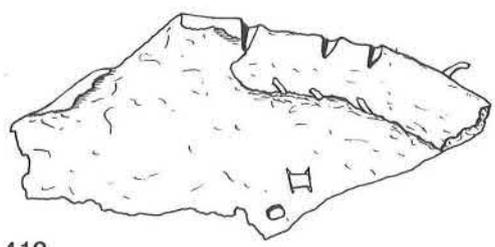
Figure 188: Leather shoes 409–410, scale 1:2.



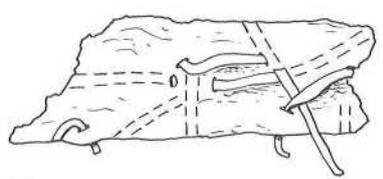
411



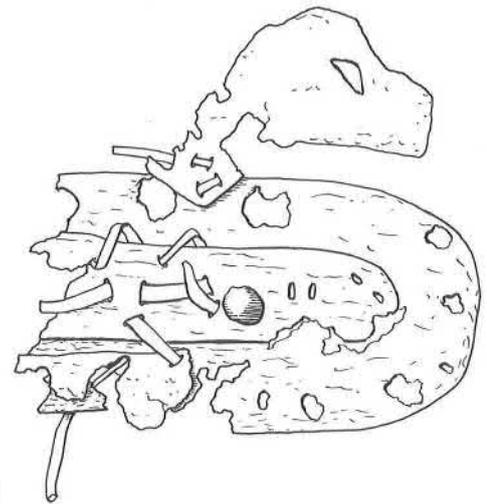
415



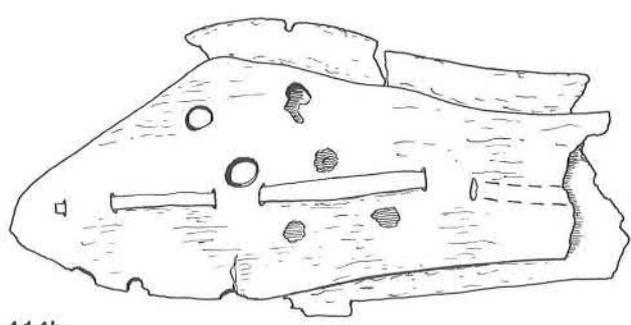
412



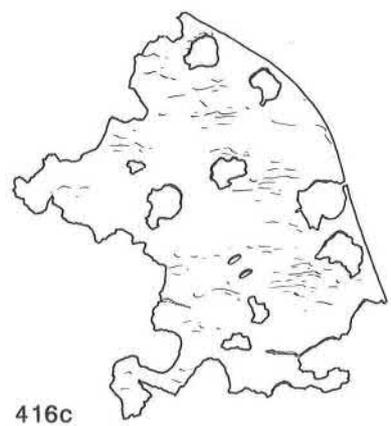
413



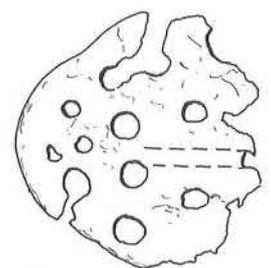
416a



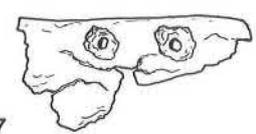
414b



416c



414c



417



Figure 189: Fragments of leather shoes 411–417, scale 1:2.

d) Upper fragment, dimensions 60 × 40 mm. Not illustrated.
V/2009/1168: fill, Pit 1166.

417 Fragment of sole edge with two hobnail holes and impression. Dimensions 60 × 30 mm. Fourth century.
V/2010/1196: fill, Ditch 1104.

ni Fragments of leather, ten of which have nail holes, indicating they are from hobnailed soles, though no nails survive; one of them also has a slit for thonging. Another piece is three layers thick. It is not possible now to be certain they are all from the same sole, or to suggest a nailing pattern, though seven indicate nailing close to a cut edge.
V/2005/1105: fill, Ditch 1104.

ni Fragment of upper from heel of shoe. Approximately 175 mm long and 35 to 40 mm wide. No lasting margin or other features survive.
V/2006a/1110: silting in 'lake' area.

WORKED STONE OBJECTS

Petrological identification of all the items in this report was undertaken by Drs John Watson and Olwen Williams Thorpe, both of the Earth Sciences Department, Open University.

Gaming Board (Fig. 190)

R. J. Williams

418 Gaming board, broken into several fragments. Made from a rectangular fragment of reused curved lining (p.234) in sandy limestone (stone type A, p.236) with a moulding across one end. One face, which is slightly concave across its width, has been roughly scribed with a checkerboard pattern, ten squares wide (215 mm) and at least twelve squares long (210 mm). Three of the edges are very clearly defined. A double line across the centre divides the board into two equal halves of six by ten squares. Individual squares range in size from 8 × 15 mm to 21 × 23 mm. Length 270 mm, width 235 mm, th. 28 mm.

M/138/431; upper fill, Ditch 94.

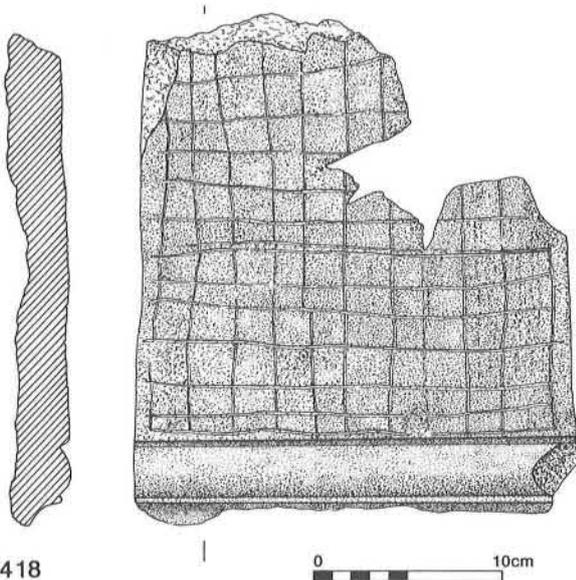


Figure 190: Stone gaming board 418, scale 1:4.

Gaming boards of this general type have been found on a number of Roman sites, including Richborough (Bushe-Fox 1928, pl. XIV, fig. 1), Sewingsheilds (Allason-Jones 1984, 160–61), South Shields (Allason-Jones and Miket 1984, 12.2), and other military sites including Chesters, Newstead and Corbridge.

It is probable that this board was used for a game called *ludus latruncularum* or the 'soldier's game' (Liversidge 1968, 350), in which the pieces were moved in a similar manner to a rook in chess, and pieces were taken by being surrounded by the opposing pieces. The most common board pattern for this game appears to have been eight by eight squares, although the South Shields example has eight by seven, and the Richborough example at least nine by eleven. The Bancroft board is one of the largest in terms of the numbers of squares discovered to date, and further indicates that there was considerable flexibility in the overall size of the boards used for this game.

A number of other items associated with gaming were found at Bancroft, including two lead dice (311, RMK no. 203), three possible dice boxes (340, 341, RMK no. 177), and 'counters' of dark glass (RMK no. 255), lead (312), fired clay (388, 389, RMK no. 192) and stone (RMK no. 201).

Jewellery and Ornament (Fig. 191)

Sonia Bird

419 Bracelet fragment, shale, with carbonate inclusions. Undecorated, rounded outer face; inner face has a groove either side of a central ridge. Length 45 mm, dia. (int.) 62 mm, height 8 mm, th. 6 mm.

V/369/620; soil spread, farmyard area.

One other shale bracelet (RMK no. 188), decorated with a stepped, notched design, was found in earlier excavations at the villa.

420 Bangle fragment, siltstone, flattened circular section, undecorated. Length 42 mm, dia. 58 mm, height 10 mm.

M/137/437; upper fill, Depression 340.

421 Two fragments of a fine white marble circular statuette base, with part of the figure's right foot remaining. The base is waisted, with rolled edges, tapering towards the top. The underside is roughly hollowed out. The figure was probably a deity, standing with the bare right foot forward. The marble used for this statuette is of a much better quality than that from which the cockerel (RMK, no. 193) is carved. Dia. 145 mm, height 40 mm. A similar piece, recorded by Lysons and now lost, was found at Woodchester (Clarke 1982, 207, 6).

V/34/2; V/147/175; destruction, Building 1.

422 Carved marble fragment, much abraded. A lopsided truncated cone, rising from a flat base. In the top, which is broken, is a hole, dia. 8 mm, drilled off-centre. Height 30 mm, base dia. c.38 mm.

V/238/1; topsoil.

Axe and Mace Heads (Fig. 191)

Sonia Bird

423 Pebble macehead. Quartzite erratic pebble, ovoid with hour-glass shape perforation drilled through slightly off-centre.

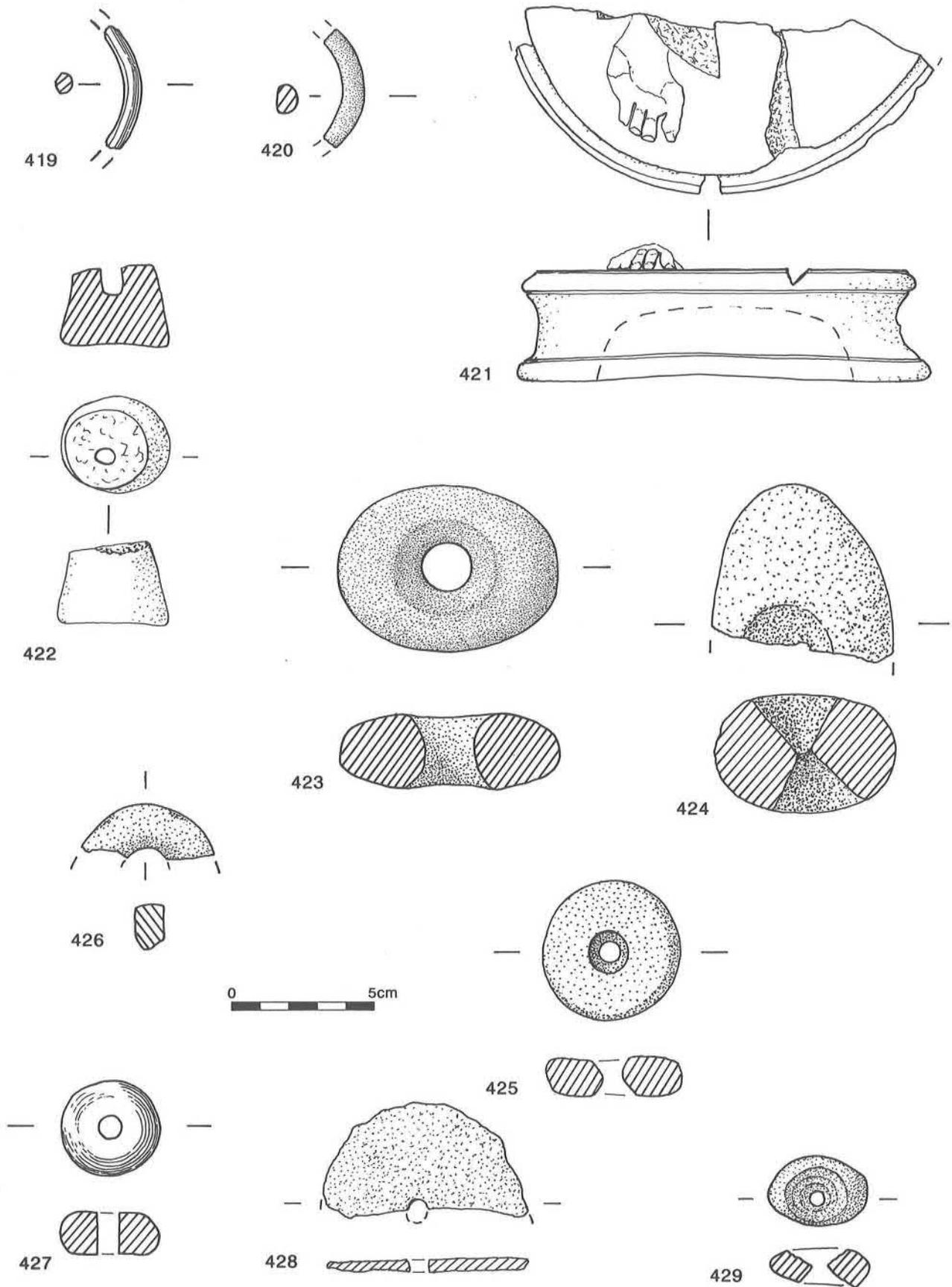


Figure 191: Shale bracelet 419; Siltstone bangle 420; Marble statuette base 421; Marble 'cone' 422; Pebble maceheads 423–424; Miscellaneous stone spindle whorls 425–429; scale 1:2.

Length 79 mm, width 60 mm, th. c.25 mm, hole dia. 18.5 mm.
V/344/571; fill, Ditch 699.

- 424 Macehead fragment, ferruginous sandstone erratic pebble. Oval, with incomplete central drilled hole, dia. 6 mm, similar to that in 423. Broken across narrow axis during making of hole. Surviving length 65 mm, width 64 mm, th. 42 mm.

M/170/1; topsoil.

- ni Flake from polished greenstone axe. Length 36 mm.

M/73/1; topsoil.

Spindle Whorls (Fig. 191)

Sonia Bird

Two pottery spindle whorls (RMK nos 190 and 191), one of shale (RMK no. 186) and one of bone (RMK no. 170) have been published previously, and a spindle whorl of Hadham ware (389) is described elsewhere in this volume (p.361).

- 425 Spindle whorl of fine-grained local Jurassic limestone. Central perforation made by drilling from both sides. Weight 48 g, dia. (ext.) 50 mm, (int.) 7 mm, th. 14 mm.

M/77/197; fill, Pit 197.

- 426 Spindle whorl fragment, of ferruginous quartzite. Drilled in similar manner to 425. Weight 12 g, length 45 mm, th. c.11 mm.

M/201/815; secondary silting, Ditch 94/95.

- 427 Spindle whorl of soft, poor quality jet, possibly local. Turned, undecorated thick annular body. Weight 13 g, dia. 35 mm, th. 15 mm, dia. of central hole 6.5 mm. A number of similar shale spindle whorls were recovered from sunken featured buildings at West Stow (West 1985), all of which were dated to the fifth or sixth century. Given the location of the Bancroft example, it is also likely to date from the early Saxon period.

M/194/726; primary silt, sunken featured building 604.

- 428 Half of a roughly made limestone disc with a drilled central hole. Possibly an unfinished spindle whorl. Dia. (ext.) 71 mm, (int.) 6 mm, th. 3–5 mm.

M/78/176; fill, Pit 197.

- 429 Oval disc of chalk, with roughly central hole with exaggerated taper, made by drilling with three drills of different sizes. Hole 5 mm dia., weight 10 g, length 35 mm, width 25 mm, max. th. 12 mm.

M/160/506; fill, Ditch 593.

Whetstones (Fig. 192)

Sonia Bird

- 430 Whetstone fragment, of fine calcareous sandstone. Oval section, with a vertical groove, worn by point sharpening. Length 100 mm, section 25 × 33 mm. Fourth century.

V/368/614; upper fill, 'industrial' area 695.

- 431 Whetstone fragment, fine-grained micaceous sandstone. Rounded-square section at base, narrowing to oval section at broken end. Length 40 mm, width at base 20 mm.

V/782/1004; destruction, Building 10.

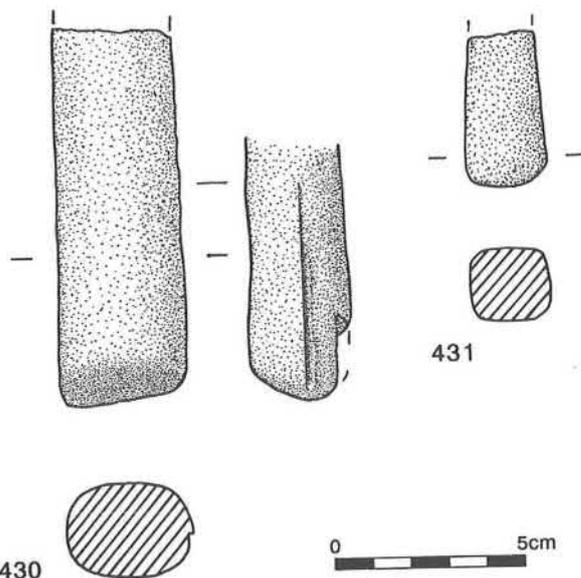


Figure 192: Whetstones 430–431, scale 1:2.

Querns and Millstones (Figs 193, 194)

Ros Tyrrell

- 432 Saddle quern fragment, of fine quartzite. Worn concave on long axis only. Surviving length 145 mm, width 200 mm, th. 35–110 mm.

M/172/485; fill, Ditch 474.

- 433 Saddle quern, almost complete, made from large quartzite pebble. Concave in both directions, showing a pocked surface with some wear, suggesting that it has been resurfaced at some time. Fire-reddened and damaged. Length 330 mm, width 200 mm, th. 55–105 mm.

M/174/275; pit/posthole in centre of Building 500.

- ni Fragment of millstone grit saddle quern. Length 330 mm, height 150 mm.

V/805/854; cobbled yard 979.

- ni Saddle quern fragment, millstone grit. Very pronounced parallel striations running across the surface. Length 285 mm, height 92 mm.

M/211/882; lowest fill, Well 880.

- 434 Lower stone of rotary quern, millstone grit. Central perforation, dia. 14 mm, for spindle, with traces of radial grooves. Excessively worn on one side, possibly because the opposite side includes a band of coarser rock. Dia. 270 mm, height 75–90 mm.

M/114/149; fill, Ditch 60.

- 435 Rotary quern upper stone, millstone grit. Lower surface well-worn, particularly on one side, like 434. Broken; split along the line of weakness between the holes for the two handles. Ext. dia. c.290 mm, height 118–170 mm. Dia. of central hole c.90 mm, narrowing to 34 mm at the lower surface.

M/173/589; fill, pit/posthole 589.

- 436 Rotary quern fragment, upper stone, millstone grit. Well-worn lower surface. Dia. c.400 mm, max. th. 40 mm.

V/244/1; topsoil.

- ni Rotary hand quern, fragment of lower half. A trace of the

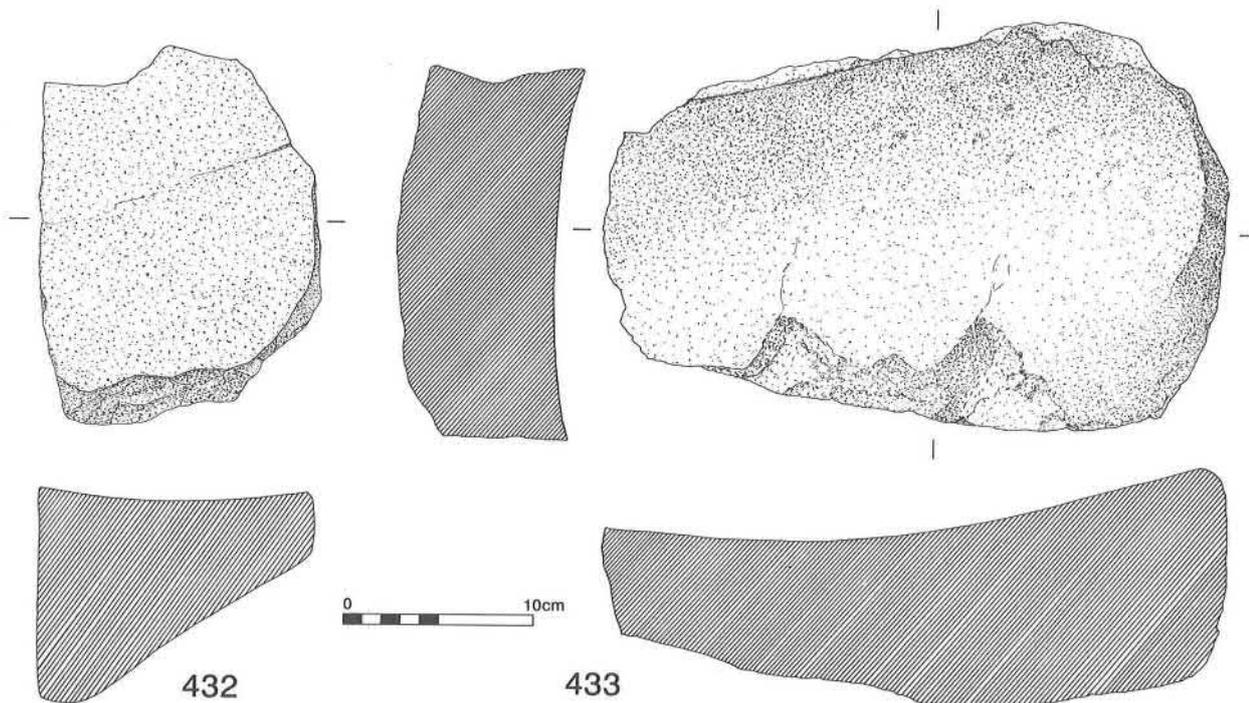


Figure 193: Saddle querns 432–433, scale 1:4.

central spindle hole survives. Dia. 270 mm, height 60–78 mm.

M/206/815; secondary silting, Ditch 94/95.

- ni Rotary quern fragment, glauconitic sandstone, possibly from Lodsworth, W. Sussex. Length 175 mm, width 65 mm.

M/212/879; burnt layer, fill, Ditch 60.

- 437 Millstone, of millstone grit, in many fragments. Lower, stationary stone, with heavily tooled underside and slightly convex upper surface, with numerous concentric wear grooves. The size of this stone suggests that it might have been part of a small 'donkey' mill. Dia. 750 mm, th. 38–70 mm, hole dia. 80 mm.

V/131/316; destruction rubble, Building 6.

- ni Millstone, millstone grit.

V/-/931; soil spread south of Building 12.

- ni Millstone, millstone grit.

V/-/1002; destruction, Building 10.

The following quern/millstone fragments were identified as being lava, probably from Mayen, despite the fact that they have finer vesicles than most Mayen rocks. They also contain feldspar crystals up to 3 mm across, and pyroxene up to 5 mm.

- ni Fourteen fragments of lava quern, some heavily worn to a thickness of 29 mm.

V/-/1026; fill, Gully 1025.

- ni Nine fragments of lava quern, badly abraded, max. th. 34 mm.

V/-/1049; fill, Gully 1025.

- ni A lava quern, with a very worn grinding surface and fine lines of tooling on the outer surface. Th. 25 mm.

V/-/1195; intermediate layer, Enclosure 1208.

WORKED FLINTS

Julian Richards

Groups of worked flint from both excavation and field survey at the villa and mausoleum sites were examined. The total number of pieces recorded was 585, of which 449 (77%) were from the villa excavation and the adjacent field.

None of the flints examined were recovered from stratified prehistoric contexts and, with few exceptions, most individual excavated contexts produced only small numbers of flints. Accordingly the worked flints have been treated as one unstratified assemblage, and analysis has been undertaken primarily to provide evidence for phases of pre-Roman (and essentially pre-Iron Age) activity in the broad area of the villa and mausoleum.

A preliminary examination of the assemblage and of the individually diagnostic tools separated out during initial stages of post-excavation work suggested a very mixed date range. The emphasis on both cores and tools, specifically scrapers, hinted at some bias in the collection and suggested that any form of metrical analysis would be inappropriate. Accordingly an initial catalogue was prepared separating material by context and site into broad technological and functional categories. Table 33 provides a summary of this catalogue, a more detailed version of which, together with a full tool catalogue, is contained within the Level III archive.

Themes for subsequent analysis included: raw material, technology and product, chronology and function.

Condition

Most of the material examined was in very fresh condition, with minimal post-depositional damage. Patination (sometimes described as cortication) was very mixed with surface

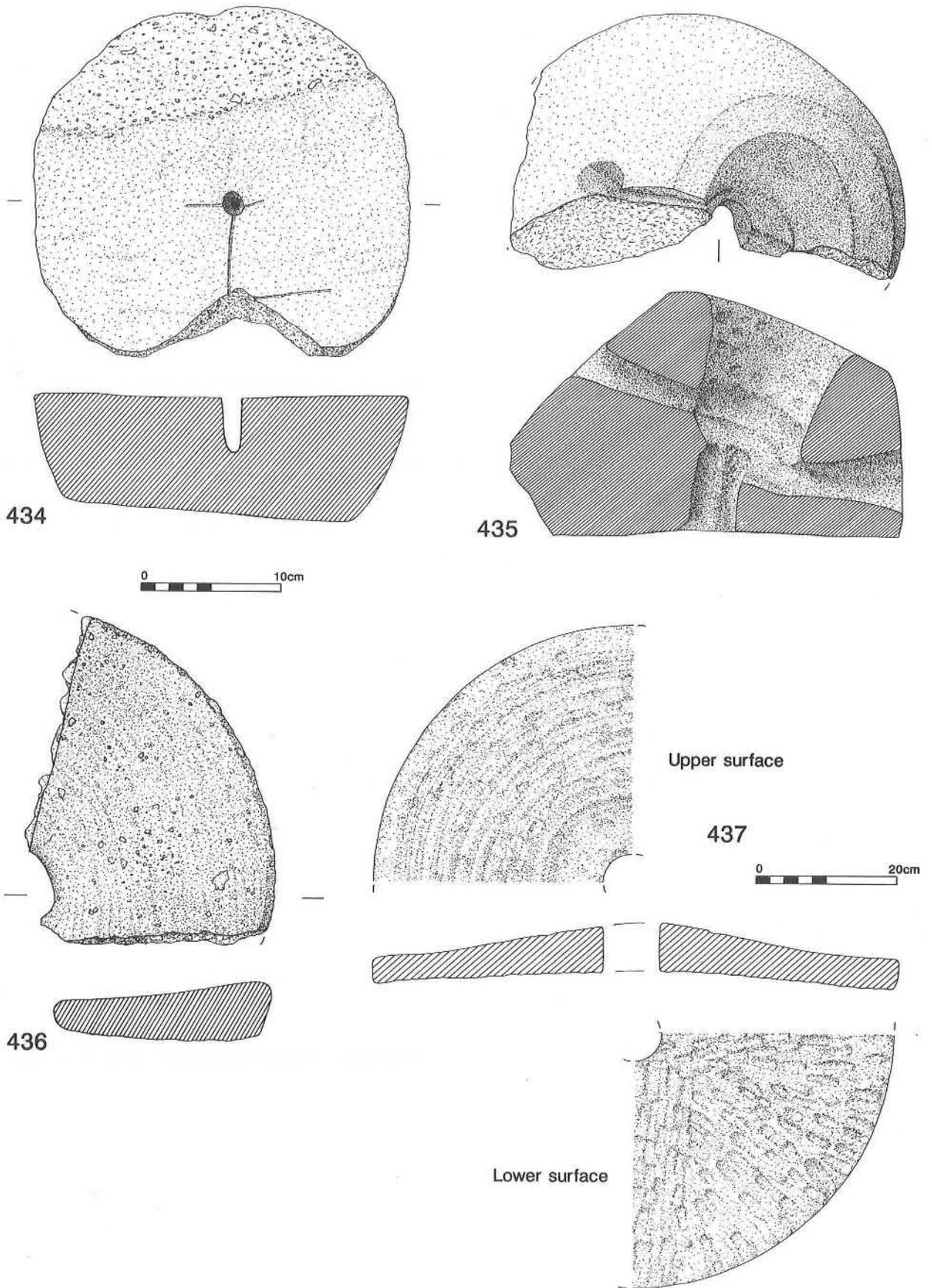


Figure 194: Rotary querns 434–436, scale 1:4; Millstone 437, scale 1:8.

1. ALL FLINTS													
CONTEXT	CORES			FLAKES			BLADES			TOOLS	CHIPS	TOTAL ex chips	
	Flake	Blade	Frag.	Comp	Brk.	Ret.	Comp	Brk.	Ret.				
<i>Villa:</i>													
1973	2	2	4	37	12	3	11	9	3	9	5	92	
1974	–	–	–	7	6	1	1	–	–	3	1	18	
1975	4	–	–	20	8	1	2	2	–	1	–	38	
1976	12	7	2	46	26	9	24	–	3	8	1	137	
1977	1	–	–	6	1	1	1	–	–	1	1	11	
1978	3	4	2	50	11	7	9	9	–	4	12	99	
1983	–	1	–	–	–	–	–	1	–	2	–	4	
1984	–	–	–	1	1	–	3	–	–	2	3	7	
1985	–	–	–	3	–	2	2	–	–	1	–	8	
U/S	5	2	2	4	–	1	–	1	–	2	1	17	
Villa field	1	–	1	6	2	3	–	–	–	5	–	18	
TOTAL	28	16	11	180	67	28	53	22	6	38	24	449	
<i>Mausoleum:</i>													
1083/4	3	–	–	32	9	6	7	2	5	11	–	75	
1985	–	–	–	20	9	2	2	1	–	3	–	37	
Field sur.	4	–	6	10	4	–	–	–	–	–	1	24	
TOTAL	7	–	6	62	22	8	9	3	5	14	1	136	
OVERALL TOTAL	35	16	17	242	89	36	62	25	11	49	25	585	
2. TOOL SUMMARY													
	CORE TOOLS				Scraper	ARROWHEADS		FLAKE TOOLS					TOTAL
	AXES			Transch.		Trans.	B & T.	Knife	Borer	Burin	Micro	Fabr.	
<i>Villa:</i>	1	2	2		14								1
<i>Mausoleum:</i>	–	–	1	9	–	–	3	–	–	1	–	14	
OVERALL TOTAL	1	2	3	23	1	4	9	2	1	5	1	52	

TABLE 33: Breakdown of flints by site and type.

colour ranging from unaltered dark grey/black through to cream/white, the latter generally considered to be caused by calcareous burial conditions. A range of ochreous surface colours was also noted. Although patination appears to have no direct correlation with chronology, useful indication of the re-use of raw material was provided by pieces where retouch cut through an already patinated worked surface.

Raw Material

On the basis of observed cortex, the majority of the raw material appears to be small nodules or pebbles derived from gravel deposits. An indication of the relatively small size of available raw material is provided by the overall size of both

flakes/blades and cores, while the care with which productive cores appear to have been husbanded suggests that suitable raw material was not readily available. The only exception to this use of gravel flint is provided by a tranchet axe (438) which appears to have been made from relatively coarse chalk flint, together with a blade core and a flake, both from the villa site, which appear to be of a fine-grained grey chert.

Method of Production

With one exception, a blade from the mausoleum showing the lipped butt which is one of the more obvious characteristics of soft hammer production (Ohnuma and Bergman 1982, 166), flaking was most probably carried out using hard

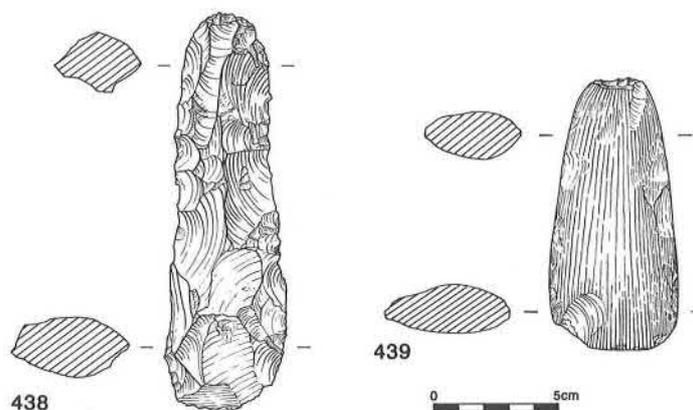


Figure 195: Flaked axe 438; Polished axe 439, scale 1:3.

hammers. Very little evidence of the use of discarded cores for this purpose was recorded, and indeed when discarded many would have been too small for this purpose.

Cores

Of the fifty-one cores recorded, the majority were from the villa site. Here both flake (64%) and blade (36%) cores were represented, in contrast to the mausoleum where only flake cores were found. The blade cores from the villa site include five examples with a single platform and four with two opposing platforms. The remainder are less specific, and include examples where considerable rotation of the core has taken place prior to discard. Flake cores include both single and multiple platform types.

There is much evidence for platform abrasion, and many of the blade and single platform flake cores show signs of rejuvenation. Despite this, only two examples of rejuvenation tablets were noted in the assemblage. The majority of cores appear to have been rejected only when their size rendered them unproductive. With the exception of one large 'tested nodule' weighing 194 g, the mean weight of the cores from the villa is 24.8 g, with some exceptionally small examples weighing as little as 9 g. This use of cores beyond what appears to be a productive stage in some cases renders the original product difficult to assess. Consequently, it is possible that blade cores may be under-represented in the totals shown in Table 33.

Core Product

The assemblage contained a total of 465 flakes and blades, including both broken and retouched examples. Blades have been defined on the basis of a length/breadth ratio greater than 5:2 and, in addition, a more subjective individual assessment has been made on the method of production. This assessment, designed to determine whether the production of a blade was deliberate or unintentional depends largely on the identification of ridges deliberately employed to guide flake shape (Gingell and Harding 1979) the overall length of any flake or blade being directly related to the length of the core.

The ninety-eight blades form 21% of the overall flake/blade population, a figure which may suggest that such forms are

more readily identifiable, but which, together with the evidence from the cores, suggests considerable emphasis on their production. It is clear from retouched pieces that blades were at least partly being produced as the initial stage in the manufacture of specific tools (see below).

No further analysis of flakes was undertaken. A thinning flake, representing debitage from the manufacture of a core tool (possibly an axe), was noted from the mausoleum site.

Tools

A summary of the tools by site is contained in Table 33.

Core Tools (Fig. 195)

- 438 Tranchet axe: a large example (160 mm long) which appears to have been made from a rather cherty chalk flint. The axe has been produced by bifacial flaking and shows evidence of abrasion of individual flake platforms. The cutting edge has been produced by a tranchet blow.
- 439 Ground axe: a finely ground axe, with evidence for multi-directional grinding striations. This axe is patinated yellow/pale ochre colour, and may be made of flint that is not locally available. A further fragment of a finely-ground tool (assumed to be an axe) was noted, together with three rudimentary bifacially-worked tools (recorded as discoids).

Scrapers (Fig. 196)

These form the most common tool type (44% of the total) and, as a group exhibit a considerable degree of homogeneity. Fig. 197 shows the dimensions of eighteen complete examples, and indicates a trend towards small flake blanks with length/breadth proportions close to 1:1. The majority have been selected (or deliberately produced) as having a dipped profile and retouch, predominantly at the distal end of the flake, which is generally fine and regular. Several examples, including the smallest of those recorded, exhibit the shallow invasive retouch often regarded as characterising Beaker period 'thumbnail' scrapers (Gibson 1982). In the context of this assemblage it is equally likely that they may be of Mesolithic date.

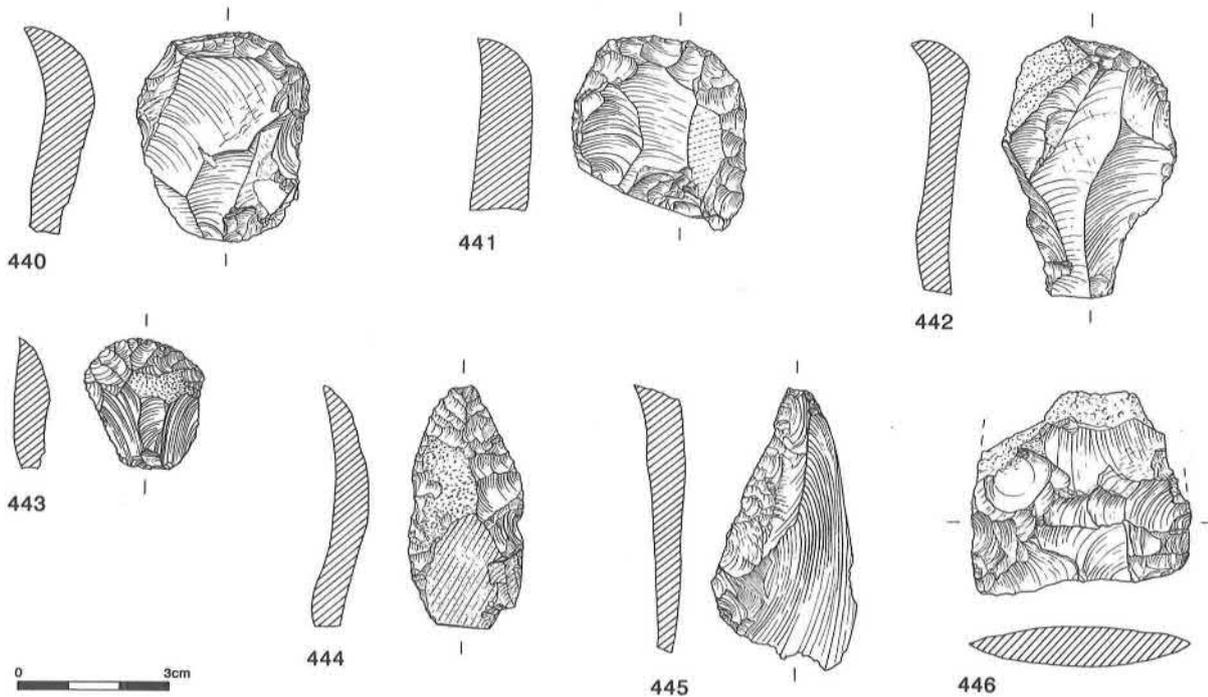


Figure 196: Scrapers 440–443; Knives 444–446, scale 2:3.

Evidence for the use of scrapers on site is provided by two examples one whole, the other broken, both from the villa site, which exhibit traces of considerable wear to the scraping edge.

Fig. 196.440–443 illustrates a selection of scrapers.

Knives (Fig. 196)

Fig. 196 illustrates a selection of knives. 444 represents the most common form (five out of nine examples) where the backing is natural, in this case retained gravel cortex. 445 is of plano-convex form, the invasive retouch, which is largely confined to the dorsal surface, cutting patination. The raw material for this example may, on the basis of surviving cortex, be tentatively suggested as being chalk flint. 446 is a broken and fire-damaged fragment of a finely ripple-flaked

knife with invasive retouch extending across the entire width of both faces (only one illustrated). Although the form of this piece is impossible to determine with certainty, the workmanship and the curvature of the surviving edges make it possibly a fragment of a dagger.

Arrowheads (Fig. 198)

These include a single example (447) of a transverse arrowhead of Green's chisel form (Green 1980, 30) which may be suggested as being of later Neolithic date (Wainwright and Longworth 1971), together with four examples of barbed and tanged forms. These, including one apparently unfinished example, vary considerably. The illustrated examples include those of Green's (1980) Sutton type (448, 449), together with an unusual example utilising as a blank a patinated flake or blade (450).

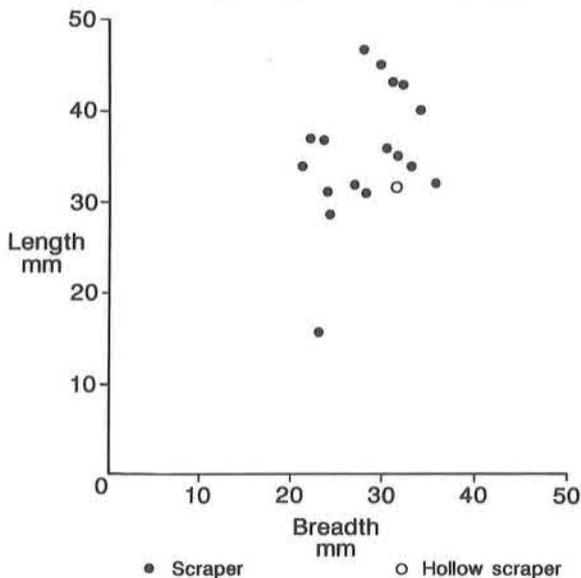


Figure 197: Scraper length/breadth ratios.

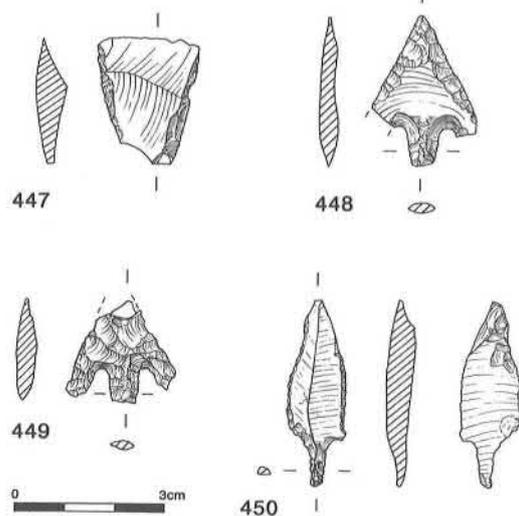


Figure 198: Arrowheads 447–450, scale 2:3.

Other tool types

Other flake tools (none illustrated) include a borer (awl) with visible wear traces and a fabricator. Evidence for the modification of blades is provided by a notched example, a burin, a single microburin, a microdenticulate and two microliths, both of simple crescent form.

Activity and Chronology

On the basis of observed technology and chronologically diagnostic pieces (primarily retouched forms) it can be suggested that the following phases of activity (in its loosest sense) can be identified:

Mesolithic

Blade production and use is represented by both cores, blades and microliths/microburins. There appears to be some evidence that this activity may be more concentrated within the villa site area. Blade cores concentrate within this area and the percentage of blades within the overall flake population is higher (23% compared to 15.6% on the mausoleum site). Some confirmation of Mesolithic activity, if not *in situ* then relatively undisturbed, is provided by a small and discrete group of material recorded during the 1978 season to the north of Building 1 and west of Building 8. This group of flakes, blades and bladelets includes a microdenticulate.

Neolithic

Although a proportion of the flake/blade assemblage could belong to the earlier part of this period rather than to the preceding Mesolithic the sole positive evidence for Neolithic activity is provided by the two ground axes for the earlier part of the period and by the fabricator and transverse arrowhead for the later. It appears therefore that there is evidence for only sporadic activity on the sites during the Neolithic period.

Bronze Age

A contrast is provided by the Bronze Age, despite difficulties in the recognition of debitage of this period within an assemblage of this type. The composition of the scraper assemblage has already been noted, with suggestions of a Beaker period bias, and such scraper types may well be associated with the arrowheads of barbed and tanged form, and with a proportion of the knives. There appears to be sufficient evidence to suggest a phase of domestic activity (attested by the wear traces on both scrapers and a borer) belonging to the earlier to middle part of this period.

Summary

The examination of this essentially mixed assemblage has enabled a succession of phases of prehistoric activity ranging from the Mesolithic to the Bronze Age to be identified. More detailed spatial analysis may enable specific areas of activity, most likely of Mesolithic date, to be retrospectively identified.

SLAG

The Villa

Gerry McDonnell

Introduction

A total of 25.6 kg of material grouped as slag was examined. Morphological examination classified the slags into six types.

Classification

The slag was classified into the following types:

Smithing Slag (SSL)

Iron silicate slag generated by the smithing process. It occurs in randomly shaped pieces, usually not exceeding about 100 g.

Hearth Bottom (HB)

Plano-convex accumulations of smithing slag, formed into the characteristic shape in the hearth. Only four examples were present in the Bancroft slag. They were all about the same size, being about 100 mm in diameter, 30 mm thick, and between 200–300 g.

Cindery Smithing Slag (SSL-CIN)

Most of the slag was morphologically between SSL and CIN. Thus it is possible that not all the material identified as SSL-CIN derived from the smithing process. The difference between SSL and CIN is the lower iron oxide content of the CIN, and that the SSL conforms to an overall iron silicate (fayalitic) composition. Thus the SSL-CIN is effectively SSL depleted in iron oxide. It is a general observation that SSL (and HBs) are richer in silica during the Romano-British period when compared to Iron Age or post-Roman to early medieval slags. This probably is due to different smithing traditions or techniques.

Cinder (CIN)

A higher silica content residue that is not necessarily derived from the ironworking (smithing or smelting) process. The Bancroft villa CIN had a white/grey colour and was very vesicular. It is possible that this material derived from the production or resulted from the production/use of mortar.

Hearth Lining (HL)

The vitrified clay lining of a hearth, furnace or kiln. There was only a small amount recovered, and only a single tuyère mouth, the latter from Context 630. The tuyère mouth is the hole in the hearth wall through which the air blast was directed. It was incomplete, only an arc of the hole, and had a maximum diameter of about 20 mm. This is the usual

diameter observed in tuyère mouths in Britain from the Iron Age through to the medieval period.

Other Material

This included charcoal, coal, a lump of refractory clay, and fragments of iron, including a possible bloom fragment (removed for analysis).

Distribution

The total quantity of each slag type is given in Table 34, and full details listed by context number are given in Appendix 7. This table shows that the SSL-CIN was the dominant slag type. In general, the quantities of slags present in contexts is at background level, *ie.* the expected general scatter of slag found on Roman-British sites. These slags derive from ironsmithing activity in the vicinity, but background quantities are insufficient to indicate that smithing was carried out in the areas excavated. Higher quantities of slags may indicate areas of smithing activity or dumping of smithing waste.

Slag type	Weight (kg.)
SSL:	3.9
SSL-CIN:	18.4
HB:	1.0
CIN:	0.5
HL:	0.4

Table 34: Total weight of each slag residue type in the villa assemblage.

Group	Contexts	SSL	SSL-CIN	HB	CIN	HL	Other
A	117	365	—	—	—	—	—
	185	167	—	—	—	—	—
B	176	—	1278	—	—	—	15
	459	83	1155	—	—	—	—
C	359	—	15	—	—	—	—
D	466	18	—	—	—	—	—
	467	151	—	—	—	—	—
	468	77	—	—	—	—	—
	496	369	—	359	—	—	—
E	581	459	—	175	—	—	—
F	606	—	696	—	—	—	—
	614	372	843	—	—	—	—
	616	—	238	—	—	—	—
	628	161	—	—	—	—	—
G	630	—	9030	—	—	436	—
H	881	—	1765	—	—	—	—
	883	—	506	—	—	—	—
	892	—	407	—	—	—	—

Table 35: Weights (g) of each slag type in Groups A–H from the villa.

The contexts containing the slag deposits had been grouped on stratigraphic criteria into eight groups (A–H). These comments do not include the detailed archaeological information. A summary list of the weights of slag in each group is given in Table 35.

Group A

Building 1 Room 11; Contexts 117 and 185.

Date: late third century.

A small quantity of smithing slag (SSL) which is considered background level (Total weight: 532 g).

Group B

Building 8; Contexts 176 and 459.

Date: fourth/fifth centuries.

The presence of 2 kg of SSL-CIN may derive from smithing activity associated with the destruction of Building 8. If the destruction was deliberate, the iron may have been retrieved and recycled.

Group C

Building 1, Room 3, Hearth 358; Context 359.

The fragment of slag present in the hearth fill was SSL-CIN, although this cannot be used to confirm the hearth as a

smith's hearth. The presence or absence of hammer scale would be a better indicator of use. It is also possible that a hearth built during the construction phase could have been used for a number of purposes, including a small amount of iron smithing.

Groups D and E

Group D: Soil spread north of Building 8; Contexts 466, 467, 468 and 496.

Group E: fill of Ditch 511; Context 581.

Date: fourth century.

These contexts are midden deposits containing a general mix of domestic waste. The slags are smithing waste (SSL plus 1 HB, total weight in Group D: 974 g, and in Group E: 634 g). It is interesting to note that they are the fayalitic slags rather than the more cindery SSL-CIN. The difference in composition between these slags has not been investigated. However, one interpretation is that the denser silicate slag represents long-term smithing, e.g. the slag produced by a full-time smithy, and that the cindery slag represents short-term immediate cruder smithing, perhaps associated with the destruction of the villa. However, both types are present in Groups F and G (see below). They may therefore represent different activities in the smithing process, e.g. simple folding and shaping or fire welding.

Groups F and G

Group F: 'Industrial Area' 698; Contexts 606, 614, 616, 628.

Group G: Pit 707; Context 630.

Date: fourth century.

The slags comprise some SSL (total Group F only: 533 g), a large quantity of SSL-CIN (total Group F: 1777 g, Group G: 9030 g), and some hearth lining, (Group G: 436 g). Flake hammer scale was noted in the soil in the bags containing the Group G slags. This strongly suggests that this area was used for smithing. The cindery nature of this slag may be due to the limestone, resulting in excess silica and lime in the slag. It is unlikely that Pit 707 was the hearth, as there would have been insufficient air blast, unless there is evidence to support its use (e.g. heat-affected). It may have been sub-divided and only part used as the hearth. However, it must have been open at the time of the smithing activity.

Group H

Building 11; Contexts 881, 883 and 892.

Date: fourth century.

A total of 2678 g of SSL-CIN was recovered from a complex of features. The archaeological evidence suggest that they were contemporary with Groups F and G. The slag is the same type, which would support this interpretation.

Discussion

Groups A-H contain nearly 60% of SSL and over 85% of SSL-CIN. They are all of late third or fourth-century date. These slags either derive from smithing activity associated with the destruction of the villa or are evidence for later occupation of the site. The latter could be a return to the site to recycle materials.

Conclusion

The evidence of the residues demonstrates that there was a period of smithing activity during the destruction of the villa or at some post-abandonment stage. It is possible that this represents recycling of iron work in the villa. There is no evidence for iron smelting on the site, either during construction of the villa, or during the occupation of the site. There is evidence for iron smelting on the Roman site of Magiovinium. There is no strong evidence for the presence of a working smithy attached to the villa from the evidence recovered.

The Mausoleum

Rod Clough

The site produced only a small quantity of material derived from pyrotechnological processes, and only a small proportion of this material can be ascribed to metallurgical activities. The late first to early second-century samples from Enclosure Ditch 2 (Contexts 25 and 428; Table 36) both derive from the bloomery process. The microstructure of both these pieces was typical of bloomery slag, with fayalite laths, wustite, and a glassy matrix. It is very difficult to distinguish between smithing and smelting process slags on the grounds of mineralogy or composition, but with such a small quantity being recovered from the site, they probably derive from a small forge.

The material from late Iron Age Roundhouse 101 (Context 127) is possibly the remnants of a mould, and that from first-century Cremation 10 (Context 518) crucible material. However, analysis by X-ray fluorescence (XRF) of the yellowish accretion on some of the crucible material proved inconclusive.

The overall picture presented by the study of this material is one of only ephemeral metallurgical activities being carried out on the mausoleum site at any period.

Author's note: a fragment of probable late Bronze Age clay mould (Fig. 186.393), possibly associated with bronze working, was identified in the fired clay assemblage after this report had been completed.

Catalogue

A full description of the twenty-one samples appears in Table 36.

Note: vfa = vitrified fuel ash. This term is used to describe a range of vitrified materials which could derive from a number of pyrotechnological processes. It normally consists of clays or quartz, fused together with fuel ash constituents such as potash or lime.

Foam or frothy vitreous material also falls into the category of vfa, being commonly associated with many pyrotechnological processes, particularly metal and glass produc-

tion. The foaming is related to composition and the temperature of the process, and normally reflects heterogeneity of the melt.

<i>CONTEXT</i>		<i>MATERIAL</i>		
<i>No.</i>	<i>Description</i>	<i>Date</i>	<i>Weight(g.)</i>	<i>Description</i>
24	upper fill, Enclosure 2	eRB	2.0	Small piece of blue glass. XRF analysis indicated that iron and a trace of copper were the colourants.
25	upper fill, Enclosure 2	eRB	7.5	Small lump of bloomery slag with adhering oxy-hydroxides.
39	fill, Ditch 60	eRB	10.5	Light vitrified fuel ash.
41	fill, Trench 41	LBA	12.8	Vitrified material, but possibly including some slag.
77	Soil spread	RB	9.7	vfa.
127	fill, Roundhouse 101	IA	86.0	Mould material?
134	fill, Ditch 111	IA	36.5	vfa.
171	fill, Roundhouse 164	IA	28.5	vfa., light and porous.
191	fill, Roundhouse 101	IA	6.0	vfa., low density, porous.
286	fill, Ph 286	LBA	3.0	vfa.
295 (2)	fill, Ph 295	LBA	2.0/10.3	vfa/agglomeration of many small pieces of slag and mud.
303	fill, Ph 303	LBA	3.0	vfa., but with some oxy-hydroxides.
380	fill, Ph 380	LBA	2.4	vfa.
394 (2)	fill, Ph 394	LBA	2.0/30.0	vfa - porous foam / iron ore nodule.
428	fill, Enclosure 2	eRB	59.0	Dense grey slag?
494	fill, Roundhouse 334	IA	21.0	vfa.
503	fill, Ditch 98	IA	3.5	very porous slag to vfa.
518a	Cremation 10	eRB	20.0	From cremation: possibly vitrified crucible fragments.
518b	Cremation 10	eRB	54.0	From Pot 1: all vfa.
519	Cremation 11	eRB	24.0	Moderately dense, light grey heterogeneous vitrified material. Microprobe analysis indicated that this consisted of many quartz inclusions, along with inclusions of apatite in a glassy matrix comprising silica, alumina, calcium and potash. There was no indication to suggest a metallurgical origin.
581	fill, Trench 288	LBA	3.0	Mud and vfa.

TABLE 36: Catalogue of slag and associated material from the mausoleum site.

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The Pottery

EARLY BRONZE AGE POTTERY

C.S.M. Allen

Three sherds of early Bronze Age pottery were found in two post holes inside the late Bronze Age Building 500. Sherd 2 (Fig. 202) is part of the collar of a pot with incised chevron decoration, and many examples of this type of decoration are known in the Midlands and elsewhere, for example at Coneygre Farm, Notts. (Allen 1987, fig. 10.54) and at Tyringham, Bucks. (Longworth 1984, no. 61). Sherd 3 (Fig. 202) is from the lower part of the collar of a pot with fingernail decoration in horizontal rows. This decoration is unusual on collared vessels, but is common on other vessels in the Midlands in the second millennium BC, as seen on a pot from Normanton, Lincs. (Allen 1988, 306).

Sherd 21 (Fig. 202) came from the collar of a large and well-fired vessel. The method and pattern of decoration of the collar of this pot is very similar to a small pot found at Dalby cum Skewsby, North Yorkshire (Longworth 1984, 1112). The grog-tempered fabric of the pot is common in the Midlands area in the mid-second millennium BC.

The type and method of decoration used on these pots suggests that they could be contemporary, and places them in the mid-second millennium BC (Allen 1988, 159ff). Since there is no evidence that the location was used for burials, this pottery suggests that there was earlier occupation on this site in the Bronze Age period.

LATE BRONZE AGE AND IRON AGE POTTERY

David Knight

Introduction

A total of 3699 sherds (49.221 kg) of Late Bronze Age and Iron Age pottery was obtained during excavation, including a remarkable range of Late Bronze Age/Early Iron Age vessels, mainly from Building 500 and Hollow 340. Small quantities of typologically diagnostic Late Bronze Age/Early Iron Age sherds were also obtained from ten other contexts: one of the postholes (322) of Four-Post Structure 293, two curvilinear ditches cutting Building 500 (99 and 263), Pits 270 (cutting Ditch 263) and 330 (east of Building 500), Posthole 355 and the ditches encircling Roundhouses 101, 262, 334 and 634 (Table 37). A proportion of this material could have been incorporated by accident in features cutting Building 500 (notably Roundhouses 262 and 334, Ditches 99 and 263 and Pit 270), while much of the remainder could also have been redeposited. Some of these vessels may date from as early as the ninth or eighth centuries BC, but a proportion at least could date from the earlier Iron Age (as late perhaps as the fifth/fourth centuries BC).

A wide range of other contexts, and in particular most of the roundhouse ditches, produced collections of handmade Iron Age pottery which on formal and decorative grounds invite comparison with typical later Iron Age material from the region (dating from the fifth/fourth to first centuries BC). Much of this derived from contexts which contained 'Belgic' and Romano-British pottery, suggesting both significant redeposition of material and the continued use of long-established ceramic types into at least the mid first century AD.

Methods of Analysis

Individual sherds and groups of sherds which definitely derived from the same vessel were catalogued separately by context. This was carried out by Yvonne Parminter between June and October 1987, under the supervision of the writer, and the following attributes were recorded: vessel fabric; surviving portions of vessel; form (profile class, rim and base form); dimensions (diameter; base; surviving percentage of rim and base; height of vertical axis; wall thickness); nature and extent of surface finish and/or decoration; condition; surface deposits; method of manufacture; firing conditions; stratigraphic phase; cross-context joins. Quantification of the prehistoric pottery was by sherd numbers and weight, and the information was entered to a computer data base, employing dBase III software. All sherds which on typological grounds may be classified as late Bronze Age or Iron Age are included in the quantitative analyses which are summarised below, unless stated otherwise. A list is provided in Table 37 of the pottery from features which on artefactual and stratigraphical grounds may be assigned to the Late Bronze Age/Early Iron Age and Middle Iron Age phases of the site.

Fabrics

The fabrics were divided initially into eighteen types by Yvonne Parminter, who selected one example from each for thin sectioning. Detailed descriptions of each thin section were prepared by Dr. C.O. Hunt, with comments on the possible sources of the raw materials, and are contained in the Level III site archive. These types have been grouped by the present writer into five main fabrics on the basis of variations in the range of inclusions which may be observed within the clay matrix, with the assistance of a $\times 30$ lens. These are described below, following which the relative frequencies of each fabric group and the problem of determining raw material sources are considered.

Descriptive Conventions

The following conventions are employed below and in the pottery catalogue:

CONTEXT	FORM TYPE						DECORATION TYPE						FABRIC GROUP				
	CB	FB	C	RS	OV	O	FR	FG	C	F	CI	S	S1	S2	S3	Q1	G1
Hollow (340)	4/35	2/60	-	2/10	-	-	-	1/5	-	9/95	-	-	166/1209	131/1268	5/25	-	-
Building (500)	55/606	6/29	40/663	4/198	2/140	-	-	1/13	1/40	15/115	6/392	-	509/5958	210/2219	9/75	59/3909	23/195
Roundhouse (101)	-	-	1/10	2/55	2/72	-	-	-	-	-	-	-	32/478	-	7/191	1/40	5/47
Roundhouse 164	-	-	-	1/12	12/360	-	-	-	-	-	-	-	16/550	1/20	-	2/40	-
Roundhouse 165	-	-	-	-	7/585	-	-	-	-	-	-	-	15/727	-	7/50	12/280	-
Roundhouse (262)*	-	-	5/35	9/73	-	-	1/25	-	-	-	-	-	35/256	5/23	7/100	34/188	-
Roundhouse 210	-	-	-	-	3/160	-	5/85	-	-	-	-	-	42/470	9/124	51/490	11/69	-
Roundhouse (334)*	-	1/5	-	-	2/75	-	-	-	1/5	-	-	-	32/480	4/25	7/105	-	-
Roundhouse 336*	-	-	-	-	-	-	-	-	-	-	-	-	7/55	4/38	-	1/20	-
Building 347	-	-	-	-	6/131	-	1/3	-	-	-	-	-	48/551	2/17	14/214	4/40	-
Roundhouse 620	-	-	-	4/44	11/192	2/30	-	-	-	-	-	-	88/1286	3/135	14/184	19/141	-
Roundhouse 622	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/20	-	-
Roundhouse 631	-	-	-	12/335	13/150	-	-	-	-	-	-	-	34/445	2/15	27/760	6/130	-
Roundhouse (634)	-	-	1/7	-	-	-	-	-	-	-	-	-	49/485	6/35	62/580	33/420	-
Roundhouse 643	-	-	-	2/15	9/148	-	7/108	-	-	-	7/108	-	33/810	-	6/180	24/410	-
Roundhouse 645	-	-	-	-	4/85	-	-	-	-	-	-	-	1/5	-	44/405	1/10	-
Roundhouse 903	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6/40	5/80	-
Pit 4	-	-	-	-	-	-	-	-	-	-	-	-	3/40	-	2/35	2/15	-
Pit 51	-	-	-	-	-	-	-	-	-	-	-	-	7/75	-	1/215	-	-
Pit 169	-	-	-	-	-	-	-	-	-	-	-	-	2/30	-	1/10	1/10	-
Pit (270)	-	1/3	-	1/15	-	-	-	-	1/3	-	-	-	9/64	7/30	6/25	14/65	-
Pit (330)	-	-	-	-	4/71	5/79	-	-	-	-	5/79	-	45/585	-	3/125	-	-
Pit 652	-	-	-	-	-	-	-	-	-	-	-	-	3/70	-	-	-	-
Well 880	-	-	-	2/49	-	-	-	-	-	-	-	-	-	-	1/10	12/377	-
4-Poster 249	-	-	-	-	-	-	-	-	-	-	-	-	1/3	1/10	2/20	10/70	-
4-Poster (293)	-	-	2/5	-	-	-	-	1/10	-	-	-	-	2/25	1/10	-	1/6	-
Ditch (99)*	-	-	1/5	-	-	-	-	-	-	-	-	-	18/140	5/40	4/45	12/110	-
Ditch 111	-	-	-	-	-	-	-	-	-	-	-	-	11/149	5/2	5/149	1/23	-
Ditch 209	-	-	-	-	1/15	-	-	-	-	-	-	-	6/40	-	2/35	2/20	-
Ditch 214	-	-	-	-	-	-	-	-	-	-	-	-	5/40	2/10	-	1/35	-
Ditch (263)*	-	1/6	1/3	-	8/176	-	-	-	1/6	-	-	-	18/158	13/110	37/353	42/234	-
Posthole 212	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/10	-	-
Posthole 281	-	-	-	-	-	-	-	-	-	-	-	-	-	2/4	-	-	-
Posthole 355	2/35	-	-	1/15	-	-	-	-	-	-	-	-	6/105	-	-	-	-
Posthole 356	-	-	-	-	-	-	-	-	-	-	-	-	1/15	-	-	-	-
Posthole 396	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4/25	-
Posthole 548	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/10	1/10	-
Posthole 655	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6/100	-	-

CB : Concertina bowl

FB : Furrowed bowl

C : Misc carinated vessels

RS : Round-shouldered vessel

OV : Ovoid vessel

O : Open bowl

FR : Finger impressions on rim

FG : Finger impressions on girth

C : Cordons

F : Furrowed decoration

CI : Circular impressions

S : Scoring

Contexts in parentheses [eg. (340)] contain diagnostic Late Bronze Age/Early Iron Age pottery

* Cuts Building 500.

First figure - Number of sherds

Second figure - Weight of sherds in grammes

(eg. 4 sherds/35 g)

Table 37: Pottery from Late Bronze Age/Early Iron Age and Middle/Late Iron Age features: Proportions of form types, decorated vessels and fabric groups (Number/weight of sherds).

Condition:

- Unabraded (original surfaces unworn)
- Moderately abraded (part of original surfaces worn)
- Abraded (original surfaces substantially worn)
- Very abraded (all surfaces worn)

Frequency of Inclusions:

- Rare (<3%)
- Sparse (3–10%)
- Moderate (11–25%)
- Common (26–40%)
- Abundant (>40%)

Size of Inclusions:

- Fine (<0.25 mm)
- Medium (0.25–1 mm)
- Coarse (1–3 mm)
- Very coarse (>3 mm)

Fabric Groups

Fabric S1: Fine Shelly Ware

This is characterised by sparse to moderate fine to medium plate-like fossil shell, combined with a similar density of fine to medium angular to rounded quartz, with some quartzite; the above inclusions are generally moderately well sorted. Shell inclusions have been leached out of some sherds, giving a light porous quality. Rare feldspar (plagioclase; orthoclase), black and red iron oxide, calcareous ironstone, flint and mudstone may be observed. Vessels may be unoxidised, incompletely oxidised or irregularly fired, the surface colour varying from black through grey and brown to (less commonly) orange. No systematic variations in firing may be discerned between vessel types, but furrowed bowls are almost invariably unoxidised throughout. The fabric is generally soft, with smooth or rough surfaces, while burnishing of some surfaces may impart a soapy texture (especially furrowed bowls). The fracture is generally irregular or laminated.

Fabric S2: Moderately Coarse Shelly Ware

This fabric is characterised by moderate to common (occasionally abundant) and generally coarse plate-like fossil shell, combined with sparse to moderate quartz, with some quartzite; these inclusions are generally moderately well sorted. Rare red iron oxide, flint, feldspar (plagioclase; orthoclase) and muscovite mica may also be observed. Firing conditions vary considerably. Most pots are irregularly fired, but vessels may be unoxidised or incompletely oxidised. Surface colours vary from black through grey and brown to (less commonly) grey. The fabric is generally soft with rough surfaces, and usually exhibits a laminated fracture.

Fabric S3: Coarse Shelly Ware

Fabric S3 is characterised by moderate to common very coarse plate-like fossil shell (up to a maximum of 10 mm) commonly protruding significantly through the surfaces, and usually poorly sorted; this is combined with sparse to moderate angular to rounded quartz, with some quartzite. The size and state of preservation of the shell in some sherds could imply derivation from a Jurassic 'oyster bed', while rare angular lumps of grey micritic bioclast limestone in these sherds may represent the matrix from which this shell was derived. Rare plagioclase feldspars, muscovite mica, red and black iron oxides and apatite (bones weathered from Jurassic limestones) also occur. The colour varies within the same range as Fabric S2, and the firing is again very variable (mainly irregular, but some vessels oxidised or incompletely oxidised). The fabric is soft and occasionally crumbly, and generally possesses a laminated fracture.

Fabric Q1: Fine Sandy Ware

This fabric is characterised by common to abundant subangular to rounded and fine to medium quartz, with some quartzite. These inclusions are generally well sorted. Rare fine to medium shell may sometimes be observed, indicating an overlap with shelly wares, but insufficient shell occurs to merit inclusion in the S1–S3 fabric groups. The fabric is commonly unoxidised, with black to dark grey surfaces, but some vessels are incompletely oxidised or irregularly fired, with surfaces varying from black through grey to brown. The fabric is soft, with smooth to rough surfaces; the exterior is occasionally burnished, imparting a soapy feel. The fracture is irregular, or sometimes fine.

Fabric G1: Grog-Tempered Ware

This is an unusual fabric group, characterised by moderate medium or coarse angular grog fragments (crushed pottery) which are generally moderately well sorted. These are associated with sparse to moderate and generally well-sorted subangular to rounded fine or medium quartz, with some quartzite; rare fine to coarse plate-like shell inclusions may occasionally be observed. Vessels may be unoxidised, incompletely oxidised or irregularly fired, with surface colours ranging mainly from grey to brown to orange. The fabric is soft, generally with smooth surfaces and a fine or irregular fracture.

Frequency of Fabric Groups

The frequencies of each fabric group are summarised graphically in Fig. 199. This reveals a pronounced bias towards shelly fabrics, and in particular towards the finer S1 wares. Sandy fabrics are less well represented, while vessels with significant grog tempering (G1) are extremely rare. The proportions of fabric groups by context are summarised in Table 37, but no clear inter-context variations in fabric preferences may be discerned. This contrasts with the evidence of vessel forms and decoration, both of which are argued below to have varied significantly by phase. Interpretation is complicated by the limited sample size and by the possible impact of redeposition, and although no fundamen-

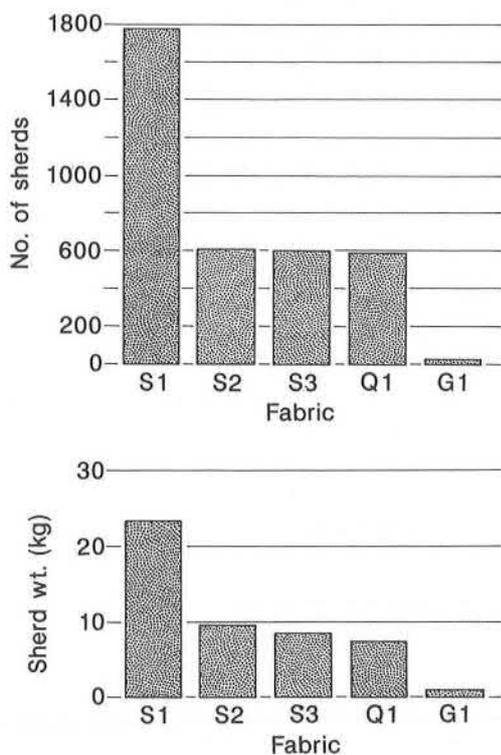


Figure 199: Late Bronze Age/Iron Age pottery; proportions of fabric groups (all contexts).

tal shifts in fabric preference may be identified it is quite possible that temporal changes may have failed to register in the archaeological record. The emphasis upon shelly and sandy wares recalls other first millennium BC ceramic assemblages in the region, notably the collections of pottery from Hartigans and Pennyland (Knight 1993), and as noted below is presumably a reflection of the local geology.

Sources of Material

The site is located on a ridge formed of Boulder clay and glacial sands and gravels above Oxford clay (Fig. 7). To the south-east, the ground falls towards the Bradwell Brook across outcrops of Blisworth clay and limestone and Cornbrash limestone, while the valley bottom itself is buried beneath substantial terrace deposits and alluvium. As in other Iron Age sites in the Milton Keynes region, potters would have enjoyed access to a wide range of sources of clay and tempering material, and not surprisingly all the inclusions which have been identified in thin section may be traced either to the highly variable local clays or river gravels, or to local Jurassic outcrops (report by C.O. Hunt in archive; cf. Hartigans and Pennyland: Knight 1993, 219ff.). However, we should not rule out the possibility of medium or long-distance exchange of pottery. Certain of the fineware vessels are unparalleled elsewhere in the region (for example, the remarkable 'concertina bowls' discussed below) and although they could have been produced locally by resident or itinerant potters, the possibility must be raised of a more widespread exchange network than can be demonstrated on fabric grounds alone.

Vessel Forms

Most sherds derive from vessels of uncertain form, but a small proportion (9% of total sherds or 15% by weight) may be ascribed to a limited range of restricted and unrestricted forms (as defined, eg. in Rice 1987, 212). These have been grouped on the basis of variations in body profile into four main classes, as follows (cf. Knight 1993, 221, 231):

Carinated Vessels

124 sherds (1.527 kg) from a maximum of forty-seven vessels derive from bowls or jars with an angular girth surmounted by a high concave or everted neck (eg. 29 and 34). Included in this group are forty-three sherds (703 g) from five vessels with double carinations, comparable to the remarkable 'concertina bowls' recovered from Hawk's Hill, Fetcham, Surrey (12, 15, 16, 18 and 24; cf. Hastings 1966, fig. 12.50; Harding 1974, 153-5) and eleven sherds (103 g) from a maximum of seven furrowed bowls with a series of parallel shallow U-shaped furrows above the girth (eg 42; cf. Harding 1974, fig. 41). One well preserved 'concertina' vessel (24) has a rounded base, possibly formed in a mould, while the most complete of the furrowed bowls (42) also preserves an omphalos base.

No rims of furrowed bowls survive, but several concertina bowls preserve a rounded direct rim which may be finely tapered. The rims of other carinated vessels vary in form, often around the circumference of a single vessel, but are generally of direct rounded form (in some cases finely tapered; eg. 12, 15, 36) or flanged (eg. 29). Several concertina bowls preserve interesting evidence of the method of manufacture (eg. 24). Horizontal fractures and poorly finished joins along the carinations (eg. 12) suggest that the wall of the vessel was constructed of strips of clay which had been bonded along the carination. In addition, the few surviving bases have profiles of such striking regularity that some kind of mould should perhaps be contemplated, for example, a block of wood with a concave depression into which the moist clay was pressed.

Round-Shouldered Vessels

106 sherds (1.963 kg) from a maximum of twenty-eight vessels derive from pots with a pronounced, but not sharply angular, girth (eg. 10). Rims are mainly of direct rounded or flattened form, but may be pinched out or expanded on one or both faces (eg. 60 and 79). One rim preserves an internal flange (10). The few bases that survive are invariably flat and may be pinched out around the circumference.

Ovoid Vessels

Ovoid jars and bowls, either of neckless form (74) or with an upright, everted or concave neck (eg. 55, 57, 59, 61, 65, 68 and 72) are represented by 101 sherds (3.967 kg) deriving from a maximum of thirty-nine vessels. Ovoid vessels are, however, difficult to identify from small sherds, and it is likely that the recorded figures underestimate significantly the actual proportions of such vessels (in contrast perhaps to

round-shouldered and carinated forms, which may be easily diagnosed on the basis of small girth fragments). It is possible also that some of these sherds in fact derive from globular or ellipsoid vessels (eg. 38 and 81; cf. Knight 1984, i, 32: Forms 4 and 5), but insufficient survives for their profiles to be determined with certainty. All of these vessels were modelled by hand, and should be contrasted with the wheelmade versions of this form class that occur in 'Belgic' contexts (discussed below). The base, in the few instances where it survives, is invariably flat, and is sometimes pinched out slightly around the edge. Rims are mainly of direct rounded or flattened form (eg. 54, 59, 61, 64 and 65) but some examples were pinched out or expanded (eg. 51, 57, 67 and 73) or in one instance bevelled internally (84).

Open Bowls

Seven sherds (109 g) from a maximum of three vessels may derive from hemispherical open bowls, each with its maximum diameter at the rim (eg. 77). The few examples which have been identified preserve direct rounded or flattened rims (eg. 77), in one instance pinched out externally, but no bases survive. Such vessels are difficult to recognise on the basis of small fragments, and hence might be significantly under represented.

Relative Frequencies of Form Classes

Overall Totals

Open bowls are poorly represented regardless of the method of calculation of vessel frequency, but the proportions of other form types vary significantly according to whether sherd number, weight or maximum number of vessels are calculated (Fig. 200). The proportions of sherds by number

and weight appear to have been significantly distorted by the comparative ease of identification of carinated and round-shouldered vessels. As might be expected, therefore, both categories of vessel, in particular the highly distinctive furrowed and concertina bowls, are represented by sherds of significantly lower average weight than fragments of ovoid vessels (Fig. 200). There is thus every likelihood that considerably more sherds derive from ovoid and open forms than can be demonstrated, while as noted above it is possible that certain categories of vessel, which may be diagnosed only on the basis of nearly complete profiles, have escaped detection completely (eg. globular or ellipsoid jars).

Spatial and Chronological Variations

Detection of significant inter-context variations in the proportions of form types is complicated by the small sample size and by the likelihood of extensive redeposition of pottery, but significant spatial variations in the proportions of furrowed bowls, concertina bowls and other carinated vessels may nonetheless be identified (Table 37). A particularly notable contrast may be drawn between the proportions of carinated forms obtained from Building 500 and (less obviously) Hollow 340 and from most other features on the site. This contrast is discussed later in this report, together with the evidence for spatial variations in the proportions of decorated vessels. It is argued that it indicates a typological progression from assemblages dominated by carinated forms to assemblages in which ovoid and related forms prevailed. This, it is argued, mirrors a transition observed in other areas of southern England in the mid first millennium BC (cf. Cunliffe 1991, 79), and provides persuasive evidence for activity in both the Late Bronze Age/Early Iron Age and later Iron Age periods.

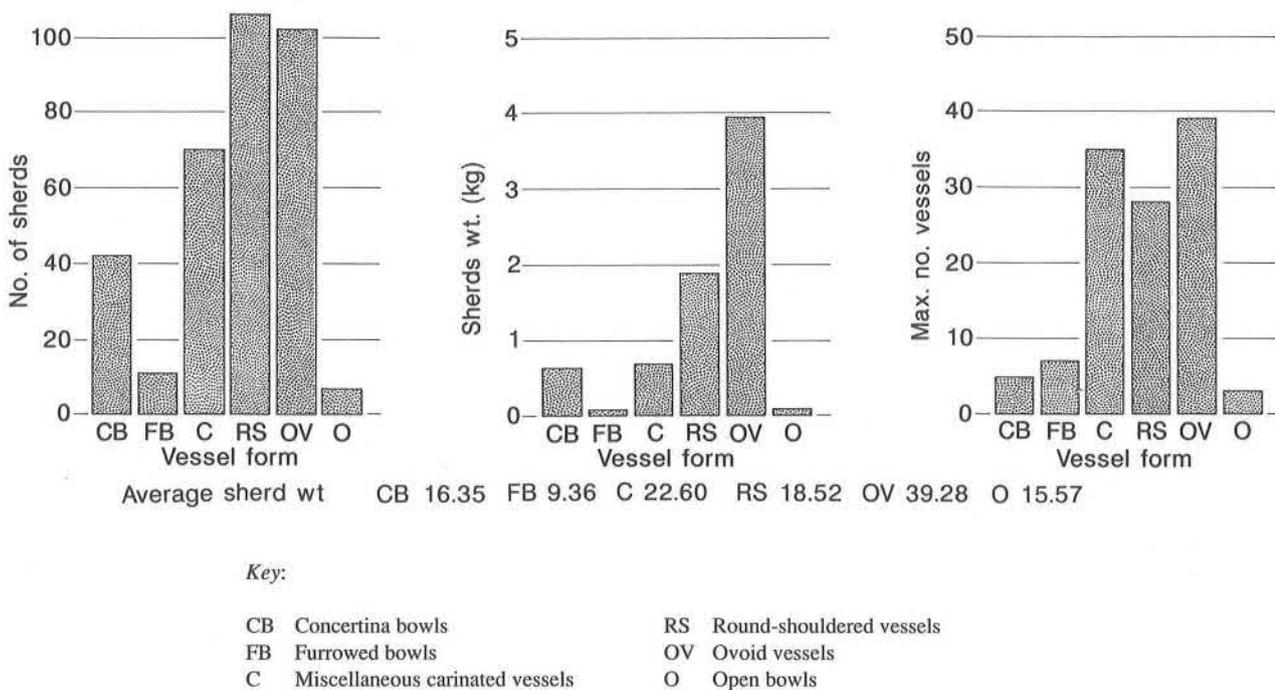


Figure 200: Late Bronze Age/Iron Age pottery; proportions of vessel forms (all contexts).

Miscellaneous Elements

Handles

Forty sherds (1.984 kg) deriving from a maximum of twenty-seven strap handles were retrieved, and given their ease of identification seem unlikely to have been significant components of the ceramic tradition. These were generally plain, but two examples were channelled on the outer face (eg. 82). All have become detached from the vessel wall, and the forms of the vessels to which they were attached cannot be determined.

Base Forms

Bases are almost invariably flat, although sometimes slightly domed internally, and may be pinched out at the circumference. Several vessels preserve an unusual rounded base or an omphalos. These were applied to fine furrowed bowls (42) and concertina vessels (24), although most of the few omphalos base fragments that have survived derive from vessels of uncertain form (eg. 7).

Rim Forms

Little effort seems generally to have been expended in the elaboration of the rim, the form of which commonly varies around the circumference of the vessel. The following rim types were identified and follow broadly the categories in the Pennyland/Hartigans report (Knight 1993, table 50):

Form 1:

rounded direct, occasionally finely tapered (eg. 78).

Form 2:

flattened direct (eg. 85).

Form 3:

bevelled internally (eg. 84).

Form 4:

rounded lip, pinched out internally and/or externally (eg. 37).

Form 5:

flattened lip, pinched out internally and/or externally (eg. 51).

Form 6:

rounded lip, slightly expanded internally and/or externally (eg. 62).

Form 7:

flattened lip, slightly expanded internally and/or externally (eg. 67).

Form 8:

flanged internally and/or externally; flanges have been arbitrarily defined as having a minimum width of 2 mm, measured from the junction of the rim with the vessel wall (eg. 10).

Correlations of rim form with vessel profile have been noted above. Most classifiable rims are unmoulded, either with a rounded and sometimes finely tapered lip (ninety-three examples) or with a flattened lip (forty-eight examples), or else are rounded or flat-topped but pinched out on the inner and/or outer face (fifty-nine examples). Other rim types are poorly represented (by a maximum of ten vessels or fewer). Finely tapered and flanged rims are especially characteristic of Late Bronze Age/Early Iron Age carinated forms, but otherwise no significant chronological developments may be discerned.

Surface Treatment

Decoration was applied to very few vessels, comprising only c.1.8% by number and c.2.9% by weight of the total collection (sixty-eight sherds; 1.427 kg). Five main categories of decoration have been distinguished, as follows (Fig. 201; cf. Knight 1993, 223–4, 232):

Finger-Tip and Finger-Nail Decoration

A total of twenty-seven sherds (509 g) deriving from a maximum of fourteen vessels preserves finger ornament. Twenty-three of these (456 g) bear a row of closely spaced finger-tip impressions or finger-nail incisions along the lip or along the outer edge of the rim (eg. 51 and 73), in one instance in association with light random scoring (84). These derive mainly from vessels of uncertain form, but some decorated rims clearly derive from ovoid vessels (eg. 73 and 84). The remaining examples were embellished with a row of finger-nail or possibly tooled incisions along the girth (1, 44 and 48); one of these preserves a row of diagonal incisions and a small oval finger impression on the girth (1).

Applied Cordons

One sherd (40 g) from a vessel of ovoid or related form was provided with a vertical applied cordon edged with shallow finger impressions (30).

Furrowed Decoration

Twenty-two sherds (299 g) from a maximum of eleven vessels preserve traces of a series of shallow and generally closely-spaced horizontal furrows on the shoulder (eg. 42). Most of these are representatives of the furrowed bowl tradition, but one vessel with two parallel furrows at the base of the neck seems more likely to derive from an ovoid or related form (11). The latter also preserves a large circular impression on the girth.

Shallow Circular Impressions

Eleven sherds (471 g) from a maximum of five vessels preserve one or more large circular impressions, between 30–60 mm in diameter and concave in section (10, 11, 13, 14 and 38). Two vessels, one of ovoid or related form (38) and one possibly of round-shouldered form (10), preserve traces of a row of regularly-spaced impressions along the girth, but otherwise the vessel fragments are too small for the pattern to be determined. One body sherd preserves a single impression on the girth and two parallel furrows at the base of the neck (11). The impressions are surprisingly regular in shape, and were perhaps formed by pressing a mould into the clay before firing.

Scoring

The outer face of seven sherds (108 g) deriving from a single vessel of ovoid form was lightly scored with a series of randomly incised lines, executed probably with a knife or other sharp implement (84). The rim of the vessel bears a row

of finger-nail incisions. The affinities of this vessel lie with later Iron Age 'scored ware' (Elsdon 1992), and in common with other vessels of this type the surface treatment may have been utilitarian; for example, it may have helped to handle the vessel (*cf.* May 1976, 138).

The surfaces of many vessels, both decorated and plain, were finished in a variety of ways before firing. Many vessels preserve traces of smoothing or finger smearing, while a small proportion of the coarser wares was lightly brushed before firing; for example, with a bundle of twigs or fibres. A small proportion of the finer wares, and in particular the carinated bowls, preserves traces of burnishing, mainly on the outer face. In general, however, little effort appears to have been expended on the surface finish of vessels.

Relative Frequency of Decorative Styles

Decoration of any kind is rare (Fig. 201) and appears to have become progressively less common during the course of the first millennium BC. Interpretation is again complicated by the small sample size and by the probability of significant redeposition of material, but comparison of the proportions of decorated sherds by context provides clear evidence for significant inter-context patterning (Table 37). Building 500 and Hollow 340 stand out on account of the comparative diversity of their associated decorated pottery (circular impressions, furrowed decoration, cordons and finger-tipping on the girth) and the relative frequency of this material (*c.*38% of the maximum number of decorated vessels from the site). This is interpreted below as a further indication of a Late Bronze Age/Early Iron Age date for this material, while the apparent preference for finger-tipping of the rim in the pottery from the roundhouse ditches and the discovery of a scored vessel in the ditch demarcating Roundhouse 643 would be compatible with a later Iron Age date.

Radiocarbon Determinations

Two radiocarbon dates were obtained from the postholes of Building 500, the first from charcoal derived from oak heartwood contained in Posthole 380 (UB-3233) and the second from a charred ash stump at the bottom of Posthole 570 (UB-

3234). Neither post-hole produced pottery, but both appear to be integral components of a structure whose post-holes yielded a substantial quantity of pottery datable on typological grounds to the Late Bronze Age/Early Iron Age (Figs 202–203.1–35; discussed below). The dates are not significantly different at the 95% level, and have been calibrated with the assistance of J.B. Kenworthy of the Department of Classics and Archaeological Studies, University of Nottingham, following the methods recommended by Stuiver and Pearson (1986).

UB-3233: 389±42bc

A) cal BC age ranges obtained from intercepts (Method A):

One sigma: cal BC 405–391

Two sigma: cal BC 513–375

B) cal BC age ranges from probability distribution (Method B):

% area enclosed	cal BC age range	relative area under probability distribution
68.3 (one sigma)	485–436	.33
	425–378	.67
95.4 (two sigma)	754–701	.07
	532–363	.91
	280–260	.02

Method B gives an extremely wide overall date range at two sigma, but it is noticeable that 91% of the probability curve falls within a date range which correlates closely with the cal BC age range derived from Method A (calculated at two sigma). An early Iron Age date might therefore be proposed for the charcoal sample, and hence for the timber structure from which it might have derived.

UB-3234: 433±42bc

A) cal BC age ranges obtained from intercepts (Method A):

One sigma: cal BC 513–399

Two sigma: cal BC 757–689, 651–648, 544–392.

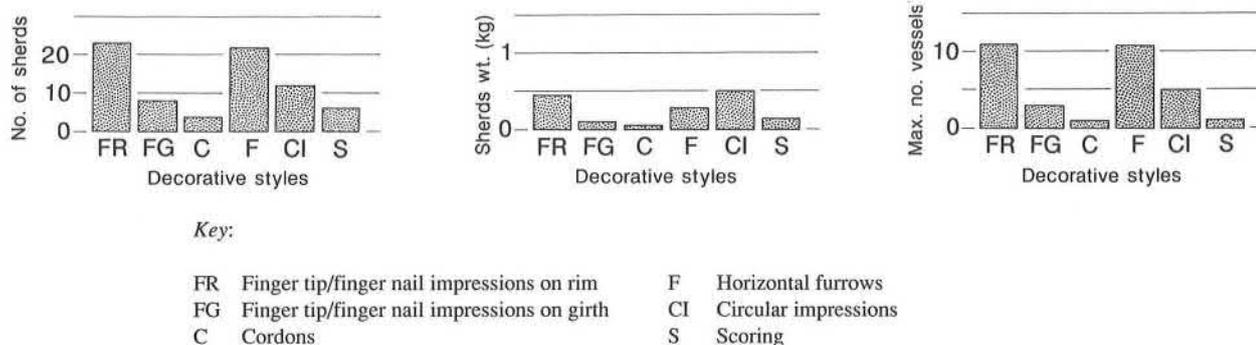


Figure 201: Late Bronze Age/Iron Age pottery; proportions of decorative styles (all contexts).

B) cal BC age ranges from probability distribution (Method B):

% area enclosed	cal BC age ranges	relative area under probability distribution
68.3 (one sigma)	520–397	1.00
95.4 (two sigma)	761–681	.19
	658–637	.02
	551–389	.78

Both methods provide wide overall date ranges at two sigma. However, as Method B indicates that 78% of the probability curve should fall within the range cal BC 551–389, an early Iron Age date might again be suggested.

This conclusion is strengthened by determination of the weighted average of the two dates, which has been calculated as **416±29bc**. This calibrates as follows:

A) cal BC age ranges obtained from intercepts (Method A):

One sigma: cal BC 408–398

Two sigma: cal BC 516–393

B) cal BC age ranges from probability distribution (Method B):

% area enclosed	cal BC age range	relative area under probability distribution
68.3 (one sigma)	481–438	.46
	423–394	.54
95.4 (two sigma)	519–392	1.00

An origin for Building 500 between the sixth and fourth centuries BC would be interesting in view of its association with certain ceramic types, notably furrowed and 'concertina' bowls, which on typological grounds may be argued to originate in the late Bronze Age (see below), but whose later history is at present obscure. The associations with radiocarbon-dated samples reported above could provide valuable evidence for the continued use of such vessels into the earlier Iron Age, but we should consider also the possibility of redeposition in a significantly later structure. If the latter, the fresh condition of much of the pottery obtained from the postholes of Building 500, and in particular the remarkable level of preservation of the fragile 'concertina' bowls (eg. 24) would suggest that material had been incorporated that had been protected from extensive weathering; it may have come from a midden associated with a phase of possibly open settlement predating the construction of Building 500.

Typological Affinities and Dating

The pottery may be attributed to two successive but overlapping ceramic traditions, dated at present to the Late Bronze Age/Early Iron Age (ninth to fifth/fourth centuries BC) and the later Iron Age (fifth/fourth to first centuries BC). As noted above, however, an unknown proportion of the pottery which has been classified here as 'Iron Age' may have continued to be manufactured alongside the novel ceramic types of the late Iron Age.

Late Bronze Age/Early Iron Age

The site produced an impressive collection of pottery, mainly from Building 500 and Hollow 340, which on the grounds of its form and/or decoration may be ascribed to the Late Bronze Age/Early Iron Age (Figs 202–203). It is, despite the small proportion of recognisable forms and decorated vessels, by far the most impressive collection of early first millennium BC pottery to have been obtained from the Great Ouse basin, and incorporates several ceramic types which have not previously been recorded in this region and which are rare elsewhere in southern Britain. In the Milton Keynes region, it invites comparison with two important unpublished groups of pottery, from Hartigans Gravel Pit (MK223; Knight 1984, i, 91–2; Milton Keynes 2) and Cotton Valley (MK23; Barrett 1975, 104; Green 1974; Knight 1984, i, 90–1; Milton Keynes 1), but pottery of this early phase is otherwise poorly represented in this area.

The emphasis is upon coarse wares, presumably for cooking and other domestic purposes, but certain vessels, notably the fine furrowed and 'concertina' bowls, suggest at least limited concern with higher status goods. Some of these, to judge by their sharply carinated profiles and high surface polish, might represent substitutes for metallic prototypes (*cf.* Barrett 1980, 313–4), and hence should perhaps be seen as attempts to mimic the high status bronze vessels which appeared in Britain during the final (Ewart Park) phase of the late Bronze Age (*op. cit.*; *cf.* Cunliffe 1991, 64–5).

The diagnostic features of this ceramic phase include plain carinated bowls or jars, occasionally with double carinations (12, 15 and 18) and in at least one case with a base of rounded profile (24). Carinated bowls are widespread in Late Bronze Age/Early Iron Age assemblages elsewhere in the Midlands (eg. Chinnor, Oxon: Richardson and Young 1951, figs 7–8; Fengate, Cambs: Hawkes and Fell 1943, figs 5–7; Gretton, Northants: Jackson and Knight 1985, fig. 9), but the nearest parallels for the remarkable bowls with multiple carinations are the 'concertina' bowls which so far appear to have been recorded at only one other site in southern Britain, namely Hawk's Hill, Fetcham, Surrey (Hastings 1966, fig. 12.50; Harding 1974, fig. 45). Several examples also survive at Bancroft of carinated furrowed bowls, one preserving a high concave neck and an omphalos base (42). Furrowed bowls are rare in the Midlands, but are well known types further south, particularly in Wessex (Harding 1974, 149–51).

Decoration of any kind is rare, and apart from horizontal furrows is restricted to finger-nail or finger-tip impressions along the girth of round-shouldered or ovoid vessels (1, 44 and 48), an unusual applied vertical cordon with finger-tip cabling along either edge (30), and single rows of wide shallow circular depressions, possibly formed by impressing a rounded mould into the moist clay (11, 13, 14 and 38). Numerous parallels for extensive finger-tip or finger-nail decoration and applied cordons may be found in Late Bronze Age/Early Iron Age assemblages throughout the Midlands and eastern England (eg. Gretton, Northants: Jackson and Knight 1985, figs 6–7; Fengate, Cambs: Hawkes and Fell

1943, figs 3–4; West Harling, Norfolk: Clark and Fell 1953, figs 10–12). Precise parallels for the large circular impressions have yet to be found, but a general parallel may be drawn with the large circular or oval ‘dimples’ recorded on pottery of Late Bronze Age/Early Iron Age character from Allen’s Pit, Dorchester, Oxon. (Bradford 1942, 42–44, fig. 8.3). The consistent association at Bancroft of such vessels with classic Late Bronze Age/Early Iron Age ceramic types and the general affinities which might be claimed with extensive finger ornament provide further persuasive evidence of a Late Bronze Age/Early Iron Age date. If this argument is accepted, the presence of circular impressed decoration on vessels of ovoid or globular form, which are otherwise chronologically undiagnostic, would support the stratigraphic evidence (eg. from the postholes of Building 500) that vessels of these form classes were also present in this early phase.

The early history of the above forms and styles of surface treatment has yet to be unravelled satisfactorily, but there is unequivocal evidence for typologically related pottery in some areas of southern England by at least the Ewart Park phase of the late Bronze Age, and hence as early perhaps as the later ninth century BC (cf. O’Connor 1980, 270–2). This is implied by occasional associations of these, and related ceramic types, with items of Ewart Park metalwork (eg. Runnymede Bridge, Egham, Surrey: Longley 1980) and by the observation that some vessels in these demonstrably early assemblages preserve formal, decorative or surface features which may imply derivation from Ewart Park sheet bronze buckets or cast bronze bowls (eg. furrowed bowls; cf. Barrett 1980, 313–4; Cunliffe 1991, 61–9). This permits recognition of a southern English ceramic tradition correlating partly with the period of currency of Ewart Park metalwork, and exemplified by the major assemblage from Runnymede Bridge, datable perhaps from as early as the ninth century BC (Barrett 1980, 307; Longley 1980).

It remains unclear, however, how many of the components of this tradition might have an earlier ancestry. Barrett (1980) has argued for the presence in some areas of southern England of a post-Deverel-Rimbury ‘plain ware’ tradition. He sees this as originating perhaps in the later second millennium BC, and incorporating many of the forms and certain of the decorative styles which are documented in Ewart Park contexts (*ibid.*, fig. 5) but distinguished from these by the general rarity of decoration and by the presence of a number of specific forms (eg. the ‘hooked rim jar’). Key ‘plain ware’ assemblages include those from Aldermaston Wharf and Knight’s Farm, Burghfield, Surrey [Sub-sites 2 and 3] (Bradley *et al.* 1980, figs. 11–18, 31, 33) and, of particular interest in the present context, a group of pottery from a site at Cotton Valley, Milton Keynes (MK23; Barrett 1975, 104). The latter site yielded a small collection of plain pottery (Green 1974, fig. 6), including fragments of round-shouldered vessels and thin-walled pots of uncertain form and part of an internally bevelled rim, from a pit producing charcoal dated to 840±70bc (Har–339) and 840±80bc (Har–860). It should be noted, however, that unpublished material from pits and post-holes elsewhere on the site includes a minority of decorated vessels which would not be out of place in

Barrett’s ‘decorated’ assemblages. This minority included vessels with finger-tip impressions on the girth, horizontally incised parallel lines below the rim, horizontal neck and girth cordons and a row of possible triangular impressions along the neck).

The case for a progression in some regions, coincident with the decline in Deverel-Rimbury traditions, from mainly plain to progressively more decorated assemblages, may be supported by the stratigraphical evidence from a number of sites (eg Ram’s Hill, Oxon: Barrett 1975) but the chronology of these traditions and the problem of regional variability remain unresolved. Decoration was certainly widespread in many areas of southern Britain by the Ewart Park phase, to judge by the metalwork evidence from sites such as Petter’s Sports Field, Egham, Surrey (Barrett 1980, 308; O’Connell 1986), but the chronology of the plainer assemblages which in some regions might predate them is less certain. Barrett’s case for a late second millennium BC origin for his tradition of post-Deverel Rimbury ‘plain wares’ rests largely upon the fragile foundations of radiocarbon associations, including the site at Cotton Valley, but such an early date sits uneasily with the parallels between certain categories of so-called ‘plain ware’ and Ewart Park bronze vessels. Furrowed bowls, for example, figure in Barrett’s ‘plain ware’ assemblages (Barrett 1980, fig. 5.11) but close typological parallels may be drawn between these vessels and the cast bronze bowl from Welby, Leics. (Powell 1948). This is currently datable to the Ewart Park phase, from which they might derive, suggesting a date no earlier than the ninth century BC. A late second millennium BC origin for furrowed bowls has been suggested by Avery (1981, 32–40) on the basis of parallels with Continental material, mainly from the upper and middle Rhine valley. However, although an earlier origin for this class of vessel cannot be discounted, convincing evidence in support of a pre-Ewart Park date for insular furrowed bowls has yet to be presented.

Tripartite carinated bowls invite further consideration of Ewart Park metallic prototypes (cf. Cunliffe 1991, fig. 4.2), as also do the ‘concertina’ bowls which, although lacking exact parallels in bronze, recall metallic rather than ceramic technology. On present evidence, therefore, there would seem to be reasonable grounds for assuming in some areas a progression to more profusely decorated wares, but some at least of the ‘plain ware’ forms are perhaps better accommodated within the ninth century BC rather than earlier. This need not argue against a late second millennium BC date for some ‘plain wares’, for example the ‘hooked rim jars’ or large jars with wide rounded shoulders, such as are represented at Cotton Valley (Barrett 1975, 104) or Ram’s Hill, Oxon. (*ibid.*, 103: Form II); but we should view this perhaps as an evolving tradition onto which new forms and styles of decoration were progressively grafted.

The vessels from Bancroft which have been described above could date, therefore, from at least the ninth century BC, but a considerably later date might also be appropriate. It is unclear how long the diagnostic elements of this ceramic tradition continued in use, or to what extent the ceramic

repertoire might have been modified over time. But despite great regional variability there are strong grounds to suppose that some of the early formal and decorative elements which have been recognised at Bancroft, most notably carinated profiles and extensive finger-tipping, continued in fashion, certainly in some areas of the Midlands, well into the fifth or fourth centuries BC (*cf.* Barrett 1978, 276; 1980, 313; *eg.* Gretton, Northants: Jackson and Knight 1985, 81–2). Whether this might apply also to the distinctive furrowed and concertina bowls which it has been suggested may derive from Ewart Park metallic prototypes is less certain, and despite the radiocarbon evidence from Bancroft which has been discussed above convincing evidence for a prolonged life for these ceramic types has yet to be presented.

Later Iron Age

Pottery with formal or decorative features which are diagnostic of a fifth/fourth to first century BC date is almost entirely absent from this site. The case for attributing a substantial proportion of the pottery to this period rests instead upon the absence from certain stratified groups of distinctive Late Bronze Age/Early Iron Age types and an emphasis in some contexts upon mainly plain vessels of ovoid and related form (Table 37). Undecorated vessels of these form classes cannot be closely dated, but the evidence from elsewhere in the Great Ouse, Nene and Thames basins suggests that ovoid and similar forms came to dominate ceramic assemblages during the latter half of the first millennium BC (*cf.* Cunliffe 1991, 85–8; Knight 1984, i, 99). The apparent preponderance of such forms in many roundhouse ditches is thus consistent with a date of deposition in the latter half of the first millennium BC, although closer dating is not possible. This conclusion would be compatible with the restriction of finger-tipping mainly to the rims of vessels, given that the fashion for extensive finger-decoration seems also to have declined in the Midlands, as in southern England generally, from the middle of the first millennium BC (*ibid.*, 99). Widespread local parallels may be cited for material of this character, most notably Hartigans Gravel Pit (MK19; Knight 1993), Pennyland (MK250; Williams 1993) and North Furzton (MK158; Knight forthcoming), while on a regional level we may note extensive parallels throughout the south-east Midlands (*eg.* Cunliffe 1991, 85–8).

Only one vessel preserves features that would justify a later Iron Age date on typological grounds alone, namely an ovoid scored vessel (84) from Roundhouse 643 (*cf.* Elsdon 1992). The origins of the 'scored ware' tradition have been traced by some to the fifth or fourth centuries BC (*eg.* Barrett 1978, 287), but the case for so early an origin is at present very tenuous. The direct dating evidence is extremely limited, and is currently restricted to sites located towards the northern and eastern fringes of the distribution zone of scored pottery. One of the most significant finds is of a La Tène 1 bronze wire fibula from the filling of a ditch at Ancaster Quarry, Lincs. (May 1976, 140, fig. 69.1). This object, which could date from as early as the fifth century BC, was found close to a

vertical-sided scored vessel (*ibid.*, fig. 69.6). Occasional associations of scored pottery with radiocarbon-dated material, for example, at Padholme Road, Fengate, where a date of 350±46bc (GaK 4198) was obtained from the collapsed wattlework lining of a pit producing scored pottery (Pryor 1974, 22–9) or at Fisherwick, Staffs. (Smith 1979, 89–92), might also suggest origins in the mid-first millennium BC. However, the formidable problems which beset the use of this technique in the first millennium BC (Pearson 1987) render interpretation hazardous. Associations on some sites with wheelmade pottery of the later first century BC and first century AD, for example in the Trent Valley, suggest that in some areas its use may have overlapped the period of currency of wheelmade late Iron Age wares (*eg.* Elsdon 1992, 84–6). But within the Milton Keynes region, as in the Middle and Upper Nene (*ibid.*, 88–9), it would seem on present evidence to have fallen out of use before this period.

Comparable scored pottery is thinly distributed elsewhere in the Great Ouse basin, but very densely distributed further north, especially in Northamptonshire (*eg.* Cunliffe 1991, fig. 4.5; Elsdon 1992, fig. 2). This latter region has been suggested as the focus of this style (*ibid.*, 84), but this pattern could reflect in part the disproportionately large amount of work which has been carried out along the Nene in advance of development. Interpretation of this distribution remains problematic. No clear evidence has been obtained for long distance exchange links, and it may represent, therefore, no more than contact between widely dispersed communities linked by a broad range of social and economic ties.

Catalogue of Late Bronze Age and Iron Age Pottery

The pottery from the Late Bronze Age/Early Iron Age building (500) is illustrated first, followed by material from other features which may date from this phase (Pit 330, Hollow 340 and Four-post Structure 293). A representative range of material from the later Iron Age roundhouses is illustrated in the final two figures. All illustrated vessels are handmade. Fabric group is recorded first, followed by details of vessel form and surface treatment, firing conditions and surface colour, surface deposits, sherd condition and context. Full descriptions of each sherd are provided in archive. The three early Bronze Age sherds (p.381) from the site (2, 3 and 21) have not been included in the fabric classification described in the above report, and their fabrics are described in detail below.

Building 500 (Figs 202, 203)

Outer Post Ring

- 1 S1. Girth sherd from round-shouldered vessel. Single elongated finger impression on girth, flanked by a row of three diagonal and probably tooled incisions. Traces of burnishing on exterior. Unoxidised (black throughout). Unabraded.

Posthole 314.

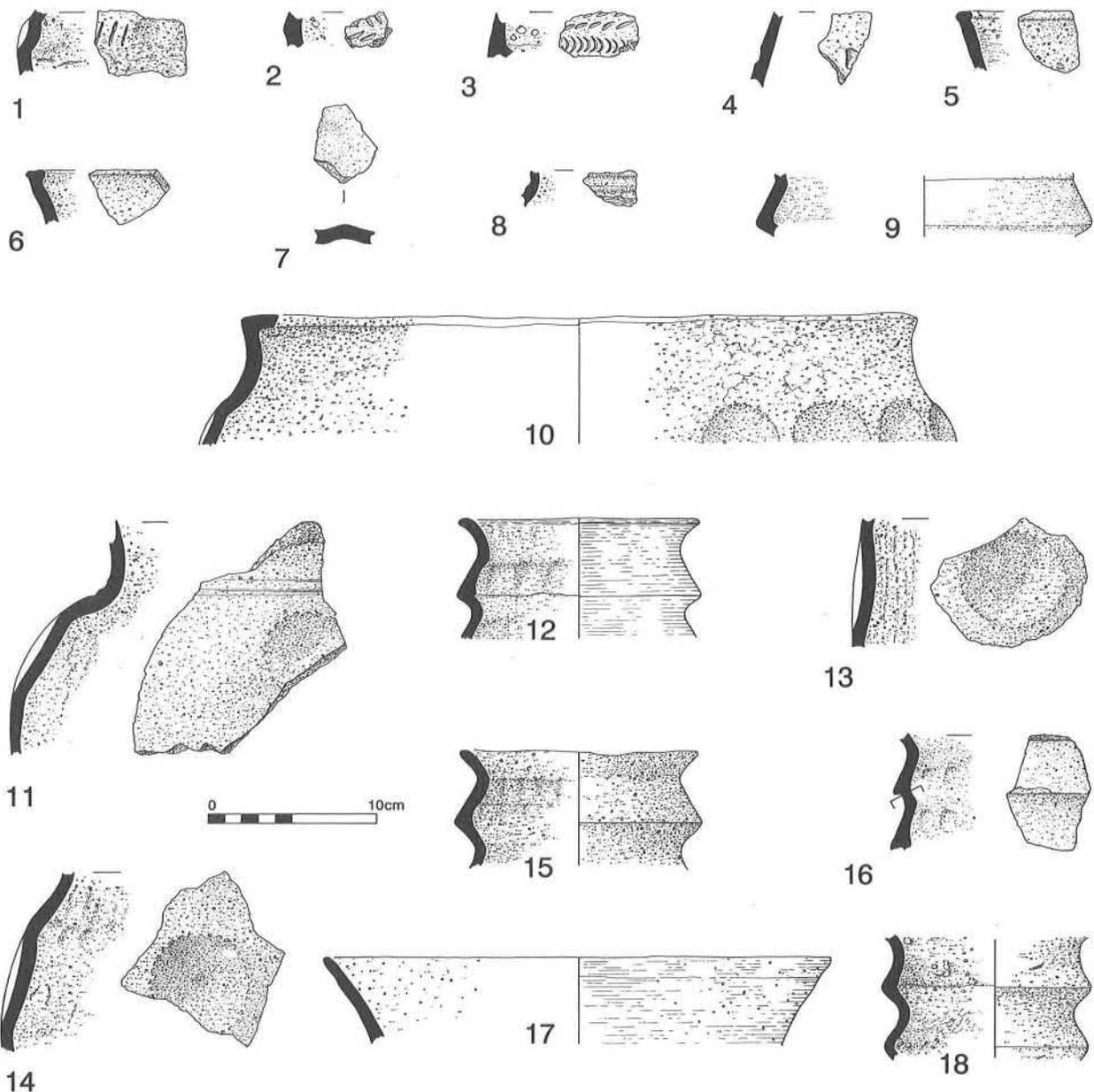


Figure 202: Late Bronze Age/Early Iron Age pottery 1-18 (Rh 500), scale 1:4.

Middle Post-Ring

- 2 Sherd from collar of early Bronze Age pot with incised chevron decoration. Moderate ill-sorted very coarse to coarse angular flint, combined with moderate well-sorted fine rounded quartz; soft; rough; irregular fracture. Irregularly fired (ext. and int. orange and grey; core light grey). Abraded. Posthole 371.
- 3 Sherd from lower part of collar of early Bronze Age pot with three rows of finger-nail decoration. Fabric as 2. Oxidised ext. and int. (orange) and unoxidised core (light grey). Abraded. Posthole 371.
- 4 S2. Shoulder (?) fragment with single shallow finger-tip impression. Oxidised ext. (light brown) and unoxidised core and int. (black). Unabraded. Context 533 (fill of ring Trench 41).
- 5 S2. Sherd from vessel with high everted neck and internally flanged rim (Form 8). Irregularly fired (dark grey, light

brown and orange surfaces). Moderately abraded.

Context 533 (fill of ring Trench 41).

- 6 S2. Sherd from vessel with high everted neck and internally and externally flanged rim (Form 8). Irregularly fired (ext. dark grey and orange; int. and core dark grey). Unabraded. Context 533 (fill of ring Trench 41).
- 7 S1. Sherd of omphalos-based vessel of uncertain form. Burnished interior and exterior. Unoxidised (black throughout). Context 582 (fill of ring Trench 41).

Inner Post-Ring

- 8 S1. Sherd of furrowed bowl with two shallow horizontal furrows on shoulder. Traces of burnishing on ext. Unoxidised (dark grey throughout). Moderately abraded. Posthole 303.

- 9 S1. Sherd of carinated vessel, possibly with an everted neck. Unoxidised (light grey ext. and int.; dark grey core). Moderately abraded.
Posthole 303.
- 10 S2. Sherd from probable round-shouldered jar preserving the upper parts of two large shallow circular impressions on the girth (formed by mould?). Rim provided with pronounced internal flange (Form 8). Irregularly fired (mottled surfaces varying from orange-brown to dark or light grey). Moderately abraded.
Posthole 303.
- 11 G1. Two joining sherds from large ovoid (or possibly globular) vessel with two shallow furrows at the base of the neck and part of a large circular impression on the girth. Unoxidised (dark grey throughout). Unabraded.
Posthole 303.
- 12 S1. Two joining sherds from carinated 'concertina bowl' with finely tapered rim (Form 1). Poorly finished join on inner face of carination suggests vessel wall constructed of strips of clay bonded along the carination. Burnished exterior. Unoxidised (black throughout). Moderately abraded.
Posthole 303.
- 13 S1. Sherd with a virtually complete circular impression (as 11), probably applied to shoulder. Irregularly fired (orange-brown to light grey mottled ext. and core; int. light grey). Unabraded.
Posthole 306.
- 14 S1. Two joining sherds from vessel with shallow circular impression of comparable diameter to that surviving on 13, and probably from the same pot. Irregularly fired (colour as 13). Unabraded.
Posthole 306.
- 15 S1. Seven joining sherds from carinated 'concertina bowl' with rounded rim (Form 1). Irregularly fired (ext. and int. mottled light grey and orange-brown; core dark to light grey). Unabraded.
Incorporates sherds from Posthole 390 and Posthole 391.
- 16 S1. Two joining sherds from carinated 'concertina bowl'. Irregularly fired (surfaces mottled from light grey to orange-brown). Moderately abraded.
Posthole 392.
- 17 S1. Four joining sherds from vessel with high everted neck and rounded rim (Form 1). Traces of burnishing on ext. Unoxidised (black throughout). Moderately abraded.
Posthole 392.
- 18 S1. Four joining sherds from carinated 'concertina bowl'. Poorly finished join on interior of carination suggests bonding of two strips of clay along carination. Irregularly fired (int. and ext. vary from light grey to orange-brown; core light to dark grey). Unabraded.
Posthole 514.
- 20 S2. Five joining sherds from a thin-walled vessel of possibly ovoid form, with a high everted neck and tapered rounded rim (Form 1). Irregularly fired (surfaces vary from light/dark grey to reddish brown or light brown). Unabraded.
Posthole 267.
- 21 Sherd from collar of large early Bronze Age pot, with a twisted cord chevron pattern; decorative panels divided horizontally by a line of twisted cord, and demarcated at the base of the collar by three horizontal lines of twisted cord. Common ill-sorted medium to very coarse grog (crushed pottery), mixed with sparse coarse limestone fragments; soft; smooth; hackly fracture. Hard well-fired fabric, with oxidised ext. (buff to light brown) and unoxidised int. and core (dark grey). Unabraded.
Pit 282.
- 22 S1. Four joining sherds from furrowed bowl with three shallow furrows surviving above girth. Burnished ext. Unoxidised (black throughout). Moderately abraded.
Posthole 285.
- 23 S1. Five sherds (some joining) from a thin-walled vessel with a probably concave neck and a slightly tapered rounded rim (Form 1). Vestiges of a narrow shallow groove at the base of the neck. Burnished exterior and interior. Unoxidised (black throughout). Unabraded.
Posthole 285.
- 24 S1. Twenty-nine sherds (mostly joining) from a remarkably complete 'concertina' bowl with thin walls and a rounded base, but unfortunately lacking the rim. Horizontal fractures along the carinations suggest that strips of clay may have been joined at these points. Burnished exterior. Unoxidised (black throughout). Unabraded.
Posthole 285.
- 25 S2. Rim with pronounced internal flange (Form 8), from thin-walled vessel of uncertain form. Oxidised int. and ext (orange), with unoxidised dark grey core. Moderately abraded.
Posthole 285.
- 26 S1. Sherd of exceptionally thin-walled furrowed bowl with two shallow furrows on shoulder. Highly burnished exterior. Unoxidised int. and ext. (black); oxidised reddish brown core. Moderately abraded.
Posthole 285.
- 27 S2. Two joining sherds from vessel with high and probably concave neck and an internally flanged rim (Form 8). Oxidised ext. (orange-brown) and unoxidised dark grey int. and core. Unabraded.
Posthole 285.
- 28 S1. Three joining sherds from a thin-walled vessel with fine tapered rim (Form 1); angle uncertain. Irregularly fired (surfaces vary from orange-brown to black). Unabraded.
Posthole 285.
- 29 S1. Five joining sherds from carinated vessel with high concave neck; rim internally and externally flanged (Form 8). Irregularly fired (int. and ext. vary from orange-brown to light brown and dark grey; core dark grey). Unabraded.
Two sherds from Posthole 285, and three sherds from Posthole 305.
- 30 S2. Sherd from vessel of uncertain form with vertical cordon

Miscellaneous Pits/Post-Holes within Building 500

- 19 S2. Sherd from vessel with high everted neck and internally flanged rim (Form 8). Oxidised ext. (light brown) and unoxidised core and int. (dark grey). Unabraded.
Posthole 267.

edged by shallow finger impressions. Rim pinched out externally (Form 5). Oxidised ext. and int (orange) and unoxidised core (dark grey). Moderately abraded.

Posthole 285.

- 31 S1. Sherd of furrowed bowl, with two very shallow furrows above girth. Burnished ext. Unoxidised (black throughout). Moderately abraded.

Posthole 305.

- 32 S2. Rim sherd from vessel of uncertain form, possibly with everted neck (angle uncertain); flattened rim, pinched out internally and externally (Form 5). Irregularly fired (orange-brown, buff and light grey surfaces). Moderately abraded.

Posthole 305.

- 33 Q1. Rim sherd from vessel of uncertain form; angle uncertain. Flattened direct rim (Form 2). Highly burnished exterior. Unoxidised (black throughout). Unabraded.

Posthole 305.

- 34 S1. Sherd from carinated bowl with concave neck and slightly tapered rounded rim (Form 1). Burnished exterior. Oxidised (buff surfaces). Moderately abraded.

Posthole 374.

- 35 S2. Rim sherd from vessel of uncertain form; angle uncertain; rim may be flattened but pinched out externally (Form 5) or internally bevelled (Form 3). Oxidised (buff surfaces). Moderately abraded.

Posthole 374.

- 36 S1. Two joining sherds from carinated vessel with high everted neck and finely tapered rim (Form 1). Shallow groove at base of neck. Oxidised (buff surfaces, with faint orange mottles on exterior). Moderately abraded.

Posthole 374.

Pit 330 (Fig. 203)

- 37 S1. Four joining sherds from ovoid vessel with concave neck; rounded rim, slightly pinched out externally (Form 5). Traces of burnt matter on interior. Irregularly fired (mottled reddish brown, buff and dark/light grey surfaces). Unabraded.

Layer 330.

- 38 S1. Four joining sherds from unusual neckless ovoid (or possibly globular) bowl, with flattened rim (Form 2). Parts of two large circular impressions, possibly formed by a mould, survive on the girth. Burnished exterior. Unoxidised (black throughout). Unabraded.

Layer 330.

- 39 S3. Three sherds (two joining) from vessel with everted neck and pronounced flanged rim (Form 8). Irregularly fired (mottled inner and outer surfaces: orange, buff and dark/light grey; light to dark grey core). Moderately abraded.

Layer 330.

Hollow 340 (Fig. 203)

- 40 S1. Sherd from plain carinated vessel; orientation uncertain. Traces of burnishing on ext. Unoxidised (black int. and ext; grey core). Unabraded.

Layer 430.

- 41 S1. Sherd of furrowed bowl with two shallow and fairly widely spaced furrows above girth. Burnished ext.; smoothed int. Irregularly fired (ext. dark grey and mid brown; core dark grey; int. mid brown). Unabraded.

Layer 430.

- 42 S1. Ten joining sherds from the lower part of an unusually well-preserved furrowed bowl with omphalos base and concave neck. Two shallow furrows immediately above girth; very broad furrow at junction of shoulder and neck. Burnished ext. and int. Unoxidised (black int. and ext.; dark grey core). Unabraded.

Layer 430.

- 43 S1. Sherd of carinated bowl with everted neck. Unoxidised (dark grey throughout). Moderately abraded.

Layer 437.

- 44 S1. Sherd with three diagonally incised lines on girth (possibly tooled). Traces of burnt matter on interior. Unoxidised (black throughout). Moderately abraded.

Layer 441.

- 45 S2. Rim, probably from an everted neck vessel, with pronounced internal and external flange (Form 8). Oxidised (orange throughout). Moderately abraded.

Layer 452.

- 46 S1. Flattened rim (Form 2) with faint incised line along lip. Irregularly fired (light grey and orange-brown surfaces). Moderately abraded.

Layer 461.

- 47 S1. Flanged rim (Form 8) from everted neck vessel. Smoothed int. and ext. Irregularly fired (dark grey and orange-brown surfaces). Unabraded.

Layer 486.

Four-Post Structure 293 (Fig. 203)

- 48 S2. Sherd with three diagonal incised lines on girth, formed either by finger-nail or by a knife or other sharp implement. Ext. smoothed above girth. Traces of burnt matter on interior. Unoxidised (black throughout). Unabraded.

Posthole 322.

- 49 S1. Two joining sherds of carinated vessel. Int. and ext. oxidised (orange); core unoxidised (light grey). Abraded.

Posthole 322.

Roundhouses (Figs 204, 205)

Context numbers refer to fill divisions within the ditches which demarcate these structures.

Roundhouse 262

- 50 S1. Sherd of carinated bowl with high everted neck; rim finely tapered (Form 1). Ext. and int. smoothed. Irregularly fired (buff, light grey and dark grey mottled surfaces). Moderately abraded.

Layer 17.

- 51 Q1. Sherd from round-shouldered vessel with high upright neck (girth slightly pronounced around part of circumference); flattened rim, slightly pinched out externally (Form 5).

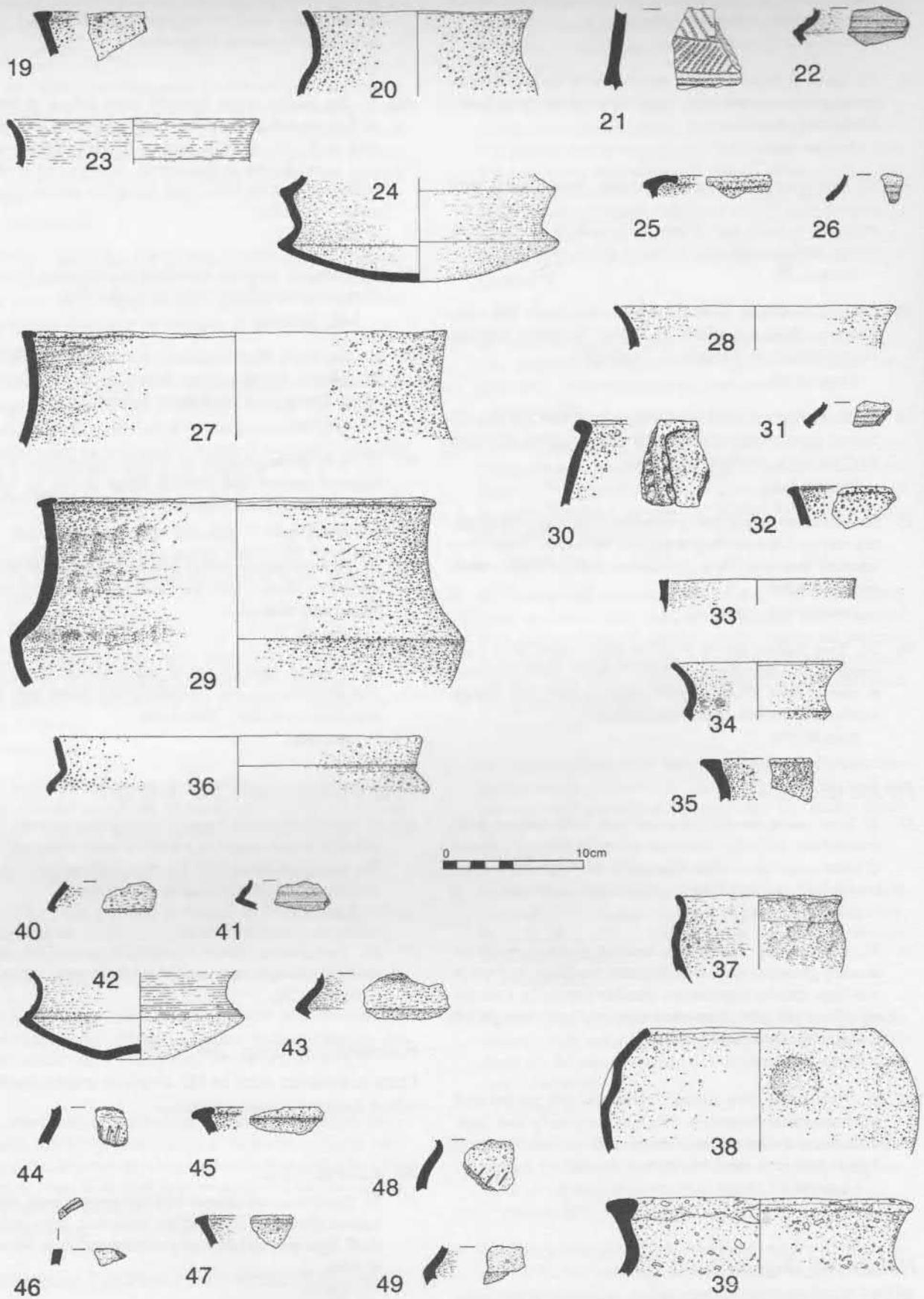


Figure 203: Late Bronze Age/Early Iron Age pottery 19–36 (Rh 500); 37–39 (Pit 330); 40–47 (Hollow 340); 48–49 (Four-poster 293), scale 1:4.

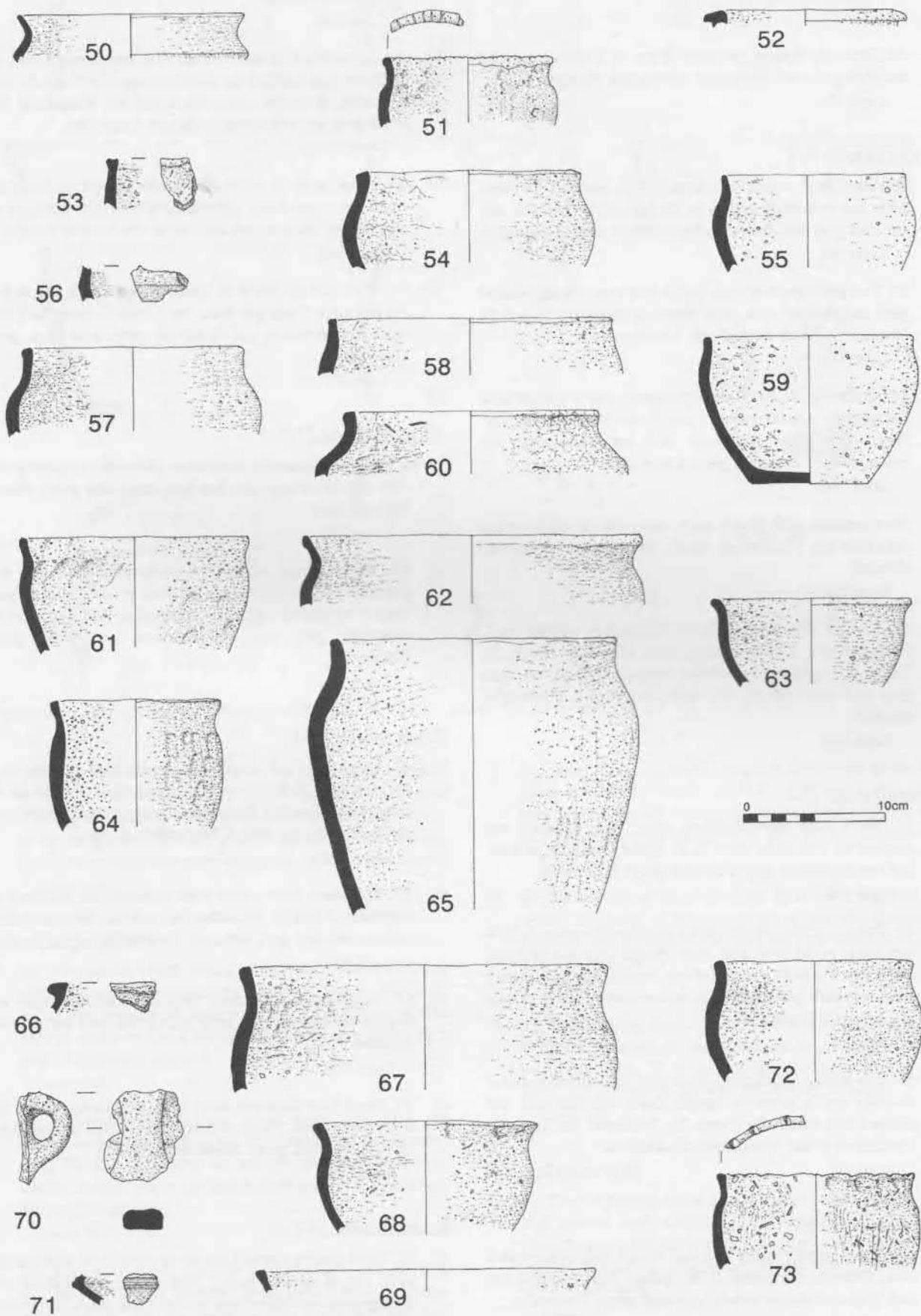


Figure 204: Iron Age pottery 50–52 (Rh 262); 53–57 (Rh 101); 58–60 (Rh 164); 61–65 (Rh 165); 66–67 (Rh 320); 68–71 (Rh 334); 72–73 (Rh 347), scale 1:4.

Row of finger-nail incisions along lip. Unoxidised (dark grey throughout). Unabraded.

Layer 17.

- 52 S2. Eternally flanged rim sherd (Form 8). Oxidised ext. and int. (orange); unoxidised core (light grey). Abraded.

Layer 17.

Roundhouse 101

- 53 S3. Sherd from vessel with flattened rim, pinched out externally and with slight hollow in lip. Irregularly fired (int. and ext. dark grey and orange-brown; core dark grey). Unabraded.

Layer 184.

- 54 S1. Two joining sherds from vessel with pronounced rounded girth and upright neck, with flattened direct rim (Form 2). Unoxidised (black throughout). Unabraded.

Layer 184.

- 55 S1. Sherd from ovoid vessel with high everted or upright neck and slightly tapered rounded rim (Form 1). Smoothed surfaces. Irregularly fired (ext. and int. dark grey and orange-brown; core dark grey). Unabraded.

Layer 184.

- 56 S1. Carinated girth sherd; angle uncertain. Burnished ext.; smoothed int. Unoxidised (black throughout). Moderately abraded.

Layer 119.

- 57 S1. Sherd of probably ovoid vessel with high upright neck; flattened rim, slightly pinched out externally (Form 5). Traces of burnishing on exterior. Irregularly fired (ext. dark grey and dark brown; int. and core black). Moderately abraded.

Layer 120.

Roundhouse 164

- 58 S1. Sherd from upright-necked vessel with flattened rim, pinched out externally (form 5). Irregularly fired (int. and ext. buff and light/dark grey; core dark grey). Unabraded.

Layer 136.

- 59 S1. Twelve joining sherds from a substantially intact (c.50% surviving) ovoid bowl with short upright neck and flattened direct rim (Form 2). Smoothed ext. Irregularly fired (mainly black and dark grey, with light brown mottles below rim on int. and ext.). Unabraded.

Layer 136.

- 60 S1. Two joining sherds from vessel with pronounced rounded shoulder and a probably upright neck; rim flattened and pinched out externally (Form 5). Smoothed int. and ext. Unoxidised (black throughout). Unabraded.

Layer 136.

Roundhouse 165

- 61 Q1. Three joining sherds of ovoid vessel with high everted neck; flattened rim (Form 2). Irregularly fired (int. and ext. dark grey and orange-brown; core dark grey). Unabraded.

Layer 177.

- 62 Q1. Rim sherd from vessel with high everted neck and rounded rim, slightly expanded externally (Form 6). Irregularly

fired (ext. and int. light and dark grey; core dark grey). Moderately abraded.

Layer 166.

- 63 S1. Large sherd of ovoid vessel with short everted neck and flattened rim, pinched out slightly externally (Form 5); angle uncertain. Burnished ext.; smoothed int. Irregularly fired (dark grey and mid brown surfaces). Unabraded.

Layer 177.

- 64 S1. Large sherd of ovoid vessel with everted neck and flattened direct rim (Form 2). Irregularly fired (ext. dark grey and mid brown; int. and core dark grey). Moderately abraded.

Layer 166.

- 65 S1. Two joining sherds of ovoid jar with high and slightly everted neck. Flattened direct rim (Form 2). Irregularly fired (ext. orange-brown and dark/light grey; core dark grey). Unabraded.

Layer 177.

Roundhouse 210

- 66 S3. Sherd of internally flanged rim (Form 8). Irregularly fired (ext. and int. orange and dark grey; core dark grey). Moderately abraded.

Layer 320.

- 67 S1. Three joining sherds from probable ovoid vessel with everted neck; rim varies from flattened to rounded and in parts slightly expanded externally. Irregularly fired (ext. and int. dark/light grey and orange-brown; core dark grey). Unabraded.

Layer 320.

Roundhouse 334

- 68 S1. Large sherd of ovoid vessel with high upright neck; flattened rim, slightly pinched out externally for part of circumference (Form 5). Irregularly fired (ext orange-brown and black; core and int. black). Moderately abraded.

Layer 494.

- 69 S2. Rim sherd from vessel with flattened rim, pinched out externally (Form 5). Smoothed int. and ext. Irregularly fired (orange and dark grey surfaces). Unabraded.

Layer 494.

- 70 S1. Strap handle. Irregularly fired (ext. dark/light grey and reddish brown; core dark grey; int. surface does not survive). Abraded.

Layer 502.

- 71 S1. Sherd from furrowed bowl with two closely spaced furrows above girth. Traces of burnishing on ext; smoothed int. Unoxidised (dark grey). Moderately abraded.

Layer 502.

Roundhouse 347

- 72 S1. Three joining sherds from ovoid vessel with high upright neck; rim of direct rounded form (Form 1). Oxidised ext. (orange) and unoxidised core and int. (dark grey). Moderately abraded.

Layer 510.

- 73 S2. Three sherds (two joining) from ovoid vessel with high,

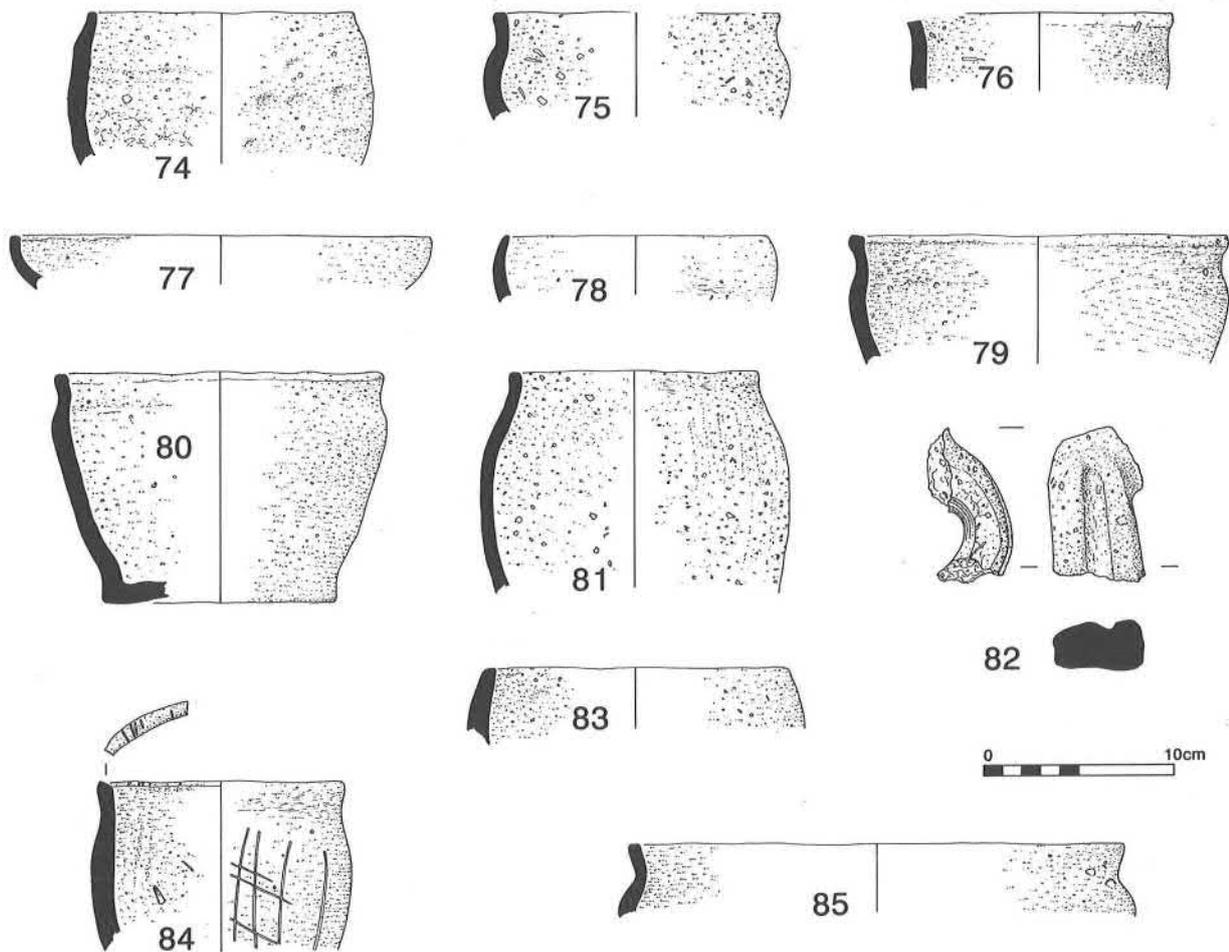


Figure 205: Iron Age pottery 74–79 (Rh 620); 80–83 (Rh 631); 84–85 (Rh 643), scale 1:4.

slightly everted or upright neck; flattened rim, slightly pinched out externally (Form 5). Faint approximately vertical brushing on exterior. Widely spaced finger-tip impressions on lip. Irregularly fired (int. and ext. dark/light grey, orange, orange-brown and buff; core dark grey). Moderately abraded.

Layer 510.

Roundhouse 620

74 G1. Five sherds (most joining) from ovoid vessel with low upright neck; flattened direct rim (Form 2). Traces of burnishing on ext., and also of finger smearing. Irregularly fired (int. and ext. dark grey, black and reddish brown; core dark to light grey). Moderately abraded.

Layer 728.

75 S1. Six joining sherds from ovoid vessel with high and slightly everted neck; flattened rim, slightly expanded externally (Form 7). Smoothed int. and ext. Irregularly fired (ext. and int. reddish brown and dark to light grey; core light grey). Moderately abraded.

Layer 747.

76 S3. Rim sherd from possibly ovoid vessel with upright/everted neck; rim of flattened direct form (Form 2). Irregularly fired (ext. and int. orange-brown, mid brown and dark grey; core dark grey). Moderately abraded.

Layer 746.

77 S1. Sherd from a probably hemispherical open bowl; flattened direct rim, slightly pinched out internally (Form 5). Irregularly fired (ext. orange-brown and dark grey; int. dark grey and mid brown; core light to dark grey). Unabraded.

Layer 746.

78 S1. Sherd from neckless ovoid or open bowl. Tapered rim (Form 1). Traces of burnishing on int. and ext. Irregularly fired (ext. and int. dark to light grey and light brown; core dark grey). Unabraded.

Layer 746.

79 S3. Three joining sherds from round-shouldered vessel with high everted or upright neck; flattened rim, slightly expanded externally (Form 7). Irregularly fired (surfaces dark to light grey, buff and orange-brown). Moderately abraded.

Layer 746.

Roundhouse 631

80 S1. Twelve joining sherds from round-shouldered vessel with high everted neck; flattened direct rim (Form 2); flat base. Smoothed exterior and interior. Irregularly fired (ext. and int. light to dark brown, reddish brown and dark grey; core dark grey). Unabraded.

Layer 695.

81 S3. Twelve joining sherds from ovoid or ellipsoid jar with

short upright neck; direct flattened rim (Form 2). Traces of mainly vertical brushing on ext. and of burnt matter on interior. Irregularly fired (ext. and int. light to dark brown and dark grey; core dark grey). Unabraded.

Layer 701.

- 82 S3. Strap handle with deep vertical channel on outer face. Unoxidised (dark grey). Moderately abraded.

Layer 701.

- 83 G1. Rim sherd from neckless vessel, possibly of ovoid form; direct flattened rim (Form 2). Traces of burnt matter on ext. Unoxidised (dark to light grey). Moderately abraded.

Layer 701.

Roundhouse 643

- 84 Q1. Seven sherds (mainly joining) from ovoid vessel with high upright neck and internally bevelled rim (Form 3). Light random scoring on exterior and row of irregularly spaced finger-nail incisions along lip. Irregularly fired (ext. and int. dark grey and light brown; core light to dark grey). Moderately abraded.

Layer 812.

- 85 S1. Two joining sherds from vessel with high everted neck and flattened direct rim (Form 2). Oxidised ext. and int. (buff) and unoxidised core (dark grey). Unabraded.

Layer 811.

ROMAN POTTERY – FOREWORD

R.J. Zeevat

Excavations at the villa produced over 800 kg of Roman pottery, amounting to over 57000 sherds, while the mausoleum excavations produced 100 kg, consisting of some 8000 sherds. Both assemblages were catalogued according to fabric and vessel type by Yvonne Parminter, and the catalogues were entered onto a database based on dBase III software. A detailed examination of both assemblages was undertaken by Pauline Marney, from which the following reports have been prepared.

Although Ms Marney was able to complete and edit the mausoleum report, the villa report was still at the draft stage when she was hospitalised in October 1991, following a stroke. As she is still in hospital at the time of writing (April 1993) the writer has been obliged to edit the final versions of the reports, and accepts responsibility for any errors that may be due to his efforts.

In the histograms showing the relative percentages of fabrics present in selected contexts/groups, only those amounting to more than 1% of the total have been shown separately. The minor fabrics in each group have been grouped together as 'others'.

Abbreviations used in the report are as follows:

Cam. refers to type series used in Hawkes and Hull 1947.

IT refers to type series for 'Belgic' pottery used in Thompson 1982.

RBP refers to Marney 1989.

SPG 'soft pink grogged', Pottery Fabric 2 and Tile Fabric 5.

ROMAN COARSE POTTERY FROM THE MAUSOLEUM SITE

P.T. Marney

Introduction

Following the initial cataloguing of the entire pottery assemblage (including the pre-Roman material) by Yvonne Parminter, the results were assessed for the purposes of deciding which groups merited publication. The criteria used for this were primarily that a group should either compliment or fill in gaps in the adjacent villa assemblage. In addition, groups which are important in their own right, for example the cremation vessels and those which are particularly valuable as dating evidence (eg. Shrine 15) have also been included. The groups are presented in phase order and then by individual feature within each phase.

The Cremations

All the cremations (Figs 34, 35) within this group *could* date to the post-conquest period, that is between AD. 43/45 to c.90, although they are probably not quite so late, while some (1, 3, 8 and 14) *may* be earlier. The presence of later fabric types (46m, 47, 44 and 9f) has been used to determine the later cremations, whilst those that may be earlier (from about AD.30) contain vessels made only in fabric 46a and, in the case of Cremation 8, fabric 27. Most of them probably date between AD.43/45 to 60/70, with Cremation 6 being somewhat later and presumably the last.

It is not possible to determine family groups. The only vague possibility is the roughly circular group (Fig. 33) formed by Cremations 3, 4, 5, and 10. Cremations 10 and 4 are adult burials and 3 and 5 possibly those of children, though this is stretching the evidence.

A military connection may be seen, especially with Cremations 4 and 9. Cremations 10, 11, 12, 13 and 16 also contained vessels in fabric 46m, which are likely to have derived from the Caldecotte Kiln 1 (or a closely related kiln). This appears to have been producing primarily for the military, as none of its products were found on the adjacent settlement site. This military connection may be simply the purchase of items from soldiers/camp followers as the army entered the region, or due to a firmer link such as the settling of a veteran.

Cremation 1 (Fig. 206)

- 1 Fab. 46a. Dark orange-brown surface, dark grey core. This is a variant of the IT type D1-1, a bowl with an offset neck and often one cordon, as it replaces the cordon with a thin groove. This vessel was highly fragmented. At Prae Wood similar vessels were dated AD.5-40/45.
- 2 Fab. 46a. The surface colour varies from black to dark brown with a dark grey core. The vessel is a squat variant of a Cam. 232C, a large angular-bodied flask. It belongs to the IT type B3-5 category which was a form popular for burials from the later first century BC, before imports became commonly available. Close relationships can be seen between this vessel and types E3-6, small true flasks with high necks and E3-7, a range of fairly angular tall necked cups. Both types date between 15BC and AD.43.

- 3 Fab. 46a. Dark orange-brown surfaces, blackened in places, dark grey to black core. It is an IT type E1-1, a simple carinated cup with one cordon constricting the waist. The type began in the late first century BC and is common in burials and settlements of the first half of the first century AD.
- 4 NI Fab. 46a. Rim only, with dark orange-brown surfaces, lightly blackened. It is an IT type B1-1, a plain everted rim necked jar or bowl. Presumably a residual piece, unless the rest of the pot was totally destroyed by the cremation fire.

Cremation 2 (Fig. 206)

- 1 Fab. 9f. Yellowish-grey surfaces heavily and unevenly blackened on the exterior face. This is a fine well-made globular vessel, possibly a small beaker similar to Cam. 92, which dates from c.AD.10-65. This vessel probably dates to the later part of this range.

Cremation 3 (Fig. 206)

- 1 Fab. 46a. Brownish-orange inner surface, outer surface discoloured by heat to a patchy grey, buff and black. Small omphalos. First century AD.

Cremation 4 (Fig. 206)

- 1 Fab. 46a. Dark orange surfaces, blackened on one side of the pot. The form is that of an IT type F3-2, a pedestalled version of cup E1-1 (see Pot. 3, Cremation 1.). This belongs to a series of fine burial pots all of which could belong to the first century BC, apart from a typologically debased example (dated AD.5-40/45) from a settlement context at Prae Wood and one from Great Wakering which may have been old when buried (Thompson 1982, 421). However, its colouring is a late Belgic phenomenon. At Prae Wood such oxidized pottery was common between the years c.AD.30-50 and it has also been suggested that on this northern side of the Chilterns such colouring is a product of the Conquest period and after (Thompson pers. comm.).
- 2 Fab. 44. Pale brownish-orange outer surface with a light grey inner face and core. It has common minute white inclusions of quartz and ?shell with black (?iron) specks. This is an unusual vessel, perhaps best described as a large angular butt-beaker or jar. The incised decoration was produced by a three-pronged tool. Similarities may be seen with some of the Period III Rushden material, dated c.AD.45-60, which may have had military connections (Woods and Hastings 1984, 35).
- 3 Fab. 46a. Dark brown surfaces, dark grey core. The pot is highly fragmented. The form appears to be that of a straight-walled platter of IT type G1-1, copying the Gallo-Belgic Cam. 1. Such a copy is usually a fair indication of a pre-conquest date, although some are found in early post-43 deposits.
- 4 Fab. 47dg. The surface colour varies between black, dark grey and a light brownish-grey, with a dark grey core. A trace of burnishing remains. The fabric is predominantly sand-tempered with some grog. The form is that of a developed butt-beaker, with a slightly humped body and moulded rim. The type appears to be that of a Cam. 119, although with a surprising lack of decoration. The moulded rim is closer to a Cam. 119A (AD.10-49/61) whilst the fabric is a romanized Cam. 119C (AD.43/44-65).
- 5 NI Fab. 46a. Highly fragmented. The form appears to be that of a G3-1, a copy of the Gallo-Belgic form Cam. 56. It has an internal lip. The fabric is dark brownish-orange with a dark

grey core. A similar example from Prae Wood (X11A, Group B no. 26) was dated AD.5-40/45, although again its colouring may suggest a date around or after the Conquest (see Pot. 1, Cremation 4).

6,7 NI Fab. 46a. Two highly fragmented platters, both probably IT types G1-1 (similar to Pot. 3).

8 Fab. 18a. Two rim fragments of a white-ware Hofheim flagon which was heavily burnt. The form is most like a Cam. 140B (4) which was found with coins of Nero (AD.54-68). Hofheim flagons were imported or made in Britain for the army during the years AD.43-70.

9 NI Fab. 18a. Several heat-discoloured fragments and sherds of a white-ware rouletted vessel, probably a Cam. 113 beaker, dated AD.10/43-49/61 at Camulodunum. A similar vessel at Caldecotte has been dated Tiberio-Claudian c.AD.14-54 (V. Rigby, pers. comm).

The burning and heat-discolouration found on Pots 8 and 9 suggests that they may have been cremated with the body. It may be that during the retrieval of the burnt bone some of these whiteware sherds were mistaken for charred bone fragments.

The Hofheim flagon and brooches found associated with Cremation 4 suggest that this person may have had military connections

Cremation 6 (Fig. 206)

- 1 Fab. 20. Samian Dr. 18/Ritterling Type 2. Rudimentary bead and no offsets internally or externally. Stamped with *PONTUS* of la Graufesenque; dated AD.65-90.
- 2 Fab. 18c. The fabric is a pale orange-pink throughout, tempered with abundant fine quartz. The form is that of a one-handled flagon with the rudiments of a ring-neck and a foot-ring. A similar vessel from Verulamium (Frere 1972, fig. 101.60) has been redated AD.50-90 (Frere 1984, 268).
- 3 Fab. 46k. A romanized fabric, tempered both with sand and dark grey grog, the latter showing clearly on the yellowish-grey surfaces. The form is an IT type E3-1, a small version of the widespread jar and bowl forms. It has a date range from the last quarter of the first century BC. to the post-conquest period when romanized and Roman examples appear, such as this vessel (Thompson 1982, 392).

Cremation 8 (Fig. 207)

- 1 Fab. 46a. Dark brownish-orange surfaces with a dark grey core, lightly incised with a two pronged tool. The origins for the form may be seen in the Samian Ritterling Type 9, a small bowl or cup with an angular wall, the upper portion of which is cylindrical and the lower part conical, and is essentially Tiberio-Claudio or Claudian in date (c.AD.14-54). This vessel differs from the original in having a cordon in place of a groove. It also resembles the IT type E1-3, a small carinated cup, cordoned, with an unconstricted wall above the carination, although this vessel has an elegant foot ring. Dateable contexts so far for the E1-3 are first century AD., occasionally overlapping the conquest.
- 2 Fab. 27. Terra Rubra 3 (A). This vessel is a typical Cam. 84, a girth-beaker with a body bulging both above and below the constriction, but decorated only above it. It is in a typical T.R. 3 (A) fabric, with a very fine-grained paste, smooth in fracture, bright orange throughout with a thin smoky dark brown haze over the exterior. It has been dated AD.5-50 and was

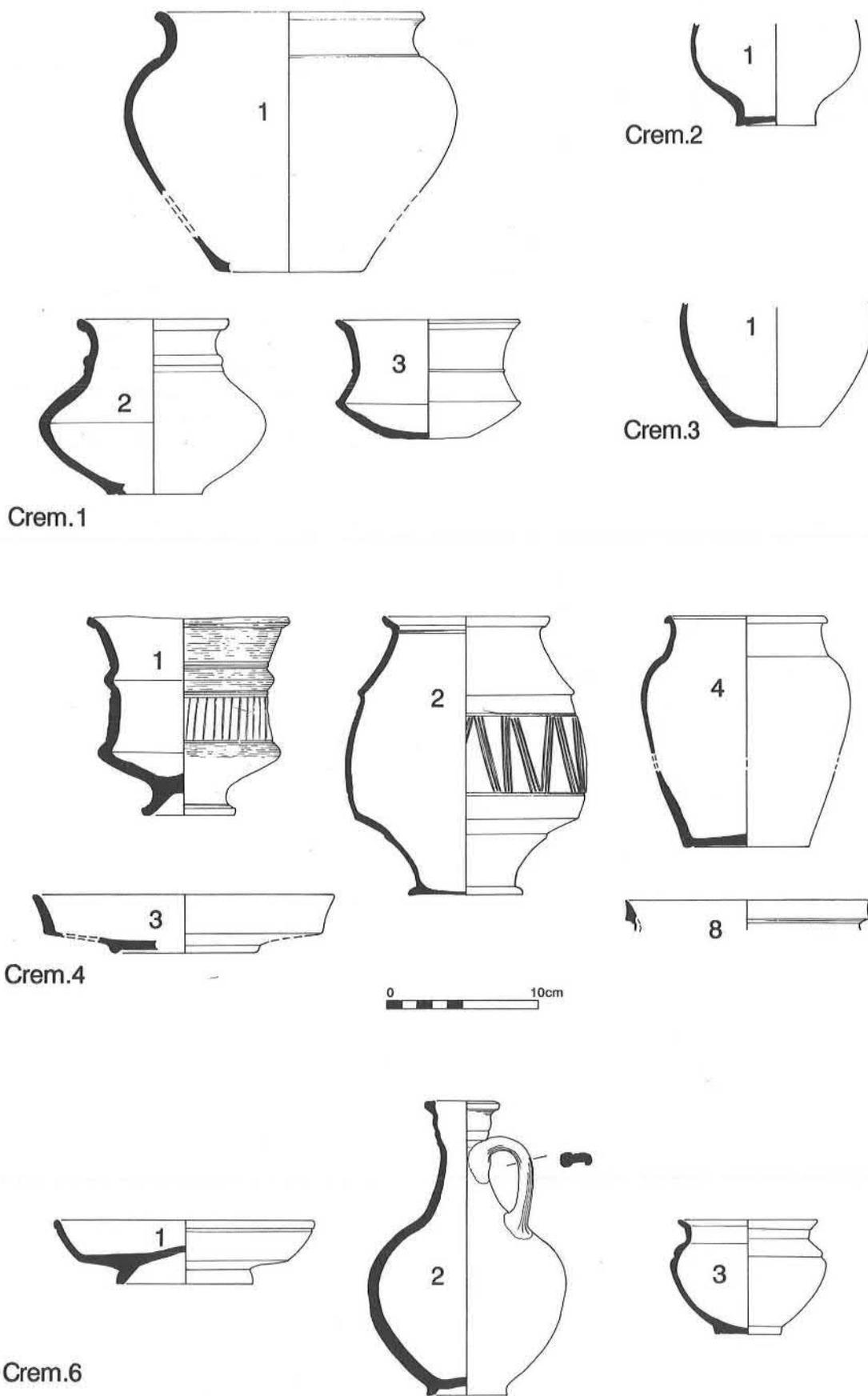
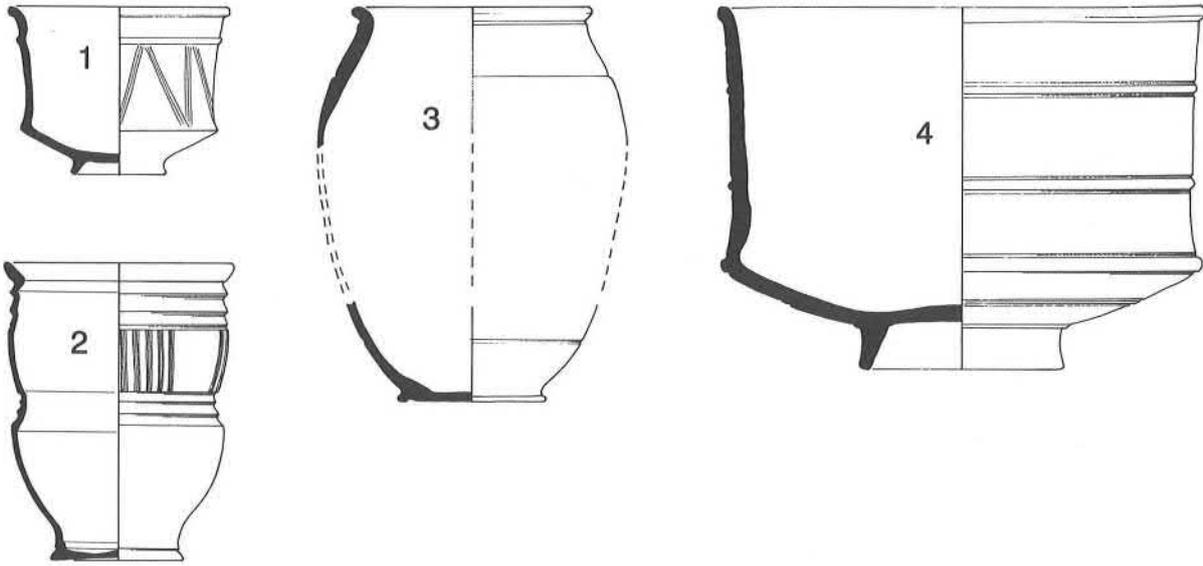
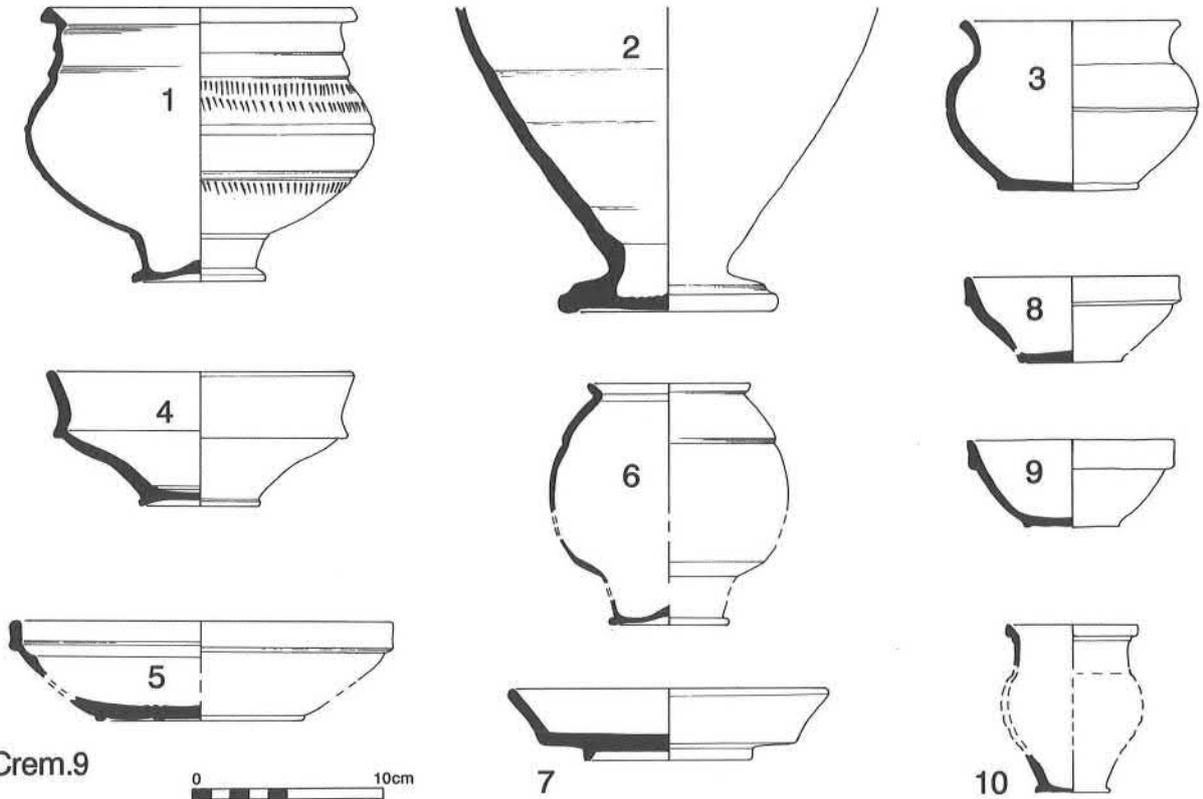


Figure 206: Pottery vessels from Cremations 1, 2, 3, 4 and 6, scale 1:4.



Crem.8



Crem.9

0 10cm

Figure 207: Pottery vessels from Cremations 8 and 9, scale 1:4.

probably made in the Marne-Vesle area, near Rheims (V. Rigby, pers. comm.).

3 Fab. 46a. Dark-brown to black smoky surface over a red underskin with a dark grey core. The form is that of a Cam. 118 or IT type B5-2, a tall plain barrel jar with a slightly out-turned foot and small upstanding rim (although some butt beaker influence may be recognized on the vessel). It is unusual on this northern side of the Chilterns. At Colchester Cam. 118 was dated AD.10-43. At Prae Wood it was found in contexts dated AD.5-40/45.

4 Fab. 46a/p. Dark brown to dark orange surfaces with a dark grey core. The form is that of a Cam. 210 or an IT type F3-4, a large pedestalled bowl or tazza. Although the vessel is essentially native and pre-conquest in form, its walls are not as concave as on the originals, which may indicate a slightly later date. At Colchester Cam. 210a was dated AD.10-43, whilst on the fringes of the area dominated by the *Belgae* a few are apparently post-conquest.

Cremation 9 (Fig. 207)

- 1 Fab. 44. Light brownish-buff upper surfaces and interior darkening to a pale orange over the pedestal with a dark grey core. The elaborate decoration has been very lightly incised and is now difficult to see. The form, a pedestalled bowl, can be related to the IT type F2 (undated) and also to a debased example of a type F3-2 from Prae Wood, dated AD.5-40/45. At Colchester the Cam. 218 (7) is very like this example, but it is also undated. Similarities may be noted with the wide-mouthed bowls of period III at Rushden (Woods and Hastings 1984, fig. 9.10), dated approximately AD.45-60, a site which may have had military connections.
- 2 Fab. 46a. Dark brownish-orange surfaces, dark grey core; signs of burning on the inner face. The form is an IT type A1, a plain pedestal urn with an ordinary foot. It begins early and is found in the earliest levels at Skeleton Green, in features dated c.15BC. to AD.20 and from a little before 20BC at Gatesbury. Its ubiquity is such, however, that it has no dating value. It is common in burials without imports. This particular vessel may be related to the Caldecotte Kiln I products, which included the remains of two such A1 pedestal urns. The kiln has been dated to about the mid first century AD. and it may have been producing for the Roman army.
- 3 Fab. 46a. Dark brownish-orange surfaces, blackened by burning up to the shoulder and a dark grey core. The form is that of a wide-mouthed everted-rim cup with a girth-groove, of IT type E3-3, related to Cam. 221B. The type is usually post-conquest and frequently occurs in Romanized fabrics. This example, however, is in a typical 'Belgic' grogged fabric and thus *may* date to the early post-conquest period.
- 4 Fab. 46j. This pot has been made in a finer (earlier?) version of this fabric. The surfaces are a smoky light brownish-orange through which the pinkish-orange underskin is visible. The core is composed of a thin streak of grey sandwiched between off-white. The form is a copy of the Gallo-Belgic Cam. 56, made in Terra Rubra, which this fabric also appears to be imitating. Such copies (Cam. 57) at Colchester are dated AD.10-65, whilst others (IT type G3-1) are dated AD.5-40/45 and AD.30-50 at Prae Wood, and AD.43-55 and Claudian (AD.41-54) at Verulamium.
- 5 Fab. 47dg. (A heavily sand-tempered Romanized fabric). The surface colour of this pot varies from dark orange to brown with patches of heat blackening and a medium grey core. The vessel is highly fragmented. The form is a copy of a Cam. 7, which even in Belgic grogged ware was primarily of post-conquest date (IT type G1-6).
- 6 Fab. 9f. This is a plain globular beaker, tempered with much fine sand, copying the Gallo-Belgic Cam. 91A, which was copying Terra Nigra. The surface colour was apparently a deep polished black but great heat has caused blistering and browning. The core is light grey. At Camulodunum the copies range in date from AD.10-c.65.
- 7 Fab. 46a. Brownish-orange surfaces with a dark grey core, some heat blackening. The form is that of a straight-walled platter of IT type G1-1, copying the Gallo-Belgic Cam. 1. Although a copy is a fair indication of a pre-conquest date some are found in early post-43 deposits.
- 8 Fab. 47dg. Orange exterior face with a light grey core and inner face. Discolouration and flaking on the exterior surface suggest that the vessel had been close to a heat source. The form is believed to be a debased copy of a Cam. 56, in a totally

Romanized fabric. At Prae Wood grogged examples ranged in date between AD.5-50 and in St. Albans between AD.43-55. This Romanized example is presumably a decade or so later.

- 9 Fab. 47a. Romanized sand-tempered ware. Blue-grey surfaces and core with some pinkish-orange heat discolouration on one side of the vessel. The form is believed to be a debased copy of a Gallo-Belgic Cam. 56 (comments and date as for 8).
- 10 Fab. 47k. Romanized sand-tempered ware. Deep orange surfaces which in places have been discoloured black by great heat. This vessel is so highly fragmented that reconstruction to obtain a profile has proved difficult; however it appears to be that of a small jar, possibly a devolved form of the miniature butt-beaker of IT type G5-3. At Verulamium a similar straight-necked example was dated c.AD.50 and Irchester also has Roman versions (Thompson 1982, 515).

Cremation 9 may have had military connections.

Cremation 10 (Fig. 208)

- 1 Fab. 46a(m). This is a squat bowl with a short corrugated neck. It has brownish-orange surfaces blackened on the lower half. The form can be likened to both the IT types D2-3 and D2-4. The D2-3 is not an early form. At Verulamium one has been dated AD.43-55. The D2-4 has a wide date range which includes some post-conquest deposits. The fabric is very like a coarse 46m (from the mid first-century Caldecotte Kiln I) although the colouring is darker.
- 2 Fab. 46m? The colour of this vessel is unusual for this fabric type. The surfaces are a fairly uniform cream colour with an almost black core. The form, a deep almost straight-sided bowl, is also uncommon. It may be related to the plain carinated cup of IT type E1-4, similar to the example from Prae Wood LVIA Group B (301) (Thompson 1982, 371), dated AD.5-40/45 or to the wide carinated bowl G2-4, dated AD.5-40/45 and post-43. However the closest comparisons are at Rushden, Northants (Wood and Hastings 1984, 44, fig. 9.7) dated c.AD.45-60, a site possibly with military connections. The similarity of this vessel to the plain carinated pedestalled bowl, IT type F3-1, has also been noted (Yvonne Parminter, pers. comm.) and it is a vessel type often found in wealthy burials.
- 3 Fab. 25/30. A soft, silty, powdery grey ware, fired light grey throughout, possibly copying Terra Nigra. The form is that of a large plain beaker. It has no direct parallel at Camulodunum although comparison may be made with Cam. 91D, a Gallo-Belgic globular beaker with an everted rim and decorated or plain body. Post-conquest in date.
- 4 Fab. 46a. Dark brownish-orange surfaces, discoloured by heat to a very dark brown on one side of the pot and a dark grey core. The form is that of an IT type G1-1, a straight-walled platter copying the Gallo-Belgic form Cam. 1. Although a copy is generally a fair indication of a pre-conquest date, some are found in early post-43 deposits.

Cremation 11 (Fig. 208)

- 1 Fab. 46m. The surface of this vessel is orange and buff with a medium grey core with traces of heat discolouration. The form is an IT type D2-2, a wide-mouthed bowl with an everted rim and flattened bulge between cordons on the shoulder. The form, fabric and colour are extremely close to

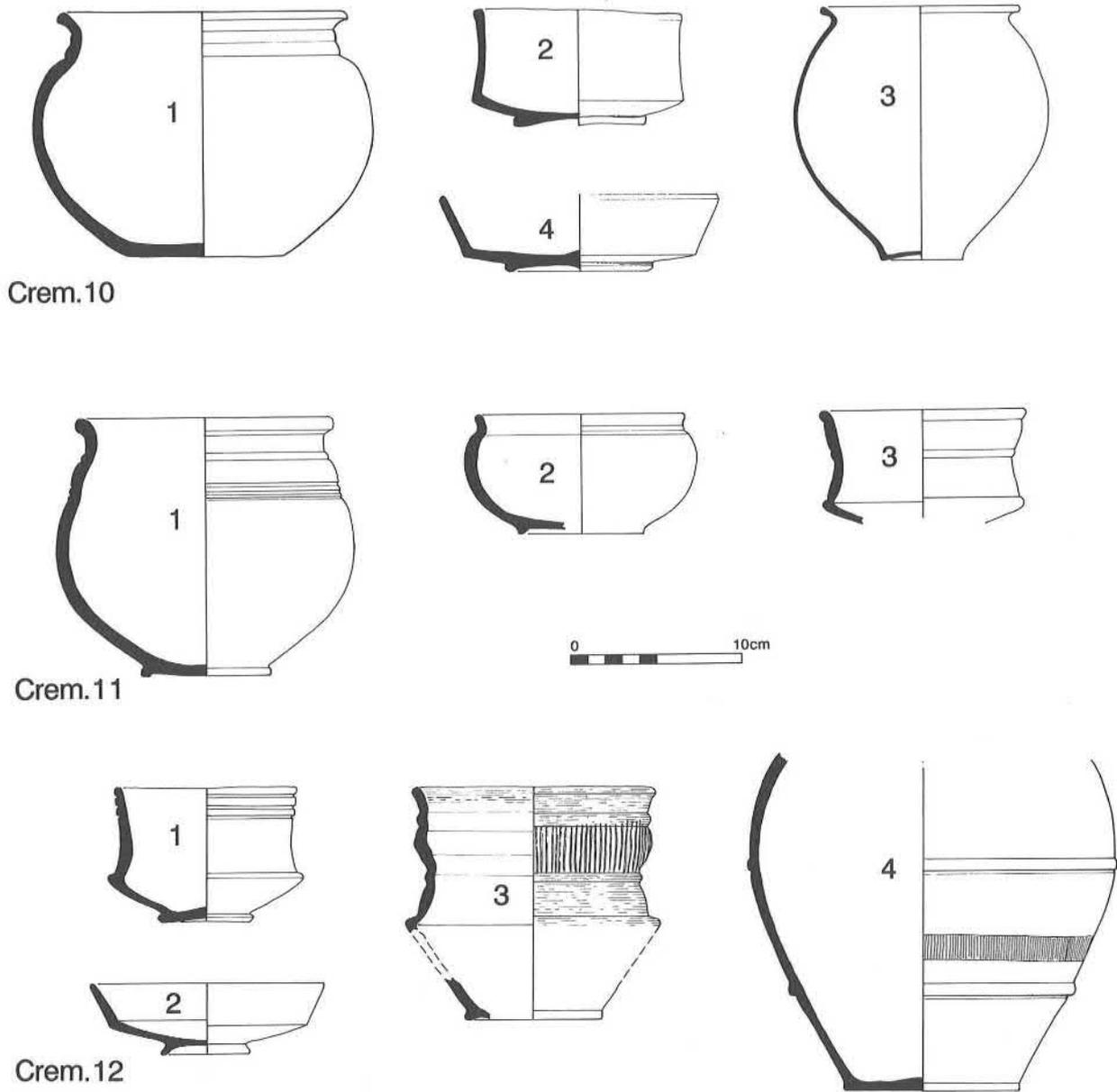


Figure 208: Pottery vessels from Cremations 10, 11 and 12, scale 1:4.

the Caldecotte Kiln I products (RBP, fig. 38.21) and is likely to be of the same mid first-century date. Kiln I is thought to have been in production for the Roman army.

- 2 Fab. 46da. This is a small, plain, round wide-mouthed bowl with a slight bead-rim in a 'soapy' native brown-black fabric. The pot is finely made and resembles a Cam. 249B, dated AD.61-c.65 and an IT type G2-1. These are connected with Terra Nigra bowl forms that are post-conquest in Britain, with strong military connections in their distribution (Rigby 1978, 200).
- 3 Fab. 46a. Dark orange-brown surfaces with a dark grey core. The vessel is a simple carinated cup with one cordon constricting the waist. It is a Cam. 212A, dated AD.10-61 and an IT type E1-1, dated AD.5-40/45 at Prae Wood and AD.50-60 at Stoke Goldington (Thompson 1982, 351).

Cremation 12 (Fig. 208)

- 1 Fab. 46a. Dark brownish-orange surfaces with a dark grey

core. The form is an elegant small carinated cup with three cordons at the rim. This type of cordoning is unusual and makes this vessel a variant of the IT type E1-3 and the various Camulodunum examples. Datable contexts for E1-3 so far are first century AD., occasionally overlapping the conquest.

- 2 Fab. 46m. Orange-brown surfaces with a dark grey core. The vessel is small and is perhaps best described as a dish rather than a platter. The form, however, is that of a miniature platter of IT type G1-1, copying the Gallo-Belgic Cam. 1. The fabric, closely related to that produced at Caldecotte Kiln I, suggests a mid first-century date.
- 3 Fab. 46a. The surface colour varies from orange to orange-brown and to black where intense heat has burnt the vessel. It has vertical comb decoration over the largest hollow-cordon. It is an IT type G4, dated c.AD.10-49, and most closely resembles Cam. 83 (a native copy of Cam. 82) dated to period IV (AD.49-61).

- 4 Fab. 46k. The fabric of this vessel is unusual containing

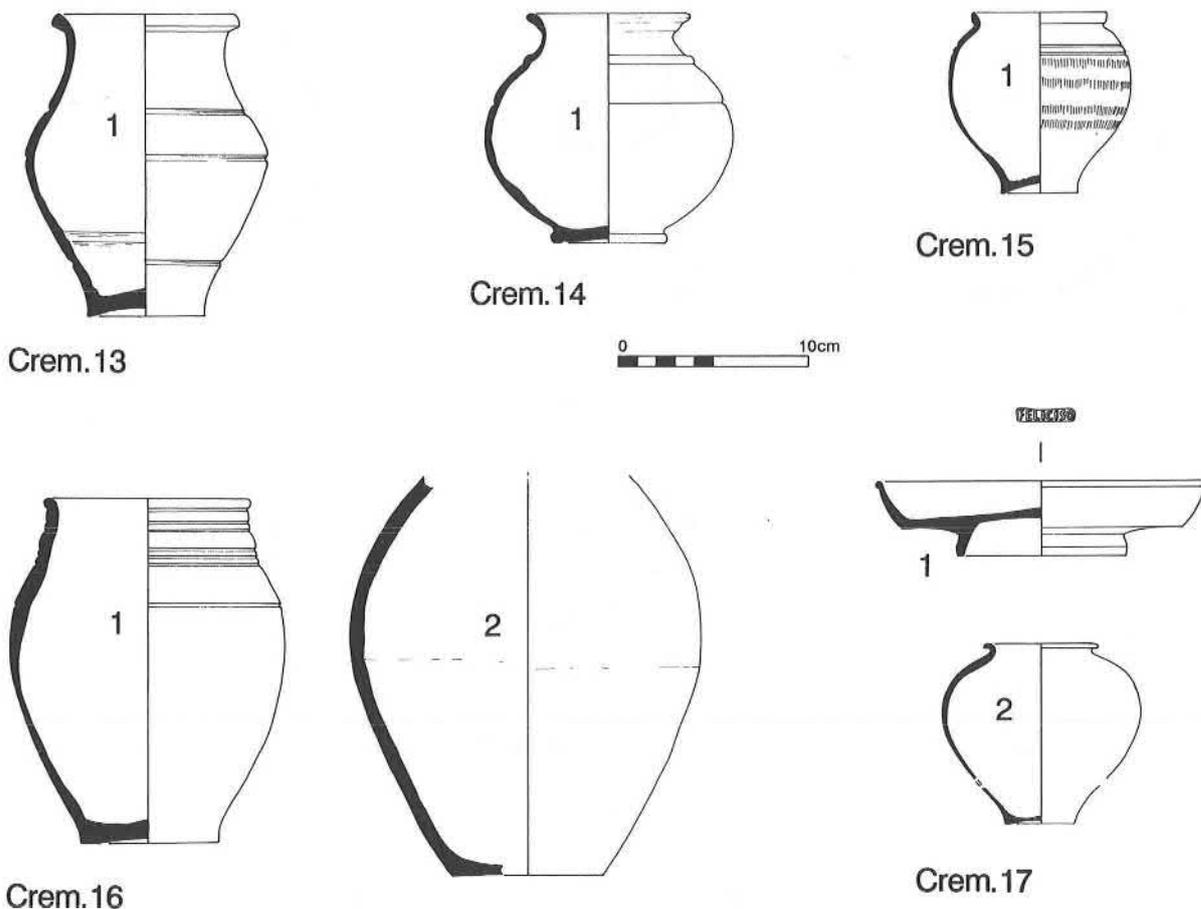


Figure 209: Pottery vessels from Cremations 13, 14, 15, 16 and 17, scale 1:4 (potter's stamp at scale of 1:2).

abundant minute grey grog inclusions and much fine quartz. The 'speckled' light grey fabric is visible only where the fine black polished outer surface has been eroded. The interior surface is also reduced. The form could be that of a Cam. 232 Aa (IT type B-8), a large flask with a cordoned ovoid body (also found in a 'Romanized native' fabric) or, if the neck was not narrow, it may have been an IT type B3-7, a tall jar, not narrow-necked with all-over cordons and/or decoration. The decoration on this vessel is rouletted. Almost certainly post-43 AD.

Cremation 13 (Fig. 209)

1 Fab. 46m. Deep orange surfaces with a grey core. The vessel is a plain butt-beaker with an off-set neck of IT type G5-4. The form is found in Hertfordshire and on the northern side of the Chilterns. It dates from c.AD.5-50 and overlaps the conquest a little. The fabric and colour of this particular pot suggests that it dates to the mid first century.

2 NI Fab. 46p. Two rim sherds only from a butt-beaker. Possibly residual or from a vessel totally destroyed by fire.

Cremation 14 (Fig. 209)

1 Fab. 46a. The surface colour is patchy dark orange-brown, brown and buff with a dark grey core. The vessel has a beaded foot and sharply formed cordon and grooves. The form, a round-bodied jar with a short narrow neck is difficult to place under any Cam. or IT categories. Similarities may be seen with IT types B3-4 (AD.10-65), B3-5 (later first century BC to c.AD.43) and E3-6 (AD.10-65).

Cremation 15 (Fig. 209)

1 Fab. 47j. The vessel is a light buff-brown in colour throughout, decorated with two parallel grooves and lightly tooled vertical dashes. The form is that of a Cam. 92, a copy of Cam. 91 in native to Romano-British ware. The date range is AD.10-65; however, the fabric of this example suggests a date towards the end of that range.

Cremation 16 (Fig. 209)

1 Fab. 46m. This vessel appears to have been subjected to great heat, having been discoloured to a patchy light to dark brown and black with numerous heat-crazed lines across the outer surface. It was made on a template. The form is related to IT type G5-5, a butt-beaker with an off-set neck, although the cordoned neck is unusual. The type dates predominantly between AD.5-65 and the fabric suggests that this example probably dates to about the mid first century AD. Possibly made in Caldecotte Kiln I.

2 Fab. 46m. The surface colour is bright orange to orange-brown with some slight blackening, the core is grey. Although the rim is missing enough of the pot is available to suggest that its form may be that of an IT type B5-1, a tall plain barrel jar with a bead rim. However, this form is not usually found with red/orange surfaces on this northern side of the Chilterns. The fabric suggests that it dates to about the mid first century AD., and also that it came from Kiln I at Caldecotte (comments as 1).

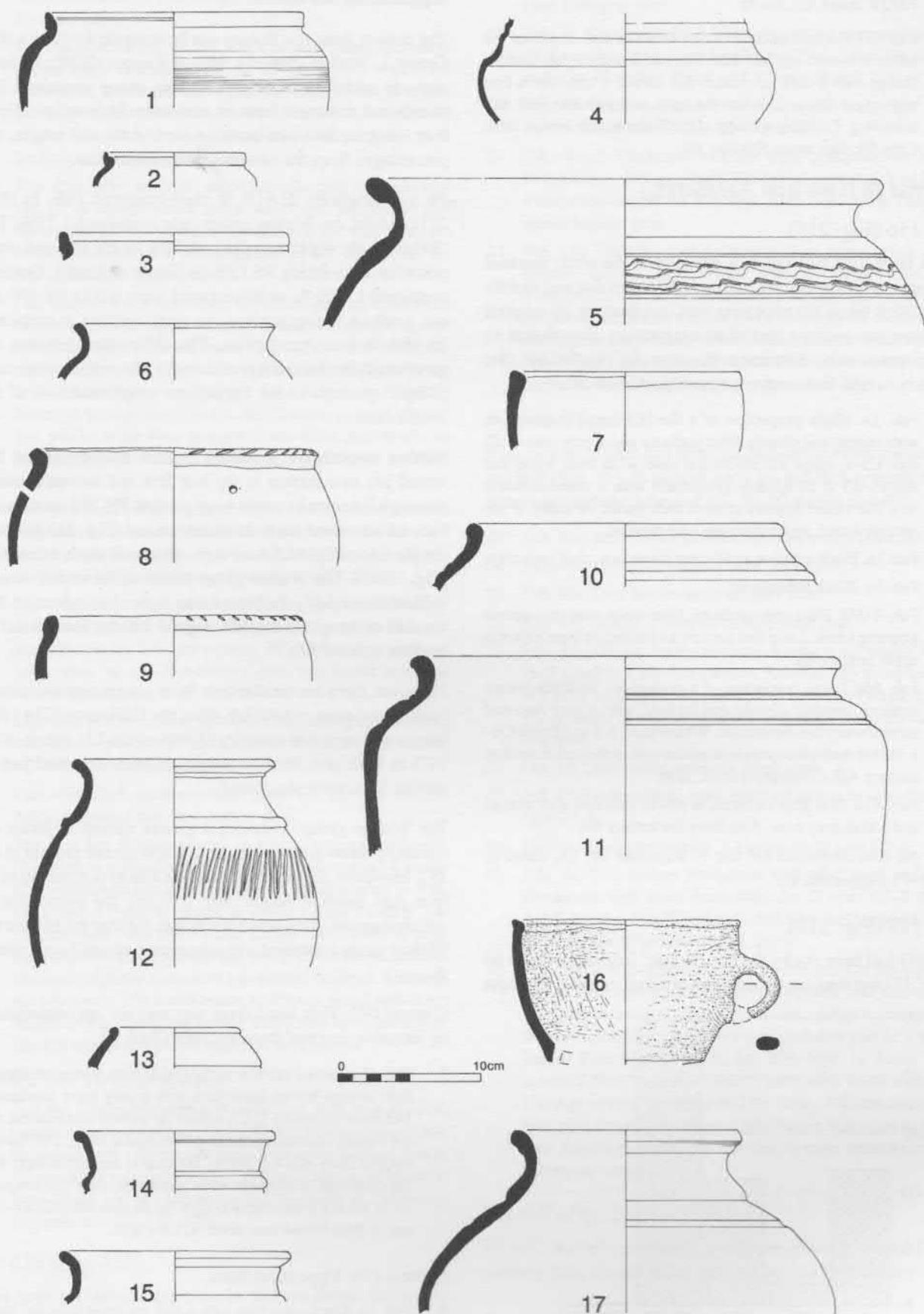


Figure 210: 'Belgic' pottery 1-6 (Pit 156); 7-17 (Pit 197), scale 1:4.

Cremation 17 (Fig. 209)

- 1 Fab. 20. Samian platter, Dr.18/Ritterling Type 2, stamped *FELIX*, dated AD.50–70.
- 2 Fab. 49? A small, extremely fine ovoid beaker. In places the fabric is almost eggshell thin. The surfaces are a pale pinkish orange with a dark grey core. The fabric is very like a fine ungrogged fabric 2, it has the same soft powdery feel and colouring. Probably a ?copy of the Gallo-Belgic beaker form Cam. 91; date range AD.10–c.65.

Period 2b (Late Iron Age/Belgic)

Pit 156 (Fig. 210)

This large oval pit (Fig. 31), adjacent to the north terminal entrance of Enclosure 60, had probably been dug and rapidly backfilled when the enclosure was constructed. Its original purpose was perhaps that of an exploratory clay pit and its date is presumably the same as the other clay pits (below), that is early to mid first century or perhaps AD.30–50.

- 1 Fab. 1a. Major proportion of a fire blackened cooking-pot with orange-red closely rilled surfaces and a grey core of IT type C5–1, dated AD.30–50 and post-43 at Prae Wood and AD.43–55 at St Albans. Handmade with a wheel-finished rim. The vessel appears to have been buried virtually, if not entirely intact, and containing lime powder.
- 2 Fab. 1a. Black exterior, red-brown inner face, dark grey core.
- 3 Fab. 1a. Black throughout.
- 4 Fab. 14/33. Blue-grey surfaces, blue-white core in a coarse granular fabric. Later first century and therefore from extreme upper tertiary fill.
- 5 Fab. 46a. Large proportion of a storage-jar. Reddish-orange surfaces, patchily discoloured by heat, with a grey core and incised wavy line decoration. Wheelmade. It is an IT type C6–1, the form of which survived unchanged to the end of the first century AD. (Thompson 1982, 259).
- 6 Fab. 47a. Mid grey surfaces, in places streaked with orange and a blue-grey core. Also from the tertiary fill.

The pit also contained the rim of a samian Dr. 18, dated to c.50–75 (Appendix 8).

Pit 197 (Fig. 210)

Pit 197 had been cut by the late 'Belgic' Enclosure Ditch 60 (Fig. 37) and thus contained some residual material amongst

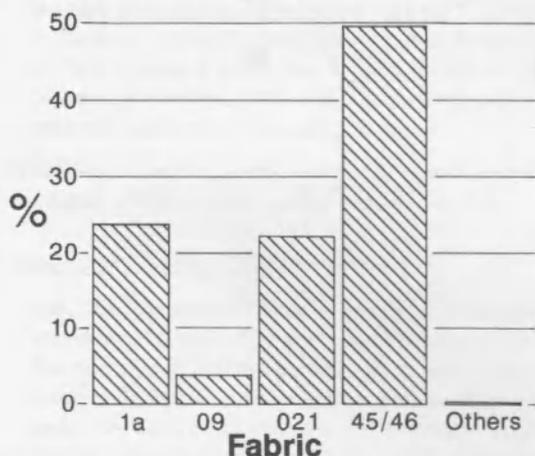


Figure 211: Histogram of the percentage of sherds in each pottery fabric from Pit 197.

its 231 sherds. Only one level, that of 197, was uncontaminated by Ditch 60. A date of early to mid first century AD. is suggested for this feature.

The pottery from this feature can be compared to that within Group 1, Walton (MK36), Milton Keynes (RBP, 7) dated early to mid first century AD. This group contained 226 sherds and also came from an enclosure ditch and pit. However, despite this similarity in size, date and origin, the percentages from the two groups are dissimilar.

Pit 197 produced 23.61% in shell-tempered Fab. 1a (Fig. 211), whilst the Walton group only contained 1.77%. The 'Belgic' Fab. 46/45 equalled 49.78% in Pit 197 and composed an astonishing 95.13% in Group 1. Lastly, Group 1 contained 1.77% in sand-tempered ware whilst Pit 197 did not produce a single piece. In total contrast it contained 26.18% in Iron Age fabrics. The differences between the groups may be due to the presence of a kiln or kilns producing 'Belgic' pottery in the immediate neighbourhood of the Walton site.

Neither assemblage produced a plain shell-tempered lid-seated jar, so common in the late first and second century, although lid-seated vessels were present. Pit 197 contained a Fab. 1a lid-seated slash decorated vessel (Fig. 210.8) and a simple internally thickened type, also with slash decoration (Fig. 210.9). The Walton group produced lid-seated vessels in Fabs 46a and 47j, the latter being a possible indication that the date of the group extends slightly into the second half of the first century AD.

However, there are similarities. Both groups contained butt-beakers and cups, whilst Fab. 46m, the Caldecotte Kiln 1 fine fabric, also occurs in quantity (9.96% of the 231 sherds in Pit 197) in both pits. Rim fragments of wide-mouthed jars of similar form were also found.

The Walton group contained a greater variety of forms including platters and storage jars, which are not present in Pit 197. However, the latter did produce a large percentage of an Iron Age handled vessel (Fig. 210.16), the proportion of which suggests that it was not residual. Neither Pit 197 nor the Walton group contained any continental or non-local material.

Context 197: This basal layer was entirely uncontaminated by intrusive material from the later Ditch 60.

- 7 Fab. 45a. Brown exterior surface with some soot encrustation, light orange-brown inner face with a grey core; handmade. The form is that of I.T. C3, a plain jar with no true external rim but usually internal thickening (Thompson 1982, 235) having derived from Iron Age forms. It began in the first century BC. but continued to be made, even handmade, after the conquest. At St Albans it was dated to the Claudian period (AD.41–54), and at Prae Wood was dated AD.5–40/45.

Context 176: Uppermost layer.

- 8 Fab. 1a. Black outer face with a dark red inner face and black to brownish core. A handmade version of an IT type C5–2 with slash decoration and three suspension holes. At Hardingsstone, Northants., such vessels were dated to the mid

first century. At Prae Wood both shelly and grogged examples were found, the latter dated to AD.5–40/45 (Thompson 1982, 249) and the shell-tempered vessels are presumably of the same date.

- 9 Fab. 1d. (Fine Belgic shelly). Black exterior with a dark red to brown inner face and core. An IT type C5–2 with slash decoration, handmade and wheel-finished. Whilst it is presumably of the same date as 2 (above) the fabric is composed of much finer shell, with the occasional larger fossil shell inclusions, than is found in Fab. 1a.
- 10 Fab. 45a. Worn surfaces, predominantly grey to black with patches of orange-brown and a black core; handmade? The form is that of an IT type B2–2, a rippled or corrugated jar, not everted. It occurred at Wheathampstead and Braughing, but was unstratified at both sites.
- 11 Fab. 46a. Dark brown exterior with a dark grey core and inner face. Handmade, wheel-finished rim. Two holes, cut after firing, are visible on the lower body. The vessel is a fairly crude version of an IT type D2–1 (Thompson 1982, 319) and looks like an early example. At St Albans in the Watling Street pit the type was dated to the Claudian period (AD.41–54), whilst in the Foss rampart it was dated AD.40–60. At Northampton those in Kiln 18 were thought to be mid first century.
- 12 Fab. 46a. Dark brown surfaces with a dark grey core. Incised diagonal line decoration below the shoulder cordon. The form is that of an IT type G5–5, dated AD.5–40/45 at Prae Wood and AD.43–55 at St Albans (Thompson 1982, 521).
- 13 Fab. 46g. Dark orange-brown surfaces, grey core. Possibly from an IT type B5–5, a grooved globular barrel jar. The type originated in the late first century BC, whilst an example in fabric 46m, of mid first-century date, was found in a field ditch at Caldecotte.
- 14 Fab. 46p. Black surfaces, red underskin, dark grey core. The vessel is a cup of IT type E1–1. At Prae Wood the type is dated AD.5–40/45 (Thompson 1982, 352).
- 15 Fab. 46m. Dark orange surface, grey core, form as 14. The fabric suggests a mid first-century date.
- 16 Fab. Iron Age. Black surfaces, dark grey core and handmade. The fabric is soft and relatively untempered containing sparse silty mudstones and sparse quartz. It looks similar to Fab. 46da, and is possibly related to David Knight's Fabric 3 at Tickfordfield Farm (Farley and Knight 1986, 153). A large proportion of this pre-Belgic cup was found in the pit, and it is obviously difficult to think of it as entirely residual. Although not a fineware, it is a well-made, handsome vessel with holes drilled into the base, suggesting that it may have had a long life and may perhaps be considered an heirloom.

Context 196: Lowermost layer.

- 17 Fab. 46a. Light yellowish-grey outer face, dark grey and pink patchy inner face and a grey core. This is a fairly crude vessel, handmade with only the rim being finished on a wheel. It is an IT type B2–4 or perhaps a B2–3, the later dated to AD.5–45 at Prae Wood and the former to AD.10–50/60 at Colchester (Thompson 1982, 127–133).

Pit 475 (Fig. 212)

This large pit had also been cut by the late Belgic Enclosure Ditch 60 (Fig. 37) and also Ditch 474. It had probably been an exploratory clay-pit, excavated at the same time as the other clay pits, and also dates to the early to mid first century AD., or possibly AD.30–50.

Context 477: Upper layer.

- 18 Fab. 1a. Black widely rilled exterior surface, orange-red inner face, dark grey core.
- 19 Fab. 1a. Blackened, finely rilled orange-red exterior, orange-red inner face, grey core. An IT type C5–1, dated AD.30–50 and post-43 at Prae Wood, and AD.43–55 at St Albans.
- 20 Fab. 45. Orange surfaces with buff margins and a light grey core. A handmade IT type C5–1 (see 19).
- 21 Fab. 46da? Blackened exterior, light orange-brown inner face, black to dark grey core. The vessel appears to have been wheelmade despite its Iron Age form. The fabric contains sparse angular grog.
- 22 Fab. 18c. Pinkish-white surfaces with an orange-pink core. Ribbed handle. This vessel probably came from the Verulamium region where the kilns making this pottery began about the mid first century AD, primarily for the military market, only expanding to the civilian markets from the late first to mid second century AD. This pot is likely to be contamination from Ditch 474 or Enclosure 60.

Pit 595 (Fig. 212)

This clay pit, which had been cut by Sunken Featured Building 604 (Fig. 32), is also of early to mid first-century date, although a tighter dating of AD.30–50 would also fit.

- 23 Fab. 46a. Dark brown to black surfaces with a black core.
- 24 Fab. 46a. Orange-brown surfaces, grey core.
- 25 Fab. 46a. Dark brown surfaces, grey core.
- 26 Fab. 46j. Orange-brown surfaces, orange core.
- 27 Fab. 46a. Orange-brown surfaces, black core. Possibly from an IT type E1–1, E1–2 or variants. Alternatively it may be part of a lid of an IT type L1, similar to that from Swarling, grave 15, although in contrast this is a well-made and well-turned example.
- 28 Fab. 45. Dark brown surfaces, black core.
- 29 Fab. 45. Patchy orange, grey, black surface, grey core of an IT type C5–1.
- 30 Fab. 1a. Black throughout. A handmade IT type C5–1.
- 31 Fab. 1c. Pale orange throughout with blackened surfaces. Handmade with slash decoration. An IT type C5–2 dated AD.5–40/45 at Prae Wood and c.AD.50 at the Camp Hill kiln, Northampton (Thompson 1982, 249).
- 32 Fab. 13a. A lead-glazed body sherd. The glaze is olive-green and on the exterior surface only, it extends over the white/cream barbotine dots. The fabric is soft, orange in colour and slightly micaceous. The sherd was probably part of a pear-shaped flask (Arthur 1978, fig. 303, type 1). Some well stratified finds from this industry have been found with late Iron Age pottery 'prior to c.AD.80' (*ibid.*, 300) but this piece may have formed part of an Anglo-Saxon collection or have been deposited during the late first to early second-century 'silting-up' process.

Pit 607 (Fig. 212)

Pit 607 was also probably a clay pit of early to mid first-century date, slowly filling up into the late first century.

Context 602: Uppermost layer.

- 33 Fab. 9f. Yellowish-grey to brown exterior, black inner face, grey core. This is a fairly fine micaceous vessel, in the form of

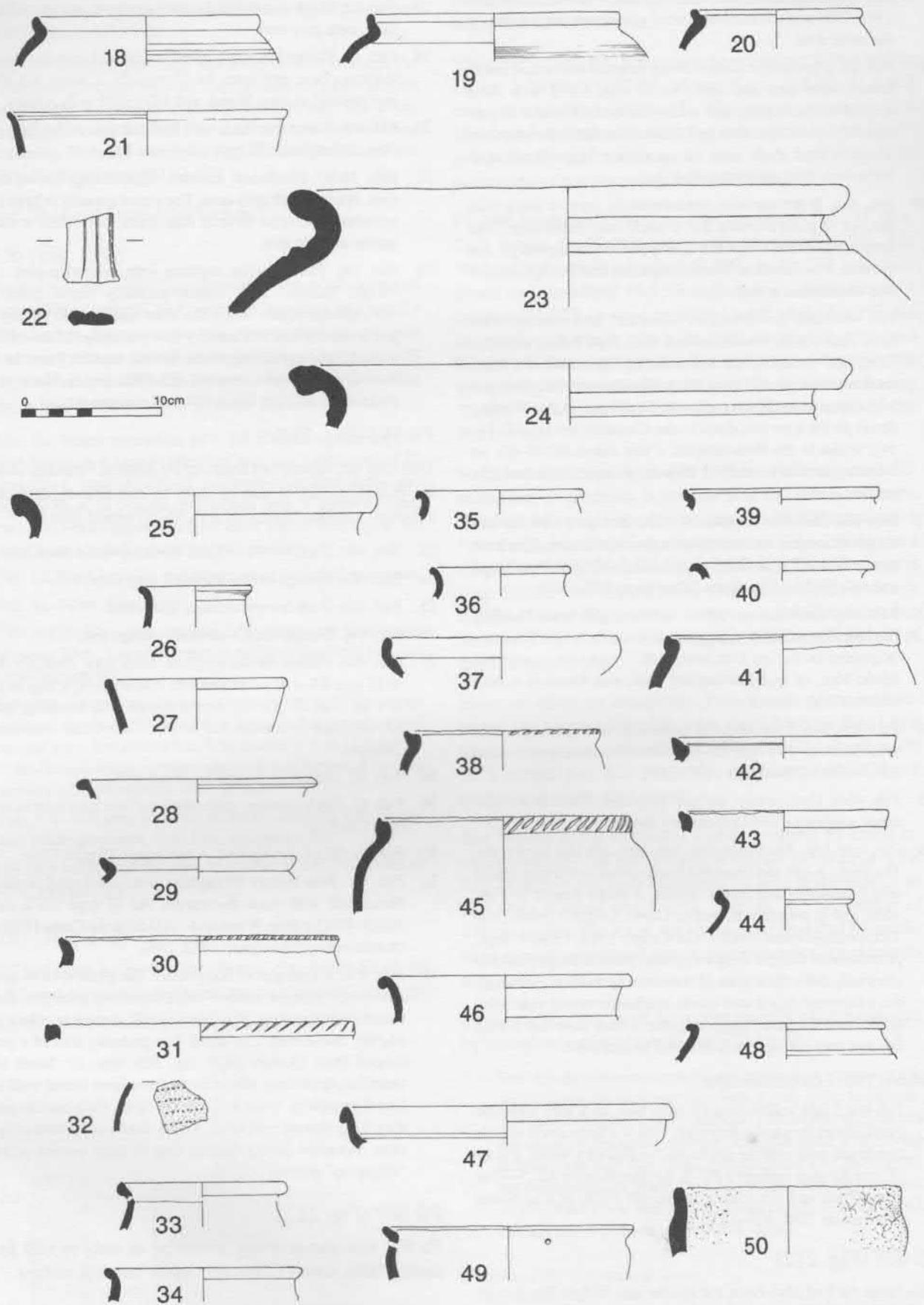


Figure 212: 'Belgic' pottery 18-22 (Pit 475); 23-32 (Pit 595); 33-40 (Pit 607); 41-50 (Pit 608), scale 1:4.

a butt-beaker with an internal overhang, derived from a Cam. 113. At Camulodunum such copies, although in a different fabric, are normally Claudian (AD.41–54).

- 34 Fab. 46a. Orange-brown surfaces, grey core.
- 35 Fab. 46a. Black exterior surfaces, dark brown inner face, dark grey core.
- 36 Fab. 46p. Black throughout. Another body sherd in this fabric (not illustrated) had comb-stabbed decoration.
- 37 Fab. 47dg. Blackened orange-brown surfaces, dark grey core. Copy of a Cam. 12 in a Romanized fabric. Dates from the third-quarter of the first century AD (Thompson 1982, 463).

Context 830: Lowermost layer.

- 38 Fab. 1c. Prickly late Iron Age shelly fabric with a black exterior and core and brown to black inner face. Handmade with slash decoration. An IT type C5–2 dated AD.5–40/45 at Prae Wood and c.AD.50 in the Camp Hill kiln, Northampton.
- 39 Fab. 1a. Black throughout. This is an extremely small example of an IT type C5–1, dated AD.30–50 and post-43 at Prae Wood and AD.43–55 at St Albans.
- 40 Fab. 46a. Blackened orange-brown exterior, orange-brown inner face, grey core.

Pit 608 (Fig. 212)

This feature is also believed to have been a clay pit (Fig. 32). The largest sherds in it came from a vessel that is native Iron Age in form (50), though obviously late. Its presence, if it is

not residual, suggests that the pit was dug at some time during the first half of the first century AD., if not earlier. Much of the remainder of the material consists of many small pieces, the proportions of which suggest that their place in the pit is related to the silting up process. The smallest rim pieces have not been illustrated. The pottery includes much 'Belgic' grogged ware and its later subgroups, covering a date range of ?early to late first century AD.

Two pieces of Samian were also found in this feature. They are both from a Pre-Flavian (c.50–75) Dr. 18 vessel (Appendix 8), a piece of which was also found in Pit 156.

- 41 Fab. 1c. Prickly Iron-Age type shelly, with a black to dark exterior and core, and orange inner face. Handmade and essentially a native version of an IT type C5–1, dated AD.30–50 and post-43 at Prae Wood.
- 42 Fab. 1a. Reddish-orange surface, grey core. Handmade with a wheel-finished rim of an IT type C5–1.
- 43 Fab. 1a. Blackened reddish-orange surfaces, grey core. Handmade with a wheel-finished rim of an IT type C5–1.
- 44 Fab. 9xy. Black surfaces, red underskin and a black to dark grey core. A copy of a butt-beaker form.
- 45 Fab. 45. Blackened orange-brown exterior, orange inner face and grey core. Handmade, wheel-finished rim with slashed decoration. Dated AD.5–40/45 at Prae Wood and mid first century in the Northampton Camp Hill Kiln 18 (Thompson 1982, 249).

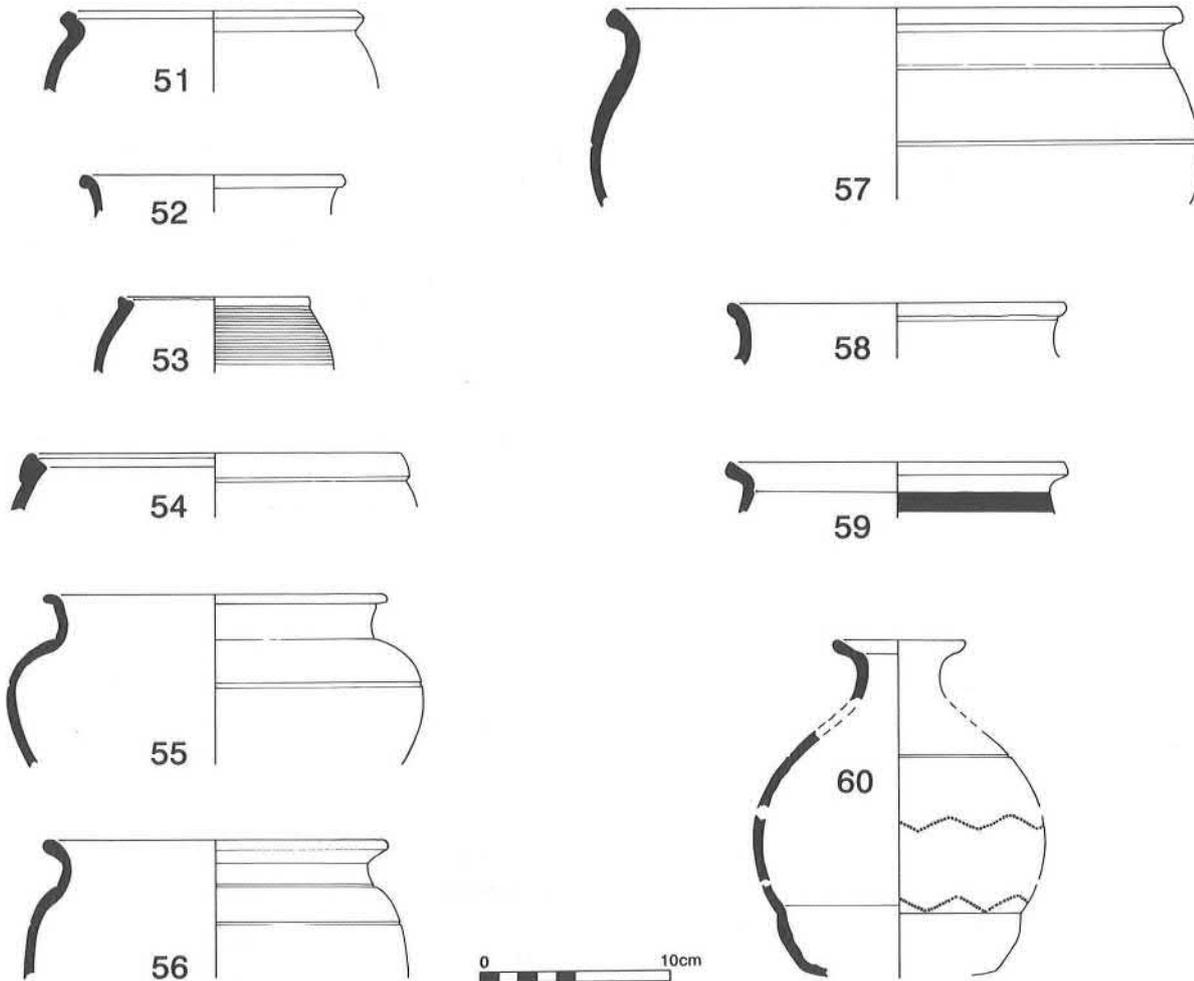


Figure 213: 'Belgic' pottery 51–60 (Ditch 855), scale 1:4.

- 46 Fab. 46a. Blackened orange-brown exterior, orange-brown inner face and dark grey core.
- 47 Fab. 46qr. Blackened brown exterior, dark orange-brown inner face and grey core. A copy of a Cam. 4 (IT type G1-4), a platter with an overhanging rim and one inner moulding. At Prae Wood it is found in contexts dated AD.5-40/45 and AD.30-50, the latter date being more common.
- 48 Fab. 46m. Dark orange surfaces and grey core. The vessel is possibly a grooved globular barrel jar of IT type B5-5. The fabric suggests that it is of mid first-century date.
- 49 Fab. 47dg. Patchy orange and grey surface with a blue-grey core and a suspension hole cut after firing. The fabric is Romanized, but the form is native.
- 50 Iron Age/46da? Slightly blackened, light brown outer face and a black core and inner face. The vessel is handmade. A base and three large wiped body sherds were also found. These were the largest items from this context, which suggests that they may not be residual. This vessel, therefore, may be dated to the same period as the other closely dated pottery i.e. vessels 45 and 47, both dated AD.5-40/45 at Prae Wood.

Ditch 855 (Fig. 213)

Ditch 855 had been cut by Ditch 609 (Fig. 30). Only Section 828 was entirely undisturbed, and therefore uncontaminated by residual material. The evidence of the pottery suggests that it dates to the same period (early to mid first century) as the group of clay pits (above) to the south.

Section 828

- 51 Fab. 1c. Orange to buff surfaces with a grey core. A handmade IT type C5-1. At Prae Wood the type was dated AD.30-50 and post-43 and AD.43-55 at St Albans.
- 52 Fab. 46k. Brownish-orange surfaces and blue-grey core.
- 53 Fab. 46da. Black outer face with faint rilling, light brown inner face and black core.

Section 795

(at the junction of Ditches 855 and 609).

(* indicates that the vessel may have originated from Ditch 609.)

- 54 Fab. 45. Orange brown surfaces, blackened on exterior and grey core, An IT type C5-1.
- 55* Fab. 46qr. Black to brown surfaces, red underskin and grey core. An IT type D1-3. Likely to be post-conquest (Thompson 1982, 309).

- 56* Fab. 47dg. Orange surfaces and grey core. A romanized Belgic form.
- 57 Fab. 46j. Brownish-orange surface and grey core.
- 58 Fab. 46a. Blackened orange-brown surfaces and grey core.
- 59* Fab. 44/18a. Off-white surfaces with a dark grey core. The outer face has a band of red-brown paint. The inside has a single groove, copying the overhang found on Cam. 113 beakers. Similar grooves are found on the Rushden kiln material (Woods and Hastings 1984, fig. 9.17), dated AD.45-60.
- 60 Fab. 41K? Brownish-orange surfaces with a dark grey core. The fabric is soft and contains sparse quartz, grog/clay pellets and calcareous inclusions. The vessel itself is of an unusual form and is fairly crude although wheel-made. It has a comb-stabbed decoration in the form of flattened 'V's.

Period 3, Phase I (mid to late first century)

Late Belgic Enclosure Ditch 60 (Figs 214-218)

This large trapezoidal enclosure ditch (Figs 36, 37) had cut through a number of Iron Age roundhouse ditches and two earlier 'Belgic' pits (176 and 475 above) and had itself either been recut or its line utilized by ditched Enclosure 2/5 (below).

Of the total of 1510 sherds, 175 (11.59%) were of Iron Age date and have been excluded for statistical purposes (Fig. 214). Of the remaining 1335 sherds, 509 (38.13%) were of distinctly 'Belgic' type, some large pieces of which (in Fab.46a) came from the primary fill (Layer 152 of section 37) of the ditch and also from the lower silty clay levels (Layers 886, 889, 890, Section 877). A small Colchester brooch (Fig 131.6), of a type which ceased to be produced after c.AD.55/60 and some early Flavian South Gaulish samian (c.AD.65-80), was found in layer 879 (Appendix 8), Section 897. A quantity of 'Belgic' Fab.46m, which is believed to be a product of the conquest period, was also recovered from several lower levels.

The ditch is thus thought to have been cut c.AD.50 and to have been largely in use during the mid to late first century AD. Iron Age pottery fragments were found in all the layers and were obviously redeposited material.

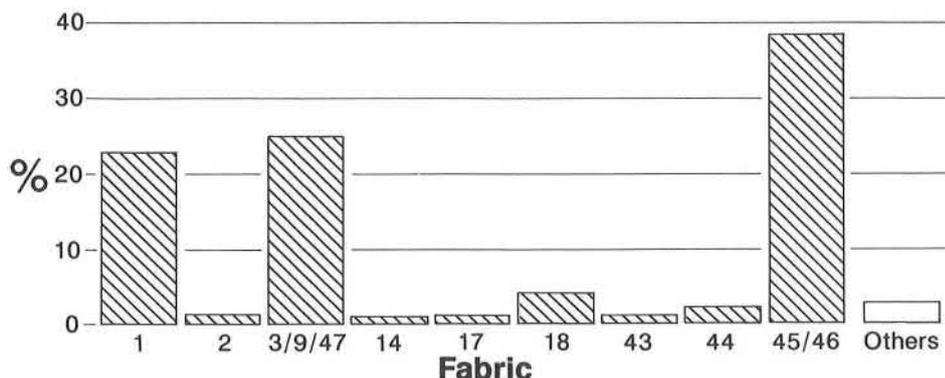


Figure 214: Histogram of the percentage of sherds in each pottery fabric from Enclosure Ditch 60.

The pottery can best be compared to that from Group 2, Pit 1, Cotton Valley (MK71), Milton Keynes (RBP, 9), dated to the mid to late first century AD. As in the slightly later group from Enclosure 2/5 (below), the percentage figure for the shell-tempered vessels is low (22.85% compared to 34.73% at Cotton Valley) and the local sand-tempered wares figure is high (25.02% compared to 7.16%). Is this an expression of wealth in that sand-tempered pots were better for cooking and thus more expensive, or could it simply relate to personal preference or availability?

The 'Belgic' Fab.46 material produced similar percentages between the two groups, 38.13% in Ditch 60 compared to 40.21% in Pit 1. Signs of greater wealth at Bancroft are elusive, for although Ditch 60 contained both Terra Nigra (0.22%) and samian (0.52%) neither of which were found in Pit 1 at Cotton Valley, a large proportion of a mica-dusted vessel (12.63%), also possibly an import, was found in Pit 1. Ditch 60 produced 2.25% of a first-century fineware (Fab.44) and a greater quantity of whiteware (4.19% compared to 1.19%) but this latter fact may be due to second-century contamination. However, Ditch 60 also had a great many more fabrics present than did the Pit 1 group, and this is unlikely to be entirely due to contamination. Fabrics known to be of a mid to late first-century date, and thus not intrusive, amount to six in the MK71 Pit 1 group and nine in Ditch 60. This may be a reflection of sample size, wealth or possibly situation, for although neither of the settlements were close to towns, Bancroft was only a short distance from Watling Street.

There were approximately 110 vessels represented in Ditch 60, of which 35 were in the typical grogged fabric 45 or 46 and occurred in the following numbers: necked jars (15), lid-seated jars (5), beakers (2), hollow-cordoned jars (3), cups (1), platters (3), storage jars (3) and beaded or barrel-type vessels (3). In contrast, the 25 shell-tempered pots occurred as lid-seated vessels (17), necked jars (4), bowls (3) and a single storage jar, many of which may be (and the bowls certainly are) second-century material.

Sand-tempered vessels (27) surprisingly outnumbered the shell-tempered vessels (25). Their forms in the following proportions are however similar; lid-seated jars (4), necked jars (10), bowls (4), beakers (2), platters (4), a single lid and two other vessels of indeterminate form.

The group also included; ten Iron Age rims, a whiteware flagon, probably from the Verulamium region, a painted white bowl, a Terra Nigra platter, a Dorchester BB1 dish, beakers and a lid-seated jar in Fabs. 17 and 14 respectively, probably from the Upper Nene/Northants area, a Lower Nene Valley barbotine rim and a possibly four samian vessels (Appendix 8). Obviously much of this material had derived from the fill of the slightly later enclosure Ditch 2 which had utilized the partially silted up line of Ditch 60, making the distinction of fills and the separation of finds very difficult.

The quantity of late material in Ditch 60 is small, the obvious pieces equalling 1.35% in Fabric 2 and 0.15% in Fabric 24 (Oxford). Their presence is no doubt due to activity on the

hilltop during the construction of the fourth-century shrine, when the ditch must still have been evident on the ground surface as a slight hollow.

Section 37

Contexts 37, 39 and 44: These uppermost layers, whilst almost certainly deposited during the fourth century, contained significant amounts of late first to early/mid second-century pottery, with a small quantity of Belgic pieces. These had undoubtedly derived from the re-use of the ditch line by Ditch 2, and by later activity related to the nearby shrine. Context 37 also produced a worn coin, dated AD.268–70.

- 61 Fab. 24. Light orange surface, mid-orange core with faint trace of an orange-brown slip. Oxford type C14 dated ?350–400+.
- 62 Fab. 6. Dark grey to black slip on a white fabric. Barbotine decoration of the rim. Lower Nene Valley type 81, dated fourth century. (Howe *et al.* 1980, fig. 7).

Contexts 149 and 152: These lower layers contained significant amounts of late 'Belgic' pottery.

- 63 Fab. 46m. Orange surfaces, lightly discoloured over the rim and a grey core. Both the form and the fabric are compatible with the Caldecotte Kiln 1 material, dated mid first century AD.
- 64 Fab. 46a. Black to dark grey throughout.

Section 877

Contexts 877 and 878: These layers had been sealed by the stone causeway (Fig. 30). Despite the fact that the pottery contained in them was predominantly late first to early/mid second century, they had resulted from fourth-century activity related to the clearance of the area and the construction of the shrine. Both layers contained sherds of SPG Fabric 2, a fabric that began, in its most typical form, in about AD.160/170, and continued into the fourth century. This fabric was very common in the third and fourth centuries, and for this reason its presence in these levels is believed to date the limestone causeway to a date later than that suggested by the bulk of the pottery. It is also found nowhere else in the ditch except in Contexts 37 and 39 (section 37, above) where it was accompanied by fourth-century Oxford and Nene Valley wares.

- 65 Fab. 2a. Light brownish-pink surface and a grey core. Hooked triangular faintly grooved rim.
- 66 Fab. 2a. Colour as above, heavily worn.

Context 879: This layer contained a large quantity of burnt material of late first to early/mid second-century date, and may represent material deposited simultaneously with the excavation and use of Ditch 2/5.

- 67 Fab. 1a. Deep orange throughout with some blackening on the outer face. Lightly rilled.
- 68 Fab. 3k? More highly sand-tempered than the usual 3k;

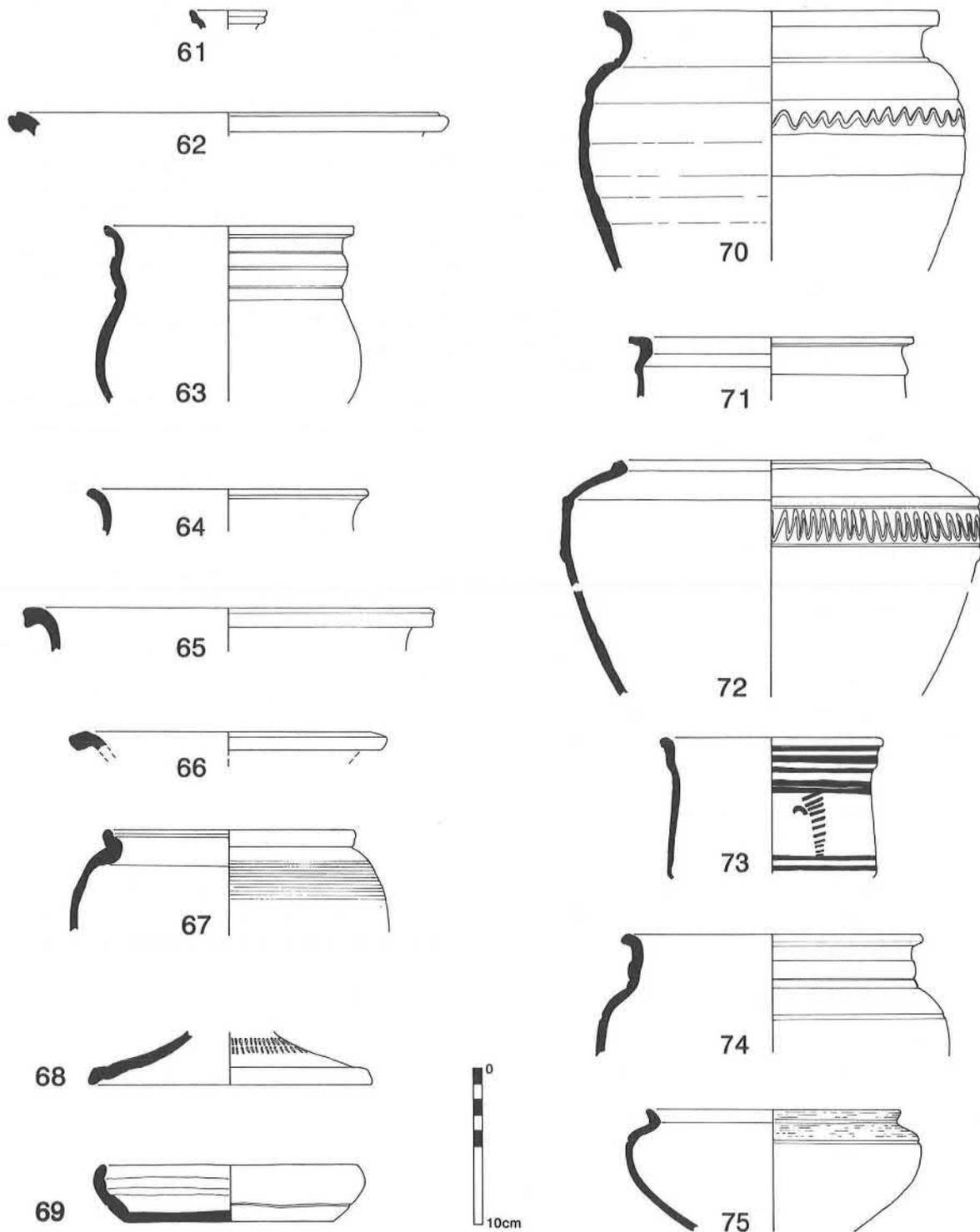


Figure 215: Mid to late first-century pottery 61-75 (Enc. 60), scale 1:4.

- possibly Fab. 14. Light grey surface, blackened over the rim with a core that varies from being orange throughout to having an orange underskin with a blue-grey core. Rouletted decoration. Such lids are an unusual find.
- 69 Fab. 9a. Black-burnished surface over a grey core. The form is a copy of a Gallo-Belgic platter, Cam. 12. Roman versions such as this appeared by the third quarter of the first century AD.
- 70 Fab. 9xy. Black surfaces, pink underskin over a grey core. Roughly incised wavy line decoration.
- 71 Fab. 9xy. Patchy dark grey to black surfaces, pink underskin over a blue-grey core.
- 72 Fab. 14a. Light grey surfaces with a thin streaky orange wash and wavy line decoration over a dark grey core. An unusual form.
- 73 Fab. 18c. White to cream-coloured surfaces with a pale blue-grey core and painted dark-brown and red-brown decoration. (Frere 1972, fig. 114.524, redated AD.105-115 in Frere 1984).
- 74 Fab. 46p. Black surfaces, pink underskin over a grey core. Cordon on the neck and shoulder grooves.
- 75 Fab. 46p. Black burnished surface, white underskin over dark grey core. The form may be related to the Cam. 249B,

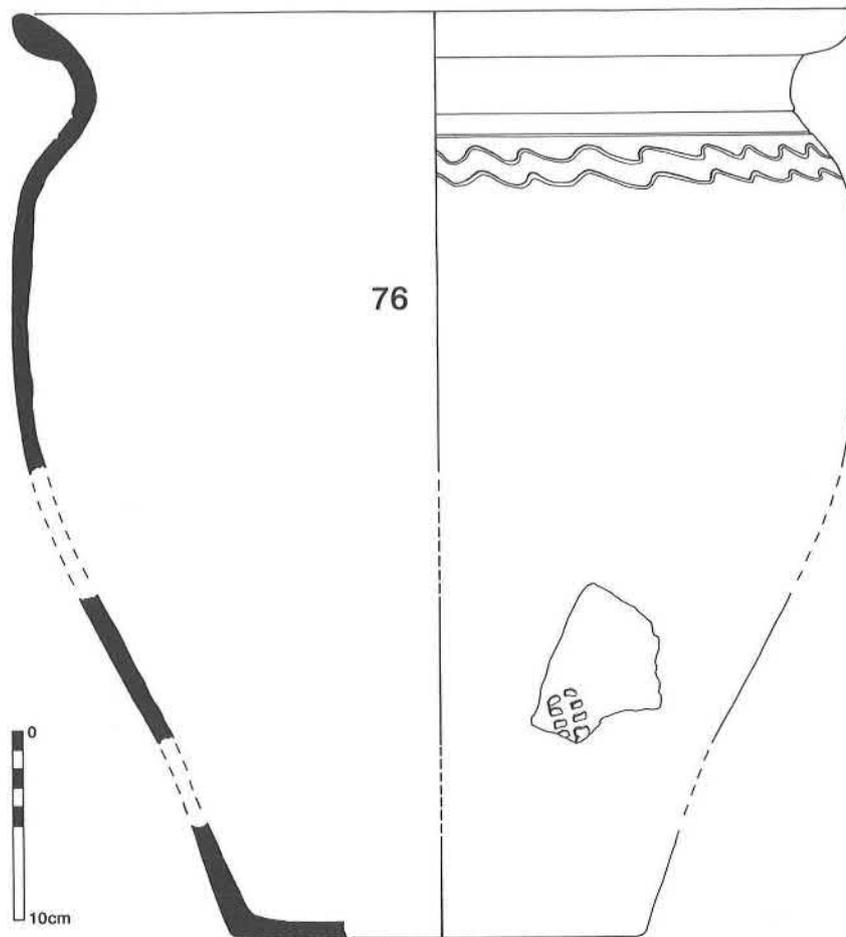


Figure 216: Mid to late first-century storage jar 76 (Enc. 60), scale 1:4.

although the rim is everted rather than beaded. The Cam. 249B was dated to Period VI, AD.61-c.65. This is possibly a later, ?evolved form. Found in Context 878.

- 76 Fab. 46g. Large proportion of a storage jar of IT type C6-1, with light orange surfaces over a grey core. Incised wavy-line decoration and a maker's mark. The type survives unchanged to the end of the first century AD.
- 77 Fab. 47ab. Grey surface, pale orange in patches over a blue-grey core. An IT type G1-1, copying Cam. 1 in a romanized fabric, dating it to post-AD.43.
- 78 Fab. 47a. Light and dark grey 'speckly' surface, white underskin over a blue-grey core.

Context 884: This layer, forming the secondary ditch silt, is of mid to late first-century date.

- 79 Fab. 9xy. Black surfaces, sooted and burnt on the exterior, red-brown underskin over a grey core. Copy of a Cam. 12 platter (IT type G1-7) with only a slightly formed internal moulding. This is a romanized version, which appeared by the third-quarter of the first century AD (Thompson 1982, 463).
- 80 Fab. 26. Terra Nigra. White paste with dark blue-grey surfaces, but very worn with no finish surviving. The vessel is a Cam. 16, a platter with roundly curved concave walls. At Camulodunum it is most common in Period IV (AD.49-61) and other British examples are Claudian (AD.41-54) or later. At Chichester it was the most important Gallo-Belgic type, which (with Cam. 58 and 56) suggests an important phase of import after c.AD.65 (Rigby 1978, 199) and it was still in use

on military sites c.AD.70-85 (*ibid.*, 190).

- 81 Fab. 46p. Worn black to light brown surfaces, pink underskin over a blue-grey core. The vessel is possibly related to a Cam. 251, a shallow wide-mouthed bowl (IT type G2-2). Dated AD.43-65 at Camulodunum and AD.5-40/45 at Prae Wood (Thompson 1982, 481).
- 82 Fab. 46p. Black to dark brown surfaces, pink underskin over a blue-grey core. The form is an IT type G1-3, a straight-walled platter copying a Cam. 1 with a bead-rim which was a localised Hertfordshire form. At Prae Wood it was dated AD.5-50, and at St. Albans AD.43-55 (Thompson 1982, 449).
- 83 Fab. 46n. Light grey throughout. Part of a tall-necked narrow-mouthed jar or flask. Probably a copy of a Cam. 231 or 232. The type is usually of late post-AD.43 date.
- 84 Fab. 47a. Mid grey surfaces with an occasional orange 'streak' over a blue-grey core. Diagonal comb-stabbed decoration on the shoulder. The form is a Cam. 119C, a butt-beaker of developed form in a romanized fabric. At Camulodunum it was dated to AD.43/44-c.65.

Context 885: This is of similar date to Layer 884, but was distinguishable by a greater proportion of burnt matter (Fig. 38).

- 85 Fab. 9g/12. Black surfaces, light brownish-grey underskin over a dark grey to black core. The form is that of a small beaker with a grooved beaded rim and hunched shoulder. The fabric was believed to be essentially of second-century date,

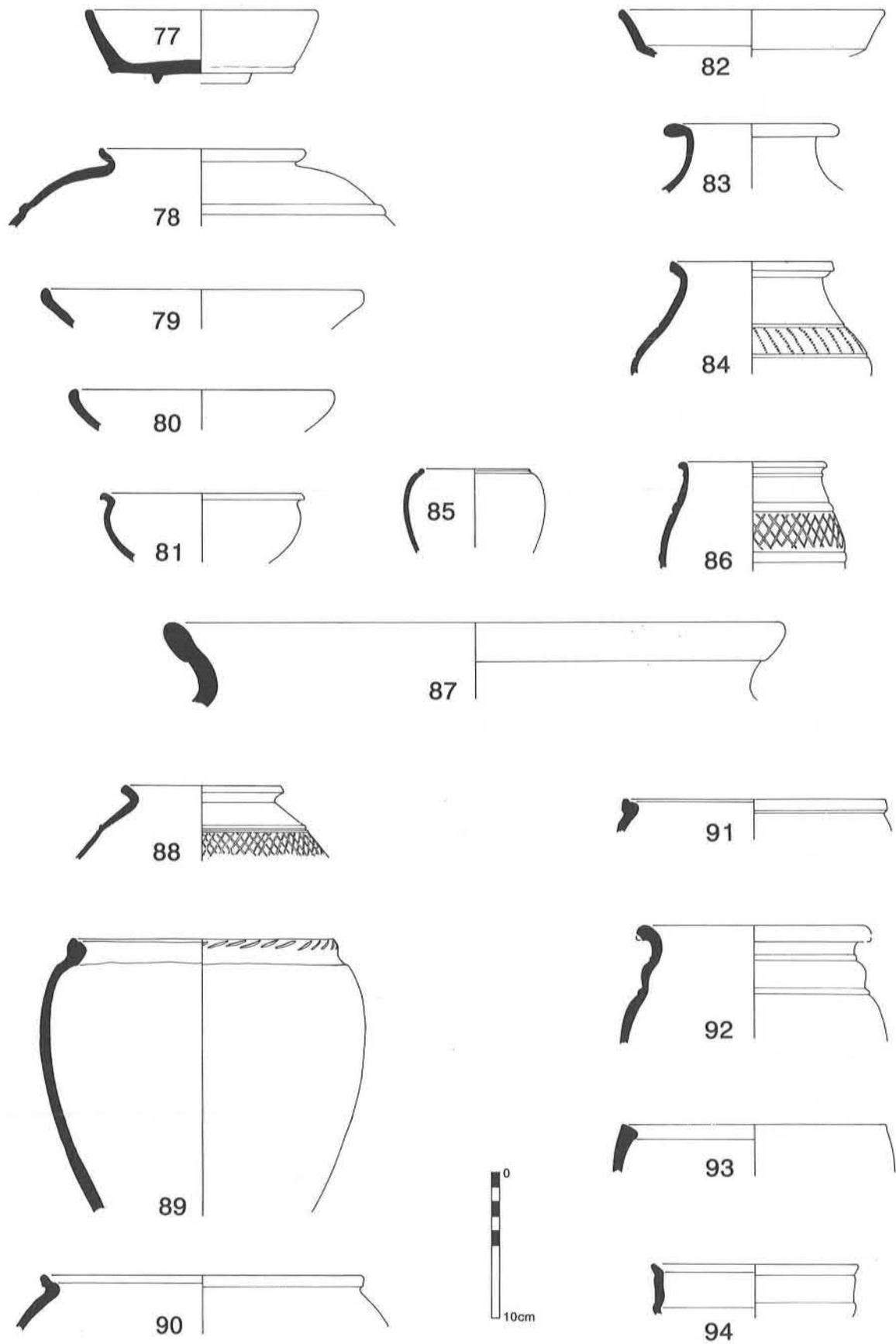


Figure 217: Mid to late first-century pottery 77-94 (Enc. 60), scale 1:4.

but the presence of this vessel in such a context indicates that it began to be produced sometime during the second half of the first century AD.

- 86 Fab. 46m. Pale orange surfaces over a dark grey core. The vessel is a butt-beaker with lightly incised lattice decoration of IT type G5-5. The fabric suggests a date around the mid first century AD.
- 87 Fab. 46a. Dark brown to orange brown surfaces over a grey core. From a storage jar of IT type C6-1, a form that survived unchanged to the end of the first century AD.
- 88 Fab. 47dg. Dark grey surfaces over a reddish-brown core. From a large beaker, seemingly related in form, though not in decoration, to the Cam. 108 series. Cam. 108Ba occurred in a Roman fabric, first appeared around AD.61-c.65, and became very common during the Flavian period (AD.68-97).

Contexts 886, 889, 890: These layers were sited just above the primary silt, which contained no pottery, and provide the best date for the excavation and early usage of the enclosure ditch, around the mid first century AD.

- 89 Fab. 45/46m. Orange surfaces with grey, brown and sooted black patches over a blue-grey core. The vessel was hand-made, wheel finished around the rim, with wipe marks on the lower outer body, and was copying an IT type C5-2. The fabric is very like 46m, although with more shell inclusions than usual. The C5-2 form is found from AD.5-40/45 at Prae Wood and is mid first century AD. at Hardingstone, Northants., although in a totally shell-gritted fabric (Woods 1969). The similarity of the fabric of this vessel to Fab. 46m again suggests a date of around AD.50.

Section 178

This section (Figs 37, 38), located on the southern arm of the enclosure some distance away from the shrine, contained no evidence for any later Roman activity. The ditch on this side and indeed to either side of the entrance was substantially shallower than on the north and west sides, and had almost entirely silted up by the second century.

Context 178: This uppermost layer dates to the mid to late first century AD.

- 90 Fab. 1a. Reddish-orange outer face, orange interior and grey core.
- 91 Fab. 1a. Blackened exterior, light brownish-red inner face and grey core.
- 92 Fab. 46m overfired? Black to dark brown surfaces and dark grey core. Possibly from an IT B3-1 or D2-1. The form becomes most common in ditch contexts which also include Roman vessels, and the form continues, in a more Roman shape and fabric, to the end of the first century AD. (Thompson 1982, 140).
- 93 Fab. 46a. Blackened orange-brown surfaces and grey core. A handmade vessel related to an IT type C1-4 with prominent internal rim thickening (Thompson 1982, 225). It is the same date as the parent type, C1-2, which was made in grogged fabric up to and after the conquest.
- 94 Fab. 46m. Dark orange surfaces and dark grey core. From a plain carinated cup of IT type E1-4 (Thompson 1982, 369).

The form flourished in the first half of the first century AD., and post-conquest examples are known. The fabric of this vessel suggests a mid first-century date.

- 95 Fab. 46j. Orange surfaces with a light grey core. From a storage jar of IT type C6-1, a form that survives unchanged to the end of the first century AD.

Context 181: This upper secondary silt immediately beneath the tertiary silt (178) is also of mid to late first-century date.

- 96 Fab. 1a. Blackened light pink outer face, orange-pink interior with a grey core.
- 97 Fab. 1a. Light pinkish-brown outer face, grey core and interior. It was thought previously (RBP, 203) that Fabric 46 had a monopoly of such necked jars at this period (mid to late first century AD), but this vessel proves otherwise, although they are still unusual in this area at this date.
- 98 Fab. 18g. Cream-coloured surfaces with an orange-pink core. This vessel almost certainly derives from the Verulamium region. The upright neck suggests that it is an early example (Frere 1972, fig. 102.110, dated AD.60-75).
- 99 Fab. 46da. Black lightly burnished exterior and black core with a brown inner face. Although the lid-seating is very shallow on this vessel, the form is related to the IT type D3-2. At Prae Wood these were mostly dated AD.5-40/45, although a more devolved form from St Albans, like this example, was dated AD.43-55. It is essentially a native form. Also found in Context 178.
- 100 Fab. 46q. Pale pinkish-orange surfaces over a grey core.
- 101 Fab. 46m. Light brownish-orange surfaces over a dark grey core. The form, that of a hollow-cordoned girth beaker (IT type G4), is found in Hertfordshire and on this northern side of the Chilterns. At Prae Wood it is commonly dated AD.5-40/45, although some examples date to AD.30-50. The fabric of this vessel is very like the Caldecote Kiln 1 material and suggests a similar date, ie. mid first century AD. Also found in Context 178.
- 102 Fab. 46m. Light brownish-orange surface over a dark grey core. Also found in Context 189.
- 103 Fab. 46k. Dark grey to black surfaces, heavily worn to show light yellowish-grey grog-speckled surface with impressed dot decoration. This IT type B3-8, copying Cam. 231, begins, but is not common, before the conquest, and is thus probably post-AD.43. Also found in Context 178.
- 104 Fab. 46a. Buff exterior, grey over the rim, with a grey core and black inner face. Handmade but wheel-finished. A number of holes have been added above the girth after firing. An IT type C6-1, which emerged with the earliest appearance of grog-tempering and continued throughout, surviving unchanged to the end of the first century AD. (Thompson 1982, 259).
- 105 Fab. 46a. Black exterior and core, reddish underskin. Comments as **104**.
- 106 Fab. 47a. Yellow-grey surfaces with a blue-grey core. The vessel is in a romanized sand-tempered fabric, but the form is still essentially native, similar to an IT type C.5-1, dating to the post-conquest period.

Context 189: This lower secondary silt, immediately above the primary silt (190), also dates to the mid to late first century.

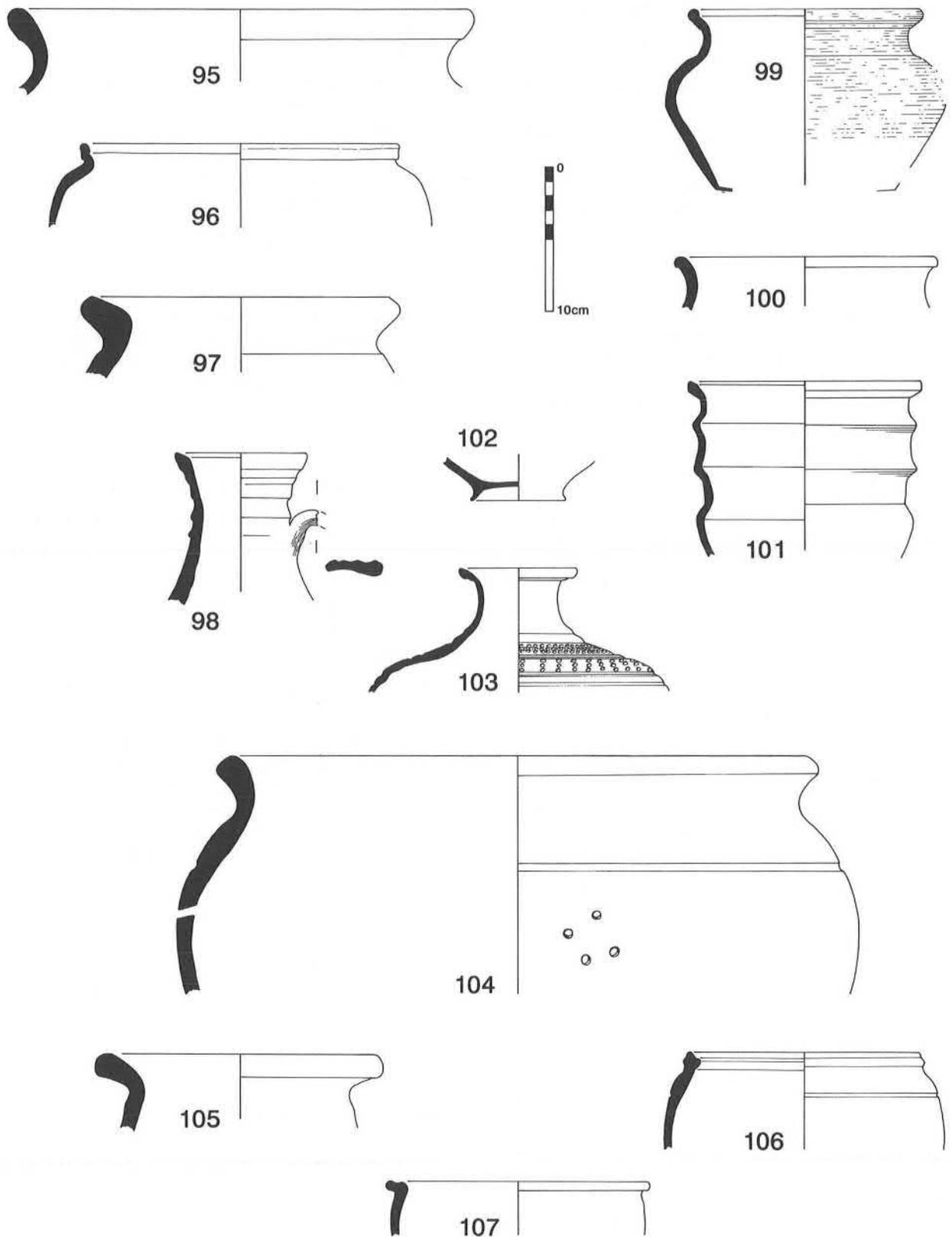


Figure 218: Mid to late first-century pottery 95-107 (Enc. 60), scale 1:4.

107 Fab. 1a. Pinkish-orange surface over a grey core. This is a common Herts., Beds. and Bucks. form of IT type C5-1, essentially native but frequently found in contexts with Roman material.

Context 190: This primary silt dates to the mid first century AD. Unfortunately no sherds were sufficiently complete for illustration, but the assemblage included Fabrics 1a, 46a and 46j.

Ditch 632/642 (Figs 219, 220)

This was a long sinuous ditch traced for over 100 m, running across the northern part of the site (Fig. 36) on an approximate north-west to south-east alignment. At its south-east end three ditches (651, 653, 685) of similar proportions, but at right angles to this ditch, may have formed contemporary

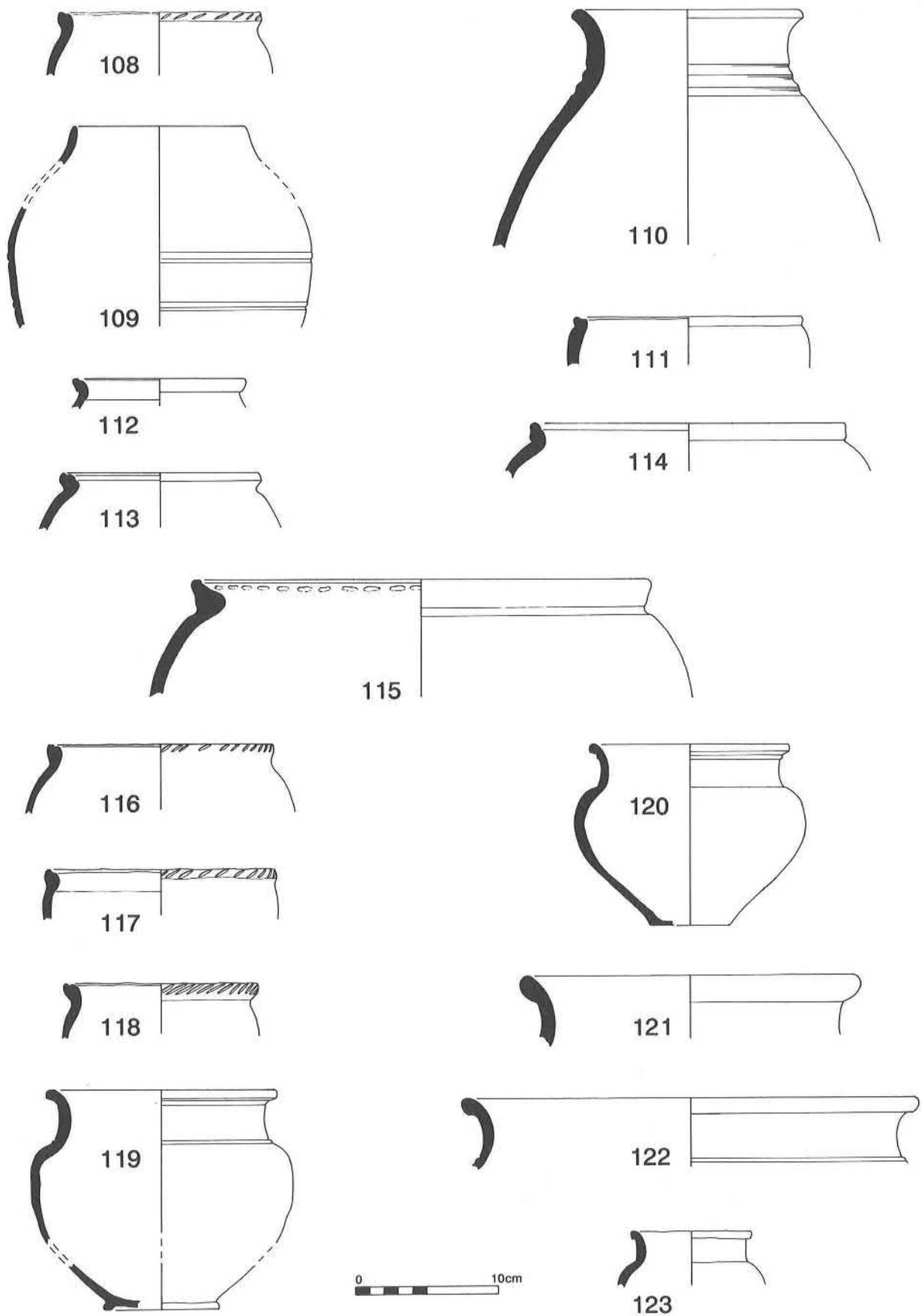


Figure 219: Mid to late first-century pottery 108-123 (Ditch 632/642), scale 1:4.

enclosed areas (Enclosures I, II and III, Fig. 36). The ditch clearly post-dated Roundhouses 631, 634 and 635, but had been cut by the much later Ditches 650 and 94/95. At its extreme south-east end it appeared to have utilized the existing line of the north-east corner of Enclosure 60, in a similar manner to Enclosure 2. The suggested date for this ditch and Ditches 651, 653 and 685 is mid to third-quarter first century AD., and was dug perhaps a generation later than Enclosure 60.

The ditch contained a substantial volume of domestic refuse, including a large quantity of pottery (p.79), much of which had been dumped in the freshly dug ditch in a semi-complete state, indicating that the main occupation area was not far away. Thirty-eight vessels have been illustrated from ten different sections (Fig. 39) along the length of the ditch, representing the complete range of forms and fabrics found in the ditch fill.

Section 690

Context 672: Upper layer.

- 108 Fab. 46a. Light pinkish-orange with heat-discoloured grey patches over a grey core. Handmade with slash decoration of IT type C5-2. Dated AD.5-40/45 at Prae Wood and mid first century in Northampton.
- 109 Fab. 46m. Orange surfaces and dark grey core. A tall barrel jar with cordons on the upper body of IT type B5-3. At St Albans it is Claudian (AD.41-54) in date, and here the fabric suggests a mid first-century date.
- 110 Fab. 46a/g. Large proportion of a patchily coloured brown, grey and black vessel with a black core. A wheelmade and romanized IT type B2-3 or B2-4.

Context 694: Lower layer

- 111 Fab. 1c. Black and buff patchy exterior, buff inner face and a black core. A handmade IT type C5-1 with a crudely formed lid-seating.
- 112 Fab. 1c. Orange-red surfaces with a grey core. Also a handmade IT type C5-1.
- 113 Fab. 1c. Orange surface. Multiple lid-seating. Fairly crude, indicating that it may have been handmade.
- 114 Fab. 1a. Black exterior with orange-red inner face. Rim probably wheel finished. IT type C5-1.
- 115 Fab. 1a. Blackened reddish outer face and reddish-brown inner face over a grey core. Finger impressions on the inside of the rim. A large lid-seated vessel of IT type C5-1 with a wheel-finished rim.
- 116 Fab. 46a/45. Patchy black, brown, grey surfaces over a grey core. The fabric contains a small quantity of shell. Handmade, with slash decoration copying an IT type C5-2.
- 117 Fab. 46m/45. Black outer face, orange inner face and grey core. Handmade with slash decoration, also copying an IT type C5-2.
- 118 Fab. 46a/45. Light brownish exterior surface, grey inner face and core. Same as 117.
- 119 Fab. 46g. Brownish-orange surfaces and grey core. Sandier,

Romanized fabric in an IT type D1-1. At Prae Wood the form was dated AD.5-40/45, at St Albans AD.40-60, c.AD.50 at Hardingstone, Northants., and AD.55-75 in the Little Munden Farm kiln.

- 120 Fab. 46a. Dark brown to black outer face. Light brown inner face and grey core. IT type D1-1, as 119.
- 121 Fab. 46a. Dark brown to orange surfaces with a grey core.
- 122 Fab. 46a. Thin black flaking surface over an orange-red underskin and a grey core. IT type B1-1.
- 123 Fab. 46qr. Dark grey surfaces over an orange red underskin and a grey core. Fairly sandy romanized fabric.

Section 677

Context 658: Upper layer.

- 124 Fab. 46g. Dark brownish-orange surfaces and dark grey core. The fabric is like a very sandy but darker 46m. IT type B1-1.

Context 665: Lower layer

- 125 Fab. 1a. Black exterior surfaces with patchy black and brick-red inner face and core, A handmade IT type C5-1, dated AD.30-50, 43-55, and post-43.
- 126 Fab. 1a. Light orange to buff heat blackened surfaces with a grey core. IT type C1-2. The form is long-lived, continuing after the conquest.
- 127 Fab. 46a. Light brownish surfaces with a dark grey core.
- 128 Fab. 46a. Brown-orange surfaces and dark grey core. IT B1-1.
- 129 Fab. 46a/m. Dark orange surface with a dark grey core but badly eroded. Probably from a platter of IT type G1-1. Some have been found in early post-43 deposits.
- 130 Fab. 46m. Base from a storage jar. A large hole has been cut into the base after firing. The fabric suggests a mid first-century date.

Section 678

Context 659: Upper layer.

- 131 Fab. 46a. Black exterior, brown inner face and a black/grey core. IT type B1-1.

Context 666: Lower layer.

- 132 Fab. 46a. Brown surfaces and a dark grey core. A large cup of IT type E1-2. Dated AD.5-40/45, AD.30-50 and post-43 at Prae Wood.
- 133 Fab. 46a. Light brown surfaces and a dark grey core. IT type B1-1.

Section 706

Context 698: Upper layer.

- 134 Fab. 1a. Major portion of a vessel with a black outer face and core and a brown inner face. IT type C5-1. At Prae Wood the type has been dated AD.30-50, and post-43 and AD.43-55 at St Albans. Also found in Layer 703.
- 135 Fab. 46a. Brownish-orange surfaces and a grey core. A hol-

low-cordoned girth beaker of IT type G4. Very common at Prae Wood in all features dated AD.5–50, and at Stoke Goldington an example was dated AD.50–60 (Thompson 1982, 501).

Context 703: Lower layer.

- 136 Fab. 46. Dark brownish-orange surfaces and a grey core.
- 137 Fab. 46a. Dark brown to brownish-orange surfaces and a grey core. IT type B3–8, usually a post-43 form.
- 138 Fab. 46a. Dark brownish-orange surfaces and a grey core. An IT type G1–8 copying a Cam. 13. The dated copies are all post-conquest (Thompson 1982, 465).

Section 680

Context 670: Lower layer.

- 139 Fab. 46m. Brownish-orange surfaces and a grey core. IT type G5–1 or G5–4. The fabric suggests a mid first-century date.

Section 712

Context 697: Upper layer.

- 140 Fab. 46p or finer smoother 46m. Light orange surfaces and a dark grey core. IT type E1–2. Probably of mid first-century date.

Section 732

Context 729: Excavated as one layer.

- 141 Fab. 46j. Orange to dark brown surface and a light grey core. An IT type C6–1, a form which continued unchanged to the end of the first century AD.

Section 714

Context 723: Lower layer.

- 142 Fab. 46a. Orange brown surfaces and a grey core. IT type B1–1.

Section 737

Context 735: Lower layer.

- 143 Fab. 47dg. Light orange-brown surfaces, blackened on the outer face and a light grey core. A native IT type C5–1 form in a sandy, totally romanized fabric.

Section 745

Context 743: Upper layer.

- 144 Fab. 1a. Brick-red surface, sooted black exterior and a black to grey core. An IT type C5–1, dated AD.30–50 and post-43 at Prae Wood and AD.43–55 at St Albans (Thompson 1982, 245).
- 145 Fab. 45. Light to dark brown surface and a grey core. IT type B1–1.

Ditch 653 (Fig. 221)

Mid to third quarter first century AD.

- 146 Fab. 45. Sandier than usual. Patchy orange, black and brown surfaces and a black core. Handmade.

- 147 Fab. 46j. Light brownish-orange surfaces and a grey core. Wheelmade. The fabric type suggests a post-conquest date.

Ditch 609 (Fig. 221)

Mid to third quarter first century AD.

- 148 Fab. 1a. Pinkish-orange surfaces and a grey core. An IT type C5–1, dated AD.30–50 and post-43 at Prae Wood, and AD.43–55 at St Albans.
- 149 Fab. 46qr. Black outer face and core with a light yellowish-brown inner face. IT type C5–1.
- 150 Fab. 46m. Brownish-orange surfaces and a dark grey core. The vessel is a copy of a Cam. 1 or IT type G1–1. The fabric suggests a mid first-century date.
- 151 Fab. 46m. Brownish-orange surfaces and a dark grey core. IT type G5–6. Also mid first century.
- 152 Fab. 46g/47c. Light orange surfaces and a grey core. Possibly related to the IT type G2–4 wide carinated bowls, which were Roman and romanizing at Sheepen (Thompson 1982, 487). This vessel is well sanded and certainly romanized.
- 153, 154 Fab. 46a. Black outer face and core with a dark brown inner face.
- 155 Fab. 9xy. Black surfaces and a medium grey core. This is a crudely made vessel and possibly an early version of the fabric, made between the mid to late first century.

Ditch 474 (Figs 221, 222)

This ditch ran in an easterly direction away from the south-east corner of Enclosure Ditch 60 (Fig. 36). It had cut through both Pit 475 (above) and the easterly extension of Ditch 591. It contained a large quantity of pottery and much charcoal. The pottery points to a date beginning about the mid first century AD., continuing with fairly heavy deposition in the late first, trailing off into the early second century. It is also possible that the ditch was recut at this time, without leaving a soil distinction, as a sherd of Fab. 2b was found in the primary silt, Layer 617, Section 683 (Fig. 39).

Section 497

Context 478: Upper layer.

- 156 Fab. 14c/43f. Black surfaces, yellowish-grey underskin over a grey core. A copy of a Cam. 12.
- 157 Fab. 1c. Reddish-orange heat blackened surfaces and a grey core.
- 158 Fab. 45. Reddish-brown surfaces with a blackened exterior.

Context 485: Lower layer.

- 159 Fab 20. Samian rim and seven body sherds of a Dr. 15/17. Claudian in date (AD.41–54).

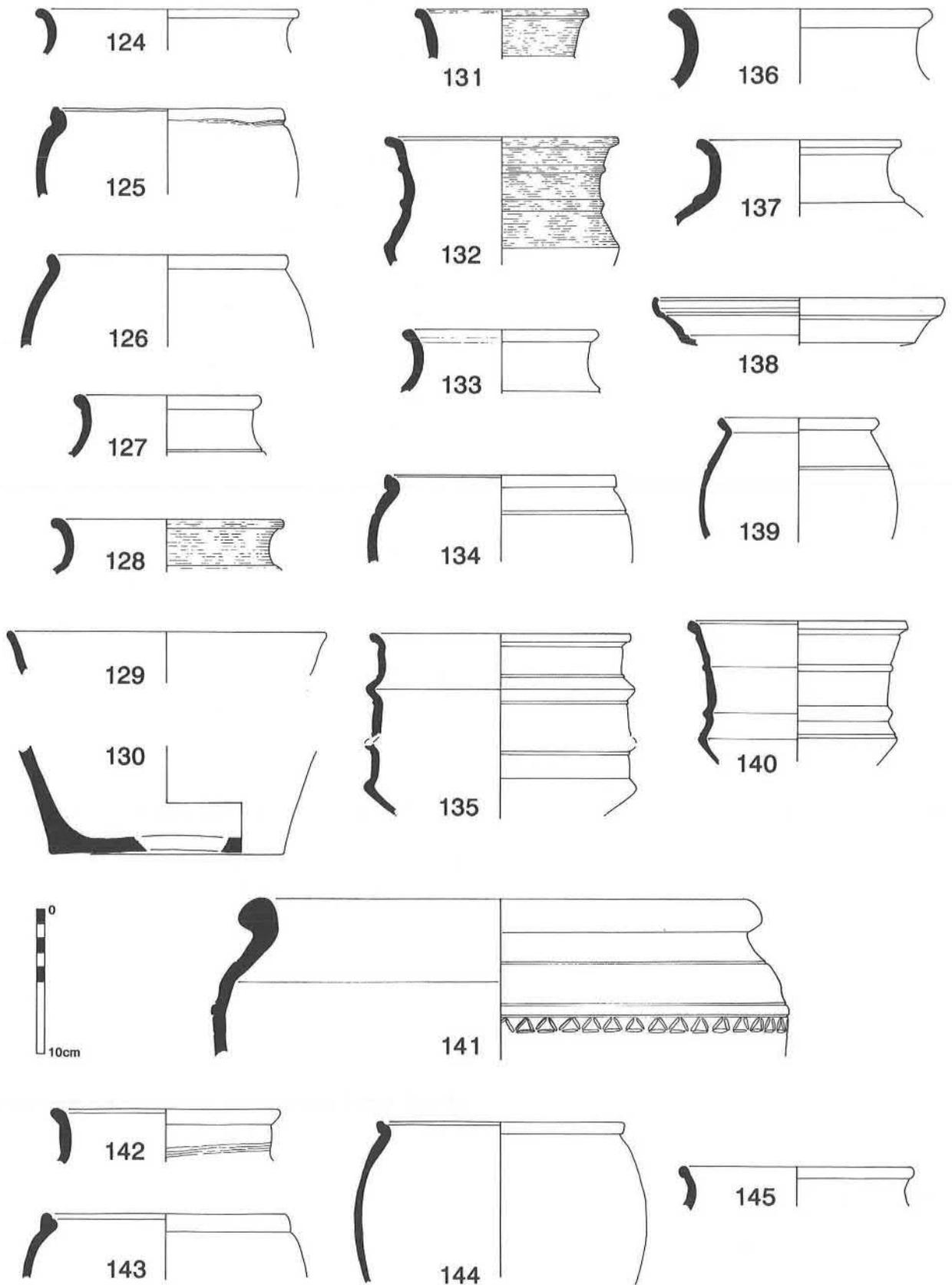


Figure 220: Mid to late first-century pottery 124-145 (Ditch 632/642), scale 1:4.

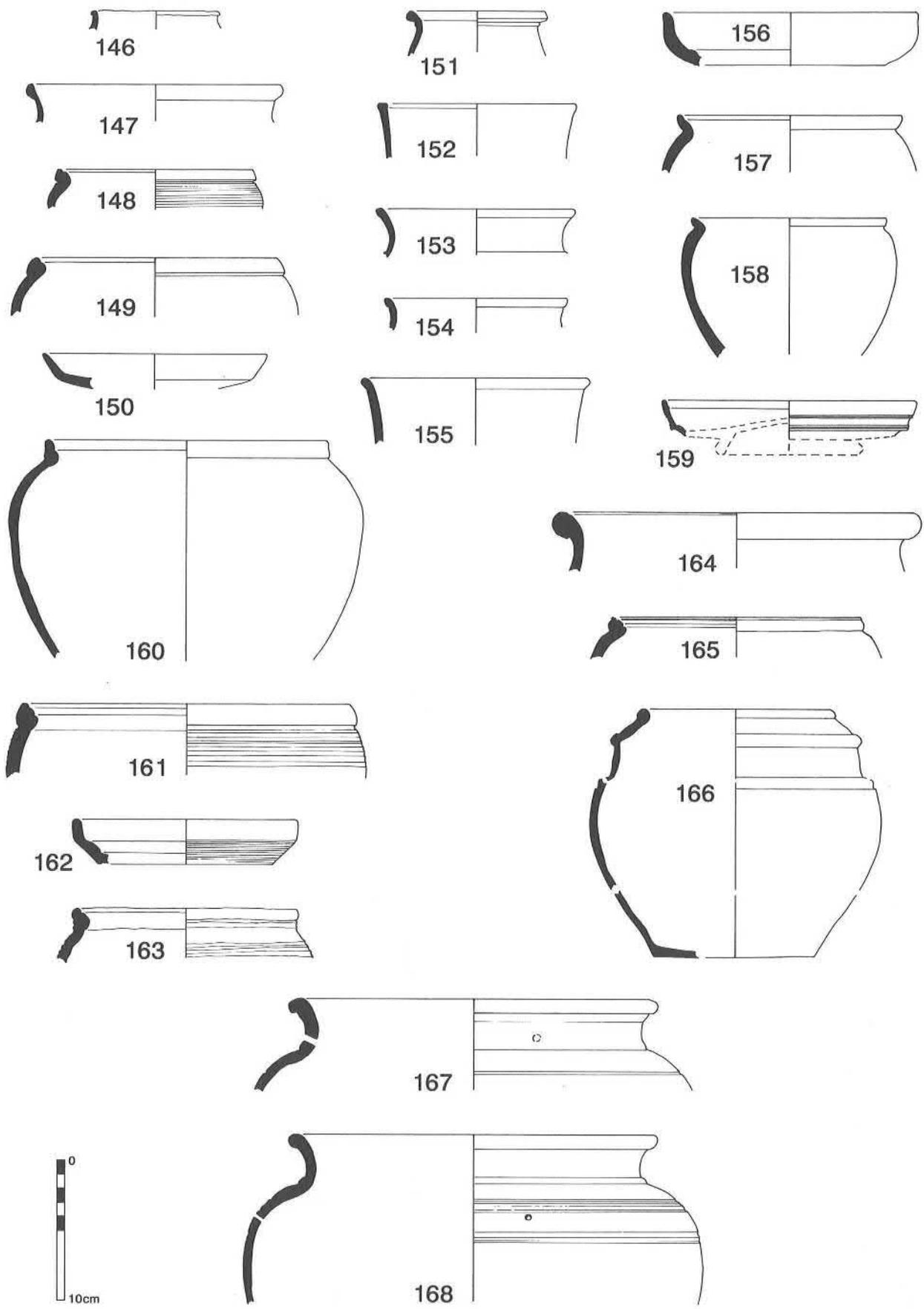


Figure 221: Mid to late first-century pottery 146-147 (Ditch 653); 148-155 (Ditch 609); 156-168 (Ditch 474), scale 1:4.

Section 479

Context 476: Lower layer.

- 160 Fab. 1c. Reddish-orange surfaces, blackened on the outer face with a grey core. A handmade IT type C5-1, dated AD.30-50 and post-43 at Prae Wood, and AD.43-55 at St Albans.
- 161 Fab. 1a. Pale pink to reddish surfaces with a self-coloured core and a heat-blackened exterior. Multiple lid-seating.
- 162 Fab. 9xy. Black rilled outer face, black inner with red underskin over a dark grey core. Copy of a Gallo-Belgic platter of IT type G1-7 (Thompson 1982, 463) or Cam. 12 type. Roman versions of the type began by the third quarter of the first century AD.
- 163 Fab. 9xy. Black surfaces, deeply rilled on the exterior with a red underskin over a dark grey core. A romanized IT type C5-1.
- 164 Fab. 46a. Orange-brown surfaces and a grey core.
- 165 Fab. 46p. Black surfaces and a dark grey core. Probably wheel-made but rather crude, with a multiple lid-seating.
- 166 Fab. 47dg. Yellowish-grey surfaces with a thin black slip over the outer face and a light grey core. The form is unusual, but is probably a romanized version of the IT type D3-4, an elaborate lidded bowl or barrel. On this side of the Chilterns such vessels, in grogged fabric, are thought to have been made close to the conquest. For this vessel a date during the third quarter of the first century AD. is suggested.
- 167 Fab. 47dg. Patchily coloured orange, brown and black surfaces and a grey core.

168 Fab. 47dg. Orange-brown surfaces and a grey core. Suspension hole(s) on the shoulder.

Section 683

Context 598: Second layer.

- 169 Fab. 25/30. Blue-grey surfaces and a dark blue-grey core.
- 170 Fab. 46k. Orange-brown surfaces and a grey core.
- 171 Fab. 47a. Light grey to orange-brown surfaces and a blue-grey core.

Context 618: Third layer.

172 Black throughout. Slash-decorated rim which was possibly wheel-finished. An IT type C5-2, dated AD.5-40/45 at Prae Wood and c.AD.50 at Camp Hill, Kiln 18 (Thompson 1982, 249).

Context 617: Primary silt.

- 173 Fab. 1c/45. Patchy pink, grey and burnt black surfaces. A handmade IT type C5-1. Suspension holes on shoulder.
- 174 Fab. 1a. Orange surfaces with a blackened exterior and rim.
- 175 Fab. 9xy. Black surfaces, red underskin over a grey core.
- 176 Fab. 46a. Orange brown surface and a grey core.
- 177 Fab. 46p. Grey to black surfaces and a blue-grey core.
- 178 Fab. 45? Buff to pink surfaces, blackened by heat and a dark grey core. Handmade.

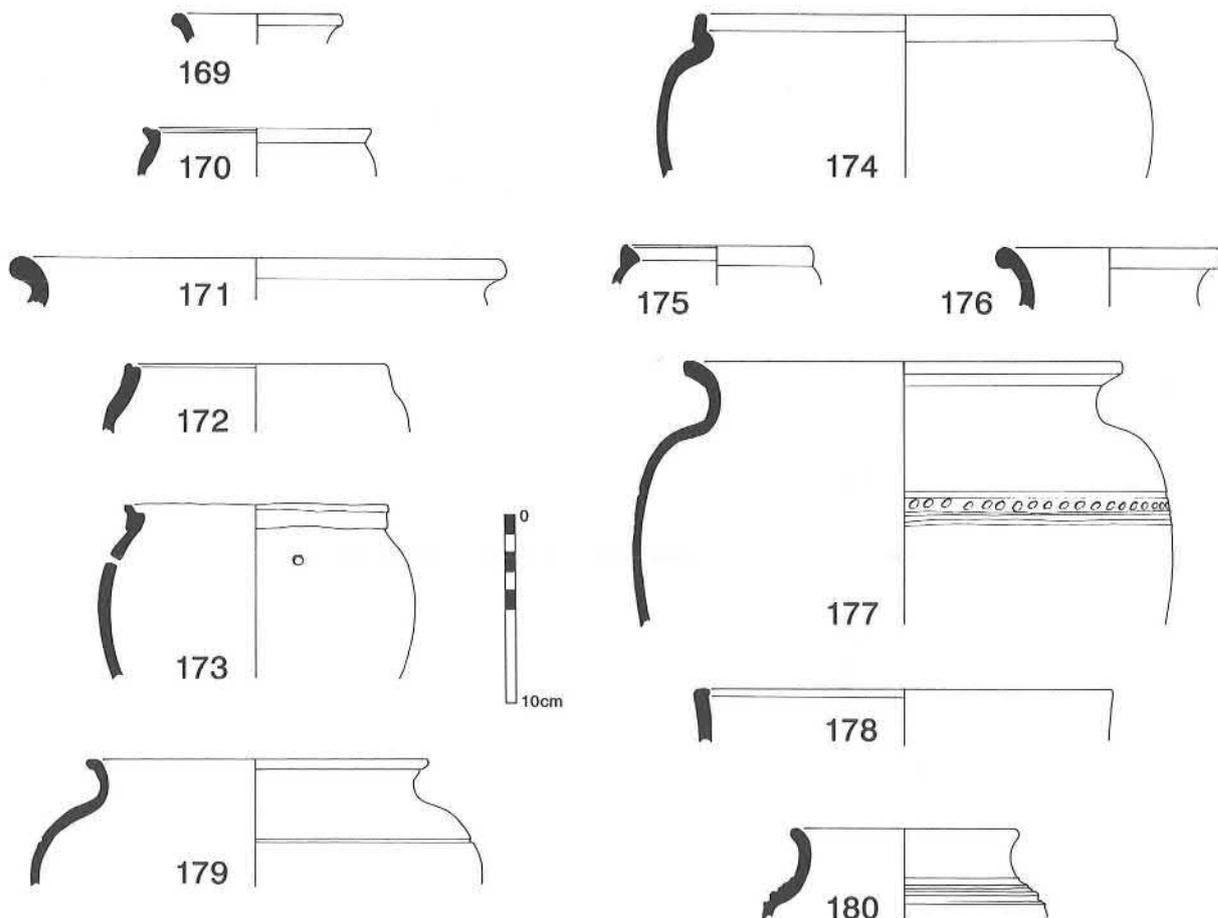


Figure 222: Mid to late first-century pottery 169-180 (Ditch 474), scale 1:4.

- 179 Fab. 46g. Patchily coloured orange-brown and grey surfaces and a grey core.
- 180 Fab. 47dg. Black throughout. A crude, wheelmade vessel with deeply rilled shoulder. Possibly a romanized version of an IT type B2-1.

Period 3, Phase II
(late first to mid second century)

Early Roman Enclosure Ditch 2 (Fig. 224)

The enclosure ditch produced a large quantity of Iron Age material and some 'Belgic' pottery, 46.55% and 15.13% respectively. In total there were 507 sherds, 271 of which were Romano-British in origin. There were twenty-six rims, only ten of which were clearly Roman, twelve Iron Age and four 'Belgic'. Shell-tempered lid-seated cooking pots were four in total, including one with a double channel. There were also six possible wide-mouthed jars, one heavy cistern type vessel, one greyware bowl copying a Dr.30 and one possible butt-beaker type. Statistically the pottery from the ditch compares loosely to Group 5, MK44 F92 from Caldecotte (RBP, 19), which dates approximately from the first quarter to the beginning of the third quarter of the second century. There is far less variety of pot function in this group than in F92, but the sample was smaller (271 sherds as compared to 384). However, the total lack of sand-tempered dishes or bowls, common in F92, is interesting.

The Roman assemblage dates largely to the late first to early second century. The pottery from the primary silt of the enclosure ditch includes one lid-seated shell-tempered rim, and body sherds in fabrics 43ea and 46qr.

The percentage (Fig. 223) of shell-tempered ware (Fab. 1) is low in the enclosure ditch when compared to other second-century assemblages, including that in F92 (29.52% compared to 40.10%). The percentage for local sandy ware is high (32.10% compared to 24.99%), although this is due to the presence of a large portion of one pot in Fab. 9xy. The low Fab. 1 percentage is not so easily explained, although it may be that some coarser Roman shell-tempered pieces have been categorized as Iron Age in origin.

Both this group and MK44 F92 included samian (Appendix 8): 4.43% in Enclosure Ditch 2 and 3.39% in F92. White ware was also well represented with 9.96% in the former and 10.16% in the latter. Fabric 2, soft pink grogged ware, is at a low level in both groups, representing only 0.37% in the enclosure ditch and 1.82% in F92. This slight difference combined with the presence (0.26%) of Lower Nene Valley in F92 suggests that the latter may have been utilized for a

while longer than the enclosure ditch. It is also interesting to note the greater variety of fabrics in F92, perhaps resulting from its date or situation, only a short distance from *Magiovinium*, or alternatively it may be a reflection of the sample size.

Non-local wares are not common. The imports were Central Gaulish samian and a Spanish Dressel 20 amphora, whilst the British material was probably from the Upper Nene/Northants. region (Fabs. 14 and 18c) or the Verulamium area (Fab. 18c). There is also the possibility of an Oxford greyware. Later non-local 'causeway' material came from the Hadham and Oxfordshire kilns.

Both this enclosure ditch and F92 went out of use at some time during the second half of the second century, and indeed during the late second and third centuries there appears to have been no activity (or at least no activity that would leave archaeological evidence) within the area of the enclosure (Fig. 42).

Despite the near-absence of late pottery in the ditch, other than the small percentage of Hadham and Oxford wares (possibly owing to the presence of the Shrine or Ditch 94/95) the enclosure must still have been visible during the fourth century. This is indicated by the central positioning of the shrine within the ditched area and the need to build 'causeways' across the ditch for access to the shrine (Fig. 42).

The pottery described below is that which can most reliably be used for dating the enclosure ditch, plus a piece (190) which is of interest. The Iron Age material is not included.

- 181 Fab. 1a. Light pink surfaces with an orange core and lightly rilled. Late first to early second century.
- 182 Fab. 1a. Pinkish-buff surfaces with a grey core and lightly rilled. Late first to early second century.
- 183 Fab. 1a. Black exterior, brownish-grey interior and core. Wheelmade with a double lid-seating (RBP, fig 24.7). First century AD.
- 184 Fab. 1a. Blackened sooted exterior with a light orange inner face. Early to mid second century (RBP, 134), although see Ditch 60, no. 97.
- 185 Fab. 9xy. Black surfaces, red underskin over a grey core (RBP, fig. 32.43). Mid first to mid second century.
- 186 Fab. 3k. Light grey exterior, light orange core and inner face. Late first to early/mid second century.
- 187 Fab. 25/30. Single body sherd of a fine greyware with a thick red underskin and light grey core, decorated with self-col-

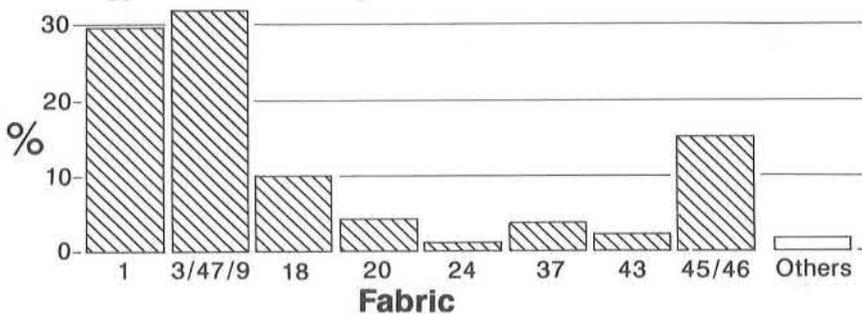


Figure 223: Histogram of the percentage of sherds in each pottery fabric from Enclosure Ditch 2.

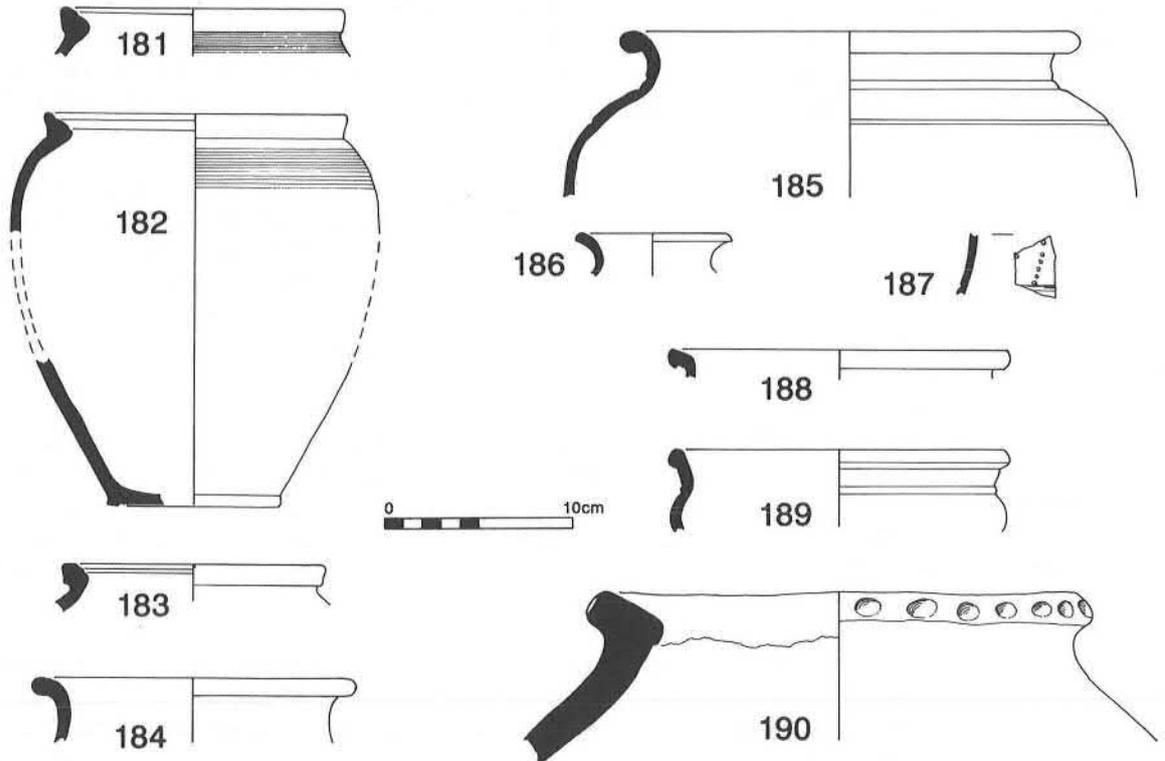


Figure 224: (top) Late first to early second-century pottery 181-190 (Enc. 2), scale 1:4.

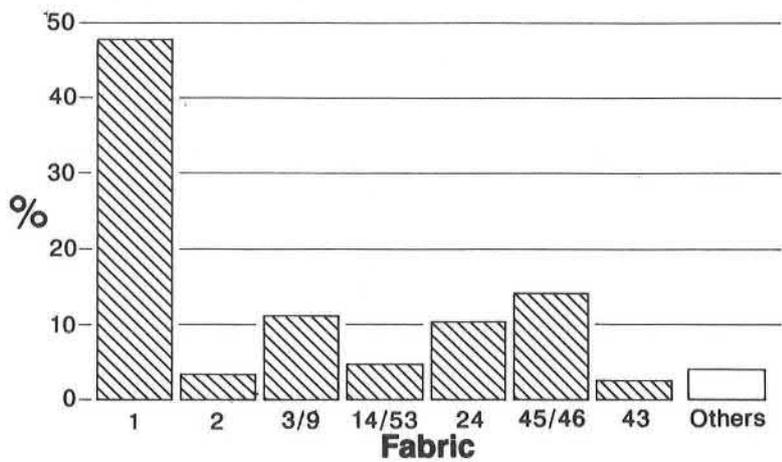


Figure 225: (centre) Histogram of the percentage of sherds of each pottery fabric from Shrine 15.

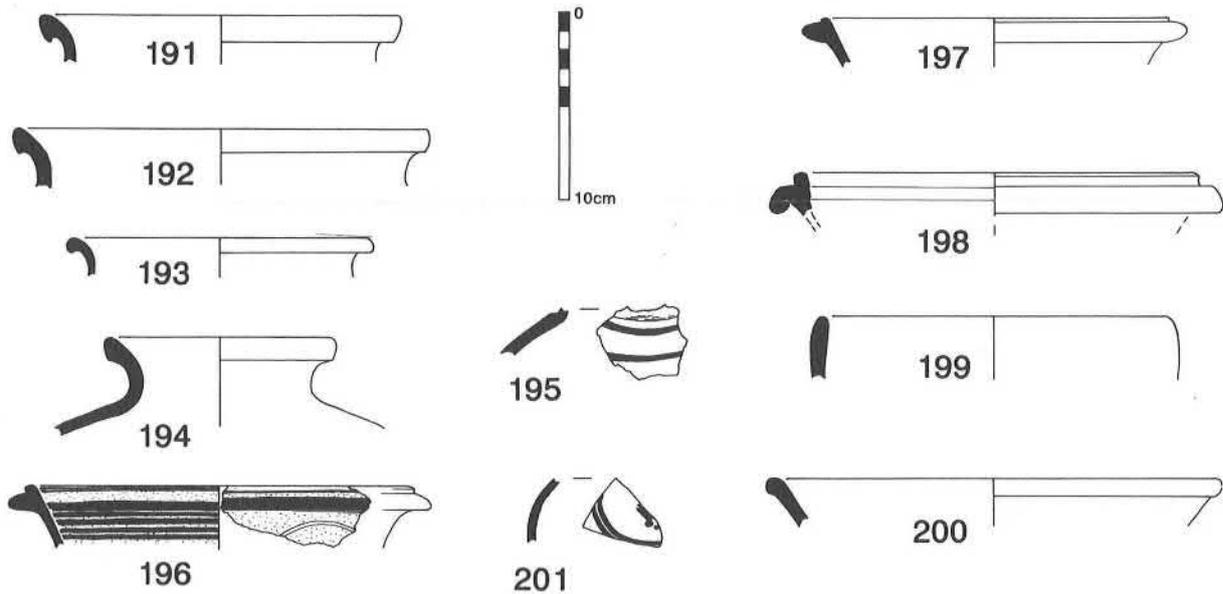


Figure 226: (below) Mid to late fourth-century pottery 191-201 (Shrine 15), scale 1:4.

oured barbotine dots and a groove. Possibly an Oxford greyware, type 3C (Young 1977, 202) from a bowl copying a Dr. 30. Late first to second century.

- 188 Fab. 18c. Pink throughout in a fine granulated ware. Late first to early/mid second century.
- 189 Fab. 47k. Patchy orange and grey surfaces, grey core. Late first to early second century.
- 190 Fab. 46g. Large handmade vessel with a predominantly light brown surface with orange and grey patches and a grey core, blackened over the rim and decorated with finger indentations. The form is unusual for Fab. 46.

Period 3, Phase IV (mid to late fourth century)

Shrine 15 (Fig. 226)

The only finds relating to this building were from the internal levels. Most of the pottery was found in the upper layers, as were the coins, which were concentrated around the central area, and most of which may have derived from the shallow central pit (Fig. 52).

Both pottery and coins indicate a fourth-century date. However, the structure was built on an earlier truncated soil horizon, so a quantity of earlier pottery was found within the excavated quadrants.

The fabric percentages (Fig. 225) on the whole indicate a date of post-350, obtained from a group of 231 sherds (excluding the seventy-three residual Iron Age sherds found within the quadrants). Shell-tempered vessels are extremely common, composing 47.62% of the total. This figure can be compared to the 41.3% found within Group 15 from the villa, dated mid to late fourth century (RBP, 50). One of the shell-tempered rims (191) is of a type that can be dated post-350 (Brodrigg *et al.* 1971, 68).

Fabric 2, the soft pink grogged ware, common from the late second to the fourth century, is very poorly represented within the shrine assemblage, forming only 3.36% of the total. Its closest analogy is again to Group 15 from the villa, which produced 4.34%, although at the time it was found such a low figure was thought to be atypical.

The sand-tempered wares equalled 12.12%, and by analogy with Group 17 from Bancroft (which contained 12.24%) indicate a possible late fourth to early fifth-century date (RBP, 54). These local vessels are represented within the shrine by two flanged bowls (196 and 197).

The percentage for lower Nene Valley colour-coated ware is surprisingly low for the fourth century, only two sherds (0.86%) having been found, whilst the Oxford ware percentage (10.39%) is much as expected. This level of incidence is in keeping with fourth-century groups, and again compares most closely with Group 17, which contained 10.2%. Some of the Oxford pottery is painted (201) and thus likely to date after 325. The Lower Nene Valley ware is heavy and late in character (200).

The discovery of thirty coins (p.275), ranging in date from 330-402, from the central pit area of the building, supports the pottery dating.

191 Fab. 1a. Black throughout. The hooked rim is typical of a post-350 date (Brodrigg *et al.* 1971, 68).

192 Fab. 1a. Black throughout with buff area over rim.

193 Fab. 1a. Brownish-orange inner face, black exterior and a grey core.

194 Fab. 1a. Light orangey-pink surfaces and a grey core.

195 Fab. 2a. Body sherd with orange-brown painted horizontal bands.

196 Fab. 3a. Light grey surfaces with a white-grey slip and orange painted? bands and arc decoration. Late third to fourth century.

197 Fab. 9b. Black surfaces with a dark red core. Late third to fourth century.

198 Fab. 4a. Rim of a burnt Oxford mortarium, type M.22, a form which flourished in the fourth century.

199 Fab. 6. Nene Valley colour coated. Straight-sided bowl rim, dark brown slip with an orange core. A 'chunky' type, typical of the fourth century (Howe *et al.* 1980, fig. 7.87).

200 Fab. 24. Colour-coated Oxford ware, type C.45, dated 270-400+.

201 Fab. 24. Oxford ware with white painted scrolls, very worn. White paint first occurred in the late third century, but the practice only became really common in the second quarter of the fourth century (Young 1977, 133). From an enclosed vessel such as a flagon or large beaker.

COARSE POTTERY FROM THE VILLA

P.T. Marney

Introduction

Over 20,000 sherds of pottery were examined from the 1982-1986 excavations, whilst a smaller quantity from the 1973-1978 excavations was also dealt with. All the unstratified pottery and material from features not considered to be relevant to the dating of the structures has been excluded. Unfortunately it has been necessary to use pottery from the earlier excavations in the dating of some buildings, but where this may be questionable, attention is drawn to this fact.

As the dating and phasing of the structures and major features at Bancroft is the *raison d'être* of this report, it does not contain the full range of pottery forms and fabrics found on site; thus the illustrated pottery has been chosen primarily to present the ceramic evidence. This is listed by phase and then in relation to the various structures and features in that phase. The fabrics are presented in numerical order, based on the Milton Keynes Roman Fabric Type Series (RBP).

Belgic/Phase I (first century)

Features Pre-dating the Farmyard (Fig. 227)

Several pits and a ditch were found beneath the cobbled farmyard (657), adjacent to Building 4. Ditch 529/843 contained first-century pottery in its largely uncontaminated section (850), whilst Pit 689, cut through the ditch, produced

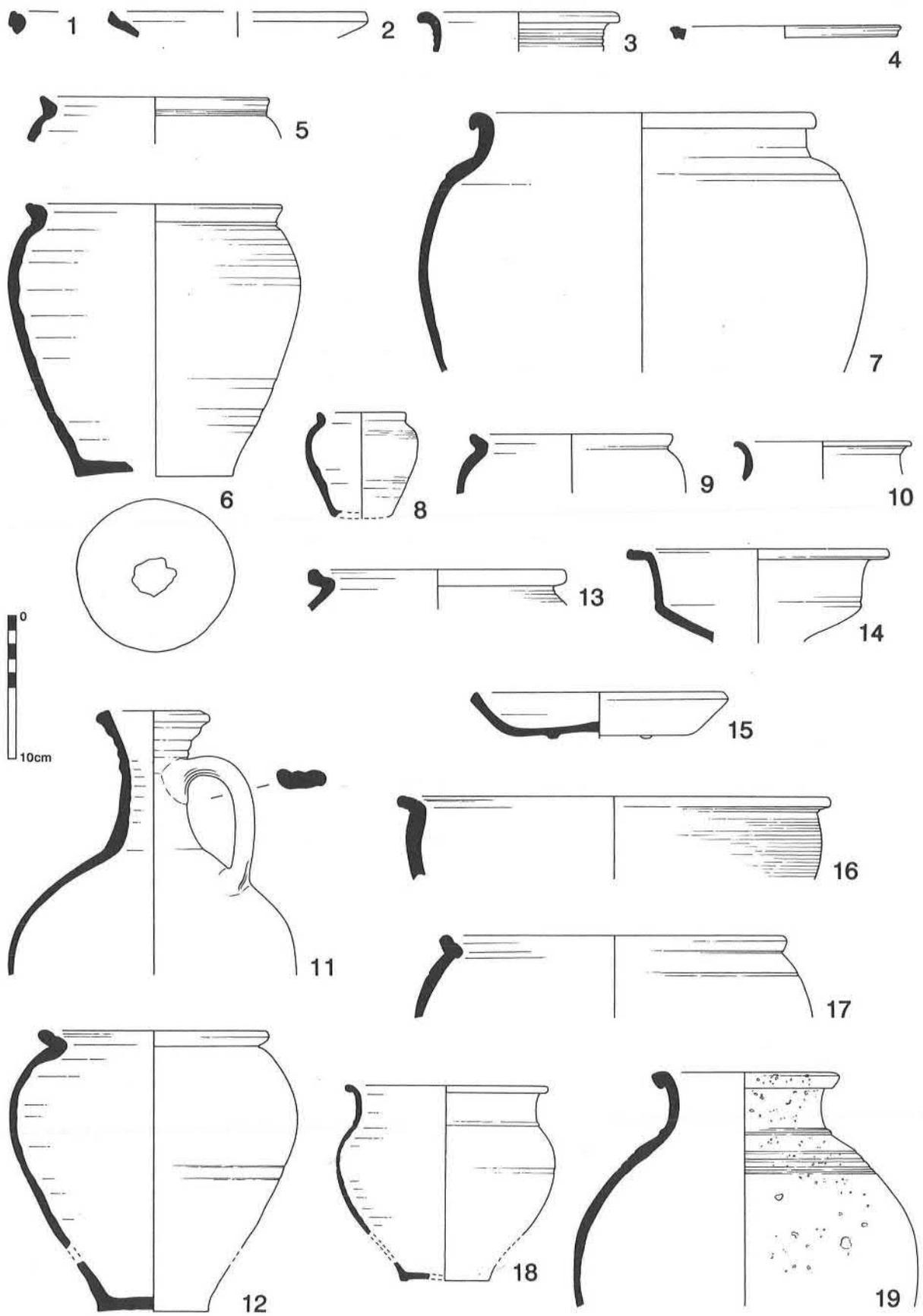


Figure 227: Belgic/Phase I pottery 1-2 (Ditch 529/843); 3-5 (Pit 689); 6-19 (Ditch 263), scale 1:4.

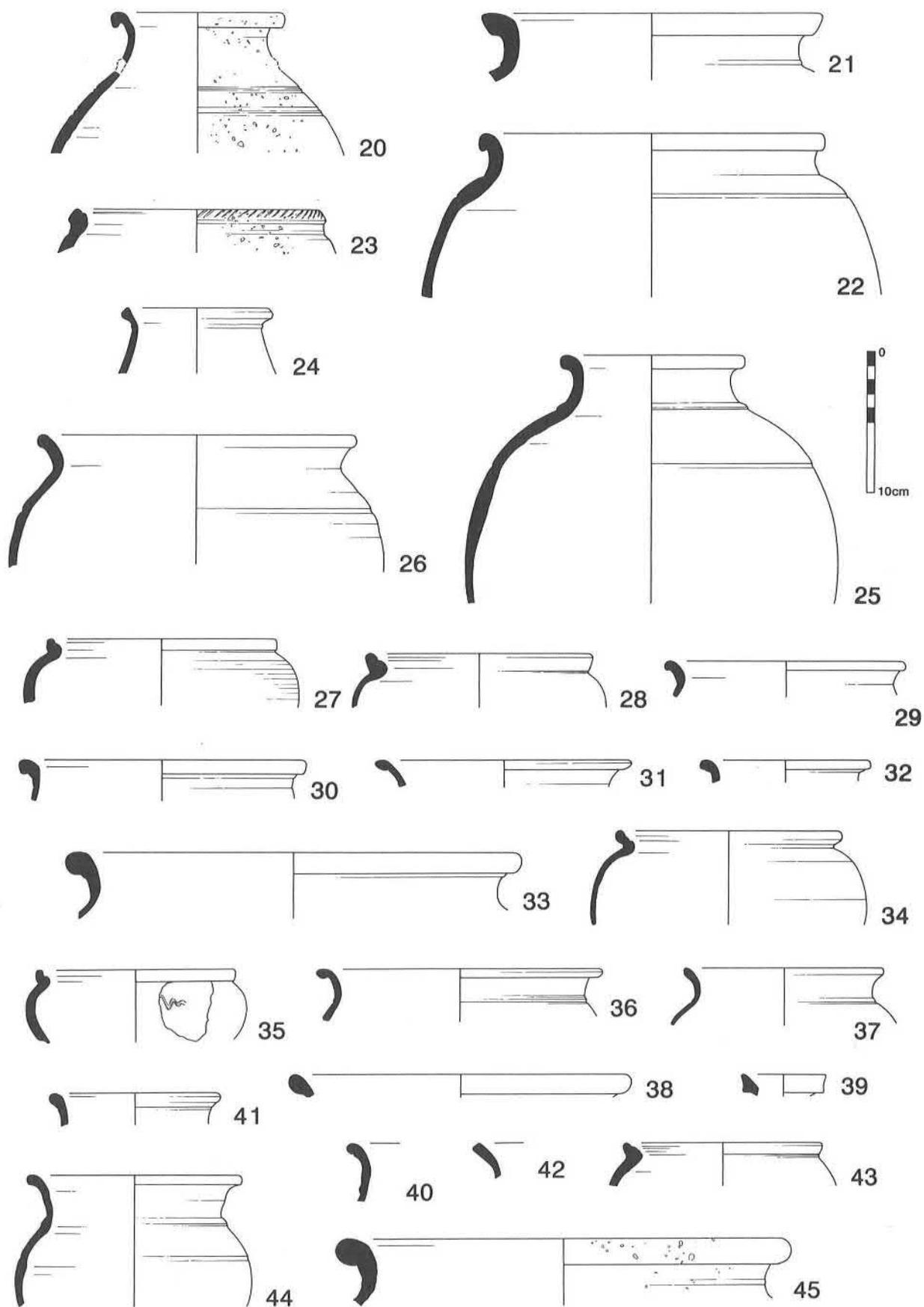


Figure 228: Belgic/Phase I pottery 20-45 (Ditch 263), scale 1:4.

pottery primarily of the late first or early second century. Pieces of a later second-century date are believed to be from the undifferentiated slumping of the cobbled surface into the pits and ditch.

Ditch 529/843

A ditch following a west-east alignment from a point close to the south-east corner of Building 3.

Context 850: fill of section to the north of Building 9.

- 1 Fab. 1a. Fragment of a lid-seated cooking pot with brownish-orange surfaces and a grey core; IT type C5-1, dated 30-50, 43-55 and post-43 (Thompson 1982, 245).
- 2 Fab. 45a. Dark brown to orange surfaces with a grey core; IT platter type G1-9, largely 43-65 in date (Thompson 1982, 467).

NI Rim in Fab. 46a of a B1-1/D1-1 jar or necked bowl.

Pit 689

Easternmost of two pits cutting Ditch 529/843

Context 671: Upper fill of pit.

- 3 Fab. 14a. Light grey surfaces with a very pale grey core. The cordoned or rilled neck was a common feature on Northamptonshire greywares; a number of such vessels were found in a pit at Brixworth, dated Hadrianic or early Antonine (Woods 1967, fig. 4.12-20) although a similar vessel from Ditch F4 at Brixworth was dated Flavian or Trajanic (Woods 1970, fig. 17.105).

Context 690: Lower fill of pit.

- 4 Fab. 14b. Dark grey throughout with a single burnished band on the top of the rim. Probably from a bowl similar to some Brixworth vessels (Woods 1970, fig. 12.64), thought to be Hadrianic, although such bowls were also common in Brixworth during the Flavian-Trajanic period (*ibid.*, 14).
 - 5 Fab. 43ae. Burnt light brownish-pink surfaces with a grey core.
- NI Rim fragments of a BB1 dog-dish, Fab. 9a jar/bowl and a Fab. 47a jar/bowl.

If the vessels are Hadrianic or early Antonine the cobbled yard in this area must have been laid at a date later than the yard near Building 9, probably c.100-110.

Ditch 263 (Figs 227-230)

Ditch 263 can be dated approximately to the mid to late first/early second century. It produced a sherd of Hadrianic/Antonine samian ware, whilst the presence of a flagon dated 60-70 shows an early tendency towards romanisation. This feature appears in RMK as 'Ditch A'.

Context 257: This section of the ditch lay to the outside of Room 5, Building 7. It had cut through Gully 379 and Pit 380.

- 6 Fab. 43ae. Tall lid-seated jar with oatmeal-coloured surfaces, blackened over the outer face, grey core. A large hole has

been made in the base after firing. Probably late first century.

- 7 Fab. 46p. Yellowish-grey surfaces fumed black or grey in places, hooked rim and shoulder groove; fabric somewhat sandier than usual. Romanized 'Belgic' form, related to IT type B1-1, mid to late first century.
 - 8 Fab. 1a. Small pot with buff surfaces, blackened on the outer face, grey core. Appears to have been coil-made and wheel-finished.
 - 9 Fab. 1a. Pinkish-brown inner face, black slightly sooted exterior, grey core. IT type C5-1, dated 30-50 and post-43.
- NI Two other C5-1 type jars.
- 10 Fab. 9xy/47c. Black outer face, worn black inner face with pink underskin, grey core.

This context also contained a sherd of Flavian South Gaulish samian.

Context 262: This section of the ditch was beneath Room 5, Building 7.

- 11 Fab. 18g. Ring-necked flagon with a ribbed handle in a granular creamy-white ware, probably from the Verulamium region (Frere 1972, fig. 104), dated 60-75.
- 12,13 Fab. 43d. Orange-brown surfaces, blackened on the exterior, cream underskin and a light grey core. Although wheel-finished, these are fairly crude vessels.
- 14 Fab. 9f. Reeded-rim bowl with black surfaces over a light pinkish-grey underskin, grey core. The form is that of a romanized Cam.246.
- 15 Fab. 25/30. Fine, smooth silky surfaces, patchy dark and light grey in colour over a pink underskin with a grey core. The line on the inner face is presumably skeuomorphic, representing a moulding as found on Gallo-Belgic platters. The fabric is that of greyware thin-section 1 (RBP, 452).
- 16 Fab. 46a. A reeded-rim bowl with a lightly rilled exterior. The vessel has been burnt slightly after breakage, thus it is a patchy orange, brown and black in colour with a black core. It is a native copy of a Cam.246A, IT type G2-3. The type was dated 43-65 at Colchester, but at Prae Wood it occurred in levels that were primarily native and pre-conquest (Thompson 1982, 483).
- 17 Fab. 9xy. Black surfaces with a dark grey to black core.
- 18 Fab. 25/30. Soft, powdery, light pinkish-grey surfaces mottled with darker grey; self-coloured core. The fabric is that of greyware thin-section 2 (RBP, 452).
- 19 Fab. 45a. Narrow-necked jar/flask with orange and grey patchy surfaces with a grey core; cordoned and grooved shoulder. Probably related to the Cam.231 and to IT type B3-8, most commonly a post-43 form.
- 20 Fab. 45a. Form and date as 19, with light orangy-pink surfaces and a grey core; this vessel has a strong overhanging rim which is not a native feature (Thompson 1982, 171).
- 21 Fab. 45b. Light orange surfaces, cream margins and a grey core.
- 22 Fab. 46p. Black exterior surface through which the yellowish-grey underskin is visible, flaking inner face and a grey core; single shoulder groove.

- 23 Fab. 45b. Light yellowish-orange surfaces, discoloured to grey over the outer face, light grey core. The vessel is an IT type C5-2 with slash decoration on the rim, dated to 5-40/45 at Prae Wood and c.50 in the Northampton Camp Hill kiln (*ibid.*, 249).
- 24 Fab. 46ab. Light grey surfaces with an orange 'bloom' and a dark grey core. The vessel is an IT type G5-4, a plain butt-beaker, in a fabric tempered with very fine grog. The form has been dated 5-40/45 and 30-50 at Prae Wood (*ibid.*, 517).
- 25 Fab. 46j. Orange surfaces with a blue-grey core; cordoned and grooved body. Form and date are as 19.
- 26 Fab. 46n. Light-grey surfaces, blue-grey core; single shoulder groove.
- 27 Fab. 45b. Black to dark-grey throughout. The form is IT type C5-1, a plain lid-seated jar, found in contexts dated 30-50 and post-43 at Prae Wood.
- 28-30 Fab. 9xy. Thin black surfaces over a red underskin with a grey core.
- 31,32 Fab. 9b. Black surfaces with a red core.
- 33 Fab. 46p. Orange-brown surfaces with a grey core.
- 34 Fab. 46qr. Reddish-brown inner face, black exterior, grey core. IT type C5-1 (see 27).
- 35 Fab. 45a. Orange-brown inner face, blackened exterior, grey core. IT type C5-1 (see 27).
- 36 Fab. 46qr. Dark-brown inner face, blackened over the outer surface.
- 37,38 Fab. 46g. Dark brownish-orange surfaces, grey core.
- 39 Fab. 46m. Orange surfaces with a dark-grey core, probably an IT type G3-1, a copy of a Cam.56, dated 5-40/45 and 30-50 at Prae Wood and 43-55 at St Albans (Thompson 1982, 493). The fabric suggests a mid first-century date. Compare to Crem. 9, Vessel 9 from the mausoleum (p.402; Fig. 207).
- 40-42 Fab. 46a. Dark brown surfaces, grey core.
- 43 Fab. 43ae. Sooted black outer face, grey to greyish-brown inner face, dark grey core.
- 44 Fab. 43f. Pale brownish-buff surfaces, blackened on the outer face and over the rim, grey core. Cordon and groove decoration.
- 45 Fab. 46j? Brownish-pink surfaces, cream margins, grey core. The fabric is similar to Fab. 43d.
- 46 Fab. 18c. Off-white surfaces and core, blackened on the outer face and over the rim. Many pieces from this vessel were also found in Context 379.
- 47,48 Fab. 47a. Light-grey surfaces with a blue-grey core.
- 49 Fab. 3n. Dark grey surfaces, blue-grey core.
- 50 Fab. 43ae. Light brownish-pink surfaces, blackened on the outer face, light grey core.
- 51 Fab. 9xy. Black surfaces with a red underskin and a grey core.
- 52 Fab. 47a. Light grey outer face, black inner face with a red underskin, blue-grey core.
- 53 Fab. 9a. Black to dark grey surfaces with a dark grey core. This is related to the Cam.246A and made in a Roman ware, as were the Camulodunum examples. Their manufacture had just begun in Claudian times, but they were still rare in period VI (61-c.65) and the majority were topsoil strays. A date in the late first to early second century is suggested for this

vessel, although a similar pot from Verulamium has been dated 130-150 (Frere 1984, fig. 102.2437).

- 54,55 Fab. 45a. Orange inner face, reddish-brown exterior burnt black over the rim. IT type C5-1. (See 27).
- 56 Fab. 1a. Black outer face with slash decoration on the rim, reddish-orange inner face, grey core. IT type C5-2, dated 5-40/45 at Prae Wood and c.50 at Camp Hill, Kiln 18.
- 57-59 Fab. 1a. Buff-coloured surfaces blackened over the outer face, grey core.
- 60-63 Fab. 1a. Orange surfaces, lightly blackened over the outer face, grey core.
- 64,65 Fab. 1a. Black exterior face, reddish-brown inner face, grey core.
- 66 Fab. 1a. Black surfaces, grey core.
- 67 Fab. 1a. Reddish-orange surfaces, heavily blackened exterior, grey core.
- 68,69 Fab. 1a. Light-orange surfaces, grey core.

Context 246: This was an uncontaminated section of Ditch 263 some distance to the south of Building 7.

- 70 Fab. 46a. Black exterior face, reddish-brown inner face, dark grey core. There is slash decoration on the rim. IT type C5-2, dated 5-40/45 at Prae Wood.

Context 343: A section of Ditch 263 outside the robbed west wall of Building 7.

- 71 Fab. 46a. Dark brown surfaces, grey core. Date and type as 61.
- 72 Fab. 46a. Black to dark brown surfaces, dark grey core.

Context 381: The lowest layer in Ditch 263, beneath Contexts 261 and 262, which were sealed levels within Room 5, Building 7.

- 73 Fab. 1a. Orange-pink surfaces, lightly blackened over the rim, grey core. IT type C5-1, dated 30-50 and post-43 at Prae Wood and 43-55 at St Albans.

Ditch 509/792 (Figs 230-236)

This was the most impressive ditch on site, with a 'V' section measuring 1.5 m in width and depth. It was traced for some 70 m, running east-west across the site, beneath Building 2 and immediately to the south of Building 9. In the bottom of the ditch, on its north side, was a line of stakeholes at 500 mm intervals, with larger postholes at 4.5 m spacing.

The ditch appears to date from the mid first century; it was used fairly heavily for dumping pot, but remained remarkably clean of other finds, although Context 593 produced 0.6 kg of tile in Fabric 5 (SPG), probably from its upper level. By the mid second century (c.150/160?) the ditch was probably barely visible; Building 2 was constructed over it about this time. Building 9, being earlier in date (c.100) respected its line.

Context 525: This section was sealed beneath limestone slabs and rubble 510, the floor of Building 2.

- 74 Fab. 1a. Large portion of a shell-tempered cooking-pot, lightly rilled on the outer face and burnt and sooted. The

surfaces range in colour from buff to light orange with a grey core. The vessel was coilmade with a wheel-finished rim. Probably first century.

- 75 Fab. 1a. Pale to dark orange surfaces with a grey core.
- 76 Fab. 23d. A soft pale cream ware, badly worn, with the remains of a dark brown colour-coat. There are also traces of sand roughcasting on the outer face. *cf.* Cam.94B, dated c.43/44–61/c.65 (Hawkes and Hull 1947, plate LV.235).
- NI Fab 57 body sherd, white colour-coated Oxford ware. The sherd is from an enclosed vessel and has a handle scar, and is thus thought to have come from a WC.1 flagon (Young 1977, 120). The dating for this type (200–250) is uncertain, and is based on the production of other white-coated wares, although the vessel type that it copied was made as early as 100, and was very much a second-century form. Its discovery within this context suggests that it may have been in production at an earlier date. The latest material in a similar sealed context (665) was a rim (98) dated to the second century. Could the Oxford white-coated flagon have been of a similar date? Certainly the other pottery from Building 2 is not suggestive of third-century construction and use.

Context 545: Section to the east of Building 2. At this point Ditch 509 cut Ditch 698, from which the earlier material (marked *) probably originated.

- 77 Fab. 1a. Black lightly rilled outer face, orange-red inner face and core.
- 78 Fab. 1a. Dark grey lightly rilled and sooted outer face, grey to buff inner face with a grey core.
- NI One similar but considerably smaller.
- 79 Fab. 1a. Light brownish-pink surfaces, slightly burnt, with a grey core.
- 80 Fab. 14a? Mid grey lightly burnished surfaces with a blue-grey core. Although this type of vessel was produced at Ecton it is an unusual rim form for the Ecton kilns and the Northampton area (Johnston 1969, 86 and fig. 7.56). Probably second century.
- 81 Fab. 34b. Mica-dusted platter in a rather sandy brownish-orange ware with a grey core. The vessel is a London-produced Type 24, dated c.90/100–140 (Arthur and Marsh 1978, 154–58 and figs. 6.10–6.12).
- 82 Fab. 35. Oxidized Oxford Ware 1; segmented bowl Type O.39, dated 70–150. The vessel is decorated with thick white paint or barbotine on the rim. The surface colour is a streaky cream and light orange with a thick light grey core (Young 1977, 196 and fig. 72).
- 83 Fab. 43ae. Burnt black surfaced vessel with uneven rilling on the outer face; grey cored. Late first to mid second in date, most commonly early second.
- 84 Fab. 45a. Orange-brown surfaces, rilled and slightly burnt on the outer face with a dark grey core. The pot bears a 'maker's mark', cut into the surface before firing. This same mark has also been found on a vessel from Quinton in a feature dated by samian to 60–80 (Friendship-Taylor 1979, fig. 35.46) and elsewhere in Milton Keynes (RBP, fig. 24.5 and 6).
- 85 Fab. 45b/1e. Handmade vessel with pale pinkish-orange surfaces and a dark buff core. Fairly crude.
- 86* Fab. 46a. Handmade lid-seated vessel decorated with slash-

ing on the rim. The buff coloured surfaces have been burnt; grey core. The pot is an IT type C.5–2, dated 5–40/50 or c.50 (Thompson 1982, 249).

- 87* Fab. 46a. Brownish-orange surfaces with some burning and a dark grey core. IT type B.1–1, dated at Prae Wood to 5–40/50, 30–50 and post-43 (*ibid.*, 87).
- 88* Fab. 46a/g. Orange-brown surfaces with a dark grey core, IT type C.6–1, dated 5–40/45 and post-43 at Prae Wood (*ibid.*, 257).
- 89* ?Fab. 46g. Brownish-orange surfaces with a grey core, IT type C.5–1, dated post-43 at Prae Wood (*ibid.*, 245).
- 90* Fab. 46g/m. Brownish-orange surfaces with a grey core, bead-rimmed IT type B.5, dated from the later first century BC to the first half of the first century AD (*ibid.*, 191–209).
- 91* Fab. 46j. Dark brown to black outer face with an orange-brown inner face and a dark grey core. IT type B.1–5 or D.1–3, dated to the post-conquest period (43–55) at St Albans (*ibid.*, 309).
- 92* Fab. 46p. Heavily flaked black surfaces showing pinkish-brown margins and a grey core.
- 93* Fab. 46qr. Black surfaces with red-brown margins and a grey core. IT type G.1–7 or G.1–8, dated 5–40/45 at Prae Wood and 43–55 at St Albans (*ibid.*, 463–465).
- 94 Fab. 47dg. Orange-brown on the outer face, dark grey to black on the interior with a grey core. Probably late first/early second century.

Context 665: The lower layer of the section within Building 2, sealed by 664.

- 95 Fab. 1a. Black rilled outer face, dark brownish-red inner face and core. The vessel has both a lid-seating ledge and a groove. Handmade. First century AD.
- 96 Fab. 1a. Patchy black and dark buff surfaces with a dark grey core. In place of lid-seating ledges the vessel has two grooves. Handmade. First century AD.
- 97 Fab. 18g. Verulamium region lid in a granular white fabric with a thin pinkish-orange core. The 'rim' is burnt. Lids were made at these kilns over a long period; the potter *Oastrivs* produced similar but slightly larger examples between 55–80, while at Brockley Hill lids were found in association with material of the Flavian potter *Marinvs* (c.70–100) together with early second-century finds, and in 1968 excavations produced lids dated to 70–120 (Saunders and Havercroft 1977, 136).
- 98 Fab. 35. Oxidized Oxford Ware 2. Dark orange throughout, slightly redder in the core; the surfaces have faint traces of burnishing. The ware is slightly micaceous. The form is a copy of a Dr.37, an O.45, dated 100–200 (Young 1977, 199).
- 99 Fab. 45a. Light brownish-orange surfaces with a grey core. IT type A6, the stunted pedestal form. At Prae Wood it has been dated 5–40/45, 30–50 and post-43 (Thompson 1982, 71).
- 100 Fab. 45b. Brownish-buff surfaces, heavily burnt on the widely rilled outer face. The vessel has double grooves instead of lid-seating ledges. Probably late first or early second century.
- 101 Fab. 46a. Dark brownish-orange surfaces with a dark grey core.

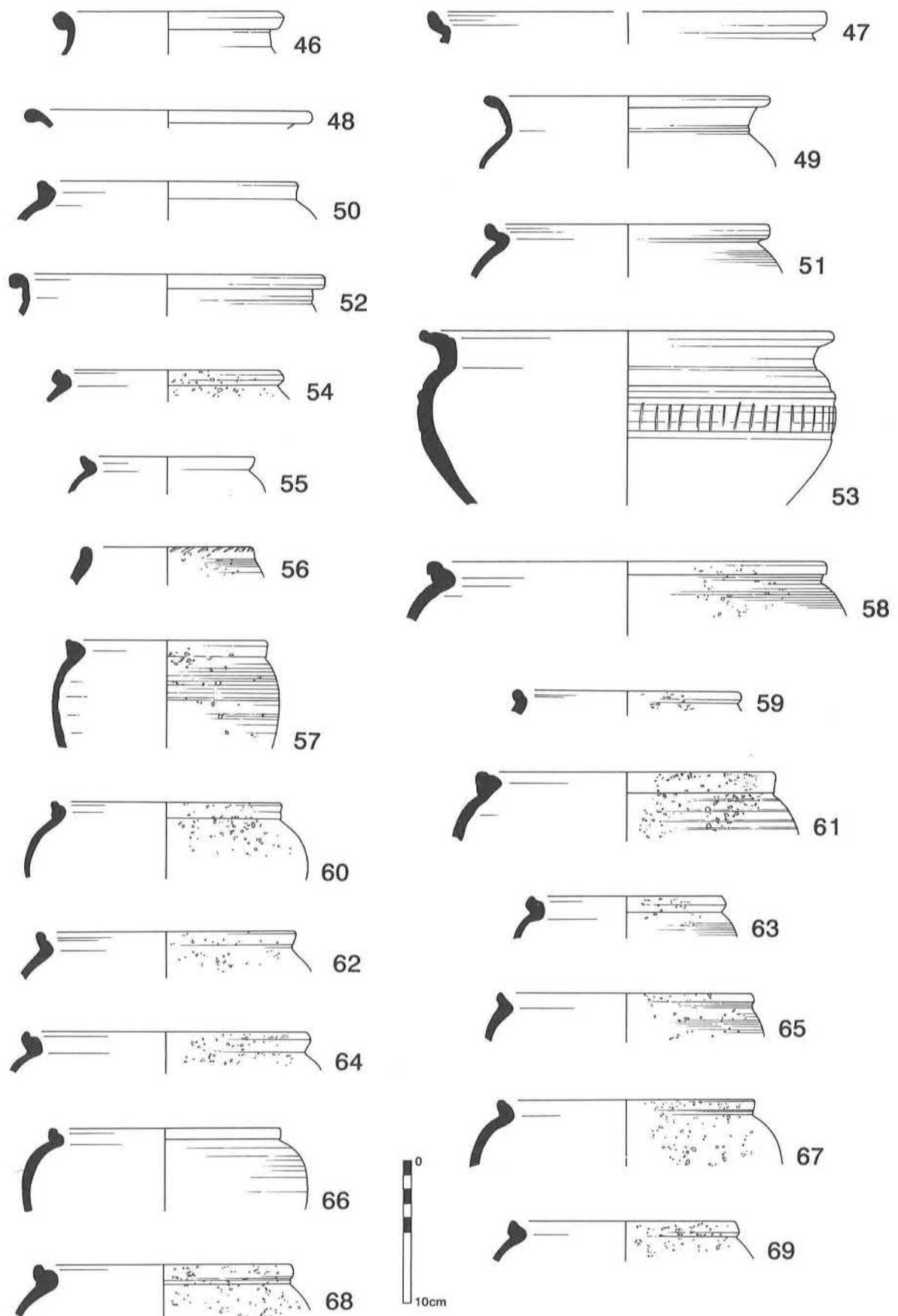


Figure 229: Belgic/Phase I pottery 46-69 (Ditch 263), scale 1:4.

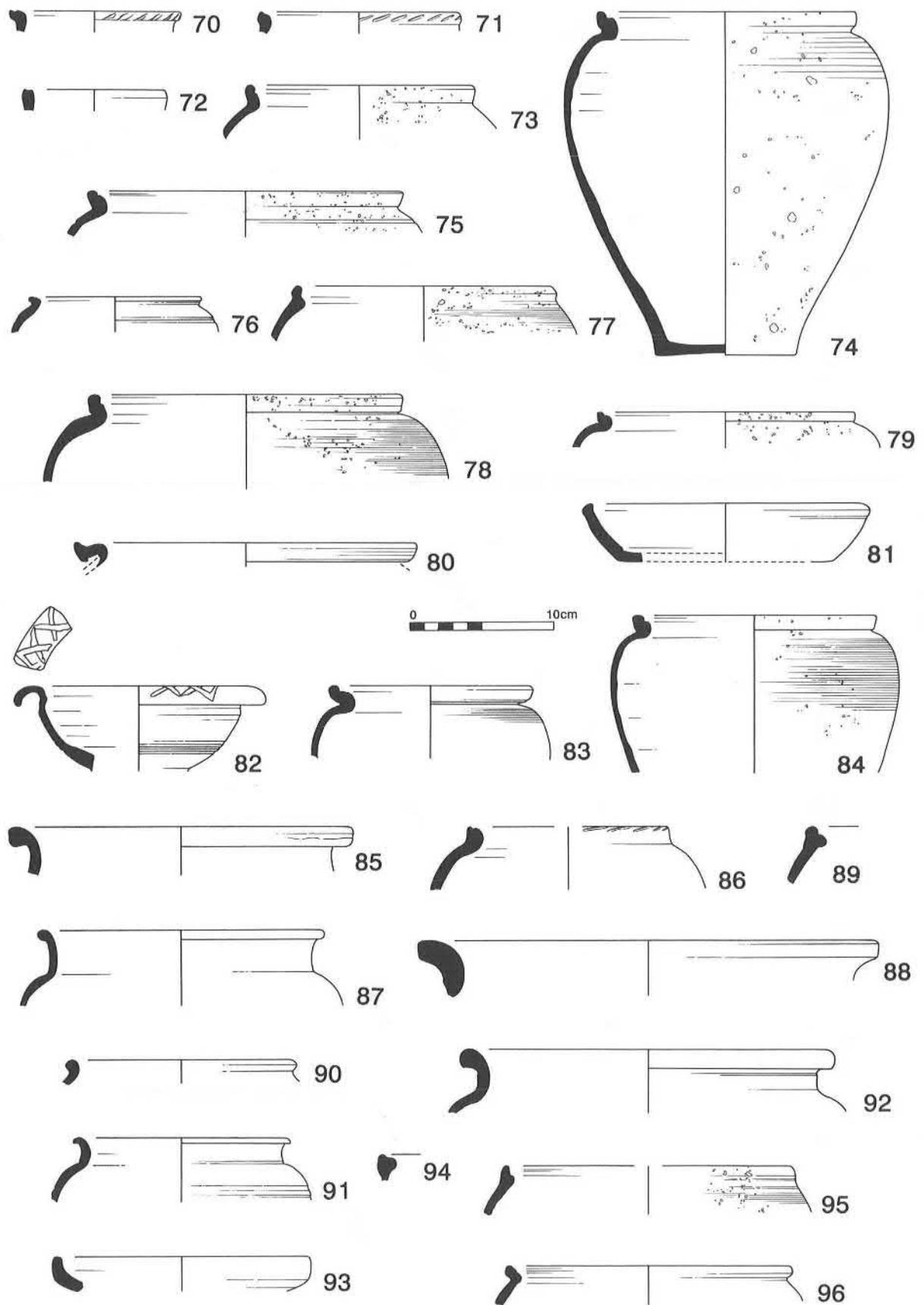


Figure 230: Belgic/Phase I pottery 70-73 (Ditch 263);74-96 (Ditch 509/792), scale 1:4.

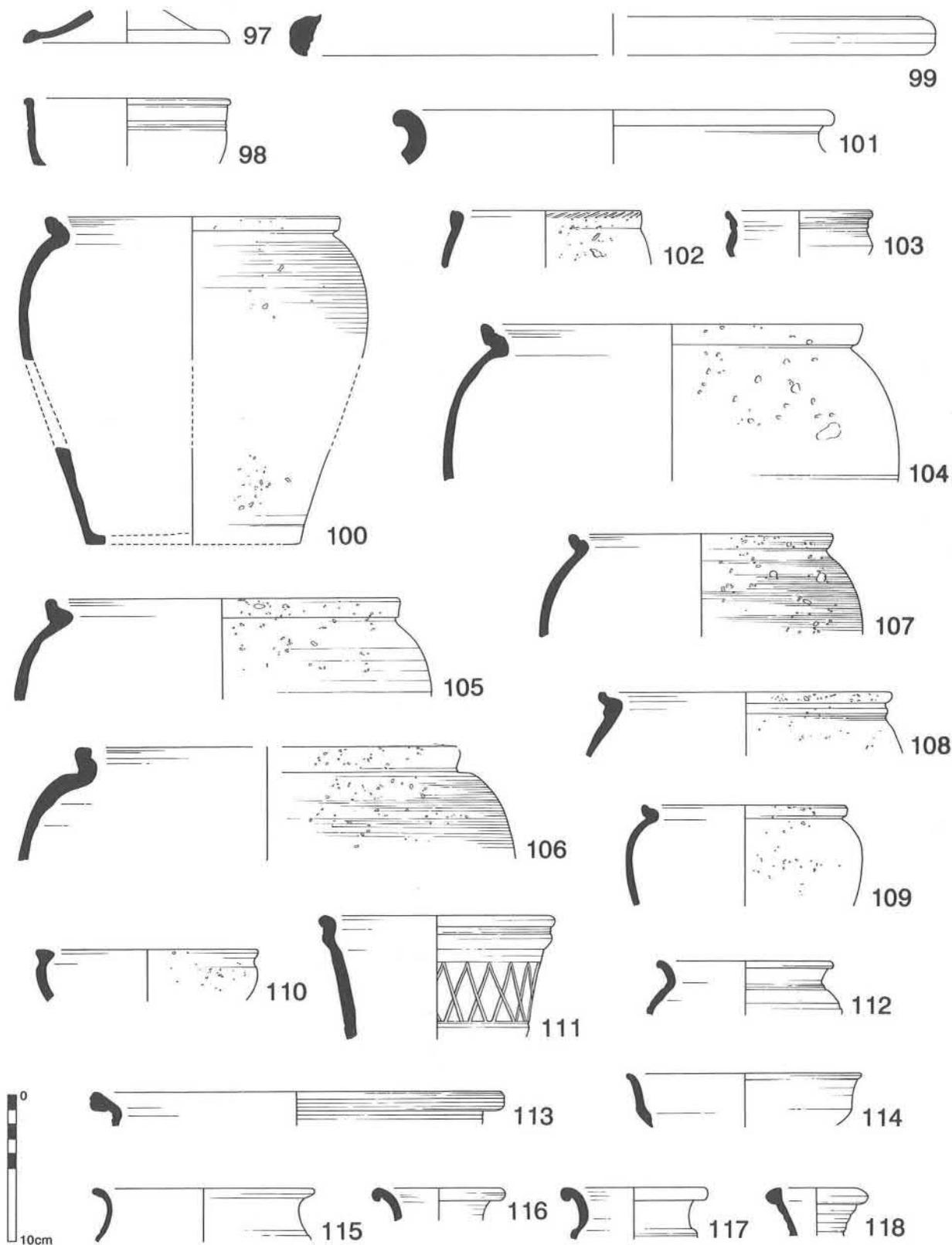


Figure 231: Belgic/Phase I pottery 97-118 (Ditch 509/792), scale 1:4.

102 Fab. 46g. Light brownish-orange surfaces, heat-discoloured on the outer face, with a blue-grey core. Handmade. IT type C.5-2. Examples not made in the standard grogged ware, like this vessel, were being produced in the Northampton kilns in the mid first century AD.

103 Fab. 46? A much finer ware than the standard grogged fabric. This vessel has both grog and some quartz, but in lower

proportions. The outer surface is a patchy brown and black with a pinkish-brown inner face and a blue-grey core. The form is possibly an IT type E2-1, dated 5-40/45 and post-43 at Prae Wood (Thompson 1982, 375).

Context 593: This was the fill of a section of Ditch 509 adjacent to Building 9. It was excavated as one layer and had

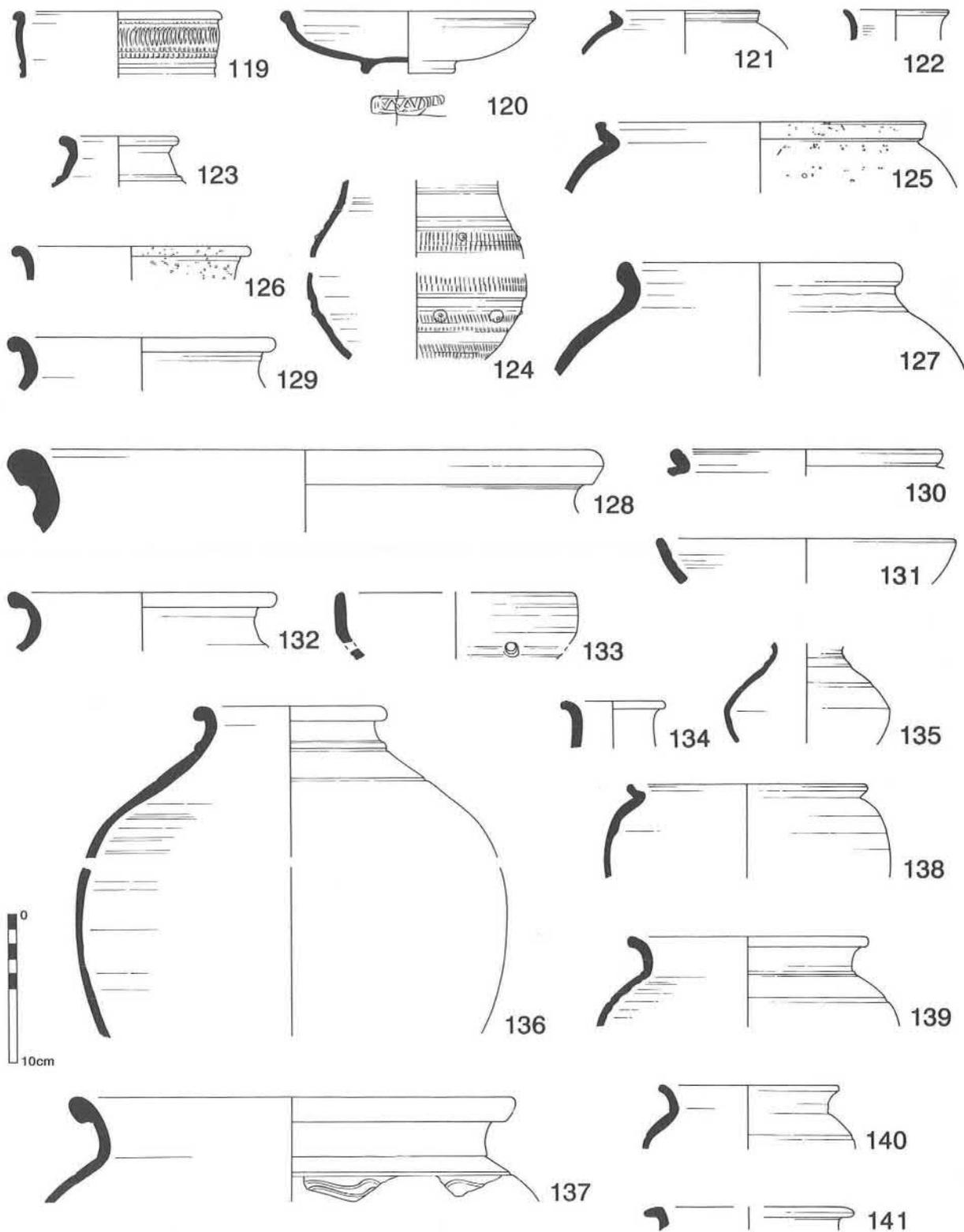


Figure 232: Belgic/Phase I pottery 119-141 (Ditch 509/792), scale 1:4.

not been contaminated by association with other features.

104 Fab. 1a. Sooted buff outer face with a pinkish-orange inner face and a grey core.

105 Fab. 1a. Buff exterior and inner face with a grey core. Sooted on the outer face.

106 Fab. 1a. Orange surfaces with buff margins and a grey core. The exterior is lightly and closely rilled.

107 Fab. 1a. Closely rilled light orange outer face with a brighter orange interior and a dark buff core.

108 Fab. 1a. Buff surfaces with a grey core.

109 Fab. 1a. Patchy black and dark reddish-brown throughout.

NI Three similar small Fab. 1a vessels, one with wide exterior rilling.

110 Fab. 1e. Pale pinkish-orange surfaces with light brown margins and a thin grey core.

- 111 Fab. 9f. Black outer face with burnished lattice decoration, light yellowish-grey inner face and a core of black, dark brown and pale brownish-grey. *cf.* Wilson 1984, fig. 100.2385, dated 120–135.
- 112,113 Fab. 9xy. Black surfaces, burnished on the outer face, with red margins and a grey core.
- 114 Fab. 9e/14. Black surfaces with purplish-brown margins and a grey core.
- 115 Fab. 14/33. Mid to light grey surfaces with a very pale grey core.
- 116 Fab. 14a. Dark grey slipped surfaces over a pinkish-brown fabric.
- 117 Fab. 15b. Black surfaces, burnished on the inner upper rim, with a grey-brown core. Micaceous. The fabric type suggests that the pot may have been similar to Wilson 1984, fig. 83.1999, dated 145–155.
- 118 Fab. 18g. Granular fabric, pink throughout. *cf.* Wilson 1984, fig. 82.1926, dated 80–140.
- NI Two flagon handles from different vessels, both white, in a medium fine fabric and with three ribs.
- 119 Fab. 25/30. Copy of a Dr.30 in a fine, soft pale greyware with faint traces of a dark grey ?wash. In thicker sections of the vessel there is a thin blue-grey core. *cf.* Young 1977, fig. 83, R.64.1, dated late first and second centuries.
- 120 Fab. 25/30. Copy of a Dr.18 in a Terra Nigra-type fabric; pale grey throughout with a thin dark grey wash over the surfaces. The inner base is inscribed with a double circle within which is a V-motif nonsense stamp. This die has also been found at Bierton, Bucks (Rigby 1986, 66.2) and dated 95–160.
- 121 Fab. 25/30. Pale grey throughout with the remains of a dark grey to black burnished slip on the outer face, *cf.* Wilson 1984, fig. 85, 2074/75/78, covering the date range 70–150.
- 122 Fab. 25/30. Light grey burnished surfaces with a pale blue-grey core, probably from a poppy-head beaker. *cf.* Wilson 1984, fig. 85.2051, dated 130–180. A non-joining body sherd with barbotine dots in Fab. 25/30 also came from this context.
- 123 Fab. 25/30. Light grey throughout with some burning on the outer face.
- 124 Fab. 35? Body sherds from a beaker, with a pale orange exterior and light grey core and inner face, decorated with rouletting and large white paint/barbotine dots. *cf.* Wilson 1972, fig. 107.252, dated 75–105. The fabric is identical both macro- and microscopically (×20) to the oxidized Oxford O.39 (82). This vessel may be of similar date, or else dates to the early years of the Oxford industry, *ie.* 50–150.
- 125 Fab. 45a. Well-made lid-seated pot with blackened brownish-orange surfaces and a grey core. IT type C5–1, dated 30–50 and post-43 at Prae Wood (Thompson 1982, 245).
- 126 Fab. 45a. Heat-blackened outer face with a brownish-orange interior and grey core. IT type B1–1/D1–1; the form has a wide date range and occurs in post-43 contexts (*ibid.*, 87).
- 127 Fab. 46a. Black surfaces with a dark grey core; handmade, with some wiping on the neck. A crude IT type C5–3?, dated c.5–50 (*ibid.*, 253).
- 128 Fab. 46a. Orange-brown surfaces with a dark grey core. IT type C.6–1. This type of storage jar survived unchanged to the end of the first century AD. (*ibid.*, 257).
- 129 Fab. 46a. Light brown surfaces with heat blackening, grey core. IT type B1–1/D1–1 (see 126).
- NI Two smaller Fab. 46a B1–1/D1–1 rims.
- 130 Fab. 46a. Pinkish-brown surfaces, heat-blackened over the rim, with a grey core. IT type C.5–1 (see 125).
- 131 Fab. 46a. Light brown surfaces, heavily heat-blackened, with a dark grey core. IT type G1–7, dated 5–40/45 at Prae Wood and 50–100 at Calfstock Lane, Farningham (*ibid.* 1982, 463).
- 132 Fab. 46m. Orange surfaces with a dark grey core; an IT type B1–1/D1–1 (see 126).
- 133 Fab. 46m. Buff surfaces with a dark grey core; IT type G1–10, likely to be post-conquest (*ibid.*, 469).
- 134,135 Fab. 46p. Black surfaces with red margins and a grey core. Although not from the same vessel, the pieces appear to be from an IT type E3–6, dated 5–40/45 at Prae Wood and up to 65 in Colchester (*ibid.*, 405).
- NI Rims of a B1–1/D1–1 and a ?G1–7 in Fab. 46p.
- 136 Fab. 46p. Dark grey to black chipped surfaces over reddish-pink margins and a light grey core. This is a romanized IT type B3–8, probably 70–100 in date.
- 137 Fab. 46qr. Dark brown to black surfaces with brownish-orange margins and a grey core; from a large romanized IT type B1–1/D1–1 (see 126).
- 138 Fab. 46qr. Black surfaces with brownish-pink margins and a grey core; IT type C5–1 (see 125).
- NI A B1–1/D1–1 type rim in Fab. 46qr with a possible suspension hole, drilled after firing, on the neck.
- 139,140 Fab. 47c. Light to mid grey surfaces, yellower on the inside face, with some orange streaks and a blue-grey core. *cf.* RBP, fig. 32, 39 and 43, from a context dated mid first to mid second century.
- NI One similar Fab. 47a rim.
- 141 Fab. 47a. Mid grey surfaces with a dark grey core.
- Context 675:* This section was adjacent to the south side of Building 9 and was partially sealed by a layer of cobbles (674). It produced over 28.5 kg of pottery, including sixteen pieces of samian dated to the Flavian and Trajanic periods. The remnants of thirty shell-tempered lid-seated jars were also found; only a representative sample is illustrated.
- 142 Fab. 1a. Almost complete vessel with light orange surfaces, closely rilled on the outer face, dark creamy-yellow margins and a grey core. There is only patchy burning on the exterior. The pot appears to have been coil-made but wheel-finished.
- 143 Fab. 1a. Buff surfaces, widely rilled on the outer face and heavily sooted, with a grey core.
- 144 Fab. 1a. Pale orange-pink sooted surfaces with a grey core.
- 145–147 Fab. 1a. Patchy buff and orange outer face, orange inner face with a grey core.
- 148 Fab. 1a. Buff outer face, lightly rilled, with orange margins and an orange inner face; grey core.
- 149 Fab. 1a. Orange surfaces with a grey core.
- 150 Fab. 1a. Black outer face with a greyish-brown inner face and core.

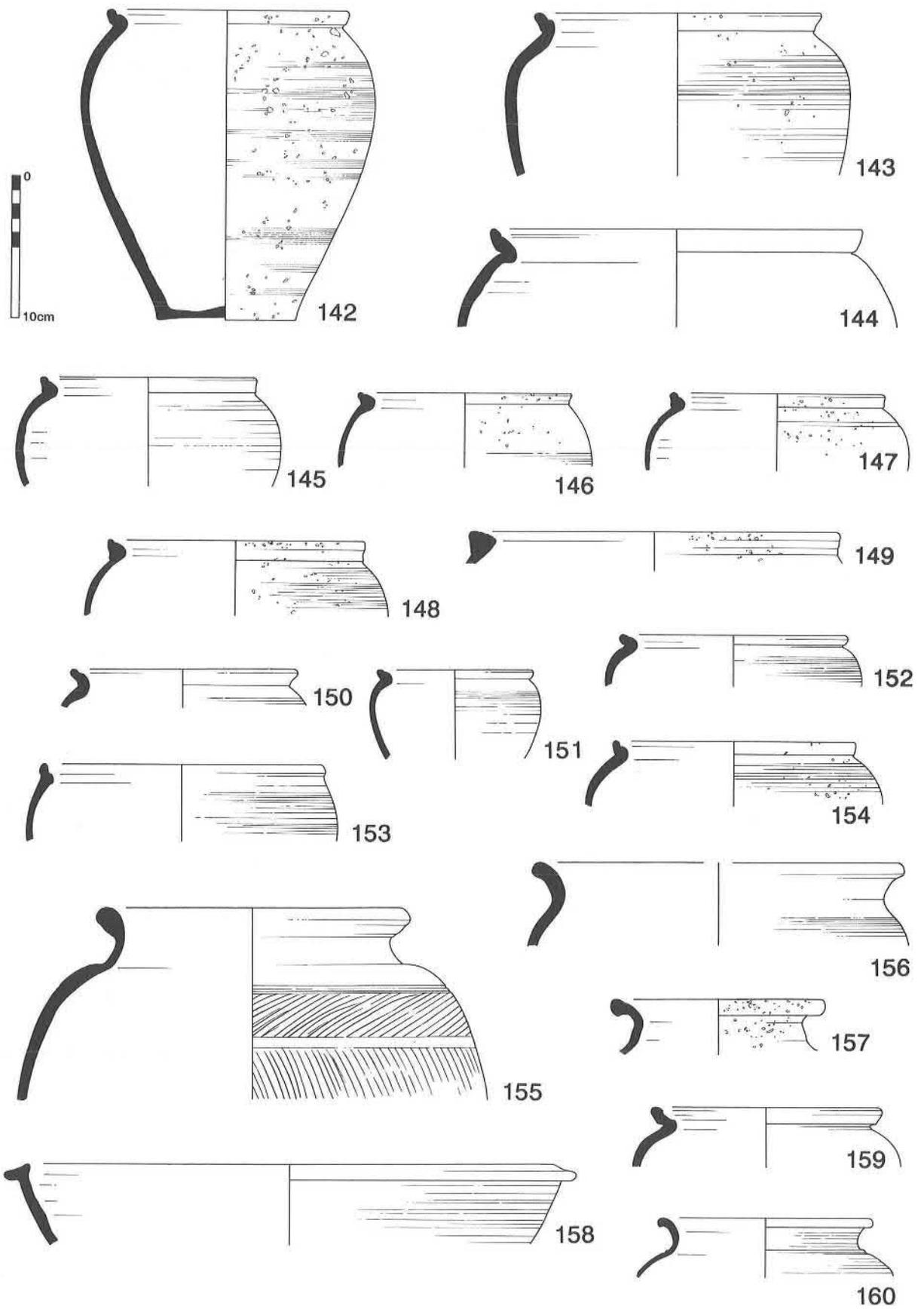


Figure 233: Belgic/Phase I pottery 142-160 (Ditch 509/792), scale 1:4.

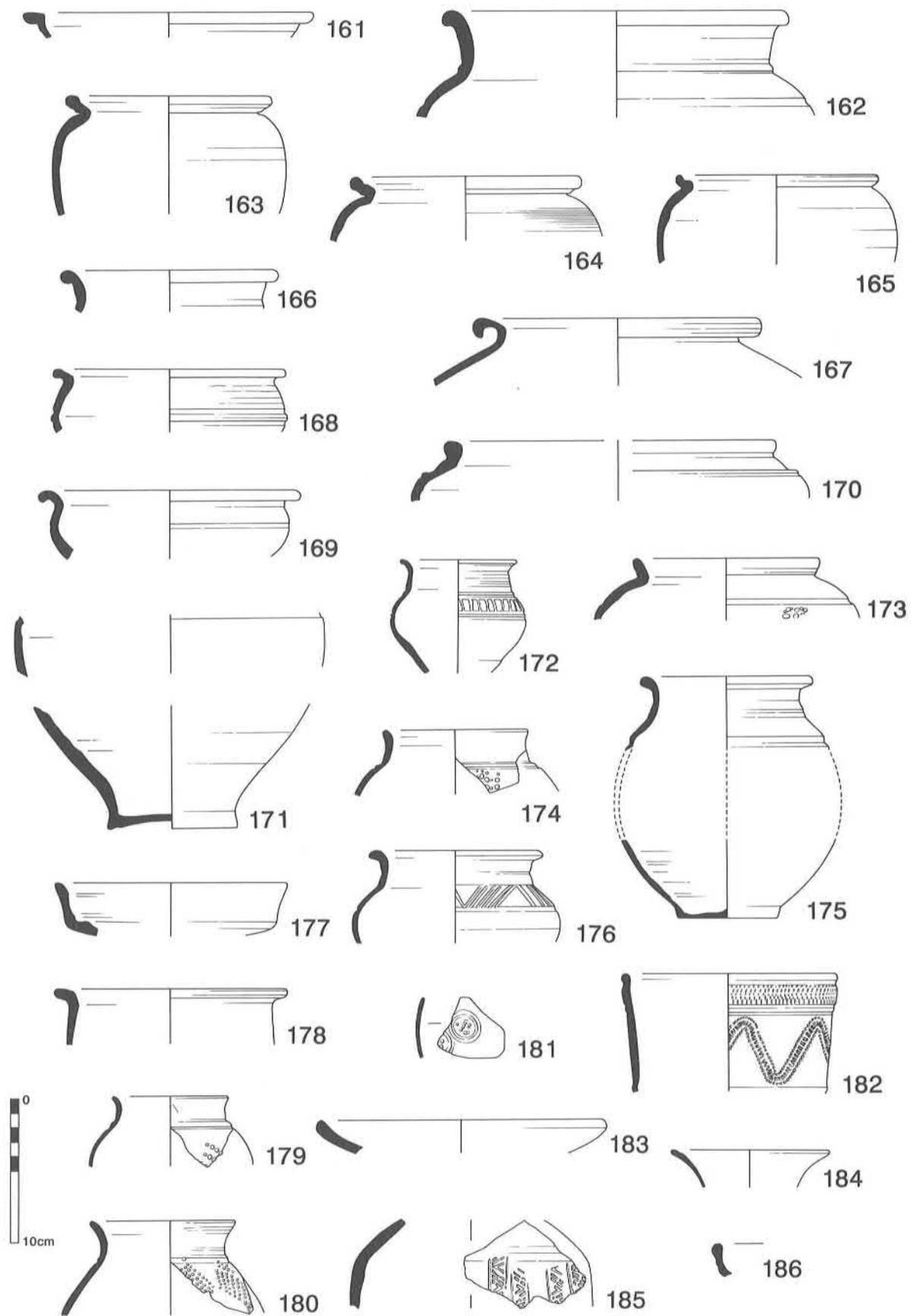


Figure 234: Belgic/Phase I pottery 161-186 (Ditch 509/792), scale 1:4.

- 151,152 Fab. 1a. Black outer face with close rilling, pinkish-brown inner face with a grey to black core.
- 153 Fab. 1a. Black outer face with close rilling, a brownish-orange inner face and a grey core.
- 154 Fab. 1a. Blackened outer face with wide rilling, an orange inner face and a grey core.
- 155 Fab. 1a. Storage jar, burnt after breakage, with blackened light yellowish-brown surfaces, heavily sooted on the inner face.
- 156 Fab. 1a. Orange surfaces with a brownish-grey core.
- 157 Fab. 1a. Narrow-necked jar with orange surfaces and a grey core.
- 158 Fab. 1a. Bowl with a buff heat-blackened rilled outer face, light orange inner face and a grey core.
- NI Fab. 1e. Rim sherd of a bowl which joins Vessel 110, Context 593.
- 159 Fab. 9a. Black and brown patchily coloured outer face with a black inner face and core.
- NI One similar.
- 160 Fab. 9a. Black and brown patchily coloured burnished outer face with a black inner face and core.
- NI Two similar.
- 161 Fab. 9a. Black surfaces and core with some brown patches over the rim.
- 162 Fab. 9f. Black outer face, heavily chipped and lightly sooted, with a light grey inner face and core. The vessel is large for this fabric type, although it does contain a greater quantity of clay pellets/grog than is usual (RBP, 85, Group 5).
- 163 Fab. 9xy. Black outer face, slightly sooted, with a patchy brown and black inner face and a grey core.
- 164 Fab. 9xy. Black throughout, with some red-brown discolouration over the rim, finely rilled and sooted on the outer face.
- 165 Fab. 9xy. Black sooted outer face with a black and red chipped inner face and a grey core.
- NI Two similar and a rim fragment of a smaller lid-seated pot.
- 166 Fab. 9xy. Black surfaces with red margins and a brown core, smoothed and slightly burnished on the outer face.
- 167 Fab. 9xy. Grey to black surfaces with red margins, heavily flaked and chipped on the inner face, grey core.
- 168 Fab. 9xy. Black outer face with a black and red chipped inner face and grey core. The form presumably developed from the Cam.246A, the manufacture of which had just begun in the Claudian period (41–54).
- 169 Fab. 9xy. Black surfaces with red margins and a grey core. The form is presumably a development of the Cam.246B, dated as above.
- 170 Fab. 9xy. Black surfaces, flaked and chipped, with red margins and a grey core. The form is unusual and may be related to the Cam.253, a vessel type found in the first half of the first century, up to c.60–65 (Hawkes and Hull 1947, 267).
- 171 Fab. 12. Lower Nene Valley greyware. White fabric with good dark grey surfaces; where the vessel walls are thick the sherds have a grey core with white margins. Burnt after breakage. Probably second half of the second century (Howe *et al.* 1980, fig. 1).
- 172 Fab. 14a. Light silvery grey surfaces with darker burnished lines on the neck and as decoration on the shoulder; grey core. It is perhaps a smaller version of Woods 1970, fig. 21.136, dated to c.117–138.
- 173 Fab. 14a. Blue-grey throughout with darker patches where smoothed on the outer face. The fabric contains much fine lustrous white quartz and a small number of ‘foreign bodies’ which mar the shoulder. The vessel is decorated with a rectangular panel of large uneven self-coloured barbotine studs. Possibly from the Biddleston Kiln 1, believed to be Flavian (c.68–97) in date (Woods *et al.* 1981, fig. 22.12, 52 and 53).
- 174 Fab. 14a? Poppy-head beaker in a light grey ware with a blue-grey core. The vessel is decorated with roughly rectangular panels of self-coloured barbotine studs over a streaky white to dark grey slip. It is similar to vessels produced at the Highgate kilns between 100–140 (Brown and Sheldon 1974, fig. 4.51 and 53).
- 175 Fab. 14c. The surfaces of the pot are largely black to dark grey in colour, with the exception of the lower portion of the outer face which is a fine light silvery-grey. The core is white and reddish-brown.
- 176 Fab. 14/33. The outer face is a dark silvery blue-grey where burnished and dark grey where plain, with burnished decoration on the shoulder. The inner face is bluish-white and the core is grey.
- 177 Fab. 14/33. Unevenly burnished silvery-blue outer face with a light blue-grey inner face and core. Sooted. Probably a late first-century copy of the Gallo-Belgic platter type Cam.1. *cf.* Woods 1970, fig. 8.7, dated to 68–97.
- 178 Fab. 15. Black surfaces, badly chipped on the outer face, light grey core. The piece is not heavily micaceous.
- 179 Fab. 23d. A poppy-head beaker in a red-brown fabric with a thin grey central vein of colour within the core. The vessel is covered with a dark grey slip which has fired to a bluish-white on the inner face. Decoration consists of diamond-shaped panels of barbotine dots beneath the slip. The shape of the panels may indicate a mid to later second-century date (Tyers 1978, 62). The fabric closely resembles that produced in the Lower Nene Valley for ‘rhenish’ ware copies.
- 180 Fab. 25/30. Poppy-head beaker in a fine sandy greyware with a well-burnished medium grey outer face decorated with diamond-shaped panels of self-coloured barbotine dots. The inner face is a medium to light grey with a blue-grey core. *cf.* Young 1977, fig. 79, R.34.2, dated to the second century. The shape of the panels may indicate a mid to later second-century date (Tyers 1978, 62).
- 181 Fab. 25/30. Body sherd in a fine sandy soft pale greyware decorated with self-coloured barbotine rings and dots. *cf.* Young 1977, fig. 79, R.31.6, dated 50–150. The placing of the dots within the ring indicates that the vessel is not in the same tradition as the Flavian ‘ring and dot’ beakers from Londinium (Green 1978, 109).
- 182 Fab. 25/30 Fine sandy light greyware with dark grey uneven patches of colour on the outer face. The vessel, a copy of a Dr.30, is decorated with rouletting and impressed decoration. *cf.* Young 1977, fig. 83, R.64.5, dated to the late first and second centuries.

- NI A rim from another Dr.30 copy in the same fabric. It joins and is illustrated with **119**, Context 593 (Fig. 231).
- 183 Fab. 34b. Mica-dusted platter with pinkish-orange surfaces and a thin light grey core. *cf.* Type 24 in Arthur and Marsh 1978, fig. 6.10, dated c.90/100–140.
- 184 Fab. 34c. Mica-dusted beaker rim in a brittle orange ware.
- 185 Fab. 34d. Mica-dusted body sherd with impressed decoration, heavily burnt after breakage.
- 186 Fab. 38. Light brownish-buff surfaces covered with a thin white slip, light grey core.
- 187 Fab. 42. A very coarse sand tempered vessel with a brownish-black sooted outer face, chipped light brown to buff inner face and a grey core.
- 188 Fab. 43ae. Light grey outer face and pinkish-brown inner face with off-white margins and a dark grey core. A late first to mid second-century fabric.
- 189 Fab. 43ae. Black outer face and dark pinkish-brown inner face with a dark grey core. Date as **188**.
- 190 Fab. 43ae. Pinkish-brown to orange outer face with off-white margins and a dark grey inner face and core. Incised decoration. Burnt and sooted after breakage. Date as **188**.
- 191 Fab. 43f. Light to dark grey patchy outer face with a brown margin and a pale buff inner face and dark grey core. Date as **188**.
- 192 Fab. 43f. Light brownish-grey outer face with a buff inner face and off-white margins, dark grey core.
- 193 Fab. 43f. Heat blackened and sooted outer face with a purplish-grey to yellowish-grey inner face and brown and grey core. Date as **188**.
- 194 Fab. 45a. Pinkish-orange outer face with an orange-brown inner face and grey core. Crudely made.
- 195 Fab. 45a. Dark orange-brown finely rilled outer face with some heat discolouration, brown inner face and a grey core. An IT type C5–1, dated 30–50 and post–43 at Prae Wood and 43–55 at St Albans (Thompson 1982, 245).
- 196 Fab. 45c. Medium brown surfaces with pinkish-brown margins, burnt and sooted on the outer face and over the rim, grey core. Type and date as **195**.
- 197 Fab. 46a. Dark brown to black surfaces with orange-brown margins and rim and a dark grey core. An IT type C6–1 that survived unchanged to the end of the first century (*ibid.*, 259).
- NI Three other similar 'Belgic' storage jar rims.
- 198 Fab. 46a. Black sooted outer face with a buff and orange inner face and grey core. The vessel is decorated with slash marks around the rim. An IT type C5–2, dated 5–40/45 at Prae Wood and c.50 in the Camp Hill kiln (*ibid.*, 249).
- 199 Fab. 46a. Heat-blackened brown outer face with an orange-brown inner face and dark grey core. An IT type B1–1 or D1–1, probably the latter, therefore dated 5–40/45 at Prae Wood and 55–75 at the Little Munden Farm kiln (*ibid.*, 299).
- NI One similar.
- 200 Fab. 46a/j. A small heat-blackened and sooted vessel, originally orange-brown in colour. It contains much light coloured tempering. Type and dating as **195**.
- 201 Fab. 46g. An orange-brown surfaced vessel with a grey core, burnt on the outer face. It has a band of incised decoration. An IT type B1–1/D1–1 of wide date range, found until well past the Roman conquest (*ibid.*, 88).
- 202 Fab. 46n. Brownish-grey surfaces with a blue-grey core. Type and date as **201**.
- 203 Fab. 46p. Black to dark grey surfaces, badly chipped on the inside face, with brownish-pink margins and a light grey core. Type and dating as **201**.
- 204 Fab. 46p. A small bowl with black surfaces, brownish-pink margins and a dark grey core.
- 205 Fab. 46p. Burnt black throughout and sooted, with a burnished inner face. Possibly a platter, IT type G1–7, dated 5–40/45 at Prae Wood and 50–100 at Calfstock Lane, Farningham (*ibid.*, 463).
- 206 Fab. 46p. Black surfaces with pinkish-brown margins and a grey core. The form may be that of an IT type G1–10, a copy of a Cam.16, probably post-conquest (*ibid.*, 469).
- 207 Fab. 46p. Black surfaces with pinkish-brown margins and a grey core. Possibly a lid, IT type L8, usually a Roman form (*ibid.*, 553). Sooted on the lower inner surface.
- 208 Fab. 46qr. Burnt and sooted black outer face with fine rilling, orange-brown inner face with a grey core. Type and date as **195**.
- 209 Fab. 46a. Dark brown surfaces with orange-brown margins and a grey core.
- NI One similar in Fab. 46a.
- 210 Fab. 47a. Medium grey surfaces with a blue-grey core, finely rilled on the outer face below the shoulder. The rim is rather uneven.
- NI The rims from four similar vessels in Fab. 47.
- 211 Fab. 47a. Medium grey surfaces with a blue-grey core. There is some burnishing on the inner rim and fine though haphazard rilling on the lower third of the exterior.
- 212 Fab. 47a. Medium grey surfaces with dark red-brown margins and a dark blue-grey core.
- 213 Fab. 47a. Large proportion of a narrow-necked jar with a medium grey outer face, light grey inner face and dark blue-grey core. The vessel appears to have been a waster. This is a romanized form developed from the Cam.231, which at Sheepen had appeared in Roman greyware by the Flavian period (*ibid.*, 171).
- NI Pieces from a vessel of similar form in Fab. 46p came from this context and Context 593 (**136**).
- 214 Fab. 47a. Medium grey surfaces with orange margins and a blue-grey core.
- 215 Fab. 47a. Medium grey surfaces with a blue-grey core; the bowl has finely incised lattice decoration on the flange.
- 216 Fab. 47a. A romanized platter, copy of a Cam.12, in a medium greyware with a blue-grey core. Such Roman versions had appeared by the third quarter of the first century (*ibid.*, 463).
- 217 Fab. 47c. Yellow-grey to dark grey surfaces with a dark blue grey core. The form is a better copy of a Cam.12 than **216**, though the same dating applies.
- NI One similar in a buff-surfaced Fab. 47c.

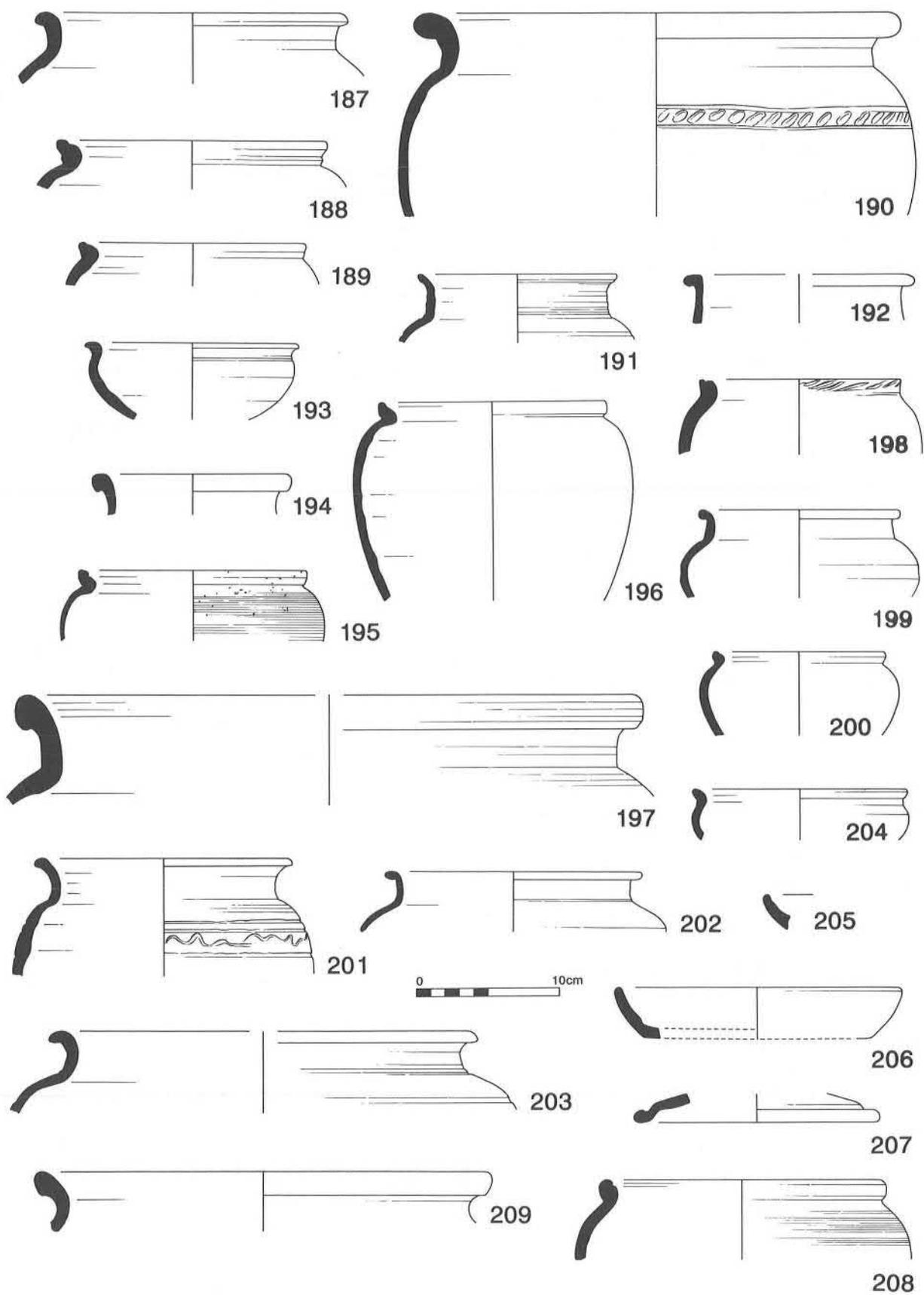


Figure 235: Belgic/Phase I pottery 187-209 (Ditch 509/792), scale 1:4.

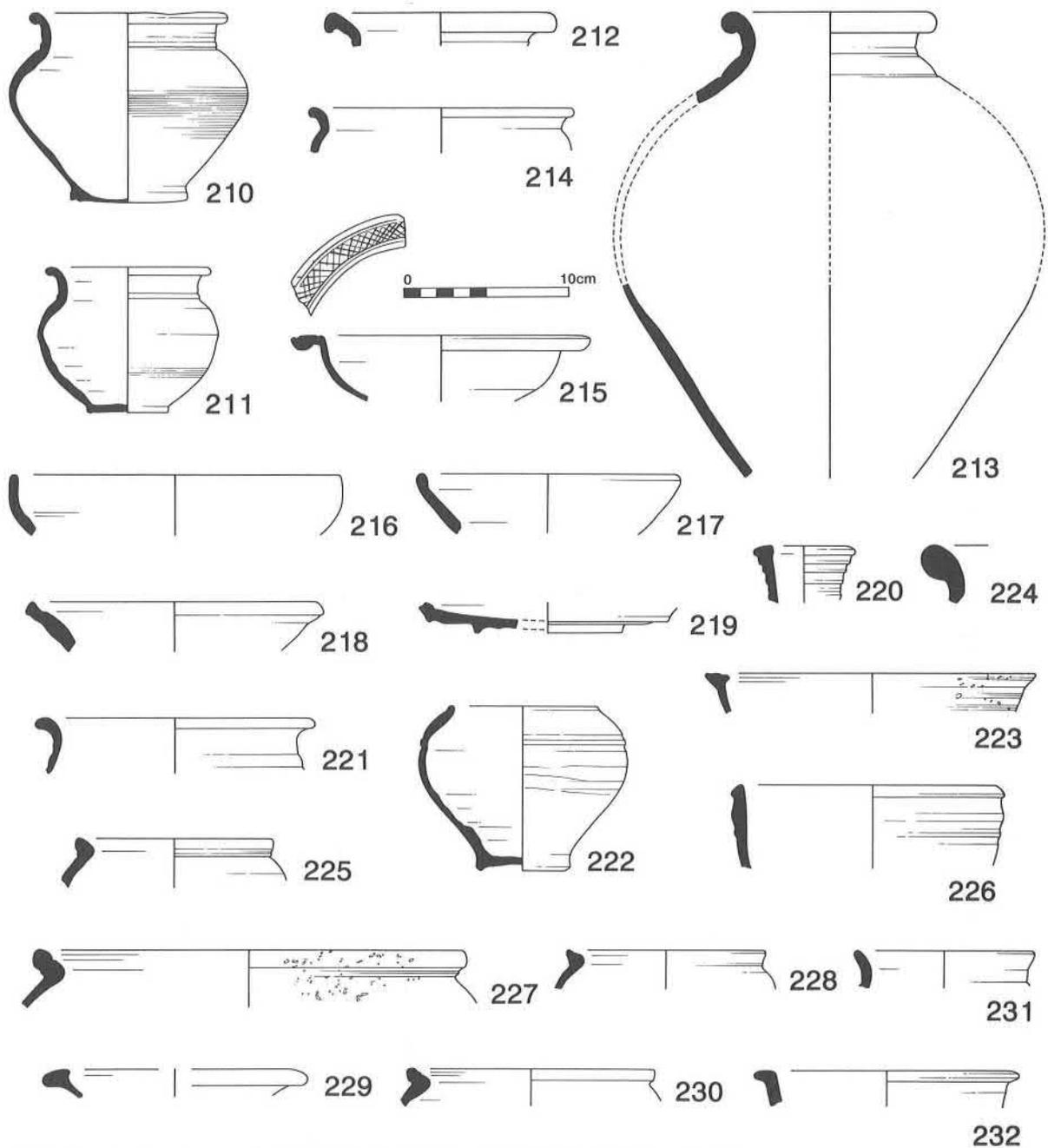


Figure 236: Belgic/Phase I pottery 210-219 (Ditch 509/792); 220-232 (Ditch 792), scale 1:4.

218 Fab. 47c. Light grey surfaces with a blue-grey core. The form is a copy of a Cam.14 and is commonly found in Roman greyware (*ibid.*, 467).

219 Fab. 47dg. Patchy dark grey to brown surfaces with a blue-grey core. The form is probably a copy of a Cam.7 or 8, largely post-43 in date (*ibid.*, 459).

Ditch 792 (Fig. 236)

Ditch 792 was the continuation of Ditch 509 to the south-east of Building 9, although at this point the character of the feature had changed, becoming much narrower. In contrast to 509, a surprisingly small amount of 'Belgic' material was recovered from this feature.

Context 787: This section had been cut by a fourth-century ditch (708/541) and thus contained a proportion of later

material (not illustrated).

220 Fab. 17c. Ring-necked flagon rim in an orange fabric covered with a thin light grey wash and with a grey core.

221 Fab. 18c. Light grey to white on the outer face with a slightly speckled appearance and decorated with a painted red-brown band; white core and inner face.

222 Fab. 43f. Large proportion of a small jar with brownish-orange surfaces, heat-blackened on the wiped outer face, and with a grey core. The inner surface has a cream margin. Early to mid second century.

Context 828: This section was sealed beneath the trackway; there were few finds. The ditch was filled with 30-40% limestone rubble and thus acted as a 'French drain'. The ditch and trackway appear to have been constructed within a very short time of each other. The pottery from this section of the

drain can be dated to the early second century, but it was probably sealed long before this date.

- 223 Fab. 1a. Black lightly rilled outer face with a brown inner face and a brownish-grey core.
- 224 Fab. 1f. Buff surfaces with a grey core, made with a more finely crushed shell-temper.
- 225 Fab. 43ae. Off-white pinkish surfaces, heat-blackened on the outer face with a brownish-grey core. A late first to mid second-century fabric.
- 226 Fab. 43f. Pale pinkish-brown surfaces, heat-blackened on the outer face and over the rim, with a grey core. The form is probably a copy of a Dr.30.

Context 831: This context also contained pottery (not illustrated) from an earlier gully (754) cut into by Ditch 792 at this point.

227,228 Fab. 1f. Buff surfaces with a grey core.

229 Fab. 18c. White surfaces with a pale orange-pink core. cf. RBP, fig. 43.23, from a context dated late first to mid second century.

230 Fab. 43ae. Light brown surfaces burnt after breakage. See 225.

231 Fab. 47a. Mid blue-grey surfaces with a pale blue-grey core.

232 Fab. 47a. Dark brownish-grey surfaces with a blue-grey core.

Phase II (late first to late second century)

Building 7 (Figs 237, 238)

Room 1

Context 110: This was a 150 mm deep layer of dark brown clay loam sealed beneath Room 1. It lay directly upon natural

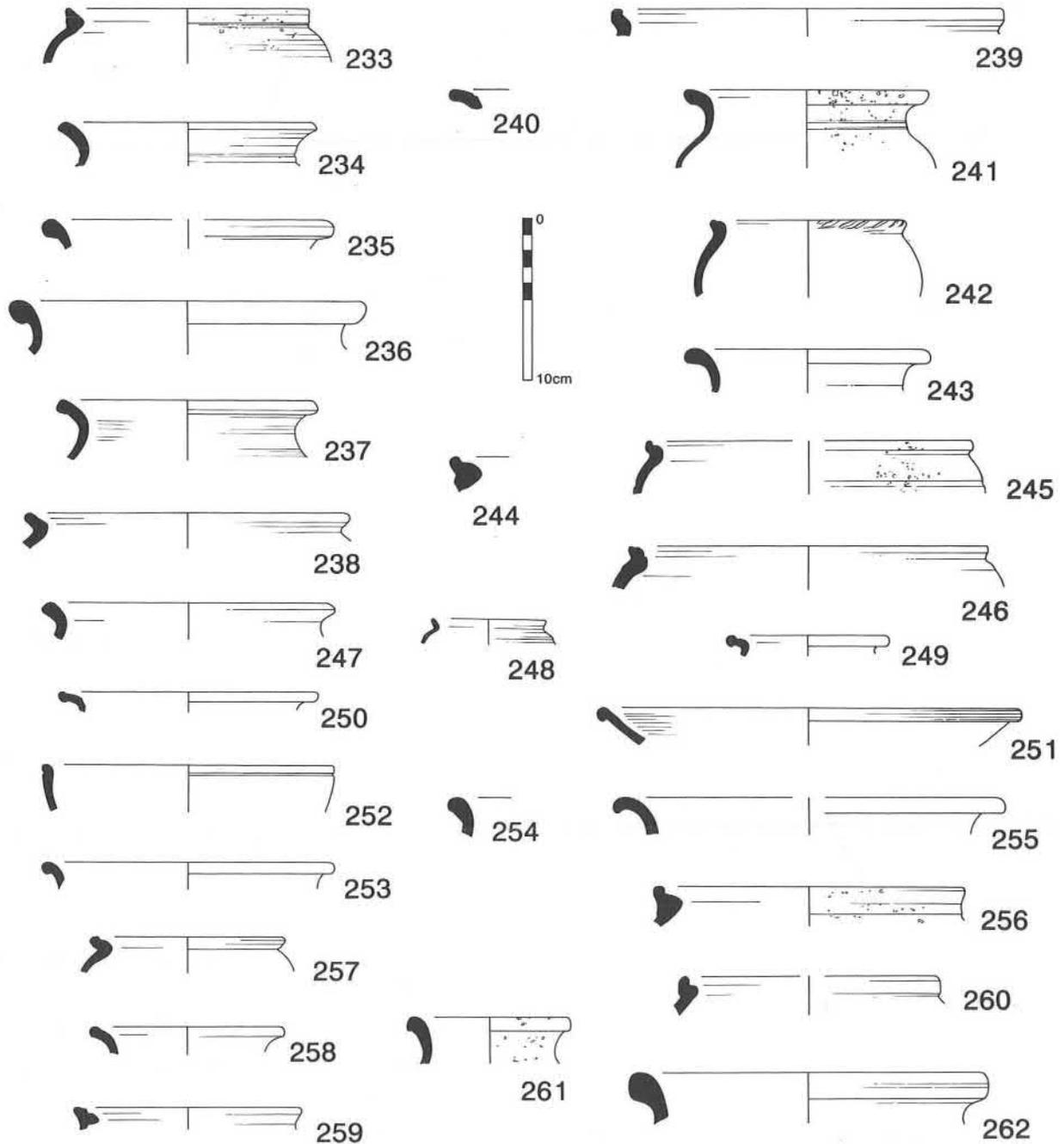


Figure 237: Phase II pottery 233-262 (Building 7), scale 1:4.

(cornbrash), was sealed by floors belonging to both Buildings 1 and 7, and was probably the original ground surface. A date up to c.100 is suggested for this material.

233 Fab. 45b. Blackened light brown exterior, light orange inner face, grey core. The fabric is a finer version of Fab. 45a, with less grog and more highly crushed shell-tempering. Wheelmade.

234 Fab. 47a. Hard burnished dark grey surfaces, streaked with orange on the exterior, blue-grey core.

235 Fab. 14/33 Blue-grey exterior, white-grey inner face, grey core.

Context 233: This was the early floor in Room 1. The pottery from it and Context 243 gives a good dating indication for the construction of the early house. A rim sherd from this layer joined with a vessel in Context 169.

236 Fab. 3k. Light grey surfaces, dark red core. Late first to second century.

237 Fab. 9/47? Grey to black surfaces with a whitish-grey underskin and dark grey core. The fabric and finish is similar to BB1, but the pot was wheel-made.

Context 243: A small area of red-brown friable clay, situated in the north-east corner of Room 1, closest to the corridor, Room 6. It was part of Floor 233, but may have been burnt.

238 Fab. 43ae. Light orange surfaces, light grey core. This is a late first to mid second-century fabric, most common in the early second.

239 Fab. 1a. Light brown surfaces, blackened on the outer rim, light grey core.

240 Fab. 1a. Light orange surfaces, blackened on the outer rim, dark grey core.

241 Fab. 1a. Black exterior and also over the inner upper rim, red-brown interior, dark grey core.

Context 249: This was a clay floor level in Room 1, sealed by destruction material.

242 Fab. 46a. Deep black sooted exterior, light brownish-orange inner face, dark grey core. Slash decoration along the rim. The vessel is an IT type C5-2, dated 5-40/45 at Prae Wood and c.50 at Camp Hill Kiln 18.

Context 316: This was a patchy level of domestic refuse in Room 1, sealed by a mortar floor level (310), which appears to have been in later use as an outer yard surface between Buildings 1 and 6. This context produced thirteen pieces of pottery, in Fabrics 1a, 1c, 3a, 9xy/46qr, 46a and 47ab, which together suggest a date in the late first or early second century.

243 Fab. 1a. Orange-pink surfaces with a dark grey core. A simple rounded everted form.

Context 335: Possibly the floor of Room 1. This was a layer of burnt, compacted clay, sealed beneath 334, at the north end of the corridor and within the eastern side of Room 2. The pottery from 335 is believed to date from the late first to the end of the third quarter of the second century, the latter

date being suggested because of the lack of Fab. 2, which became common after c.170/75. It also produced two pieces of plain samian of Trajanic date.

This is an important assemblage, as the absence of late pottery within it suggests that 335 was sealed after c.170 by Layer 334. The latter could be builders' tread, but it was similar to 'pea-grit', a layer of small stones and charcoal flecks in a friable gritty brown/grey matrix. This and its sterility suggests that it may be a horizon of abandonment.

244 Fab. 1a. Dark grey to black surfaces with a grey to pink core. Shell-tempered lid-seated jars were produced during the first to late second century.

245 Fab. 1a. Black exterior face, reddish-brown inner face with a grey core. Comments as 244.

246 Fab. 1d. Sooted exterior face, light brownish-pink inner face with a grey core. Handmade.

247 Fab. 3c. Brownish-grey surfaces, red margins with a blue-grey core.

248 Fab. 3k. Light grey fabric with a darker, blue-grey slip. Late first to second century.

249 Fab. 9xy/46c. Black surfaces, chipped on the inner face, red-brown margins and grey core.

250 Fab. 14/33. A very sandy vessel with blue-grey surfaces which bear the remains of a thin white slip into which lines of decoration have been burnished. White core (*cf.* RBP, fig.8.18, dated late first to early second century).

251 Fab. 35? Possibly an Oxford oxidized ware. Orange throughout with fine burnished surfaces, possibly an O.41?, dated 100-300, but with a *floruit* in the second century (Young 1977, 196).

252 Fab. 38. A rather worn, slightly burnt sherd, copying a Dr.30. The exterior surface is light brown, the inner face light orange and the core brownish-orange with a greyish-brown central vein. The fabric is micaceous.

253 Fab. 46a. Slightly burnt. Buff surfaces with a dark grey core.

254 Fab. 46p. Black surfaces with a grey core.

255 Fab. 47k. Hard, smoothed yellowish-brown surfaces, possibly discoloured, with a pink underskin and blue-grey core. Similar to Fab. 2.

Context 424: This was a floor make-up level below Room 1, composed of large, well-packed blocks of limestone in a friable loam matrix. The pottery is indicative of a late first to early second-century date.

256 Fab. 1a. Well formed lid-seated jar, pale pink surfaces, grey core.

257 Fab. 1a. Black to light purplish-grey surfaces, grey core.

NI Rim or a lip of a Fab. 1a jar or lid.

258 Fab. 9e/14. Black throughout.

259 Fab. 47dg/9. Black surfaces, grey core.

260 Fab. 46qr. Black surfaces, dark grey core.

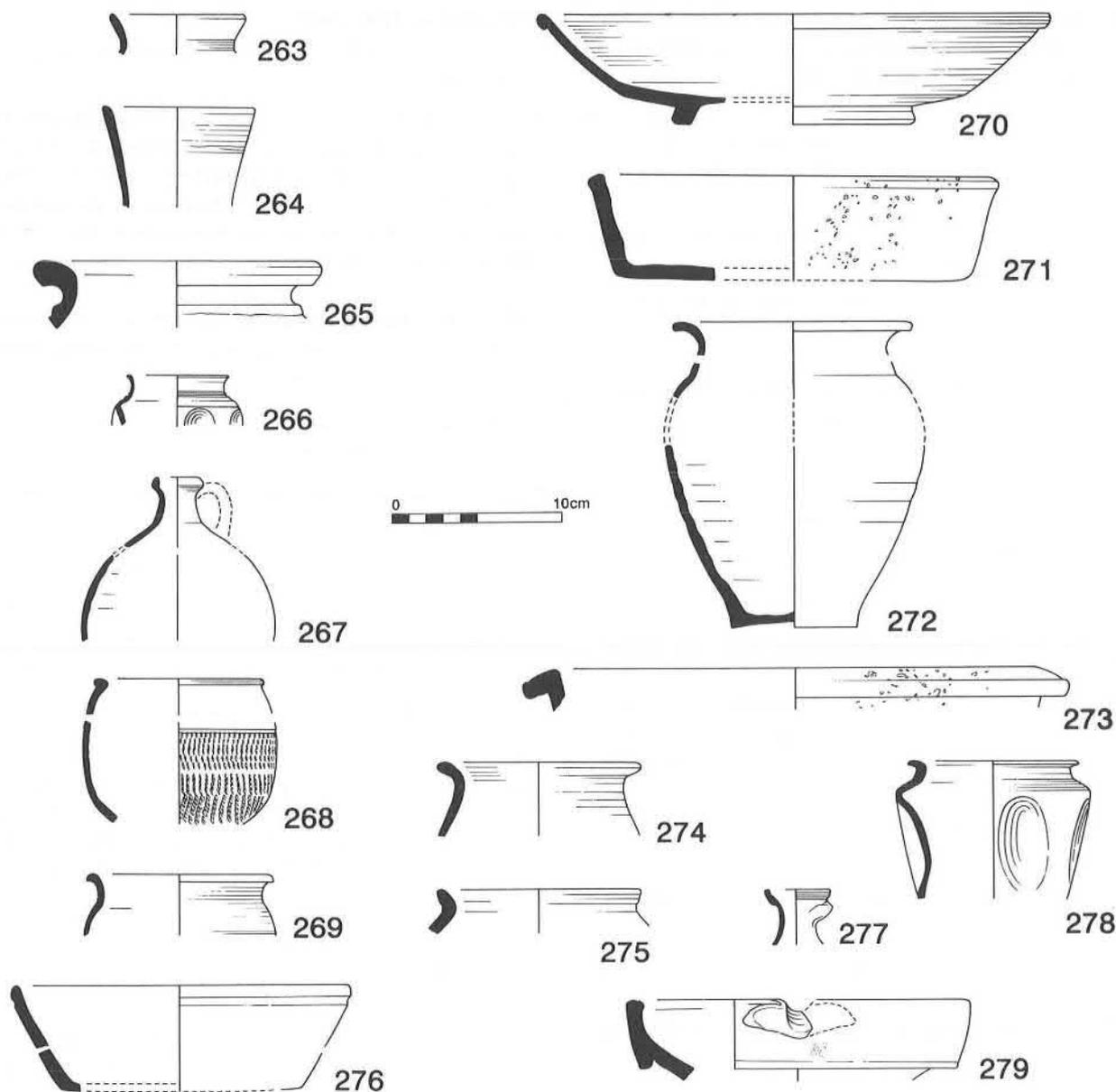


Figure 238: Phase II pottery 263-279 (Building 7), scale 1:4.

One burnt samian rim, dated to the late second century, also came from this context, and probably represents contamination from the destruction of Building 7.

Room 4

Context 200: The soil and rubble fill of Aisle Post-Hole 1.

261 Fab. 1a. Light orange surfaces varying to light grey, dark grey core. Sherds from this same vessel were also in Post-Hole 4 (230).

262 Fab. 1a. Medium grey throughout.

NI Fragmented rim of a shell-tempered vessel larger than 261 and 262. The post-hole was also packed with fifty-eight Fab. 1a body sherds, many large and predominantly buff in colour. The high percentage of this ware and its colour are indicative of the early second century.

Room 5

Context 197: Fill of Aisle Post-Hole 2.

263 Fab. 41h. Dark orange surfaces with a self-coloured or dark grey core; traces of a white or cream-coloured slip.

264 Fab. 47k. Pale orange surfaces, blue-grey core; the remains of linear burnishing are visible on the outer face. It has been patchily burnt. The fabric is very like that produced at Caldecotte Kiln II, dated late first to early/mid second century. The form of this vessel and the attempt at burnishing suggests that it may have been a local copy of a Dr.33 cup.

265 Fab. 43ae. Orange, pink and grey patchily coloured surfaces with a dark grey core. There are signs of burning. A number of vessels in this fabric were found in Ditch 263 below Room 5, Building 7; they may have been used for levelling the earlier ditch and for post-packing during the construction of the building. The fabric type is thought to date to the late first to mid second century, being most common in the early second century.

266 Fab. 23c? Hard white finely sand-tempered fabric with a matt brown to black colour-coat which thins to orange in places. It has been burnt and is almost certainly an import. Second century?

- 267 Fab. 18b/17f. Hard white finely sand-tempered fabric, fired a streaky pink on the inside face. Traces of a handle scar remain. The vessel has been lightly burnt.
- 268 Fab. 17a. Light buff-orange surfaces with a patchy thin dark brown wash, self-coloured to light grey core. Lightly burnt. *cf.* Woods 1970, fig. 21.150, dated late Antonine.
- 269 Fab. 14a. Light grey surfaces, burnished on the outer face, dark grey core. The neck is rilled (*cf.* Johnston 1969, fig. 7.49–50).
- 270 Fab. 35. Oxford oxidized ware. A large proportion of this vessel was found within the post-hole. It is in a hard smooth ware, orange on the exterior, brownish-cream on the inner face with a grey and self-coloured core. The surfaces are well burnished. Some of the sherds are discoloured (by heat?) to a patchy grey. The form is an Oxford O.41, a type which flourished in the second century but may have continued into the third (Young 1977, 196). A small number of sherds from this vessel were also found in the destruction rubble (27) within the room.
- 271 Fab. 1a. Pale orange surfaces, dark grey core. Although wheelmade, this vessel is fairly crude; one piece of it was also found in Context 27. The form would suggest a fourth-century date, but this is extremely unlikely considering its provenance. It is also extremely unlikely to be intrusive, as a large proportion of the vessel (three rim pieces and eleven body sherds) came from this post-hole. Therefore it must date either to the construction phase of the villa, and have served as post-packing (late first to early second century), or it dates to the years after the fire (post *c.* 170) when the remains of the early villa were levelled and some backfilling took place.

The samian from this feature is all Hadrianic-Antonine.

Context 169: This was a level of clay and large stones, with some mortar inclusions, which lay upon natural in Room 5. It has been interpreted as a make-up level for the floor.

- 272 Fab. 1a. Large proportion of a shell-tempered jar with an everted rim. The vessel is believed to be late first to early second century in date.

Context 261: A burnt layer within Room 5, related to the destruction of the building. It had subsided into the underlying Ditch 260. It also contained two late second-century samian sherds.

- 273 Fab. 1a. Buff-coloured surfaces, partially burnt.
- 274 Fab. 3a. Yellowish-grey surfaces with a core that varies in colour from dark grey to pink.
- 275 Fab. 47a. Dark-grey to blue-grey surfaces, streaked with orange, grey core.
- 276 Fab. 25/30. Light grey surfaces with orange patches, grey core.
- 277 Fab. 18bv? White surfaces, dark grey core.
- 278 Fab. 18b? White surfaces, pink underskin, grey core. The fabric is very similar to that from the Lower Nene Valley; there is some burnishing over the rim and shoulder. *cf.* a colour-coated vessel in Howe *et al.* 1980, fig. 4.40, dated later second to early third century.
- 279 Fab. 4a. Oxford whiteware mortarium, type M.14, dated 180–240. Burnt.

Building 2 (Fig. 239)

This structure had been heavily robbed. The 1983–86 pottery finds number only forty-nine sherds, recovered from the rob trenches. They include an Oxford M.22 mortarium rim of a type dated 240–400+, and a local flanged sand-tempered rim, typical of the late third and fourth century. Of these forty-nine sherds, 28.57% were in Fab. 1 and 32.57% were in Fab. 2, quantities which were average for the late third century (RBP, 196, table 1, Group 12). It is tempting to suggest that Building 2 was robbed for its stone at this date for the construction of Building 1, although the group also produced a hooked triangular shell-tempered rim, typically of a post-350 date.

During the 1977 excavations 174 sherds were recovered from the ‘trowelling down’ of the interior of the building. These are mid/late first to late second century in date; the earlier material probably came from the underlying Ditch 509. Pottery sealed within the ditch when Building 2 was constructed (Context 525) suggests a date in the mid second century for that event.

Building 2 appears to have had a very short useful life. The pottery from the interior included single sherds of Lower Nene Valley colour-coated ware, BB1, a Spanish amphora Dressel 20 fragment, 33.91% of Fab. 1, 7.47% of Fab. 2 and 14.94% of the local sand-tempered wares. Some of these fabrics were abundant in the third century in this area, and their low level of recovery in this group, combined with a lack of later forms, suggests that the building went out of use in the late second century.

The 1977 excavations also revealed ‘stone features’ (1978/500 and 502) within Building 2. These were cleaned and removed; unfortunately there is no record of what they may have been. The pottery from them is largely late second century in date; 1978/500 produced a burnt stamped samian sherd dated *c.* 160–190.

Burnt stones, randomly spaced, were found to have been used in the construction of Building 2; these are thought to have originated from the dismantling of the ‘sauna’ complex 938.

Contexts 1977/455, 1977/495 and 1977/496: ‘Trowelling down’ of the interior.

* denotes sherds that probably came from Ditch 509.

- 280* Fab. 1a. Light pink surfaces, grey core, multi-lid seated. *cf.* RBP, fig. 6.3, dated mid to late first century, and fig. 24.7 from a group of mixed date but primarily second century.
- 281,282 Fab. 1a. Orange surfaces with a dark grey core.
- 283 Fab. 1a. Pale greyish-pink surfaces with a grey core. *cf.* RBP, fig. 10.19, dated to the early to third quarter of the second century.
- 284 Fab. 1a. Very pale brownish-cream surfaces with a grey core.
- 285 Fab. 3c. Dark grey surfaces with a blue-grey core and thick orange margins.
- 286 Fab. 9a. Black sooted surfaces decorated with ‘wild’ arcs on

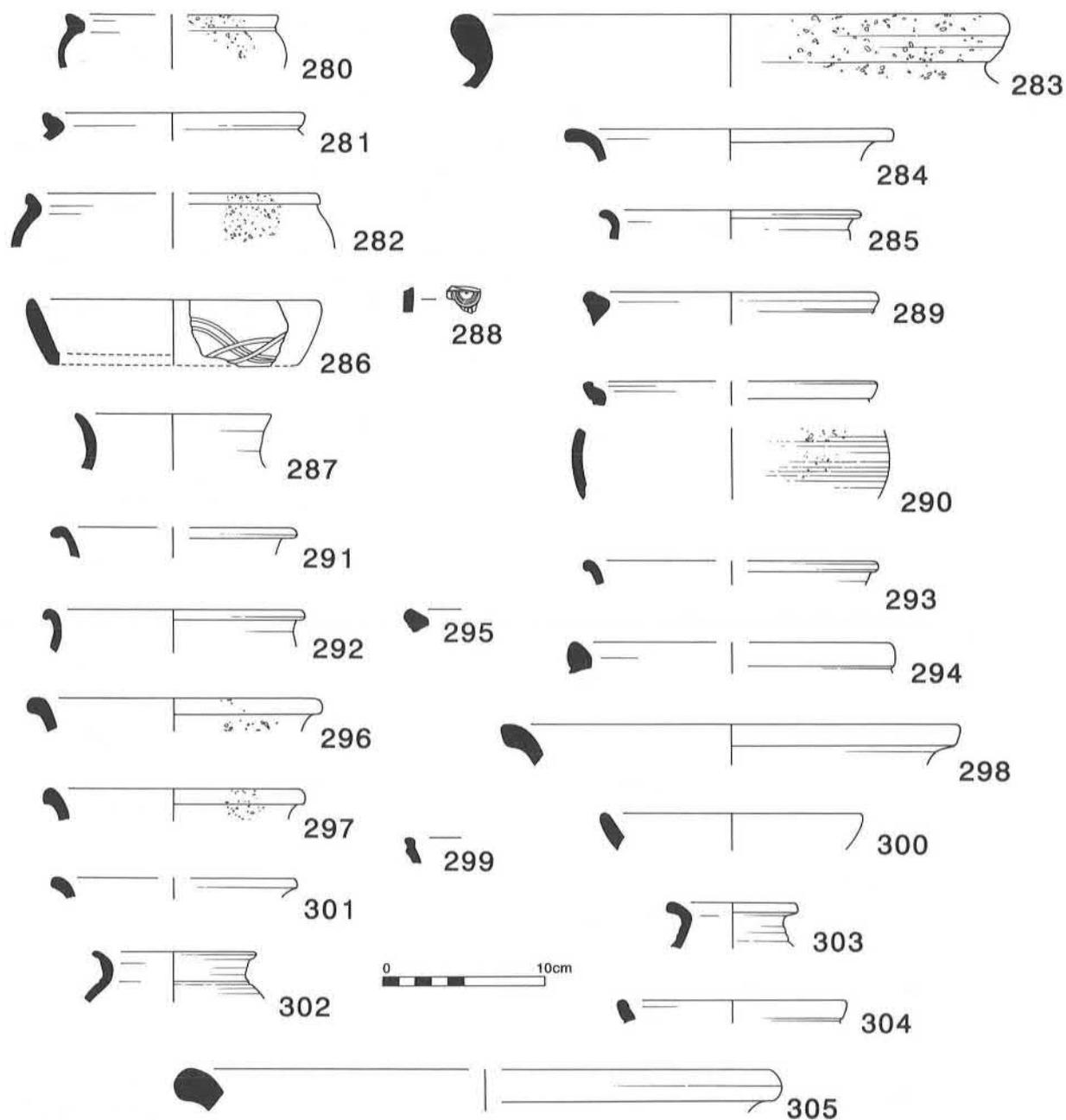


Figure 239: Phase II pottery 280-305 (Building 2), scale 1:4.

the outer face, grey core. Later robbing?

287 Fab. 9xy. Black surfaces with a red core.

288 Fab. 15. Dark brown to black surfaces, pink underskin with a grey core. Very micaceous fabric. *cf.* RBP, fig. 12.35, in a mid to late second-century group.

289 Fab. 43ae. Brownish-pink surfaces, blackened on the outer face, grey core. Common in the early second century.

290* Fab. 45a. Orange surfaces, blackened on the exterior, grey core. IT type C5-1, dated 30-55 and post-43 (Thompson 1982, 245).

291* Fab. 46a. Grey surfaces with a blue-grey core.

292 Fab. 47j. Orange exterior face, black interior, grey core.

293 Fab. 47j/a. Dark grey exterior, orange inner face, blue-grey core.

Contexts 1977/500 and 1977/502: The 'stone features'.

294 Fab. 1a. Black exterior, buff inner face, grey core. Late second-century evolved form.

295 Fab. 1a. Buff surfaces, grey core; comments as 294.

296 Fab. 1a. Buff surfaces, blackened over the inner face and core after breakage.

297 Fab. 1a. Black throughout.

298 Fab. 2a. Pale orange to buff surfaces, grey core.

299 Fab. 3k. Light grey surfaces with a grey core veined with pink.

300 Fab. 9a. Black surfaces with a grey core and red margins.

301 Fab. 9/47. Black throughout.

302 Fab. 14b. Hard, fine light grey to blue-grey throughout. Burnished.

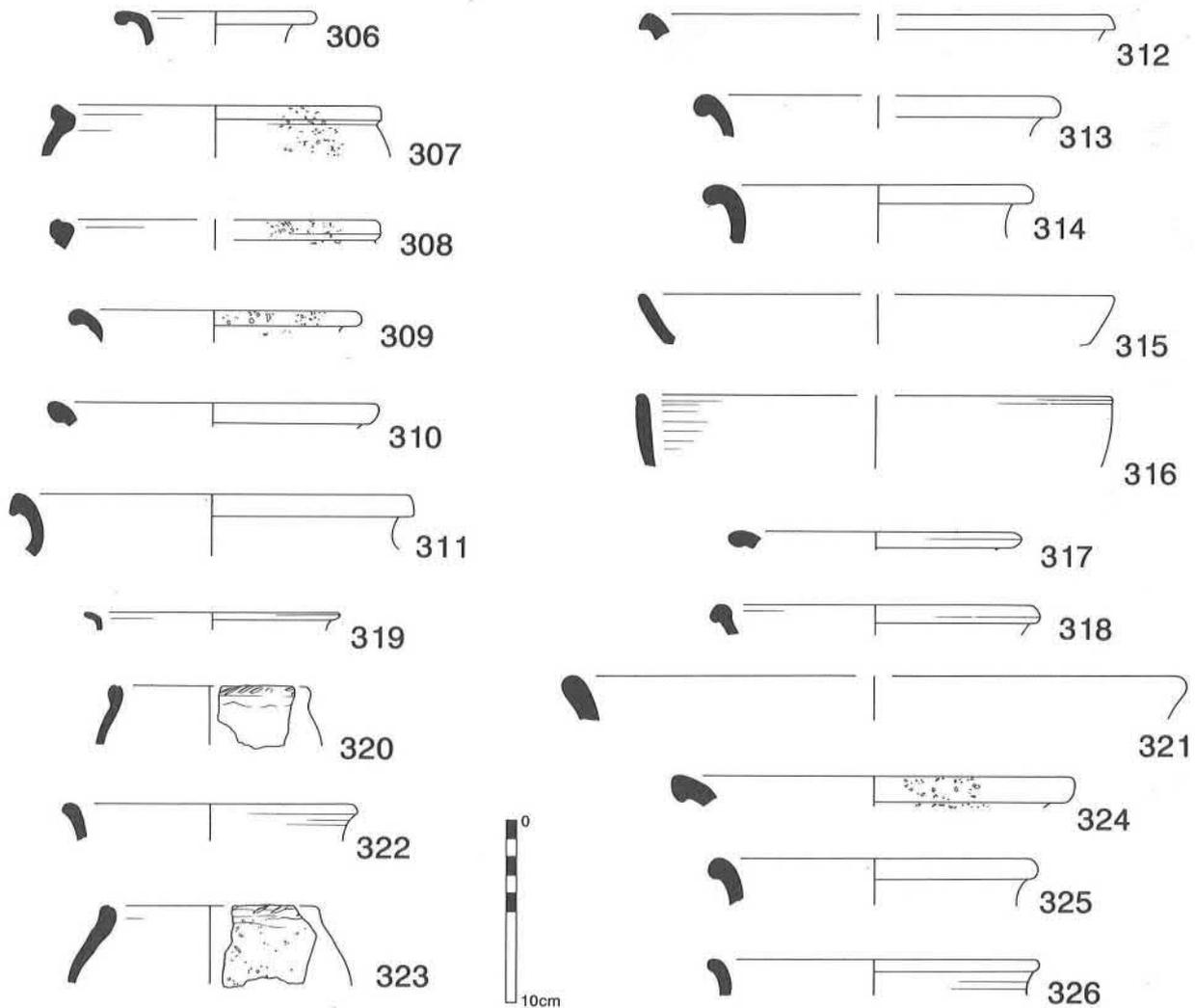


Figure 240: Phase II pottery 306-326 (Building 4), scale 1:4.

303 Fab. 14/33. Hard, fairly coarse; light grey surfaces with a darker grey core. Such grooved necked jars were made in the second half of the second century and continued to be popular into the third (Johnston 1969, 76).

304* Fab. 45a. Brownish-orange inner face, black exterior, dark grey core. An IT type C5-1, dated 30-55 and post-43 (Thompson 1982, 245).

305* Fab. 46a. Dark brown surfaces with a dark grey core.

These contexts also contained burnt samian dated 160-190.

Building 4 (Fig. 240)

This circular building had few definite internal features, other than four possible post-holes (excavated 1976) and a pit. These were not located in the 1983-86 excavations.

Context 463: The 1984 re-trowelling of the clay interior, above natural. It produced four sherds, one of which was a rim.

306 Fab. 18b. White throughout, slightly greyer in the core. The fabric is very like that produced in the Lower Nene Valley. This piece is possibly from a vessel similar to the second-century painted narrow-necked jar seen in Howe *et al.* 1980, fig. 8.94. It may have travelled into this area with a consign-

ment of the more popular colour-coated ware during the second half of the second century.

A quantity of material was also recovered from the interior of the structure in 1976 (Contexts 1976/457 and 497). This is described below. Part of the wall of the building was built over an earlier ditch (638); the 'Belgic' material in this group (indicated thus *) may have originated from this feature.

Although the finds are listed as coming from a 'cleaning down' of the interior, the diagnostic pottery forms (307 and 316) are consistent with a late second-century assemblage, and may have come from the earliest floor level or even the buried soil sealed beneath the building. If, however, they can safely be regarded as from 'cleaning down', they must be seen as destruction finds and thus may date the collapse of the structure.

The handful of later sherds within the group may have originated from later disturbance caused by ploughing, as may two coins, dated 335-48 and 348-60.

Context 1976/457: 'Trowelling down' inside the building.

307 Fab. 1a. Lid-seated jar of devolved form. Black exterior face, light brown interior, grey core. Late second century?

- 308 Fab. 1a. Orange surfaces, dark grey core.
- 309 Fab. 1a. Black exterior, dark brown inner face, partially blackened and sooted, grey core.
- 310 Fab. 1a. Light grey to off-white surfaces, grey core. Very worn.
- 311 Fab. 2a. Light orange surfaces with a light grey core.
- 312 Fab. 2a. Light pink surfaces with a light grey core.
- 313 Fab. 3a. Light grey surfaces and core with orange margins.
- 314 Fab. 3g/j. Medium grey surfaces with a light grey core.
- 315 Fab. 3a. Slipped blue-grey surfaces with a light grey core.
- 316 Fab. 8. BB1. Black exterior face, streaky brown and black burnished inner face, dark grey core. The vessel has a faintly beaded rim and is fairly upright. *cf.* Gillam 1976, fig. 5.78 and 79, dated late second to early third century.
- 317 Fab. 9a. Black to dark grey surfaces, grey core.
- 318 Fab. 24. Oxford colour-coated ware. A C.44?, dated 270–350 (Young 1977, 158).
- 319 Fab. 25/30. Light grey surfaces and core, brownish-pink margins.
- 320*Fab. 46a. Black exterior, orange inner face, grey core. IT type C5–2, dated 5–40/45 at Prae Wood (Thompson 1982, 249).
- 321*Fab. 46a. Brownish-orange surfaces, grey core.
- 322*Fab. 46p. Black surfaces, grey core with pink margins.

Context 1976/497: 'Trowelling down' inside the building.

- 323*Fab. 1d. Black throughout, handmade, similar to 320.
- 324 Fab. 1a. Light brownish-grey surfaces, grey core.
- 325 Fab. 3a. Light grey surfaces, blue-grey core with orange margins.
- 326*Fab. 46qr. Dark brown surfaces with a grey core.

In total 208 sherds were found, including the 'Belgic' and Oxford wares; these were excluded from statistical analysis on the grounds that both were likely to be contamination from other features. The percentages shown (Fig. 241A) are therefore based on a group of 166 sherds, while the percentages for the whole group are shown in Fig. 241B. Compare the former to the late second-century Group 7 (RBP, table 1).

As these sherds are from 'cleaning down', it could be that they are related to the destruction of the building. If so, the building went out of use in the late second, and the fourth-century material probably represents some later activity in the area.

Building 9 (Fig. 243)

This was the large aisled barn to the east of Buildings 2 and 4. It is thought to have been built c.100 and to have gone out of use c.170/180.

Context 465: This is the destruction rubble that covered the whole of the structure, including the fill of Drain 483. The rims of eight shell-tempered lid-seated jars were found within

the destruction rubble; their forms suggest a date between the late first to late second century. Jars with everted rims, in the same fabric, numbered ten. Sherds from this context (327–343) are missing, and therefore are not illustrated.

- 327 Fab. 1a. Brownish-orange surfaces, lightly blackened on the exterior, grey core. This is a tall angular rim, possibly late first century in date (RBP, 58).
- 328 Fab. 1a. Buff inner face, grey exterior and core.
- 329 Fab. 1a. Blackened reddish-brown inner face, black exterior, dark grey core.
- 330 Fab. 1a. Dark brown to black surfaces, reddish margins, grey core.
- 331 Fab. 1a. Reddish-brown exterior, pinkish-red inner face, grey core.
- 332 Fab. 1a. Off-white to buff surfaces, heavily blackened by fire after breakage, black to grey core.
- 333 Fab. 1a. Pinkish-buff inner face with orange margins, light grey core, dark grey exterior.
- 334 Fab. 1a. Buff surfaces with a light grey core. Evolved late second-century form (RBP, 58).
- 335,336 Fab. 1a. Buff to off-white inner face, grey exterior and core.
- 337 Fab. 1a. Buff inner face, pale orange exterior, grey core.
- 338 Fab. 1a. Buff throughout, blackened after breakage; a very soft example of this fabric.
- 339 Fab. 1a. Black throughout; *cf.* RBP, fig. 14.10 and 11, dated to the late second century.
- 340 Fab. 1a. Orange surfaces with a grey core.
- 341 Fab. 1a. Brownish-grey throughout.
- 342 Fab. 1a. Very pale greyish-pink surfaces with a grey core.

NI One similar.

- 343 Fab. 1a. Pinkish-grey surfaces with a grey core. The hooked, triangular form is typical of a post-350 date. Intrusive.

Fabric percentages for the this context are shown in Fig. 242. These suggest destruction in the late second or early third century, although the Oxford ware level (7.89%) is high, indicating possible later activity in the area.

Context 470: Wall footing.

- 344 Fab. 1a. Dark brown outer face, reddish-orange exterior with a grey core. This is a tall, angular example, possibly of late first to early second-century date. *cf.* RBP, fig. 7.10.

The packing within the nine post-holes of Building 9 was found to have collapsed, suggesting that the posts had been removed. Some of the sherds may date to this removal and subsequent backfilling, and are indicated thus *. However, most of the pottery dates to a period in the early second century, and is believed to belong to the construction phase.

Context 471: Fill of Post-Hole 1.

- 345*Fab. 9b. Black and grey patchy surfaces with a red core. 9.

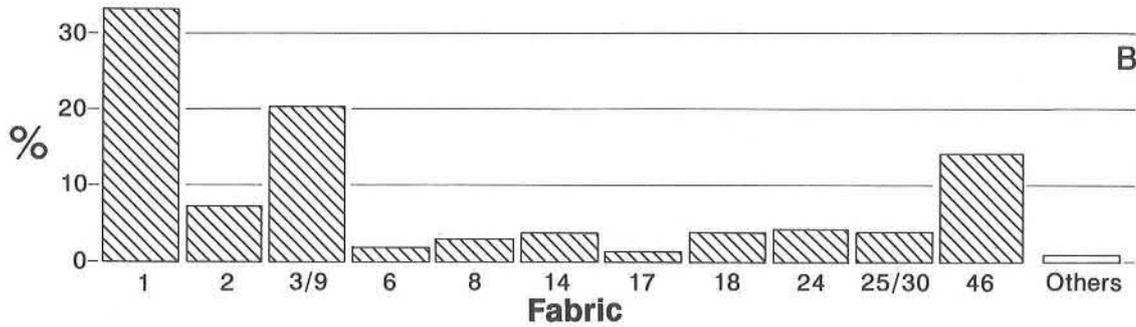
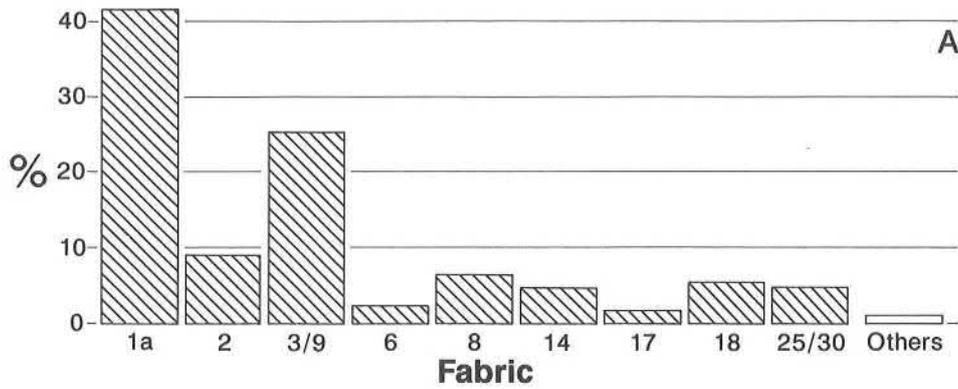


Figure 241: Histogram of the percentage of sherds in each pottery fabric from Building 4.

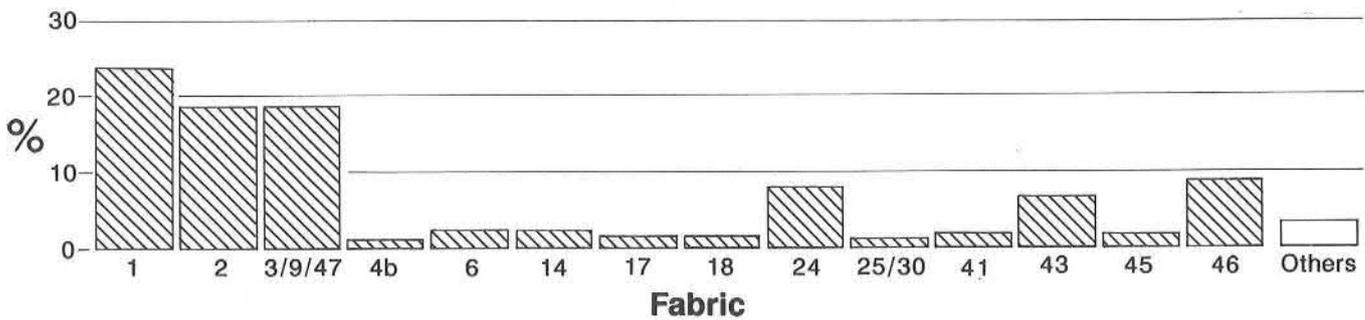


Figure 242: Histogram of the percentage of sherds in each pottery fabric from the destruction contexts over Building 9.

The outer face has traces of arc decoration. The style of decoration on this vessel was in use from about the late second to the fourth century.

Context 472: Fill of Post-Hole 2.

346* Fab. 24. Oxford. Orange fabric with a grey core and brownish-orange colour-coat. The form appears to be a copy of a P.24, thus C.91? The type is dated c.240–400+ (Young 1977, 173). Removal of post or fourth-century slump?

Context 473: Fill of Post-Hole 3. Sherds from this context (347–348) are missing, and therefore are not illustrated.

347 Fab. 35. An oxidized Oxford, type O.41. Although dated 100–300, the *floruit* of the type was in the second century.

348* Fab. 9a. Black surfaces, lightly burnished over the inner lip, reddish-brown margins with a grey core. The outer face has wavy line decoration. Comments and date as for 345.

Context 477: Fill of Post-Hole 7.

349* Fab. 8. BB1 Mid grey outer face, burnished black interior, bluish-grey core. The outer face has burnished arc decoration. Comments and date as for 345, although in this area BB1 had two main phases of importation, the late second to early

third century and the late third century (RBP, 127).

Context 478: Fill of Post-Hole 8.

350 Fab. 46n. Grey throughout. The fabric resembles a grey Fab. 2 and may be a late example of a grogged 'Belgic' subgroup. Early second century?

351 Fab. 18c. A two-ribbed handle, pinkish-buff throughout, thought to be from the Verulamium region. Late first to early second?

Building 10 (Fig. 243)

This was a small but substantial structure adjacent to the north walled garden (1208); it appears to have been destroyed by fire and produced a large quantity of burnt samian. It was probably built c.100.

Contexts 1064 and 1065: A floor of limestone cobbling and slabs inside the building.

352 Fab. 1f. Very pale brownish-pink surfaces with red margins and a grey core. Mid to late second century? (RBP, 58). Joins with a piece from Context 1053.

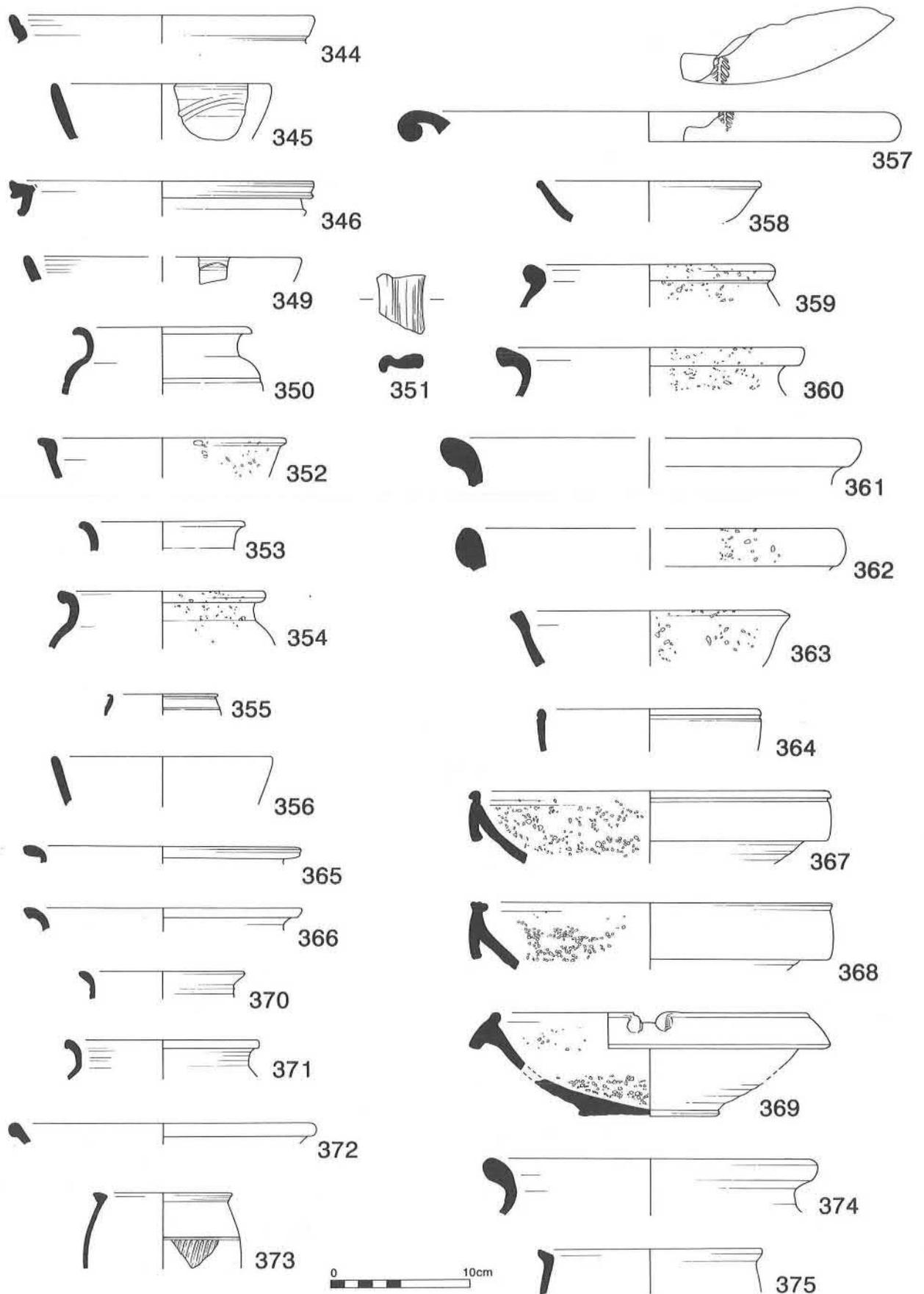


Figure 243: Phase II pottery 344-351 (Building 9); 352-375 (Building 10), scale 1:4.

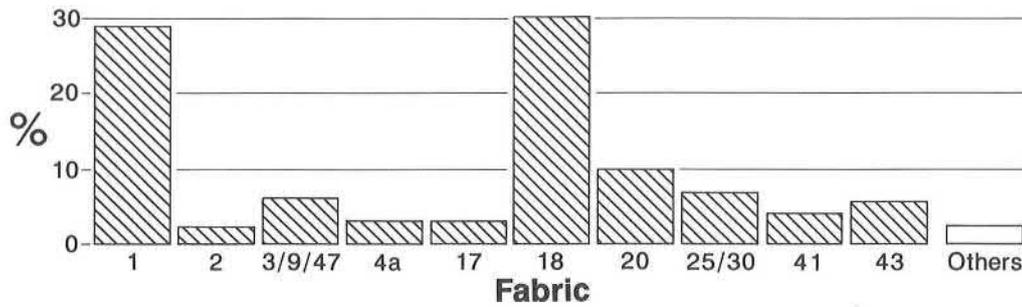


Figure 244: Histogram of the percentage of sherds in each pottery fabric from Context 1053, Building 10.

- 353 Fab. 43cb? Pale brownish-pink surfaces with a darker core. Late first to mid second century.
- 354 Fab. 1a. Black exterior, sooted over the rim, with a patchy grey and brownish-pink inner face and core.
- 355 Fab. 34c. Mica-dusted beaker with pale orange surfaces; within the thicker rim the core is blue-grey in colour and dark orange elsewhere. Second century.
- 356 Fab. 47a. Mid grey surfaces with a dark blue-grey core; black slip.

Context 1121: This was a make-up layer for Floor 1065. The pottery indicates a date in the early second century for its construction.

- 357 Fab. 4a. An Oxford M.1 type mortarium complete with stamp, the style of which indicates that the vessel came from the Cowley kilns. The type is dated 100–150 (Young 1977, 68).
- 358 Fab. 25/30. Dark grey inner face and upper part of the exterior with a light grey core. Pieces of the same vessel were found in Context 1131, a surface of limestone slabs, above natural, to the north side of Building 10. *cf.* RBP, fig. 50.8, from a context dated predominantly mid first to early second century.

Context 1053: Burnt clay and rubble overlying much of the floor. The material sealed within this context dates the destruction of the building. The samian gives a Hadrianic-Antonine date.

- 359 Fab. 1a. Lid-seated jar of a fairly evolved form. Very pale pinkish-brown/beige surfaces with a grey core. Mid to late second?
- 360 Fab. 1a. Very pale pinkish-brown surfaces with a grey core.
- 361 Fab. 1f. Light grey throughout.
- 362 Fab. 1f. Pale pinkish-orange surfaces, light grey core.
- 363 Fab. 1f. Buff surfaces with a grey core; partially burnt. Pieces from this vessel were also found in Context 1012, the fill of a rob trench. The form suggests a vessel of fourth-century or later date but the fabric, colouring and the burning indicate a date in the second century.
- 364 Fab. 3a? Similar to Fab. 9g/12. Worn dark grey to black surfaces with a light grey to white core.
- 365 Fab. 3a/9. Mid grey surfaces with a light grey core; the vessel may once have had a thin black wash over the exterior.
- 366 Fab. 3c. Dark grey to black surfaces with a red and grey core.

- 367 Fab. 4a. Rim of an Oxford M.10, dated 180–240 (Young 1977, 70). Also occurs in Context 1004.
- 368 Fab. 4a. Rim of an Oxford M.14, dated 180–240 (*ibid.*, 72).
- 369 Fab. 4c. Mancetter-Hartshill mortarium rim in a white 'pipe-clay' fabric with red, black and brown trituration grits. Also occurs in Context 1004.
- 370 Fab. 9f. Black to dark grey surfaces with a pinkish-brown core.
- 371 Fab. 25/30. Predominantly light grey throughout but in places the outer surfaces have fired a light brownish-pink.
- 372 Fab. 38. Pinkish-buff surfaces with an orange core.
- 373 Fab. 41h. Pale pinkish-orange surfaces with an orange core; the outer face is discoloured with grey and black patches. Incised decoration.
- 374 Fab. 43cb. Greyish-white to light grey throughout. Also found in Context 1004.
- 375 Fab. 47dg. Dark grey surfaces with a mid grey core.

The percentages for the 463 sherds recovered from this context are shown in Fig. 244. They indicate the fall in the level of shell-tempered wares in the late second century and the beginnings of SPG, although this is rather a low percentage. This is also true for Fab. 6. However, the exceptional quantity in this group is that of the whitewares, at 30.2%. Samian is also extremely well represented. The figures are most like that of Group 8, dated possibly very late second century (RBP, 32). It may be that the high levels of whiteware and samian are indicative of the function of the structure.

The 'Sauna' Complex (934) (Figs 245, 247)

This group of structures, at the northern end of the site, consisted of a small square building (939), a semicircular plunge bath (938) and drain (978), and two circular hearths (962, 969). These structures may be as early as c.100. A layer of ash and charcoal (964) inside and over the walls of the 'sauna' suggests that they were destroyed by fire, probably at some time around the mid second century. Stone from these buildings may have been re-used in the construction of Building 2.

Context 956: A layer of rubble and mortar that lay piled against a section of wall within the remains of Structure 939. The finds it contained presumably date the destruction of that structure; this rubble also produced a small quantity of red-painted wall plaster from the internal walls of the building.

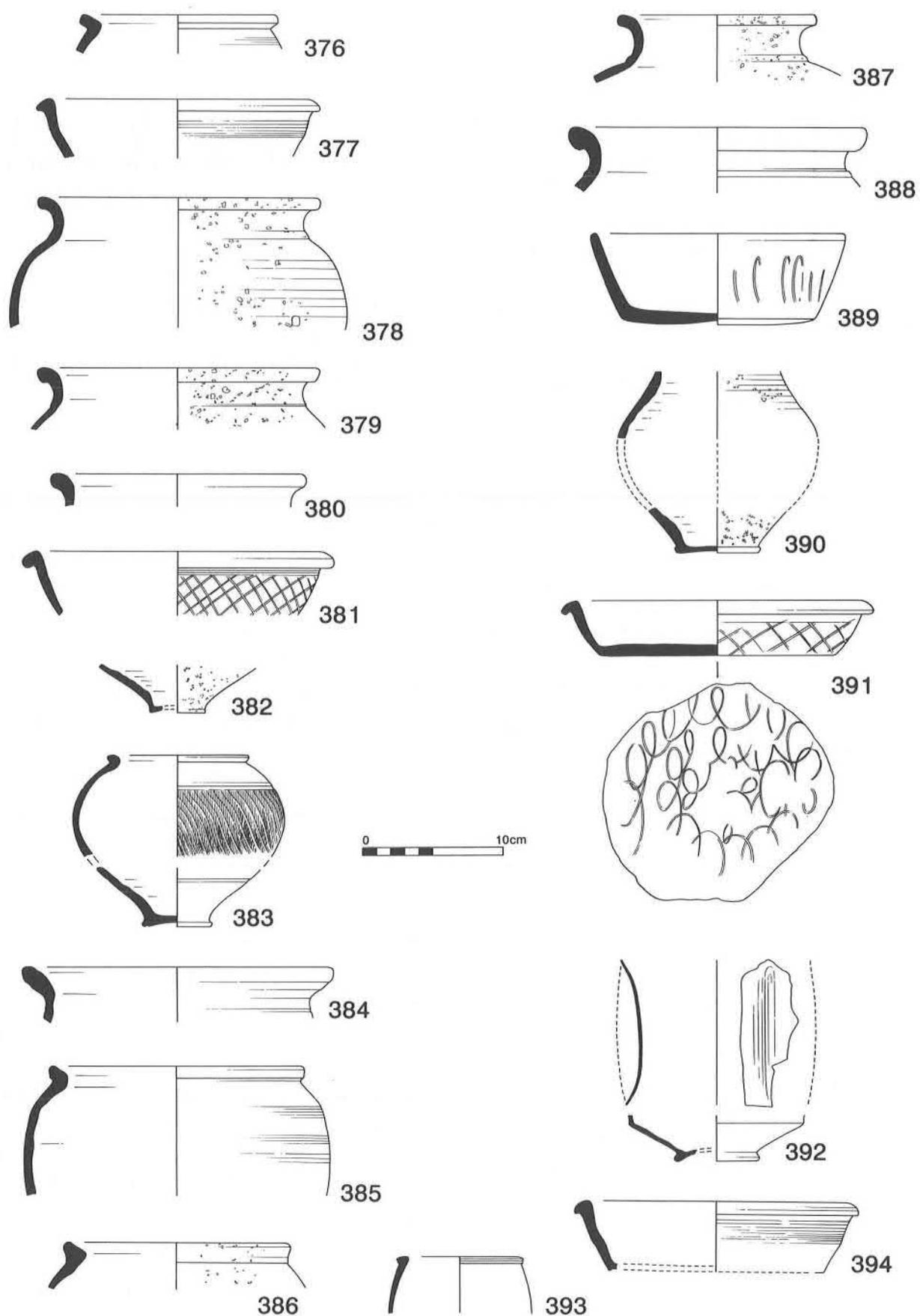


Figure 245: Phase II pottery 376–394 ('Sauna'), scale 1:4.

376 Fab. 43ae. Black outer face with a brownish-pink interior and a grey core. The fabric is dated late first to mid second century.

377 Fab. 43ae. Brown to black exterior with a pink inner face and a grey core. Date as 376.

Context 964: A black ash and charcoal layer inside and over the walls of 'sauna' 939.

378 Fab. 1a. Buff throughout.

379 Fab. 1a. Pale orange throughout.

380 Fab. 1a. Patchy dark brown to buff surfaces with a brownish-grey core.

381 Fab. 9a. Lightly sooted black outer face with burnished lattice decoration and a pale brownish-pink inner face and core; cf. Wilson 1972, fig. 119.716, dated 130–150, redated in 1984 to 135–70.

382 Fab. 23b? Fine sandy creamy white fabric with a patchy matt dark brown to orange colour-coat and clay roughcast particles on the exterior. Such beakers were made between c.70–150.

Context 966: Destruction layer within plunge bath 938.

383 Fab. 17b/41h. Dark pinkish-orange throughout with a thin dark brown exterior surface. Rouletted and slightly burnt. cf. Brown and Alexander 1982, fig. 11.99, dated c.140 to the final quarter of the second century. Joins in Gully 945 and Ditch 954.

Context 970: Fill of the early Hearth 969, over the remains of the pebble base.

384 Fab. 43ae. Black outer face with a pale brown to black inner face and a grey core. A late first to mid second-century fabric.

Context 973: A burnt layer of opus signinum fragments and mortar from the early structures. Contained a coin dated 103–111 (Appendix 3iii, no.8).

385, 386 Fab. 1a. Dark brown to black outer face with a light brownish-pink inner face and core.

387 Fab. 1a. Buff-coloured surfaces with a pale orange core.

388 Fab. 1a. Sooted, dark to light brown exterior with a pale brownish-pink inner face and core.

389 Fab. 9a. Burnt or overfired vessel with grey to orange surfaces and a blue-grey core, coated with a slip that has fired black, white and deep pink.

390 Fab. 17b. Brownish-orange surfaces with a grey core; cf. RBP, fig. 42.21, from a context dated mid first to mid second century.

391 Fab. 17a/41b. Pinkish-orange surfaces with a light grey core. There are traces of a thin dark brown colour wash and the vessel is heavily decorated with patterned burnishing on the inside base, latticing on the outer walls and wild scribbles on the outer base. cf. Wilson 1972, fig. 128.981, dated 150–155/160, although this vessel is in a different fabric with a heavier rim.

392 Fab. 34c. Mica-dusted indented beaker with pale brownish-orange surfaces and a dark orange core. cf. Marsh 1978, 152,

fig. 6.9, type 21. The examples occurring in London have been dated c.90/100–140 (*ibid.*, 120).

393 Fab. 41h. Pinkish-orange throughout. cf. RBP, fig. 51.9 and 10, from contexts dated second century and late first to third quarter of the second century respectively.

394 Fab. 43ae. Black outer face with a dark pink inner surface and a grey core. A late first to mid second-century fabric.

Percentages for the 210 sherds recovered from destruction contexts over and within these structures suggest that the buildings were in use during the first half of the second century and went out of use c.150–160 (Fig. 246).

Context 954: The drainage ditch from the plunge bath.

395 Fab. 3k. Light grey outer face with an orange and grey patchy inner face and a blue grey core with thick orange margins. Late first to second century.

396 Fab. 41h. Pale brownish-orange throughout. This vessel is very similar to that found in 973, thus date and comments as 393.

397 Fab. 46k. Yellowish-grey throughout speckled with darker grog. First to early second century?

398 Fab. 47k. Light brownish-pink to grey surfaces covered with a white slip, blue-grey core. The vessel may be a copy of the white or buff pots produced in the Verulamium region at the time; cf. Wilson 1972, fig. 114.512, redated in 1984 to 105–15.

Ditch 572 (Fig. 247)

This ditch ran parallel with and to the west of the trackway. It produced only sixty-two sherds, twenty-seven of which are in Belgic grogged ware, eleven in shell-tempered ware and eight or nine are contamination from the fourth-century Ditch 511. Most of the pottery can be dated to the mid to late first century; there are surprisingly few second-century finds and a total absence of recognizable late second-century material, despite the fact that the ditch must have been functional until this time. Thus the pottery indicates that the track was constructed parallel to the ditch rather than vice versa, and that from this time onwards (c.100–110) the ditch was kept free from rubbish for drainage purposes.

Context 568: An uncontaminated section.

399 Fab. 1a. Orange surfaces with a grey core. The vessel has been very crudely potted and looks handmade although there are traces of wide rilling on the outer face. IT type C.5–1, dated 30–50 and post-43 at Prae Wood and 43–55 in St Albans (Thompson 1982, 245).

400 NI Fab. 1a. Black outer face with a light brownish-grey inner face and a dark grey core. For identical vessel and dating, see 399.

401 Fab. 2/46. Buff-coloured surfaces, blackened by heat on the outer face, with a dark grey core. The ware is harder and finer than the usual Fab. 2a, with a much darker core and in a form rarely made in this fabric. It is perhaps an early second-century passage ware between Fabs 46 and 2.

402 Fab. 46a. Highly burnished brownish-orange outer face with

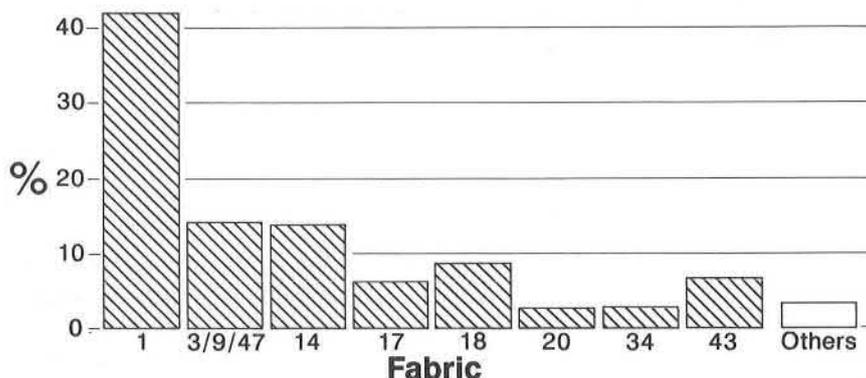


Figure 246: Histogram of the percentage of sherds in each pottery fabric from the destruction contexts of the 'Sauna'.

a pinkish-brown inner face and a black core. IT type L3.2 or L5.7/8, dated 30–50 and 5–40/45 respectively (Thompson 1982, 543 and 547).

403 Fab. 47a. Dark grey surfaces with a dark bluish-grey core.

Context 666: Section cut by Ditch 511; fourth-century sherds not illustrated.

404 Fab. 1a. Dark brown outer face, lightly sooted, with a brownish-orange inner face and grey core. The vessel is again crudely made but has faint fine rilling on both surfaces. Dating as 399.

405 NI Fab. 1a. Black outer face with a patchy black to dark brown inner face and grey core. For identical vessel and dating, see 404.

406 Fab. 45a. Light grey outer face with a dark brownish-pink inner face and a grey core.

NI Rim fragment in Fab. 46a of a probable B1–1/D1–1 jar or necked bowl.

Ditch 796/1027 (Fig. 247)

This ditch paralleled the west sides of Enclosures 795 and 1208, and the east side of the trackway. It appeared to have been constructed c.100–10 and to have gone out of use between 160–70. Therefore it was contemporary with the construction as Building 9, the trackway and Ditch 792. It joined the latter, and predated the walling of the gardens, as it was cut by features which in turn were cut by the garden walls.

Contexts 803 and 806: Fills of Ditch 796.

407 Fab. 43ae. Bowl with pale brownish-pink surfaces, heat-blackened on the outer face, with a brownish-grey core. *cf.* RBP, fig. 8.18 and 19, dated late first to early second century.

408 Fab. 1a. Orange surfaces with a grey core.

409 Fab. 1a. Heat-blackened brown outer face, brownish-orange inner face with a grey core.

410 Fab. 1a. Heat blackened widely-rilled outer face with a patchily coloured grey and buff inner face and grey core.

411 Fab. 1a. Possibly the base to 410, with a hole pierced through after firing.

412 Fab. 1a/b. Buff heat-blackened surfaces with a grey core.

413 Fab. 18g. Verulamium region two-handled flagon, date c.100–160.

Phase III (late second to late third century)

Building 12 (Figs 249–253)

This circular building overlay the Phase II 'sauna' complex, and added to its northern side was a square structure (941). Following the destruction of the Phase II structures, the area was levelled prior to the construction of Building 12. The pottery (only forty-one sherds) in the levelling layer (950) dates to the late second or early third centuries. There is no evidence to indicate when 941 was added. Building 12 remained in use until the late third century.

Rubble layer 910, which covered the whole of Building 12, was essentially a third-century context with a small quantity of second and fourth-century elements. It is interesting to note that the very earliest vessels are those that may have been more highly valued; samian, fine white wares, an imported beaker and the functional mortaria, and thus had a longer life. The later vessels presumably came from the post-350 Gully 929.

Owing to the scarcity of third-century groups the pottery from 910 is described below, despite the obvious contamination. Intrusive and residual (heirloom?) material is marked thus *.

Context 910: The rubble layer that covered the whole of Building 12. It contained pottery of late second to late third-century date, indicating the time the building remained in use. However, the percentages of fabrics (Fig. 248) are those of the late third century, when the building was abandoned, seen largely in the figures for the coarse wares. A total of 417 sherds were recovered from the context, as well as two coins (Appendix 3iii, nos 10 and 551), dated 161 and 364–78.

414 Fab. 1a. An evolved lid-seated jar; light brownish-grey outer face, blackened over the rim, buff interior, grey core. Late second century.

415 Fab. 1a. Buff surfaces with a grey core and thick orange margins.

NI Two others of similar form and fabric.

416 Fab. 1a. Black outer face, buff inner with a grey core.

NI Two others of similar form and fabric.

417 Fab. 1a. Buff surfaces, grey core.

418 Fab. 1a. Patchy black/brown surfaces, grey core.

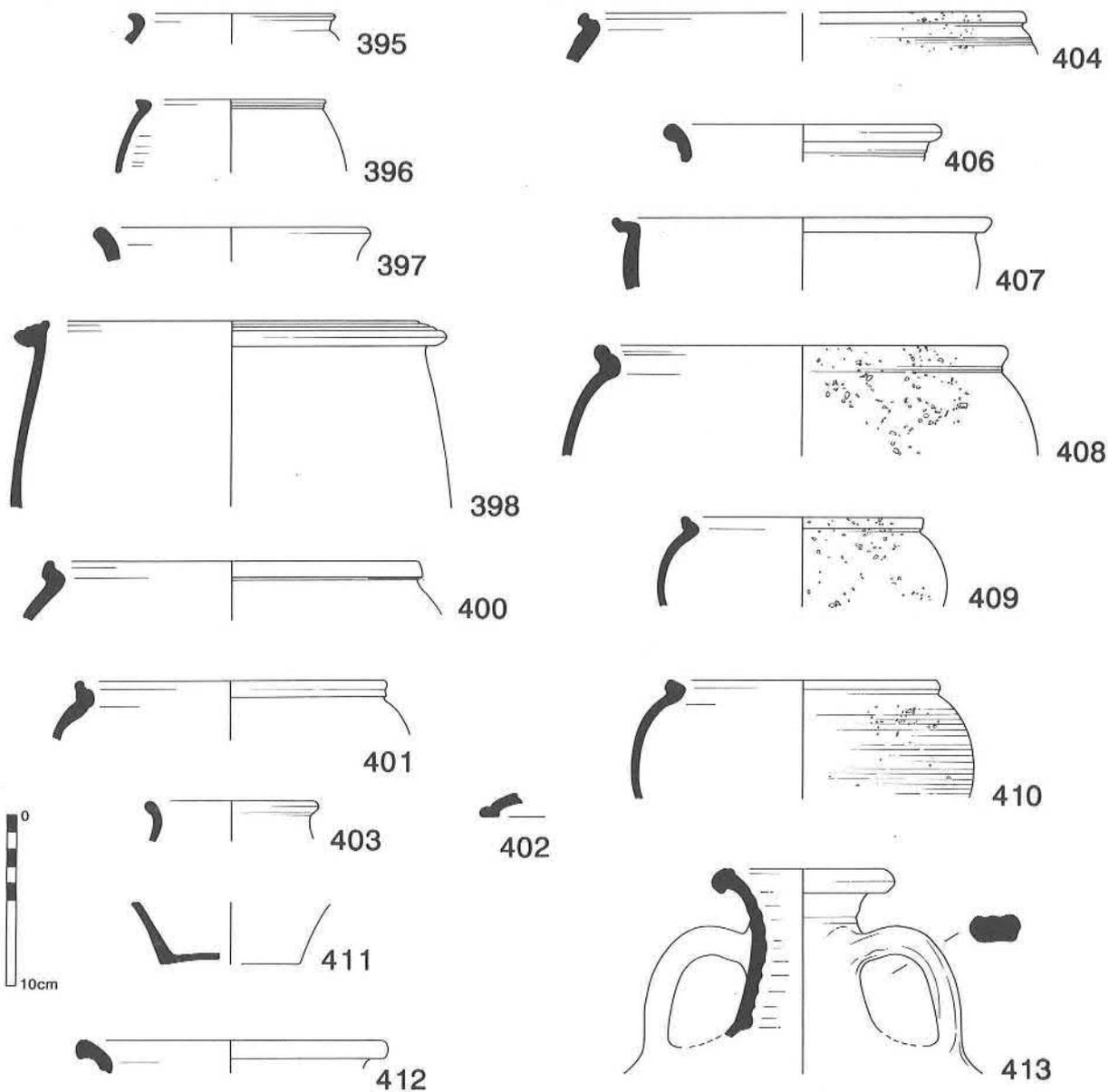


Figure 247: Phase II pottery 395–398 ('Sauna'); 399–406 (Ditch 572); 407–413 (Ditch 796/1027), scale 1:4.

419 Fab. 1a. Black outer face, light pink inner face, orange-pink core.

NI One of similar form and fabric.

420 Fab. 1a. Orange throughout varying to brown with a grey core.

NI One of similar form and fabric.

421 Fab. 1a. Black throughout.

NI Two of similar form and fabric.

422 Fab. 1a. Pale brownish-pink surfaces with a grey core.

NI One of similar form and fabric.

423 Fab. 1a. Pale brownish-pink surfaces, blackened over the rim; grey core.

424 Fab. 1a. Black outer face, blackened red-brown interior, grey core.

425* Fab. 1a. Pale greyish-pink outer face, blackened pinkish-brown inner face, grey core. The rim form is hooked and triangular, indicative of a post-350 date (Brodrribb *et al.* 1968, 68).

426* Fab. 1a. Pinkish-grey outer face, pale brownish-pink interior, grey core. *cf.* RBP, fig. 23, 4 and 5, dated ?late fourth to fifth century.

427* Fab. 1a. Buff surfaces with a grey core and thick orange margins. A late form.

428–439 Fab. 2a. Pale pink or light orange surfaces with a grey core.

440–448 Fabs. 3 and 9. Local sand-tempered ware with grey or black surfaces and grey cores. Some have red-brown margins and the decoration, where present, consists of faint burnished haphazard arcs.

NI Four other vessels of similar form and fabric.

449–453 Fabs. 3 and 9. Forms as above.

NI Two other vessels of similar form and fabric.

454 Fab. 9a. Black surfaces with a brownish-grey core. *cf.* Wilson 1984, fig. 106, 2560, 2561 and 2564, dated 200–50 and 230–280 respectively.

455 Fab. 3a. Mid grey surfaces with a blue-grey core.

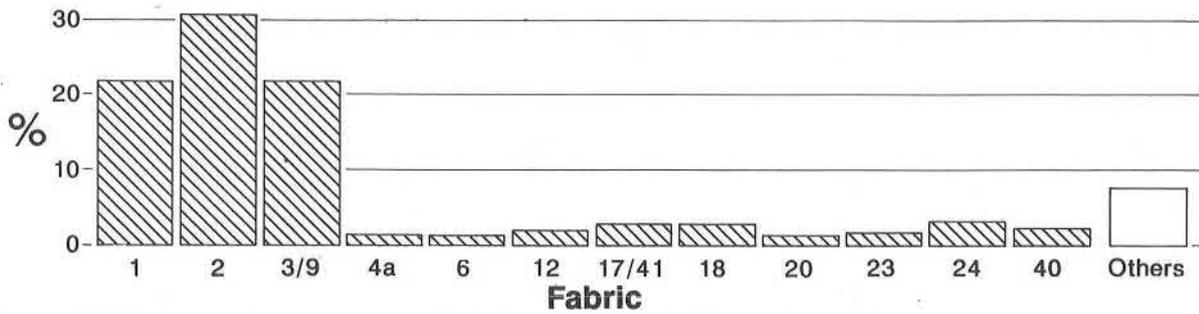


Figure 248: Histogram of the percentage of sherds in each pottery fabric from Context 910.

- 456 Fab. 3a. Brownish-grey surfaces with a dark grey core.
- 457 Fab. 3gj. Yellowish-grey surfaces with a light brown core.
- 458 Fab. 9b. Black surfaces with brownish-pink margins and a grey core.
- 459 Fab. 3a. Mid grey surfaces with a grey to brown core.
- 460* Fab. 3k. Grey surfaces with an orange-red core. Very worn.
- 461 Fab. 19/29. Orange surfaces with a darker orange core. The outer face bears traces of a white slip.
- 462, 463 Fab. 19/29 or 47j. Pinkish-brown surfaces with a blue-grey core. Possibly residual.
- 464 Fab. 4a. Oxford white mortarium, Type M.3, dated 140–200 (Young 1977, 70). It was produced at Blackbird Leys, with forms unlikely to date before the end of the late second century.
- 465 Fab. 4a. Oxford white mortarium, Type M.17, dated 240–300 (*ibid.*, 72). Partially burnt.
- 466* Fab. 4g. A Verulamium region mortarium in a granular, cream-coloured fabric with a pink core. The trituration grit consists largely of flint with sparse red-brown and black material. Mid second century?
- NI Base from an oxidized Oxford ware mortarium (240–400+) and two rim sherds from a Mancetter-Hartshill mortarium, also found in Pit 942 (not published).
- 467–469 Fab. 5. Oxford Parchment ware, Type P.24. All three bear traces of red-brown paint. 240–400+ (Young 1977, 86).
- 470 Fab. 6. Lower Nene Valley. Cream-coloured surfaces with a salmon-pink core and a red-brown colour-coat. The fabric is identical to that produced at Orton Hall Farm.
- 471 Fab. 6. Lower Nene Valley. White fabric with a steely-grey colour-coat.
- NI Lower Nene Valley beaker base in an orange fabric with a brown colour-coat.
- 472 Fab. 12. White fabric with light grey surfaces; probably third century in date. *cf.* Howe *et al.* 1980, fig. 1.7.
- 473, 474* Fab. 14c. Dark grey to black surfaces with a grey to brownish-grey core.
- 475 Fab. 17b/41h. Pinkish-orange surfaces with a darker orange core.
- NI Rim from a rouletted beaker, also found in Ditches 945 and 954, and in Gully 929 (not published).
- 476* Fab. 18a. Slightly sandy fine white flagon rim.
- 477* Fab. 18c. Granular white ware with a heat-blackened outer face. *cf.* Wilson 1972, fig. 113.485, dated 105–30 (redated 1984 to 115–30).
- 478* Fab. 18c. Granulated white ware with a brownish-pink core.
- 479* Fab. 23b. Imported roughcast beaker; extremely fine white fabric with a black/dark brown to orange colour-coat.
- 480 Fab. 24. Oxford. Type C.45, dated 270–400+ (Young 1977, 158).
- NI One other of similar form and fabric; the upper rim of a C.51.
- 481 Fab. 24. Oxford. Type C.18, dated 270–400+ (Young 1977, 152).
- 482 Fab. 28a. Light grey surfaces with a dark grey core.
- 483 Fab. 40a. Creamy-orange surfaces with a darker orange core and red-brown colour-coat. There are also faint traces of white painted decoration. *cf.* RBP, fig. 17.6, in a late second to mid third-century group.
- 484 Fab. 40b. Pale pinkish-orange surfaces with a darker orange core.
- 485 Fab. 40b. Light orange surfaces with a darker orange core and traces of a red-brown colour-coat.
- 486 Fab. 41e. Light orange surfaces with a brownish-orange core.
- 487* Fab. 46a. Reddish-brown surfaces blackened by heat, grey core.
- Context 950:** A mixed soil and rubble layer covering the southern half of the interior of Building 12, possibly a floor make-up layer. The pottery in this context is only a small group of forty-one sherds. It indicates a date in the late second or possibly early third century for the construction of Building 12. Percentages for this group are shown in Fig. 252.
- 488 Fab. 1a. Orange-pink surfaces with a grey core.
- 489 Fab. 2b. Orange-pink to buff surfaces with a dark grey core, most commonly found in late second to early third-century contexts (RBP, 35, Group 9).
- 490 Fab. 3a. Dark grey surfaces with a blue-grey core. *cf.* Wilson 1972, Fig. 128.960, redated in 1984 to 145–200.
- 491 Fab. 12. White and pale grey speckled surfaces with thick white margins and a grey core. Late second to ?early third century.
- The layer beneath 950 (965) also contained four sherds of the ‘prickly’ shelly Fabric 1b, so typical of a late second/early third-century date, and a single sherd of Fab. 2. These five sherds are of later date than the rest of the material in 965 and are, no doubt, intrusive from 950.
- Context 924:** Rubble layer over Room 2, Building 12. The room itself did not contain any pottery finds.
- 492, 493 Fab. 2a. Light orange surfaces with a grey core.
- 494 Fab. 2a. Brownish-pink surfaces with an orange core.

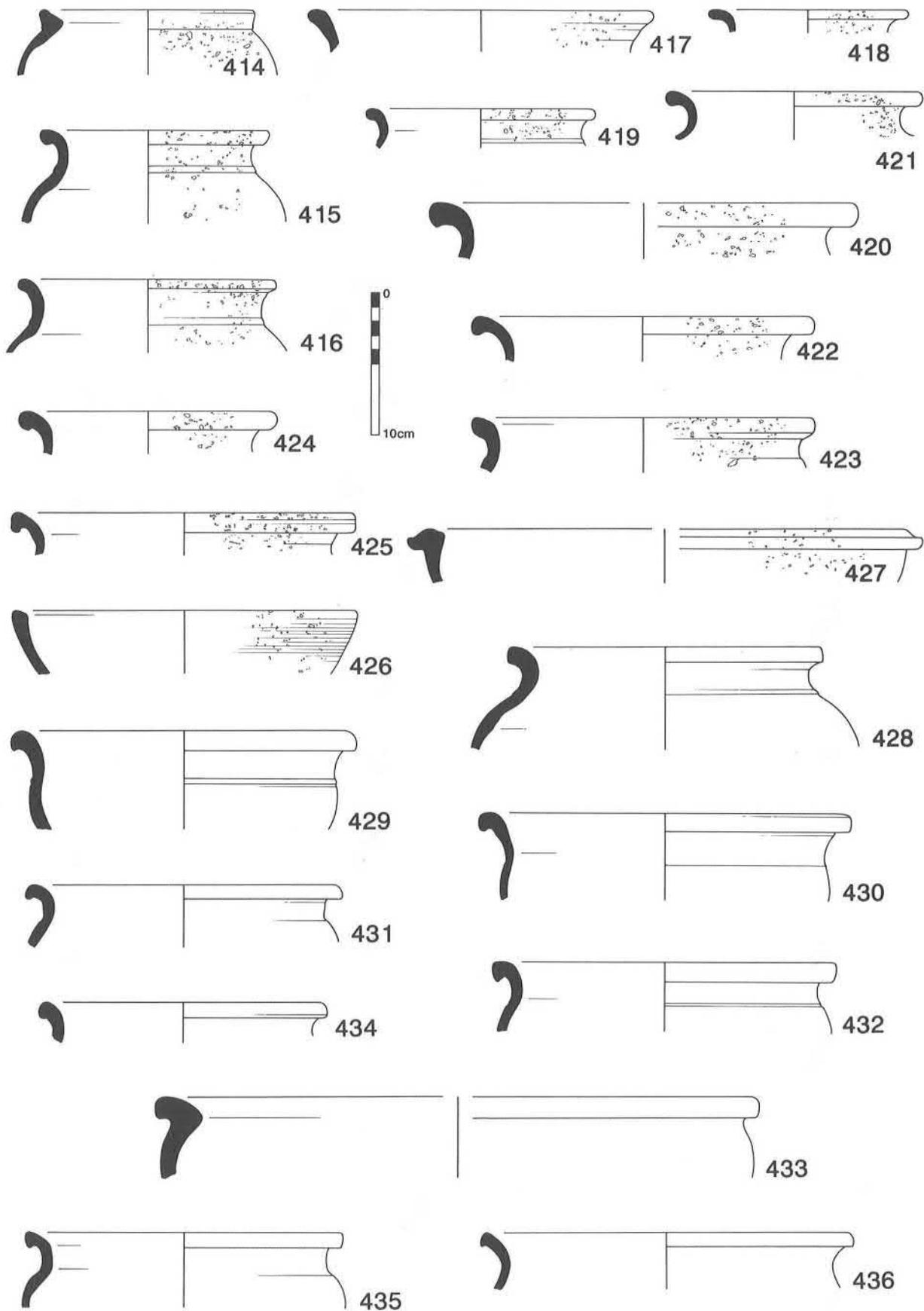


Figure 249: Phase III pottery 414–436 (Building 12), scale 1:4.

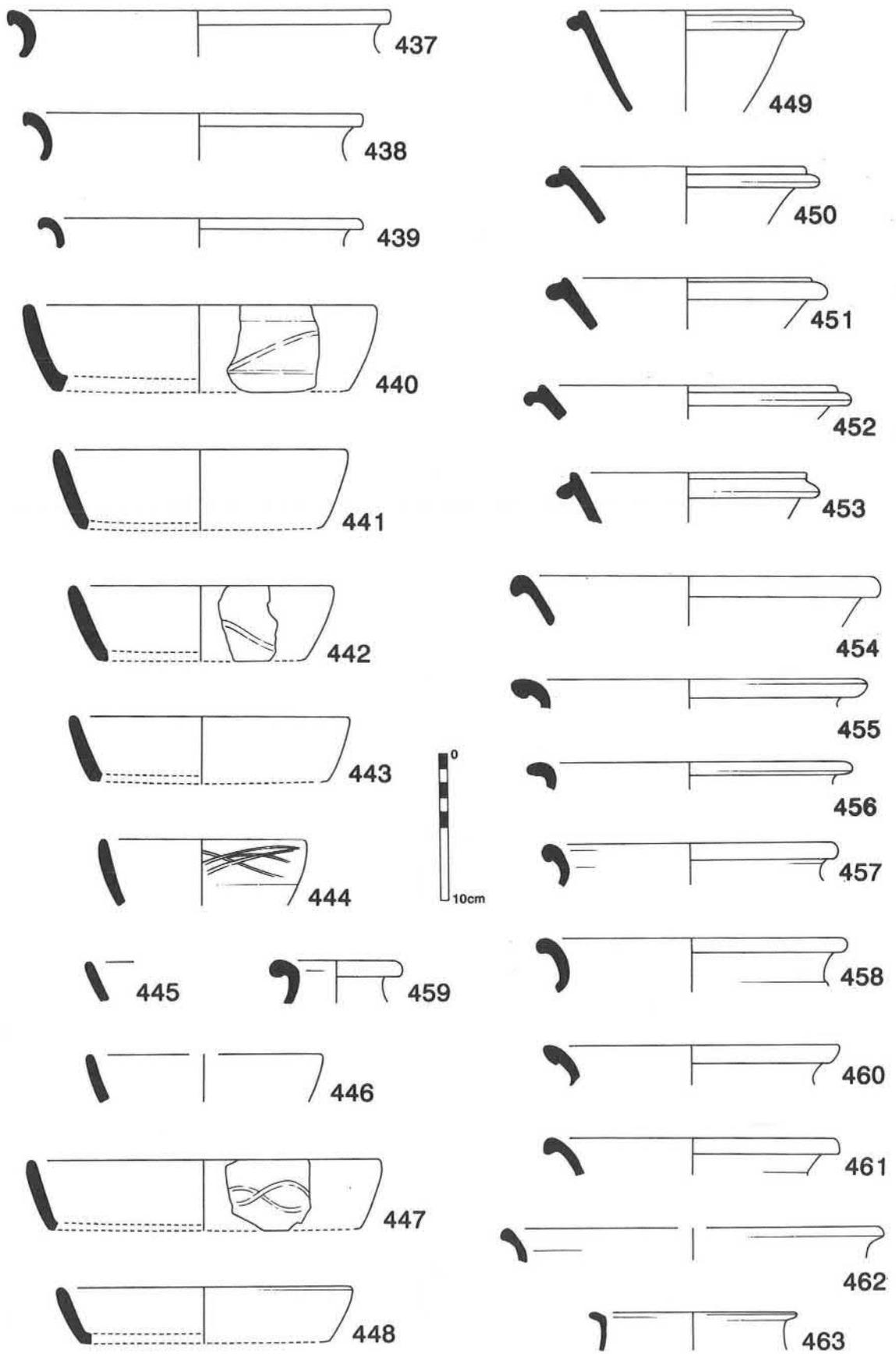


Figure 250: Phase III pottery 437–463 (Building 12), scale 1:4.

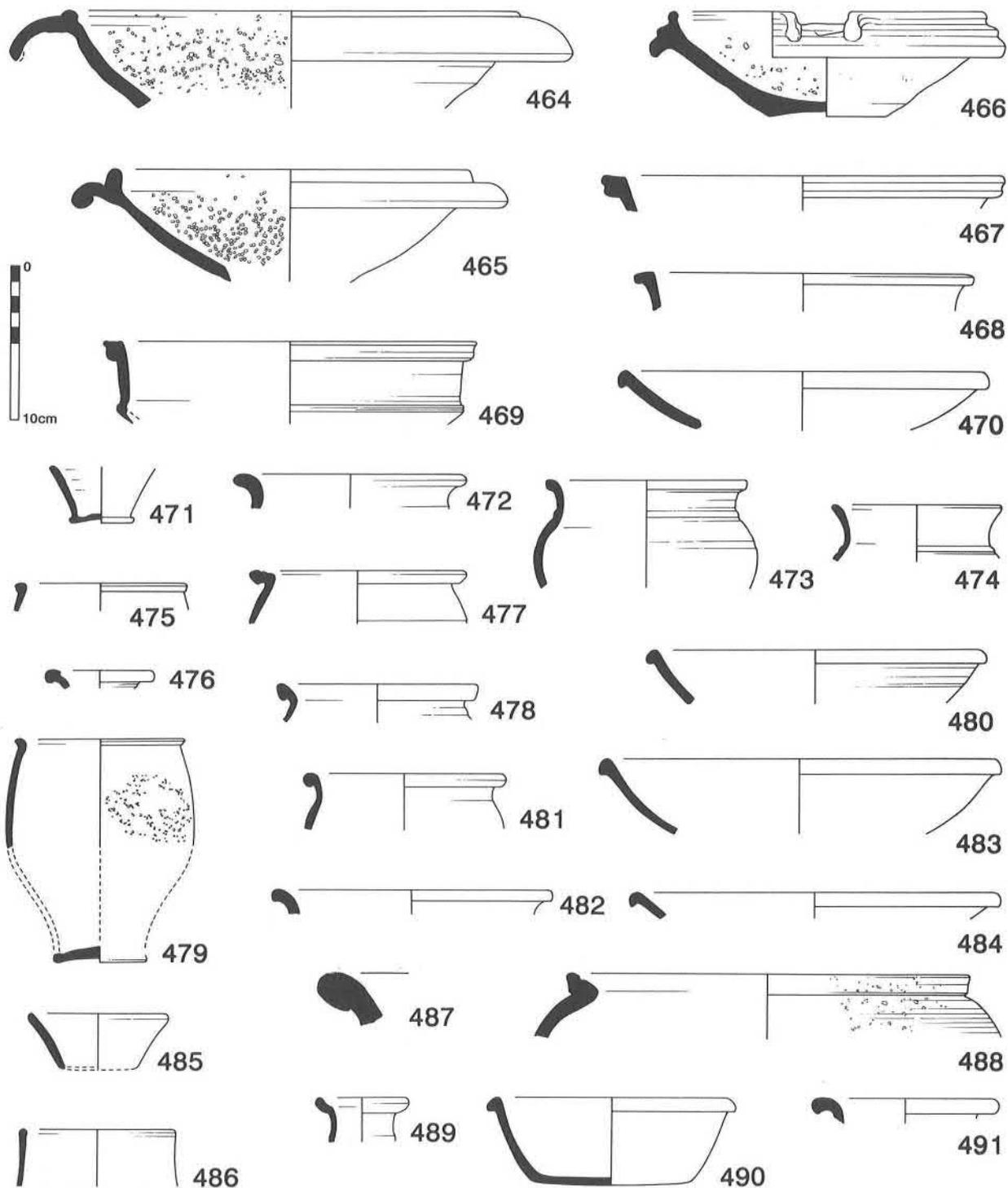


Figure 251: Phase III pottery 464-491 (Building 12), scale 1:4.

- 495 Fab. 2a. Light pink surfaces with a grey core.
- 496 Fab. 3a. Brownish-grey surfaces with a dark grey core. Late third to fourth century.
- 497, 498 Fab. 3a. Brownish-grey surfaces with a blue-grey core.
- 499 Fab. 6. Lower Nene Valley ware. A small deep bowl in a white fabric with a black colour-coat. Late third to fourth century?
- NI Rim of an Oxford C.51, dated 240-400+. The form has been found in levels dated c.240-290 at the Walbrook site, London, and in third-century contexts at Droitwich (Bay's

Meadow); it continued to be made until the end of the Roman period (Young 1977, 160).

Although this is only a small group, the percentages of the various fabrics suggest a late third-century date for the abandonment of this structure. However, the forms and fabrics could equally well be fourth century.

The rubble (910) over Building 12 also produced similar findings; the pottery and percentages together indicate use of the building from the late second or early third century, followed by abandonment/demolition in the late third centu-

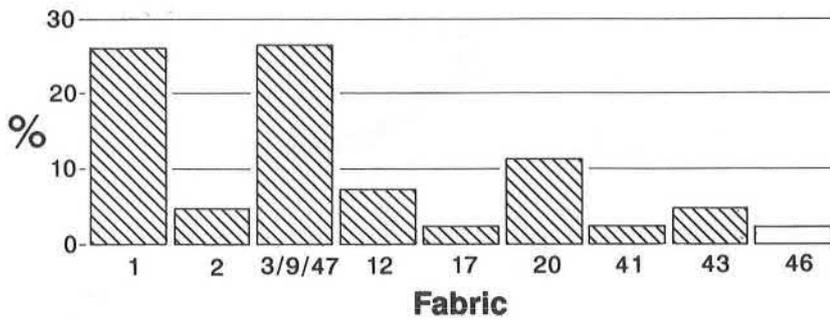


Figure 252: Histogram of the percentage of sherds in each pottery fabric from Context 950, Building 12.

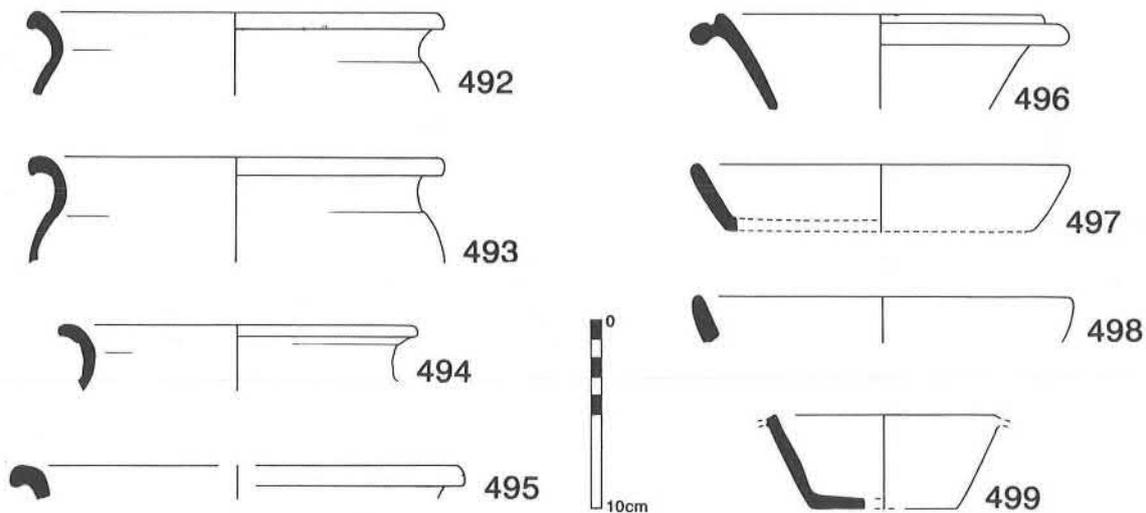


Figure 253: Phase III pottery 492–499 (Building 12), scale 1:4.

ry. A small proportion of the pottery is residual, from the underlying structures, and there is also a small quantity of later (mid fourth century onwards) contamination.

Ditched Enclosure 1210 (Figs 254–256)

This occupied much of the area formerly encompassed by Enclosure 1208. Enclosure 1210 consisted of Ditches 1029 (west), 1054 and 1160 (north) and 1025 (south), the latter being recut post-350 on a much larger scale as Ditch 1104. The pottery from the latter is included below.

Context 1030: Fill of Ditch 1029.

- 500* Fab. 17d. Dark orange surfaces streaked with grey, deep orange core.
- 501 Fab. 37. Hadham ware. A large proportion of a small Dr.38 copy with bright orange surfaces which were originally burnished on the upper outer rim and flange. The core is light grey in the thicker sections of the pot and a reddish-brown elsewhere. The date may echo that of the Oxfordshire miniature C.109, that is 300–400+ (Young 1977, 174).

Context 1054: Fill of Ditch 1054.

- 502 Fab. 24. Oxford. Rim of a C.75 with little surviving colour-coat, dated 325–400+ (*ibid.*, 166).

Context 1094: Fill of Ditch 1093.

- 503 Fab. 31a? Probably an Alice Holt/Farnham Class 3B vessel in a grey fabric, black slipped, with burnished horizontal lines

on the outer face. A date between 270–420 is suggested (Lyne and Jefferies 1979, 42).

Context 1156: Fill of Ditch 1155.

- 504 Fab. 1a. Black to dark grey throughout with sooting on both faces. The notches on the flange were made in antiquity.
- 505 Fab. 1a. Black to dark grey throughout with sooting on the outer face.
- 506 Fab. 3c. Very light grey outer face with a mid to light grey inner face and orange red core.
- 507 Fab. 4a. Oxford M.13? A wall-sided mortarium, dated ?180–240, but all the dated examples found are late third century and later (Young 1977, 72).
- 508 Fab. 4a. Oxford M.22, dated 240–400+, the standard late mortarium of the Oxford potteries (*ibid.*, 76).
- 509 Fab. 9a. Black to dark grey surfaces with a grey core; there is some burnishing on the rim and sooting on the outer face. The form was common in the second and third centuries (Wilson 1984, figs. 106 and 107).
- 510 Fab. 9a. Black surfaces, smoothed on the inner face and burnished over the flange, dark grey core. Heavily sooted on the outer face.
- 511 Fab. 9a. Beaded cavetto-type rim, black to dark grey throughout, burnished on the inside face and sooted on both surfaces. This is a good local copy of a late BB1 jar.
- 512 Fab. 9b. Black surfaces, worn on the inner face, smoothed and burnished on the exterior, with a red-brown core. A

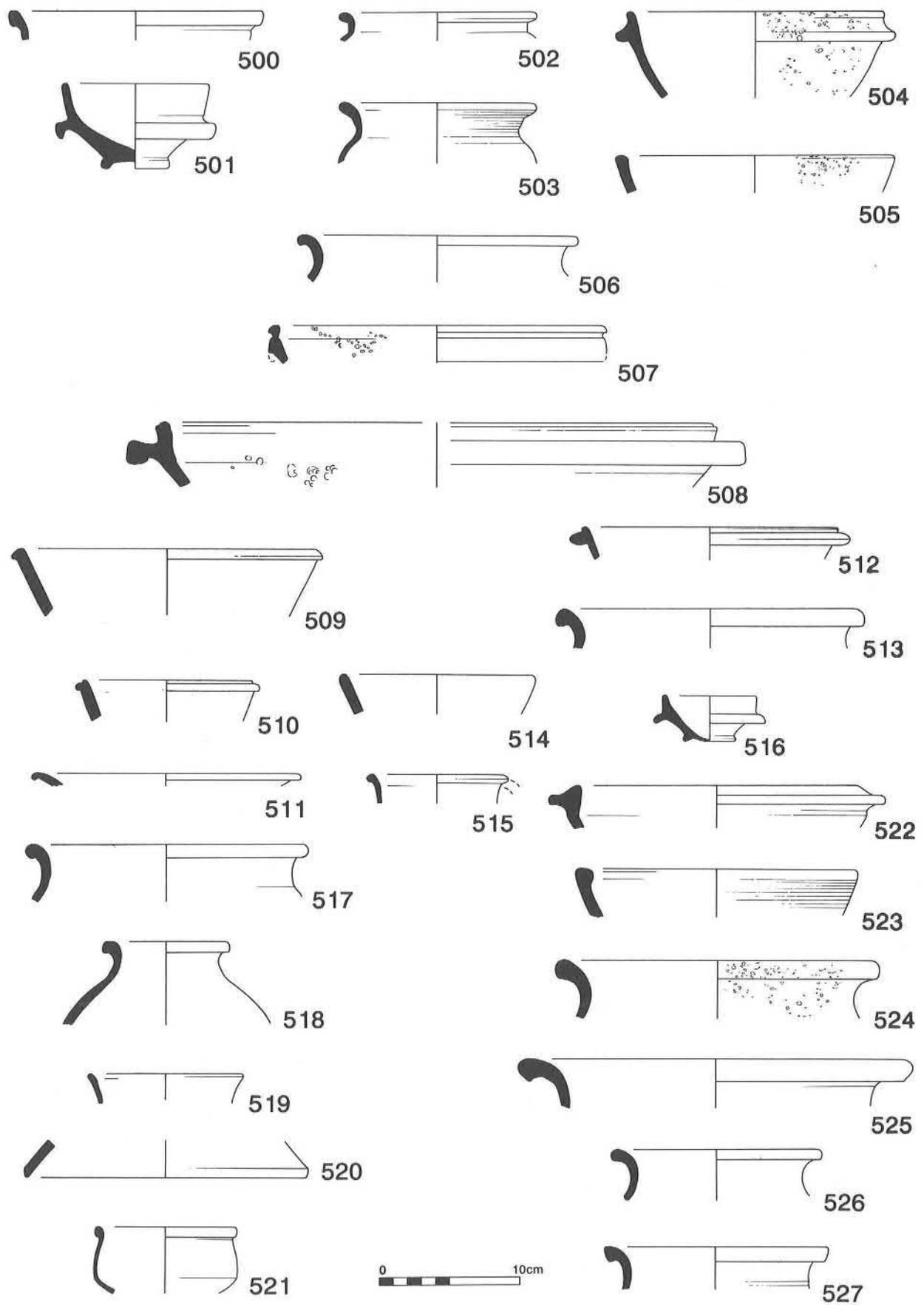


Figure 254: Phase III pottery 500–527 (Enclosure 1210), scale 1:4.

common late third and fourth-century type.

- 513 Fab. 9j. Thin black slip over light grey surfaces with pale pinkish-brown margins and a grey core.
- 514 Fab. 19/29. Pinkish-brown throughout.
- 515 Fab. 24. Oxford C.13? with traces of a handle scar, dated ?350–400+ (Young 1977, 150).
- 516 Fab. 24. Oxford C.109. Miniature vessel, discoloured by heat. Dated 300–400+ (*ibid.*, 174).
- 517 Fab. 32a. Coarse sand-tempered jar with black to light grey streaked and speckled surfaces with a grey core.
- 518 Fab. 53b? Light blue-grey throughout with smoothed (not burnished) surfaces.

Context 1176: Fill of Ditch 1056.

- 519* Fab. 17d. Light pink surfaces with numerous grey streaks (?originally a wash), brownish-pink core.

Context 1161: Fill of Ditch 1160.

- 520 Fab. 9b. Smoothed black surfaces with a red-brown core. Lids are an unusual find in this fabric.
- 521 Fab. 24. Oxford. A miniature C.69, a full-bellied bowl with traces of white painted decoration. Presumably its date range is similar to that of a normal-sized C.69, *ie.* 325–400+ (Young 1977, 164).

Context 1105: Fill of Ditch 1104. This appears to be a re-cut of the enclosure ditch.

- 522 Fab. 1a. Pale brownish-grey surfaces, blackened on the outer face, with a dark grey core (*cf.* Woodfield 1983, fig. 30.257, dated c.355–370+).
- 523 Fab. 1a. Dark grey throughout, widely rilled and sooted on the outer face. (*cf.* RBP, fig. 23.5, dated ?late fourth to early fifth century).
- 524 Fab. 1a. Patchy yellow-grey to grey surfaces with some blackening over the rim, grey core.
- 525 Fab. 1a. Black surfaces with an orange-pink rim, grey core.
- 526 Fab. 1a. Whitish-buff surfaces with a grey core.
- 527 Fab. 1a. Sooted black surfaces with a dark grey core.
- NI One similar but smaller.
- 528 Fab. 1a. Pale brownish-pink surfaces with a grey core (*cf.* Woodfield 1983, fig. 30.258, dated c.355–370+).
- 529 Fab. 1a. Pale greyish-pink surfaces with a grey core.
- 530 Fab. 2a. Pale orange-pink surfaces with a dark grey core.
- 531 Fab. 2a. Brownish-pink surfaces with orange margins and a grey core.
- 532 Fab. 3a. Sooted light grey outer face with a trace of burnished arc decoration, whitish-grey inner face with a grey core. The vessel appears to have been coated with a thin white to light grey slip. Late third to fourth century.
- 533 Fab. 3a/28a. Pale grey surfaces coated with a thin white slip, burnished arc decoration on the outer face, grey core.
- 534 Fab. 4a. Oxford M.22 mortarium, dated 240–400+ (Young 1977, 76).

- 535 Fab. 4a. Oxford M.23? mortarium, dated 350–400+ (*ibid.*, 79).
- 536 Fab. 6. Lower Nene Valley ware in a brownish-yellow fabric, covered with a dark grey colour-coat which is unusually thin in places. Fourth century (Howe *et al.* 1980, fig. 7.79).
- 537 Fab. 9a. Black surfaces with a mid-grey core, sooted on both faces and with faint traces of burnished arcs on the outer face.
- 538 Fab. 9a. Black surfaces with a grey core, decorated with wildly scribbled burnished arcs on the outer face.
- 539 Fab. 9a? Black surfaces with a mid grey core. The quartz inclusions are perhaps too white for the local ware. Lid or dish?
- 540 Fab. 24. Oxford C.70, burnt on the inner face, dated 325–400+ (Young 1977, 164).
- 541 Fab. 24. Oxford C.75, dated 325–400+ (*ibid.*, 166).
- 542 Fab. 24. Oxford C.109, dated 300–400+ (*ibid.*, 174). This vessel contains some unusually large inclusions, indicating the use of very poorly prepared clay. One of these inclusions is about 15 x 7 mm in size; it appears to be a pot fragment.
- NI The fragmented rim of a C.49, and the badly burnt fragmented rim of a C.51.
- 543 Fab. 37. Hadham. Orange surfaces covered with a thin slip that has fired a streaky white and grey; dark brown core.
- 544 Fab. 53b. Grey sooted surfaces with linear smoothing rather than burnishing, although this matt appearance may have been the result of burning; brownish-orange core. The decoration consists of wavy combing.
- 545 Fab. 53b. Dark grey surfaces with a highly metallic burnish on the outer face, mid grey core.
- 546 Fab. 53d. Dark grey throughout, with a highly metallic burnish on the outer surface and over the rim. However, even the unsmoothed inner face has a metallic lustre, presumably from overfiring.

Context 1196: Fill of recut Ditch 1104.

- 547 Fab. 1a. Dark brown to black surfaces, rilled and sooted on the outer face, dark grey core. See 522.
- 548 Fab. 1a. Black rilled and slightly sooted outer face with a pale pinkish-grey inner face and grey core.
- 549,550 Fab. 1a. Grey and orange-pink patchily coloured surfaces with a grey core.
- 551 Fab. 1a. Dark grey and pinkish-grey patchily coloured surfaces, grey core.
- NI Two other shell-tempered jar rims.
- 552 Fab. 2a. Light orange surfaces with a grey core.
- 553 Fab. 6. Lower Nene Valley. Pale pinkish-orange fabric with a dark brown to black colour-coat, decorated on the rim with dashes of thick cream-coloured paint or barbotine, over the slip (*cf.* Howe *et al.* 1980, fig. 7.86, dated to the fourth century).
- 554 Fab. 9a. Black surfaces, slightly sooted, with a black to grey core. The outer face has a faint trace of burnished arc decoration.
- 555 Fab. 9a? Dark grey to black surfaces, rather streaky, with a light grey core.

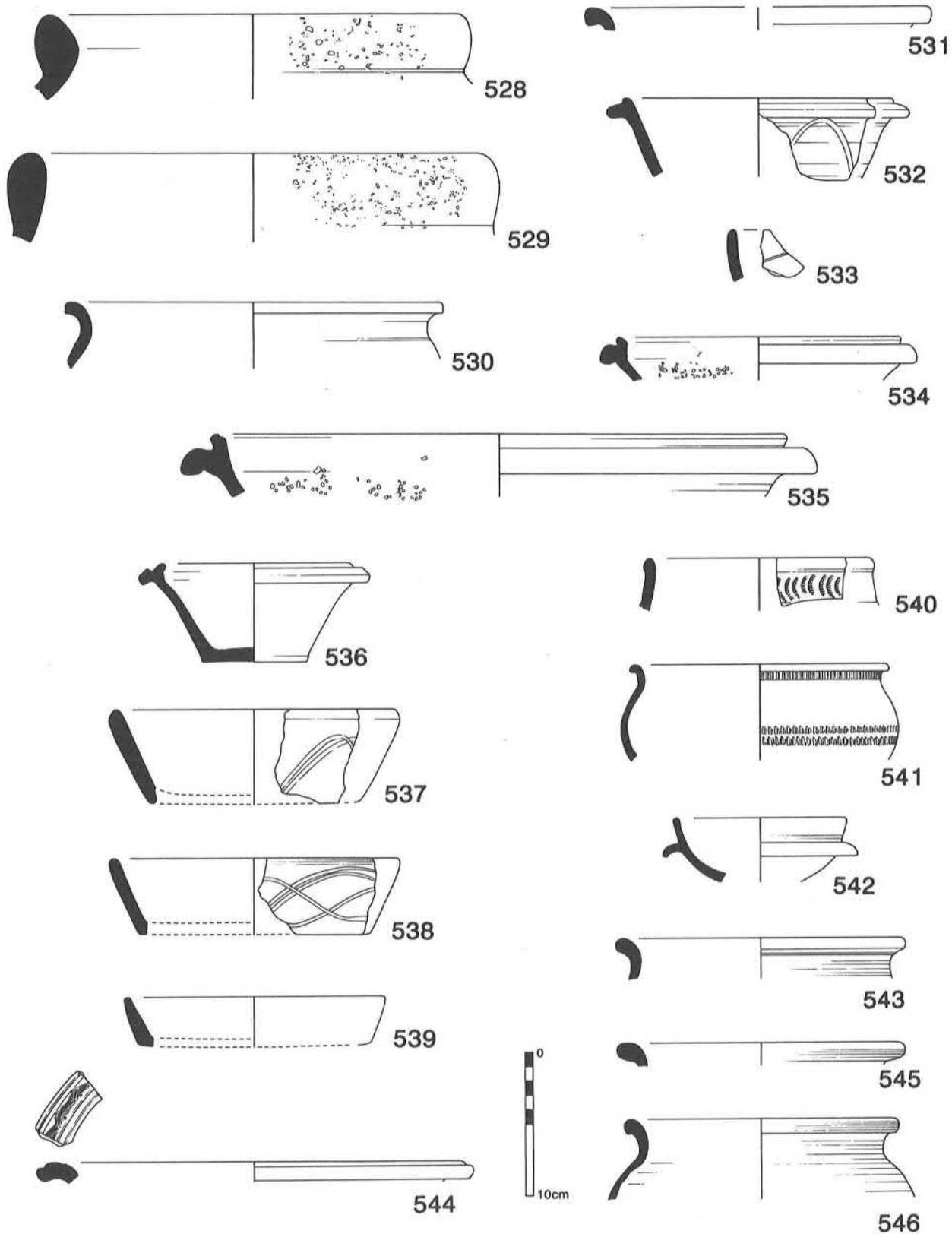


Figure 255: Phase III pottery 528–546 (Enclosure 1210), scale 1:4.

556 Fab. 24. Oxford. Rim of a C.22 or variant, lightly burnt, dated 240–400+ (Young 1977, 152).

557 Fab. 24. Oxford. Extremely crude C.78, with a double cordon and numerous demi-rosettes. Dated 340–400+ (Young 1977, 166). Burnt after breakage.

NI Rim of a smaller, finer C.75.

The pottery from the earlier ditches (1030, 1054, 1094, ?1156, 1161, 1176) totals ninety-two sherds. The percentages are odd - 10.87% for Fabric 1, 15.87% for Fabric 2, 26.09% for Fabric 3/9 and 14.13% for Fabric 24. The levels for the coarse wares, largely Fabrics 1 and 2, are surprisingly low, perhaps indicating that the ditches were in use during the late second to mid third century (*cf.* RBP, 196, table 1, Groups 10

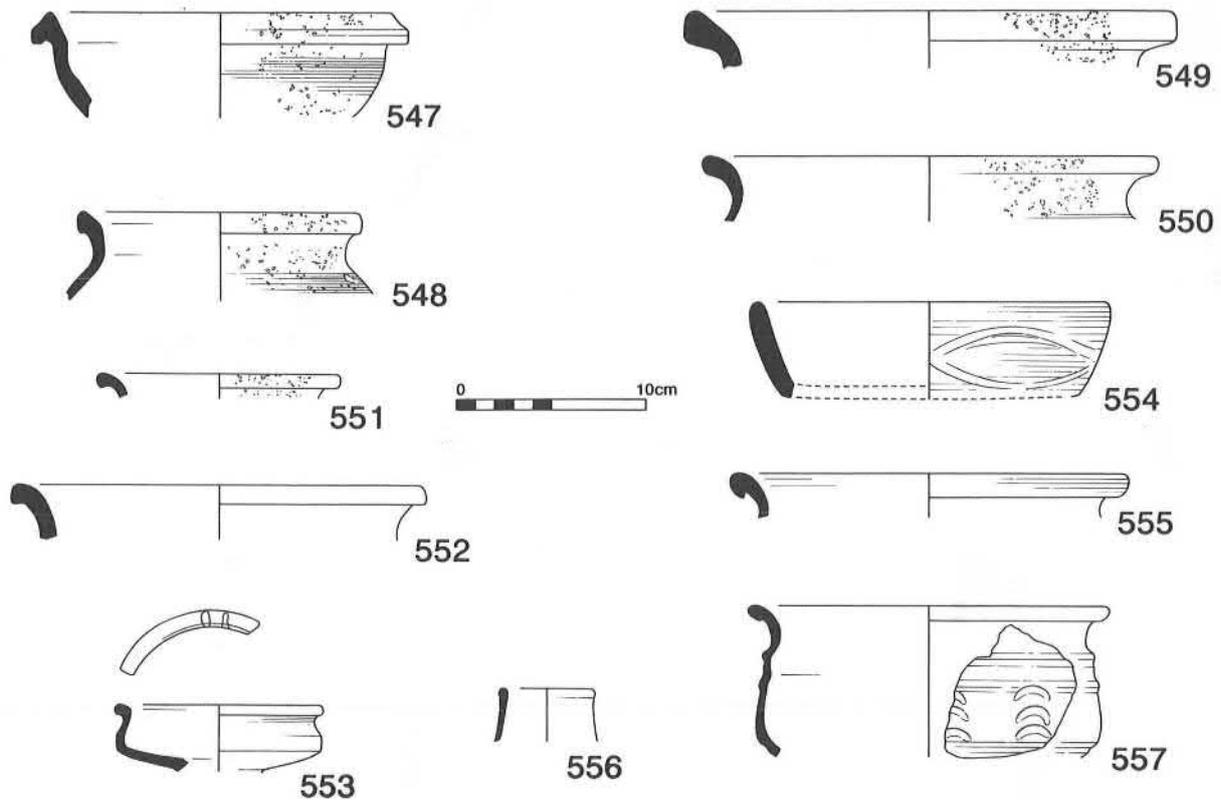


Figure 256: Phase III pottery 547-557 (Enclosure 1210), scale 1:4.

and 11, although the Fabric 2 percentage for Group 11 is abnormally high). As only Building 12 was occupied during this period, and deposition during the third century was invariably minimal, this small quantity of pottery is perhaps to be expected. This could be supported by the presence of an M.13 mortarium, dated 180-240, Vessels 500, 519 and the pre-flange type bowl 509, a common form in the second and third centuries. However, the Oxford ware figure (13 sherds, 11 of which came from 1155 and 1161) for this group is a normal level for the fourth century, thus this early dating is conjectural. If correct, it suggests that these two ditches were recut.

In comparison, the percentages from the recut Ditch 1104 are similar to those from the mid to late fourth-century Group 16 (RBP, 196, table 1). It contained 151 sherds, the largest percentages being 33.55% in Fabric 1, 12.58% in Fabric 2, 11.92% in Fabric 3/9 and 13.25% in Fabric 24.

The pottery percentages for the whole of the enclosure follow the pattern seen in an assemblage dated to c.330-360 (RBP, 196, table 1, Group 13), that is 25.51% for Fabric 1, 13.58% for Fabric 2, 17.28% for Fabric 3/9 and 13.99% for Fabric 24. The total number of sherds is 243, within which a minimum of seventy vessels are represented.

The dominant form is that of the wide-mouthed jar or necked bowl, totalling thirty-five. There are twenty-two bowls and dishes, four whiteware mortaria, three beakers, two storage jars, two lids or dishes, one orangeware mortarium and one very miniature bowl.

Shell-tempered ware is the dominant fabric, comprising nineteen vessels; twelve wide-mouthed jars or necked bowls,

five bowls and dishes and two storage jars. The sand-tempered wares are the second largest group, with seventeen vessels, composed of six wide-mouthed jars or necked bowls, five dog-dishes, four bowls and two dishes or lids. The third group is Oxford ware, with twelve pots, again with the dominant necked bowl/jar form, of which there are five, four bowls, two beakers and one very miniature pot. Surprisingly the fourth group, the soft pink grogged ware, although amounting to 13.58%, consisted of the rims of only four wide-mouthed jars or necked bowls.

A fair proportion of the assemblage is non-local, in that 40.33% came from regional markets such as Oxford, Hadham, and the Lower Nene Valley and, from further afield, Dorset (only 0.41%, possibly residual), Alice Holt and Lincolnshire (East Midlands burnished ware). This is on a par with the figures for the mid to late fourth-century Group 15 (RBP, 50, table 1). There were no continental imports.

Phase IV (late third to mid fourth century)

Building 1 (Fig. 257)

Room 1

Context 103: This was a rubble and soil 'make-up' horizon for Floor 102, an original floor within Building 1. Both 'make-up' and floor overlay the remains of Wall 3 of the earlier house.

558 Fab. 3a. Large portion of a bowl with burnished patchy orange and grey surfaces and a blue-grey core. There are traces of a thin off-white slip or slurry over the rim. Lumps of mortar still adhere to the base, presumably from Floor 102. *cf.* Frere 1984, fig. 106, 2558, 2560 and 2561, dated 200-225/250.

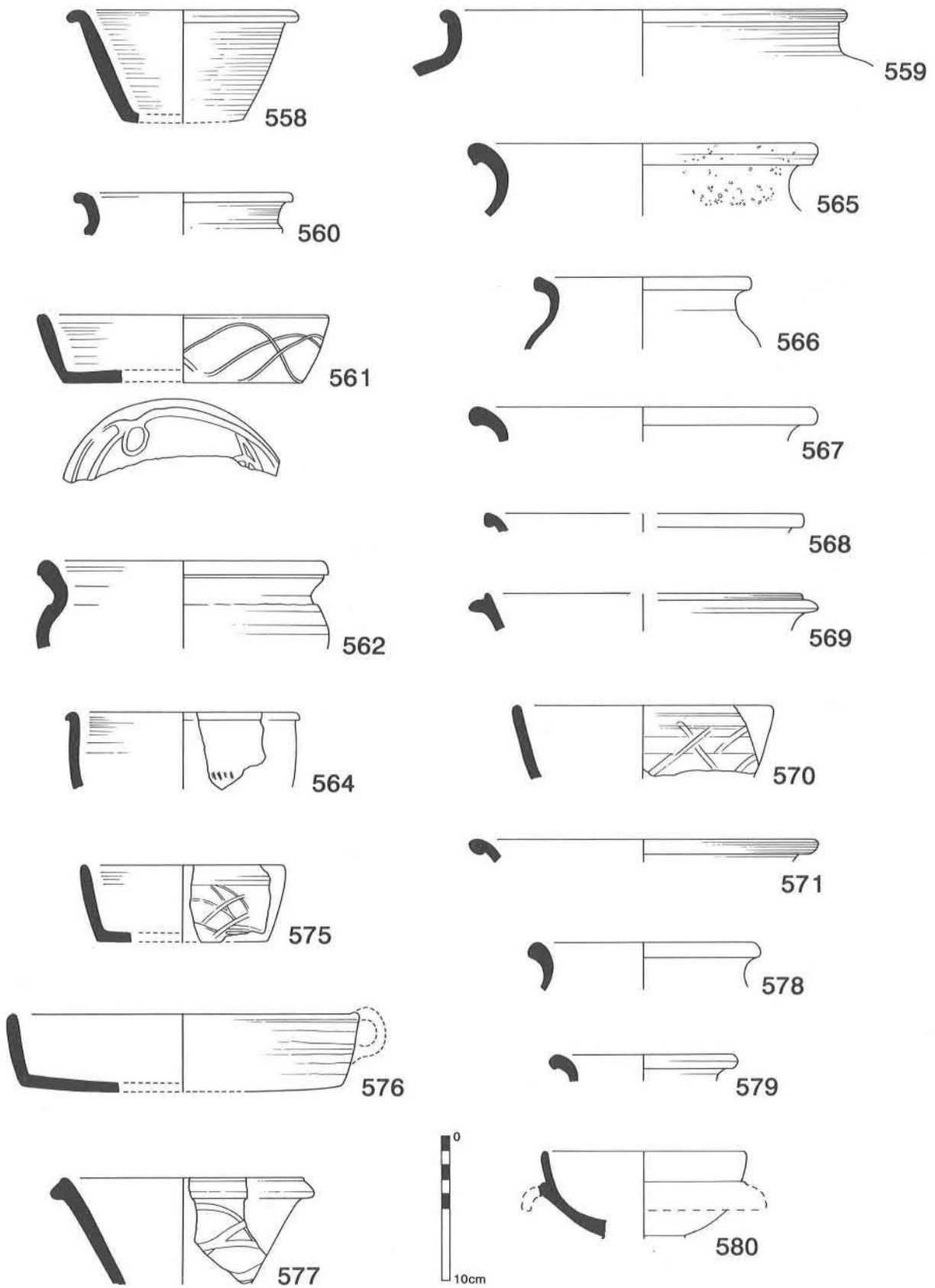


Figure 257: Phase IV pottery 558–576 (Building 1); 577–580 (Building 6), scale 1:4.

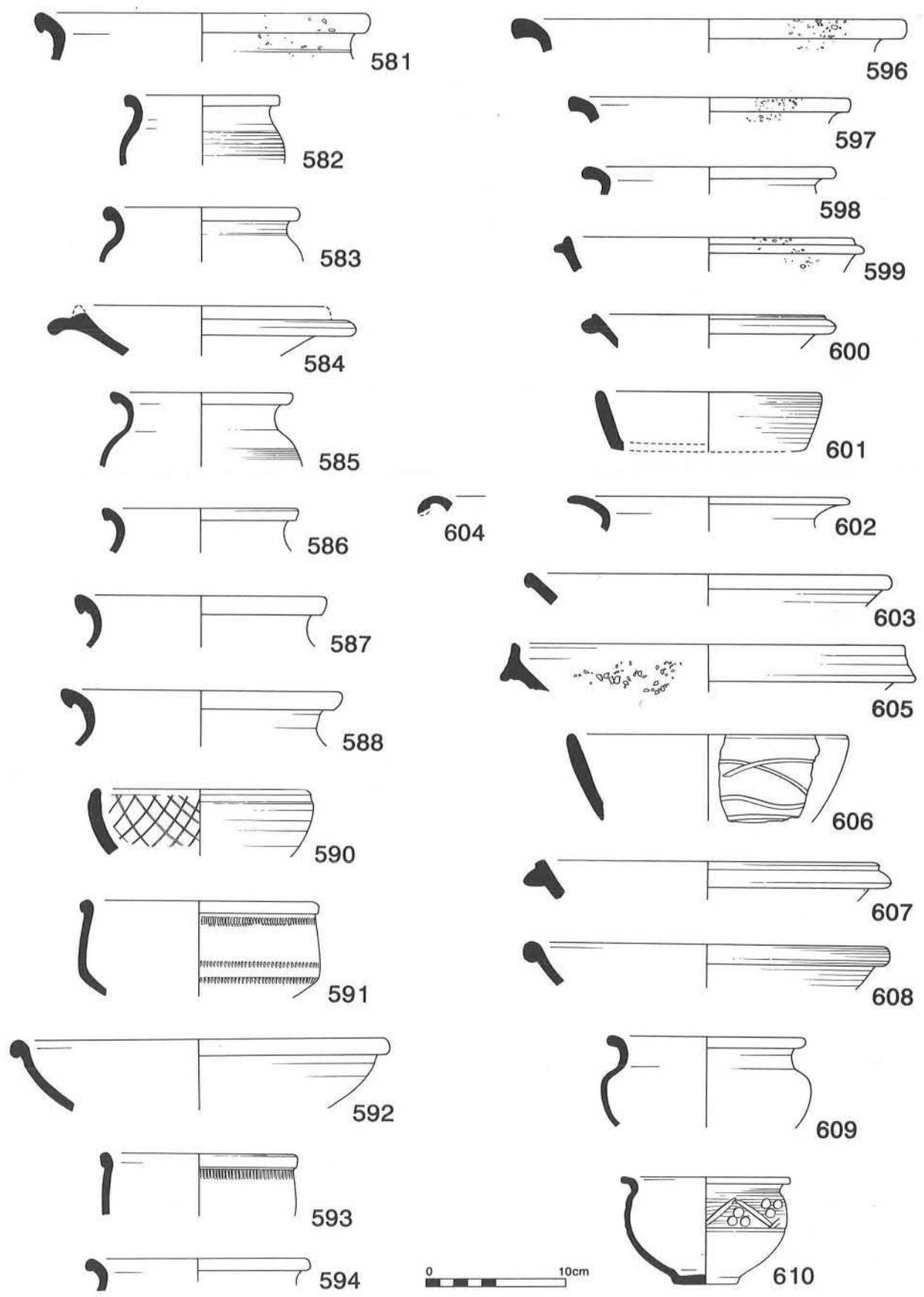


Figure 258: Phase V pottery 581–610 (Building 1), scale 1:4.

Room 3

Context 138: This was the original ground surface, composed largely of a natural brown loam.

559 Fab. 47a. Smoothed yellowish-grey surfaces with a thin pink underskin, blue-grey margins and dark blue-grey core. Late first to second century.

560 Fab. 19/29. Heavily chipped burnished orange to light grey surfaces with thick orange-red margins and thin grey core.

Context 138 was sealed by a layer of sandy mortar and limestone rubble (137) that appeared to be builders' tread. A hearth (358) had been built into this layer; it contained a single piece of pottery, a Lower Nene Valley beaker sherd with a lustrous dark brown colour-coat and a pale orange/grey 'sandwich' core. This piece appears to be part of a Rhenish ware copy; the originals first appeared in the second half of the second century, but were much more common in the first half of the third. It is not certain how soon the imported originals were copied. In theory, there could have been a contemporary industry, but the main period may not have been till later in the third century (Howe *et al.* 1980).

The hearth that this piece came from is thought to be related to the construction of the second house. Second half of the third century?

Context 136: This was a lens of fine ash within the opus signinum floor (134). It produced five pieces of a single vessel, a rim sherd of which was also found within the debris lying on the hypocaust chamber floor of Room 5. This piece had presumably been on or in the floor of Room 3 when it collapsed into the chamber below. Floor 134 bore evidence of several repairs; there appears to have been much burning.

561 Fab. 3/9a. Dark grey to brownish-black surfaces, burnished on the inner face. The exterior is decorated with burnished arcs. The form and type of decoration, with minor variations, are known to have had a long life, from the mid to late second century onwards. At Brixworth the type is dated c.270–350 (Woods 1970, fig. 9.18) and it occurs in Groups 12 to 15 locally, covering a date range of late third to mid/late fourth century (RBP).

Context 214: This was part of the Phase IV opus signinum floor of Room 3. It produced a rim sherd from its base.

562 Fab. 2a. Smoothed light-orange surfaces with a grey core. The finish is good for a pot in this fabric. It may date to about 170/180 (*cf.* RBP, fig. 12.37, dated mid to late second century), although this fabric was most common in the third century.

Context 339: This was a layer of compacted sand and gravel make-up for the original hard pink mortar floor 338 which in turn was below the opus signinum bedding (337) for the later mosaic. It produced six pieces of two sand-tempered dog-dishes (only one is illustrated) and single sherds of Fabrics 1, 2 and 46, the latter being residual.

563 Fab. 9a. Local sand-tempered dish with black surfaces, burnished on the inner face and decorated with burnished arcs on the outer face. The type was common from the mid/late

second to the fourth century, but most common in the late third and fourth. For illustration of an identical vessel, see 575.

Room 7

Room 7 was the original stoking area for the southern bath suite, to the west of Room 6. Its boundary was formed by Ditch 17 and 25 on its south and west sides. The sections produced much ash with some bone, plaster, iron and oyster shells, and a little pottery. Context 17 contained a hoard of seventy-six coins, dated to c.330 (Appendix 3ii). Enclosed by Ditches 17 and 25 was a stoking pit, which produced successive layers of ash (91, 118 to 122).

The small quantity of finds from these features suggests that both ditch and stoking-pit were kept clean during the years that the bath suite was in use and were only used for small-scale rubbish disposal once the new baths were built, after c.350.

Ditch 17:

564 Fab. 24. Oxford colour-coated ware. A burnt rim of a C.55, with traces of rouletting around the girth. Dated 240–400+ (Young 1977, 160).

Ditch 25:

565 Fab. 1a. Lightly sooted grey exterior, buff inner face, grey core; slightly hooked, semi-double rim. Probably post-350.

566 Fab. 1a. Thin black vessel, lightly sooted on the outer face.

567 Fab. 1a. Light grey throughout.

568 Fab. 2a. Buff-coloured surfaces, burnished on the inner face, orange margins, dark pink core. The finish of this vessel is of a higher quality than is usually found in this fabric.

569 Fab. 3a. Dark grey surfaces with a blue-grey core; late third to fourth century.

570 Fab. 9a. Black surfaces with burnished decoration and a black to dark red core.

Context 91: One of the ash layers in the stokepit. Sherds missing, so not illustrated.

571 Fab. 19/29? Slightly burnt, dark orange sandy ware with burnished surfaces. The fabric looks local but the finish is most unusual.

572 Fab. 2a. The base of a vessel, the form of which is rare in this fabric. It has been decorated with reddish-brown horizontal paint stripes, and is probably fourth century in date.

573 Fab. 32b. Heavily sand-tempered black-surfaced pot with a pinkish-grey core. The fabric type has previously been found in stratified late second to early third-century contexts, thus this vessel may be residual. Probably late Roman, with a similar date to Fab. 32a, *ie.* fourth and possibly fifth century.

574 Fab. 1a. Dark brown surfaces, lightly blackened, with a grey core.

Room 9

Room 9 was the anteroom to the later phase of the southern bath suite; it covered the west end of the earlier Room 3. One

of the smaller fine mosaics, dated to the early fourth century, came from this room.

Context 339: A layer of compacted sand and gravel make-up for the original hard pink mortar floor 338 which in turn was below the opus signinum bedding (337) for the mosaic. It produced six pieces of two sand-tempered dog-dishes (only one is illustrated) and single sherds of Fabrics 1, 2 and 46, the latter being residual.

575 Fab. 9a. Local sand-tempered dish with black surfaces, burnished on the inner face and decorated with burnished arcs on the outer face. The type was common from the mid/late second to the fourth century, but most common in the late third and fourth.

Room 11

This was the south-west wing room. Unfortunately, no floors were found within it, although Contexts 186, 188 and 189 could be the remains of make-up layers. The soil levels beneath these layers produced pottery dating from the first to the fourth centuries, including colour-coated Oxford ware, indicating that the room was a late third or fourth-century addition upon previously open ground.

Context 117: A layer of rubble and soil over the whole of the room. As it was simply destruction the majority of the pottery is not illustrated; the vessel described below is included because it is an unusual find.

576 Fab. 50. BB2? Fish-dish or 'dog-dish' with a handle scar. The black surfaces are silky and smooth with clear burnished faceting; the core is grey with reddish-brown margins. The fabric appears to be identical to that of sherds of BB2 from Canterbury within the Unit Type Series. BB2 was never common outside eastern England; it is not recorded after the mid fourth century and had already declined during the preceding century (Swan 1978, 15).

Building 6 (Fig. 257)

This was a small square structure built in the courtyard behind Building 1 in the centre of the area formerly occupied by Building 7.

Context 70: Fill of a gulley running north-south between the walls of Building 6. It does not extend beyond the walls and thus appears to be contemporary with the structure.

577 Fab. 3a/28. Grey surfaces with a blue-grey core. The finish is very hard and smooth, with scribbled burnished decoration on the outer face. Late third to fourth century.

NI Rim fragment from a dog-dish.

Context 307: Fill of the footing trench of Building 6.

578 Fab. 1a. Black throughout.

579* Fab. 3n. A rather gritty example of the local sand-tempered ware. The outer face is slate-grey in colour, smooth and sooted, the inner face is dark grey and rough, whilst the core is a dark blue-grey. The fabric is believed to be a second-century type. Residual from Building 7?

580 Fab. 52. Copy of a Dr.38 in an extremely hard fabric. The outer surface is orange and heavily burnished, the inner face

is partially burnished, the actual bowl of the vessel having a slightly sandy orange matt finish. The core is grey. The fabric is fairly coarse; its place of manufacture is unknown. Looks similar to Severn Valley ware, but the form has no parallels in that ware.

Phase V (mid fourth to early fifth century)

Building 1 (Figs 258–263)

Room 1

Context 101: This was a layer of dark brown loose soil and mortar used to raise the floor level beneath a sand screed (100) laid as a levelling base for the mosaic. The pottery within it gives a post-350 date. It lay above an earlier floor of white mortar (102).

581 Fab. 1a. Pinkish-buff outer face, light grey interior, dark grey core. The rim is triangular and hooked, a post-350 feature (Brodrigg *et al.* 1971, 68).

582 Fab. 1a. Black sooted exterior, rilled, brownish-pink interior, grey core.

583 Fab. 3a. Burnished blue-grey surfaces, darker grey margins, blue-grey core.

584 Fab. 6. Nene Valley colour-coated ware; white fabric with an orange-brown colour-coat over thick pink margins. This is one of the Nene Valley imitation samian range, dated late third to fourth century (Howe *et al.* 1980, 24).

Room 6

This room, constructed as the *caldarium* of the first bath suite, was reconstructed as the *tepidarium* of the remodelled baths. Its collapsed *opus signinum* floor was found still in position over the tumbled *pilae*. The finds from the room are few and came from the rubble fill.

Contexts 4 and 1978/563: These consisted of ash, collapsed *pilae*, burnt tile and mortar, and also contained the remains of ten vessels. A number of the sherds are coated with mortar, suggesting that they had once been cemented into the fabric of the building.

585 Fab. 1a. Originally a dark grey or black surfaced vessel with a red core. The exterior is rilled and the rim is hooked or triangular, a feature indicative of a post-350 date (Brodrigg *et al.* 1968, 68). Coated with mortar.

586–588 Fab. 1a. Patchily coloured light brown to black shell-tempered vessels with hooked or triangular rims. Dating as above.

589 As 586–588. Sherd missing, therefore not illustrated.

590 Fab. 8/50. BB1/2? A dish that feels and looks like the hand-made Dorset BB1 fabric, but appears to have been wheel-made. The patchy brownish-pink to black outer face is worn, with only slight burnishing remaining, and the inside face has burnished lattice decoration.

591 Fab. 24. Oxford ware. Part of a C.69 with an orange-brown colour-coat, pale orange fabric and white painted decoration. The type is dated 325–400+ (Young 1977, 164). Coated with mortar.

592 Fab. 24. Oxford ware. A grey-cored C.45 with a pale orange fabric and brownish-orange colour-coat. Some mortar is adhering to the vessel. The type is dated 270–400+ (*ibid.*, 158).

- 593 Fab. 24. Oxford ware. A C.68 with a deep orange fabric and brownish-orange colour-coat. Dated 300–400+ (*ibid.*, 164).
- 594 Fab.? A sand-tempered vessel. The surfaces are black and pimply, with a brownish-grey core.

Room 8

This was probably the main private room in Building 1, containing the largest of the good quality mosaics. As built, Room 8 was heated by a composite hypocaust fed by a stokehole within the corridor; the stokehole went out of use when the corridor was constructed in the second half of the fourth century (p.175).

Context 142: This was the *opus signinum* bedding for the mosaic, laid over the original white mortar floor 143. Twenty-three sherds were found within the *opus signinum* level; they look like a late third to early fourth-century group, for there are none of the hook-rimmed shellies typical of the post-350 period, whilst flanged bowls, a form frequently found in the late third/early fourth century, are common, comprising three out of the eleven rims. The Oxford rim C.45 (603) is also one that appears relatively early in this area. The dating is in agreement with that tentatively given by Dr Smith (p.254) for the sealing of this floor by the Room 8 mosaic; that is, a date in the early fourth century, possibly between the years 300–320.

- 595 NI Fab. 1a. Buff-coloured surfaces, slightly discoloured by heat, grey core. For identical vessel, see 596.
- 596 Fab. 1a. Brownish-buff surfaces, blackened over the rim and outer face, grey core.
- 597 Fab. 1a. Light brown inner face, black exterior and core.
- 598 Fab. 1a. Black throughout.
- 599 Fab. 1a. Brownish-buff surfaces, blackened over the outer face, grey core. *cf.* RBP, fig. 18.4, found within a group dated ?mid to late third century.
- 600 Fab. 3a. Light grey surfaces, burnt on the flange, dark grey core.
- NI One similar vessel (flange only).
- 601 Fab. 3/9a. Black exterior, whitish-grey inner face, dark grey core.
- 602 Fab. 8. Rim of a typical BB1 jar, most like Gillam 1976, fig. 1.9, dated to the mid to late third century.
- 603 Fab. 24. Oxford. An orange-brown colour-coated C.45 rim, dated 270–400+ (Young 1977, 158).
- 604 Fab. 40a/24? Light pink surfaces with traces of an orange-brown colour-coat, grey core. The form is that of an Oxford C.47, but the fabric is not typical. Same date as a C.47?, *i.e.* 270–400+.

Room 10

This was the mid to late fourth-century *frigidarium* of the southern bath suite, built over Rooms 4 and 5 and part of 3. Most of the contexts relating to the construction of its floor were makeup levels of building rubble and debris, used to fill the former plunge bath and hypocaust.

The room had a mosaic, almost totally destroyed, probably laid in the third quarter of the fourth century. The presence of late Hadham ware (610) in the infill below this mosaic supports such late dating.

Context 57: A compacted sand make-up layer for the *opus signinum* bedding of the mosaic. It produced one rim sherd.

- 605 Fab. 4c. A badly worn and slightly burnt hammer-headed Mancetter-Hartshill mortarium rim; it may once have been painted. A similar painted example has been dated 280–360, whilst an unpainted version was dated 230–340 (Gillam 1970, fig. 29.284 and 282 respectively).

Context 61: This was a yellow loose sandy layer that contained bone, iron, painted wall-plaster and five pieces of pot; it is probably simply the upper level of the rubbish infill to Room 4.

- 606 Fab. 9a. A dog-dish with good, black surfaces decorated on the outer face with burnished arcs; grey core. There is some mortar adhering to the vessel. The walls lean out at a fairly wide angle, a tendency generally indicative of a later date (Gillam 1976, 77, fig. 6.83, dated to the mid fourth century).

Context 65: Like Context 61, this was a rubbish infill layer of yellow loose sandy material. However, it was much deeper, and contained a greater proportion of pottery, iron and bone.

- 607 Fab. 9a? Shallow necked bowl with good black surfaces, burnished on the outer face, with red margins and a dark blue-grey core.
- 608 Fab. 9a. Flanged bowl with black surfaces and a grey core; a local type common in the late third and fourth centuries.
- 609 Fab. 24. Rim of an Oxford C.46, dated 340–400+ (Young 1977, 158).
- 610 Fab. 37. Much Hadham ware, orange throughout and burnished on the outer face. The vessel has been slightly burnt and has mortar adhering to it. The exterior is decorated with a shoulder and girth groove between which is a band of incised triangles with three dimples in each triangle. A similar vessel, in grey ware, has been dated post-351 (Roberts 1982, plate 2, A3.15).

Room 12

This was the corridor and porch on the east facade of the house.

Context 279: This was a shallow irregular pit cut into ?natural (276), below 275 and 196 within the porch area. It had been levelled with clay, limestone rubble, some of which had been burnt (possibly from the early house) and the odd piece of pot and tile. Context 276 had also been cut by a small fourth-century feature (281) which contained a few sherds of colour-coated Oxford ware.

- 611 Fab.? Burnt beaker rim with light brownish-pink surfaces, a light grey core and a dark brown to black colour-coat. The rim form appears to be the same as that found on vessels from third to fourth-century contexts in the Nene Valley (Howe *et al.* 1980, fig. 5.49–50).

Context 332: A section, cut across the northern part of the corridor through the raised floor. The 124 sherds recovered from this section are of mixed date, from five pieces of Belgic grogged ware to three colour-coated Oxford fragments. Much of the stone and waste material used in the construction of the raised corridor floor probably came from Building 7, as the fabric percentages for the assemblage give a late second-

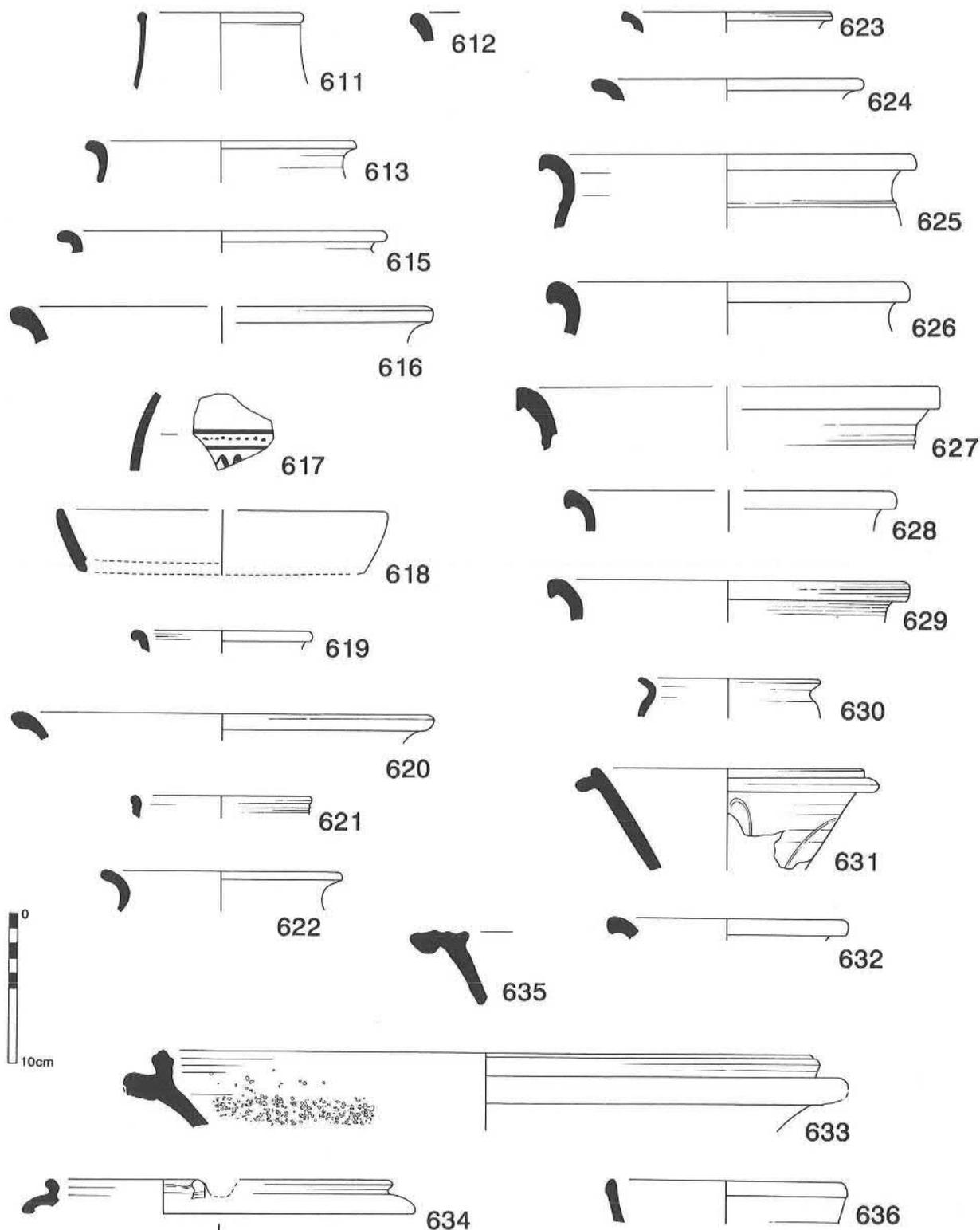


Figure 259: Phase V pottery 611-636 (Building 1), scale 1:4.

century date, based on the percentages for the major coarse wares (Fab. 1 - 32.26%, Fab. 2 - 9.68% and Fab. 3/9/47 - 20.97%). However, the assemblage also produced 2.24% of Oxford ware, a coarse Nene Valley sherd and a sherd of painted soft pink grogged ware, which are indicative of a late third/early fourth-century date.

612 Fab. 1a. Light pink inner face with an orange 'underskin', blackened outer face, buffish core.

613, 614 Fab. 1a. Black with buff patches. The lack of triangulation on these rims is worthy of note, for such a feature was common after 350 (Brodribb *et al.* 1971, 68). Only 613 is illustrated.

615 Fab. 2a. Pale orange throughout.

616 Fab. 2a. Pale pink throughout.

617 Fab. 2a. Light orange surfaces with a grey core and dark orange painted decoration on the outer face. Painting is thought to be a fourth-century occurrence on this ware.

- 618 Fab. 9b. Black surfaces with a red core.
 619 Fab. 14a. Light grey surfaces, blue-grey where burnished, blue-grey core.
 620 Fab. 17a. Pale orange surfaces, laminated buff/grey/buff in the core.
 621 Fab. 24. Oxford colour-coated ware. Orange throughout. Form C.71?, dated 300–400+ (Young 1977, 164).

Context 362: Same as 332. This was an area of rubble make-up in the south part of the corridor. The pottery that it produced differs from that in the northern end of the corridor, presumably because unlike 332 it does not lie directly over or immediately adjacent to the early house, so the rubble and earth used to build up this section may have come from elsewhere. The fabric percentages are different to those from 332, giving a mid to late third-century date (Fab. 1 - 5.94%; Fab. 2 - 28.71%; Fab. 3/9 - 21.78%). It contained the rims of two Oxford mortaria, one of third-century date and the other dated 240–400+.

- 622, 623 Fab. 1a. Light purplish-brown surfaces, blackened and sooted on the outer face, grey core.
 624 Fab. 1a. Light purplish-brown surfaces with a grey core.
 625–628 Fab. 2a. Light pink surfaces with a grey core.
 629 Fab. 2a. Orange outer face, light pink interior with a dark orange to brown core.
 630 Fab. 2var. Hard; brownish-pink throughout.
 631 Fab. 3/9. Grey to black surfaces with faint burnished arc decoration on the outer face, grey core. Late third to fourth century.
 632 Fab. 3/9. Grey to black surfaces with a grey core.
 633 Fab. 4a. Oxford white ware mortarium, type M.22, dated 240–400+ (Young 1977, 76).
 634 Fab. 4a. Oxford white ware mortarium with a thin orange wash. The spout has been formed by turning the rim out across the flange. A type M.17? dated 240–300? (Young 1977, 72).
 635 Fab. 4f. Lower Nene Valley mortarium rim, yellowish-white fabric with a very thin orange wash and a few black trituration grits. The core is streaked through with orange. Late third to fourth century?
 636 Fab. 6. Lower Nene Valley colour-coated ware. Light brown fabric with an orange-brown slip. Late third to fourth century.
 637 Fab. 14a. Dark grey to black burnished surfaces, with a red core in thin sherds and laminated red/grey/red in the thicker examples.
 638 Fab. 28a. Yellowish-grey surfaces with a darker grey core. The vessel is decorated with burnished stripes over the shoulder and a large area of burnishing below the girth.

Context 383: This was a level of loose yellow-brown mortar and small pebbles below 382, the raised floor within the area of the central part of the corridor adjacent to the porch.

- 639 Fab. 3a. A dog-dish in a local grey sandy fabric with a thin light blue-grey slip on the inner face and darker blue-grey slip

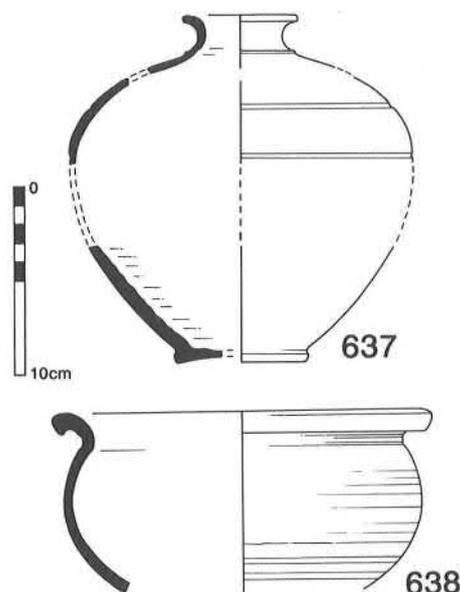


Figure 260: Phase V pottery 637–638 (Building 1), scale 1:4.

on the exterior. Smoothing lines have produced a striped effect.

Context 389: This was a continuation of the raised floor make-up for the corridor floor, below 362.

- 640 Fab. 12. Lower Nene Valley greyware? A white cored vessel with light to dark grey surfaces. Late second to third century.

There are many problems in dating the corridor. The surfaces sealed beneath it do not contain pottery later in date than the late second century, providing a *terminus post quem* for the corridor. The sherds within the raised floor (*ie.* in Context 362) are late third to early fourth century in date. It is possible that the reason why there is no later pot beneath the corridor is that the site was abandoned after the fire that destroyed the first house, and only resettled again in the very late third century. Percentages for the fabrics present in the corridor assemblage are shown in Fig. 262.

The main house certainly seems to have been built in the very late third century. The corridor was built after the stokehole was filled in about 350, when the later mosaics were laid; its fill was painted wall plaster, as was much of the backfill for Room 10.

Room 14

This was the stokeroom to the final phase of the southern baths.

Context 30: The ash and charcoal fill of the stokeroom.

- 641 Fab. 1a. Light grey surfaces with a darker grey core. The form is undatable.

West Bath Suite; The Stokepit

Contexts 77 and 81: These were layers of ash in the stokepit, the latter being the lowest, above natural.

- 642 Fab. 3a. Dark grey surfaces, burnished over the rim and inside face and with burnished arc decoration on the exterior. Blue-grey core. Late third to fourth century.

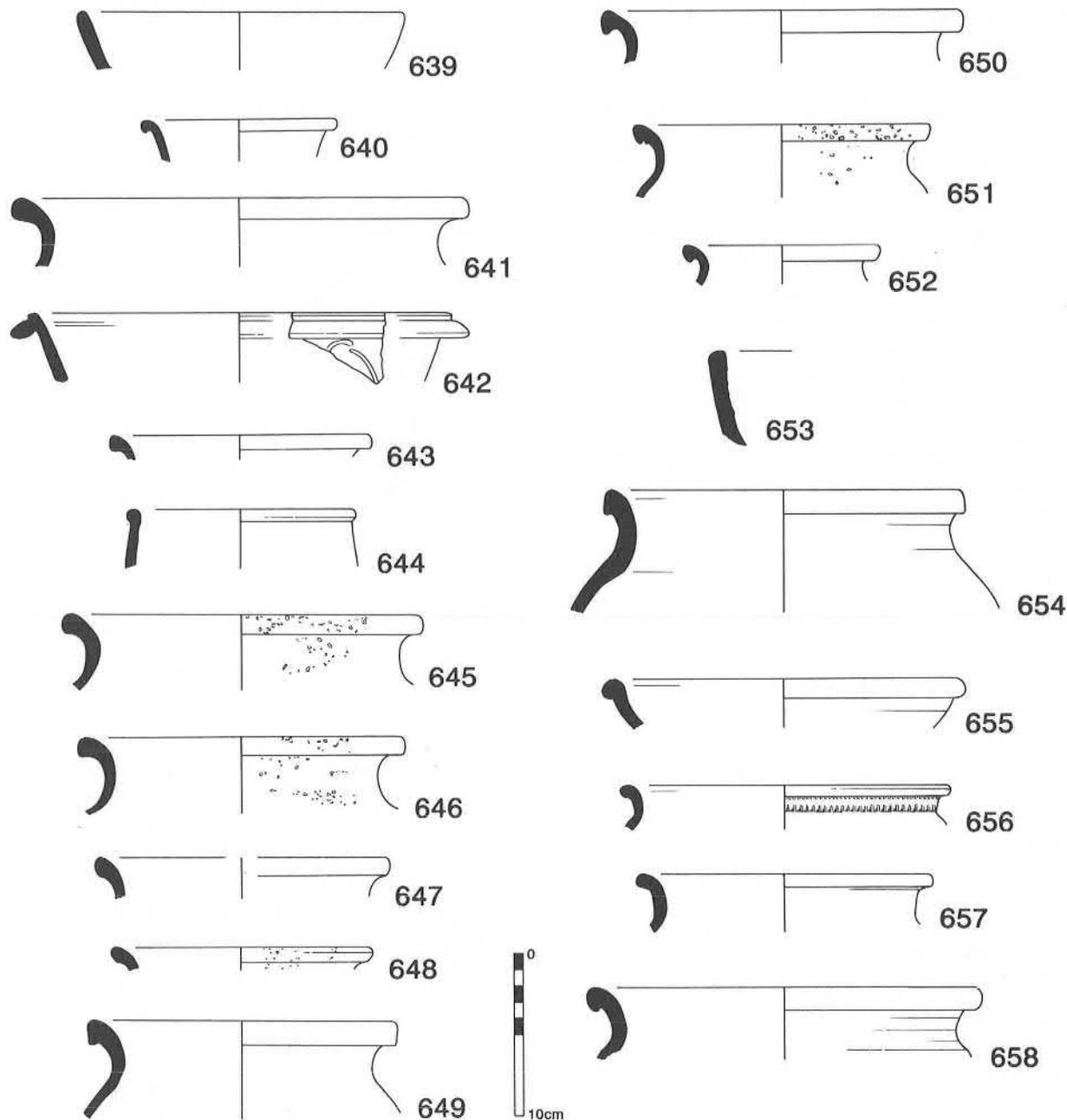


Figure 261: Phase V pottery 639-658 (Building 1), scale 1:4.

643 Fab. 1a. Light pinkish-orange surfaces with a dark grey core.

644 Fab. 24. Oxford colour-coated ware, rim of a C.68, dated 300-400+ (Young 1977, 162).

Room 16

Room 16 was the *caldarium* of the remodelled southern bath-suite. The finds from it came from the rubble fill, excavated in 1978. Some robbing is believed to have occurred and these finds, which form a post-350 group and date to the latest 'romanized' occupation of the site, probably found their way into the collapsed chamber at this time. Percentages for fabrics in this group are shown in Fig. 262.

645 Fab. 1a. Blackened brown outer face with a purplish brown interior and grey core.

646 Fab. 1a. Black throughout.

647 Fab. 1a. Grey throughout.

648 Fab. 1a. Grey outer face with a pale yellowish-grey inner face and a grey core.

649 Fab. 1a. Black soot-encrusted rim with light grey surfaces and a grey core; there is a small quantity of mortar on the inside face. Such triangular and hooked rims are believed to indicate a post-350 date (Brodrribb *et al.* 1968, 68).

650 Fab. 1a. Buff surfaces with a grey core; mortar adhering on the inside face. Comment and date as 649.

651 Fab. 1a. Black outer face and over the inner lip, buff interior encrusted with a small quantity of mortar; grey core. Comment and date as 649.

652 Fab. 1a. Patchy brown and pink surfaces, encrusted with mortar on the outer face; orange-pink core. Comment and date as 649.

653 Fab. 1a. Light grey outer face and core, off-white heavily corrugated inner face. Undated.

NI Large part of the same bowl (659) found in Room 17.

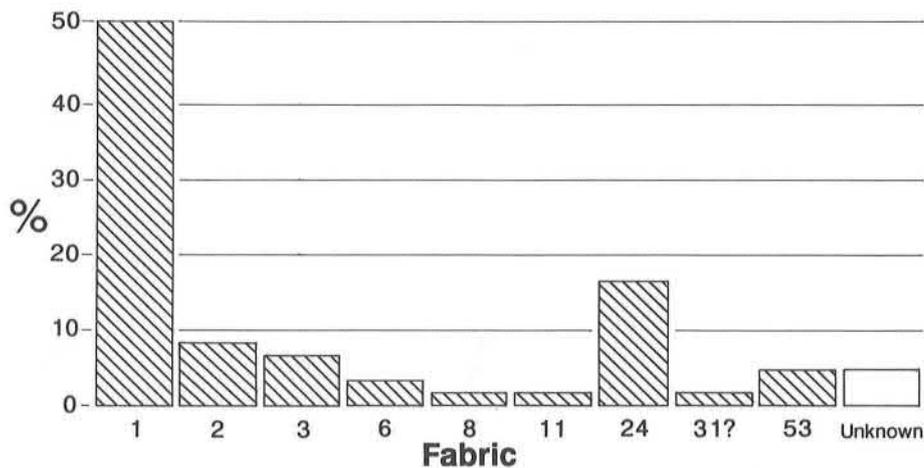


Figure 262: Histogram of the percentage of sherds in each pottery fabric from contexts related to Rooms 14 and 16, Building 1.

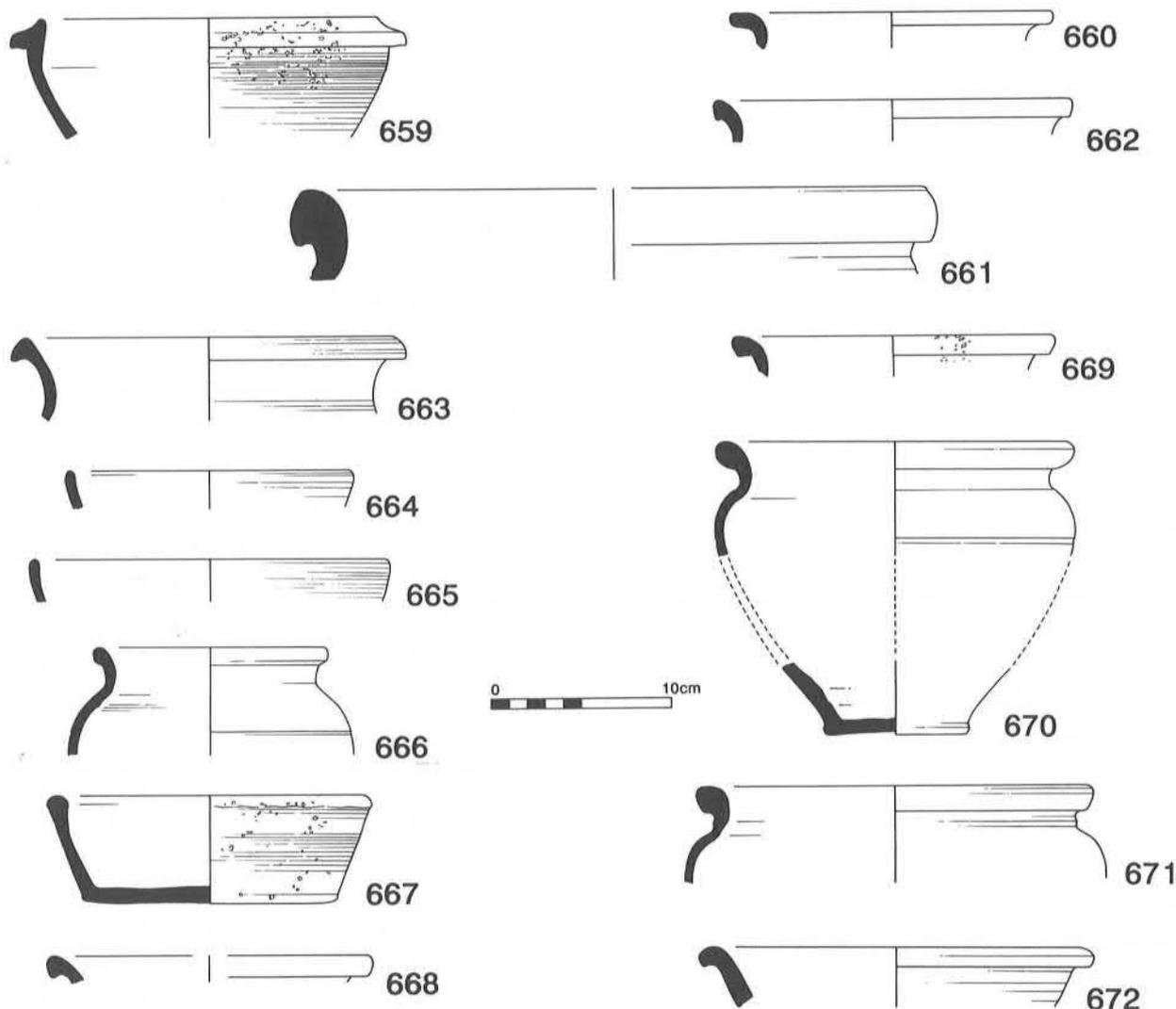


Figure 263: Phase V pottery 659-672 (Building 1), scale 1:4.

654 Fab. 2a. Orange-pink surfaces with a grey core.

655 Fab. 24. Oxford ware. Rim of a C.46, dated 340-400+ (Young 1977, 158).

656 Fab. 24. Oxford ware. Rim of a C.75, dated 325-400+ (*ibid.*, 66).

657 Fab. 24/31? or from an unknown source. The fabric has the appearance of a hard grey-cored Oxford ware, whilst the finish looks more akin to Hadham, *ie.* dark orange and burnished.

658 Fab. 53b. Burnished blue-grey surfaces with a lighter grey core; very hard.

Room 17

This room, the cold plunge bath of the southern bath-suite, was excavated in 1978. The finds are entirely from the rubble infill of the room and no doubt were in use during the last years of 'romanized' occupation.

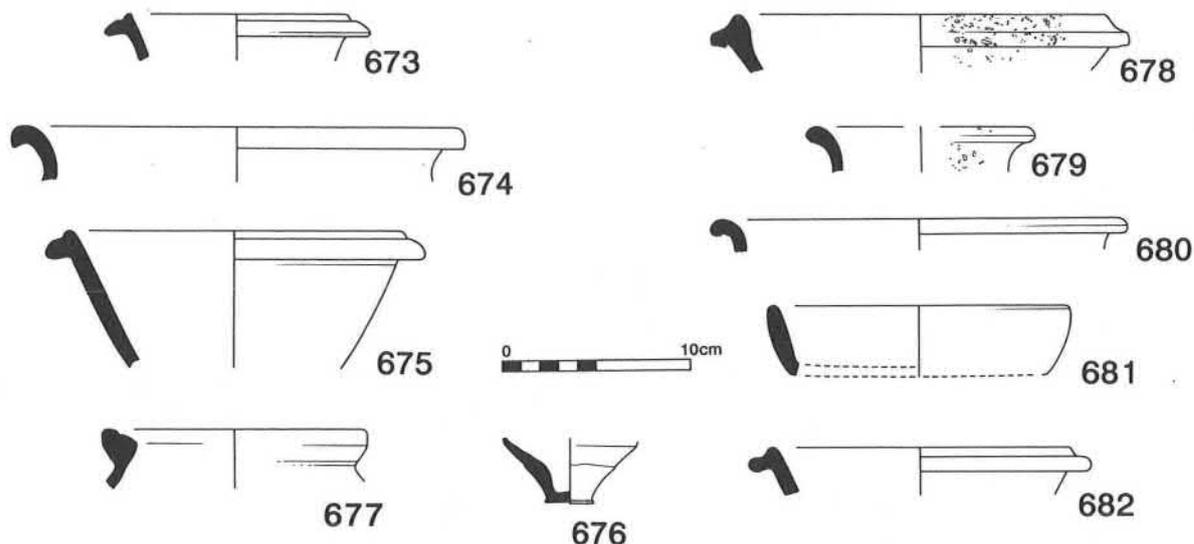


Figure 264: Phase V pottery 673-682 (Building 5), scale 1:4.

- 659 Fab. 1a. Patchy yellowish-grey and black surfaces with red margins and a grey core. Rilled. *cf.* Woodfield 1983, fig. 30.257, dated 355-370+.
- 660 Fab. 1a. Sooted dark grey outer face with a light brown inner face and a grey core.
- 661 Fab. 1a. Buff surfaces with a grey core.
- 662 Fab. 2a. Light pink surfaces with a darker brownish-pink core.
- 663 Fab. 3a. Mid grey surfaces with streaky dark to light grey burnishing on the outer face and over the inner lip; blue-grey core.
- 664 Fab. 6. Lower Nene Valley. Pale brownish-pink fabric with a brownish-orange colour-coat. This appears to be part of a Dr.38 copy; samian imitations were probably not produced much beyond the middle years of the fourth century (Howe *et al.* 1980, 9).
- 665 Fab. 24. Oxford. Heat-discoloured rim from a C.51? (Dr.38 copy) dated 240-400+ (Young 1977, 160).
- 666 Fab. 24. Oxford. Slightly burnt and mortar-coated C.18, dated 270-400+ (Young 1977, 152). The form was in production until the end of the industry. The mortar on it may suggest that the sherd at one time had been incorporated within the fabric of the building.

Room 18

This was the *caldarium* of the western bath suite. Its floor had collapsed into the hypocaust, filling the chamber with a dark, ashy rubble. The finds from this were very few, but included the rim of a pot heavily coated with mortar (662); it may have been cemented within the collapsed *opus signinum* floor, and therefore can be used to date the construction of the suite. The tile used throughout was Fabric 4, generally regarded as being of late second to fourth-century date.

It is also worthy of note that out of the fifty-five sherds from the western bath suite, ten are Saxon and 'sub-Roman'; a fairly large proportion for such material. This is perhaps indicative of a later (Saxon?) use of the buildings.

Contexts 1978/566 and 573: Rubble and ash fill of Room 18 hypocaust.

- 667 Fab. 1a. Black rilled outer face, patchy pink to dark brown inner face, dark grey core. The vessel appears to have been wheelmade, but was roughly finished. Pieces from this same vessel also came from the flue/drain (578) in Room 19.
- 668 Fab. 1a. Dark grey to black surfaces, grey core. The triangular rim may indicate a post-350 date (Brodrribb *et al.* 1968, 68).
- 669 Fab. 1a. Dark grey to black surfaces with a grey core.
- 670 Fab. 6. Lower Nene Valley. White fabric with a lustrous black colour-coat. *cf.* Howe *et al.* 1980, fig. 7.75-76, dated to the fourth century.
- 671 Fab. 6. Lower Nene Valley. Pinkish-white fabric with a dark orange colour-coat. Dating as 670.
- 672 Fab. 53b. Burnished medium grey surfaces with a blue-grey core. Very like the East Midlands burnished greywares of the late third and fourth centuries.

Building 5 (Fig. 264)

Building 5 was the octagonal structure which lay to the south-east of Building 1. The pottery from it came from various levels of 'trowelling down'; floors were not recognized. The sherds, fifty-nine in all, are largely fourth century in date. Five of the sherds are of first to early second-century date, and are thought to be residual. Building 5 was almost certainly constructed and in use during the fourth century.

Context 1978/3(+): Trowelling of the interior.

- 673 Fab. 6. Lower Nene Valley ware. White fabric with a brownish-orange colour-coat. Fourth century (Howe *et al.* 1980, fig. 7.79).

Context 158: Trowelling of the interior. First level beneath the backfill removed in 1983.

- 674 Fab. 2a. Light pink surfaces with a thin grey core.
- 675 Fab. 3a. Light and dark grey speckled surfaces, light grey core. Late third to fourth century. A large sherd from the same vessel, but oxidized, came from Context 206.
- 676 Fab. 6. Lower Nene Valley beaker base with a black lustrous colour-coat and orange fabric derived from copying Rhenish imports. Probably later third to fourth century (Howe *et al.* 1980, 20).

Context 206: Beneath Context 158. Produced a coin dated 310–17 (Appendix 3iii, no.69).

677 Fab. 1a. Lid-seated jar rim with buff surfaces, lightly blackened by heat on the outer face, grey core. Mid to late second century.

678 Fab. 1a. Bowl with very pale greyish-brown surfaces, blackened by heat on the outer face, grey core. *cf.* RBP, fig. 21, Group 15.1, dated mid to late fourth century.

679 Fab. 1a. Pale greyish-brown surfaces, blackened lightly on both faces, dark grey core.

680 Fab. 2a. Pale pinkish-orange throughout.

681 Fab. 9a. Black surfaces with traces of a thin lighter grey wash on the inner face, dark grey core.

Context 293: Beneath Context 206. A layer of dark brown clay, cobbles and limestone fragments (first and only floor?); above natural.

682 Fab. 3a. Yellowish-grey surfaces with the remains of a thin slip that has fired off-white to a very dark grey. Grey core. Late third to fourth century.

Building 6 (Fig. 265)

Context 52: Destruction rubble. Contained a coin (Appendix 3iii, no.497) dated 367–75.

683 Fab. 1a. Black outer face and black half way up inner face, red upper half; grey core. *cf.* RBP, fig. 23.5, dated ?late fourth to early fifth century.

684 Fab. 1a. Off-white to pale brownish-buff surfaces with some heat discolouration, dark grey core. *cf.* Woodfield 1983, fig. 30.257, dated 355–370+.

685 Fab. 1a. Pale brownish-buff surfaces with heat discolouration on the exterior, grey core. The rim is triangular and hooked, a post-350 feature (Brodrick *et al.* 1971, 68).

686 Fab. 1a. Grey throughout, lightly sooted on the outer face. Date and comment as 685.

687 Fab. 1a. Dark grey to black throughout.

688 Fab. 1a. Buff surfaces with some discolouration, grey core.

689 Fab. 1a. Dark grey to black throughout.

NI One similar.

690 Fab. 1a. Pale brownish-pink surfaces, grey core,

NI Two similar.

691 Fab. 1a. Pinkish-orange surfaces, grey core. Scored marks have been made in the rim after firing.

692 Fab. 1a. Dark grey to black throughout. Sooted.

693 Fab. 3a. Brownish-grey surfaces, blue-grey core.

694 Fab. 4ba. Oxford. Orange surfaces with traces of a white slip; grey core. The form is that of a WC.7, a type popular in the fourth century. (Young 1977, 122).

695 Fab. 6. Lower Nene Valley. Patchily fired red-brown to black colour-coat on the outer face, dark brown colour-coat on the interior; grey core with cream margins. Fourth century (Howe *et al.* 1980, fig. 7.79).

696 Fab. 6. Lower Nene Valley. Patchily fired orange-brown to black colour-coat on the exterior, orange-brown colour-coat on the inner face, pale pink core. Date and comment as 695.

697 Fab. 9c. Black surfaces with a red core; burnished arcs on the outer face. Late third to fourth century.

698 Fab. 19/29. Reddish-orange throughout; lightly burnished surfaces.

699 Fab. 24. Oxford. Orange surfaces with a red core, dark orange colour-coat. The form is that of a C.51, dated 240–400+ (Young 1977, 160).

700 Fab. 25/30. Light greyish-brown surfaces with a grey core. The softness of this fabric has led to much of the surface being eroded, but in places the remains of fine burnishing can be found. The fabric is slightly micaceous.

701 Fab. 28b. Grey surfaces and core with reddish-brown margins. The outer face has a slight pimply face, the inner surface has been burnished.

702 Fab. 28a? Burnished brownish-grey exterior, light grey inner face, light blue-grey core with pinkish-brown margins. Roughly finished, in contrast to 705.

703 Fab. 37. Orange Hadham ware. Reddish-orange throughout, burnished on the inner face. Fourth century onwards.

704 Fab. 53b. Late burnished metallic greyware. Grey surfaces, almost slate grey where burnished, dark bluish-grey core. *cf.* Woodfield 1983, fig. 30.236, dated c.355–370+.

705 Fab. 53a. Late burnished metallic greyware. Light grey surfaces with a brown 'bloom', especially where burnished; blue-grey core with orange margins. The fabric resembles Fab. 25/30 but is a great deal harder.

The percentages for the destruction rubble are shown in Fig. 266. The combined total for the Oxford ware is 6.83%. Compare to Pit 637 (below). As this appears to be an early fifth-century assemblage, it is worth noting that the south wall of Building 6 was cut by Ditch 447, which was itself open and in use during the second half of the fourth century, indicating that Context 52 may relate to the destruction of Building 1 rather than Building 6.

Building 8 (Fig. 267)

Building 8 stood to the north of the formal garden. The pottery from the floor make-up levels suggests a date around 350 for its construction.

Context 575: Floor make-up layer in Room 2.

706 Fab. 1a. Black exterior and light brown inner face with a black to dark grey core. Soot is encrusted on the rim.

Context 577: Floor make-up layer in Room 2, above natural.

707 Fab. 2a. Pale pinkish-orange exterior, orange inner face with a grey core.

708 Fab. 3a. Light grey surfaces with a self-coloured slip, medium grey core with purplish-brown margins.

709 Fab. 9a. Burnished black surfaces and a dark grey core with purplish-brown margins.

- 710 Fab. 24. Oxford ware. An orange fabric with a brownish-orange colour-coat. A type C.45, dated 270–400+ (Young 1977, 158).
- 711 Fab. 24. Oxford ware. A reddish-brown fabric with a dark brown colour-coat. A type C.71, dated 300–400+ (*ibid.*, 164).

Context 587: Floor make-up layer in Room 1.

- 712 Fab. 1a. Dark grey sooted exterior, blackened buff inner face with a grey core.

NI One similar.

- 713 Fab. 1a. Patchy light grey to buff surfaces with a grey core.
- 714 Fab. 1a. Black to dark grey throughout. The rim is hooked and undercut, a post-350 feature (Brodrigg *et al.* 1971, 68).
- 715 Fab. 2a. Pale orangey-pink surfaces with a grey core. The rim and shoulder bear numerous brownish-orange painted 'squiggles'; painting is thought to be a fourth-century decorative style on this fabric.

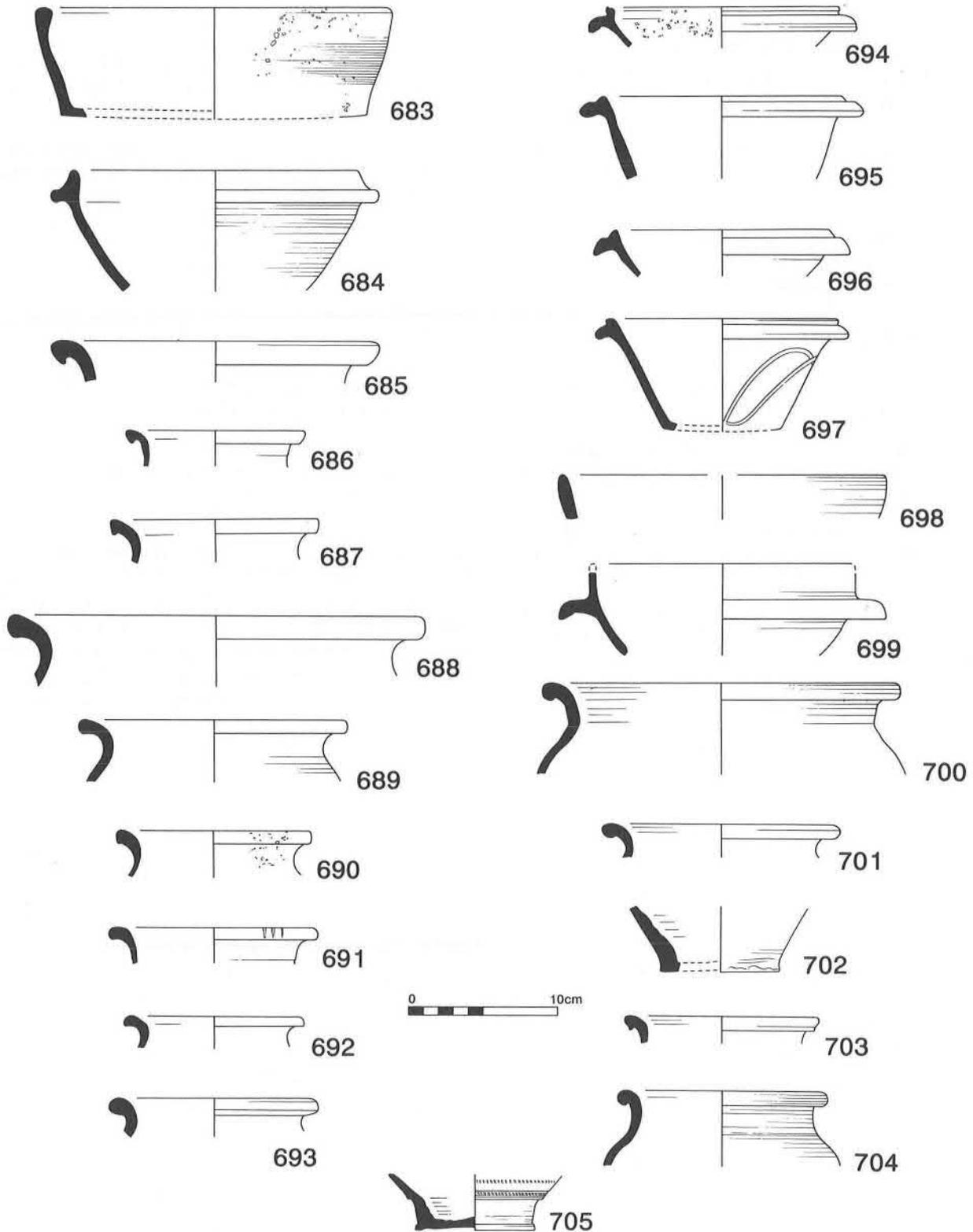


Figure 265: Phase V pottery 683-705 (Building 6), scale 1:4.

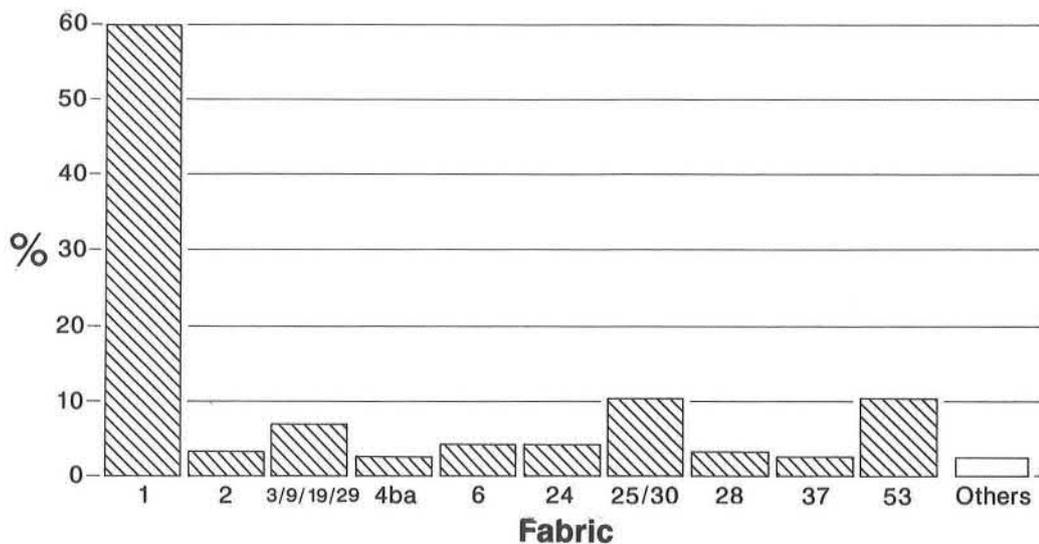


Figure 266: Histogram of the percentage of sherds in each pottery fabric from the destruction contexts of Building 6.

716 Fab. 3a. Medium grey surfaces covered with a thin cream coloured slip. Where burnished, (on the inner face and exterior arc decoration), the colour is a light yellowish-grey. Bluish-grey core.

717 Fab. 9a. Black surfaces with a grey core with reddish-brown margins. The outer face is decorated with burnished arcs or scribbles.

718 Fab. 9a. Black surfaces with a dark grey core. The outer face is decorated with burnished arcs or scribbles.

719 Fab. 24. Oxford ware. Orange fabric, slightly burnt, with a brownish-orange colour-coat. The rim is decorated with white paint. Type C.48, dated 270–400+, although most dated examples are fourth-century (Young 1977, 158).

720 Fab. 24. Oxford ware. Description as above, also slightly burnt. Type C.71, dated 300–400+ (*ibid.*, 164).

721 Fab. 28b? Extremely hard light grey ware with a blue-grey core. The vessel is burnished over the rim. Its hardness is akin to the late burnished metallic greyware Fab. 53, but conspicuous white quartz, as found in Fab. 28, is visible in the fracture.

Sixty-five sherds came from the floor make-up layers of Rooms 1 and 2. The percentages are shown in Fig. 268.

The Fishpond (Figs 269–271)

The pond was a large rectangular structure to the front of the villa building. Although the finds it contained are essentially a fourth/early fifth-century assemblage, the pond was not a sealed context and thus both earlier and later elements were present. In order that the degree of residuality can be judged all the rims, except where very alike or too small, have been illustrated and, where recognized, the residual/intrusive pieces are marked 'R'.

Coins with the date range of mid to late fourth century were found in the upper layers (Appendix 3iii, 11, 15, 36, 40, 43, 45); in the middle layers (Appendix 3iii, 12, 20, 37, 41, 46, 48) they had a date range of 337–50 and in the lowest levels (Appendix 3iii, 14, 38, 42, 47, 49) they were dated 320–346. Contexts 13 and 21 were quadrants excavated as single layers.

722–724 Fab. 1a. Black to purplish-brown heat discoloured outer faces, brownish-pink or buff inner faces, grey cores. *cf.* Woodfield, 1983, fig. 30.257, dated c.355–370+. Conts. 12, 14, 20 and 46.

725 Fab. 1a. Brownish-pink throughout, with scored wavy-line decoration. *cf.* RBP, fig. 25.29, dated fourth century onwards. Cont. 12.

726 Fab. 1a. Black to purplish-brown, sooted, heat discoloured rilled outer face, dark brownish-purple inner face and a grey core. Conts. 12 and 46.

727–729 Fab. 1a. Grey throughout with sooted outer faces. Conts. 12 and 20.

NI Two similar Fab. 1a rims.

730 Fab. 1a. Purplish-brown surfaces with some heat discolouration on the outer face, grey core. The hooked triangular rim is typical of a post-350 date (Brodrribb *et al.* 1971, 68). Cont. 43.

731 Fab. 1a. Light pink outer face with some heat blackening and soot, brownish-purple inner face and a grey core. Comments and date as 730. Conts. 12 and 46.

732 Fab. 1a. Heat-blackened outer face, blackened and lightly sooted pale greyish-pink inner face, grey core. Comments and date as 730. Cont. 42.

733 Fab. 1a. Pale orange-pink outer face, greyish-pink inner face with a grey core. Comments and date as 730. Cont. 12.

734 Fab. 1a. Pinkish-grey outer face, orange-pink inner face with a grey core. Comments and date as 730. Cont. 12.

735R Fab. 1a. Buff surfaces with a grey core. Cont. 46.

736 Fab. 2a. Pinkish-orange surfaces with a grey core. Cont. 20.

737 Fab. 2a. Pale pinkish-orange surfaces with unusual linear burnishing on the inner rim, grey core. Cont. 20.

738 Fab. 2a. Burnished, patchy light grey to orange outer face, grey inner face with a dark pink and blue-grey core. Cont. 20.

739 Fab. 3a. Speckled light and dark grey surfaces with a blue-grey core. Cont. 12.

740 Fab. 3a. Smoothed dark grey surfaces with a blue-grey core. Cont. 21.

741 Fab. 3a. Grey throughout. Cont. 14.

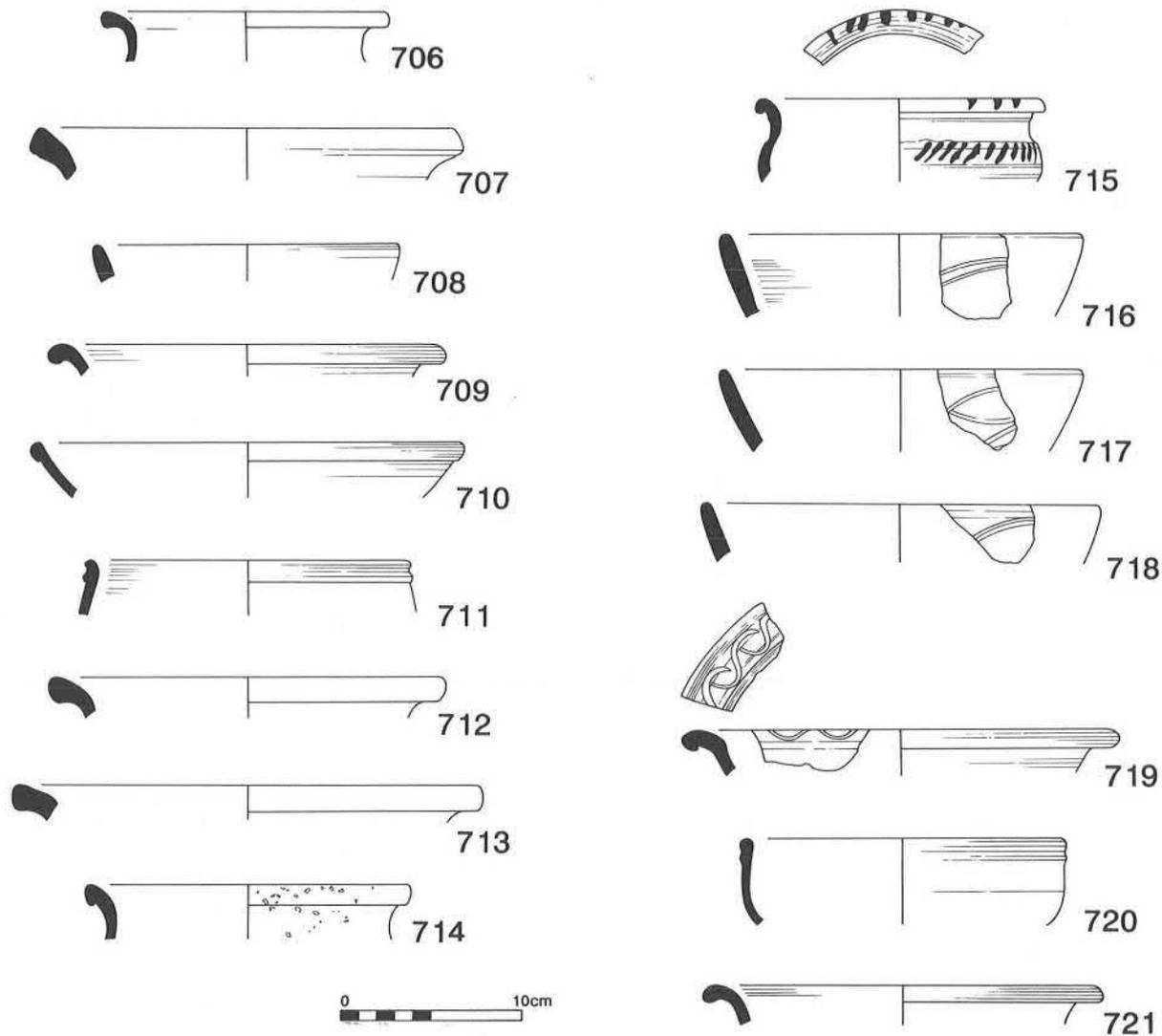


Figure 267: Phase V pottery 706-721 (Building 8), scale 1:4.

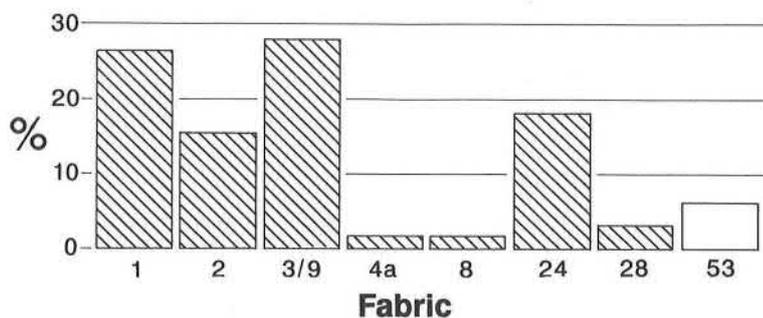


Figure 268: Histogram of the percentage of sherds in each pottery fabric from Building 8.

- 742 Fab. 3a. Speckled light and dark grey surfaces with a blue-grey core. Cont. 43.
- 743-745 Fab. 4a. Oxford M.22 mortaria, 240-400+ (Young 1977, 76). Conts. 12 and 20.
- 746 Fab. 4b. Oxford C.97, 240-400+ (Young 1977, 173). Cont. 42.
- NI The rims of three other C.97s.
- 747 Fab. 4f. Castor-Stibbington mortarium with black ironstone trituration grit and a thin cream-coloured wash. Cont. 12.
- 748 Fab. 5. Oxford Parchment ware, P.24, with the remains of red-brown painted decoration, 240-400+ (Young 1977, 87). Cont. 15.

- 749 Fab. 6. Lower Nene Valley ware; beaker base, Type 54-57, white fabric with a dark brown to black colour coat, probably fourth century (Howe *et al.* 1980, fig. 5). Cont. 46.
- 750 Fab. 6. Lower Nene Valley Ware; copy of a Dr.38, Type 83, white with an orange-brown colour coat, late third and fourth century (*ibid.*, fig. 7). Conts. 12 and 36.
- 751 Fab. 6. Lower Nene Valley Ware; small dish, Type 87, white with a black/dark brown to orange colour coat, fourth century (*ibid.*, fig. 7). Cont. 12.
- 752 Fab. 6. Lower Nene Valley Ware; jar with a 'Castor Box' lid-seating rim in a white fabric with a dark brown to orange colour coat. Probably fourth century. Cont. 12 and 14.

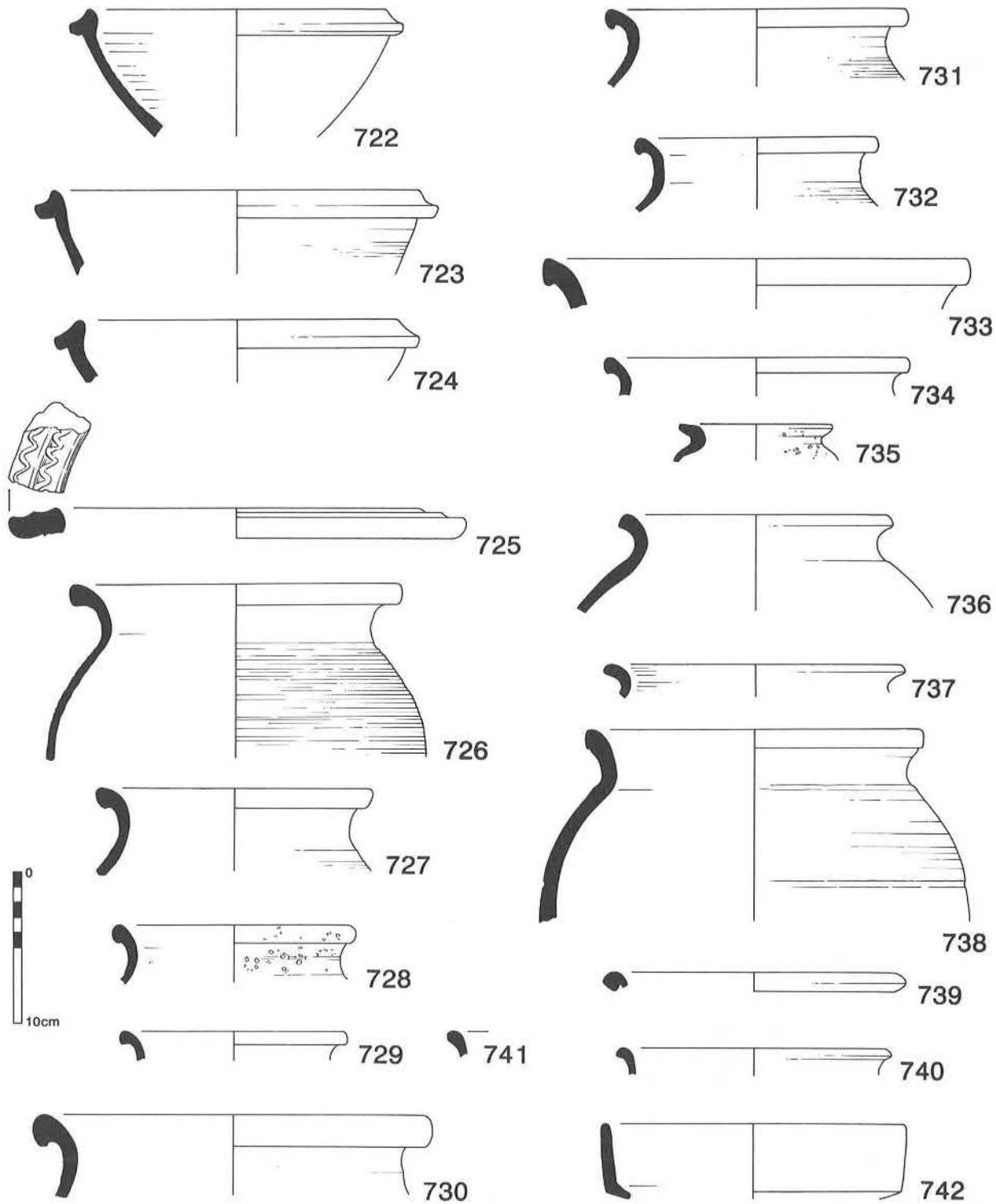


Figure 269: Phase V pottery 722-742 (Fishpond), scale 1:4.

- 753 Fab. 9a. Black burnished surfaces decorated with two matt bands on the outer face, brownish-red margins and a grey core. Conts. 12 and 46.
- 754 Fab. 9b. Black surfaces with a dark red-brown core. Cont. 43.
- 755R Fab. 10. Black throughout, handmade, smoothed, with some burnishing. Saxon or sub-Roman. Cont. 12.
- 756R ?Fab. 12. White fabric with grey surfaces, burnished on the outer face; third century? Cont. 43.
- 757R Fab. 17a. Pinkish-buff surfaces with a thin blue-grey wash

and a blue-grey core. Cont. 13.

- 758 Fab. 19/29. Pinkish-buff throughout with a white slip. Late third to fourth century. Cont. 43.
- 759R Fab. 22a. Spanish Dressel 20; hard, light reddish ware with a cream slip. In this area Dressel 20 amphorae were most common in the second century, thus this piece is probably residual. Cont. 46.
- 760 Fab. 24. Oxford ware, Type C.44, dated 270-350 (Young 1977, 158). Cont. 20.

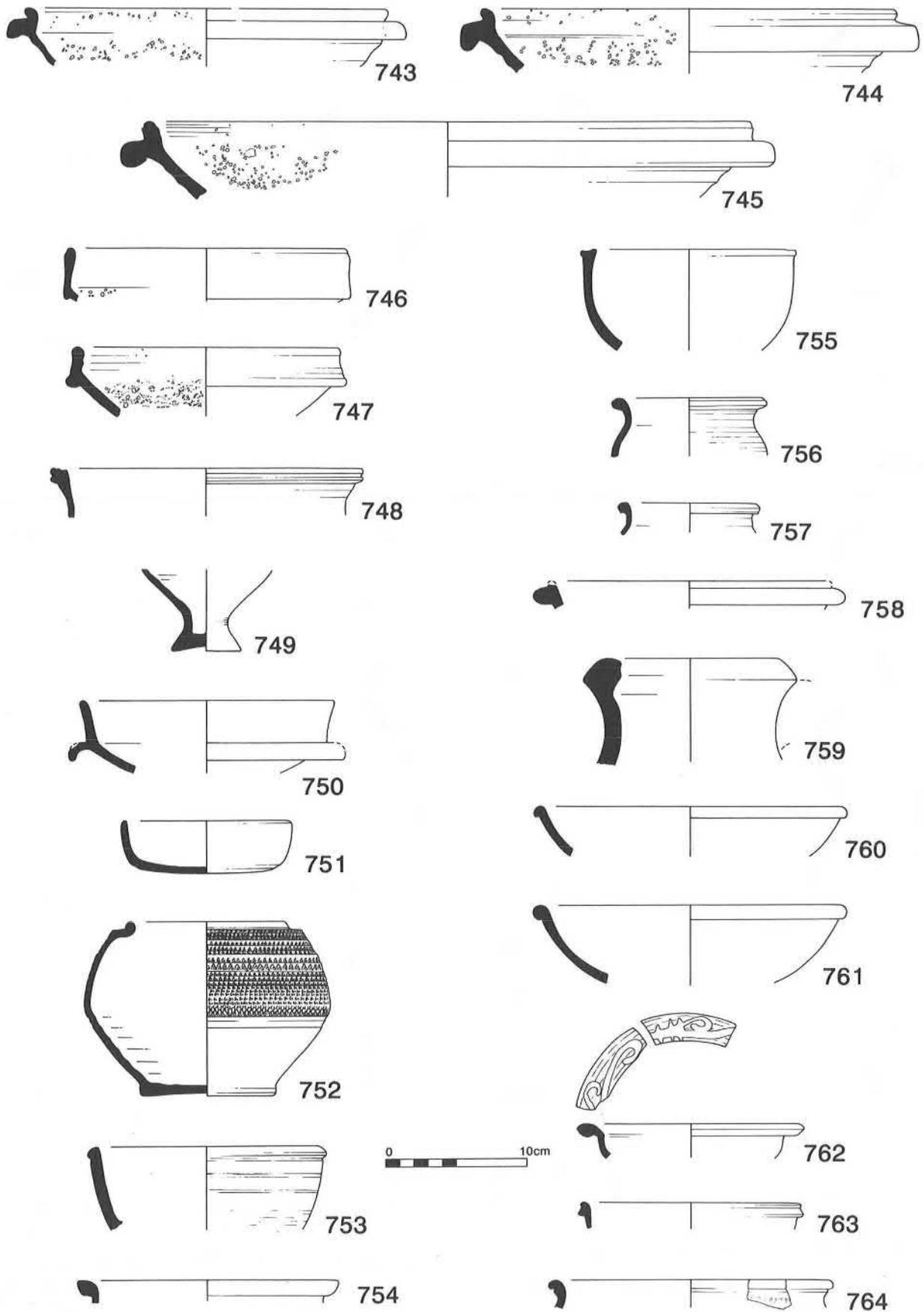


Figure 270: Phase V pottery 743-764 (Fishpond), scale 1:4.

- 761 Fab. 24. Oxford ware, Type C.45, dated 270–400+ (*ibid.*, 158). Cont. 47.
- 762 Fab. 24. Oxford ware, Type C.48, with white painted decoration, dated 270–400+ (*ibid.*, 158). Conts. 14 and 20.
- 763 Fab. 24. Oxford ware, Type C.63?, dated 340–400+ (*ibid.*, 162). Cont. 11.
- 764 Fab. 24. Oxford ware, Type C.75, dated 325–400+ (*ibid.*, 166). Cont. 43.
- 765 Fab. 24. Oxford ware, Type C.81, dated 300–400+ (*ibid.*, 166). Conts. 46 and 47.
- 766 Fab. 24. Oxford ware, Type C.82, dated 325–400+ (*ibid.*, 170). Cont. 43.
- 767 Fab. 24. Oxford ware, Type C.113?, dated 340–400+ (*ibid.*, 176). Cont. 12.
- 768 Fab. 24. Oxford ware, Type C.117, a miniature version of a C.83 with the same date range, mid to late fourth century (*ibid.*, 170 and 176). Cont. 12.
- 769 Fab. 28a. Light grey surfaces, burnished on the outer face, with a mid grey core. Cont. 12.
- 770 Fab. 28b. Light grey surfaces with a brownish-grey core. Cont. 15.
- 771 Fab. 28d. Black surfaces with an uneven, burnished line; the form is similar to the Oxford R.8.1. Perhaps it has a similar date, *ie.* 300–400+ (Young 1977, 209). Cont. 12.
- 772 ?Fab. 31. Grey ware, apparently with a self-coloured slip, which has been highly burnished to produce a 'streaky' white and grey outer surface. Possibly a small Alice Holt Class 4 (Lyne and Jefferies 1979, 45). Cont. 46.
- 773 Fab. 37. Hadham ware. Copy of a Dr.38, orange throughout with faint burnishing on both surfaces. Cont. 43.
- 774 Fab. 37. Hadham ware. Orange throughout with horizontal greyish streaks on the outer face. Cont. 11.
- 775R Fab. 43ae. Burnt black outer face with a yellowish-grey inner face and dark grey core. Late first to mid second century; residual. Cont. 12.
- 776R Fab. 45. Brownish-orange surfaces with a grey core. Perhaps mid to late first century; residual. Cont. 12.
- 777R Fab. 47a. Mid grey surfaces with dark blue-grey core; both inner and outer faces are coated with a thick white slip. Late first to mid second century; residual. Cont. 43.
- 778 Fab. 50? Greyish-brown burnished surfaces, very smooth, with a dark grey core. Cont. 14.
- 779 Fab. 52b. Very hard pale orange ware with a dark orange, highly burnished colour coat and a blue-grey core. The form is a copy of a Dr.38. Cont. 12.
- 780 Fab. 52c. Very hard, dark orange throughout, burnished on the outer face and over the rim. Cont. 12.
- 781 Fab. 53a. Medium grey throughout, burnished on the outer face. Cont. 12.
- 782 Fab. 53b. Medium grey surfaces with a dark blue-grey core. The outer face bears traces of worn burnishing, and the base has been roughly finished. Cont. 40.

This pond produced 256 sherds of pottery, much painted wall plaster and several coins, the latter covering a date range from

320 to the late fourth century. The pottery can be most closely compared to the mid to late fourth-century Group 16 from Caldecotte and the late fourth to ?early fifth-century Group 17 from Bancroft (RBP, 51 and 54).

There are approximately sixty-six vessels in the assemblage, including five that are residual and one that is intrusive. This number is composed of twenty-four wide-mouthed jars or necked bowls, twenty-three bowls or dishes, eight mortaria (an unusually high number), one flagon/bottle, one amphora (probably residual), three lid-seated cooking-pots (residual), one beaker and five indeterminates.

The dominant fabric in the assemblage is that of the shell-tempered ware, Fabric 1, which amounts to 28.52%. In comparison, Group 17 produced 22.45% and the mid to late fourth-century Group 16 contained 31.88%. The pond material consists of four bowls and eleven wide-mouthed jars, plus a ?residual vessel (735). The bowls and hooked triangular-rimmed jars are typical of a post-350 date.

Colour-coated Oxford ware, including the mortaria, is the second largest group, composed of nine fineware bowls and four mixing bowls; in total it composes 19.93%. Separately the orange Oxford finewares compose 16.8% of the 256 sherds, similar to the 14.48% in Group 16 but unlike the 10.2% in Group 17. The percentage is in fact closest to the 15.85% produced by the mid fourth-century Group 14.

Local sand-tempered ware composes the third most dominant group, with 11.72%. The four possible jars/necked bowls in this fabric are represented by small rim pieces only, but the dishes, three in total, are more complete (e.g. 753). Group 16 contained 14.48% and Group 17 12.24% in this ware.

Nene Valley colour-coated ware is fairly well represented, with a total amounting to 8.98%, composed of only four vessels: a beaker, a bowl, a dish and a tall rouletted vessel with a 'Castor Box' type rim (752). In comparison, Groups 16 and 17 produced 11.59% and 5.44% respectively.

The mortaria are extremely well represented by eight vessels, totalling 5.86%. Seven of these were products of the Oxfordshire kilns (three whiteware M.22s and four orange C.97s) and one was from the Lower Nene Valley.

The quantity of soft pink grogged ware in the assemblage is surprisingly low, as it comes to only 4.69%, composed of three wide-mouthed necked bowls or jars. Although this compares favourably with the mid fourth-century Group 15, which contained 4.34% in SPG, this percentage was thought to be untypically low owing to the small size of the sample group. In contrast, Groups 16 and 17 had 10.14% and 12.92% respectively in this ware.

The pond also contained pottery only paralleled in Pit 637 (p.505). This ware is very hard and highly burnished and may be related to the East Midlands burnished ware tradition (Todd 1968), especially the greyware Fab. 53, which composed 3.52%. It also produced 1.56% of a deeply burnished orange ware, Fab. 52. The origins of these wares are unknown, but they are not thought to be local.

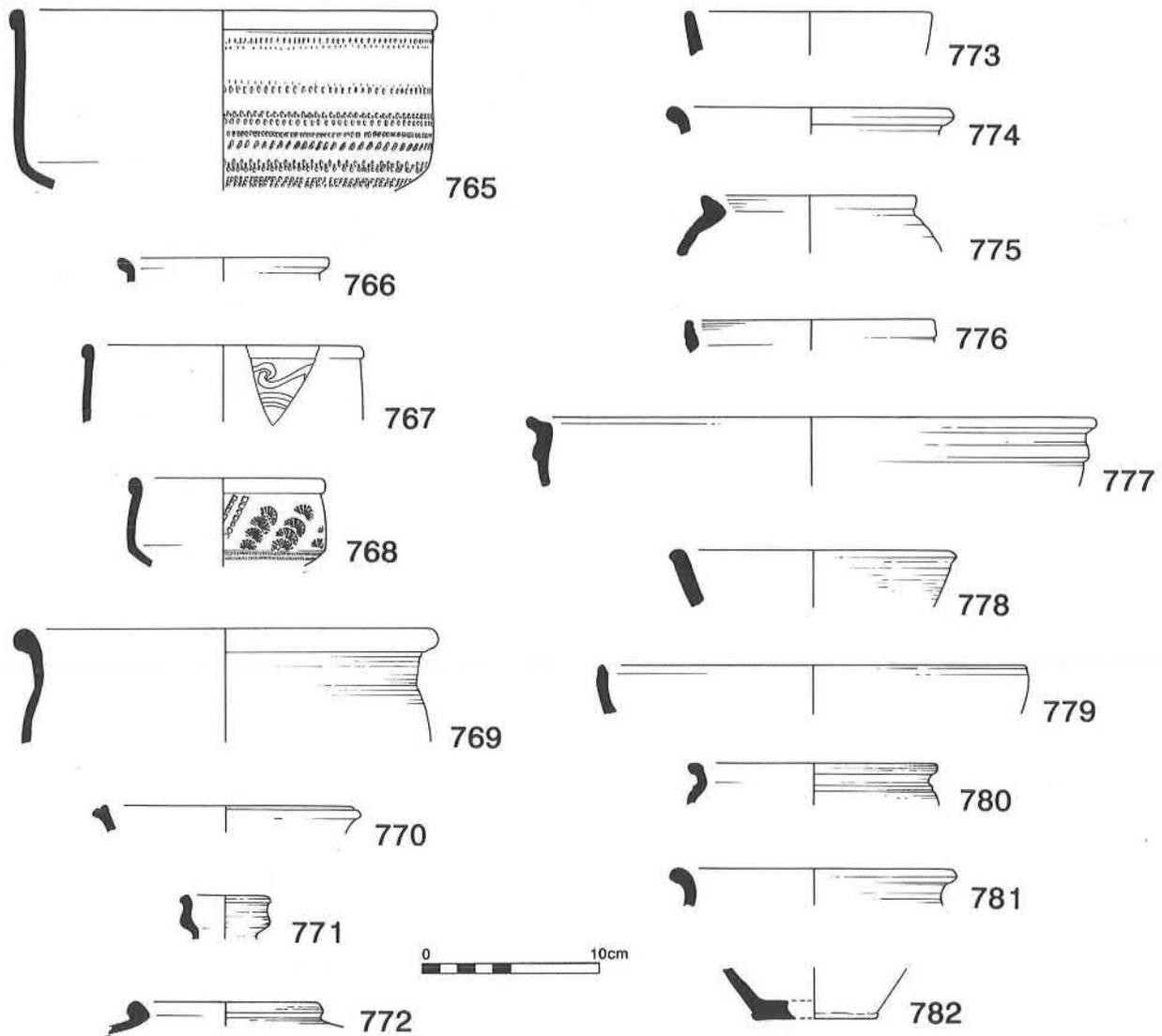


Figure 271: Phase V pottery 765-782 (Fishpond), scale 1:4.

With the exclusion of the residual and intrusive pieces the local wares account for 46.88% of the group whilst the non-local wares come to 45.7%; the latter originate from Oxfordshire, the Lower Nene Valley, Hadham in Hertfordshire and possibly the Alice Holt kilns on the Surrey-Hampshire border (only 0.78% of the group). There is also a single body sherd of Dorset BB1, which may or may not be residual, a rim of possible BB2 dish from an unknown but non-local source, and the amphora pieces which are continental but again may be residual.

Ditch 447 (Fig. 272)

This was the drainage ditch leading from the western bath suite of Building 1, cutting through the east side of Building 6 and Rooms 3 and 6, Building 7. It was referred to in the 1978 excavations as 'Ditch G'.

Context 364: A section cut north of Room 3, Building 7.

783 Fab. 9a. A pedestal base with good black surfaces. The core has wide brownish-buff coloured margins with a thin grey central vein.

784 Fab. 24. An Oxford C.45 type rim, dated 270-400+ (Young 1977, 158).

785 Fab. 37. An orange Hadham rim, perhaps copying the Oxford C.49, (dated 240-400+) which in turn may have been derived from the Dr.36 and Curle 15.

Context 71: That part of Ditch 447 which cut through the east wall of Building 6.

786 Fab. 1a. Black outer face with a black to dark brown inner face and a dark grey core.

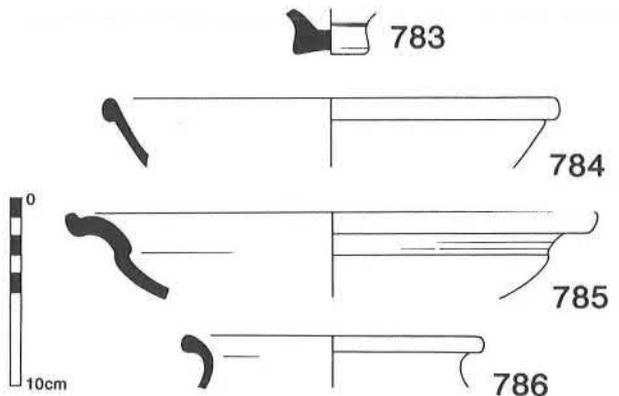


Figure 272: Phase V pottery 783-786 (Ditch 447), scale 1:4.

The Enclosure Ditch, 260/511/708

This substantial feature ran to the west (260) and north (511/708) of Building 1, cutting through the west end of Building 7, the trackway, and several other earlier features. It appeared to form an enclosure around Building 1 and its associated structures.

Ditch 260 (Fig. 273)

The western arm of the enclosure ditch, which cut through Building 7 and Ditch 263. It was designated as 'Ditch E' in the 1978 excavations (RMK, 67), where it was wrongly dated to the mid to late first century. Context 18, the fill of 260 south of Building 7, contained Saxon sherds, as did Context 245, a possible Saxon feature cut into the ditch (p.205).

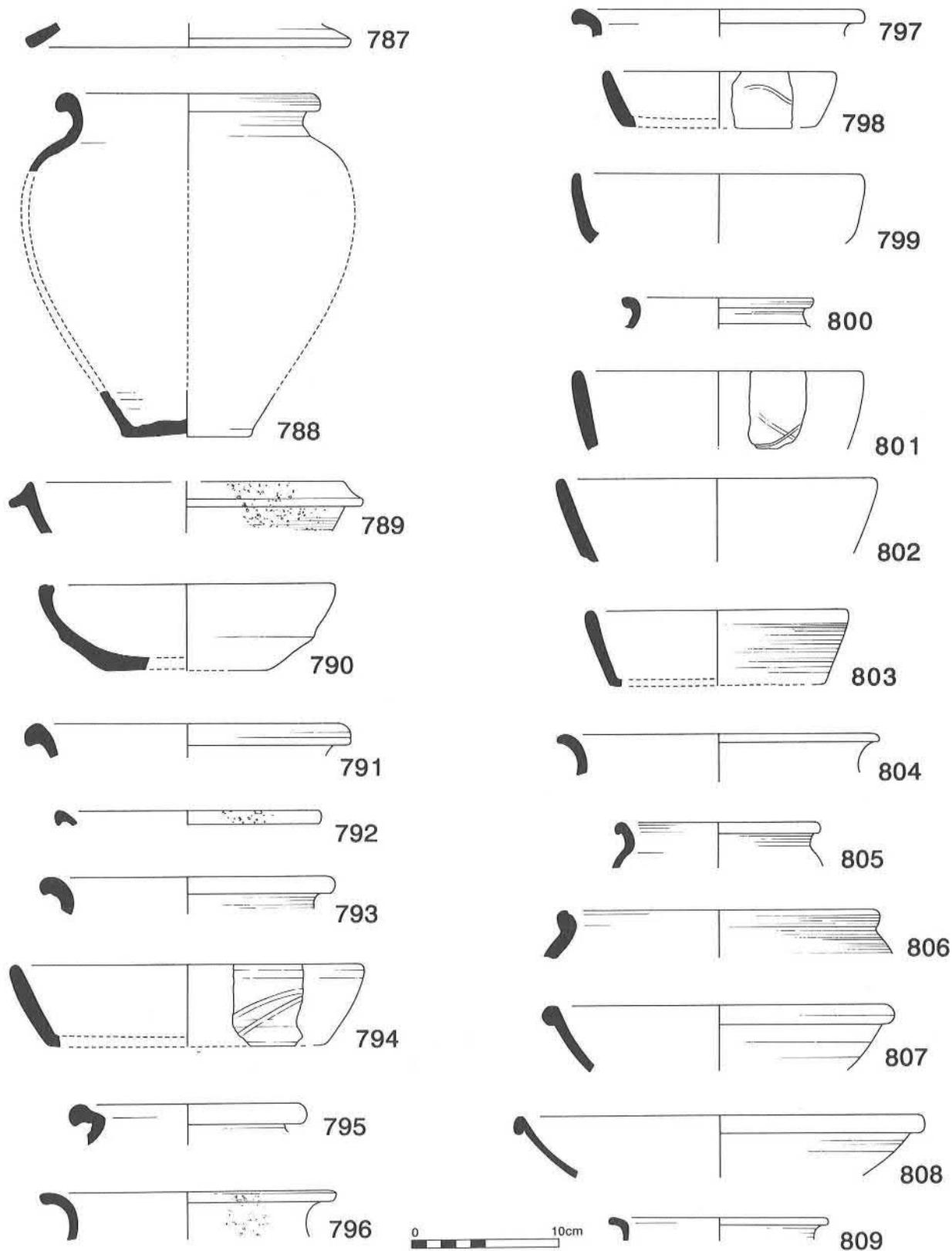


Figure 273: Phase V pottery 787-809 (Ditch 260), scale 1:4.

Context 258: Fill of section cutting Ditch A and the wall of Building 7.

787* Fab. 46a. Dark brown surfaces with a black core. Residual from Ditch 263.

788 Fab. 53f. Very hard fabric with worn mid grey surfaces showing darker burnishing streaks; the core is blue-grey with red-brown margins.

Context 259: Lowest fill.

789 Fab. 1a. Very pale pinkish-grey inner face and rim with a darker brownish-grey exterior and dark grey core. *cf.* Woodfield 1983, fig. 30.257, dated c.355–370+.

790R Fab. 18c. Oxford white ware; shallow bowl copying the wall-sided mortarium form M.14. Presumably of the same date, *ie.* 180–240. Burnt.

791 Fab. 19/29. Light orange surfaces covered with a worn white slip; dark orange core.

Context 286: Produced a coin dated 364–78 (Appendix 3iii, no.487).

792 Fab. 1a. Light orange throughout; the triangular, hooked rim is typical of a post-350 date (Brodrigg *et al.* 1970, 68).

Context 526:

793 Fab. 2a. Light pink surfaces with a blue-grey core.

794 Fab. 9a. Black surfaces decorated on the outer face with disordered arcs; brownish margins with a grey core.

795R Fab. 9xy. Black to light grey surfaces with pinkish-red margins and a blue-grey core.

Context 558:

796 Fab. 1a. Heat blackened brownish-pink surfaces with a grey core.

797 Fab. 1a. Light grey throughout, sooted on the outer face.

798 Fab. 3a. Mid grey surfaces with a dark grey core, lightly sooted on the outer face.

799 Fab. 6. Lower Nene Valley ware. Off-white fabric with an orange-brown colour-coat. Fourth century (Howe *et al.* 1980, fig. 7.87).

800 Fab. 6. Lower Nene Valley ware. Off-white fabric with a dark orange colour-coat. Fourth century (*ibid.*, fig. 7.75–77).

801 Fab. 9a. Black surfaces with a grey core, trace of arc decoration on the outer face.

802 Fab. 9a. Black to grey sooted outer face with a mid grey burnished inner face, grey core.

803 Fab. 9b. Burnished black surfaces with a red-brown core.

804 Fab. 9a. Black surfaces with a grey core; BB1 cavetto-type rim.

805 Fab. 9b. Black surfaces burnished on the outer face and inner upper rim; dark orange-red core.

806R Fab. 46g. Dark brown to black outer face, orange-brown inner face with a grey core.

807 Fab. 52a. Extremely hard fabric with a burnished brownish-orange colour-coat over light pinkish-brown surfaces, dark grey core.

808 Fab. 52b. As 806, with a light grey core.

809 Fab. 53e. Light to mid grey surfaces, burnished on the inner upper rim; dark blue-grey core.

Percentages for the 136 sherds from Ditch 260 are shown in Fig. 274. The percentage for shell-tempered Fabric 1 within this group is, like that of Ditch 511, at variance with other local fourth-century groups (14.71% and 14.26% respectively). Soft pink grogged ware accounts for 11.76%, which is believed to be usual for a mid to late fourth or late fourth to early fifth-century date, and the same applies for the local sand-tempered wares at 13.98%. The 4.41% of Lower Nene Valley colour-coated ware is similar, not surprisingly, to that of Group 17 (RBP) with 5.4% (they are in fact from the same feature) dated ?late fourth to early fifth century. That said, there are differences; the percentage for Fabric 1 is an example, as is the figure for Oxford ware, which is unusually low, 5.15% as compared to 10.2% in Group 17. The quantity of Saxon material also varies, with Group 17 containing 9.5% whilst Ditch 260 produced 18.38%. The Saxon pottery is in fact the dominant fabric type within Ditch 260.

Excluding the residual material, there are a minimum of twenty-nine vessels within the group, including six Saxon pots (one bottle, two carinated bowls and three urns). The Roman material is composed of thirteen wide-mouthed jars or necked bowls, six dog-dishes and four bowls (one of which joins in Ditch 511). Surprisingly, there are no mortaria fragments.

Local wares in the group, including the ?Harrold shellies and excluding the Saxon sherds, compose 40.45% of the total. Non-local British wares amount to 10.29%, coming from the Oxford kilns and the Lower Nene Valley. The remainder are; Saxon - 18.38%; origin unknown - 13.96%; residual material, including some samian - 16.91%.

Ditch 511 (Figs 275–280)

That part of the enclosure ditch to the north of Building 1. It joined with Ditch 260 which lay to the west of the building; from the junction of these two features, Ditch 511 continued

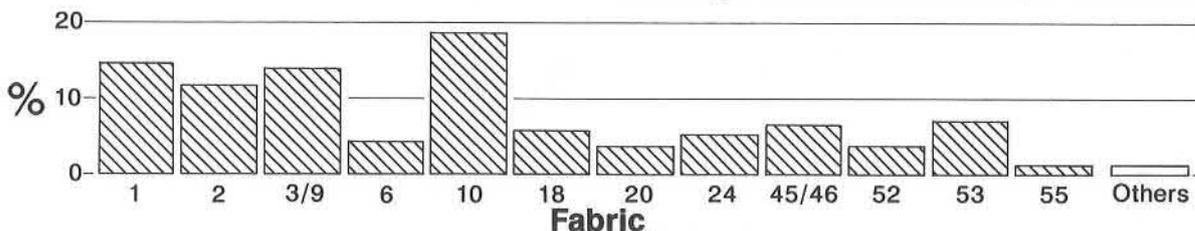


Figure 274: Histogram of the percentage of sherds in each pottery fabric from Ditch 260.

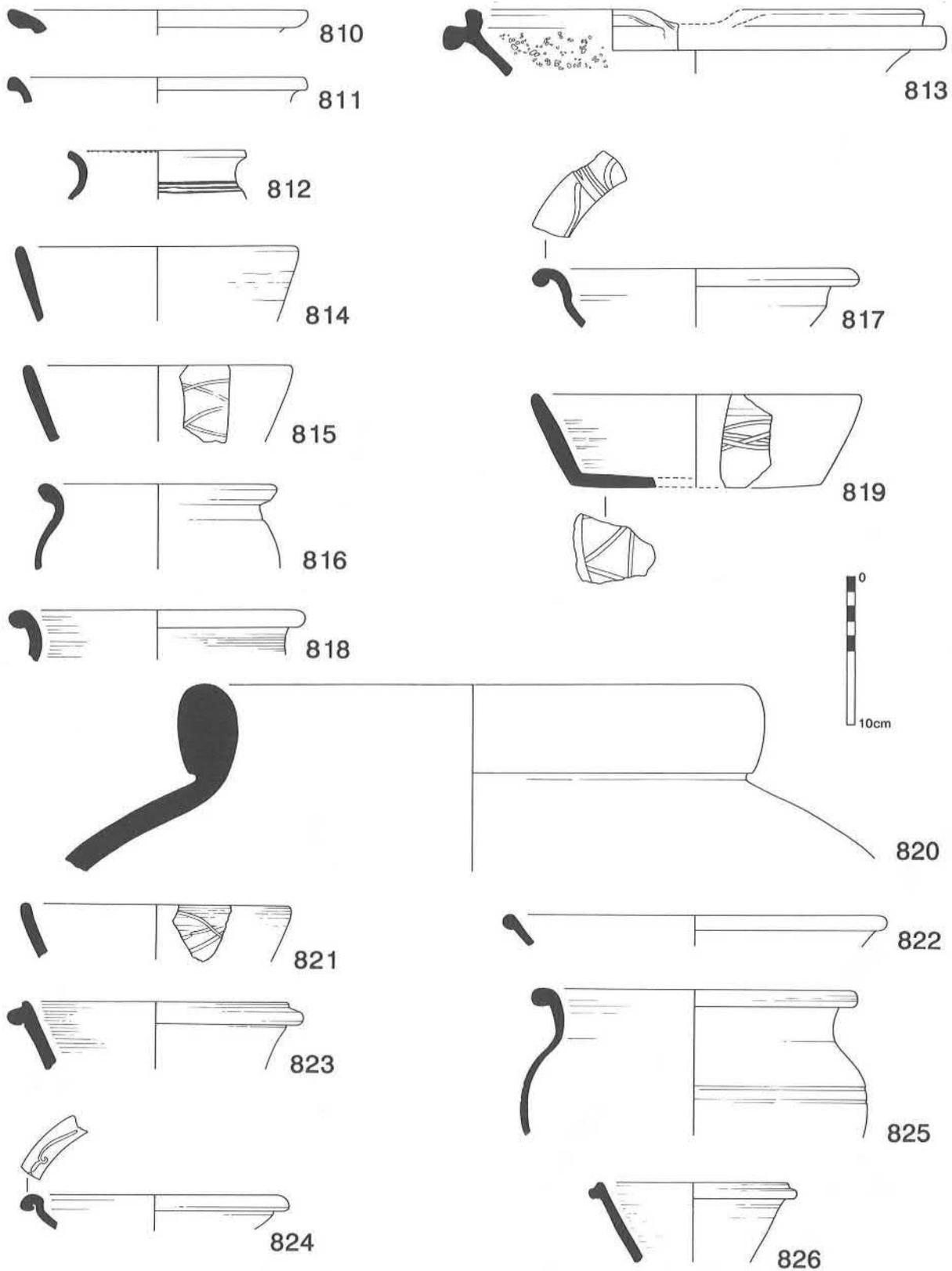


Figure 275: Phase V pottery 810-826 (Ditch 511), scale 1:4.

for approximately 40 m, cutting 561, 698 and Trackway 770 and its roadside ditch.

Context 512: Upper layer.

810, 811 Fab. 1a. Brownish-pink surfaces with a grey core.

812 Fab. 2a. Pinkish-buff surfaces decorated with bands of brownish-orange paint, blue-grey core.

813 Fab. 4a. Oxford M.22 whiteware mortarium, dated 240–400+. This was the principal mortarium product from about 300 (Young 1977, 76).

814 Fab. 9a. Black surfaces with a grey core.

815 Fab. 9b. Black to dark grey surfaces decorated on the outer face with burnished, disordered overlapping arcs; dark red core.

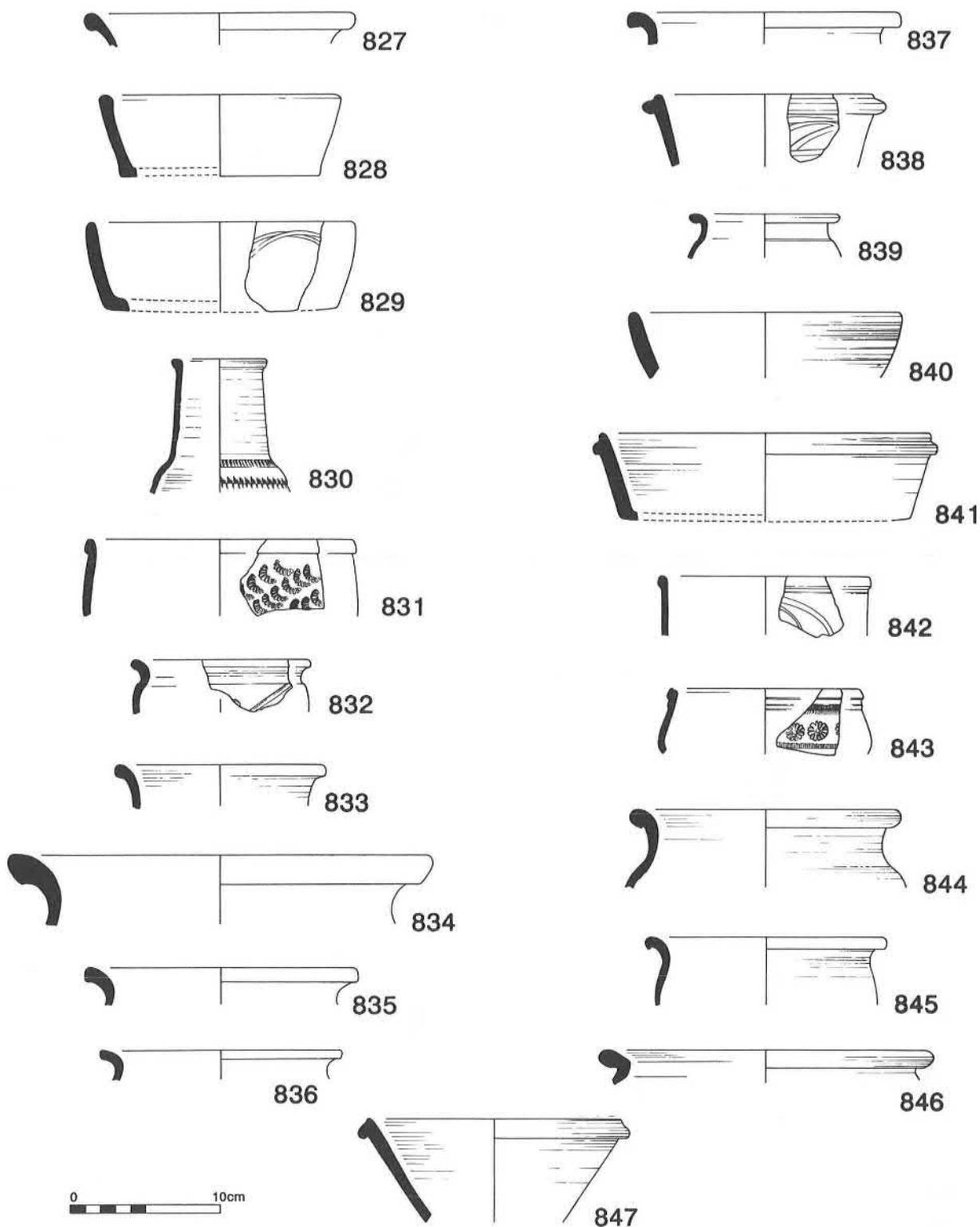


Figure 276: Phase V pottery 827-847 (Ditch 511), scale 1:4.

- 816 Fab. 24. Oxford C.18 with a worn orange colour-coat, dated 270-400+ (*ibid.*, 152).
- 817 Fab. 24. Oxford C.48 with pale orange painted decoration, dated 270-400+ (*ibid.*, 158).
- 818 Fab. 53d. Very hard pale yellowish-grey ware, burnished over the rim and with clear burnished stripes on the upper inner face.
- 819 Fab. 53d. Highly burnished very hard pale grey ware. Disordered burnished arcs and lines were used to decorate a matt panel on the outer face and on the inner base.

Context 531: Middle layer.

- 820 Fab. 1a. Enormous shell-tempered rim with buff surfaces and a grey core. Joins in Context 555. *cf.* Woodfield 1983, fig. 30.258, dated c.355-370+.
- 821 Fab. 9a. Black to dark grey burnished surfaces with a matt, arc-decorated panel on the outer face and a brown core with a blue-grey central vein. Also found in Context 532.
- 822 Fab. 24. Oxford C.45 with a worn coloured coat and in an extremely eroded state. 270-400+ (Young 1977, 158).

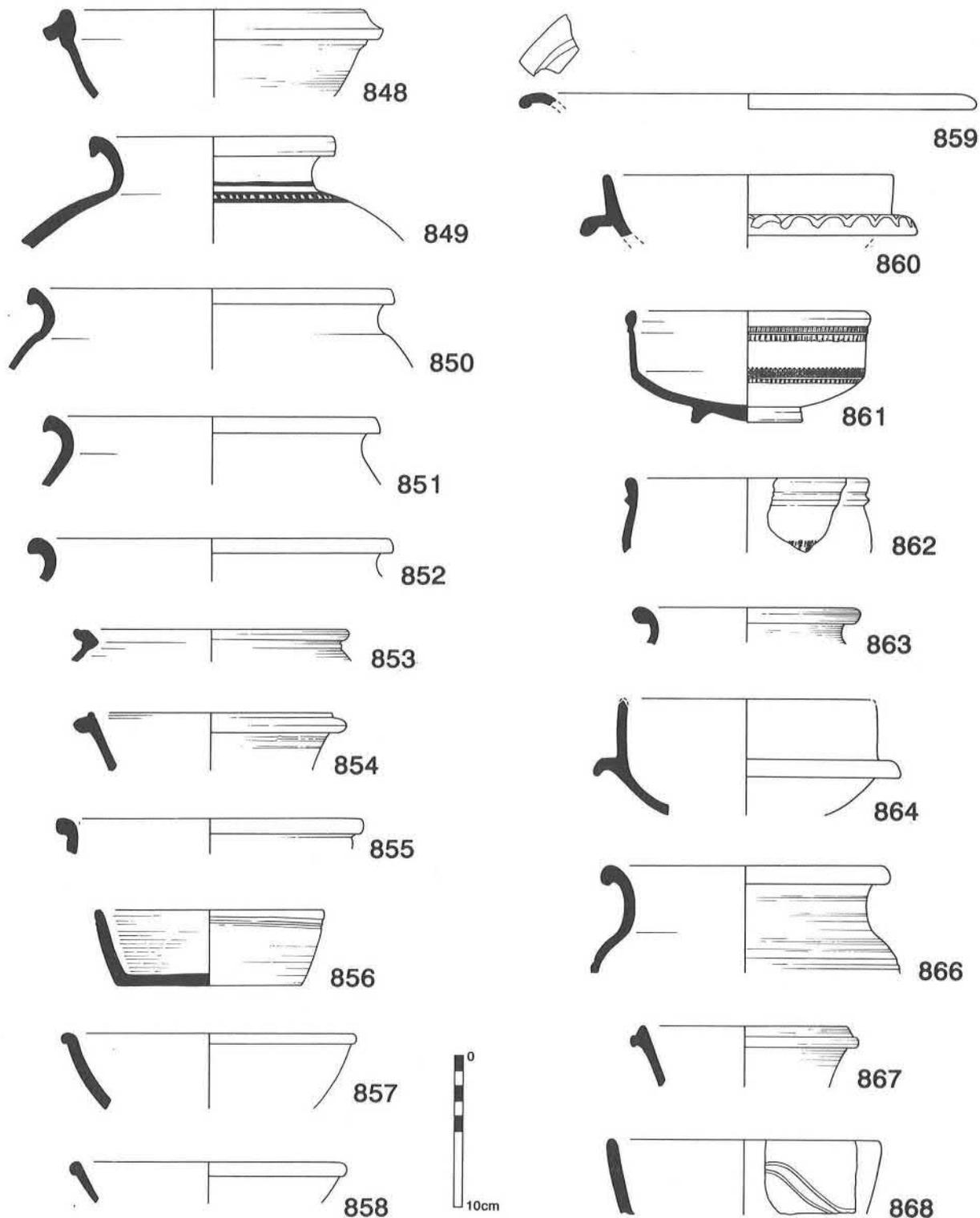


Figure 277: Phase V pottery 848-868 (Ditch 511), scale 1:4.

Context 532: Lowest layer.

823 Fab. 9a. Black burnished inner face and flange, pale yellowish-grey outer face, red margins with a grey core. Late third to fourth century.

824 Fab. 24. Oxford C.48 with white painted decoration, dated 270-400+ (Young 1977, 158).

825 Fab. 28b/53b. Dark grey outer face, light grey interior with red margins and a blue-grey core. The vessel is extremely hard and well-fired. There is some slight burnishing on the cordon and on the inner upper rim.

826 Fab. 53c. Lightly burnished pale grey outer face, black to dark grey slipped and burnished inner face and rim, brownish-grey core. Late third to fourth century.

Context 544: This section excavated as a single fill.

827 Fab. 1a. Brownish-pink surfaces, heat-discoloured over the rim and on the outer face, grey core.

828 Fab. 1a. Light pink surfaces, heat-discoloured on the lower portions of both faces. *cf.* RBP, fig. 22.3, dated mid to late fourth century.

- 829 Fab. 9a. Black surfaces decorated on the outer face with disordered burnished arcs, brown margins with a dark grey core.
- 830 Fab. 17d. Fine, extremely hard ware with brownish-orange surfaces, burnished and rouletted on the outer face, grey core. The form is like the Oxford C.23 and is presumably of the same date, 270–400+.
- 831 Fab. 24. Oxford C.70 decorated with demi-rosettes; burnt. Dated 325–400+ (Young 1977, 164).
- 832 Fab. 37. Hadham. Dark orange throughout, burnished and decorated with a groove and dimple on the outer face. Probably mid to late fourth century.
- 833 Fab.37? Deep orange sand-tempered fabric with burnished light to mid brown surfaces; very clear burnishing lines.

Context 554: Upper layer.

- 834–836 Fab. 1a. Patchy light grey to black coloured surfaces and cores with some heat discoloration and sooting.
- 837 Fab. 2a. Light pink surfaces with a grey core.
- 838 Fab. 3a. Mid grey surfaces and core with burnished arc decoration on the outer face, red-brown margins and a grey core.
- 839 Fab. 6. Lower Nene Valley ware. Creamy-white fabric with an orange to dark brown colour coat. Fourth century (Howe *et al.* 1980, fig. 7.75–77).
- 840 Fab. 9a. Black surfaces, lightly rilled on the outer face, red-brown margins with a grey core.
- 841 Fab. 9a. Smoothed fine black surfaces, burnished over the rim, flange and inner face; brownish-grey core. Joins in Context 573.
- 842 Fab. 24. Oxford C.82 with white painted decoration, dated 325–400+ (Young 1977, 170).
- 843 Fab. 24. Oxford C.115.2 with impressed rosette decoration, dated 350–400+ (*ibid.*, 176).
- 844 Fab. 36. Hadham. Mid grey to black linear burnished surfaces with a light brown core and pale grey margins.
- 845 Fab. 53b. Very hard dark grey burnished surfaces with a blue-grey core.
- 846 Fab. 53b. Very hard light grey burnished surfaces with a blue-grey core.
- 847 Fab. 53d. Very hard blue-grey burnished surfaces, blue-grey core.

Context 555: Lowest layer.

- 848 Fab. 1a. Light pink inner face, patchy brown and black outer face, grey core. *cf.* Woodfield 1983, fig. 30.257, dated c.355–370+.
- NI Three large rim pieces of 820 were also found in this context.
- 849 Fab. 2a. Pinkish-buff surfaces decorated with red-brown paint, blue-grey core.
- 850 Fab. 2a. Pinkish-orange surfaces with a blue-grey core.
- 851,852 Fab. 2a. Pale creamy-pink surfaces with a blue-grey core.
- 853 Fab. 2a. Burnished pinkish-orange rim and outer face, pale creamy pink inner face, blue-grey core. An unusual rim form

and good quality finish. Residual.

- 854 Fab. 3a/c. Light grey surfaces, slightly burnished, with a brownish-pink to dark grey core. Late third to fourth century.
- 855 Fab. 6. Lower Nene Valley. Pale pink surfaces with thick orange margins and off-white core; orange-brown colour coat. Fourth century (Howe *et al.* 1980, fig. 7, 75–77).
- 856 Fab.9e/14? Very like BB1 or closely allied fabric. Black surfaces with over-fired white patches, highly burnished on the inside face, black core. The vessel appears to have been wheel-made, although the grooving on the outer face is uneven. Residual?
- 857 Fab. 24. Oxford C.44 with a slightly hooked rim, dated 270–350 (Young 1977, 158).
- 858 Fab. 24. Oxford C.45, dated 270–400+ (*ibid.*, 158).
- 859 Fab. 24. Oxford C.48 with white-painted decoration, dated 270–400+ (*ibid.*, 158).
- 860 Fab. 24. Oxford C.52 with white-painted decoration, dated 350–400+ (*ibid.*, 160).
- 861 Fab. 24. Oxford C.64, dated 300–400+ (*ibid.*, 162).
- 862 Fab. 24. Oxford C.71, dated 300–400+ (*ibid.*, 164).
- 863 Fab. 37. Hadham. Deep orange throughout with a slightly darker burnished outer face.
- 864 Fab. 37. Hadham. Deep orange throughout, slightly redder in the core; burnt on the outer face.
- 865 Fab.46da? Handmade burnished platter with black surfaces and a dark grey core. Residual.
- 866 Fab. 53b. Yellowish-grey surfaces, burnished on the outer face, red margins with a blue-grey core.
- 867 Fab. 53d. Very hard burnished blue-grey/white streaky surfaces with a blue-grey core.
- 868 Fab. 53e. Very hard dark grey surfaces, burnished on both faces, with a matt zone on the exterior upon which burnished decorative arcs are visible. Dark grey core.

Context 556: Top layer.

- 869 Fab. 1a. Black surfaces with a dark grey core.
- 870 Fab. 2a. Pale orange-pink surfaces with a blue-grey core.
- 871 Fab. 9a. Black surfaces, burnished on the inner face and sooted on the exterior; dark grey core.
- 872 Fab. 9g/12. Black surfaces, burnished on the inner face, with a red-brown core. Residual.
- 873 Fab. 24. Oxford C.69 with white painted decoration, dated 325–400+ (Young 1977, 164).
- 874 Fab. 24. Oxford C.75, dated 325–400+ (*ibid.*, 166). This vessel is unusually micaceous and rather roughly finished.
- 875 Fab. 37. Hadham. Deep orange throughout, burnished on the outer face and over the rim.
- 876 Fab. 37. Hadham. Burnished dark brownish-orange outer face and core, ‘pimply’ red-brown inner face.
- 877 Fab. 52d. Fairly hard light reddish-brown ware with burnished surfaces and a dark grey core.
- 878 Fab. 52e. Soft, worn, dark reddish-orange ware with traces of a finer self-slipped or burnished surface.

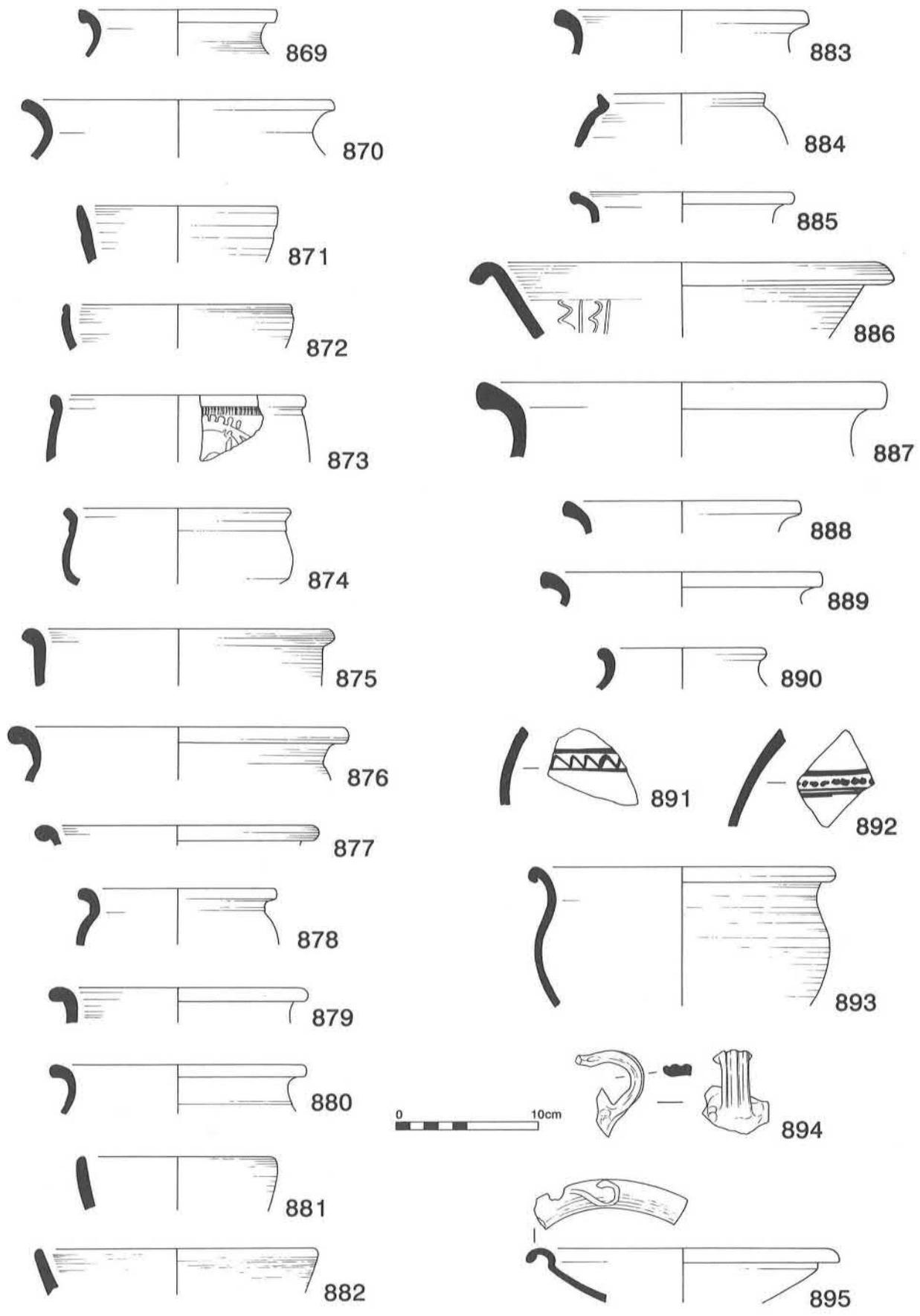


Figure 278: Phase V pottery 869-895 (Ditch 511), scale 1:4.

879 Fab. 53b. Very hard burnished ware with a dark grey burnished inner face and blue-grey outer face and core.

Context 557: Middle layer.

880 Fab. 1a. Black outer face, black to light brown inner face, dark grey core.

881 Fab. 3a. Mid grey surfaces, burnished on the outer face, light brown margins with a grey core.

882 Fab. 9a. Black highly burnished surfaces, sooted on the outer face; dark grey core. Dish or lid? 893 also joins sherds in this context.

883 Fab. 9b. Black to dark grey surfaces, overfired to white on the outer rim and lightly burnished on the inner upper rim; reddish-brown core.

884 Fab. 43ae. Dark grey outer face, greyish-buff inner face, grey core. Residual.

885 Fab. 47c? Light grey and white patchy outer face, light grey inner face and core. Residual.

886 Fab. 53d. Very hard mid grey burnished surfaces with a decorated matt panel on the inner face.

Context 559: Lower layer.

887 Fab. 1a. Very pale brownish-pink surfaces, discoloured to a dark brown on the outer rim and lower inner area; grey core.

888 Fab. 1a. Dark brown surfaces with the brownish-pink margins showing through in places; grey core.

889 Fab. 2a. Burnt; burnished surfaces, dark brownish-pink throughout.

890 Fab. 2a. Pinkish-orange surfaces with a grey core.

891,892 Fab. 2a. Body sherds with pale pink surfaces and blue-grey or orange cores, decorated with brownish-orange paint.

893 Fab. 3a/9a. Grey to black burnished outer face, yellowish-grey inner face, blue-grey core. Joins in Context 557.

894 Fab. 17d. Hard fabric, orange throughout, with a ribbed handle. Unusual. Residual?

895 Fab. 24. Oxford C.48 with white painted decoration, dated 270–400+ (Young 1977, 158).

Context 573: Excavated as one layer.

896 Fab. 1a. Pinkish-brown rilled outer face, pinkish-orange inner face with a grey core. See 848.

897 Fab. 1a. Pinkish-orange outer face, dark brown inner face, grey core.

898 Fab. 1a. Light grey outer face, blackened over the rim, off-white inner face, grey core.

899 Fab. 3a/53. Light to mid grey surfaces with disordered burnished arc decoration and some sooting on the outer face, traces of burnishing or smoothing on the inner face; blue-grey core.

900 Fab. 9a. Black surfaces, pinkish-brown margins, grey core.

901 Fab. 24. Oxford C.18, dated 270–400+ (Young 1977, 152).

902 Fab. 53b. Very hard mid grey fabric, smoothed on the inside face and burnished on the rim and on the lower third of the exterior. Late third to fourth century.

Context 581: Excavated as one layer.

903 Fab. 1a. Black surfaces with a dark grey core.

904 Fab. 2a. Worn cream to grey thin surface-colour over a pale orange body with a blue-grey core.

905 Fab. 2a. Greyish-pink surfaces with a blue-grey core.

906 Fab. 4a. Oxford mortarium M.22, dated 240–400+ (Young 1977, 76).

907 Fab. 5. Oxford parchment ware P.24 with brownish-orange painted bands, dated 240–400+ (*ibid.*, 87).

908 Fab. 9a. Black surfaces with some sooting and burnished decoration on the outside face.

909 Fab. 24. Oxford C.18?, dated 270–400+ (*ibid.*, 152).

910 Fab. 24. Oxford C.51?, dated 240–400+ (*ibid.*, 160).

911 Fab. 32b. Buff surfaces with an orange core. Residual?

912 Fab. 37. Hadham. Deep orange throughout, burnished on the outer face and inner upper rim.

913 Fab. 37. Hadham. Deep orange burnished surfaces with a brown core, grey within the thicker areas of the pot.

Context 604: Excavated as one layer.

914 Fab. 1a. Light grey slightly blackened outer face, very pale greyish-pink inner face with a grey core.

915 Fab. 1a. Light grey throughout.

916 Fab. 1a. Black to dark grey surfaces and core, partially overfired to white on the outer face.

917 Fab. 2a. Light pink surfaces with a blue-grey core.

918 Fab. 4g/18g. White surfaces with a light grey core. Probably a Verulamium region mortarium. Residual.

919 Fab. 6. Lower Nene Valley ware. White fabric with an orange colour-coat. Fourth century (Howe *et al.* 1980, fig.7, 75–77).

Context 673: Excavated as one layer.

920 Fab. 1a. Black to dark grey surfaces with a dark grey core. The rim is triangular, a feature believed to be post-350 (Brodrigg *et al.* 1971, 68).

921 Fab. 1a. Light grey outer face, rim and core, with an off-white inner face.

NI Two small rim fragments from similar Fab. 1a vessels.

922 Fab. 1a. Light grey throughout; the vessel has a hole cut through the shoulder.

923 Fab. 1a. Light grey outer face and core with a pale greyish-buff inner face. Residual?

924–930 Fab. 2a. Pale orange to light pink surfaces with blue-grey, pale grey or brownish-pink cores.

931 Fab. 3a. Mid grey surfaces, decorated on the outer face with thin rilling and traces of burnished arcs, whilst the inner face has been smoothed on the lower section; blue-grey core.

932 Fab. 4a. Oxford M.23 mortarium, dated 350–400+ (Young 1977, 79).

933 Fab. 9a. Black surfaces with a dark grey core.

934 Fab. 9a. Black inner face, dark grey outer face with purplish-brown margins and a blue-grey core.

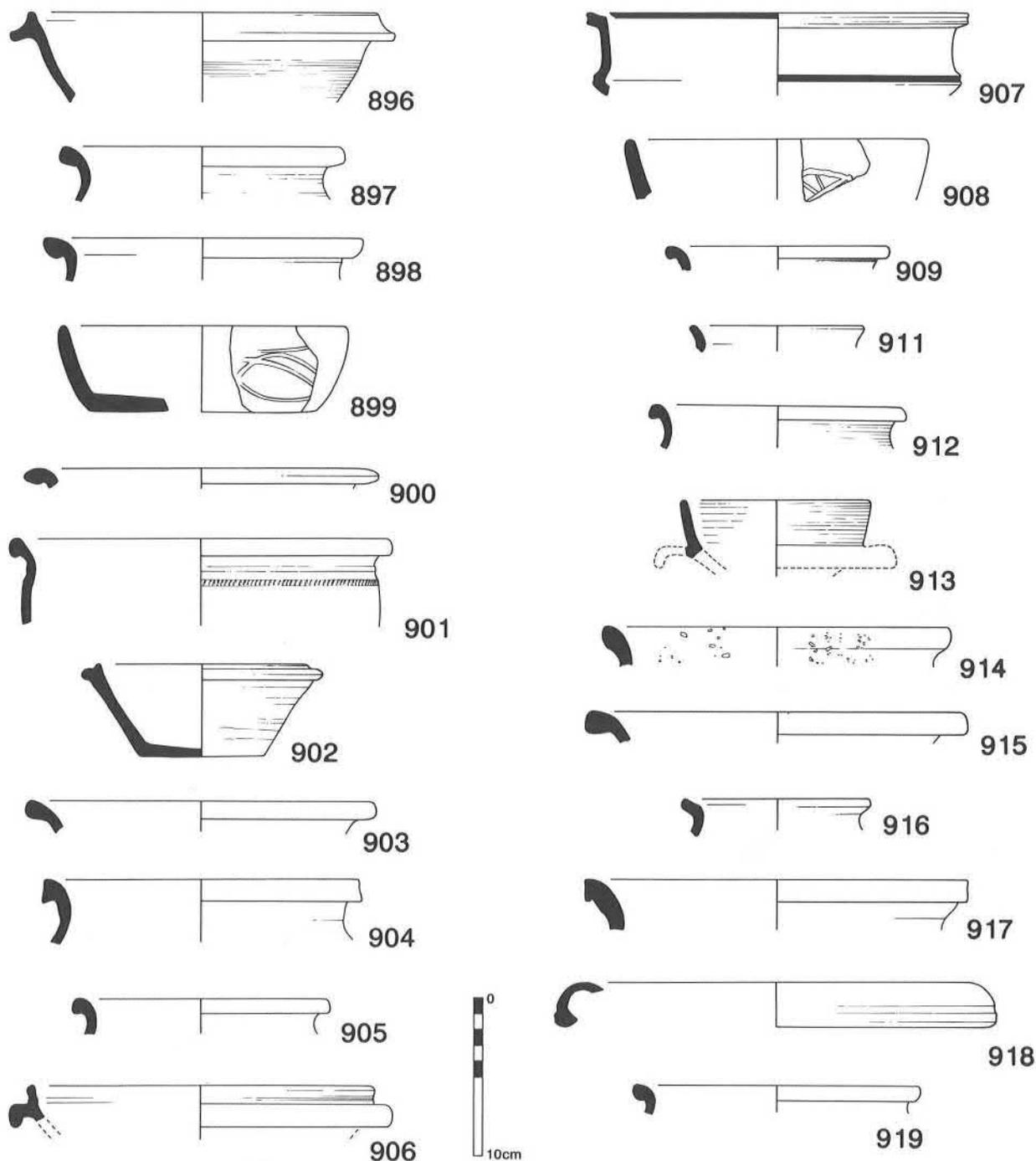


Figure 279: Phase V pottery 896-919 (Ditch 511), scale 1:4.

- 935 Fab. 9a. Black outer face, sooted and decorated with burnished arcs, dark grey inner face and core. Late third to fourth century.
- 936 Fab. 9f? Dark grey to black burnished outer face with a yellowish-grey interior, thick brown margins and a thin grey core. Residual?
- 937 Fab. 12. White to light grey core with mid grey surfaces. Residual.
- 938 Fab. 24. Oxford C.14 jug with a handle scar, dated ?350-400+.
- 939 Fab. 24. Oxford C.51, dated 240-400+ (Young 1977, 160).
- 940 Fab. 24. Oxford; form unknown, possibly the flange tip of a

C.50 but the form is not quite right and the piece is exceptionally small and well moulded.

- 941 Fab. 28d. Lid; patchy light to dark grey outer face, light grey smoothed inner face, blue-grey core.
- 942 Fab. 37. Hadham copy of a Dr.36. Dark orange burnished slip over brighter orange surfaces with a brownish-orange core.
- 943, 944 Fab. 37. Hadham ware, deep orange throughout.
- 945 Fab. 54a. Brownish-orange colour coat over light pinkish-orange surfaces with a thin blue-grey core.

Ditch 511 contained 561 sherds, the forms and fabrics of which suggest a late third to fourth-century date for the cutting and functional life of the feature. Much of the pottery

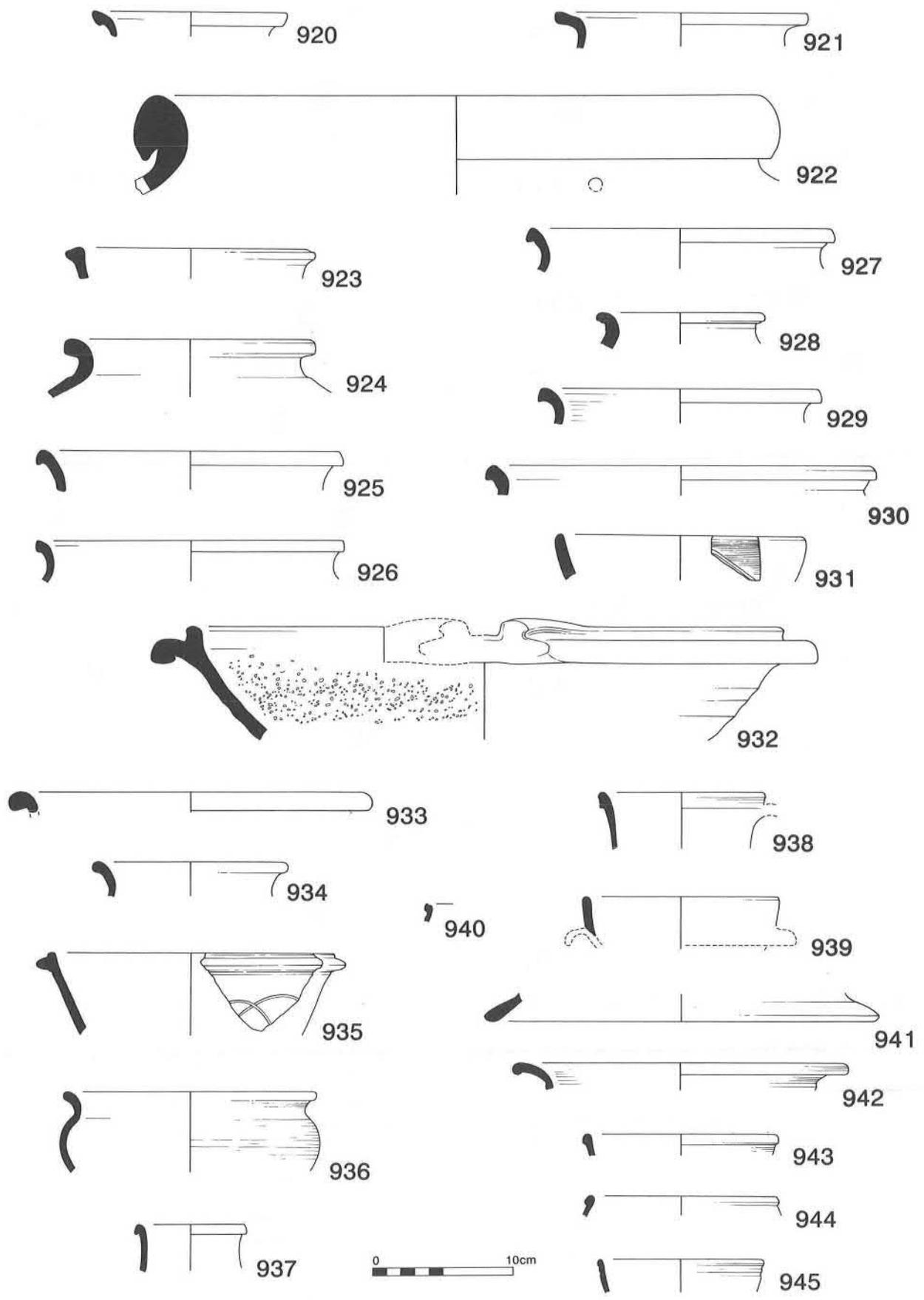


Figure 280: Phase V pottery 920-945 (Ditch 511), scale 1:4.

appears to date to the second half of the fourth century+, eg. the large Oxford mortarium (932). Despite this fact, the group poses a number of problems, firstly that its percentage levels for most of the major wares are dissimilar to those of other local fourth-century assemblages, and secondly that it almost totally lacks the hooked or triangular rim forms so commonly found in shell-tempered ware after c.350. However, this may simply be a reflection of the small quantity (14.26%) of shell-tempered ware present. This is unusually low; in general a figure of between 20% to 40% is common in the fourth century.

Also anomalous is the level for soft pink grogged ware (Fabric 2) which amounts to 24.6% and is the dominant fabric within the group. In other local fourth-century groups this fabric comes to between 4% to 15% and appears to have been in decline in this area in the fourth century. However at Towcester, in the Alcester Road suburbs Phase 4b, dated c.355–370+, it totalled 33%, thus indicating that the ware was not in decline in all areas (Woodfield 1983, 79).

The colour-coated Nene Valley ware produced the exceptionally low figure of 0.89%. This is greatly at variance with the more usual local fourth-century levels of between 5% to 12% (in the Alcester Road suburbs it came to 10.5%).

The Oxford ware percentage follows the common pattern, at 16.34%. Locally the level generally falls between 10% to 20%. It is the third most dominant fabric group within the assemblage.

Local sand-tempered wares are the second most dominant fabric, with 17.82%. This, like the Oxford ware, is not an unusual level as it too generally falls between 10% and 20%.

Excluding the residual material, there are a minimum of 130 vessels within the group. These are composed of sixty-seven wide-mouthed jars or necked bowls, thirty-eight bowls, sixteen dog-dishes, three storage jars, two mortaria, one beaker, one jug, one lid and one vessel of indeterminate form, probably a bowl.

Local wares in the group, including the ?Harrold shellies, compose 59% of the total. Non-local British wares equal 27.6%; most of this percentage being from the Oxfordshire kilns, with smaller quantities coming from Hadham, the Lower Nene Valley, Purbeck (possibly residual) and also possibly from the Alice Holt/Farnham kilns. The remainder are; Saxon - 0.2%, origin unknown - 8.4%, residual material, including some samian and Spanish amphora sherds - 4.8%.

Ditch 708 (Fig. 281)

This was the westward continuation of Ditch 511 to the north of Building 8, separated from the former by a gap of some 3 m, presumably a causeway.

Context 582:

- 946 Fab. 1a. Brownish-orange outer face, patchy pink and orange interior, grey core.
- 947 Fab. 2a. Body sherd with pale pink surfaces decorated on the outer face with red-brown paint; blue-grey core.

948 Fab. 24. Oxford C.18, dated 270–400+ (Young 1977, 152).

Context 595:

- 949 Fab. 1a. Sooted dark brown outer face, light pinkish-brown inner face, grey core.
- 950 Fab. 1a. Purplish-brown surfaces with orange margins and a grey core.
- 951 Fab. 1a. Patchy yellowish-brown and black outer face, light pink inner face, grey core. The hooked rim is typical of a post-350 date (Brodrigg *et al.* 1971, 68).
- 952 Fab. 1a. Dark grey throughout.
- 953 Fab. 2a. Buff surfaces with orange margins and a grey core.
- 954 Fab. 19/29. Patchy orange and black outer face, decorated with burnished arcs, burnished orange inner face with an orange core.
- 955 Fab. 53a. Burnished grey surfaces with a red-brown core.

Context 777:

- 956 Fab. 1a. Pinkish-orange surfaces with a grey core, decorated on the flange with stabbing and a wavy line; usually found in fourth-century contexts (A.E. Brown, pers. comm.).
- 957 Fab. 1a. Dark brown surfaces with a dark grey core, *cf.* Woodfield 1983, fig. 30.257, dated c.355–370+.
- 958 Fab. 1a. Light pink throughout.
- 959 Fab. 1a. Black throughout.
- 960 Fab. 2c. Pale pinkish-orange surfaces with a grey core. The fabric type indicates that this vessel may be residual.
- 961 Fab. 9a. Black surfaces with light brown margins and a grey core, decorated on the outer face with disordered burnished arcs.
- 962 Fab. 24. Oxford C.45, dated 270–400+ (Young 1977, 158). The walls of this vessel are unusually thin.
- 963 Fab. 24. Oxford C.51, dated 240–400+ (*ibid.*, 160). Heavily burnt.
- 964 Fab. 37. Hadham. Orange throughout with some burning.
- 965 Fab. 41e? Orange surfaces with an orange-brown colour-coat on the outer face fired to a dark brown on the inner face; blue-grey core.
- 966 Fab. 53f. Medium grey throughout with traces of burnishing on the inner upper rim.
- 967 Fab. 18g? Crucible, white surfaces with a pink core and encrusted on the inner face with copper-alloy slag. If the attribution of the fabric to the Verulamium region is correct, this pot must be residual.

Percentages for the seventy-four sherds from this context are shown in Fig. 282.

Despite the fact that Ditch 703 cut through a series of earlier ditches, it appears to be relatively free from residual material, with only three of the seventy-four sherds recovered from it being obviously late first to second century in date, excluding the crucible.

The forms and percentages present can be compared to those from the ?late fourth to early fifth-century Group 17 (RBP,

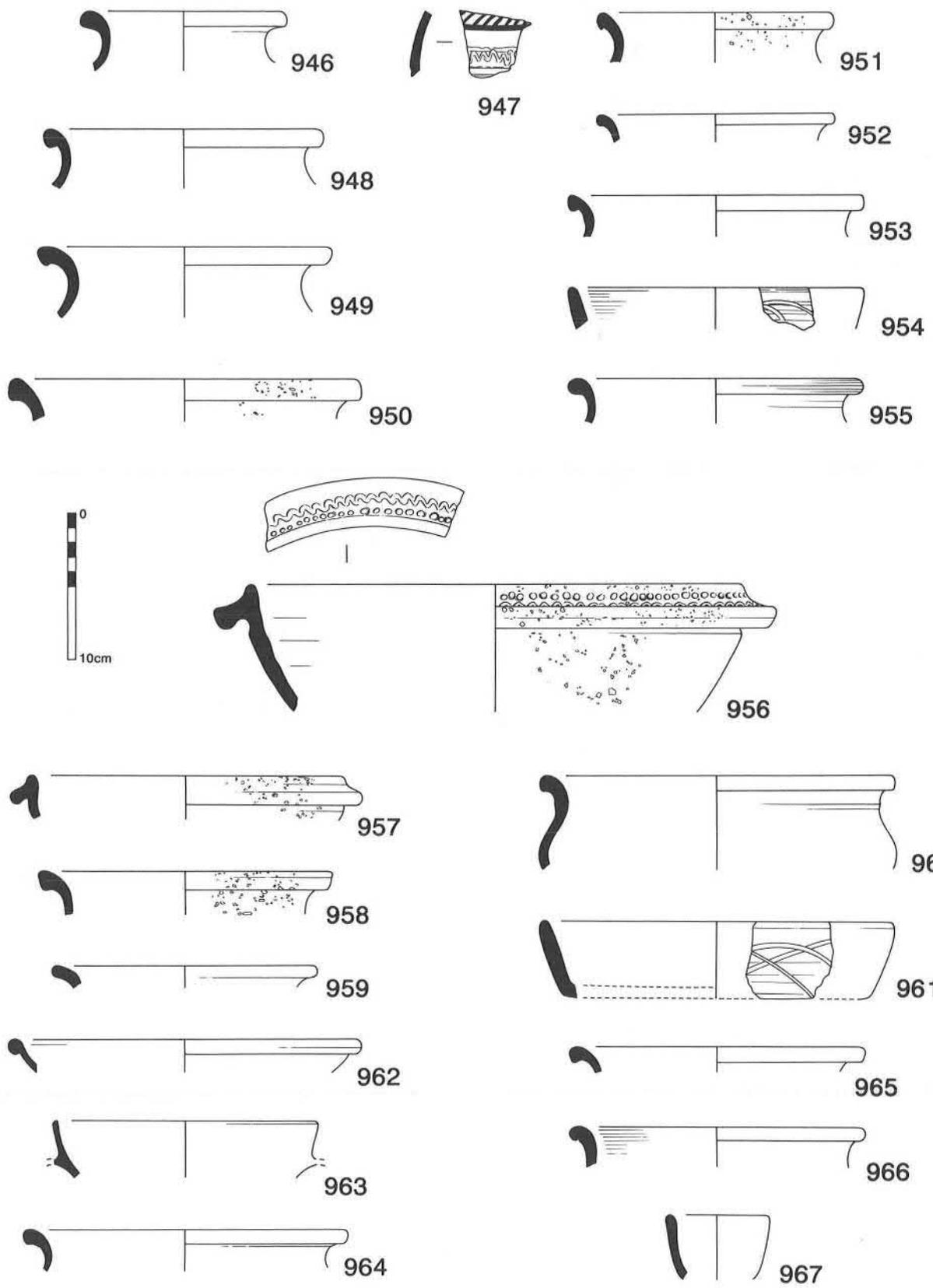


Figure 281: Phase V pottery 946-967 (Ditch 703), scale 1:4.

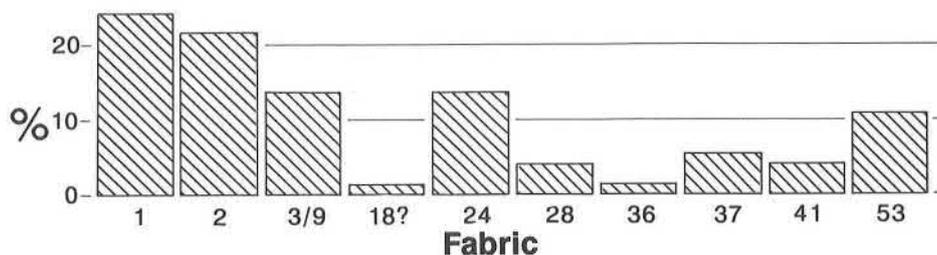


Figure 282: Histogram of the percentage of sherds in each pottery fabric from Ditch 703.

54) which was from the junction of Ditches 260 and 511. The quantity of shell-tempered ware is not dissimilar; 24.32% in Ditch 703 as compared to 22.4% in Group 17. Shell-tempered ware is the dominant fabric in this assemblage.

The percentage for the local sand-tempered wares and Oxford ware is also roughly similar, 13.51% compared to 12.9% and 13.51% compared to 10.2% respectively. The Hadham ware percentage is high in both groups; 7.5% in Group 17 and 5.4% in Ditch 703. Both groups produced crucibles.

However, the level for Fabric 2 is quite different, with Ditch 703 producing 21.62% and Group 17 containing only 12.9%. Can this be a reflection of the fact that Group 17 was from the 'slump' of the junction, whilst the excavated group contains material from lower, and therefore possibly earlier (*i.e.* late third-century), deposits?.

One surprising aspect is the total lack of Lower Nene Valley colour-coated ware in this assemblage. Group 17 contained 5.4%, whilst mid to late fourth-century groups produced 10.9% and 11.6%.

Ditch 703 contained a large quantity (10.81%) of late burnished greyware. This did occur in Group 17 but was unrecognized at the time; the 'residual' 2% of Fab. 14 is now thought to be Fab. 53 (RBP, 196). The illustrated 'Fab. 14' rim (RBP, fig. 23.21) is, however, unburnished and therefore difficult to place, although the fabric is very like Fab. 53f.

The group contained a minimum of nineteen vessels, consisting of twelve wide-mouthed jars or necked bowls, four bowls, two dog-dishes and a crucible.

Local material, excluding that thought to be residual and including the ?Harrold shellies, accounts for 59.44%. Non-local British wares amount to 20.27%, the majority of this coming from the Oxford kilns and the remainder from Hadham. The remaining pieces are either residual (4.05%, excluding the crucible) and origin unknown (16.22%).

The Midden Deposit (Figs 283–287)

This was an extensive spread of dark soil (Contexts 735 and 736) covering the trackway and all other features between the farmyard and the waterlogged area beside the brook. It contained large concentrations of building debris, masses of animal bone and a large amount of pottery. With only two earlier exceptions, the date range of the large number of coins from these contexts spans the whole fourth century. It is thought that this area may have been the midden for the later house.

Below the midden deposits lay a spread of coarse grey silt (504), presumably the result of flooding, that built up over the trackway during the years when the site was sparsely occupied.

Owing to the quantity of pottery from this feature (56.27 kg), the material is summarized and selectively illustrated. Only material from Context 735 has been used to illustrate this group.

Fabric 1a: Shell-tempered ware.

968, 969 Two dishes with black outer faces, brownish-pink inner surfaces and grey cores. *cf.* RBP, fig. 23.4, dated ?late fourth to early fifth century.

970–973 Flanged bowls, largely black, brown or light grey in colour with grey cores. *cf.* Woodfield 1983, fig. 30, 256–257, dated *c.*355–370+.

NI Seven other flanged bowls. Unlike the jars and necked bowls these vessels are sufficiently different enough from one another to be counted 'by eye'. However, the EVE method produced ten such vessels.

974 ?Part of a flanged bowl. The flange and upper part of the rim appears to have been formed from a separate piece of clay; much of the flange has broken off, so its exact form remains uncertain.

975, 976 Storage jars with dark buff surfaces and grey cores. 976 has been burnt on the outer face. *cf.* Woodfield 1983, fig. 30.258, dated 355–370+.

977–985 There are 135 rim pieces from shell-tempered jars or wide-mouthed necked bowls, which by EVE method equal fifty-seven vessels. Only two appear to be from narrow-necked jars; seven are over 260 mm dia. and were obviously large pots, but they do not have the heaviness of storage jars like 975 and 976. A representative sample has been illustrated. The triangular hooked form (983) is typical of a post-350 date (Brodrigg *et al.* 1971, 68). Three residual Fabric 1 lid-seated jars have not been illustrated.

Fabric 2a: Soft pink grogged ware (Fig. 284)

Seventy-one rim pieces were found in this fabric grouping, all from jars or wide-mouthed necked bowls. Only one appears to be from a narrow-necked vessel. By EVE the number of vessels present is forty-three. Only a selection has been illustrated.

986 Narrow-necked jar with hard, cream-coloured surfaces with burnished stripes and brown painted decoration. The core is orange with a pinkish-brown central vein.

987 Jar with light pink surfaces, very powdery, and a grey core.

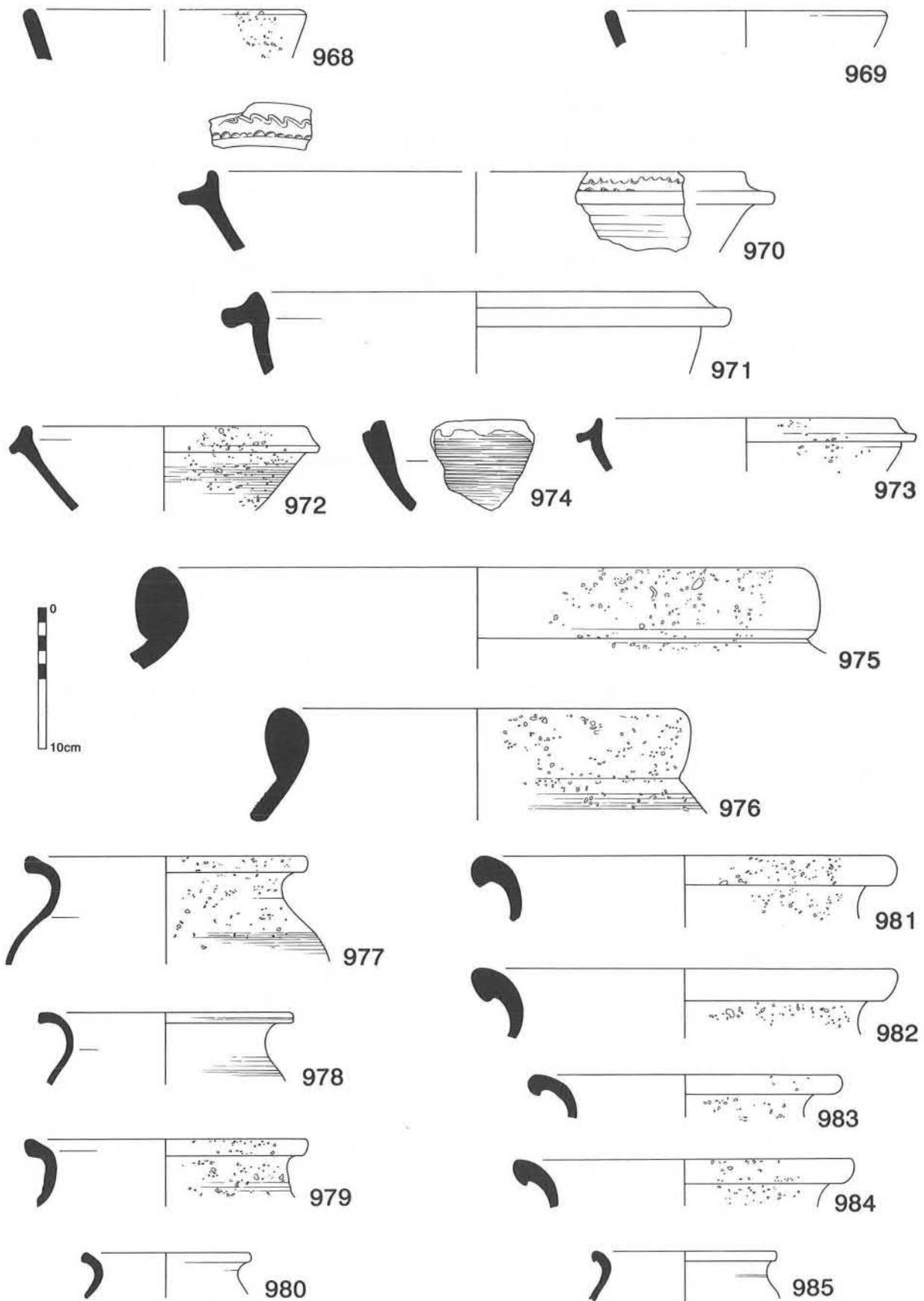


Figure 283: Phase V pottery 968-985, fabric 1a (Midden), scale 1:4.

- 988 Harder than usual light pink burnished surfaces with a brownish-pink to orange core.
- 989–994 Pale orange-pink surfaces with a grey core.
- 995 Pale orange-pink surfaces, which have the remains of a bright orange slip on the outer face, and a grey core.
- 996 Pale orange-pink surfaces, burnished to a cream colour on the shoulder and inner rim, with thin orange-painted decoration.
- 997 Light brown surfaces with a grey core.
- 998 Patchy light grey and pink surfaces with a grey core.
- 999 Pale orange-pink surfaces with a grey core.

Fabrics 3/9/19–29: Local sand-tempered wares: dog-dishes (Fig. 284)

There are in total seventy-nine local sand-tempered dog-dish rims, amounting to (by eye) fifty-one or fifty-two vessels, by EVE totalling forty-two. Eight are illustrated. Also illustrated is a vessel in Fab. 9f (1008) which is possibly residual. A dog-dish rim in Fab. 3k has not been illustrated. The basic form type was in use from the second to the fourth century (Wilson 1984, fig. 105).

- 1000 Deep vessel with brownish-grey surfaces and a blue-grey core. *cf.* Wilson 1984, fig. 105.2536, dated 360–70 and 375–400.
- 1001 As 1000, with burnished scribbled arcs on the outer face.
- 1002 Brownish-grey surfaces with red margins and a blue-grey core. The outer face was decorated with burnished scribbled arcs. There are traces of burning prior to breakage.
- 1003 Light grey throughout. This dish is unusually thin towards the base.
- 1004 Small dish with the remains of a thin white slip or wash which has an orange bloom on the lower half of the outer face; orange core.
- 1005 Black surfaces with a grey core, decorated with burnished arcs.
- 1006 Black surfaces with a red-brown core, decorated with burnished arcs.
- 1007 Black surfaces with a red-brown core.
- 1008 Fab. 9f. Black outer face, worn yellow-brown inner face with traces of a black surface, red-brown core.

Fabrics 3/9/19–29: Local sand-tempered wares: flanged bowls (Fig. 285)

There are forty-seven rim pieces of flanged bowls in a mixture of the grey, black and oxidized local sand-tempered ware. By eye these appear to number thirty-seven vessels, but by EVE only twenty. Five of these are illustrated. The form type was found in quantity in Verulamium, covering the date range 265–400 (Wilson 1984, fig. 104).

- 1009 Grey throughout with burnished arc decoration on the outer face.
- 1010 Grey surfaces with an orange-brown core.
- 1011 Unusual rounded bowl with grey to black surfaces, red margins and a blue-grey core. A number of such incurving vessels were found at The Park, Lincoln, in a late fourth-century (378–395) group (Darling 1977, fig. 3.43–47).
- 1012 Black surfaces with a grey core.

- 1013 Frilled flanged dish with black surfaces and a brown-grey core.
- 1014 Fab. 3k. Light grey throughout, originally burnished on the inside face. The fabric of this vessel is similar to the second-century 3k subgroup.

Fabrics 3/9/19–29: Local sand-tempered ware: Bowls/dishes (Fig. 285)

All six found are illustrated. 1016 is residual.

- 1015 Yellowish-grey to black surfaces with a blue-grey core.
- 1016 Grey outer face with a brown inner face and a blue-grey core.
- 1017 Yellowish-brown outer face with traces of a grey wash, orange-brown inner face and margins with a grey core.
- 1018 Brownish-grey outer face with a grey inner face and core.
- 1019 Dark grey to black surfaces with red-brown margins and a grey core.
- 1020 Black surfaces with dark brown margins and a grey core.

Fabrics 3/9/19–29/47: Local sand-tempered wares: Jars and necked bowls (Fig. 285)

Forty-eight rim pieces were found in these fabric subgroups; this includes five rims (five vessels) in Fab. 3k and Fab. 9f which were thought to be residual, though flanged bowl 1014 indicates that this may not be the case; four rims in Fab. 9xy/46p, and eight in Fab. 47a and c, which are almost certainly residual. The EVE calculation, based on all the material, including that thought to be residual, is that there were forty-four jars or necked bowls. Examination by eye and excluding the residual material suggests the presence of thirty-one vessels, including a single narrow-necked jar. Only a selection has been illustrated.

- 1021 Grey to black speckled surfaces with a light grey core.
- 1022 Black to yellowish-grey surfaces with a red core.
- 1023 Black surfaces with a light grey core.
- 1024 Grey surfaces covered with a white slip on the exterior face and partially on the inner face; the upper rim is decorated with bands of thin orange paint. Orange core.
- 1025 Black to grey surfaces with a brownish-grey core.
- 1026 Worn black to yellowish-grey surfaces with a grey core.

The Mortaria (Fig. 285)

White Oxford ware products dominate the mortaria. There are thirty-seven pieces in Fab. 4a, composed of nineteen vessels; twelve M.22, five M.18, one M.17 (Young 1977) and one too incomplete for the form to be determined. Orange Oxford wares are the second most dominant mortarium fabric, with either a red or white colour-coat, comprising twenty-six sherds from eight or nine C.97, two WC.5 and three WC.7. The lack of any C.100 is surprising. In contrast there are only three pieces (two vessels) of Hadham mortaria, (1029 and 1030) with forms copying those from Oxford, one rim of Mancetter/Hartshill (1027), one Castor/Stibbington base, and one rim and two bodysherds probably of Beds/Bucks/Northants manufacture (1028). The Oxford products are all typical of those published by Young (1977), so none are illustrated.

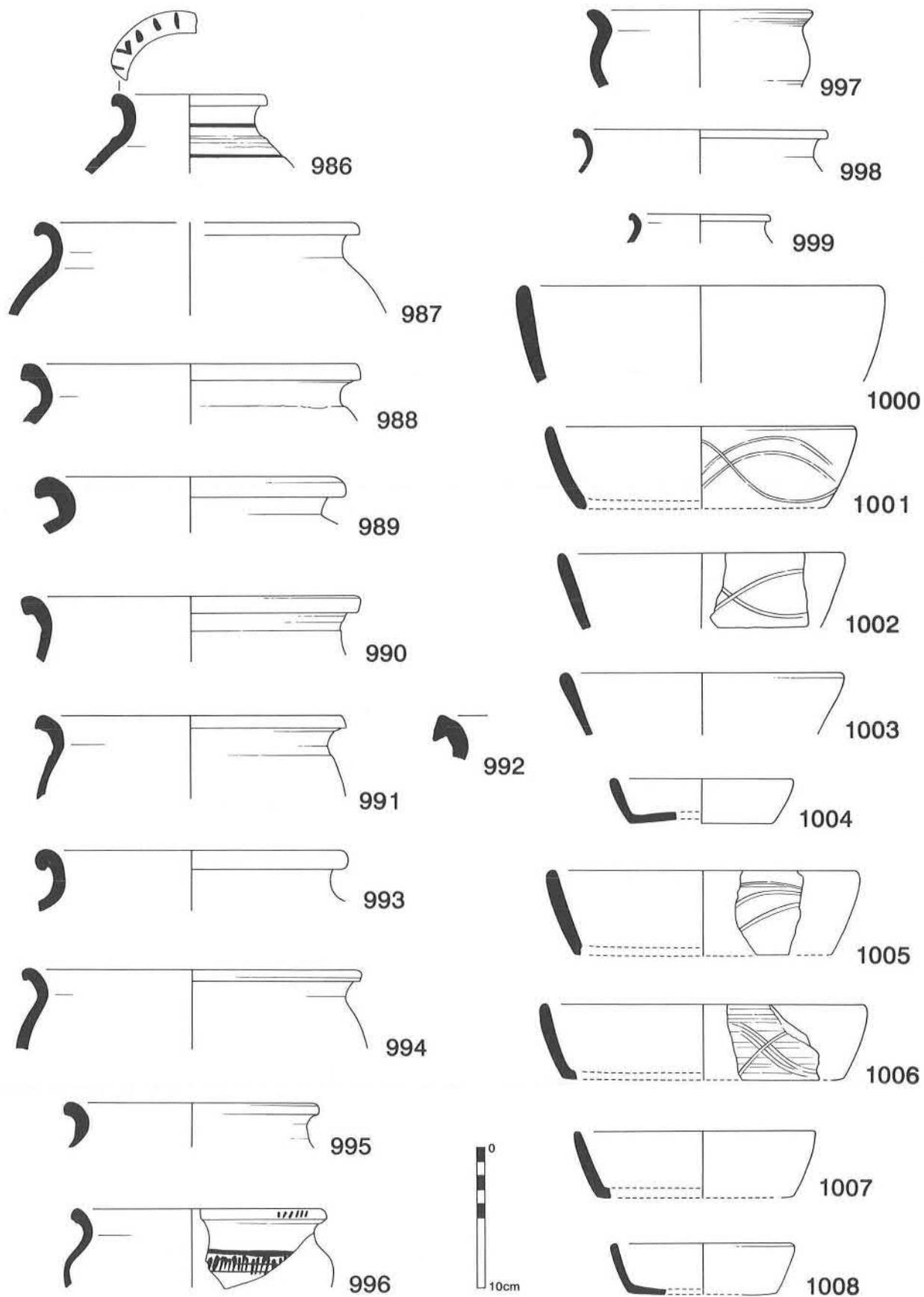


Figure 284: Phase V pottery 986-1008, fabrics 2a, 3/9/19-29 (Midden), scale 1:4.

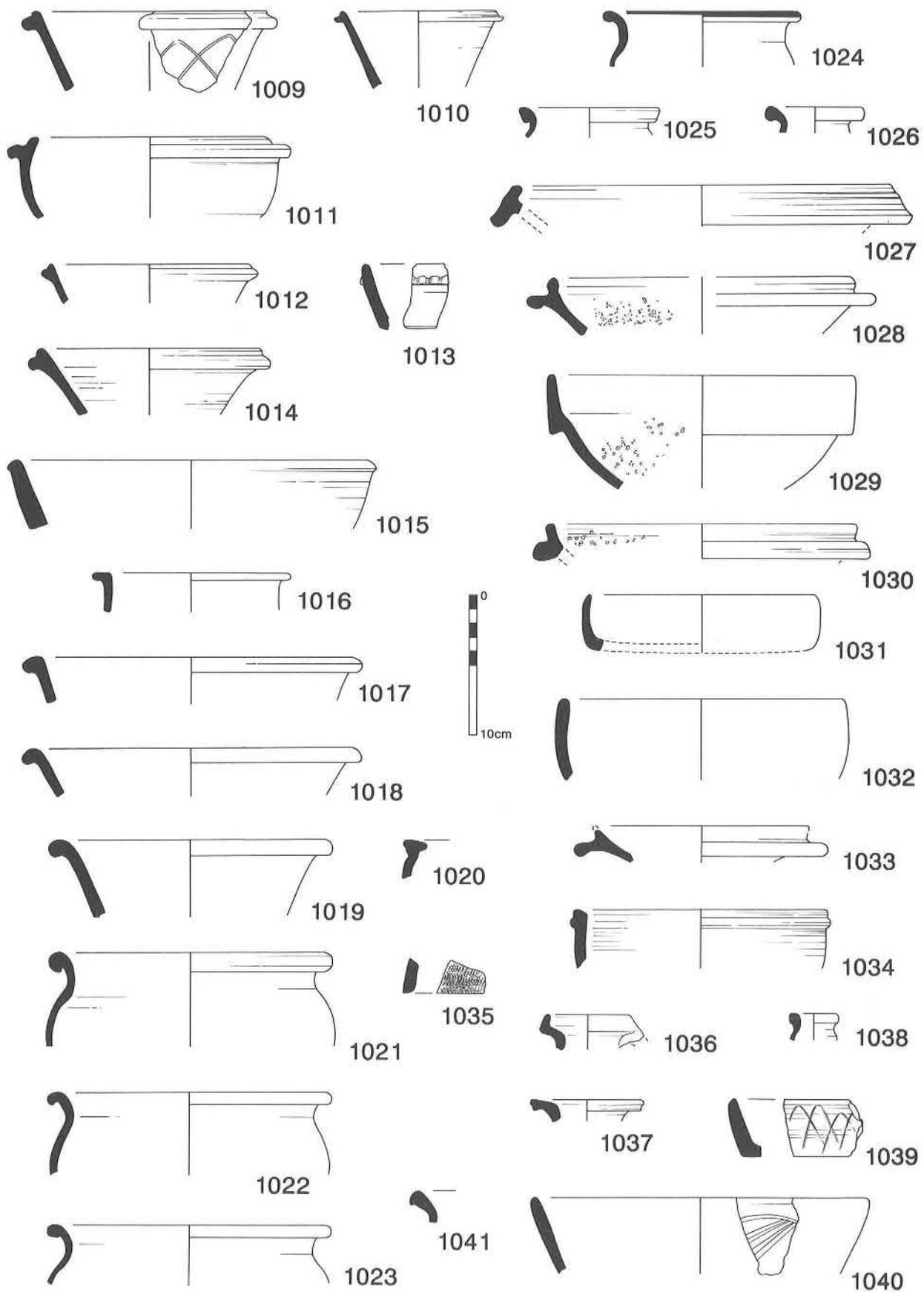


Figure 285: Phase V pottery 1009-1041, fabrics 3/9/19-29, 47, mortaria (Midden), scale 1:4.

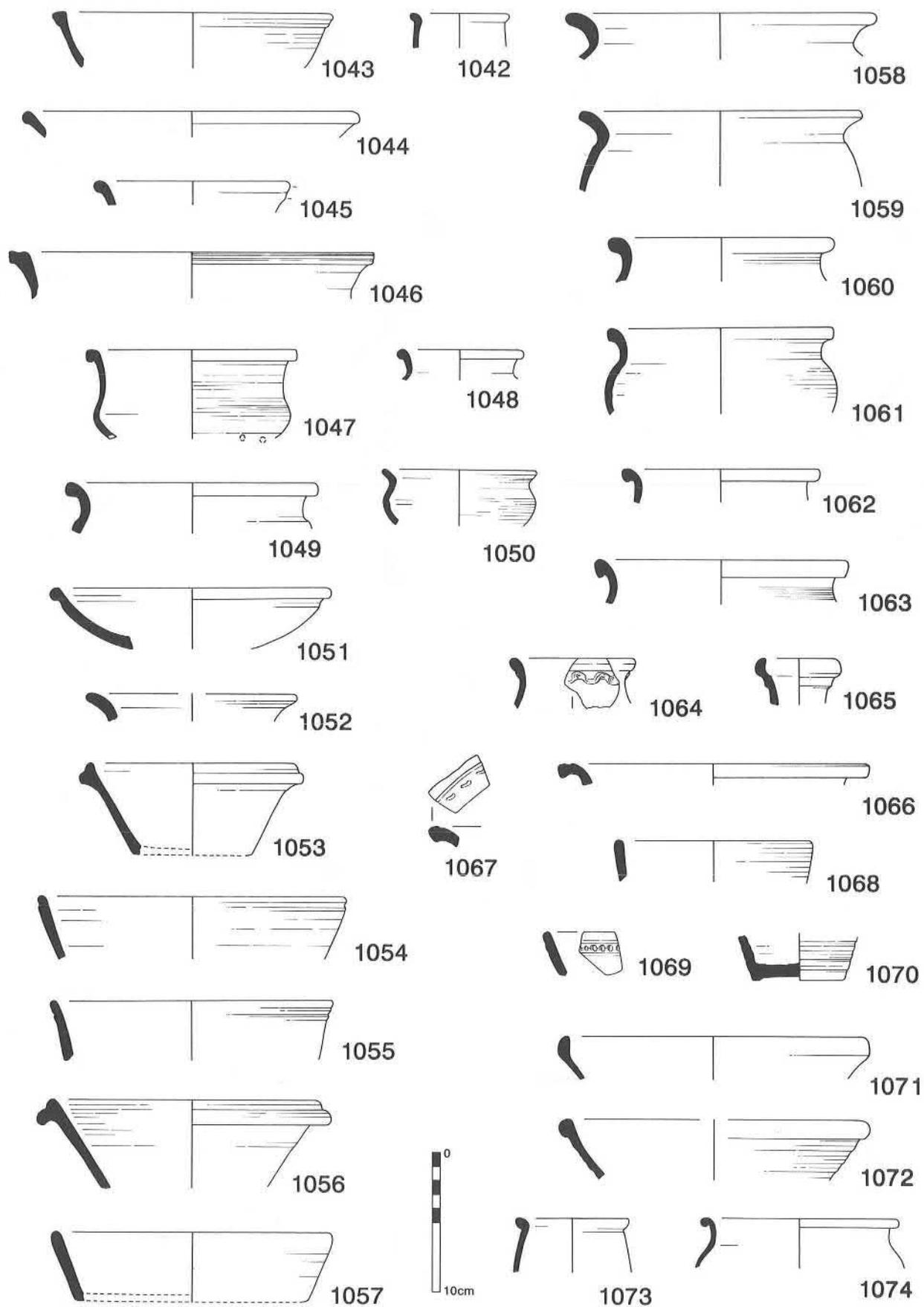


Figure 286: Phase V pottery; fabric 24, 1042–1046; other fabrics 1047–1074 (Midden), scale 1:4.

- 1027 Fab. 4c. Mancetter/Hartshill hammer-headed rim in a white 'pipeclay' fabric with faint traces of orange paint or a wash on the outer face. *cf.* Gillam 1970, fig.29.284, dated 280–360.
- 1028 Fab. 4ea/54. Probably a local Beds/Bucks/Northants mortarium in a fairly soft, light pinkish-orange fabric. The core varies from beige, in the thinner sections, to light grey. The fabric is similar to Fab. 54. The trituration grit consists of small white/pink/grey quartz. The form is like an Oxford M.18 and may be of similar date, *i.e.* 240–300 (Young 1977, 76).
- 1029 Fab. 4h. Hadham mortarium in a dark orange fabric with a red-brown core and multi-coloured quartz trituration grit. The form is a copy of samian Dr.45 and the Oxford C.97, dated 240–400+ (*ibid.*, 173).
- 1030 Fab. 4h. Hadham mortarium, fabric as 1029, but with traces of burnishing on both faces. The form is similar to the Oxford C.100 and may be of similar date, 300–400+ (*ibid.*, 174).
- NI Fab. 5. Oxford parchment ware. Rim of a P.9 in a white fabric with very pale pinkish surfaces and traces of orange-brown painted bands. The type is dated 240–400+ (*ibid.*, 86).
- NI Fab.5. Oxford parchment ware, rims of six P.24s, some of which are decorated with bands of brownish-orange paint. The type is dated 240–400+ (*ibid.*, 87).
- 1031 Fab. 6. Lower Nene Valley ware. White with a black colour-coat. *cf.* Howe *et al.* 1980, fig. 7.87, dated to the fourth century.
- 1032 Fab. 6. Lower Nene Valley ware. White with a dark brown colour-coat. Date as 1031.
- NI Three rims in Fab. 6, which are either from dishes similar to those above or from Dr.38 copies (*ibid.* fig. 7.83), late third to fourth century in date.
- 1033 Fab. 6. Lower Nene Valley ware. White with an orange-brown colour-coat. *cf.* *ibid.* fig. 7.83, dated to the late third and fourth centuries.
- 1034 Fab. 6. Lower Nene Valley ware. Off-white to very pale brown with a brownish-orange colour-coat. The form is unusual.
- 1035 Fab. 6. Lower Nene Valley ware. White with a dark-brown colour-coat on the outer face and orange on the inner face; lid of a 'Castor Box'.
- 1036 Fab. 6. Lower Nene Valley ware. White with a dark brown to orange-brown colour-coat. The form is similar to the Oxford C.13, dated ?350–400+ (*ibid.*, 150).
- NI Similar but larger dia. Fab. 6 vessel with a black colour-coat.
- 1037 Fab. 6. Lower Nene Valley ware. White, with the remains of a dark brown colour-coat. The form is probably that of a narrow-necked jar or bottle. *cf.* Howe *et al.* 1980, fig. 6.69 or 70, both fourth century in date.
- 1038 Fab. 6. Lower Nene Valley ware. White with an orange-brown colour-coat. *cf.* *ibid.*, fig. 5.62, a miniature pot dated ?fourth century.
- NI The residual rim of a late second or early third-century Lower Nene Valley beaker with the later type of cornice rim; a body sherd of a vessel with barbotine scroll and solid circle decoration over a black colour-coat, probably third or fourth century in date.
- 1039 Fab. 8. BB1. Thick fairly crude 'dog-dish' with lightly burnished surfaces, decorated on the outer face with very faint thin restrained arcs.
- 1040 Fab. 8. BB1 'dog-dish', not as coarse as 1039, decorated with thick burnished haphazard arcs.
- NI Two other BB1 dog-dishes and rim fragments from a late BB1 cooking pot and flanged bowl.
- NI One rim in Fab. 12/14 and four rims in Fab. 14. All small and residual.
- 1041 ?Fab. 18/2. Unusual fabric; creamy-white throughout, containing fairly large angular pinkish-orange grog, some grey grog, white calcareous 'lumps', sparse minute quartz and sparse black/dark grey iron? inclusions. The form and tempering suggests that it belongs in the Fab. 2 tradition. Indeed, it appears to have been grogged with fragments of this ware (RBP, 64). Fourth century+?
- NI Rim of a ring-necked flagon in Fab. 18c. Residual.

Fabric 24: Oxford red and brown colour-coated ware (Fig. 286).

All the forms listed are to be found in Young 1977; one C.8, eight C.18, three C.18 or C.75, two C.23, one ?C.37 (1042), five C.44, twelve C.45, two C.46, two C.47, one C.48, the rims and distinctive body sherds from twenty-seven Oxford C.51 or variants, one C.55, one ?C.62 (1043), two C.68, one C.69 (sandier than usual), two C.71, one C.72, one C.73, one ?C.74.2 (1044), one C.75, six C.81, one C.83, one C.84, one ?C.85 (1045), one C.91 (1046), one C.93 (rim fragment only), and one C.118 body sherd.

1042 Fab. 24. Oxford? Possibly an Oxford product, a C.37, in an orange-buff fabric with traces of a dark brown colour-coat. The type is very uncommon and undated.

1043 Fab. 24. Oxford, a ?C.62. Uncommon, fourth century in date.

1044 Fab. 24. Oxford. A sherd from a vessel with a flaring rim, possibly similar to C.74.2. Uncommon and undated.

1045 Fab. 24. Oxford. Rim sherd from a handled vessel, possibly a C.85, dated 350–400+.

1046 Fab. 24. Oxford, a C.91, copying a P.24. The vessel appears to have had a cream-coloured slip and bands of red-brown paint or vice versa.

Other Fabrics (Figs 286, 287).

1047 Fab. 25/30c. Colander in a fine sandy fabric, mid grey throughout, with some burnishing on the outer face. *cf.* Lambrick and Robinson 1979, fig. 26.71, dated ?post-375, found with coins dated 270–375. Also compare to the Oxford R.80 (Young 1977, fig. 84.R/80/4), there given a mid first to third-century date.

1048 Fab. 25/30c. Small jar or necked bowl with mid grey surfaces and a dark blue-grey core.

NI Two similar, one of which is burnished on the outer face.

1049 Fab. 25/30b. Soft grey ware rim in a micaceous fine sandy fabric; mid grey surfaces and a very pale grey core.

NI Fab. 25/30b, body sherd of a large jar with incised wavy line decoration. *cf.* Young 1977, fig. 77.R/23/7, dated first to fourth centuries.

- NI Rim and body sherd in fab. 25/30b, of a poppy-headed beaker with barbotine dot panels. Second century, residual.
- 1050 Fab. 28a. Small burnished bowl with mid to dark grey surfaces and a pale blue-grey core.
- 1051 Fab. 28c/burnt 52b? Orange-brown fabric, slipped on the outer face with a dark brown colour-coat, grey core. Dr.18/31 and Oxford C.45 copy?
- 1052 Fab. 31. Alice Holt Class 3B rim, mid grey throughout with a white slip on the inner face, dated 270–400 (Lyne and Jefferies 1979, fig. 28).
- 1053 Fab. 31. Although this form is similar to Alice Holt Class 5B.6–10, its fabric is not quite right for an Alice Holt vessel, and probably originates from a more local source, the High Wycombe area of the Chilterns (pers. comm. Malcolm Lyne). The surfaces are light grey with traces of a white slip on the inner face, decorated with a faint internal burnished series of vertical lines (or possibly a lattice). Dated probably late third to late fourth/early fifth century.
- 1054 Fab. 31. ?Alice Holt. The fabric of this vessel resembles that from Alice Holt; the form is that of a Class 6A.6 dish, dated 270–300 (*ibid.*, fig. 36), though the bead is too rounded. The vessel has dark grey surfaces, slate grey where burnished on the outer face, with black sooted streaks and a light grey core. This latter feature suggests that the vessel may originate from the Nene Valley area (pers. comm. Malcolm Lyne).
- 1055 Fab. 31. ?Alice Holt. A possible Class 6A.13 dish with a black internal slip over grey surfaces. The type is dated 270–420 (*ibid.*, fig. 36). Comments as for **1054**.
- 1056 Fab. 32a. Flanged bowl in a coarse sand-tempered fabric with black surfaces, burnished over the top portion of the inner face and rim.
- 1057 Fab. 32a. A dog-dish with dark grey ‘gritty’ surfaces and a pale pinkish-grey to yellowish-grey core.
- 1058 Fab. 32a. Jar copying the BB1 cavetto-rim form with black to dark grey surfaces composed of a thin slip or wash over a light brownish-grey core.
- 1059 Fab. 32a. As **1058**, with a pinkish-red core.
- 1060 Fab. 36. Grey Hadham ware jar or necked bowl, light grey throughout with light burnishing on the outer face.
- 1061–63 Fab. 37. Orange Hadham ware jars or necked bowls with orange surfaces and darker red-orange cores. The hooked-rim vessel has the remains of a self-coloured slip.
- NI Four other orange Hadham jars/necked bowl rims.
- 1064 Fab. 37. Hadham narrow-necked jar, red-orange throughout, decorated with a finger-impressed frill and burnished on the rim and below the frill.
- 1065 Fab. 37. Hadham flagon or bottle with orange surfaces and a darker orange core; the outer face has traces of a self-coloured slip. The form may be similar in date to the equivalent Oxford C.2, dated 300–400 (Young 1977, 148).
- 1066 Fab. 37. Hadham bowl with orange surfaces and darker orange core.
- 1067 Fab. 37. Hadham bowl, pinkish-orange throughout, decorated with small diagonal slashes on the upper face; the remains of a self-coloured slip can be seen within these impressions.
- 1068 Fab. 37. Hadham dish with orange surfaces and a darker orange core, burnished on the outer face.
- 1069 Fab. 37. Hadham dish with orange surfaces and a darker orange core, decorated on the outer face with an impressed cordon.
- 1070 Fab. 37. Hadham base with a grooved red-orange outer face, dark brownish-grey core and dark orange-brown inner face streaked with a darker brown. A run from a red-orange slip, no longer visible on the exterior, has trickled down onto the inner base.
- 1071 ?Fab. 39. White fabric, burnt and sooted on the outer face and gritted throughout with multi-coloured quartz c.1 mm in size. Possibly an Oxford gritted ware, fourth century in date (Young 1977, 113).
- 1072 Fab. 40a. Pale pinkish-orange to buff outer face with traces of a red-brown slip and a darker pinkish-orange inner face and core. The form is a Dr.18/31 copy.
- 1073 Fab. 40a. A bag-beaker, pinkish-buff throughout, with traces of a dark brown slip on the outer face and orange-brown on the interior. Residual? or akin to the Oxford C.37 (undated, but presumably made at some time between 240–400+).
- 1074 Fab. 40b. Jar with a rolled rim and cream-coloured surfaces with a pinkish-orange core.
- 1075 Fab. 40b. A dish or possibly a Dr.38/45 copy, with cream-coloured surfaces and an orange core. The vessel bears traces of an orange-brown slip and has some large quartz pieces on the inner face; it was thus possibly a mortarium.
- 1076 Fab. 41f. Small jar with a rolled rim with medium orange surfaces and a deeper orange core. The outer face has traces of a deep orange colour-coat.
- 1077 Fab. 41g. Dish with pale orange surfaces and a grey core.
- 1078 Fab. 41j. Jar or necked bowl rim in a fairly coarse fabric, buff-orange throughout.
- 1079 Fab. 42. Slightly ‘pimply’ mid to dark grey burnished outer face with a dark pinkish-orange inner face and core. The dating for this fabric type suggests that this vessel is residual in this context (RBP, 188) but this may not be the case.
- 1080 Fab. 51. Cavetto rim in a heavily quartz-tempered blue-grey fabric with a very pale blue-grey slip. The outer face is ‘pimply’ in appearance.
- 1081 Fab. 51. As **1077**, with pinkish-orange margins.
- 1082 Fab. 53b. A jar or necked bowl with a roll rim and blue-grey surfaces upon which lines of burnishing clearly visible, dark grey margins and a blue-grey core.
- 1083 Fab. 53b. A jar or necked bowl with a roll rim and smoothed yellowish-grey surfaces and a blue-grey core.
- 1084 Fab. 53b. A jar or necked bowl with a roll rim and smoothed silvery-grey surfaces and a blue-grey core.
- 1085 Fab. 53d. A small jar or necked bowl with a roll rim and dark slate-grey surfaces upon which lines of burnishing are clearly visible, dark blue-grey core.
- 1086 Fab. 53b/28b. A jar or necked bowl with yellowish-grey to dark grey surfaces upon which lines of burnishing are clearly visible, dark pinkish-brown margins and a blue-grey core.
- 1087 Fab. 53b/28b. Base with silvery blue-grey surfaces, possi-

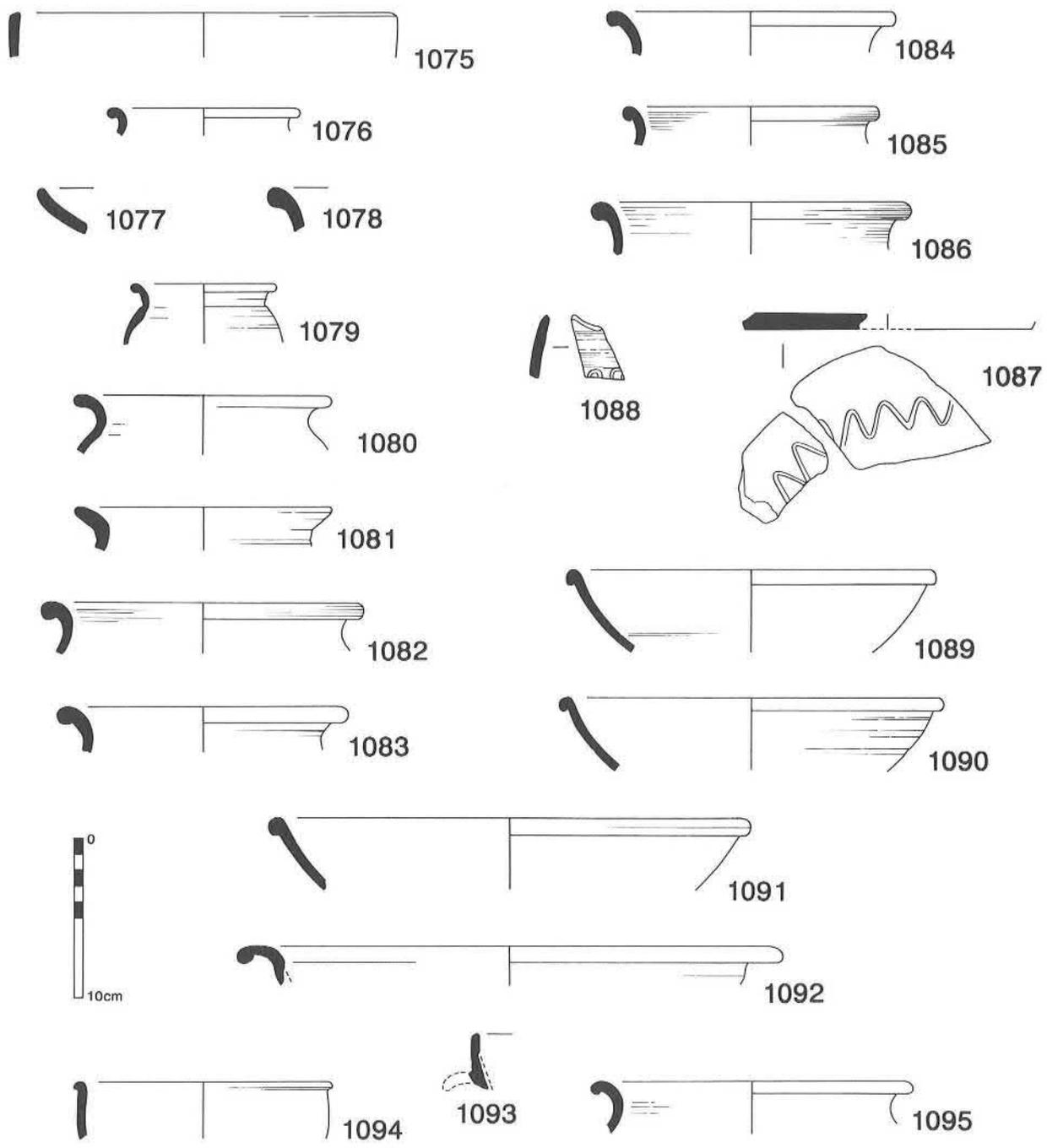


Figure 287: Phase V pottery 1075-1095, fabric 24 (Midden), scale 1:4.

bly slipped on the inner face, decorated with burnished wavy lines and with thick brownish-pink margins and a thin blue-grey core.

- 1088 Fab. 53b. Body sherd with slate grey surfaces, dark brownish-red margins and a thin dark blue-grey core, decorated on the outer face with burnished bands and burnished ?ovols/circles/scrolls.
- 1089–91 Fab. 54. Three copies of Dr.31 or Oxford C.45, either pale pinkish-orange throughout or with a slightly darker core, or with a buff-coloured outer face. All bear traces of a red-brown colour-coat.
- 1092 Fab. 54. Dr.36 or Oxford C.47 copy, with pinkish-orange surfaces, covered with a red-brown colour-coat and a with a darker orange core.
- 1093 Fab. 54. Dr.38 or Oxford C.51 copy, with pinkish-orange surfaces and cream-coloured surfaces which bear traces of a red-brown colour-coat.
- 1094 Fab. 54. Bag-beaker with pinkish-orange surfaces, covered with a red-brown colour-coat, and with a darker orange core.
- 1095 Fab. 59. Copy of a Dr.36 or Oxford C.47, with an exaggerated roll rim, in a fine-textured fabric with pale orange-pink surfaces with the remains of an orange-brown colour-coat, and with a very pale grey core. The vessel has similarities to the Hartshill Kiln 6 products (Hartley 1981, fig. 17.5).
- NI Two joining body sherds of a crucible with traces of vitrification on the outer surface and a pinkish-red colouration on parts of the inside. XRF analysis detected copper, zinc, lead, and ?tin, suggesting the vessel had been used to melt copper alloys containing these elements. The exact composition of the metal cannot be determined.

Residual

Fab.46 three rims, two bases and eighteen pieces.

Fab.18as one body sherd.

Fab.18g one piece Brockley Hill.

Fab.43 five lid-seated jar rims, one jar rim, one base, plus six body sherds.

Fab.17a/18c two body sherds of a folded beaker.

Fab.9e/14 two rims.

Fab.34g one reeded mica-dusted rim

Fab.66 (Y.P. fab) one lid-seated rim.

Discussion

The midden, an extensive spread of dark soil, produced 1912 sherds from one area alone (Context 735). This pottery is almost wholly fourth century in date but with some late third-century elements and, no doubt, some material that is fifth century in date if it could be recognized. The total absence of Saxon pottery from this context is surprising.

The group has been dated by the presence of many distinctive vessel forms and late fabric types, supported by numerous fourth-century coins. It contained a minimum of 433 vessels of late date (this total was reached using EVE, but only for material so alike that it was difficult to determine by eye) and

about thirty-five residual pots. Excluding, where possible, the residual material, this total is composed of 186 jars or necked bowls, 130 bowls, sixty-one dishes, thirty-six or thirty-seven mortaria, five bottles or flagons, four narrow-necked jars, three beakers, two storage jars, two colanders or sieves, two unknown, one lid and one miniature jar.

This assemblage is extraordinary for one of this date, in that shell-tempered ware is not the dominant fabric type (RBP, 196, table 1, Groups 13–17), either by sherd or vessel count. Most unusually, the local sand-tempered grey and black wares dominate this group, with 23.9% of the 1912 sherds. This is composed of 112 vessels by the EVE method and 123 or 124 vessels by eye. By EVE this breaks down into forty-four jars or necked bowls, forty-two dog-dishes, twenty flanged bowls and six bowls. These figures include the residual material. By eye, and excluding that thought to be residual, the figures are; forty-nine dog-dishes, thirty-seven flanged bowls, thirty-one jars or necked bowls and six bowls. None of these vessels are particularly interesting, with perhaps the exception of the rounded flanged bowl **1011** and the frill-decorated **1013**. Many are decorated with burnished wild scribbling, typical of the later Roman period.

The second dominant fabric within the group is the shell-tempered ware, with 21.65%. There are seventy-five or seventy-six vessels in this ware, including three residual lid-seated pots. Some of the jars may also be residual but they are impossible to distinguish from their later counterparts. The EVE method discerns fifty-five jars or wide-mouthed necked bowls (this count was not attempted by eye), eleven or twelve flanged bowls, two dishes, two storage jars and two narrow-necked jars. Large flanged and decorated bowls, such as **970**, were found at the kilns in Harrold, Beds in both the early fourth and late fourth to early fifth centuries (A.E. Brown, pers. comm.). The group also includes a number of triangular-hooked-rim jars, typical of a post-350 date (Brodribb *et al.* 1971, 68).

Soft pink grogged ware (Fabric 2) was the third most common material (by sherd count) accounting for 18.46% of the 1912 sherds. The EVE method indicated the presence of forty-three jars or wide-mouthed necked bowls and a single narrow-necked vessel; this count was again not attempted by eye.

In contrast to this, the orange-coated Oxford Fabric 24 composed only 12.87% of the total (and was thus fourth in dominance) but produced eighty-seven vessels. This excludes the seven or eight orange-coated Oxford mortaria that were found (Fabric 4b), which equalled 1.05% of the whole assemblage. Bowls totally dominate the orange Oxford tableware material, with seventy-one of the above mentioned, and only eleven jars and necked bowls, three beakers, one bottle or flagon and one sieve. These are listed under their form types (Young 1977) in Table 38.

The Oxford kilns also supplied the villa with thirty-one or thirty-two mortaria (3.3% of the 1912 sherds) which were eventually disposed of into the midden. These were com-

Type (after Young 1977)	Description	No. present
C.8	bottle or flagon	1
C.18	jars	8
C.18/C.75	jars or necked bowls	3
C.23	beakers	2
C.37	beaker	1
C.44	shallow bowls	5
C.45	shallow bowls	12
C.46	shallow bowls	2
C.47	shallow bowls	2
C.48	shallow bowl	1
C.51 or variants	deep bowls	27
C.55	deep bowl	1
C.62	deep bowl	1
C.68	deep bowls	2
C.69	deep bowl	1
C.71	deep bowls	2
C.72	deep bowl	1
C.73	deep bowl	1
C.74.2?	globular bowl	1
C.75	deep necked bowl	1
C.81	deep bowls	6
C.93	flanged bowl	1
C.118	sieve	1

TABLE 38: Fabric 24 Oxford ware form types present in Context 735.

posed of eleven or twelve M.22, five M.18, one M.17, seven or eight C.97, three W.C.7, two W.C.5 and one unknown. In comparison, there were only two Hadham mortaria (0.16%), one Mancetter/Hartshill (0.05%), one Castor/Stibbington (0.05%) and one probably of local manufacture (0.16%). In total there appear to have been thirty-six or thirty-seven mortaria (3.67%).

The Oxford area was also the source of six or seven Fabric 5 Parchment ware vessels; a single P.9 jar and five or six P.24 bowls (1.12%). It is also thought, but not proved, that much of the Fabric 25/30 material (1.1%) is in fact Oxford reduced ware, composed of two R.38 jars, one R.80 colander and a residual R.34 poppy-headed beaker. There is also a single rim of a possible burnt/gritted white ware in Fabric 39 (0.05%) If this the case, the Oxfordshire-produced goods in the midden group account for 18.44%, and might be even higher if the origins of fabrics like Fabric 40 could be established.

Surprisingly, orange/red Hadham ware Fabric 37 amounted to 3.45% of the 1912 sherds, thus being more in evidence than Lower Nene Valley colour-coated ware which produced only 2.77%. The Hadham ware was composed of thirteen vessels: one decorated and seven plain jars or necked bowls, two bowls, one bottle/flagon and one decorated and one plain 'dog-dish'. The Lower Nene Valley colour-coated ware also comprised thirteen vessels, despite its lower percentage. This was made up of five 'dog-dishes', two cup-rimmed flagons, one Castor box lid, one beaded/flanged bowl, one bottle or narrow-necked jar, one bottle, one miniature pot and one

Dr.38 copy. A rim from a residual cornice-rim beaker was also found.

Hadham grey wares were represented by two pieces (0.11%) one of which was the rim of a jar or wide-mouthed necked bowl.

Fabric 53, a late burnished greyware, was fairly well represented with seven jars or necked bowls (0.68%) whilst Fabric 54, an orange colour-coated ware probably imitating the Oxford products, came to 1.54%, consisting of three Dr18/31 copies, one Dr.38 copy, one Dr.36 copy and an Oxford C.68 copy. The origins of both these wares is unknown.

BB1 from Dorset equalled 0.58%, consisting of six vessels; four 'dog-dishes', one flanged bowl and a single cooking pot, whilst the 0.68% of the assemblage probably from the Alice Holt kilns consisted of two jars, one flanged bowl and a beaded dog-dish, though it is likely that all but 1052 originate from more local sources.

Other fabric groups within the assemblage are largely made up of one, two, or occasionally three vessels and, where possible, these have been illustrated. A crucible encrusted with copper alloy slag was also discovered.

Local wares compose 66.94% of the group, 28.15% being regional, 0.47% residual continental samian and 4.41% from unknown sources. These figures compare closely with groups of similar date (RBP, table 1, groups 13–17). The percentages of the assemblage as a whole are most like those of Group 13, dated c.330–360 (RBP, 45) but it has been suggested elsewhere in this pottery report (Enclosure 1208) that the drainage of the area east of the old trackway became increasingly difficult at sometime between 350–400, and perhaps it was during this period that most rubbish deposition took place into the encroaching mire. Percentages for the midden assemblage (Context 735) are shown in Fig. 288.

Pit 637 (Fig. 289)

This small pit lay to the north of Building 2. It contained 2.5 kg of pottery, 1 kg of bone, and seventeen coins with a date range of 324–53 (p.271). It had been cut into natural.

- 1096 Fab. 1a. Black throughout. Possibly coil-made, finished on a wheel, cf. RBP, fig. 23.5, dated ?late fourth to early fifth century.
- 1097 Fab. 1a. Black exterior with faint rilling, brownish-grey inner face and grey core. Sooted on both faces.
- NI One similar.
- 1098 Fab. 1a. Light pink surfaces with some blackening, grey core. The shoulder is decorated with a row of stabbing above an area of rilling.
- 1099 Fab. 5. Oxford Parchment ware. This is the rim of a P.9, a small jar decorated with orange-red bands of paint. The type is dated 240–400+ (Young 1977, 86).
- 1100 Fab. 6. Lower Nene Valley ware. Part of a large 'Castor Box'. White with a dark brown to black colour-coat, lustrous in places. The vessel lacks the carination found on earlier types (Howe *et al.* 1980, 24). Fourth century.

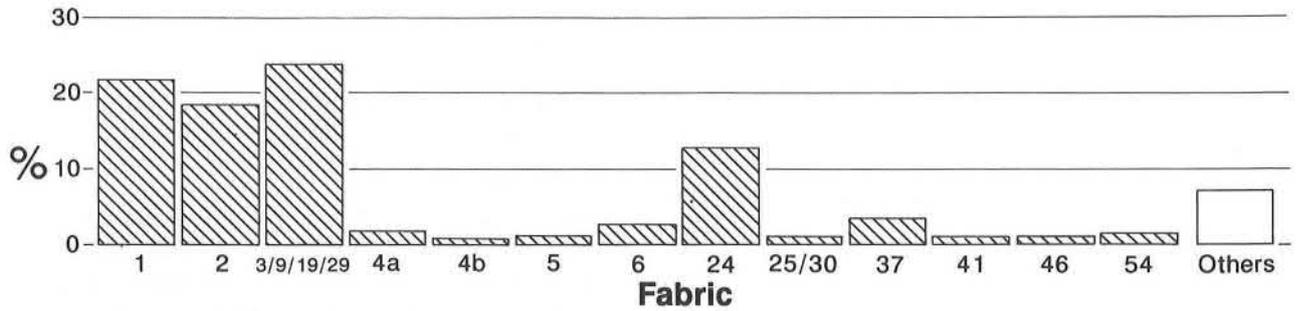


Figure 288: Histogram of the percentage of sherds in each pottery fabric from the Midden (Context 735).

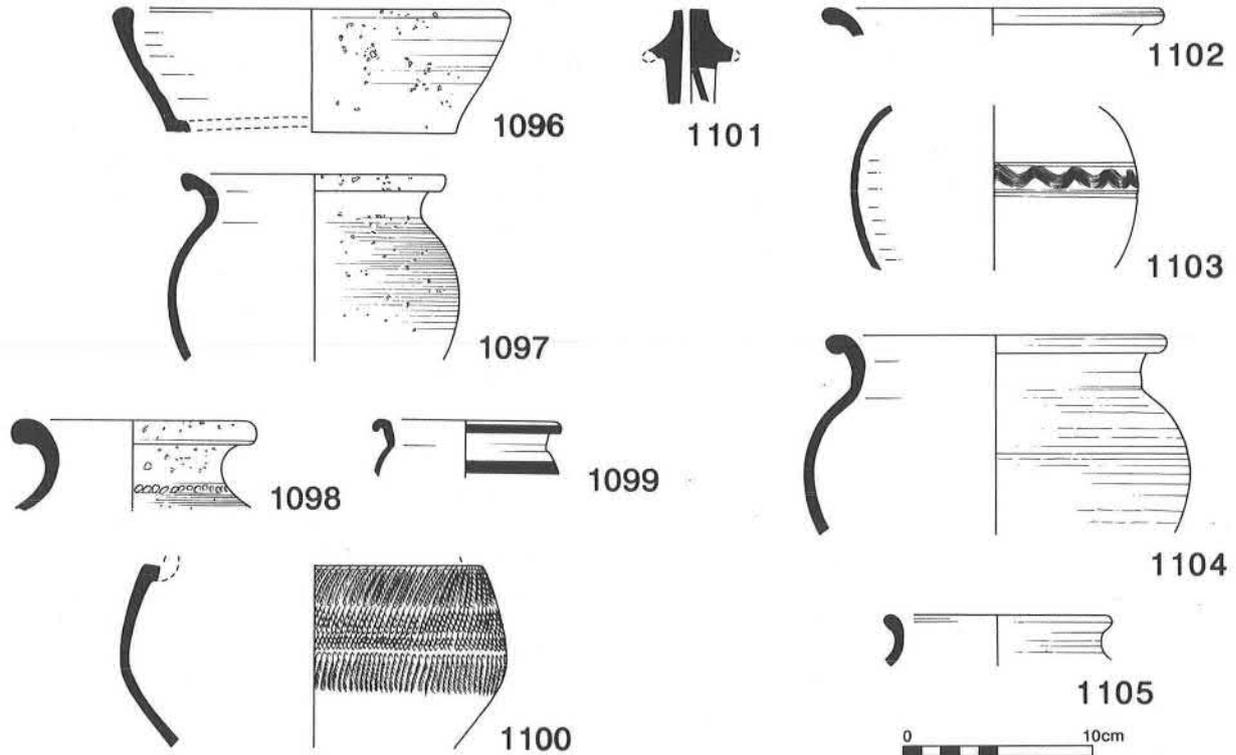


Figure 289: Phase V pottery 1096-1105 (Pit 637), scale 1:4.

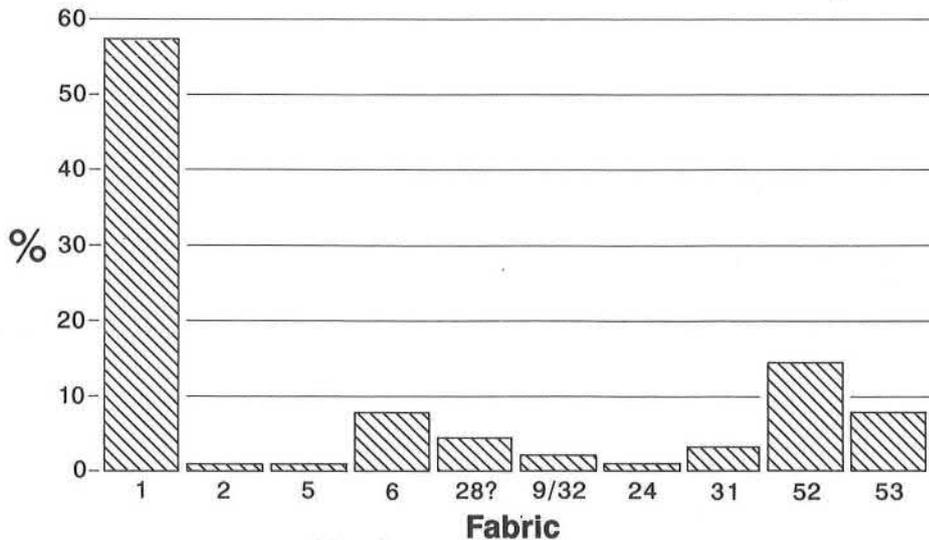


Figure 290: Histogram of the percentage of sherds in each pottery fabric from Pit 637.

1101 Fab. 6. Lower Nene Valley self-coloured ware. Part of a bottle or a flagon in a white fabric with reddish-brown painted decoration.

1102 Fab. 28b? Very hard, with mid grey surfaces, pimply on the outer face, and a light grey core. *cf.* Woodfield 1983, fig. 29.245, from Phase 4b, dated c.355-370+.

1103 Fab. 31. Alice Holt/Farnham ware. Yellowish-grey surfaces with the remains of a burnished black slip, grey core. A class 3B.14 jar with broad girth cordon decorated with wavy combing, dated 350-420 (Lyne and Jefferies 1979, fig. 28).

- 1104 Fab. 53b. Late burnished metallic greyware. Jar with a rolled rim in an extremely hard fabric. The surfaces are yellowish-grey with red margins and a blue-grey core, the outer face has much linear burnishing, slate-grey to almost black in colour. *cf.* Woodfield 1983, fig. 30.236, dated c.355–370+.
- 1105 Fab. 53a. Late burnished metallic greyware. Yellowish-grey surfaces with red margins and light grey core, linear grey/black burnishing. *cf. ibid.*, fig. 30.235 and 237, dated c.355–370+.

Percentages for this group are shown in Fig. 290. These differ from those for other late groups, suggesting that it could be an early fifth-century assemblage, although the coins date to 324–53.

THE SAMIAN

G. B. Dannell, B. Dickinson and H. Pengelly.

Author's note: A detailed catalogue of the samian from the 1973–78 villa excavations was prepared by Hedley Pengelly, who also reported on the material from the mausoleum excavation. The following summary, and a catalogue of material from the 1983–86 excavations, was provided by G. B. Dannell. All the stamped sherds were identified by Brenda Dickinson.

A full catalogue of the material from both sites is retained in the excavation archive. The summary catalogue and accompanying illustrations deal only with the major decorated sherds and the identifiable potter's stamps.

Summary

Insofar as the villa is concerned it is clear that there is a pre-Flavian presence, typified by a persistent scatter of plain ware. Decorated material appears in the Flavian period, and samian imports are continued smoothly into the Trajanic, with a strong showing from Les Martres-de-Veyre. Lezoux then takes up the market, and the normal phenomenon of increased availability of samian shows through the Antonine period, with a number of late Antonine/Central Gaulish pieces, together with imports from Rheinzabern and Trier.

The much smaller mausoleum assemblage (Appendix 8) consists mainly of plain ware, about half of which is pre-Flavian, with a smaller quantity of Flavian material, and only three vessels of Hadrianic to early Antonine date. Only three vessels from the site are illustrated: two stamped form 18 dishes, which appear with other vessels from Cremations 6 and 17 (Figs 206 and 209), and a form-37 sherd with a 'name' graffito (Fig. 185).

Summary Catalogue

Sherds and stamps from the 1973–78 villa excavations have provenance descriptions prefixed 'A', while those recovered between 1983–86 are prefixed 'B'. A full list of the other abbreviations used appears at the end of this section.

Decorated Sherds (Figs 291, 292)

- 1 67, Esp? Stamped in the mould, A[LBI]: Albus i, Die 9e. The same stamp has been noted elsewhere on forms 30 and 67, always in the ovolo zone. Here it is in a bifid wreath which

has replaced the ovolo. The decoration of the bowls in question is not typical of La Graufesenque, but is paralleled on decorated ware thought to have originated at a pottery in the Lot area, probably at Espalion (J.L. Tilhard, unpub. thesis). A bowl with the same ovolo, but with a different stamp of Albus, is known from the Nijmegen fortress. He was basically a Neronian potter, but form 67 is uncommon before the Flavian period, and so a likely range for this piece is c. 65–75.

B/314: topsoil.

- 2 37, SG. The ovolo used by a potter who made bowls from moulds stamped VITALIS (Vitalis ii), from an unprovenanced vessel in Kettering Museum. The style of vessels with the same ovolo suggests that he made f.37 while f.29 was still well current. c. 70–85.

B/719: primary silt, Ditch 724.

- 3 29, SG. A late vessel; the upper zone has a chase scene, with a dog and hare. Below the central moulding, a frieze of lozenge-shaped leaves, apparently compounded with a poppy-head; below, wreathed medallions containing opposed hares, separated by a trifid motif. The decoration is abraded, particularly the lower zone. A number of the details are similar to those appearing in work stamped internally by COELVS. The trifid and both hares are similar to those shown by Knorr (1919, Taf. 23.15, 16 & 19). c. 75–90.

B/540: Upper fill, Ditch 539.

- 4 37, SG. The ovolo is one associated with bowls stamped in the mould by PATRICIVS (*cf.* CAJ 33, pl. 39. 98/7). c. 75–90.

B/675: fill, Ditch 509.

- 5 37, SG. This ovolo was used on bowls stamped in the mould by MERCATOR (ML S481G). It is so similar to an ovolo used earlier on bowls signed in the mould by CALVVS (CALVOS, La Graufesenque), that a derivation from that poinçon must be likely, the only difference being that the MERCATOR version rarely has a clear rosette tip. The lion, O1400 (type), is on a f.37 with the ovolo from London (ML 4662G), over similar grass tufts. The stag O1738, here presumably dead, runs happily on a f.37, stamped in the mould by MERCATOR (*cf.* May 1916, pl. XXV.5, where the tail of the lion can also be seen). MERCATOR seems to have started work sharing a mould-maker with M. CRESTIO, who made f.29. c. 75–90.

B/710: upper fill, Ditch 724.

- 6 37, SG. A small fragment of a thin-walled bowl with partially crackled gloss; ovolo and part of wavy-line beneath destroyed by the bowl-finisher when he formed the rim. The poorly-moulded leaf, blurred when the bowl was removed from the mould, appears to be one of a pair of diverging leaves attached to a winding stem. Potter (1979, fig. 118, 58) gives both the envisaged 'effect' and the leaf. This leaf is like one used by potters of the Germanus School of La Graufesenque, and may in fact be the same (Hermet 1934, pls. 8.6 and 100.113). c. 75–90.

A/305: destruction, Building 7.

- 7 37, SG. Very difficult to interpret. The trifid motif was common in South Gaul (*cf.* Knorr 1919, Textbild 12.13). The remainder of the decoration is a wreathed festoon. c. 75–95?

?B/262: fill, Ditch 263.

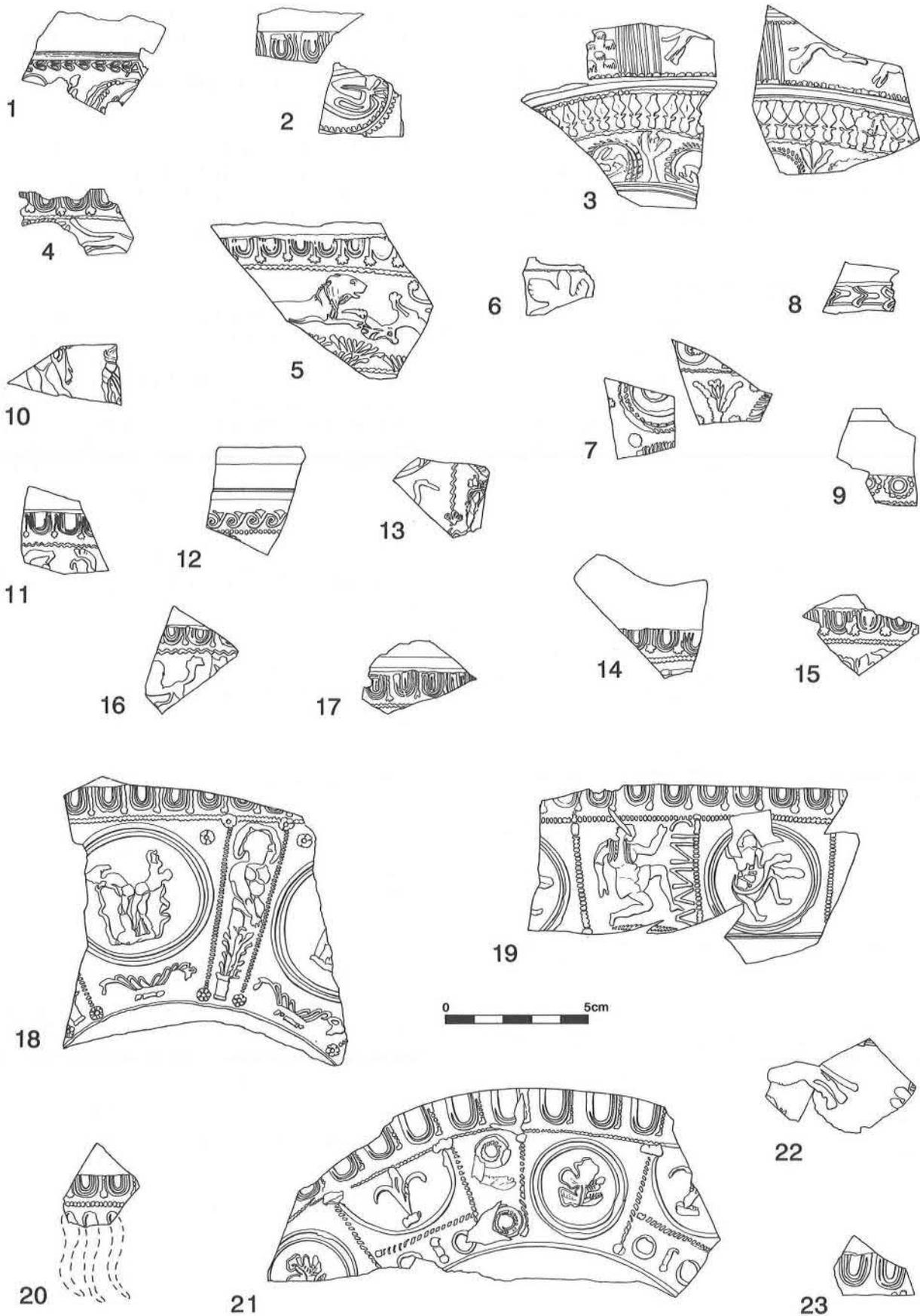


Figure 291: Decorated Samian ware 1-23, scale 1:2.

- 8 37, MdV? This leaf is not shown by Rogers. Ovolo replacements of this type are known in the work of the early Central-Gaulish potters, like AVITVS and VEGETVS (*cf.* Stanfield and Simpson 1990, pl. 62). However, the fabric looks more like that of Les Martres-de-Veyre, although not conclusively. *c.* 90–120?
B/673: fill, Ditch 511.
- 9 37, MdV. Ovolo replacement, probably Rogers C293, *c.* 100–120.
B/1: topsoil.
- 10 37, MdV. Style of IGOCATVS, the figure is D 338. *c.* 100–120.
B/465: upper layer, interior Building 9.
- 11 37, MdV. The ovolo is Rogers B28, here used by DRVSVS 1. The figures are two gladiators, O 1013Q & R (types). *c.* 100–120.
B/852: fill, Ditch 835.
- 12 37, MdV. Ovolo replacement (*cf.* Stanfield and Simpson 1990, fig. 11.7) ascribed to DONNAVCVS. *c.* 100–120.
B/895: part of soil spread 900.
- 13 37, CG. The broad wavy line and small trifid leaf suggests the work of GELENVS (*cf.* Stanfield and Simpson 1990, pls. 65–66. *c.* 120–135).
B/564: fill, Ditch 700.
- 14 37, CG. The ovolo is Rogers B24. *c.* 130–150.
B/899: rubble spread north-east of Building 11.
- 15 37, CG. See 14 for comments.
B/1103: fill, Ditch 1104.
- 16 37, CG. This looks very like the ovolo ascribed to potter P–30 by Rogers as B86. *c.* 130–150?
B/1044: fill, Ditch 1063.
- 17 37, CG. The ovolo is Rogers B209, ascribed to Pottery P–3. *c.* 135–150?
B/899: rubble spread north-east of Building 11.
- 18 37, CG. The style used by DIVIXTVS. All the elements appear in his work. The ovolo is Rogers B52. For the erotic group, O B in a double medallion, and beaded borders ending in rosette circles (*cf.* Stanfield and Simpson 1990, pl. 116.8 & 10). The caryatid D657 is known on stamped pieces (*ibid.*, pl. 115.6 & 7), while the large acanthus, Rogers K2, is on pl. 116.17. It is not clear if the loose piece goes with this vessel. *c.* 140–160
B/861: topsoil.
- 19 30, CG. Stamped in the mould, [C]INN[AMI and]JIN[retr. (Walke and Walke 1968, Taf. 57, 6): Cinnamus ii of Lezoux, Die 5b (a). This is the commoner of Cinnamus's large label stamps. There are many examples from Hadrian's Wall and other northern forts reoccupied *c.* 160, but even more from Antonine Scotland. The ovolo is Rogers B231, and the figures: kilted man, D394, and danseuse, D220. D220 is a figure-type shared with PAVLLVS. See Stanfield and Simpson (1990, 304) for a discussion of the ovolo which, if the connection with Rogers B39 is correct, implies an earlier rather than later date for the piece. By comparison with others the figures are not common, and the modelling is good on this example. *c.* 145–165.
B/1004: destruction, Building 10.
- 20 37, CG. A small fragment, burnt. The ovolo with rosette to the tongue was used by a number of potters working in Central Gaul, including the Donnaucus Group, Attianus and associates, Docilis, and Cinnamus ii in his branch workshop at Vichy (Terre Franche). Cinnamus also used, though not very often, the curving gadroon depicted here (e.g. Stanfield and Simpson 1958, pl. 158.14, from Vichy, with the large CINNAMIOF stamp used at Vichy and Lezoux). For a similar arrangement to this particular piece, *cf. ibid.*, pl. 157.13, from Corbridge. *c.* 145–70.
A/23: topsoil.
- Author's note: Other fragments of this vessel were found in 1983 in destruction contexts probably related to Building 7, the existence of which was not recognised at the time this piece was found.*
- 21 37, CG. The style of PATERNVS ii: his ovolo, Rogers 234; the leaf motif, Rogers G56; astragalus, Rogers R60; and medallions, *cf.* Stanfield and Simpson 1990, pl. 104.8. The roped borders can be seen (*ibid.*, 4). *c.* 160–190.
B/1004: destruction, Building 10.
- 22 37, EG. Burnt. Two adjoining pieces of a small bowl with freestyle decoration including hound (Ricken and Fischer, 1963, T130b) and leaf (*ibid.*, P81) below a straight line with overriding ovolo replacement of a chevron wreath of one of a kind found frequently in the work of the Rheinabern potter Reginus I, who also used the types (Ricken and Fischer 1963, Taf. 11–18). *c.* 160–200.
A/500: trowelling interior of Building 2.
- 23 37, EG. The ovolo of REGINVS 1, *cf.* Ricken and Fisher 1963, E67. *c.* 170–195.
B/677: fill, Ditch 704.
- 24 30, CG. The ovolo is that associated with MERCATOR ii, and MASCELLIO (*cf.* Stanfield and Simpson 1990, fig. 43.3), where the irregular size can be seen clearly. Stanfield's observations about the lack of a constant "style", is probably because he worked for others, rather than that various mould-makers made for him. The ovolo is Rogers B180. The demi-medallions are on a similarly chaotic design (*ibid.*, pl. 146.10), which also has the small stag, O1784 or 1786, and the female panther, O1534. The satyr is a variant of D354; the bifid is Rogers G250; the leaf, H129 and the lozenge U32. The large column is not noted by Rogers, although its base is probably that on Stanfield and Simpson 1990, pl. 7. *c.* 170–195.
B/1053: burnt clay and rubble over floor, Building 10.
- ### Stamps (Fig. 293)
- 1 33, CG. ADIECTIMA (Bjelajac 1990, A2): Adiectus of Central Gaul (almost certainly Lezoux), Die 1b. This stamp is only known on form 33; all the examples recorded in the Leeds Index, with two exceptions (in Gallia Belgica and Pannonia), are from Britain and have been noted as Antonine, though not closely datable within the period.
B/1002: destruction, Building 10.

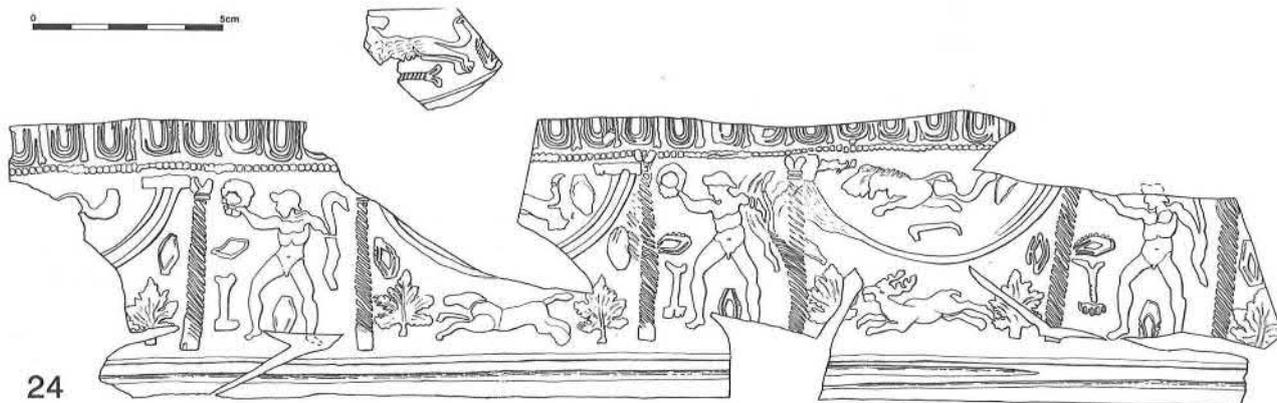


Figure 292: Decorated Samian ware 24, scale 1:2.

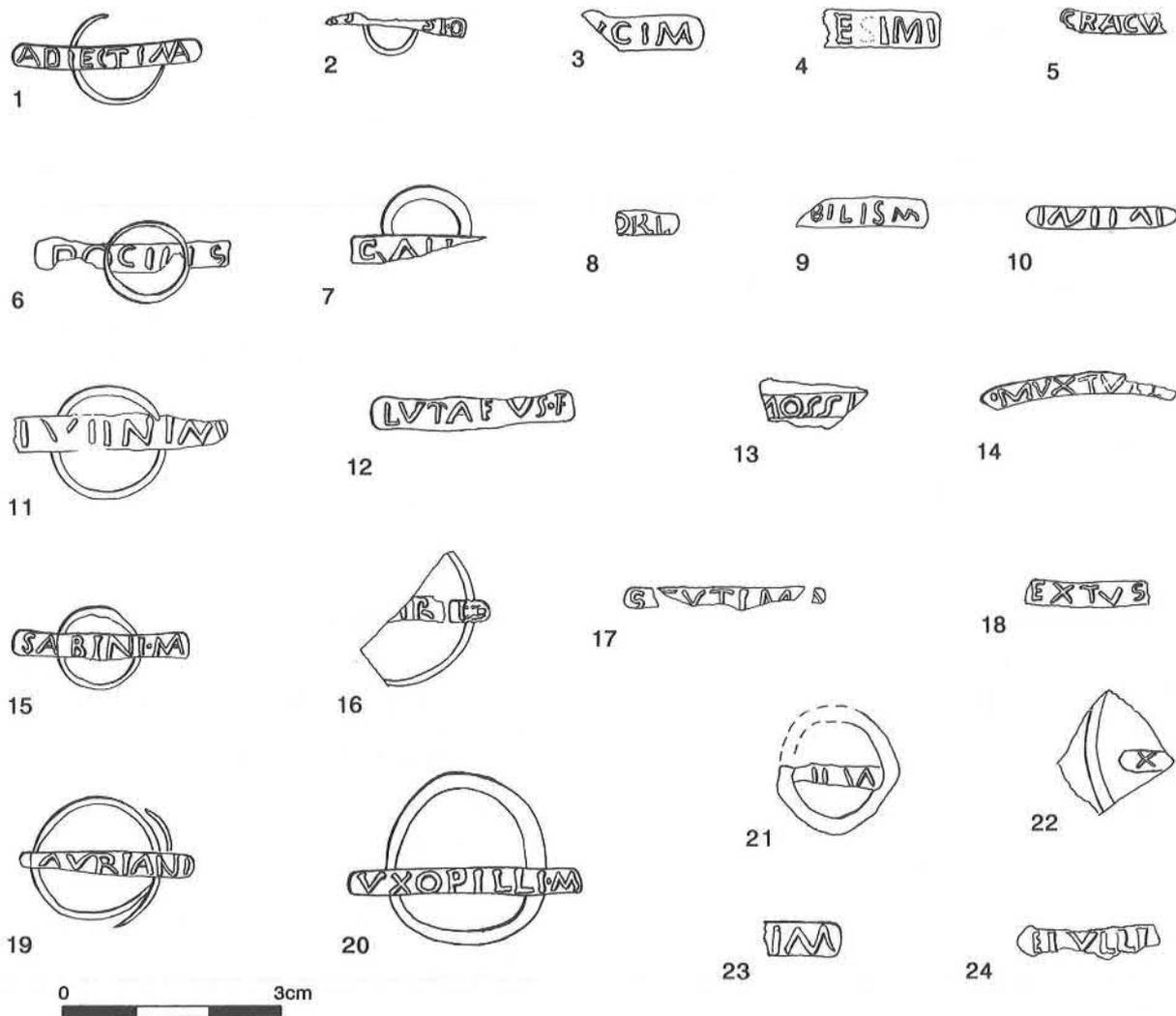


Figure 293: Samian stamps 1-24, scale 1:1.

2 31R, CG. A[JSI-O. This fragmentary stamp belongs to Advocisus of Lezoux, but the precise die is uncertain and does not match any previously recorded stamps. The possible reading in full is: ADVOCISI-O. c. 160-190.

A/500: trowelling interior of Building 2.

3 33, CG. [ALA]VCIMA (Bjelajac 1990, A4): Alaucus of Lezoux, Die 1a (a). Some versions of the stamp, like this, have lost the *ansa* at the end of the frame, while others have *ansae* at both ends. Alaucus was a minor Lezoux potter, who

stamped mostly form 33. Single examples of forms 79 and 80 are known for him, the latter stamped with this die. 1a is also recorded from Ilkley. c. 150-180.

B/1022: destruction, Building 10.

4 33, CG. [C-R]E(S)IMI on a concave base (burnt): Chresimus of Montans, Die 4a (a). Chresimus was one of a group of potters working at Montans in the first half of the second century. His earlier wares turn up in the London Second Fire groups. His stamps are also common in Antonine Scotland,

and this particular one has been noted from Camelon and Inveresk. *c.* 110–145.

B/197: fill of aisle ph2, Room 5, Building 7.

- 5 18/31, CG. CRACV[NA-F] (Curle 1911, no. 32): Cracuna of Lezoux, Die 2a (a). This stamp occurs repeatedly in the Rhineland, which received very little, if any, Lezoux samian after the middle of the second century. It is also common in Antonine Scotland and occurs in a group of burnt samian of *c.* 140–150 at Castleford (publication forthcoming). *c.* 125–150.

B/901: part of soil spread 900.

- 6 33, CG. DOCILIS: Docilis i of Lezoux, Die 3a (a). There is little internal dating evidence for this stamp, but two examples from Corbridge can only date from after *c.* 140. His decorated bowls occur in Scotland and his range of forms includes 18/31 and 27. His career is unlikely to have continued much after 160, since none of the later second-century Lezoux forms have been noted for him. *c.* 135–165.

B/1071: intermediate layer, Enclosure 1208.

- 7 33, CG. GALL[IO]: Gallio of Central Gaul, almost certainly Lezoux, Die 1a. Only two other stamps are known for this potter, both from the same die as this. Neither provides site dating, but both are typologically Antonine.

B/197: fill of aisle ph2, Room 5, Building 7.

- 8 31R, CG. [G·E·N·I·T]ORF: Genitor ii of Lezoux, Die 5a (a). A stamp noted in a group of late second-century samian from a wharf site in London (Dickinson 1986, 189, 3.54) and used regularly on form 31R, which did not evolve before 160 or so. *c.* 160–190.

B/739: layer overlying Building 12.

- 9 38/44, CG. [HA]BILISM (burnt): Habilis of Lezoux, Die 1a (a). Habilis's repertoire includes form 27, which is unlikely to have been made at Lezoux after *c.* 160, and 80, which did not reach its developed form there before that date. This stamp appears on both forms, but is slightly commoner on form 27. A likely date range is therefore *c.* 150–170.

B/27: destruction, Building 7.

- 10 18, SG. IAIIAI: Inea, almost certainly of La Graufesenque, Die 1a. This stamp, as far as records show, was confined to dishes of form 18. It is known from Caerleon and the Nijmegen fortress and is probably early Flavian, though the die may have been used first in the late Neronian period. On this particular vessel the final letter registers as 'I', but clearer examples show it to have been 'F'. *c.* 65–85.

B/482: fill of gully inside Building 9.

- 11 33, CG. IVIINIM: Ivenus of Lezoux, Die 5c (b). No other examples of this stamp have been noted. Ivenus' output includes forms 18/31R (from Camelon), 27, 80, and probably 79. The first two forms imply that his career began before 160, and the others that it continued after that date. The later forms slightly outweigh the earlier, suggesting a range of *c.* 150–175.

B/311: topsoil.

- 12 31, CG. LVTAEVVS-F (Ludowici 1927, 219.e): Lutaeus of Rheinzabern, Die 3a. Lutaeus used this die to stamp both plain and decorated vessels, though not moulds. The stamp

appears on the rim of a bowl from Cannstatt with a mould-stamp of Ianus ii (Knorr 1921, Taf. IX, 108) and on bowls by Reginus vi. On decorated ware it is sometimes placed in the base. The connection with these two potters at Rheinzabern puts this stamp in the range *c.* 160–180.

B/197: fill of aisle ph2, Room 5, Building 7.

- 13 33, CG. MOSSI[M], Mossius ii, Die 2b. Heavily burnt fragment from a thick-based cup. Mossius ii was a Lezoux potter, though this particular stamp has not been found there. Other stamps turn up in dated contexts in Northern Britain including Benwell, Catterick, Malton and South Shields. Mossius's output was mainly mid-to-late Antonine, though he occasionally made use of form 27 which indicates that he was working before 160. The probable range is *c.* 155–180.

A/389: destruction, probably Building 7.

- 14 18/31 Or 31, CG. ·MVXTVLL[I·M] (Walke 1965, no. 264): Muxtullus of Lezoux, Die 1a (a). The date of this piece depends on the precise identification of its form. The site evidence suggests that his career began *c.* 140, though this stamp is unlikely to be from one of his earlier dies. It was used on the mid to late Antonine dish, form 31R, and in the Wroxeter Gutter hoard. In view of this, another example, from South Shields, must have arrived there after the Antonine reoccupation of the fort. Therefore the probable date for this dish is *c.* 160–180, though if the form is really 18/31 it is more likely to belong to the 150s.

B/1004: destruction, Building 10.

- 15 33, CG. SABINI-MA (Dickinson 1986, 195, 3.179): Sabinus viii of Lezoux, Die 7b. This stamp occurs mainly on cups of form 33, which account for the bulk of Sabinus viii's output, but has also been noted once on form 31R. This form, and others which he stamped, such as 79, 79R and 80, did not evolve at Lezoux before about 160. *c.* 155–185.

B/968: fill, Pit 967.

- 16 31, CG. [S]EXTVS[F] (burnt): Sextus v of Lezoux, Die 8d (a). There is no internal dating evidence for this stamp, but Sextus v was clearly a mid to late-Antonine potter. His stamps occur in the group of late Antonine samian recovered off Pudding Pan Rock, Kent, on Hadrian's Wall, and on forms which were introduced at Lezoux *c.* 160, such as 31R and 79. *c.* 160–200.

B/861: topsoil.

- 17 31, CG. SEXTIMA: Sextus v of Lezoux, Die 4d (a). There are at least two examples of this stamp in the group of late Antonine samian recovered off Pudding Pan Rock. It is usually on form 33, but was also used on forms 31, 31R and 38. *c.* 160–200.

B/671: fill, Pit 689.

- 18 31, CG. [SIIVI]IRI: Severus v of Lezoux, Die 6a (a). The internal dating of this stamp comes entirely from the forms on which it was used. These include the mid to late-Antonine dishes, forms 31R and Tg. Severus v's stamps occur on Hadrian's Wall and at other forts in northern Britain which were recommissioned about 160. *c.* 160–190.

B/1002: destruction, Building 10.

- 19 33, CG. [T]AVRIANI: Taurianus of Lezoux, Die 1a (c). There is no site dating yet for Taurianus, but this particular

stamp has been noted on form 18/31R and another, from a different die, is on a dish on the borderline between forms 18/31R and its later second-century variant, 31R. c. 130–150.

B/197: fill of aisle ph2, Room 5, Building 7.

- 20 38, CG. VXOPILLI-M (burnt); Uxopillus of Lezoux, Die 4a (a). A considerable amount (in fragments) of a large bowl. This stamp occurs in one of a series of large pit groups at Alcester, dated c. 150–160, in a burnt group (of the 160s) at TÁC, and at Newstead. Uxopillus was primarily a mid to late Antonine potter, but the evidence from Alcester and TÁC suggests that this particular die was one of his earlier ones. c. 150–170.

A/264: destruction, probably Building 7.

- 21 Ritt. 9, SG. JIIV. Pre-Flavian (pre-69).

B/1: topsoil.

- 22 18/31(R?), CG. X[?], heavily burnt. Hadrianic or Antonine (118–180).

B/27: destruction, Building 7.

- 23 33, CG. JIM. Antonine (138–180).

B/1004: destruction, Building 10.

- 24 31, CG. ELVLLI[. Almost certainly a stamp of Elvillus of Lezoux, though not one recorded in the Leeds Index of potters' stamps. c. 160–190.

B/1004: destruction, Building 10.

ABBREVIATIONS USED:

CG	Central Gaul
D	Déchelette 1904.
EG	East Gaul
Esp	Espalion.
H	Hermet 1934.
La Nautique	Fiches <i>et al.</i> 1978.
MdV	Les Martes-de-Veyre.
ML	Museum of London
O	Oswald 1937.
Rogers	Rogers 1974.
SG	South Gaul

Ligatured letters are underlined

EARLY SAXON POTTERY

P. Blinkhorn

Introduction

The early Saxon pottery from this site consists of a small fragmentary group of 192 sherds. Most of the pottery was found in topsoil or upper levels of Roman features, apart from the group from the sunken featured building (604) on the Mausoleum site. No reconstructions of vessel profiles were possible and no cross-joins were found, apart from within the different layers and quadrants of the SFB. The decorated sherds are generally of a form which suggests occupation in the early to middle part of the fifth century.

Fabrics

The range of fabrics of the early Saxon pottery from this site are typical of those from the Milton Keynes area. The classification and codings used are the same as those for Pennyland (Blinkhorn 1993).

The fabrics occurring at Bancroft are as follows:

- F2** Sand-tempered. Moderate to dense rounded to sub-rounded white and pink quartzite up to 1 mm with sparse to common sub-rounded ironstone and limestone up to 1 mm.
- F3** Ill-sorted, sparse to moderate angular limestone up to 2 mm. Occasional speckling of very fine mica. Rare quartzite and/or sandstone.
- F5** Moderate to dense finely crushed angular and sub-angular clear quartzite up to 0.5 mm, with rare grains up to 2 mm. Very rare pieces of limestone up to 2 mm.
- F9** Very sparse small fragments of quartzite and/or limestone, up to 1 mm.
- F10** Moderate to dense sub-angular quartzite with lumps of granite, up to 4 mm.
- F11** Moderate to dense sandstone and/or crushed sub-angular metaquartzite, up to 2 mm.
- F14** Chaff-tempered, with moderate to common rounded quartzite up to 2 mm.

The number of sherds by fabric from the site were as follows:

Fabric	F2	F3	F5	F9	F10	F11	F14
No.	34	3	49	7	8	89	2

The fabrics can be amalgamated into classes, the defining parameter being the physical treatment of the temper, *ie.* crushed mineral (Class A), untreated sand (Class B) or chaff temper (Class C). The results are as follows:

Class A (Fabrics 3, 5, 10, 11):	149	sherds (77.6%)
Class B (Fabrics 2, 9):	41	sherds (21.4%)
Class C (Fabric 14):	2	sherds (1.0%)

These results are worthy of comparison with the pottery from the early Saxon site at Caldecotte, Milton Keynes (Blinkhorn, forthcoming), which is of a similar date. This site is akin to Bancroft in that the main occupation consisted of a single SFB with carinated bowls amongst the pottery assemblage. However, the proportions of fabric classes present at Caldecotte were quite different. Class B fabrics were by far the most common, making up 57.9% of the assemblage. Class A comprised 24.4% and Class C 17.7%, although the majority of the Class C sherds came from a single vessel, probably distorting the significance of the chaff-tempered material.

The vast majority of the carinated bowls from Caldecotte were in the Class A fabrics, as is the case at Bancroft, so it appears that there may be some significance in the treatment of the temper, although there is evidence to suggest that this has cultural rather than typological significance. This has

been discussed at some length in the report on the early/middle Saxon domestic pottery from North Raunds, Northants. (Blinkhorn, forthcoming b), and it is suggested that the treatment of the inclusions may be the result of the cultural or tribal background of the potters. Other sites from the south-east Midlands have been examined in this fashion, and it is certain that the explanation is not typological. More work is obviously needed, but the forthcoming publication of a number of small early Saxon sites in the area may make an overview and synthesis possible. It is hoped that this will be carried out in the near future.

Dating

The bulk of the decorated early Saxon pottery from the villa suggests that this site was occupied during the fifth century. The four fragments of carinated bowls (1–4), are typical of *Schalenurne* tradition of East Holstein, and are datable to the first half of the fifth century (Myres 1986, 66). The slashed sherds (5–6) are probably of a similar date, this being a typical decorative technique of fifth-century Jutish vessels (*ibid.*, 64). The stamped sherd (7) is difficult to date accurately without an overall picture of the decorative arrangement. Stamping is not unknown as a fifth-century decorative technique, but is extremely rare (*ibid.*, 64). The sherd is therefore tentatively given an early date as it occurs in Context 442, which also contained a carinated bowl sherd, although a later date is not out of the question. A rusticated sherd (8) was also found in this feature, but this decorative form is impossible to date in isolation.

The sherd which appears to be from the neck of a bottle (9) is rather unusual, and a parallel cannot be found. It is possible that it is an imitation of a Roman vessel, but this cannot be stated with confidence.

The rod handle (12) is also extremely unusual, but is similar to those on a vessel from Empingham, Leics. (Myres 1976, Corpus No. 3336), which contained a fifth-century cremation (*ibid.*, 9).

The SFB on the Mausoleum site did not produce any decorated pottery, but did yield a small plain hollow-necked biconical vessel (14). This type is firmly attributable to the fifth century, and there are strong links to the decorated *Schalenurne* (Myres 1976, 3). A similar vessel was found at a villa site at Greetwell, Lincs. (*ibid.*).

Apart from doubts concerning the stamped sherd, the ceramic evidence indicates that the Saxon occupation of the site was probably relatively short-lived, and dated from the early part of the fifth century to the middle.

Catalogue (Fig. 294)

Decorated Sherds

- 1 F5. Fragment of carinated bowl, with at least two horizontal cordons above the carination. Light and even burnish on both surfaces.
V/245: Fill of Ditch 260.

- 2 F5. Fragment of carinated bowl as 1. Vertical slashing below carination.
V/245: Fill of Ditch 260.
- 3 F5. Fragment of carinated bowl. Slightly degraded, wet hand finished surface. Diagonal slashing and horizontal cordon above the carination.
V/442: Junction of Ditches 260 and 511.
- 4 F5. Fragment of carinated bowl. At least two incised cordons above the slashed carination.
V/467: Surface clearance to west of Building 1.
- 5 F5. Slashed sherds from ?shouldered vessel. Rough unfinished surfaces, oxidized outer.
V/1978/388: topsoil.
- 6 F10. Slashed and cordoned sherd from ?shouldered vessel. Smoothed outer surface.
V/23: Surface clearance to west of Building 1.
- 7 F2. Single annular stamp impression, with at least four horizontal cordons.
V/442: Junction of Ditches 260 and 511.
- 8 F11. Rusticated sherd. Oxidized brown outer surface.
V/442: Junction of Ditches 260 and 511.
- 9 F5. Single sherd from the neck of a ?bottle. Three horizontal cordons.
V/245: Fill of Ditch 260.
- 10 F5. Single sherd from a ?globular vessel. Lightly burnished surfaces, at least two horizontal cordons.
V/245: Fill of Ditch 260.
- 11 F11. Single incised sherd, oxidized surfaces. Overall linear scheme uncertain.
V/442: Junction of Ditches 260 and 511.

Handle

- 12 F2. Rod handle with an uneven squared ovoid profile. Wet hand finished surface.
V/245: Fill of Ditch 260.

Base

- 13 F10. Three sherds from a flat base.
M/595, 615, 765: SFB 604.

Rim Sherds

- 14 F2. Four sherds from a plain hollow-necked biconical vessel. Very rough, unfinished surface.
M/611: SFB 604.
- 15 F11. 11 sherds from the rim, body and base of a small globular jar. Oxidized inner surface, wet-hand finished outer.
M/611: SFB 604.
- 16 F2. Three sherds from the rim and shoulder of a small jar. Wet hand finished surfaces.
M/610: SFB 604.

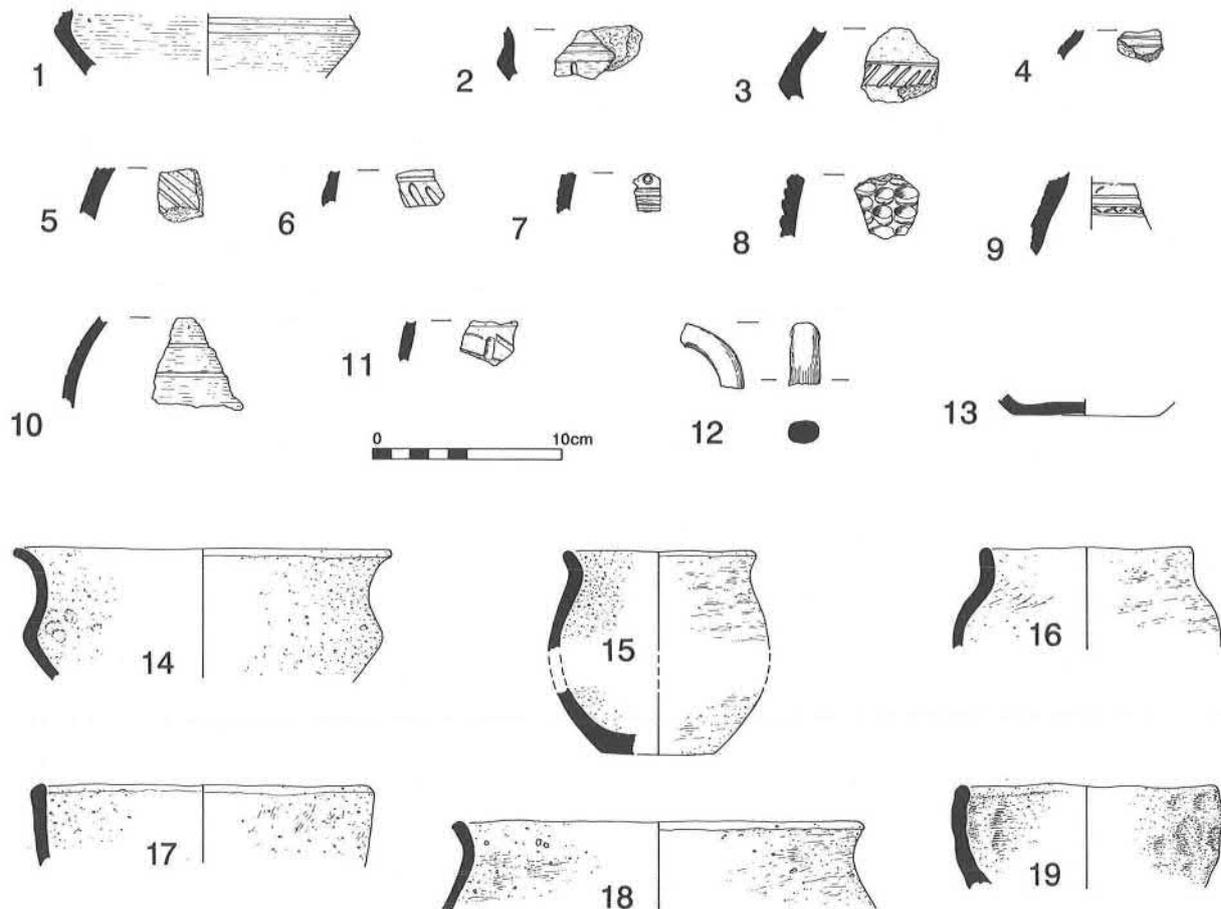


Figure 294: Saxon pottery from the villa and mausoleum sites 1-19, *scale 1:4*.

- | | |
|--|--|
| <p>17 F10. Three sherds from the rim of a bowl. Unfinished surface.
M/610: SFB 604.</p> | <p>19 F9. Two sherds from a small bowl. Very uneven profile, suggesting either poorly executed pinch construction or an inept attempt at internally pressed boss decoration.
M/610: SFB 604.</p> |
| <p>18 F3. Rim sherd from a large jar. oxidized, wet hand finished surfaces.
V/18: Fill of Ditch 260.</p> | |

ENVIRONMENTAL EVIDENCE

ANIMAL BONE FROM THE 'MAUSOLEUM' SITE

Jonathan Holmes and Kevin Rielly

Author's note: The initial bone identifications were made by Jonathan Holmes, who prepared the original report in 1986/7. This was subsequently updated and edited by Kevin Rielly in 1992.

Introduction

A total of 7360 fragments (98 kg) of animal bone were recovered from the excavations at the 'Mausoleum' site. 6387 of these (94.4%) were found in stratified contexts, which can be divided into six main phases of occupation, namely late Bronze Age/early Iron Age, Iron Age, Belgic/early Roman, Saxon and Medieval. Table 39 shows the number of bones found and the main features in which they were located within each of the six phases. Clearly the majority of the stratified assemblage was produced by the Iron Age and Belgic/early Roman contexts, 48% and 30% respectively, corresponding to a greater density of features during these two periods.

The later three assemblages are of limited worth owing to their small size and rather poor dating. Both the late Roman and Saxon features, with the exception of the shrine (mid to late fourth century), cannot be more closely dated than the fourth or fifth centuries. However, the possible temporal overlap should lead to discounting the noticeable material differences. Therefore each of these two assemblages is dealt with as a separate group. The medieval sample is very poorly dated. For this reason it is excluded from any further part in this report.

Small samples, from both features and period assemblages, largely limit this report to a comparison of the Iron Age and Belgic/early Roman bone groups. Spatial analyses are confined to the larger bone samples within these two periods.

It is pertinent to mention that the Belgic/early Roman assemblage contains a small number of animal bones found in association with a number of human cremations: a total of 181 bones (Table 39), of which only twenty-six could be identified to species. These bones receive no further specific mention in this report but are dealt with in some detail elsewhere (Appendix 9).

Recovery

All material was collected by hand. The recovery bias introduced by the absence of sieving has been dealt with in great detail elsewhere (Payne 1972). The major consequence is that hand recovery favours the finding of larger fragments, which will affect both species diversity and the character of

each species assemblage. Clearly these factors must be born in mind when considering the faunal evidence from this site.

Preservation

The degree of fragmentation was high throughout the site, as shown by the proportion of unidentifiable bones and loose teeth in Table 40. This is a typical feature of excavations in this region (Holmes 1989, 1993 and forthcoming). Fresh breakage was a major contributory factor to this fragmentation; a large proportion of bones, in particular of larger animals, showed such breakages. These, in turn, undoubtedly result from the intractable heavy soil of the region and the consequent difficulties of excavation. Referring to factors contributing to ancient breakage, it has been noted that fragmentation is directly related to depth of deposit (Wilson 1978). Most of the features at this site were shallow. In addition a large proportion of the bones in each phase show signs of either having been weathered and/or gnawed (Table 40). This evidence indicates that bones had been left on the surface prior to burial, increasing the chance of fragmentation. Weathering is particularly prevalent in the late Roman assemblage (Table 40). In this case it can be suggested that the mausoleum burial chamber and robber trenches, which produced over 95% of the assemblage, may have been only gradually filled up. Overall the bones found in each period were generally in good condition and not noticeably friable.

Methodology

Fragments of bone which could be refitted, either broken during excavation or in the past, were counted as one fragment. In addition bones which were clearly part of a partial or complete skeleton were also counted as one fragment. Obviously, if counted individually the bones of one skeleton would bias any bone count towards that species.

Three quantitative methods were used; total fragment count (TF), bone weight (BW) and minimum number of individuals (MNI). The first two methods involve a straight count or measure of the bones in each context, while the latter follows the calculation suggested by Chaplin (1971), comparing left and right side elements of the skeleton and tooth wear where appropriate. Each context was divided into identified and unidentified portions. The former includes all loose teeth, epiphyses (where they could be fitted to a diaphysis or vertebral body), and ribs where a rib head was present. Neither TF nor BW take the likely biases of differential fragmentation into account. Hence it is often appropriate to use a weighted quantitative method, as MNI. Indeed it is advantageous to use a number of quantitative methods to gain a better understanding of the raw data (Maltby 1981). However, the MNI method loses its potential for comparability when used on small samples. Hence this method is employed sparingly in the following report.

FEATURE	PERIOD					
	Late Bronze Age/ early Iron Age	Iron Age	Belgic/ early Roman	Late Roman	Sub- Roman/ Saxon	Medieval
Roundhouse(s)	280	2597	—	—	—	—
Hollow 340	185	—	—	—	—	—
Enclosure 2	—	—	224	—	—	—
Ditch system (632/642, etc)	—	—	491	—	—	—
Cremations	—	—	181	—	—	—
Temple-mausoleum	—	—	—	188	86	75
Shrine 15	—	—	—	91 ⁽¹⁾	—	—
Ditch 94/95	—	—	—	—	459 ⁽¹⁾	—
SFB 604	—	—	—	—	115 ⁽¹⁾	—
Enclosure 60	—	—	635	—	—	—
Other	—	743	552	46	—	—
TOTAL	465	3340	2083	325	660	75
%	6.6	48.0	30.0	4.7	9.5	1.1
% proportion of total stratified site assemblage ⁽¹⁾ including one skeleton counted as a single fragment						

TABLE 39: Bone representation by period and feature.

STATE	Late Bronze Age/early Iron Age	Iron Age	Belgic/ early Roman	Late Roman	Sub- Roman/ Saxon
% Unidentifiable frags.	79.6	71.2	68.7	70.8	69.0
% cattle long bones with new breakage	58	48	65	46	72
% sheep long bones with new breakage	10	38	33	47	38
% loose teeth ⁽¹⁾	26.1	26.8	23.4	30.2	29.4
% identifiable bone gnawed or weathered	8.4	5.4	7.1	12.8	2.1
% charred bone	17.4	2.1	2.5	1.0	1.6
⁽¹⁾ percentage of total number of cattle, sheep/goat and pig loose teeth					

TABLE 40: State of the bone finds.

Relative Frequency of Individual Species

Domestic Animals

This section compares the representation of cattle, sheep/goat, horse, pig, dog and cat. Three of the species on this list need a few introductory comments. It is possible that the cattle assemblage in the late Bronze Age/early Iron Age period may include a small proportion of aurochs. These are referred to in the 'Wild Fauna' and 'Size and Type' sections below. Sheep and goat bones are notoriously difficult to separate. Criteria detailed in Boessneck (1969) and Payne (1985) were used to distinguish these species. Goat was positively identified in the Belgic/early Roman assemblage only, from a skull from Ditch 60. This period also produced two first mandibular molars which could be tentatively identified

as goat. The absence of identified goat bones in the other periods does not categorically exclude its presence. However, it can be suggested that sheep were relatively more abundant than goat in all periods.

The representation of the domestic species are compared and contrasted using three quantitative methods.

Total Fragment Count

While highly variable, the proportions of the domestic species (Table 41) do show some consistencies. Noticeably cattle and sheep/goat predominate, with the former ascendant in all but the late Roman period. Horse and pig are similarly represented in each

SPECIES	PERIOD									
	Late Bronze Age/early Iron Age		Iron Age		Belgic/early Roman		late Roman		Sub-Roman/Saxon	
	N	%	N	%	N	%	N	%	N	%
Cattle	36. ⁽¹⁾	37.9	503	52.3	256	39.3	23	23.5	73	35.6
Sheep/Goat	23	24.2	317	32.9	208	31.9	32	32.6	45	21.9
Horse	–	–	50	5.2	92	14.2	5	5.1	29	14.2
Pig	29	30.5	83	8.6	71	10.9	6. ⁽²⁾	6.1	24	11.7
Dog	1	–	5	0.5	8	1.2	1	1.0	16. ⁽²⁾	7.8
Cat	–	–	–	–	–	–	3	3.1	2	–
Red deer	4	4.2	1	–	–	–	14	14.3	7	3.4
Fallow deer	–	–	–	–	–	–	–	–	1	–
Deer	–	–	–	–	–	2.0	–	–	–	–
Hare	–	–	–	–	–	–	3	3.1	–	–
Small rodent	–	–	–	–	–	–	3	3.1	1	–
Fox	–	–	–	–	1	–	2	2.0	–	–
Avian	1	–	2	–	11	1.7	6	6.1	5	–
Amphib.	1	–	1	–	1	–	4	4.1	3	–
Total identified	95	20.4	962	28.8	648	31.1	98	30.1	205	30.1
Unidentified	370		2378		1435		227		455	
TOTAL	465		3340		2083		325		660	

⁽¹⁾ including auroch(?)
⁽²⁾ including one skeleton counted as a single fragment

TABLE 41: Species representation

Context/Feature	Cattle %	Sheep %	Horse %	Pig %	N
<i>Iron Age</i>					
Rhs 101, 164 and 165	56.6	34.5	3.6	5.3	113
Rh 620	50.3	26.9	5.7	17.1	141
Rh 631 and Ditch 630	64.7	32.3	0.8	2.2	136
Rh 634	44.4	42.7	6.0	6.9	117
Rh 643	60.7	27.8	6.3	5.2	79
<i>Belgic/early Roman</i>					
Enclosure Ditch 60	44.1	34.6	10.6	10.7	254
Ditch 632/642, etc.	49.6	21.6	17.6	11.1	125

N Total number of cattle, sheep, horse and pig in those contexts.
% proportion of N.

TABLE 42: Species fragment frequency in selected Iron Age and Belgic/early Roman features.

period, with the exception of the late Bronze age/early Iron Age, which produced no horse and a large proportion of pig. Dog is poorly represented in all but the Saxon period. A few cat bones were found in the later two periods.

This quantitative method was also applied to some of the better-represented features in the Iron Age and Belgic/early Roman assemblages (Table 42). The purpose is to test for any differences

in disposal strategies in a particular occupation period (eg. Maltby 1985). As with the period assemblages, the results are fairly consistent though the actual proportions are highly variable. However, there are two notable inconsistencies. In the Iron Age, one bone group has a high proportion of pig (Roundhouse 620), and in the Belgic/early Roman period the ditch system produced a large proportion of horse bones.

Species	N	Iron Age			Belgic/early Roman			
		MNI	%	TF	N	MNI	%	TF
Cattle	13		32.5	52.8	17		30.3	40.4
Sheep/Goat	16		40.0	33.2	19		33.9	32.8
Horse	3		7.5	5.2	9		16.0	14.6
Pig	8		20.0	8.8	11		19.8	12.2

N number of individuals
% proportion of total number of cattle, sheep/goat, horse and pig bones. Number of fragments per species shown in Table 41.

TABLE 43: Representation of major domesticates in the Iron Age and Belgic/early Roman periods, using Minimum number of individuals (MNI) and Total fragment count (TF).

Species	PERIOD				
	Late Bronze Age/ early Iron Age	Iron Age	Belgic/ early Roman	Late Roman	Sub-Roman/ Saxon
	%	%	%	%	%
Cattle	75.0	75.3	59.0	51.9	53.4
Sheep/Goat	4.2	7.9	8.4	10.6	5.4
Horse	—	13.4	26.5	13.4	16.8
Pig	14.6	3.1	4.8	8.9	6.2
Other	6.2	0.3	1.3	15.2	18.2
Weight ident* (kg)	3.4	29.3	25.0	2.55	7.07
Total weight (kg)	4.87	41.19	32.87	3.87	9.45
% ⁽¹⁾	5.2	44.4	35.4	4.2	10.4

* Total weight of the identified assemblage by period.
% percentage of the latter weights.
%⁽¹⁾proportion of total weight of the stratified assemblage, ie. 92.82 kg.

TABLE 44: Proportions of the major species by weight in each period.

Any analysis of these results must take fragmentation into account. Fragmentation is noticeably greater in the late Bronze Age/late Iron Age, and though it is not much greater in relative terms in the late Roman period, this assemblage does display a high proportion of weathered bone (Table 40). As cattle tends towards greater fragmentation than the smaller domestic species (Maltby 1981), it is likely that using TF counts this species is over represented in all periods. The greater fragmentation shown by the late Bronze Age/early Iron Age and late Roman assemblages may suggest that cattle is particularly over-represented in these two periods.

Minimum Number of Individuals

MNI is used in order to reduce the effects of differential fragmentation (Watson 1979, 128; Maltby 1981, 164). The results using this method when compared to the TF figures generally show a rise in the proportion of the smaller mammals at the expense of the larger. Both methods were applied to the larger site samples, that is the Iron Age and Belgic/early Roman bone assemblages, and the

results clearly follow the same pattern (Table 43). Unfortunately, neither the late Bronze Age/early Iron Age nor the late Roman samples were large enough to apply the MNI method, so it is impossible to test for the above mentioned over-representation of cattle.

A point worth mentioning with regard to the Iron Age assemblage is that, conversely, the MNI cattle proportion in Table 43 may be under-represented. MNI estimates were calculated using the mandible in sheep/goat and pig, and the radius in cattle. The great majority of cattle long bones are fused, indicating mature individuals, although several juvenile mandibles were found (Tables 49 and 50). Taking age into account, it seems that the cattle MNI estimate may be too low.

Weight of Bone of Different Species

It has been argued that the relative weights of bone give an idea of the proportion of meat available from each species (eg. Davis

1987, 37). Table 44 compares the weights of material from each of the main phases, concentrating on the major domesticates. Partial or complete skeletons, where present, are included in the total bone weights for each species. This table clearly shows the importance of beef in all periods. Proportions of sheep/goat and pig vary; pig is emphasised in the late Bronze Age/early Iron Age, and sheep/goat in the Iron Age and Roman periods. Horse may have formed a substantial part of the meat diet in each of the five phases, especially in the Belgic/early Roman period.

Discussion

There are clear difficulties in comparing bone groups with quite different sample sizes and degrees of fragmentation. The use of a variety of quantitative methods is helpful, but many of these are limited by sample size. Obviously the Iron Age and Belgic/early Roman data is more reliable than that from the other periods. Comparing the TF and MNI results obtained from these two periods, and taking fragmentation and age considerations into account, it is possible to draw tentative conclusions. In both phases there appears to be no change in cattle and pig abundance, sheep/goat possibly declines and horse increases in relative frequency through time.

Overall, in all periods, cattle is well represented, and would certainly have provided for the greater part of the meat diet.

Wild Fauna

The wild animals can be divided into game species: red and fallow deer, hare and possibly – accidental – fox. Red deer are represented in most periods, possibly including the Belgic/early Roman period (Table 41). The bones from this period may belong either to young/small red deer, or possibly to fallow deer. One fallow deer bone was identified from a context in the Saxon enclosure ditch (94/95). Hare was found in the late Roman period only. It is clear that game species are minimally represented in all but the latter period. This fact is perhaps significant, considering the relatively small sample size of the late Roman assemblage, assuming that there is a direct relationship between sample size and species diversity (Grayson 1984, 131–167). It would appear that hunting provided for a relatively larger part of the late Roman meat diet in comparison to the other periods of occupation.

Fox bones were provided by each of the two Roman phases.

Possibly relevant to this section is a very large and badly weathered atlas found in a late Bronze Age/early Iron Age context within the metalled area (340). Identified as bovid, it was found to be larger than any modern atlas in the Museum of the Sub-Department of Veterinary Anatomy. The inescapable conclusion is therefore that it is from an aurochs, *Bos primigenius*. Owing to the poor condition of this bone it could conceivably date to an earlier period. However, the majority of the bones in the same and adjacent contexts are also in a poor state. This may argue either for blanket residuality or, more likely, for a corresponding bone and artefact deposition period.

Small Mammal and Amphibian Remains

A small number of rodents were found in the late Roman and Saxon levels within the abandoned temple-mausoleum. Accurate identifications were not possible, although it is fairly clear that a possible rat is represented in both periods and a possible mouse in the earlier period. These bones could represent the remains of owl

pellets. Frog or toad were found in each of the five period bone groups. These are also restricted, in the late Roman and Saxon phases, to the temple-mausoleum deposits.

Avian Remains

Bird bones formed only a small part of each period assemblage. A large proportion of these were identified. Chicken was recognised in all periods from the Iron Age onwards. In addition three bones, possibly representing the partial skeleton of a small passerine, were found in a Belgic/early Roman context.

Frequency of Skeletal Remains and Butchery

The removal of meat involves a sequence of butchery events. It is the purpose of this section to try to identify one or more of these events by looking firstly for the over/under-representation of particular groups of skeletal parts, and secondly for concentrations of cut marks in particular areas of the skeleton.

A major division of the carcass, into 'meat rich' and 'meat poor' parts can be identified in the archaeological record. The 'meat poor' or 'butchers' waste' part of the skeleton includes the lower limbs (carpals/tarsals, metapodials and phalanges) and the head (skull and mandible). Contexts with a marked over-representation of either 'butchers waste' or 'meat rich' bones may indicate that such a division had taken place.

Prior to the skeletal part analysis there are two major points that must be considered:

1. Certain skeletal parts will be under-represented owing to the lack of sieving (see *Recovery*), while others will be over-represented because of differential fragmentation (see *Methodology*). In the latter case the skull is often highly fragmented, and in consequence relatively well-represented. The use of weighted quantitative methods is inappropriate where the sample sizes are small (see *Methodology*).
2. Discrete dumps of particular parts may be mixed up owing to ancient redeposition. In addition, mixing may occur where only period assemblages are considered, as in this case. While the degree of redeposition is difficult to appraise it can be seen that, even though the assemblages for each context were small, no obvious over-representation of any skeletal parts was seen.

The butchery events behind 'butchers waste' are best recognised by an analysis of the cut marks. There are limitations to such an analysis. The high degree of fragmentation is likely to have masked much of the butchery evidence. In addition, the butchery methods which tend to leave marks on the bone are generally those involving the use of the cleaver. Hence certain events may not be recognised, or only minimally represented.

As with the previous section both analyses are generally restricted to the Iron Age and Belgic/early Roman assemblages.

Skeletal Parts

Cattle

The anatomical distribution of the bones of the cattle found in each of the five major periods is shown in Table 45. Most of the skeletal parts are represented in each period, and the proportions of these parts can be seen to be highly variable. To a large extent, this

	<i>Late Bronze Age/ early Iron Age</i>	<i>Iron Age</i>	<i>Belgic/ early Roman</i>	<i>Late Roman</i>	<i>Sub-Roman/ Saxon</i>
Skull	2	50	17	–	4
Mandible	2	68	39	2	7
Loose teeth	12	105	48	6	17
Vertebrae	3	44	19	2	8
Rib and Sternum	–	5	5	–	–
Scapula	3	17	7	1	2
Humerus	4	23	12	1	2
Radius and ulna	4	40	23	1	5
Pelvis	–	19	11	1	2
Femur and patella	–	16	7	3	1
Tibia and fibula	1	18	14	3	4
Carpal/tarsal	2	27	12	–	1
Metapodial	3	40	31	1	15
Phalangeal	–	5	5	–	–

TABLE 45: Anatomical analysis of cattle bones (Total fragment count).

	<i>Late Bronze Age/ early Iron Age</i>	<i>Iron Age</i>	<i>Belgic/ early Roman</i>	<i>Late Roman</i>	<i>Sub-Roman/ Saxon</i>
Skull	0	14	6	–	2
Mandible	3	60	27	4	4
Loose teeth	3	100	42	10	12
Vertebrae	1	12	9	1	5
Rib and Sternum	0	5	12	2	1
Scapula	0	11	9	–	2
Humerus	2	17	14	–	–
Radius and ulna	6	40	22	3	4
Pelvis	2	10	11	2	1
Femur and patella	0	16	3	2	2
Tibia and fibula	0	18	32	1	4
Carpal/tarsal	0	27	5	–	2
Metapodial	5	32	21	7	3
Phalangeal	1	11	3	1	1

TABLE 46: Anatomical analysis of sheep/goat bones (Total fragment count).

variation is undoubtedly related to recovery and fragmentation biases. The proportion of 'butchers waste' in the Iron Age and Belgic/early Roman assemblages are 63.2% and 61.1% respectively.

Sheep/Goat

Table 46 shows the frequency of sheep/goat elements found at this site. Each period displays a wide distribution of skeletal parts, with abundance again dependant on a number of post depositional factors. However unlike the cattle assemblage the proportion of 'butchers waste' from the two major periods is quite different (Iron Age, 77.0%; Belgic/early Roman, 50.2%). As the degree of fragmentation noted for these two periods (Table 40) is approximately similar, it can perhaps be suggested that the difference is

related rather to differential disposal than to differential fragmentation.

Pig

Pig elements are shown in Table 47. There is a wide distribution of parts, with a noticeable bias towards the head. The proportion of 'butchers waste', similar to sheep/goat, is higher in the earlier period (Iron Age, 74.7%; Belgic/early Roman, 54.9%).

Horse

Table 48 shows a mix of anatomical parts in each period. A roughly similar proportion of 'butchers waste' was found in the Iron Age and Belgic/early Roman assemblages, 65.3% and 58.7% respectively.

	<i>Late Bronze Age/ early Iron Age</i>	<i>Iron Age</i>	<i>Belgic/ early Roman</i>	<i>Late Roman</i>	<i>Sub-Roman/ Saxon</i>
Skull	3	10	8	0	3
Mandible	9	16	13	–	5
Loose teeth	8	32	12	2	10
Vertebrae	0	1	0	–	–
Rib and Sternum	0	1	0	–	1
Scapula	0	9	10	–	–
Humerus	1	5	9	–	2
Radius and ulna	2	4	4	2	2
Pelvis	1	0	3	–	–
Femur and patella	0	1	1	–	–
Tibia and fibula	1	0	5	–	1
Carpal/tarsal	0	0	1	1	0
Metapodial	2	3	3	0	1
Phalangeal	2	1	2	0	0

TABLE 47: Anatomical analysis of pig bones (Total fragment count).

	<i>Iron Age</i>	<i>Belgic/early Roman</i>	<i>Late Roman</i>	<i>Sub-Roman/Saxon</i>
Skull	1	4	1	0
Mandible	5	4	0	6
Loose teeth	10	30	2	15
Vertebrae	5	9	1	2
Rib and Sternum	0	1	0	0
Scapula	1	2	0	0
Humerus	1	2	0	0
Radius and ulna	4	7	0	0
Pelvis	0	4	0	1
Femur and patella	3	7	0	1
Tibia and fibula	3	6	0	0
Carpal/tarsal	3	5	0	1
Metapodial	8	8	2	2
Phalangeal	5	3	0	1

TABLE 48: Anatomical analysis of horse bones (Total fragment count).

Butchery

Cattle

A variety of butchery events can be recognised, mainly in the Iron Age and Belgic/early Roman assemblages. There is evidence for the division of the head and lower limbs. An example of decapitation was found in the Iron Age bone group – a heavy chop to the posterior side of an occipital condyle. Superficial chops to the calcaneus, together with knife cuts to the dorsal surface of the astragalus and proximal perimeter of the metatarsus (all Iron Age examples) may have facilitated the disarticulation of the hock joint. A similar cut was found in the Saxon assemblage, though on a metacarpus rather than a metatarsus. In addition, in all periods except the late Bronze Age/early Iron Age, the radius, tibia and metapodials have commonly been chopped through at variable distances from the carpal/tarsal joint. A number of these chops could be directly related to the separation of the lower limb, for

example three Iron Age tibia fragments with chops approximately one-third up from the distal end.

A similar division of the mandible was seen in both the Iron Age and Belgic/early Roman groups. Butchery and breakage patterns suggest a three part division; that is, a vertical chop separating the vertical and horizontal portions of the bone, and a horizontal chop removing the mandibular processes. These cuts would expose and therefore facilitate the removal of the tongue. Chops through the zygomatic (Iron Age), ventral to the orbit, would have helped to gain access to the cheek meat and eye.

The carcass, at least in the Iron Age, may have been subdivided along the backbone, as attested by several crudely chopped cervical and thoracic vertebrae. There is no clear evidence for a systematic splitting or quartering of the carcass in any period. However, a large number of Iron Age ribs had been chopped

through near the proximal end. The commonly medial direction and position of these cuts may relate to splitting, at least in the thoracic area of the carcass. A noticeable feature of both the Iron Age and Belgic/early Roman butchery record, and to a lesser extent the Saxon, were chops removing the thoracic neural spine. In this way the butcher would have gained access to the spinal cord.

Most of the limb bones, including the scapula and pelvis in all periods, had been chopped through the shaft. No consistent breakage/butchery zones could be recognised in any of these skeletal parts. However, with the exception of the metapodials, these could relate to disarticulation and/or jointing. Less crude methods were also used to separate bones, as shown by knife cuts adjacent to or on the proximal humerus (late Bronze Age/early Iron Age), proximal radius (Iron Age) and distal humerus (Belgic/early Roman). In addition one scapula (late Roman) displayed parallel knife cuts on the medial side of the blade, which may suggest the method used to separate this bone from the ribcage.

Knife cuts were observed on the shaft of a humerus (Iron Age) and pelvis ischium (Belgic/early Roman). These, as well as grazing chops to humeri from the Iron Age and Belgic/early Roman periods, are likely to be the result of defleshing activities. Finally, it is possible that many of the long bones were bashed in order to remove the marrow. This could explain, to a certain extent, the noted high degree of fragmentation.

Sheep/Goat

One horncore had been chopped off in the Iron Age assemblage. This event may have occurred during the skinning process.

There is possible evidence for the separation of the lower limbs where knife cuts were noticed on the dorsal surface of an astragalus (Iron Age) and a proximal metapodial (late Roman). As with the cattle assemblages, many limb bone fragments had been chopped. This pattern was displayed in all but the earliest and latest periods. No sheep/goat bones with cutmarks were found in the late Bronze Age/early Iron Age, and only two butchered examples were identified in the Saxon assemblage. Some of this long bone butchery could have resulted in lower limb separation.

No evidence was found that would indicate splitting or sectioning of the carcass. The vertebrae in most periods were mostly intact, and only two cases of butchery were recovered – two severed thoracic neural spines from the Iron Age. Again it can be suggested that this would facilitate access to the spinal cord. In the same period a number of ribs had been systematically chopped into pieces, generally from a medial direction.

The mandibles in both the Iron Age and Belgic/early Roman phases show a breakage area similar to the cattle jaws, that is posterior to the cheek tooth row. Unfortunately no butchery evidence was found to confirm this as a man-made breakage pattern. However, a number of mandibles in both periods received a vertical chop through the diastema, no doubt as an aid to the removal of the tongue.

Evidence for disarticulation and/or jointing is well attested by the above-mentioned limb bone butchery, again including the scapula and pelvis. A noticeable difference between the Iron Age and Belgic/early Roman assemblages is that amongst the long bones the chops are close to the epiphyses in the former, and at a variable distance from the epiphyses in the latter. A feature of the long bone

butchery in both the Belgic/early Roman and late Roman periods is that certain long bones, in particular radii, have been chopped in such a way as to remove both epiphyses. Knife cuts to the iliac blade of a pelvis (Belgic/early Roman) and distal femur (Saxon) suggest an alternative disarticulation/jointing method. A possible defleshing cut was noticed on a pelvis fragment (Belgic/early Roman).

Unlike cattle the sheep/goat bones, in particular the long bones, tend to be substantially more intact. If marrow was extracted from these bones this was clearly done without much damage to the bone.

Of interest are two bones, a distal humerus and a distal tibia fragment (both Belgic/early Roman) which have a neat hole in their articular surfaces. This could have been caused by a spiked instrument like a spit.

Pig

The commonest cuts in the Iron Age and Belgic/early Roman assemblages are again the disarticulation/jointing limb bone chops. Many of the long bone chops appear to be restricted to the midshaft. Apart from these there are a number of mandibles, mainly Iron Age but also a few in the Saxon period, with vertical chops at various points through the cheek tooth row. While removal of the tongue may again explain this cut, its variable position may relate more to the haphazard hacking of the head into useable portions. No vertebrae displayed cut marks, and just one cut rib (Saxon) was found, possibly a defleshing mark.

Horse

A few butchered examples were found; a scapula and an astragalus with knife marks (Iron Age), a chopped metatarsus (Belgic/early Roman) and a chopped metacarpus (late Roman). Other possible instances of butchery were found in each period. The scapula cuts could be related to disarticulation/jointing, while the metapodial butchery may have resulted from skinning activities. A noticeable feature of the horse bones in each phase is that they are generally less fragmented than other species. This evidence and the paucity of butchery cuts in the meat-rich areas of the skeleton suggests that horse was only minimally exploited for its meat.

Age and Sex

Two ageing methods are used, epiphyses fusion and tooth eruption/wear. The former employs the fusion ages described in Bruni and Zimmerl (1951) to create four maturation stages based on groups which tend to fuse at about the same time (Noddle 1984). One problem with such grouping is the possible bias that could be introduced by using bones from the same individual. This would especially affect the latest fusion group, which uses vertebrae only, and so the results of this stage should be treated with some caution.

Sex determination was limited to cattle and sheep/goat. In the former this depended on the use of metacarpal measurements defined by Howard (1963). He described two indices; distal breadth/length $\times 100$, and minimum diaphyseal breadth/length $\times 100$. Sheep/goat were sexed on morphological grounds, using the pelvis as described by a number of authors, including Boessneck (1969).

The tooth eruption/wear data follows the method of Grant (1975) for cattle and pig. Grant's wear stages have been divided into

Mandible Wear Stage	Tooth eruption	Age ⁽¹⁾	Number of mandibles	
			Iron Age	Belgic/ early Roman
0-7	M ₁ erupting	1-6 m.	6	2 ⁽²⁾
8-11	M ₁ in wear, no M ₂	6-15 m.	1	-
12-17	M ₂ erupting	-	2	-
18-24	M ₂ in wear, no M ₃	15-26 m.	1	-
25-30	M ₃ erupting	24 m.	1	-
31-40	M ₃ in wear	26-30 m.	2	3
41+	M ₃ heavily in wear	3+ years	4	1

(¹) Age estimations from Legge (1992) adapted from Simonds (1854)
(²) possibly one individual
m months

TABLE 49: Tooth wear stages of the cattle mandibles from the Iron Age and Belgic/early Roman periods, after Grant (1975).

groups following the eruption sequence (see Table 49). The sheep/goat data follow the method of Payne (1973).

The available data will clearly have been affected by both recovery and fragmentation biases. Such factors must be taken into account with any interpretation of this data. In this section, emphasis is placed on the larger samples, taken from the Iron Age and Belgic/early Roman periods.

Cattle

Table 49 shows the mandible data from the Iron Age and Belgic/early Roman periods. Though sample sizes are small, it can be seen that the age profiles in each period are quite different. For convenience, the wear groups can be amalgamated into three main groups; pre-second molar, up to third molar erupting, and third molar in wear. These correspond to juvenile, immature and mature respectively. Applying these groupings to the age data provides the following ratios: Iron Age, 7:4:6, and Belgic/early Roman, 2:0:4 (possibly 1:0:4, as the two juvenile mandibles are likely to be from the same individual).

It should be noted that the chance of survival of these mandibles increases with age. The major problem is that it is very difficult to assess the full impact of preservation factors on the representation of younger individuals. However, certain tentative conclusions regarding these two periods can be put forward:

1. Table 40 shows that the degree of fragmentation is approximately similar in both the Iron Age and Belgic/early Roman periods. Thus the relatively smaller proportion of juvenile and immature individuals represented in the latter period may reflect a disposal rather than a preservation bias.
2. The good representation of juvenile in comparison to immature individuals in the Iron Age suggests that the juveniles far outnumbered the immature in the original deposits.

The epiphyseal evidence for these two periods is shown in Table 50. While the ages used in this table may not be directly comparable to those shown in the tooth-wear table, it is certainly clear that contrary to the mandible evidence both periods display a paucity

of younger individuals. This difference is possibly related to a combination of factors, *i.e.* the relatively poorer survival rate of the bones of young animals, and the fact that fragmented mandibles are generally easier to identify to species than fragmented long bones/vertebrae. What this table does show is a large proportion surviving well into maturity. The vertebrae, according to Silver (1969) fuse at 4-5 years, while other sources put the age at 7-9 years (Schmidt 1972, 75).

Combining both sets of data it can perhaps be suggested, in both periods, that secondary products were a major concern. A meat-based economy would be represented by a large number of immature individuals, in particular those approaching adult size, *i.e.* at approximately two years of age (Legge 1992, 25). The older component would consist mainly of animals kept for breeding purposes. Immature animals are well represented in the Iron Age period. However, the large number of older animals, as displayed by the epiphyseal evidence, cannot solely represent surplus breeding stock. Obviously this conclusion must be weighted against the age-related preservation bias mentioned above.

The abundance of juveniles in the Iron Age period may suggest a high infant mortality. Conversely, linking this data with the abundance of mature animals rather suggests a pattern of killing reminiscent of a dairy economy. Here the majority of male calves would be culled prior to their first winter, while the females would be kept for milk production as long as possible (Legge 1992, 25-26).

A few sufficiently intact metacarpal were found in both periods. It must be stressed that, as this skeletal part fuses at approximately 2-2.5 years (Table 50), this data will give a sex ratio for the mature part of the death assemblage. Using Howard's indices gave the following results: Iron Age, four females and one castrate; Belgic/early Roman, one borderline male/female and one castrate. Sample sizes are small, but the earlier period ratio does perhaps lend some credibility to the suggested importance of milk/milk products.

In conclusion, the Iron Age period may have witnessed a mixed economy, with evidence pointing to the importance of both meat and milk production. The Belgic/early Roman data possibly sug-

<i>Modern Age Stage</i> (Bruni & Zimmerl 1951)		IRON AGE		BELGIC/EARLY ROMAN	
<i>Bone</i>		<i>sample</i>	<i>No. in Fused</i>	<i>% Epiphyses sample</i>	<i>No. in % Epiphyses Fused</i>
7–20 months (Early)	Dist. Scapula Dist. Humerus Prox. Radius Acetabulum	72	90.0	36	94.4
20–30 months (Intermediate)	Dist. Tibia Dist. Metapodial Prox. 1st Phalanx	26	85.0	21	80.9
3–4 years (Late)	Prox. Humerus Dist. Radius Prox. Ulna Prox. Femur Dist. Femur Prox. Tibia	27	78.0	10	70.0
4–5 years (Very Late)	Vertebral Centrum	23	65.0	8	62.5

TABLE 50: Fusion of epiphyses of cattle bones from the Iron Age and Belgic/early Roman periods.

gests a greater reliance on secondary products other than milk, for example the use of animals for work.

The other periods produced very small samples of age data. However most of the animals represented in each of these periods were clearly mature to adult.

Sheep

Table 51 shows the mandible age distribution from the Iron Age and Belgic/early Roman periods. While most of the wear stages are represented in each period, the relative proportions differ quite markedly. This can best be illustrated by dividing the data into the juvenile, immature and mature age groups, as described for cattle. In terms of frequency and then percentage the mandible data gives the following results: Iron Age, 5:4.5:17.5 and 18.5:16.7:64.8; Belgic/early Roman, 8.5:3.5:8 and 42.5:17.5:40 respectively. Of some interest is the possible spatial element in the later period age distribution. A large proportion of the Belgic/early Roman mandibles were found in Enclosure Ditch 60, and these gave an age ratio of 7.5:2.5:3, which then leaves a ratio for the remainder at 1:1:5. Although this difference may be significant for comparative purposes, the mandibles in this period were amalgamated.

The epiphyseal evidence (Table 52) agrees with the mandible evidence in that a substantial proportion of the animals represented in each period survived to maturity. Here mandible stages E to I are compared to the proportion of fused epiphyses in the 15–24 month fusion group. A major difference lies in the representation of juvenile animals, *i.e.* unfused bones in the earliest fusion group. The reverse of the mandible data is shown, where this fusion group displays a low proportion of juveniles in the Belgic/early Roman period and a high proportion in the Iron Age period. The preservation/identification bias mentioned in the cattle age section could

<i>Wear Stage</i>	<i>Suggested Age</i>	<i>Final Corrected Count</i>	
		<i>Iron Age</i>	<i>Belgic/early Roman</i>
A	0–2 months	0.0	0.0
B	2–6 months	0.5	2.0
C	6–12 months	4.5	6.5
D	1–2 years	4.5	3.5
E	2–3 years	5.0	2.5
F	3–4 years	8.0	0.5
G	4–6 years	3.5	1.5
H	6–8 years	0.5	3.5
I	8–10 years	0.5	0.0
TOTAL		27	20

TABLE 51: Tooth wear of sheep mandibles from the Iron Age and Belgic/early Roman period (after Payne 1973).

account for the Belgic/early Roman difference, but cannot be so easily employed to explain the Iron Age difference. Without positive recourse to post-depositional biases it can perhaps be assumed that this difference may relate more to a disposal bias.

The combined ageing evidence suggests an approximately similar age distribution for both periods up to maturity. Older animals in the Iron Age period are apparently confined, to a large extent, to early maturity (Payne stages E and F). The Belgic/early Roman data shows two peaks, one at stage E and one at stages G and H. It is noticeable that the greater proportion of more aged animals in this period is reflected in the epiphyseal evidence, *ie.* the 3–3.5 year fusion group.

<i>Modern Age Stage</i> (<i>Bruni & Zimmerl 1951</i>)		IRON AGE		BELGIC/EARLY ROMAN	
<i>Bone</i>		<i>sample</i>	<i>No. in Fused</i>	<i>% Epiphyses sample</i>	<i>No. in % Epiphyses Fused</i>
3–10 months (Early)	Dist. Scapula Dist. Humerus Prox. Radius Acetabulum Prox. 1st Phalanx	37	64.9	27	92.6
15–24 months (Intermediate)	Dist. Tibia Dist. Metapodial	9	44.4	16	68.7
3–3.5 years (Late)	Prox. Humerus Dist. Radius Prox. Ulna Prox. Femur Dist. Femur Prox. Tibia Prox. Calcaneus	17	17.6	20	45.0
(Very Late)	Vertebral Centrum	11	45.5	9	11.1

TABLE 52: Fusion of epiphyses of sheep bones from the Iron Age and Belgic/early Roman periods.

It is assumed that animals bred specifically for their meat would be culled approximately within Payne stages D and E (one to three years old). This is a somewhat generous estimate, and clearly if both stages are well-represented (Table 51) the exploitation of this product is far from intensive. Animals in stage F may also be included in this estimate or else, in turn, represent a low intensity exploitation of secondary products. An individual between the ages of three to four years can be expected to have been shorn three times and/or have produced a minimum of three lambs. Older animals would obviously have provided a greater return of secondary products.

The good representation of juveniles in each period may represent a cull related to a lack of resources. Conversely, in the case of the Belgic/early Roman period where the proportion of older animals is greater, it may indicate the importance of milk in the economy (Maltby 1981, 172).

In conclusion the evidence from the Iron Age may suggest a sheep economy based largely on meat production, while that from the Belgic/early Roman period, while also being partly meat-based, shows a greater reliance on secondary products. Neither period shows evidence for intensive exploitation.

Evidence of sex was limited to the Iron Age, where two pelvises were identified as female. The small sample size and the unknown age of the animals represented precludes any interpretation of this data.

The slight ageing evidence from the late Bronze Age/early Iron Age, late Roman and Saxon periods suggests the presence of juveniles in the earliest and late Roman phases, immature animals in the late Bronze Age/early Iron Age and late Roman periods and

mature individuals in all periods. Scope for further analysis is limited by the small sample sizes.

Pig

The small number of mandibles which could be aged using the system of Grant (1975) is shown in Table 53. No ageable mandibles were found in the late Roman assemblage. Clearly a wide distribution of ages was exploited in each of these periods. The epiphyseal fusion evidence from the Iron Age and Belgic/early Roman periods is shown in Table 54. From this limited data it can be seen that the Iron Age displays a relatively larger proportion of juvenile animals, which is possibly reflected in the mandible evidence. A major cull of immature individuals or possibly young adults (at approximately two years of age) is indicated in both periods. 'Suckling' pig is represented by one bone, a pelvic ilium fragment, found in a Belgic/early Roman context.

The combined evidence would suggest that the pigs represented in these two periods, and possibly throughout the occupation of the site, were not farmed intensively.

Horse

Unfused horse epiphyses were limited to the late fusion group. From the Iron Age came one distal radius (normally fusing at 3.5 years), and from the Belgic/early Roman a proximal ulna and two distal femurs (both parts fusing at 3.5 years). These form only a small proportion of an admittedly small age sample from each period. However, they possibly signify that the majority of animals represented in the four later periods are fully adult. This is confirmed by the tooth wear analysis. Ageable teeth were found in just two periods. A number of loose incisors in the Iron Age period were aged at 6, 10/11, 11 and 15 years. One complete mandibular incisor row in the Saxon period could be aged at 10 years.

Size and Type

Cattle

Two measurable bones were found in late Bronze Age/early Iron Age contexts. These are a radius (proximal width, 84 mm) and a tibia (distal width, 55 mm). Perhaps of some significance is the fact that these bones represent two quite differently sized animals. An explanation for this difference may relate either to sexual dimorphism or to the presence of at least two types (*ie.* breeds or species) of cattle. The smaller bone could be from a typically-sized late Bronze Age/early Iron Age animal, while the larger may represent a type retained from the Neolithic period, tending towards the aurochs in size (see *Discussion*). Noticeably, the radii found in later periods are all somewhat smaller than this late Bronze Age/early Iron Age example (Table 55).

Selected measurements of cattle bones from the Iron Age and Belgic/early Roman periods are shown in Table 55. Astragalus and metapodial length can be compared with figures given in Wilson (1978), Maltby (1981) and Luff (1982) from a number of Iron Age and Romano-British sites. Both measurements are listed in the first source, while the remaining two list respectively astragalus and metapodial measurements only. It is noticeable that the range of sizes given for the Iron Age sites is fairly uniform. The corresponding Iron Age measurements at this site offer no discernible differences to this size pattern. On a local level, the Pennyland Iron Age (Holmes 1993) measurements tend to be somewhat smaller in bone breadth and a little longer in bone length in comparison to Bancroft. These differences, though consistent, are not large, and may not be significant. Measurements from a few early Roman sites, *eg.* Sheepen and Longthorpe (Luff 1982) and Winnall Down (Maltby 1985) were compared to the Belgic/early Roman size range at this site. Again, there were no clear differences. Maltby (1981, 185) points out that an increase in cattle size may have occurred by the early Roman period. This is based on the noticeably larger size of the tibial tarsals recovered from the early Roman levels compared with those from the middle Iron Age at Winnall Down. A consistent size difference, though on a smaller scale, is discernible between the Iron Age and Belgic/early Roman measurements at this site, perhaps suggesting a similar increase.

The factors described in Fock (1966) and Matolcsi (1970) were used to calculate shoulder heights. At Bancroft all the available whole limb bones were employed, these being: Iron Age – five metacarpi, three radii and one tibia; Belgic/early Roman – a metacarpus, a radius and two metatarsi. The calculated heights are shown in Table 56, in comparison to those (obtained from the metacarpi) from a variety of Iron Age, Romano-British and Saxon sites. In addition, the range of shoulder heights from two modern breeds is included. The single estimate of height from a tibia at Bancroft (1001 mm) was 60 mm less than that from any other bone. Without this single result, the mean shoulder height estimate from Iron Age cattle would be somewhat greater, very similar to that found at Pennyland. In general, the average heights from the Iron Age and early Roman sites are approximately similar, although again a slight increase in cattle size by the early Roman period at Bancroft is discernible.

A small number of horncores were recovered from Iron Age contexts. According to the criteria suggested by Armitage and Clutton-Brock (1976) these represent one borderline small or short-horned, one short-horned and one medium-horned individual. At Iron Age Pennyland all the horn cores (5 in number) came from small or short-horned animals, apparently typical for this period (Armitage 1977). The presence of at least one animal with much longer horns at Bancroft suggests that there was either a

large sex difference, or that more than one breed of cattle was present. Medium-horned animals were found at Saxon Pennyland. The Belgic/early Roman period provided three sufficiently intact horncores. These were categorised as representing one small-horned and two short-horned animals.

The late Roman period produced just one measurable bone, a tibia with a distal width of 52 mm, while the Saxon period provided the following: humerus, distal width 66.5 mm; radius, proximal width 80.5 mm; tibia, distal width 57 mm; metatarsus, length 216 mm. Whereas most of the latter measurements are comparable to the equivalent Saxon dimensions from Pennyland, a few are much larger. For example, the Pennyland radius proximal width range is 61–72 mm (nine examples). The shoulder height obtained from the metatarsus is 1177 mm. In addition, a badly-fragmented tibia gave an estimated height of 1118 mm. These give an average of 1148 mm, which is similar to Pennyland (Table 56).

Sheep/Goat

Very few sheep bones were measurable. A selection from the Iron Age through to the late Roman period is shown in Table 57. A noticeable feature is the slightly larger figure for humerus distal width (both range and mean values) in the Belgic/early Roman period, compared to the Iron Age. A minor increase in sheep size by the Roman period can perhaps be suggested for this site. Using the same dimension, at Iron Age Pennyland and also at a number of Iron Age sites in the Thames valley (Wilson 1978), the sheep were somewhat larger (mean values 25.4 – 28.7 mm) relative to the Bancroft examples in the same period. Distal tibia measurements from the Belgic/early Roman period can be compared to figures given in Luff (1982) and Maltby (1981) from a variety of Romano-British sites. The mean value as well as the largest size, at 28 mm, are apparently more typical of late rather than early Roman sites. Conflicting evidence is provided by the distal humeri measurements from this period, which are similar in size to those from the Iron Age sites mentioned above, including Pennyland.

The few length measurements are also shown in Table 57. Withers heights were calculated using the factors of Teichert (1975), as follows: Iron Age metatarsus, 554 mm; late Roman metacarpus, 592 mm, and metatarsus, 595 mm. The Iron Age example is at the smaller end of the range of sizes from the Iron Age sites listed in Wilson (1978). Conversely, the two late Roman heights are towards the upper half of the Roman range, and well within the range of Roman heights (Luff 1982). This also includes Roman Caldecotte (MK44, Holmes forthcoming) and Stanton Low (Holmes 1989).

Two Saxon bones were measurable; an astragalus, length 26.5 mm, and a tibia, distal width 22 mm. Both are smaller than those found at Saxon Pennyland. A range of approximately 21–29 mm is given for the tibia measurements from a number of Saxon sites listed in Maltby (1981).

Horned sheep, a single case in each period, were found in Iron Age, Belgic/early Roman and Saxon contexts. In addition, the Belgic/early Roman period produced a goat skull with massive horncores, measuring approximately 130 mm around the basal circumference.

Pig

Measurements taken for comparison with other sites were the length of the mandibular third molar and the distal width of the humerus. The first measurement gave the following results: late

Wear Stage	Tooth eruption	Age ⁽¹⁾	NUMBER OF MANDIBLES			
			Late Bronze Age	Iron Age	Belgic/early Roman	Saxon
0-10	M ₂ erupting	9 m.	1	2	0	0
10-20	M ₂ in wear	>9 m.	1	3	1	1 ⁽²⁾
20-30	M ₃ erupting	18 m.	1	2	0	0
30-40	M ₃ in wear	>18 m.	2	3	0	1
TOTAL			5	10	1	2

(¹) Age estimations from Simonds (1854)
(²) Mandible Wear Stage= 20.
m Months

TABLE 53: Distribution of pig age groups by tooth wear (after Grant 1975).

Modern Age Stage (Bruni & Zimmerl 1951)	Bone	IRON AGE		BELGIC/EARLY ROMAN	
		sample	No. in Fused	% Epiphyses sample	No. in % Epiphyses Fused
1 year (Early)	Dist. Scapula Dist. Humerus Prox. Radius Acetabulum	9	33.3	9	77.8
2-2.5 years (Intermediate)	Dist. Tibia Dist. Metapodial Prox. 1st Phalanx	2	50.0	3	33.3
3-3.5 years (Late)	Prox. Humerus Dist. Radius Prox. Ulna Prox. Femur Dist. Femur Prox. Tibia	0	—	0	—
4-5 years (very Late)	Vertebral Centrum	0	—	0	—

TABLE 54: Fusion of epiphyses of pig bones from the Iron Age and Belgic/early Roman periods.

Bone	Dimension	IRON AGE				BELGIC/EARLY ROMAN			
		No.	Range	Mean	S.D.	No.	Range	Mean	S.D.
Metacarpal	Length	5	173.5-182	177.4	± 3.2	2	174-192	183.0	—
Metatarsal	Length	—	—	—	—	4	189-215	203	±10.7
Calcaneus	Length	1	—	114	—	—	—	—	—
Astragalus	Length	9	54-60	57.8	± 1.8	4	57-63	59.0	± 2.7
Tibia	Distal width	7	49-57	54.2	± 2.5	6	55-58	56.0	± 1.8
Radius	Proximal width	10	65-78	72.8	± 3.9	9	71-81	75.9	± 3.6
Humerus	Distal width	5	62.5-70	66.1	± 2.8	3	61-75	66.5	—
First phalanx	Length	10	49-60	55.6	± 3.2	4	53-57	54.0	—

TABLE 55: Selected measurements of cattle bones (in mm).

Site	Period	N	Range (mm)	Mean (mm)	Source
Bancroft Maus.*	Iron Age	9	1001–1115	1078	
Pennyland	Iron Age	9	1054–1161	1105	Holmes (1993)
Ashville	Iron Age	10	1000–1180	1080	Wilson (1978)
Bancroft Maus.*	Belgic/ early Roman	7	103–1176	1114	
Sheepen	1st cent AD	14	985–1150	1074	Luff (1982)
Godmanchester	1–2 cent AD	6	1025–1171	1110	"
	2–3 cent AD	9	1086–1214	1183	"
Barton Court	3–5 cent AD	18	976–1287	1175	"
Bancroft villa	late Roman	41	1076–1402	1186	Levitan (p.536ff)
Pennyland	Saxon	5	1078–1226	1140	
Hamwih	Saxon	42	1053–1377	1162	Bourdillon and Coy (1980)
Chillingham	Modern	7	1068–1127	1102	Armitage (1977)
Red Danish cow	Modern	32	1207–1397	1316	"

Shoulder heights calculated from metacarpals except when marked *. Height estimations using the factors of Fock (1966) for metapodials, and Matolski (1970) for other bones.

TABLE 56: Estimation of the shoulder height of cattle.

Bone	Dimension	N	Range	Mean
<i>Iron Age:</i>				
Metatarsal	Length	1	–	122
Metatarsal	Distal width	1	–	20
Astragalus	Length	3	22–33	23.5
Humerus	Distal width	3	23–26	24.0
Tibia	Distal width	1	–	21.5
<i>Belgic/early Roman:</i>				
Astragalus	Length	1	–	24
Humerus	Distal width	4	24–31	25.9
Tibia	Distal width	3	23–28	25.2
<i>Late Roman:</i>				
Metacarpal	Length	1	–	121
Metatarsal	Length	1	–	131
	Dist. width	1	–	21

TABLE 57: Selected measurements of sheep bones from the Iron Age, Belgic/early Roman and late Roman periods (in mm.).

Bronze Age/early Iron Age, mean value of 32.7 mm (3 examples); Iron Age, 32 mm and 33 mm; late Roman, 35 mm; Saxon, range of 29–35 mm with a mean value of 32.7 mm (3 examples). Two humeri were measurable; Iron Age, 35.5 mm; Belgic/early Roman, 38 mm. These results can be compared with figures from one Neolithic (Durrington Walls) and a variety of Iron Age and Romano-British sites given in Wilson (1978). Of interest is the fact that the consistency shown by the Bancroft measurements is reflected in the Neolithic to Romano-British range of sizes shown

at these sites. Some variability in mean values is noticeable but the differences are not great. The Saxon third molars are somewhat larger than those found at Saxon Pennyland, range 27–33 mm with a mean value of 30.7 mm (15 examples). Again the difference is not large, and could relate more to the bias introduced by the small sample size rather than to the use of different-sized animals. The single humerus measurement from this period is within the equivalent Pennyland size range.

Horse

The two better-represented periods provided a small number of intact long bones. Withers heights, using the factors of Kieswalter (1888) in Boessneck and von den Driesch (1974) were calculated, as follows: Iron Age, two metacarpi with estimated heights of 1282 mm and 1295 mm, and a metatarsus at 1375 mm; Belgic/early Roman, a metacarpus at 1279 mm and a metatarsus at 1418 mm. Wilson (1978) and Luff (1982) list the metapodial lengths from a number of Iron Age and Romano-British sites. Withers heights calculated from these lists give the following ranges; 975–1505 mm and 1135–1546 mm. Clearly each set of Bancroft heights can be included within their respective period range of sizes. The Iron Age heights, similar to Pennyland, are confined to the upper half of the general size range.

Dog

Two mandibles found in Iron Age contexts are sufficiently different to suggest the presence of two sizes of dog in this period. The lengths of the cheek teeth rows are 68 mm and 81 mm. In comparison to Harcourt's (1974) range of sizes for Iron Age dogs, the former represents a small dog and the latter a large dog. Two particularly large dogs are represented in the Belgic/early Roman period. The cheekteeth row from one fragmented skull gave a length of 74 mm, and, while not measurable, another skull was seen to be of a similar size. Within the late Roman and Saxon periods a small number of bones possibly represent partial articulations. The earlier period produced three metapodials from a fairly small animal, and the latter a skull, mandible and vertebrae (10 out of a total of 15 bones) from a broad-faced animal with strong jaws, as evinced by a deep masseteric fossa.

No unfused bones were found in any period, and none of the mandibles showed teeth with heavy wear. In addition, none of the dog bones showed cut marks.

Cat

This species was found in the late Roman period only. The total of three bones represent at least two animals, one small and immature and the other adult, similar to modern domestic cat in size.

Deer, Hare and Fox

The deer remains are all from adult animals, with the exception of a mandible from an Iron Age context which possibly represents a new-born faun. Butchery cuts are confined to a number of longbones from the late Roman period, which may have been chopped across. In each period deer clearly formed only a supplement to the meat diet. However, their presence in some cases may not necessarily imply hunting, for example the shed antler recovered in a late Bronze Age/early Iron Age context (Grant 1981).

All the hare and early Roman fox bones were from adult animals. The late Roman fox mandible is clearly from a young cub.

Pathological Notes

Oral Pathology

- (i) An Iron Age cattle mandible shows slight evidence of periodontal disease. In addition, the fourth permanent premolar is out of alignment.
- (ii) A Belgic/early Roman cattle mandible was recovered with no teeth. Some of these had clearly been lost before death, as the sockets were partly filled by bone with evidence of periodontal disease.

- (iii) The incisors in a Saxon horse mandible show unusual wear, suggesting that this animal may have been rather buck-toothed.

Post-Cranial Pathology

- (iv) A diseased second phalanx of a red deer was found in a late Roman context. This bone shows signs of periostitis with damage to both joints, notably erosion of the proximal articular surface. The damage is probably due to a tracking abscess from the hoof.
- (v) The unstratified goat skeleton found near the Roman shrine (see *Special Deposits*) displays a traumatic injury. One rib had been fractured and had subsequently repaired a considerable time before death.

Notes on Possible Special Deposits (Articulated Skeletons/Limbs)

Cattle

- (i) A large part of a late Bronze Age/early Iron Age skull, unfortunately without any teeth and in a very fragmentary state, was recovered from Posthole 391 of Roundhouse 500. Most of the left caudal part of the skull is present with the bases of both horn cores. Both horns have broken off and are missing. The skull is from a relatively large animal.
- (ii) Five Iron Age radii were found together in Layer 136 of Roundhouse 164. These represent at least one pair and a single bone from adult animals (the distal epiphysis of one radius was missing). A large ulna fragment fits one of the intact radii. Three of these bones were substantially intact, a rare finding, with no evidence of butchery. Only one other intact radius was found from all the Iron Age deposits.

Goat

- (iii) A Belgic/early Roman goat skull was found in Layer 189 of Enclosure Ditch 60. Much of the skull was present, including the bases of two massive horns, with a basal circumference estimated at 130 mm.
- (iv) An unstratified animal burial was discovered in Context 117, near the shrine (p.109). The poor dating is outweighed by the possibly significant location, hence the inclusion of this undoubtedly special deposit in this section. The remains are those of a female goat. Most of the skeleton was present, including small bones like the stylohyoids, one patella and eleven phalanges, although one radius and ulna, one femur, one metatarsus, three vertebrae, and most of the carpal and tarsal bones were missing. All the epiphyses were fused except some of the caudal vertebral ones, so the animal was fully mature. Curiously, for so complete a skeleton, butchery marks were common, and there were signs of ancient breakage and chopping. The horn cores were missing except the bases, and there were chop marks on the medial side of both bases. There were transverse scratch marks across the ventral side of the atlas, deep nicks on the cranial aspect of the tibial tarsal, and knife scratch marks on both scapulae and both humeri (on the medial side except for one humerus, where the marks were on the articular surface of the proximal end). Clearly the carcass was buried after removal certainly of the skin and horns, and probably of a considerable part of the meat. However, it seems that no attempt had been made to get at head meat. The marks on the atlas could have been caused by a deep cut to slash the animal's throat.

Horse

- (v) A complete metatarsal together with all five articulating tarsal bones and both splint bones were found in Layer 447 in Iron Age Ditch 263. The tuber calcis of the fibular tarsal is missing, but it is not clear if this has broken off, or been chopped off, or if it is the result of an unfused epiphysis. There is no sign of butchery, and the bones appear to have been deposited while still articulated.

Pig

- (vi) A late Roman semi-articulated skeleton of a pig was excavated, buried centrally in the shrine (p.107). The animal was a young one, certainly less than one year old, probably 3–6 months judging from the size of the bones. The remains comprised; both upper limbs including both scapulae, humeri, ulnae, femora, and tibiae with one radius and fibula, the ilium only of one side, four metapodial bones and a number of ribs and sternbrae. All epiphyses except the proximal metapodial ones were unfused, several being present separately. There was no sign of the skull, mandibles or teeth, or of any vertebrae. It can be argued that the absent parts of the skeleton may relate either to disturbance or a deliberate disposal strategy. As several complete ribs are present, the post-depositional removal of the vertebrae would have required an extremely precise cut. The deliberate argument calls for semi-disarticulation of the carcass prior to disposal.

Red Deer

- (vii) The sunken featured building (604) produced an almost complete red deer skeleton. This consisted of both mandibles, pieces of both maxillae and other skull fragments, both scapulae, humeri, radii, femora, tibiae, an ulna, metacarpi,

most of the tarsal bones, four pieces of pelvis, seventeen vertebrae including some coccygeal ones and a number of ribs. The epiphyses were all unfused except the proximal radial, distal humeral, and proximal metacarpi (all 'early-fusing' epiphyses). The first molar teeth were in wear and the second molars just visible in their crypts. This would suggest an age of about one year. Such a finding of a wild animal is extremely unusual. There is no evidence of butchery, so it must have been abandoned or buried uneaten.

Dog

- (viii) A possible Saxon dog burial was excavated in Layer 442, Ditch 94/94. The remains comprised both mandibles, cheek tooth row 71.5 mm, with teeth in good condition and not heavily worn, two upper jaw teeth, the first three cervical vertebrae, a scapula, ulna, and both innominate (pelvis) bones with fused epiphyses, the shaft of a radius and a humerus, and some fragments of rib. The mandibular cheek tooth row length is within Harcourt's range for Anglo-Saxon mandibles, but very much at the lower end of it. This dog was not large by Saxon standards. It was fully adult, but probably not old as the teeth were in such good condition.

Discussion

Representation of the Major Domesticates

Late Bronze Age/early Iron Age Bancroft can be compared with a number of sites of similar age from the South Midlands (Robinson and Wilson 1982). The cattle:sheep ratio is approximately similar at all these sites, at 1.5:1. Ivinghoe Beacon (Westley 1968) is used in Table 58 to illustrate this point. Representation of pigs at these sites, however, and

Site	Period	Cattle %	Sheep %	Horse %	Pig %	N	Source
Bancroft mausoleum	LBA/EIA	37.5	26.1	–	36.4	88	
Ivinghoe Beacon	LBA/EIA	60.5	31.8	0.6	7.1	2053	1
Pennyland	Iron Age	56.9	27.3	8.2	7.6	1248	2
Bancroft mausoleum	Iron Age	52.7	33.2	5.2	8.9	953	
Caldecotte (MK117)	Belgic	67.2	11.8	15.3	5.7	287	3
Bancroft mausoleum	Belgic/ early Roman	40.4	32.8	14.6	12.2	630	
Bancroft villa	1–2 cent AD	52.2	36.1	5.3	6.4	224	4
	2–3 cent AD	36.0	20.8	14.2	29.0	197	
	3–4 cent AD	48.1	38.5	7.2	6.2	83	
	4th cent AD	51.3	31.0	5.8	11.9	4069	
Caldecotte (MK44)	Roman	53.0	26.2	11.3	9.5	1793	3
Bancroft mausoleum	late Roman	34.8	48.5	7.5	9.2	66	
Pennyland	Saxon	47.2	36.1	3.3	13.4	2476	2
Bancroft mausoleum	Saxon	42.6	26.3	16.9	14.2	171	

Sources: ¹ Westley (1968); ² Holmes (1993); ³ Holmes (forthcoming); ⁴ Levitan (p.536).

TABLE 58: Proportions of the major species by total fragment count from sites in the Milton Keynes area.

indeed at the majority of late Bronze Age/early Iron Age sites, eg. Grimes Graves (Legge 1992), is usually quite small, very different from Bancroft. However, comparisons can be made with other sites; for example, various areas within Middle Bronze Age Runnymede have produced pig proportions close to 40% of the major domesticates (Reilly, pers. comm.).

It has been suggested that the relative abundance of pigs may relate to the availability of suitable feeding areas, in particular woodland (Bradley 1978). Conversely, cattle and sheep husbandry are normally associated with open grassland. Clearly the relative importance of these domesticates will depend to a large extent on the local environment. Other factors may also influence the abundance of these species (see below). However, the environment is likely to be the major deciding factor for rural sites, especially if the animal management is not intensive. It can perhaps be inferred that the pig-rich sites such as Bancroft and Runnymede had relatively better access to woodland.

Both Cunliffe (1978) and Bradley (1978) suggest a massive woodland clearance in Southern England between the late Bronze Age/early Iron Age and the late Iron Age, coinciding with the increase in arable land. The South Midland region may have witnessed a similar clearance programme (Robinson and Wilson 1982), such that by the late Iron Age much of the area was under arable or grass. Indirect evidence for this is provided by the generally small proportion of pig and also red deer found on Iron Age sites in this area, eg. Bancroft, Pennyland (Tables 58 and 59) and those described in Robinson and Wilson (1982).

The major species at Iron Age Bancroft is cattle. This is again at odds with the sites described by Robinson and Wilson (1982), and indeed is different to the general Iron Age pattern (Maltby, 181.163) in Southern England, where sheep predominate. Variability within this pattern, as argued for pigs, is likely to be related to the local environment. Wilson (1978) noted that the Iron Age Upper Thames Valley sites with the greatest abundance of cattle were those lying closest to the river, eg. Appleford, where the cattle:sheep ratio is 67%:33%, compared to Bancroft's 61%:39%. However, unlike the Thames Valley it appears that the excavated Iron Age sites in the Milton Keynes area all show an abundance of cattle (Table 58), including Pennyland and also, a little later in date, Belgic Caldecotte (MK117, Holmes forthcoming). This evidence prompted Holmes (1993) to suggest that the Milton Keynes region, with pasturage available around the valleys of the Ouse and its tributaries, might have been a specialist cattle-breeding area.

This data must be weighed against the possible bias of differential fragmentation (see *Methodology*). When the Minimum Number of Individuals method (MNI) is applied to the figures from Iron Age Bancroft (Table 43), Pennyland and the cattle-rich Thames Valley sites, the results tend towards the Iron Age pattern with sheep more abundant than cattle. However, this method produces a similar increase in sheep at the expense of cattle in the sheep-rich Thames Valley sites, eg. Ashville. Combining this evidence it can perhaps be assumed that, in reality, while sheep are possibly

better represented than cattle at the Milton Keynes and Thames Valley sites, there appear to be at least two levels of sheep predominance. At the upper level is the typical sheep-specialised Iron Age settlement, while the lower level reflects the introduction of a limited number of cattle, as found at Bancroft.

The general trend in sites from the Southern Midlands (Robinson and Wilson 1982) is for an increase in cattle relative to sheep by the Roman period, following a possibly nationwide pattern recognised by King (1978). For obvious reasons, this pattern is not so easily recognised at Bancroft. However, it can be shown that no significant change in the cattle:sheep ratio took place in the Belgic/early Roman period compared to Iron Age Bancroft. This is confirmed by both the Total Fragment (TF) and MNI figures (Tables 39 and 43). Noticeably, the TF ratio is approximately similar to that found at Roman Caldecotte (MK44, Holmes forthcoming) and also in each of the four occupation periods at the villa (p.537; Table 58). These varied slightly from 55%–63% cattle:37%–45% sheep. A very different result was obtained from late Roman Bancroft. As high fragmentation noted for this period (see *Preservation*) would tend to favour the survival of cattle at the expense of sheep bones, the higher incidence of sheep may be significant.

There is a noticeable increase in the proportion of horse at this site by the Belgic/early Roman period. While the previous representation of this species is typical of the south Midlands sites, the Belgic/early Roman horse representation is considerably higher. It is conceivable considering the specialist nature of this animal (see *Horse*, below) that the abundance may relate to some particular horse-related function for this site, eg. hunting. The recovery of two large dogs (see *Dog*, below) in this period may confirm this interpretation, except that very few bones of wild animals were represented. Similar proportions of horse bones were found at Belgic Caldecotte, and in the second/third century levels at the villa (Table 58).

It can perhaps be seen that pig continued as a supplement to the meat diet throughout the Roman period at this site. The pig proportion from the two Roman periods are within the range of percentages for this species given in Robinson and Wilson (1982). A similar representation of pig was noted at Roman Caldecotte, and in all but one of the four villa periods (Table 58). Excluding the horse representation in Table 20, the second/third century levels at the villa give the following results: cattle 42%, sheep 24% and pig 34%. The marked increase in the consumption of pork during this period could be related to environmental as well as possibly cultural influences. A notably greater proportion of pig has been observed at a variety of "romanised" sites (King 1978), of which a villa is a prime example. It is possible that the later decrease in the importance of pig at the villa could indicate a return to the use for which the surrounding land is most suitable, that is sheep and, in particular, cattle keeping.

Cattle continued as the major species (TF figures, Tables 39 and 58) into the Saxon period at Bancroft. Though the sample size is small the cattle:sheep ratio suggests an increase in cattle in the Belgic/early Roman period, namely 62%:38%

compared to 55%:45% respectively. These results can be tentatively compared with the general trend in the Saxon period which seems to be, conversely, for an increase in sheep relative to cattle (Robinson and Wilson 1982; Grant 1976). The Saxon Pennyland ratio of cattle 56% to sheep 44% is closer to the villa Roman figures.

Horse is probably over-represented in this period at Bancroft. A large part of the horse assemblage is composed of loose teeth, which undoubtedly represent a few broken mandibles/maxillae. Thus Saxon Bancroft is likely to be similar to the majority of early Saxon sites, where horse was quite scarce (Seebohm 1952).

The pig representation at Saxon Bancroft fits the general pattern for sites of this period in the South Midlands (Robinson and Wilson 1982), and compares well to Pennyland (Table 58).

Cattle

Husbandry

Iron Age: The ageing evidence can be grouped as follows: one clear kill-off peak at a few months old, a wider distribution of ages up to about three to four years, and a large proportion, if not the majority of the animals represented, killed off at some age beyond three to four years. There is a difficulty in assigning more accurate proportions to these groupings, largely owing to the small number of ageable mandibles and the reliance on a combination of ageing methods (see *Age and Sex*).

This age distribution includes animals bred for their meat, *ie.* the middle group, as well as those allowed to reach an advanced age owing to the importance of some secondary product. Clues to the identity of this product are provided by the presence of juveniles plus the sex ratio derived from the small sample of distal metacarpal, *ie.* three females and one castrate. These may point to the importance of milk in the economy. It was noticeable that each of the six juvenile mandibles represent animals of a similar age, possibly coinciding with the time of weaning. The death assemblage from a milking herd would indicate that the majority of calves culled at this age were male.

A similar age and sex distribution, *i.e.* a large proportion of young calves plus a predominance of adult cows, was found at Ashville (Wilson 1978, 135). In addition, the age pattern at Pennyland is approximately similar to Bancroft, with the exception of a smaller proportion of juveniles. It can be suggested from the cumulative evidence that 'dairying was an important element in cattle husbandry' within a number of Iron Age communities (Maltby 1981, 178). However, at Bancroft it is clear that the cattle were exploited for a number of products, not just for their milk. The presence of the castrate indicates the use of cattle for work.

Belgic/Early Roman: The ageing data may indicate that a greater proportion of the Belgic/early Roman meat demand was met by older animals, compared to the Iron Age period.

Though the epiphyseal evidence is very similar in both periods, there is a paucity of both juvenile and immature individuals represented in the Belgic/early Roman mandible data. Sample sizes are again very small, but it can be tentatively suggested that this evidence may point to a greater emphasis on secondary products. The use of cattle for work is indicated by the single measurable distal metacarpus, which was identified as belonging to a castrate.

Maltby (1981, 182) showed that the cattle age distributions based on the mandibles from a number of Roman sites exhibit a predominance of mature to adult individuals. He also defined two fairly distinct distribution groups which seem to be related to the site setting, *ie.* rural or military/urban. The Bancroft sample is perhaps too small to be realistically allocated to either group. However, it is noticeable that the late Roman evidence from the villa does conform to the rural pattern, *ie.* a wide distribution signifying the use of a variety of products.

Stature

The late Bronze Age/early Iron Age size data, though slight, is noteworthy. Two animals, one much larger than the other, are represented. It is conceivable that these may correspond to two distinct size groups, possibly 'types' (*ie.* breeds or species). Such groupings have been noticed at a number of late Bronze Age/early Iron Age sites. Both Ivinghoe Beacon (Westley 1968) and Snail Down (Jewell 1963) included, as well as the typically small late Bronze Age/early Iron Age cattle, a small proportion of much larger animals. The tibia measurement certainly fits the former category, and compares to those found at Grimes Graves (Legge 1992), while the radius possibly corresponds to the class of larger animals. Jewell (1963) argues that the two groupings can be seen as representing two distinct types, the larger of the two tending towards wild cattle in size. The latter group can be compared to the size of cattle in the Neolithic period, *eg.* Windmill Hill (Grigson 1965, 145). While it is clear that cattle size diminished between the Neolithic and Iron Age (Legge 1981) the above evidence suggests that a small number of Neolithic-sized cattle were retained well into the later Bronze Age/early Iron Age.

The Bancroft Iron Age cattle measurements represent animals which are clearly quite typical in size for their period (Wilson 1978). This does not discount the possibility of subtle differences in overall shape. The Iron Age Pennyland cattle may be a little taller and more gracile than those at Bancroft. A slight increase in cattle size by the Belgic/early Roman period reflects the more substantial increase shown over a similar period at Winnall Down (Maltby 1981). Other sites in the early Roman period show no such increase, and indeed the Belgic/early Roman range of sizes at this site is, in general, very similar to the Iron Age size range shown in Wilson (1978).

Though it appears that cattle size in the Iron Age period was uniform, there are clear differences in the range of horned types represented. This site produced small, short and medium-horned individuals, while Pennyland (Holmes 1987a)

had small and short-horned, Ashville had short and medium and Danebury (Grant 1984) had only short-horned animals. While this data may be limited by the ubiquitous small sample size, the larger sample size and the single horncore type at Danebury may suggest these results have some significance. This evidence would argue against inbreeding, which would have produced uniformity rather than the variety of types noticed at these sites. Extending the argument, this may suggest that there was interchange of cattle between communities during this period. Similar reasoning can be used to explain the small and short-horned types present in the Belgic/early Roman levels at Bancroft.

The greater size of the Belgic/early Roman cattle is confirmed by a review of the available shoulder heights (Table 56). It has been suggested that larger animals may have been introduced or bred in Britain as early as the first century AD (Maltby 1981). While such animals are represented at a few early Roman sites, eg. Winnall Down, it is not until the late Roman period that they are consistently recovered. The late Roman size data at Bancroft is extremely limited. However, a greater sample is available at the villa (p.546; Table 56). The fourth-century levels at this site produced a range of sizes which included some particularly large animals.

The Saxon Pennyland size data as well as the limited evidence from Saxon Bancroft suggests a slight decrease in cattle size in the Milton Keynes area by this period (Table 56). However, they are in general larger than the Iron Age and early Roman examples.

Butchery

The proportion of cut bones is not large, and most of these were found in the Iron Age and Belgic/early Roman periods. No obvious difference in the methods used could be ascertained from the cut bones found in each period. Both provided evidence for a similar series of butchery procedures, from skinning to bone smashing. It appears that nothing was wasted. A noticeable aspect in each period was the excessive use of heavy instruments, either a cleaver or an axe. Such chops were particularly found in the shaft area of the longbones. Some of these could relate to disarticulation, while others may have made it easier to use joints or remove marrow. Joint production would suggest the cooking of meat while still on the bone. Certainly, few defleshing cuts were noticed. However, this interpretation must be weighed against the likelihood that defleshing, often involving a knife, may not leave any mark on the bone.

A similar array of cut marks, including the use of heavy instruments, was recorded at both Iron Age and Saxon Pennyland. Noticeably, at Iron Age Ashville (Wilson 1978) a very large proportion of the butchery marks were clearly made with a knife. The cleaver/axe had been used only sparingly, and long bone shafts were obviously smashed rather than chopped. In a study of various Roman sites in Hampshire, Maltby (1989, 89) suggested that butchery by chopping is more typical of rural sites, while the use of heavy instruments is a feature of urban sites. A large proportion of

knife or chop marks could indicate the Iron Age pattern; chop marks possibly point to a "romanised" type of butchery. Maltby (*ibid.*) recognises a certain degree of variation within the general rule. Certainly it will be necessary to study the butchery from a number of Iron Age and Romano-British sites in other regions before any firm conclusions can be made.

Sheep

Husbandry

Iron Age: The age data from this period shows a predominance of animals between the two major kill-off peaks at less than one year and approximately three to four years. After this age there is a marked decrease in the animals represented. A more substantial decrease is shown in the Iron Age Pennyland data, which was taken to indicate the absence of a breeding flock. The higher proportion of such individuals at Bancroft is more typical of a number of Iron Age sites, and can perhaps be viewed as representing a self-sustaining herd structure.

Maltby (1981, 174) has recognised two distinct age distributions from the study of a variety of Iron Age sites. Both exhibit juvenile and mature peaks but only one, like Bancroft, is well represented with immature/early mature individuals (coinciding with Payne stages D and E), *ie.* sheep killed at an optimal meat yield age. The distribution at Iron Age Pennyland is similar to the other type, as relatively few animals in this age group are represented.

In general, at Bancroft and also at these various Iron Age sites the emphasis is clearly not on secondary products, as relatively few aged animals beyond the necessary requirement for breeding purposes are represented. Meat may have been the major concern, but it is unlikely from the available evidence that it was farmed commercially.

Belgic/Early Roman: The Belgic/early Roman data can be viewed as representing two kill-off peaks, one of juvenile and one of adult animals, possibly more than four to six years old. In addition, there is a reasonably good representation of animals within the optimum meat yield age (corresponding to Payne's stages D and E). Noticeably, in marked contrast to the Iron Age distribution, the early mature representation is younger (concentrated in Payne stage E rather than stage F). The narrower distribution of mandibles in this part of the profile may be suggestive of an economy with a more efficient approach to meat production.

The sheep age profiles from a number of first-century AD sites, including Winnall Down (Maltby 1985) and Sheepen (Luff 1982) are noticeably closer to the Iron Age pattern than that shown at Belgic/early Roman Bancroft. However there is one clear similarity, namely the high incidence of juveniles. A much smaller proportion of this age group coinciding with a major kill-off peak (or peaks) within one to three years old (Payne stages D and E) are characteristics of an age profile found on several later Roman sites (Maltby 1981, 175, based on mandible data only). Maltby argues that this age profile may indicate a move, with particular regard to meat produc-

tion, sometime in the Roman period towards more intensive husbandry.

It can perhaps be suggested that the interpretation of the Bancroft age profile is at least partly dependant on the recognition that it displays elements of both the Iron Age and Roman sheep husbandry systems. The latter is indicated by the proposed, though tentative, greater farming efficiency.

Noticeably, the late Roman age distribution at the villa is somewhat similar to the Roman age profile described by Maltby (1981). However, a difference lies in the greater proportion of mandibles approximately three to four years old (Payne stage F). This would suggest a local variation to the general rule, pointing to less intensive meat production.

Secondary products are clearly of some importance at Belgic/early Roman Bancroft. There appears to be no contemporary site with a similar concentration of adult animals. However, a small number of late Roman sites have produced large proportions of this age group (Maltby 1981, 175).

Other Periods: Sample sizes are very small, and any interpretation is likely to be of very little significance. However, it is interesting to note the lack of immature animals in the Saxon levels. This is very different to the Saxon Pennyland age profile, were it is the mature individuals that are under-represented.

Stature

The Iron Age Bancroft sheep may be a little smaller in size in comparison to the size ranges shown by a variety of sites in this period, including Pennyland and Danebury. An increase in size is apparent by the Belgic/early Roman period. Here the sheep are similar in size to those from these Iron Age sites, as well as from a number of first-century AD sites, compared with figures given in Luff (1982). However, certain measurements from the Belgic/early Roman levels at Bancroft suggest the presence of somewhat larger animals which are more commonly found in late Roman sites. Both Maltby (1981) and Luff (1982) demonstrate an increase in sheep size by the third/fourth centuries. At present it is unclear whether this size increase involved the introduction of larger animals, as may be the case with cattle (see *Cattle Stature*), or the culmination of a determined breeding programme. The finding of larger animals, eg. at early Roman Bancroft, may help to clarify the situation.

Large animals were found in the later Roman levels at the villa. Levitan (p.543) divides the sheep represented at this site into two size categories, based on two distal tibia dimensions; a slender Soay type and a larger, more robust type. The size of the former, based on their tibia distal width, is similar to those found on several Iron Age as well as Romano-British sites.

The few Saxon measurements available represent relatively small animals for the period.

Butchery

The limited evidence is too slight to warrant any detailed discussion, but a few points are worth noting. A feature of the sheep butchery at this site was the use of heavy instruments. A variety of long bone chops were noticed in the Iron Age, Belgic/early Roman and late Roman periods, which can be compared with the chops noticed on Iron Age and Saxon sheep bones at Pennyland. Chops close to the epiphyses is a Bancroft Iron Age feature, except for a small number of radii found in both Roman periods and also at Iron Age Pennyland, where both ends had been removed. Midshaft chops were only found at Belgic/early Roman Bancroft and Saxon Pennyland. The actual number of chopped bones is quite small, and these results may have little or no significance. However, it is noticeable that the larger Bancroft assemblages (Iron Age and Belgic/early Roman) in comparison to Pennyland display a greater proportion of intact or nearly intact limb bones. This may suggest a difference either in the jointing procedure, or in the use of marrow. The use of heavy instruments at both these sites is again, as with cattle, at odds with the predominantly lighter methods employed at Iron Age Ashville (Wilson 1978). Of interest is the possible use of a spit in the Belgic/early Roman period.

Pig

Husbandry

Owing to a high reproductive rate, only a very few adult pigs need to be kept to maintain a regular supply of meat. It can be suggested that the death assemblage would include a great majority of juvenile/immature individuals. The intensity of production could be gauged by referring to the proportion of mature (*ie.* greater than two years old) animals represented. In the Iron Age and Belgic/early Roman samples it can be seen that the earlier period may have witnessed more intensive husbandry practices than the later. However, the proportion of mature individuals in both periods indicates overall non-intensive husbandry. The older animals would have provided lard and skins, as well as breeding potential.

A large proportion of adult animals would have required expensive feeding if kept on site. The likelihood is that the pigs in these two periods, and probably throughout the occupation of the site, represent herds put out to feed either in local woodlands or on rough pasture.

A similarly wide age distribution is found for pigs from a variety of Iron Age and Roman sites, although a few of the later sites have produced a large proportion of first-year animals (Maltby 1981, 185). The Roman liking for 'suckling' pig is well-known (White 1970, 318-320). This age group is well represented in the late Roman levels at the villa, which with only a small proportion of mature animals is strongly suggestive of intensive pig farming.

Stature

There is a clear similarity in both range and mean values in the samples of third molar length provided by the late Bronze Age/early Iron Age, Iron Age, late Roman and Saxon periods.

These results can be compared with the figures from a variety of prehistoric and Romano-British sites given in Wilson (1978). Ashville, in particular, is very similar (*ie.* range 30-35 mm with a mean value of 32 mm (8 examples)). The evidence suggests that, with regard to this measurement at least, pig size did not differ markedly throughout the time span covered by this report. Unfortunately, no length measurements which could have given a better idea of stature were available for comparison. In the Saxon period at this site the mean values of the third molar measurements are somewhat larger than both Saxon Pennyland and Hamwih (Bourdillon and Coy 1980), where each gave a value of approximately 30.5 mm.

Horse

Husbandry

Most of the horses represented at Bancroft are fully mature. The teeth evidence suggests a maximum age of 15 years in the Iron Age and 10 years in the Saxon phases. A small number of unfused bones were found in the Iron Age and Belgic/early Roman periods, but these clearly represent young adults rather than juvenile/immature individuals. This age profile is very similar to that found at the majority of Iron Age, Roman and Saxon sites described in Maltby (1981, 184). The general lack of younger animals could be related either to the presence of specialized breeder sites (Champion 1978, 384), or to the possibility that horses were captured and trained from wild stock (Harcourt 1979, 158; Maltby 1981, 184). In the absence of either juvenile animals or those of an age where training would be in progress, neither possibility can be proposed for Bancroft.

The ageing evidence certainly suggests that horses were not bred for their meat. Indeed the paucity of cuts on 'meat rich' bones from this site indicates that their use as a supplement to the diet was limited at best. However, there is evidence to suggest that the site occupants in the Iron Age as well as both Roman periods made use of horse skins.

Horses were valued as transport and pack animals up to early modern times (Maltby 1981, 184). Heavy work may have been left to cattle (but note a possibly work-related disorder found on a Iron Age horse bone at Pennyland). It seems that horses would have been more expensive to keep than cattle, and would have represented a valuable investment, possibly intended for some specialist purpose (eg. communication). The abundance of horses at the Belgic/early Roman 'Mausoleum' site and possibly the second-century villa could suggest firstly a heightened interest in one of these purposes, and secondly a continuation of this purpose through at least two centuries. Leaving aside the possibility of training or rearing, the noted abundances may signify a particular status. Otherwise this evidence, as mentioned above (see *Representation of the Major Domesticates*), could relate to some specific activity, eg. hunting.

Stature

The horses in both the Iron Age and Belgic/early Roman periods are pony sized, approximately 12.5 to 14 hands in height. These are typical of these periods; *ie.* Iron Age, 10 to

14 hands (Maltby 1981, 192), and Romano-British, 11 to 15 hands (calculated from figures in Luff 1982). The absence of a fuller range of sizes in each period could relate to the small sample sizes. However, it is perhaps significant that the horses in both Iron Age Bancroft and Pennyland are confined to the upper half of the Iron Age range of sizes. The larger Romano-British animals were found in the later Roman levels at the villa (13 metatarsi with a height range of 1236-1567 mm, *ie.* 12.1-15.4 hands). Larger sizes do tend to occur more often on later rather than early Roman sites, yet there are exceptions. For example, a horse of 15.7 hands in height was represented at the first-century Frocester Court Villa (Luff 1982, 71).

Dog

Canid remains were scarce in all periods (Table 41) which is typical for most contemporary sites (eg. Table 59). There is no clear evidence for the eating of dogs, or indeed for any post-mortem use. Their occurrence with domestic refuse is probably more fortuitous than deliberate. However, it is possible, in view of the large proportion of gnawed meat-bones found, that this species is actually under-represented in each period.

Various sizes of dogs were found. When more than one size is present, as seen for example in the Iron Age, it can be suggested that this represents a selection process with size related to function. Particularly large dogs were found in the Belgic/early Roman period, indicating the use of either guard or hunting dogs. While the large proportion of horse bones in this period may suggest hunting, the paucity of bones belonging to wild species points to guard dogs. The Bancroft dogs, with the exception of the large early Roman animals, are within the relevant period size ranges given in Harcourt (1974).

Wild Animals

If the aurochs bone recovered can be dated by the associated artefacts (see *Wild Fauna*) to the late Bronze Age/early Iron Age, then this possibly represents one of the latest such finds in Britain. The latest date so far recorded for this species was from a single bone found in Chapterhouse Warren Swallett in the Mendips (Levitan *et al.* 1988). This gave an uncalibrated radiocarbon date of 3250±37 BP (BM-731), which would be somewhere in the middle Bronze Age.

Deer bones clearly formed only a small part of the diet in most periods at Bancroft. The exception may be the late Roman period, although the deer bone abundance in this phase may be over-represented (8 out of 14 bones recovered are teeth). Deer remains can be seen to be poorly represented in a variety of contemporary sites in the Milton Keynes area (Table 59).

Most of the deer bones were identified as red deer, but one recognisable fallow deer was found in a Saxon context. This species was also recovered at Saxon Pennyland.

The late Roman period also produced a few hare bones. These are often found on Roman sites. The greater number

SITE	PERIOD	DOMESTIC			WILD ⁽¹⁾			N
		<i>M.Dom.</i>	<i>D/C</i>	<i>Dom. Bird</i>	<i>Deer</i>	<i>Other Animal</i>	<i>Wild Bird</i>	
		%	%	%	%	%	%	
Bancroft mausoleum	LBA/EIA	93.6	1.1	–	4.2	–	1.1	94
Ivinghoe Beacon	LBA/EIA	98.9	0.3	–	0.6	0.1	0.1	2075
Pennyland	Iron Age	97.7	1.6	–	0.2	–	0.5	1277
Bancroft mausoleum	Iron Age	99.1	0.5	0.3	0.1	–	–	961
Caldecotte (MK117)	Belgic	99.0	1.0	–	–	–	–	290
Bancroft mausoleum	Belgic/ e. Roman	96.6	1.2	1.4	0.3	0.1	0.4	652
Bancroft villa	1–2 cent AD	96.1	2.6	0.5	–	–	0.8	233
	2–3 cent AD	75.1	2.3	20.6	–	–	2.0	262
	3–4 cent AD	95.4	2.3	–	2.3	–	–	87
	4th cent AD	94.5	1.7	2.7	0.6	0.1	0.4	4307
Caldecotte (MK44)	Roman	95.6	2.9	–	0.2	0.1	–	1875
Bancroft mausoleum	late Roman	72.5	4.4	1.2	15.4	3.3	–	91
Pennyland	Saxon	95.1	0.2	3.7	0.5	0.1	0.4	2602
Bancroft mausoleum	Saxon	85.0	8.9	2.1	4.0	–	–	201

⁽¹⁾ and N proportion and number, respectively, of identified bones excluding small rodents and amphibians.
M.Dom. Major domesticates *ie.* cattle, sheep/goat, horse and pig (see Table 58).
D/C Dog/Cat.
Dom.Bird Domestic fowl, goose and duck.

TABLE 59: Proportions of domestic to wild species from sites in the Milton Keynes area.

and possible abundance of game species during this period may suggest an increase in hunting activity. However, no such increase was noticed at the villa in the late Roman period (Table 59).

Birds

Bird bones at this site are minimally represented on counts of both abundance and species diversity. While chicken was found in contexts dating from the Iron Age onwards, no other species was positively identified. These proportions are not dissimilar to other sites in the Milton Keynes area (Table 59), with two notable exceptions. Obviously any intersite comparison of avian remains must be viewed with some caution, when each of the sites concerned was unsieved. However, the large quantity of bird bones at the villa in the second and third centuries, and possibly at Saxon Pennyland, may be significant. The domestic range of species at these other local Roman and Saxon sites (Table 59), in order of importance, include chicken, goose and duck. This is typical of many sites in the Roman and Saxon periods; for example, compare Roman Exeter (Maltby 1979) and Saxon Hamwih (Bourdillon and Coy 1980). A wide range of wild species was found at both the villa and Saxon Pennyland, suggesting the exploitation of a variety of habitats including woodland, grassland, ponds and waterways.

Special Deposits

Grant (1984) described a number of complete or semi-articulated animal skeletons, often located at the base of ditches or pits, found at Danebury Hillfort. She suggested that they may have some 'ritual' significance. This interpretation could be applicable to two partial skeletons found at Bancroft; a juvenile pig recovered from the late Roman shrine and a adult goat, unfortunately unstratified, adjacent to this same shrine. In both cases it can be argued that the carcasses were modified prior to disposal/burial. Of some interest is the finding of a near complete juvenile red deer in the Saxon sunken-featured building. Presumably this animal would represent the culmination of a hunt, and so its deposition, probably as a whole carcass, unless for some special purpose, would seem ridiculous.

VERTEBRATE REMAINS FROM THE VILLA

Bruce Levitan

Introduction

Over the past decade or so, it has become accepted that detailed recording and analysis of every bone from every archaeological site is a costly and unnecessary use of resource-

es (eg. O'Connor 1984; Levitan 1989). In some cases assemblages may be too small, too poorly dated or too badly preserved to be worth any work being carried out. At the other extreme, assemblages may be too large to warrant the recording of every bone, since there will come a point when each additional record adds nothing in terms of new information about the site. Yet other sites may not require full recording and analysis because they fall into a category that has been well studied in the past, and all that is needed is enough to show how they fit the known pattern. The present site falls into the last of the above categories, and for this reason it was decided to undertake a selective approach to the recording and analysis of the assemblage. A sample of 9697 bones, forming about two-thirds of the entire assemblage, was selected for identification and analysis. The selection was made on a semi-random basis using the following three criteria:

1. Contexts with small amounts of bone (less than fifty fragments), and those where preservation was poor and/or fragmentation very high were not recorded.
2. The most important zones of the site in terms of bone deposit were more intensively sampled than other zones, but it was ensured that all zones were sampled.
3. In so far as was possible in advance of the final dating, the sampling was random across the time span of occupation.

In addition to selection at this level, further selection was carried out in terms of the detail of recording. Two levels of recording were undertaken; a very crude count of identified and unidentified bones covered all the bones in the sample, but a sub-sample of 2105 of these were recorded in more detail. The more detailed records comprise:

1. All birds, fish and wild mammals.
2. Selected anatomical elements from the domesticated mammals.

The selection of elements is as follows, with bracketed descriptions giving the zone that had to be present in order to be included. More complete bones with the zone present were included but no bone, no matter how complete, was included if less than half the zone was present.

skull (maxilla)
 mandible (tooth row area)
 scapula (glenoid)
 humerus (distal end)
 radius (proximal end)
 ulna (proximal articulation)
 metapodials of cattle, sheep/goat and horse (distal end)
 metapodials of pig (complete III)
 pelvis (acetabulum)
 femur (proximal end)
 tibia (distal end)
 fibula (more than 75% complete)
 astragalus (complete)
 calcaneum (more than 75% complete)

first and second phalanges (more than 75% complete – not pig abaxial)

Any other bones or parts of bones were not recorded at this level, but they were counted as part of the relevant taxon totals. This approach is similar to one adopted by Payne for his analysis of bones from Catterick (Payne 1990), though the details of which elements were recorded differ to some extent. The above list includes a selection of all parts of the skeleton so that anatomical analysis may be carried out. It also includes bones from all epiphysial fusion groups and mandibles, so that ageing analysis is possible. A restricted series of measurements were taken, but those that were obtained are the ones that are most commonly used and cited in bone reports. A full list of measurements taken is in the Level III archive.

The analysis is divided into three sections. First there is a consideration of the relative frequency of the taxa. This is followed by an analysis of the anatomical representation and butchery evidence for the major taxa (cattle, sheep/goat and pig), and the final section considers ageing and metrical data for the major taxa. The report is concluded with a section which draws out the major points from the analysis.

The dating of the site is as follows:

Phase 1: first and first to second centuries.

- 1.0 first century;
- 1.1 late first to early second centuries;
- 1.2 late first to late second centuries.

Phase 2: second, second to third and second to fourth centuries.

- 2.0 early second century;
- 2.1 mid to late second century;
- 2.2 late second century;
- 2.3 second century?;
- 2.4 early second to early third centuries;
- 2.5 late second to late third centuries;
- 2.6 early second to fourth centuries;
- 2.7 second to fourth centuries.

Phase 3: third and third to fourth centuries.

- 3.0 third century?;
- 3.1 late third century;
- 3.2 third to fourth centuries.

Phase 4: fourth century.

- 4.0 early fourth century;
- 4.1 early to mid fourth century;
- 4.2 mid fourth century;
- 4.3 mid to late fourth century;
- 4.4 late fourth century;
- 4.5 fourth century.

A: Phases 1 and 2																
PHASE																
TAXON	1.0	1.1	1.2	1	total	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2	total	
	N	N	N	N	%	N	N	N	N	N	N	N	N	N	%	
Cattle	2	85	30	117	51	3	6	38	20	4	13	18	41	143	44	
Sheep/goat	4	60	17	81	35	4	-	16	14	7	11	17	5	74	23	
Pig	-	9	5	14	6	-	-	54	2	1	-	2	2	61	19	
Horse	-	9	4	12	5	1	26	1	-	-	2	2	7	39	12	
Dog	-	6	-	6	3	-	-	5	1	-	1	1	-	8	2	
Cat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Red deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Roe deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Deer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Rabbit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hare	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ferret	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water vole	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Domestic fowl	-	1	-	1	33	-	-	36	-	-	1	-	-	37	61	
Goose	-	-	-	-	-	-	-	12	-	-	-	-	-	12	20	
Duck	-	-	-	-	-	-	-	6	-	-	-	-	-	6	10	
Teal	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mute swan	-	-	-	-	-	-	-	-	-	-	1	-	-	1	2	
Grey heron	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Godwit	-	-	1	1	33	-	-	3	-	-	-	-	-	3	5	
Woodcock	-	-	1	1	33	-	-	-	-	-	-	-	-	-	-	
Gull	-	-	-	-	-	-	-	1	-	-	-	-	-	1	2	
Partridge	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Pigeon/Dove	-	-	-	-	-	-	-	1	-	-	-	-	-	1	2	
Magpie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Raven	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ling	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Unidentified mammal	6	84	34	124	98	4	8	104	41	19	46	48	41	311	99	
Unidentified bird	-	2	-	2	2	-	-	4	-	-	-	-	-	4	1	
TOTAL	12	255	90	357	-	12	40	281	78	31	75	88	96	701	-	
B. Phases 3 and 4																
PHASE																
TAXON	3.0	3.1	3.2	3	total	4.0	4.1	4.2	4.3	4.4	4.5	4	total			
	N	N	N	N	%	N	N	N	N	N	N	N	%			
Cattle	6	26	8	40	46	-	75	167	134	611	1104	2091	50			
Sheep/goat	1	24	7	32	37	-	75	131	72	323	660	1261	30			
Pig	1	4	-	5	6	-	43	115	21	143	159	481	12			
Horse	-	3	3	6	7	-	8	20	1	87	111	236	6			
Dog	-	2	-	2	2	-	2	2	11	18	38	71	2			
Cat	-	-	-	-	-	-	1	-	-	-	4	5	+			
Red deer	-	-	-	-	-	-	-	1	1	3	8	13	+			
Roe deer	1	-	-	1	1	-	-	-	-	-	2	2	+			
Deer	-	1	-	1	1	-	-	2	-	7	1	10	+			
Rabbit	-	-	-	-	-	-	1	-	-	-	-	1	+			
Hare	-	-	-	-	-	-	1	-	-	3	-	4	+			
Ferret	-	-	-	-	-	-	1	-	-	-	-	1	+			
Water vole	-	-	-	-	-	-	-	-	-	-	1	1	+			
Domestic fowl	-	-	-	-	-	-	10	16	6	28	15	75	57			
Goose	-	-	-	-	-	-	3	2	1	9	11	26	20			
Duck	-	-	-	-	-	-	3	5	-	3	3	14	11			
Teal	-	-	-	-	-	-	-	-	-	1	-	1	1			
Mute swan	-	-	-	-	-	-	-	-	-	-	-	-	-			
Grey heron	-	-	-	-	-	-	-	-	-	-	7	7	5			
Godwit	-	-	-	-	-	-	-	-	-	-	-	-	-			
Woodcock	-	-	-	-	-	-	-	3	-	1	-	4	3			
Gull	-	-	-	-	-	-	-	-	-	-	-	-	-			
Partridge	-	-	-	-	-	-	1	-	-	-	-	1	1			
Pigeon/dove	-	-	-	-	-	-	-	-	-	1	-	1	1			
Magpie	-	-	-	-	-	-	1	-	-	-	-	1	1			
Raven	-	-	-	-	-	-	-	-	-	1	-	1	1			
Ling	-	-	-	-	-	-	-	-	-	1	-	1	+			
Unidentified mammal	36	152	3	191	99	-	268	392	187	1282	1954	4083	100			
Unidentified bird	-	1	-	1	1	1	1	-	1	10	2	15	+			
TOTAL	45	213	19	277	-	1	494	856	444	2532	4080	847	-			

Notes:
Individual percentages are based on sub-totals for each group (mammal/bird/fish/unidentified);
Percentages for sub-totals based on phase totals

TABLE 60: Summary of taxa from the villa.

The bones are curated and housed by the Milton Keynes Archaeological Unit. The records are available on computer discs as IBM compatible dBase, SuperCalc and WordPerfect files, or as ASCII text files. Copies of this archive are housed in the Unit's archive and at the Environmental Archaeology Unit, Oxford University Museum

Relative Frequency of the Taxa

Table 60 summarises the number of fragments for each taxon and each phase and sub-phase. Three major points are obvious:

1. The majority of the bones are from phase 4;
2. The number of taxa is very restricted with the exception of phase 4;
3. The majority of the bones are cattle, sheep/goat, pig and horse.

In general terms there is little variation between the phases. The difference in the range of taxa is attributable to sample size, the larger sample having the greater range of taxa. Fig. 295 illustrates the representation of cattle, sheep/goat, pig, horse and dog. It is noticeable that apart from phase 2 there are only minor differences between phases, and even phase 2 is not markedly different. The major change is in proportions of pig and horse relative to cattle and particularly sheep/goat in phase 2: the former two taxa are better represented.

In this report sheep/goat will not be treated as separate species, and generally the term 'sheep/goat' is employed. Where 'sheep' is used, this does not mean that all the bones concerned were identified as sheep, but that the likelihood is of most being sheep. A total of 170 bones were definitely identified as sheep or goat: phase 1, fourteen sheep; phase 2, six sheep; phase 3, six sheep; phase 4, 139 sheep, five goat. On this basis, goat is about 3% of the sheep/goat total, and can thus be regarded as having been present only in small numbers.

The site was not sieved for bone recovery (samples were taken for botanical analysis), so it is not surprising that there are few small mammal, bird and fish bones. Phases 1 to 3 have no small mammal bones at all, and only phase three has any wild mammals represented. Similarly phases 1 to 3 have few species of birds (three, two and none respectively) and no fish. All but three of the species of birds are represented in phase 4. The very low percentages of the minor mammals (dog, cat, ferret, rabbit and wild mammals) indicate that these taxa were unimportant. The low percentages of deer and hare reflect, therefore, that hunting was not commonly practised, though it should be noted that if deer were partly butchered at the site of the kill, few bones would be present at the consumption site.

Among the birds, the major taxa are the domesticates, with domestic fowl the most common; a typical pattern for Roman sites. There is nothing unusual about any of the other species, though the gull is interesting so far inland. The tendency for gulls to venture and live inland is relatively recent, however such chance occurrences are reasonably well known.

The proportion of unidentified bone, ranging from 35–69%, is fairly typical. The average is nearer 50%, rather lower than normal, but this is due to the good preservation in the waterlogged and semi-waterlogged deposits.

The human bones represent a typical scatter of redeposited bones, with the exception of 44 bones from an infant or newborn baby from phase 4.4 (context 1162, part of Enclosure 1208).

Anatomical Representation and Butchery

The small sample size of the major taxa in phases 1 to 3 in Table 60 is further reduced when anatomical analysis is considered because only a proportion of the bones were identified to that level (see *Introduction*). Tables 61–63 summarise the data for cattle, sheep/goat and pig, from which it is obvious that the only reliable results come from phase 4. The counts have been divided by the skeletal element fre-

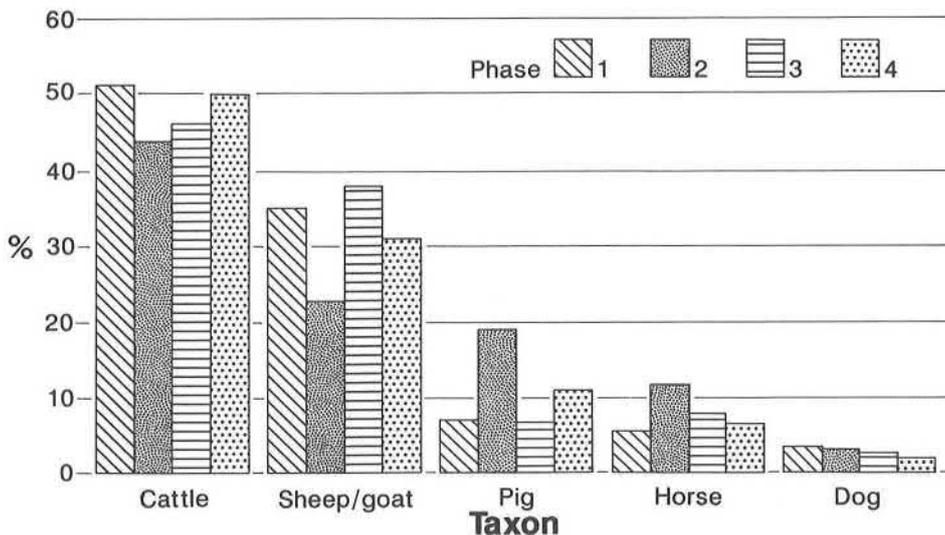


Figure 295: Histogram showing the proportions of the major animals at the villa.

quency to give a figure which shows the relative frequencies more clearly (eg. there are eight first phalanges to every two humeri). These data are illustrated graphically in Figs 296–298. A general point regarding the results is that it is clear that most parts of the skeleton are represented for all the major taxa. Such a result is typical of mixed rubbish deposits, and in many cases poorly represented elements are those which are least robust (eg. skull) or are small in size (eg. carpals). Definite patterns such as primary butchery waste, kitchen waste, etc. are often difficult to perceive unless the deposit is purely of that type. It follows, then, that any emphasis on one pattern or another can only be tentatively interpreted against a 'general mix of rubbish' background.

Butchery marks were observed and recorded. The evidence was typical of many other Roman sites with the exception of the more specialised deposits such as those at Caerleon (O'Connor 1986), etc. There was nothing unusual enough to be worth separate comment.

Cattle

The phase 4 data are dominated by scapulae, but Fig. 296 illustrates the fact that there is no clear pattern of representation. The bones, therefore, are best described as above: general rubbish. The same may be said of phases 1 and 2 (the phase 3 sample is much too small to be of any value), though it is worth noting that phase 2 does have clear peaks in frequency for mandibles and scapulae, and that phalanges are better represented than many other elements. The meaning of this, however, is unclear.

Sheep/Goat

The data are very sparse, but those from phase 4 show a marked predominance of mandibles (Fig. 297; Table 62) which may be echoed in the other phases. Mandibles are amongst the best preserved of elements, and this might partially account for this result, but taken together with the fact that lower limb elements are better represented than upper limb elements (scapula, distal humerus and proximal radius compared with distal metacarpal; pelvis and proximal femur compared with distal tibia and distal metatarsal), an emphasis on primary butchery is indicated.

Pig

The results for pig (Table 63; Fig. 298) are superficially similar to those of sheep/goat, but it should be noted that the limb frequencies are more balanced. In this case the better representation of mandibles is more likely to be a preservation pattern since pig post-cranial material is notoriously poorly preserved.

Ageing

Epiphysial fusion status was recorded for the bones where anatomical element was recorded, and these data are in the archive. They are not used here because data from epiphysial fusion are at best difficult to interpret. Much better informa-

tion can be gained from an analysis of tooth eruption and wear state. The method of Grant (1982) was employed and the results are shown in Fig. 299 for all phases summed. There were few mandibles for any of the taxa from phases 1 to 3 (see Tables 61–63), so these data have been combined with those from phase 4.

The results for cattle show that a wide range of ages are present, but that two main concentrations, centred on mandible wear stages 9 and 48–49, are discernable. In addition, the peak at wear stage 35 may be a third group. This implies kill-off at selected ages: the younger animals with second molar not yet erupted being between about three and nine months old, those at stage 35 with third molar just in wear (wear state b-c) being around three and a half years old, and the older animals with third molar ranging from wear state g-k being about four and half or five years old. This is suggestive of a mixed economic strategy: excess animals, possibly mainly males, being killed early, a proportion then being slaughtered as young adults, possibly after having been used for work (? castrates), and the oldest group being animals at the end of their useful working lives: possibly a mixture of working animals and milk cows.

In the case of sheep/goat there is a very clear single peak in kill-off between stages 22 and 41, representing an age range of perhaps three to four and a half years old (third molars erupting through to wear state g). One can divide this main peak into two groups: one centred on wear stage 22–25 and the other on 32–36, representing, perhaps, three and four year olds; this is an indication of seasonal kill-off, but the evidence is very slight. In addition, a certain number of lambs and older adults are present. Here one can postulate a mixed economic regime with the sheep yielding milk and wool, but being killed before their meat producing optimum is passed.

Finally, the data for pig, whilst sparse, are indicative of a typical pattern for pigs: the majority being killed young (by wear stage 12, that is before second molar comes into wear) and only a few surviving into adulthood. One slightly unusual aspect is the high frequency of very young animals (wear stages 0–4) which would be less than three months old. These may be a mixture of infant mortalities and slaughter of 'suckling pig'.

Metrical Data

The following analysis concentrates only on those elements where a large enough number of measurements have been obtained to make their use worthwhile. For this purpose, a minimum sample size of twenty was chosen, though even this is on the small side.

Cattle

Fig. 300 illustrates the greatest length measurements obtained for metacarpals and metatarsals. The metapodials show a consistent pattern with a spread over quite a large range and a minority of larger specimens as outliers to the main 'group' (two metacarpals over 220 mm, and one meta-

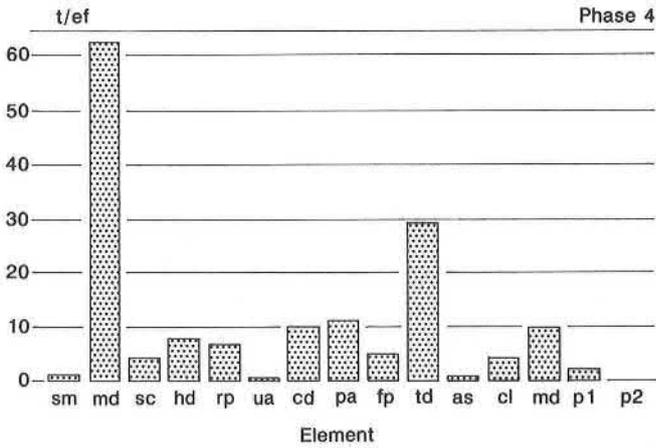
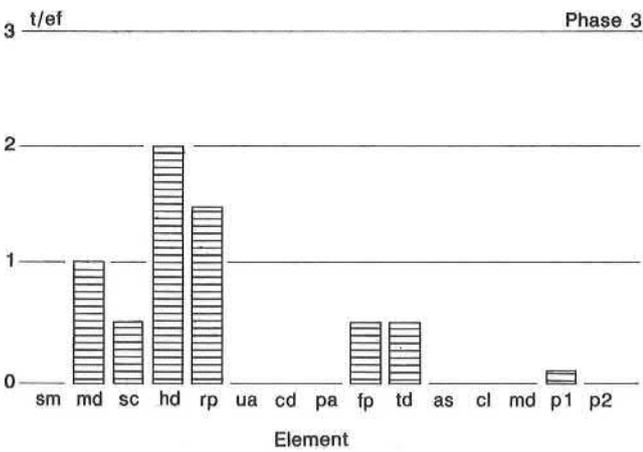
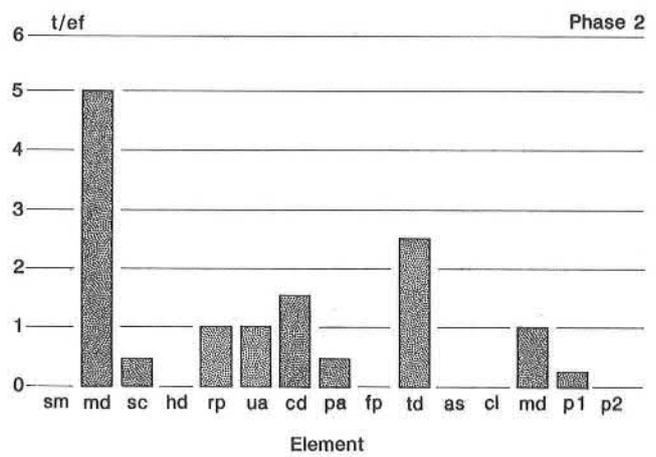
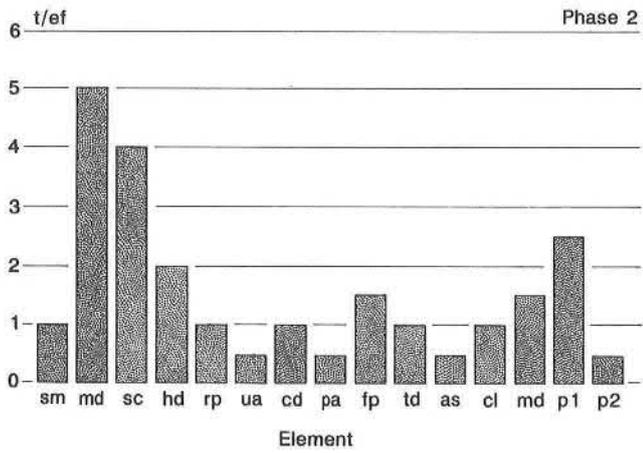
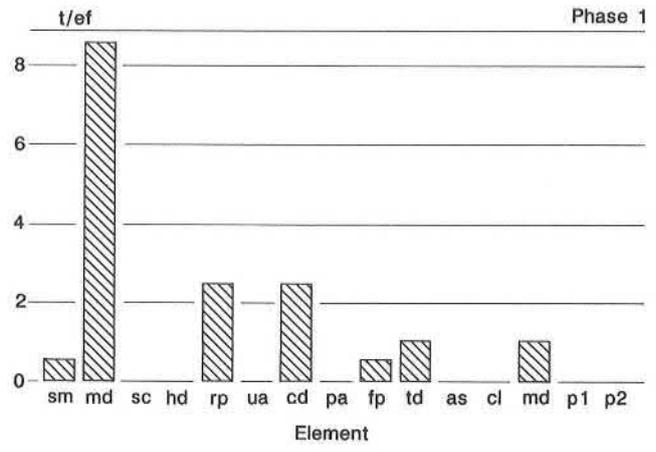
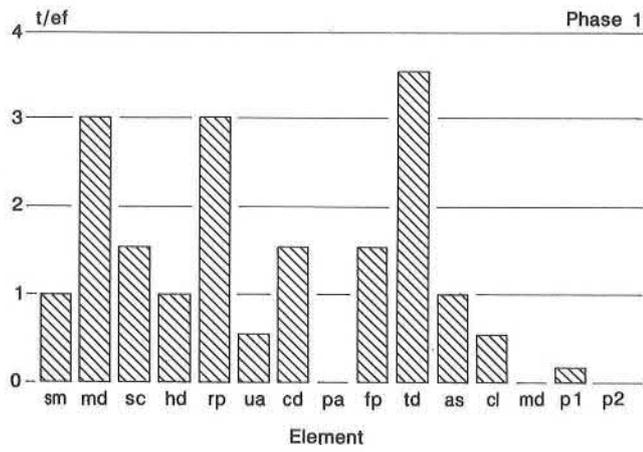
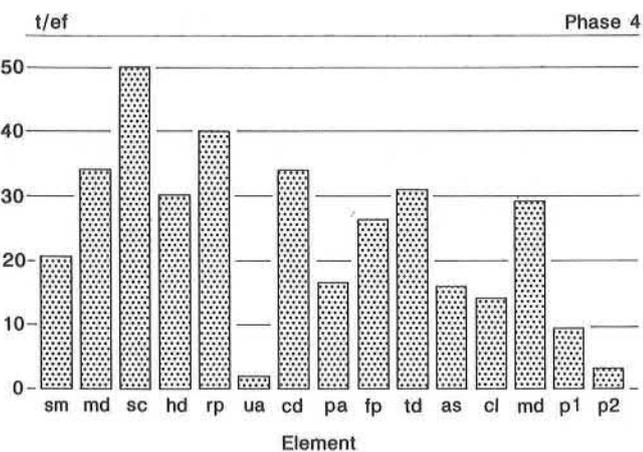


Figure 297: Sheep/goat anatomical representation at the villa .



- | | |
|--------------------|-------------------|
| sm skull (maxilla) | fp femur (P) |
| md mandible (tr) | td tibia (D) |
| sc scapula (P) | as astragalus |
| hd humerus (D) | cl calcaneum |
| rp radius (P) | md metatarsal (D) |
| ua ulna (pa) | p1 1st phalanx |
| cd metacarpal (D) | p2 2nd phalanx |
| pa pelvis (acet) | |

Figure 296: (left) Cattle anatomical representation at the villa .

A. Phases 1 and 2																
CODE ELEMENT	PHASE					2	2.1	2.2	2.3	2.4	2.5	2.6	2.7	tot.	t/ef	
	1	1.1	1.2	tot.	t/ef											
sm skull (maxilla)	–	–	2	2	1.0	–	1	–	–	–	–	1	–	2	1.0	
md mandible (tr)	1	5	–	6	3.0	1	–	–	2	–	–	2	5	10	5.0	
sc scapula (P)	–	3	–	3	1.5	–	–	–	1	–	–	2	5	8	4.0	
hd humerus (D)	–	1	1	2	1.0	–	–	1	1	1	1	–	–	4	2.0	
rp radius (P)	–	2	4	6	3.0	–	–	1	–	–	1	–	–	2	1.0	
ua ulna (pa)	–	–	1	1	0.5	–	–	–	–	–	–	–	1	1	0.5	
cd metacarpal (D)	–	3	–	3	1.5	–	–	2	–	–	–	–	–	2	1.0	
pa pelvis (acet)	–	–	–	–	–	–	–	–	1	–	–	–	–	1	0.5	
fp femur (P)	–	1	2	3	1.5	–	–	1	–	–	–	1	1	3	1.5	
td tibia (D)	–	3	4	7	3.5	–	–	–	–	–	1	1	–	2	1.0	
as astragalus	–	1	1	2	1.0	–	–	–	–	–	–	–	1	1	0.5	
cl calcaneum	–	–	1	1	0.5	–	–	–	1	–	1	–	–	2	1.0	
md metatarsal (D)	–	–	–	–	–	–	–	–	–	1	–	–	–	2	1.5	
p1 1st phalanx	–	–	1	1	0.13	–	–	15	1	1	–	–	–	17	2.13	
p2 2nd phalanx	–	–	–	–	–	–	–	4	–	–	–	–	1	5	0.63	

B. Phases 3 and 4																
CODE ELEMENT	PHASE					4.1	4.2	4.3	4.4	4.5	tot.	t/ef				
	3	3.1	3.2	tot.	t/ef											
sm skull (maxilla)	–	–	–	–	–	1	7	3	15	16	42	21.0				
md mandible (tr)	–	1	1	2	1.0	1	5	7	19	37	69	34.5				
sc scapula (P)	1	–	–	1	0.5	2	5	8	41	44	100	50.0				
hd humerus (D)	2	–	2	4	2.0	1	8	7	23	22	61	30.5				
rp radius (P)	–	2	1	3	1.5	3	5	2	26	45	81	40.5				
ua ulna (pa)	–	–	–	–	–	–	1	–	1	2	4	2.0				
cd metacarpal (D)	–	–	–	–	–	3	3	9	19	35	69	34.5				
pa pelvis (acet)	–	–	–	–	–	2	5	1	13	12	33	16.5				
fp femur (P)	–	1	–	1	0.5	3	2	1	17	30	53	26.5				
td tibia (D)	–	–	1	1	0.5	1	3	5	26	28	63	31.5				
as astragalus	–	–	–	–	–	1	3	3	7	18	32	16.0				
cl calcaneum	–	–	–	–	–	–	1	2	10	15	28	14.0				
md metatarsal (D)	–	–	–	–	–	3	8	4	20	24	59	29.5				
p1 1st phalanx	–	1	–	1	0.13	5	11	7	18	36	77	9.63				
p2 2nd phalanx	–	–	–	–	–	1	4	3	9	10	27	3.38				

Mandible (tr) – tooth row; Pelvis (acet) – acetabulum; P – proximal end; D – distal end.
t/ef – total divided by skeletal element frequency

TABLE 61: Cattle anatomical representation.

tarsal over 240 mm). Within the main group there are hints of a bimodal distribution, particularly in the metacarpals (one centred on 180 mm, and one on 199 mm). Figs 301a and 302a illustrate greatest length plotted against distal breadth for metacarpals and metatarsals. In both cases the outliers are again fairly obvious, but note that the metatarsal with a greatest length of 238 mm also appears to be an outlier on the basis of its distal breadth. The rest of the specimens for both elements produce diffuse scatters with no obvious sub-groups discernable. However, when distal breadths (Bd) are plotted against depth of the medial condyle of the distal epiphysis (Dmc) (Figs 301b and 302b) a more clear division is discernable, particularly in the case of the metacarpals. The latter fall into three, or perhaps even four groups:

The main group: Bd 51–61 mm, Dmc 22–26 mm;

A smaller group of seven specimens: Bd 62–66 mm, Dmc 24–27 mm;

A group of four large specimens: Bd 69–72 mm, Dmc 27–30 mm;

The fourth group (?), the two smallest specimens: Bd 48–51 mm, Dmc 20–21 mm

The metatarsals also seem to fall into three (but not four) groups:

The main group: Bd 49–60 mm, Dmc 21–25 mm;

The three large specimens: Bd 65–70 mm, Dmc 24–29 mm;

The two smallest specimens: Bd 45–47 mm, Dmc 20–21 mm

The distribution of greatest lengths for astragalus is shown in Fig. 300. Here there is also a hint of bimodal distribution, centred on 61.5 mm and 70 mm. The small outlier (54.5 mm) is possibly a young individual – it is difficult to age astragali with precision.

Finally, Fig. 303 illustrates the Bd and distal depth (Dd) of tibiae. Once again there appears to be a small number of larger specimens (Bd above 70 mm, Dd above 52 mm), and a diffuse scatter of the rest. In this case the main group does not appear to fall into any sub-groups.

Taken together, this evidence points fairly strongly to two definite size groups, a main group of smaller bones and a small group, usually only a handful of specimens, of larger bones. There is also evidence, albeit rather less obvious, that

A. Phases 1 and 2															
CODE ELEMENT	PHASE														
	1	1.1	1.2	tot.	t/ef	2	2.2	2.3	2.4	2.5	2.6	2.7	tot.	t/ef	
sm skull (maxilla)	–	–	1	1	0.5	–	–	–	–	–	–	–	–	–	
md mandible (tr)	–	14	3	17	8.5	–	2	2	1	1	3	1	10	5.0	
sc scapula (P)	–	–	–	–	–	–	1	–	–	–	–	–	1	0.5	
hd humerus (D)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
rp radius (P)	2	1	2	5	2.5	1	1	–	–	–	–	–	2	1.0	
ua ulna (pa)	–	–	–	–	–	–	2	–	–	–	–	–	2	1.0	
cd metacarpal (D)	2	3	–	5	2.5	–	1	1	–	1	–	–	3	1.5	
pa pelvis (acet)	–	–	–	–	–	–	–	–	1	–	–	–	1	0.5	
fp femur (P)	–	–	1	1	0.5	–	–	–	–	–	–	–	–	–	
td tibia (D)	–	2	–	2	1	1	2	–	–	1	1	–	5	2.5	
as astragalus	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
cl calcaneum	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
md metatarsal (D)	–	1	1	2	1	1	1	–	–	–	–	–	2	1.–	
p1 1st phalanx	–	–	–	–	–	–	1	–	1	–	–	–	2	0.3	
p2 2nd phalanx	–	–	–	–	–	–	–	–	–	–	–	–	–	–	

B. Phases 3 and 4															
CODE ELEMENT	PHASE														
	3	3.1	3.2	tot.	t/ef	4.1	4.2	4.3	4.4	4.5	tot.	t/ef			
sm skull (maxilla)	–	–	–	–	–	–	–	–	1	1	2	1.0			
md mandible (tr)	1	–	3	4	2.0	8	14	15	36	52	125	62.5			
sc scapula (P)	–	1	–	1	0.5	–	1	1	1	5	8	4.0			
hd humerus (D)	–	–	–	–	–	1	2	1	1	11	16	8.0			
rp radius (P)	–	–	1	1	0.5	1	3	–	6	3	13	6.5			
ua ulna (pa)	–	–	–	–	–	–	–	–	1	–	1	0.5			
cd metacarpal (D)	–	–	–	–	–	2	3	1	5	10	21	10.5			
pa pelvis (acet)	–	–	–	–	–	–	1	–	7	14	22	11.0			
fp femur (P)	–	–	–	–	–	–	8	1	3	–	12	6.0			
td tibia (D)	–	–	–	–	–	6	6	4	12	30	58	29.0			
as astragalus	–	–	–	–	–	–	1	–	–	1	2	1.0			
cl calcaneum	–	–	–	–	–	–	2	–	–	7	9	4.5			
md metatarsal (D)	–	–	–	–	–	1	2	1	9	7	20	10.0			
p1 1st phalanx	–	–	–	–	–	1	5	–	7	5	18	2.3			
p2 2nd phalanx	–	1	–	1	0.13	–	–	–	–	–	–	–			

Mandible (tr) – tooth row; Pelvis (acet) – acetabulum; P – proximal end; D – distal end.
t/ef – total divided by skeletal element frequency

TABLE 62: Sheep/goat anatomical representation.

the main group may comprise two groups within it, so we may be seeing three size groups, two of which overlap in their ranges. These groups are probably best interpreted as gender based: the major group (of smaller bones) representing cows, the intermediate group, overlapping with the main group, representing castrates, and the small group of large specimens representing bulls.

Sheep/Goat

The tibia is the only element with enough measured specimens to fall into the analysis group. The scatter plot of Bd and Dd is illustrated in Fig. 304a. This shows a diffuse scatter with no obvious grouping, though there may perhaps be two groups:

Small specimens: Bd less than 25.5 mm, Dd less than 20 mm;

Large specimens: Bd greater than 25.5 mm, Dd greater than 20 mm.

If these data are plotted using Bd against a Bd/Dd index (Dd divided by Bd percent) the separation becomes more obvious: the seven specimens in the upper left quadrant of Fig. 304b are the same seven specimens as in group one (above) in Fig. 304a. This indicates that the smaller Bd tend to be more square (i.e. have a higher Dd/Bd index), whilst the larger specimens are more variable, though the majority are

more rectangular (low Dd/Bd index). It was not possible to relate these data to shaft diameters, but the subjective impression gained was that the more square distal ends corresponded to the more slender tibiae.

This pattern is difficult to interpret. One scenario is that the slender, square-ended tibiae are females, though this would mean that the majority of specimens are from rams. Another possibility is that the two groups represent sheep and goats. In this case the slender, square-ended specimens would best be interpreted as sheep which puts goats into the majority, a result at odds with the other evidence for species frequency (above). A third option is that there are two 'types' of sheep present, one representing a native, soay-like 'breed' (the slender tibiae) and one an improved, Romanised 'breed' (the more rectangular-ended, larger tibiae). The third option seems the most likely, and best fits the regional and national scenario based on other sites.

Other Taxa

None of the other taxa produced enough measured specimens to fill the criterion given above. Pig tibiae produced the largest number of measurements for that species (eight specimens). One was much smaller than the others (Bd 27 mm, Dd 21 mm; the rest Bd over 28 mm, Dd over 25 mm).

A. Phases 1 and 2											
CODE ELEMENT		PHASE									
		1.1	1.2	tot.	t/ef	2.2	2.3	2.4	2.6	tot.	t/ef
sm	skull (maxilla)	—	—	—	—	—	—	—	—	—	—
md	mandible (tr)	4	1	5	2.5	4	1	—	1	6	3.0
sc	scapula (P)	—	—	—	—	1	—	—	—	1	0.5
hd	humerus (D)	—	1	1	0.5	2	—	—	—	2	1.0
rp	radius (P)	—	—	—	—	4	—	—	—	4	2.0
ua	ulna (pa)	—	—	—	—	2	—	—	—	2	1.0
c3	metacarpal III	—	—	—	—	3	—	1	—	4	2.0
pa	pelvis (acet)	—	—	—	—	—	—	—	—	—	—
fp	femur (P)	—	—	—	—	6	—	—	—	6	3.0
td	tibia (D)	—	1	1	0.5	7	—	—	—	7	3.5
as	astragalus	—	—	—	—	—	—	—	—	—	—
cl	calcaneum	—	—	—	—	1	—	—	—	1	0.5
m3	metatarsal III	—	—	—	—	2	—	—	—	2	1.0
p1	1st phalanx	—	—	—	—	2	—	—	—	2	0.25
p2	2nd phalanx	—	—	—	—	2	—	—	—	2	0.25

B. Phase 4								
CODE ELEMENT		PHASE						
		4.1	4.2	4.3	4.4	4.5	tot.	t/ef
sm	skull (maxilla)	—	—	—	—	—	—	—
md	mandible (tr)	9	15	8	5	11	48	24.0
sc	scapula (P)	1	7	—	3	4	15	7.5
hd	humerus (D)	1	2	—	4	3	10	5.0
rp	radius (P)	—	2	—	2	6	10	5.0
ua	ulna (pa)	1	2	—	1	—	4	2.0
c3	metacarpal III	2	1	—	3	6	12	6.0
pa	pelvis (acet)	—	5	—	5	6	16	8.0
fp	femur (P)	—	5	1	—	3	9	4.5
td	tibia (D)	—	1	—	6	6	13	6.5
as	astragalus	—	—	—	3	1	4	2.0
cl	calcaneum	—	—	1	2	1	4	2.0
m3	metatarsal III	2	5	—	6	3	16	8.0
p1	1st phalanx	1	3	—	2	1	7	0.88
p2	2nd phalanx	—	1	—	2	—	3	0.38

Codes: these are also used in Fig. 298
Mandible (tr) – tooth row; Pelvis (acet) – acetabulum; P – proximal end; D – distal end.
t/ef – total divided by skeletal element frequency

TABLE 63: Pig anatomical representation.

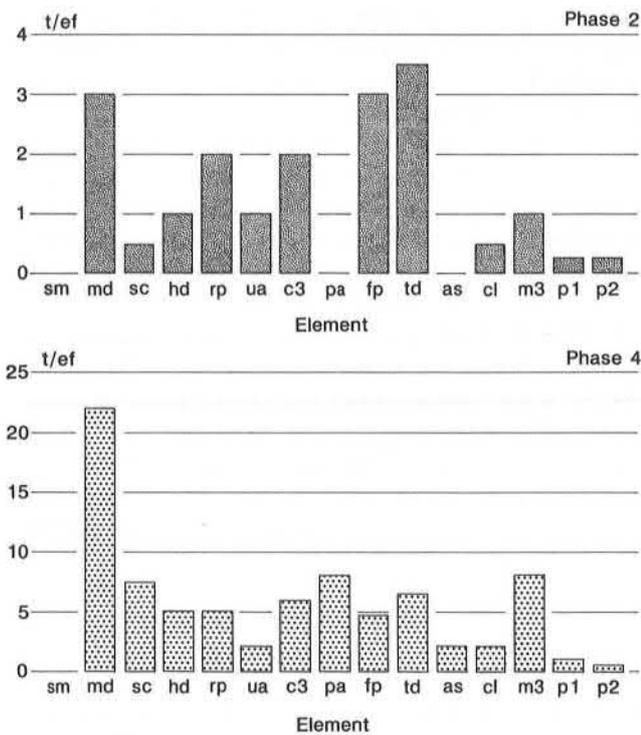


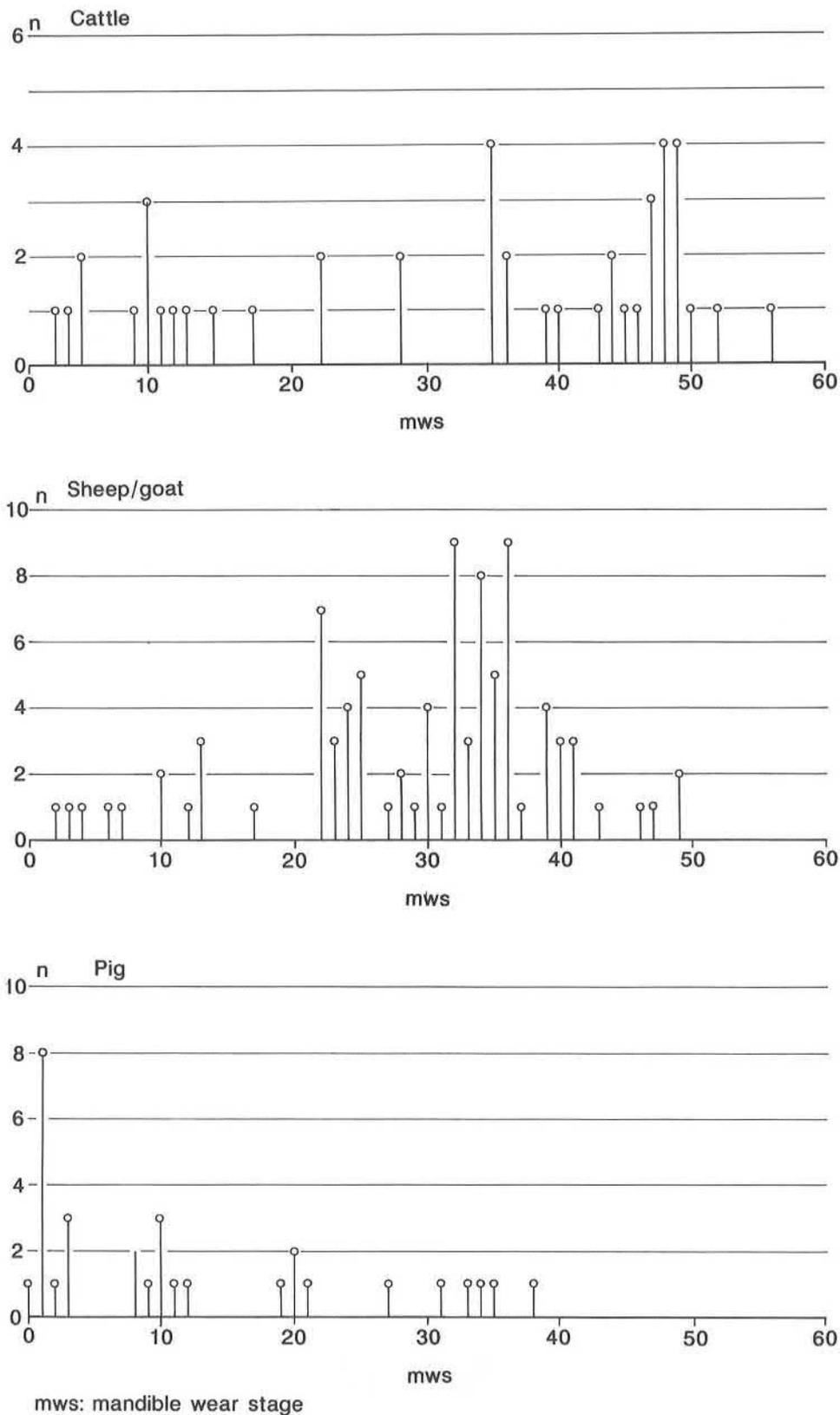
Figure 298: Pig anatomical representation at the villa (Key to codes in Table 64).

Thirteen horse metatarsal III's produced measurements. Two were much smaller than the rest: G1 232 and 235 mm, compared with 256–294 mm for the other eleven. The small bones came from small ponies whilst the large bones came from large ponies or small horses. Finally, domestic fowl provided thirteen measured humeri. One has a greatest length of 53.5 mm, the rest are between 61 mm and 77.5 mm, with a mode at 73 mm.

Conclusions

Although this site has produced a large sample for a domestic rural site, the selective recording and analysis has shown that there is nothing unusual about the assemblage in other terms. There was a fairly strong temporal consistency in terms of relative frequency of the major taxa, though pigs and horses were possibly more important in phase 2 than in other phases. Generally, all the bones fall into a 'mixed rubbish' category, suggesting that all the butchery processes were carried out locally, from slaughter and initial dressing of carcasses to kitchen preparation and table waste. The only possible anomaly here is the large number of sheep/goat mandibles. This taxon seems to have a relatively high primary butchery element.

The ageing evidence for cattle is suggestive of a mixed economic regime with surplus males being killed young, a certain proportion being killed in early adulthood and the



mws: mandible wear stage

Figure 299: Ageing results for cattle, sheep/goat and pig at the villa.

majority surviving well into adulthood. The metrical data, which pertain to the older animals, are suggestive of gender-defined groups, with a minority of bulls, a larger proportion of castrates, and mainly cows. This fits well with the ageing evidence which suggest that the older animals would have been mainly cows plus castrates.

The pattern of slaughter of sheep/goat was different to that of cattle, but the interpretation is the same, that is a mixed economy with, in the case of sheep, meat, wool and milk all being of importance, perhaps in that order. The metrical data from tibiae provide subtle evidence for two groups, but unlike cattle these groups are probable best interpreted in

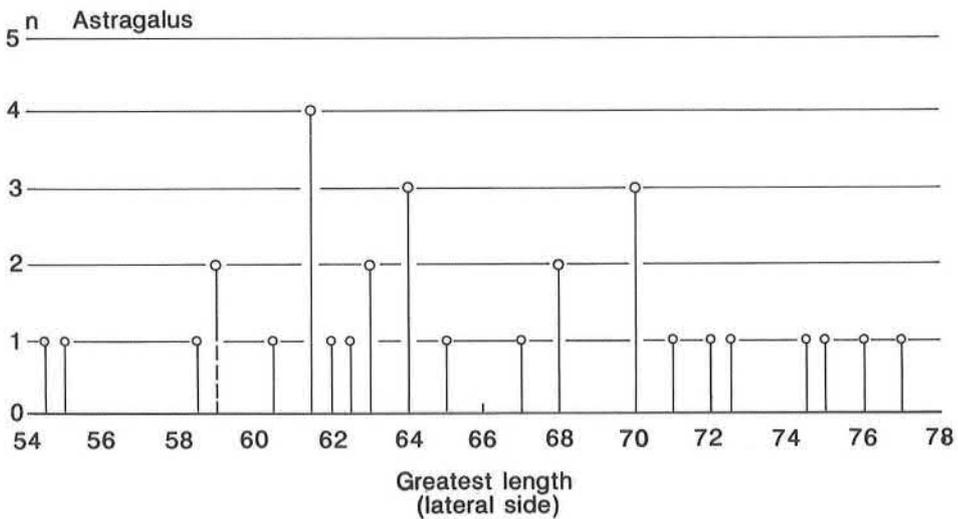
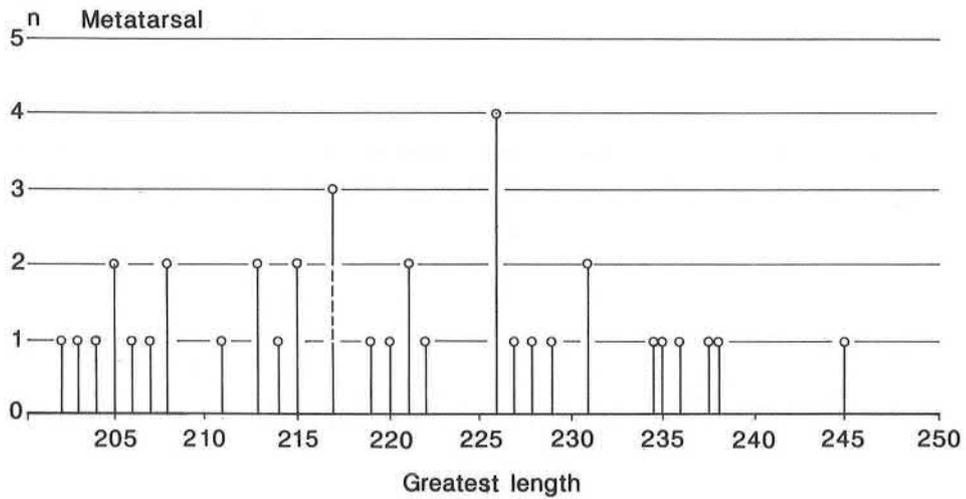
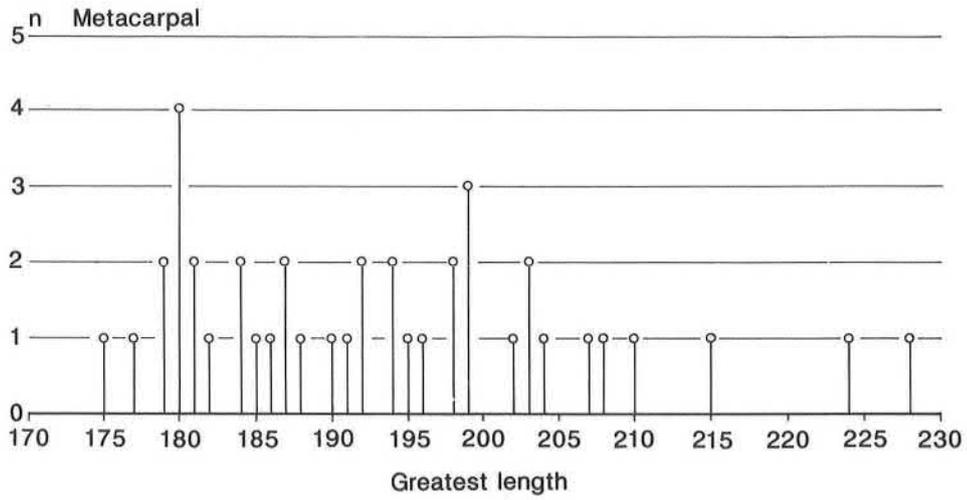


Figure 300: Selected cattle measurements (in mm) at the villa.

terms of sheep 'type' rather than gender. The evidence suggests that a small proportion of the sheep were small and slender-limbed, typical of native Iron Age and early Roman sheep, perhaps like the modern day soay breed, and that the majority were larger and had more rectangular-end tibiae, and may be equated with improved, Romanised sheep.

The anatomical data for pigs imply a marked emphasis on mandibles, but this probably is the result of taphonomic processes rather than of selective deposition, and the pig bones are best interpreted in terms of mixed rubbish, similar to cattle.

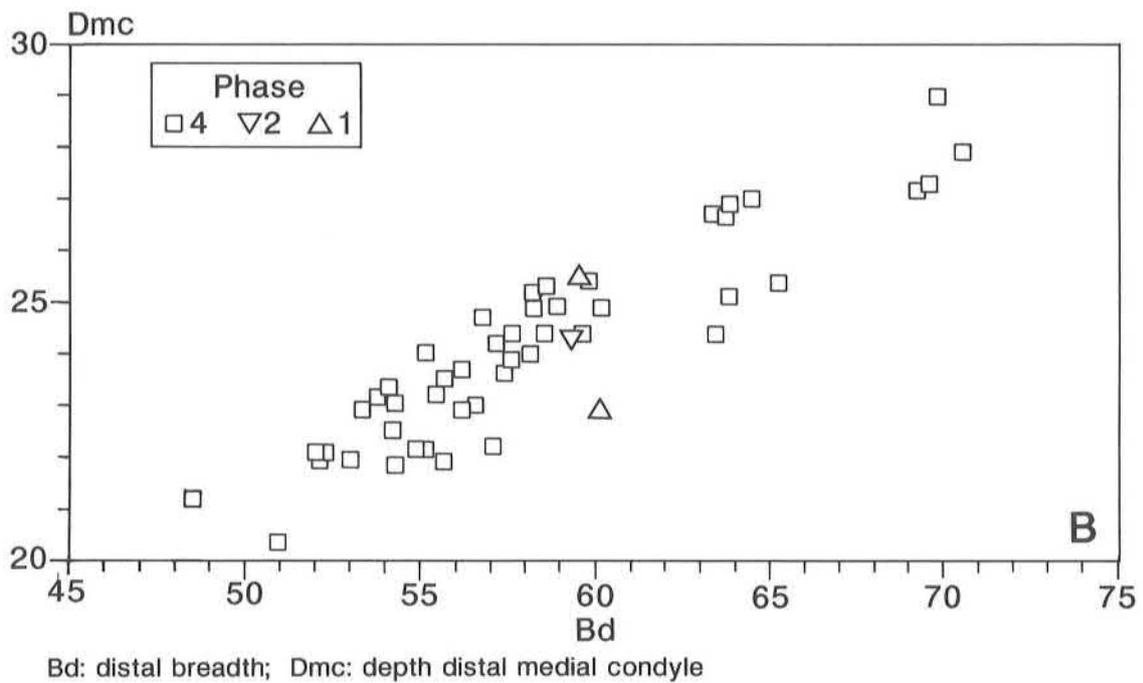
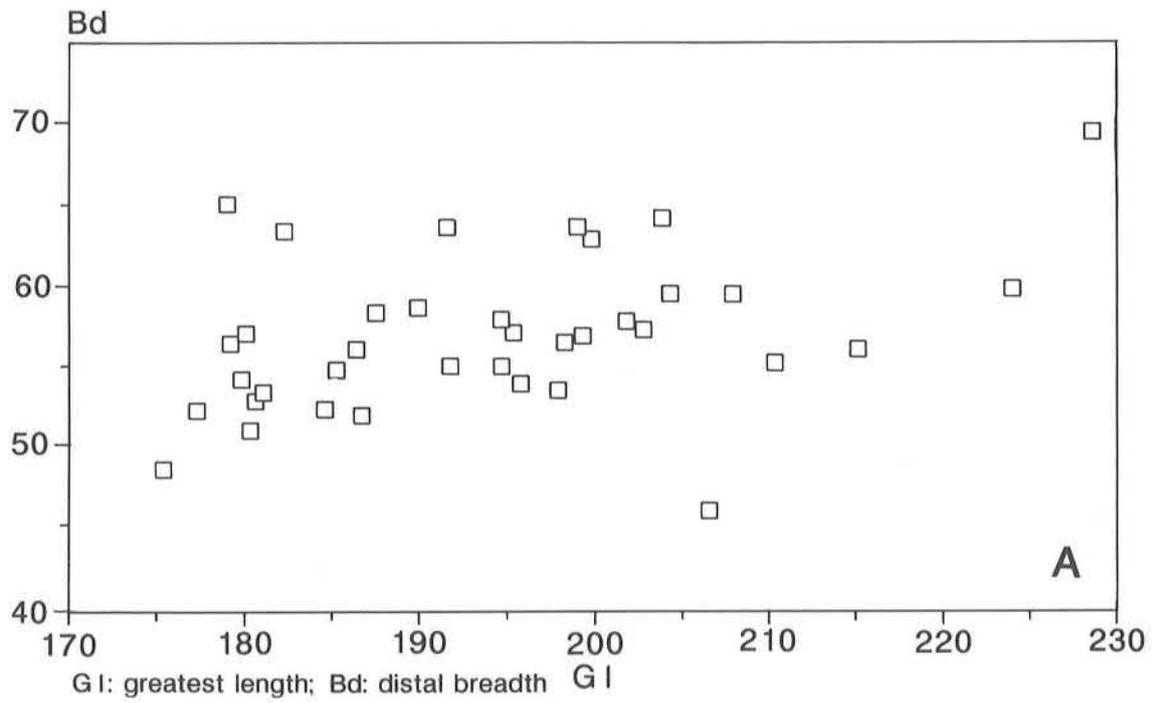


Figure 301: Cattle metacarpal measurements (in mm) at the villa.

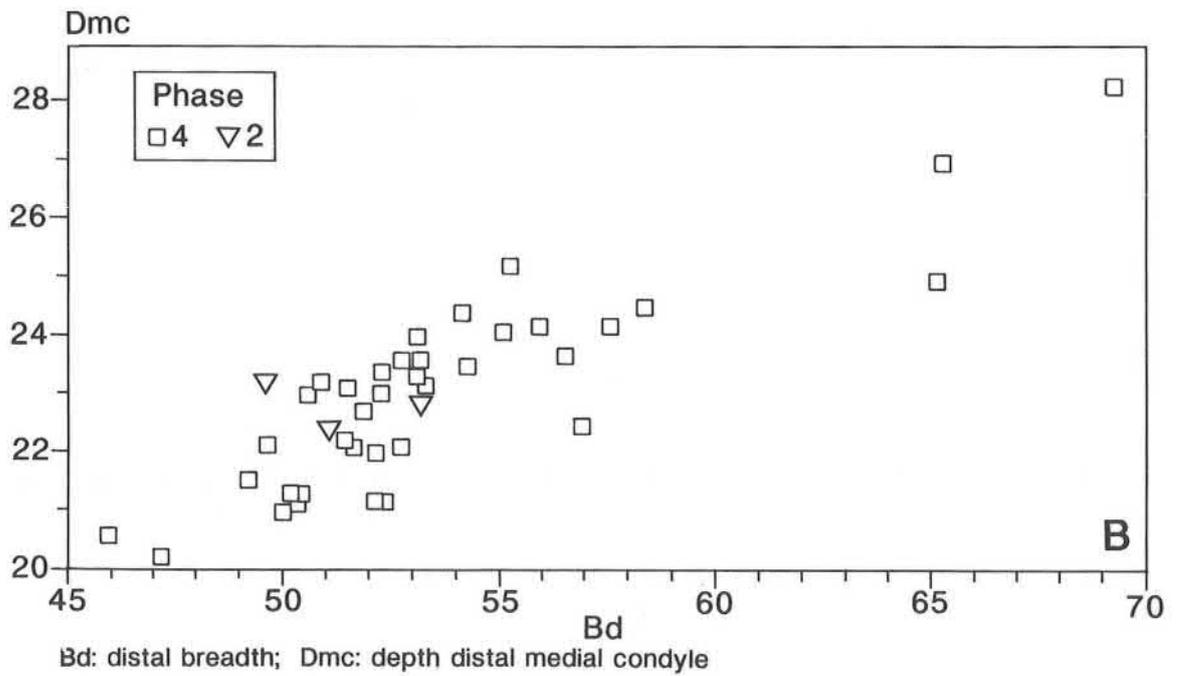
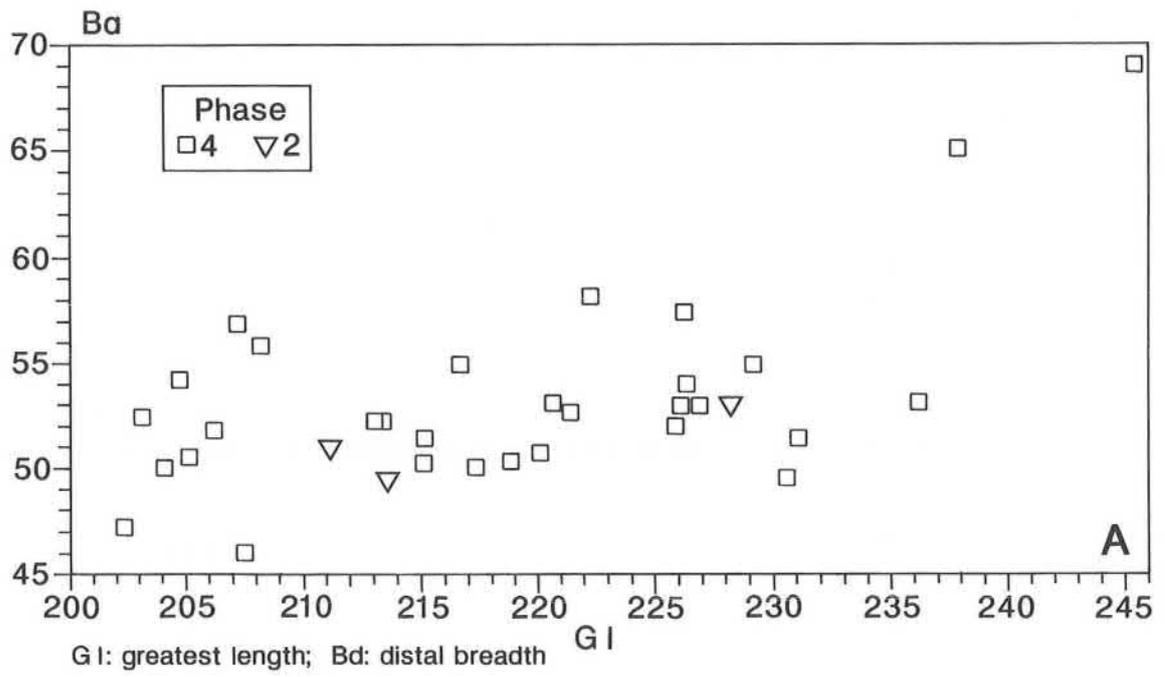


Figure 302: Cattle metatarsal measurements (in mm) at the villa.

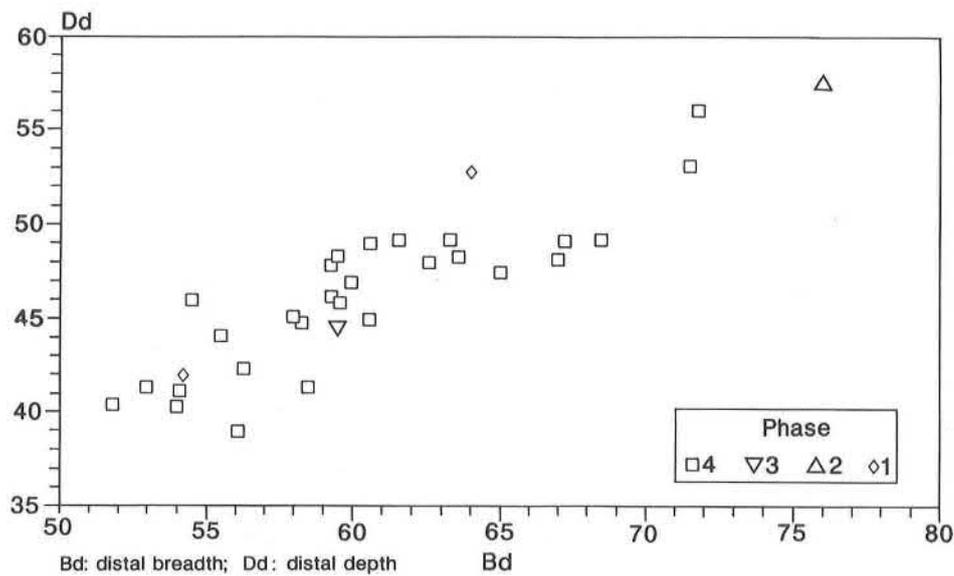


Figure 303: Cattle tibia measurements (in mm) at the villa.

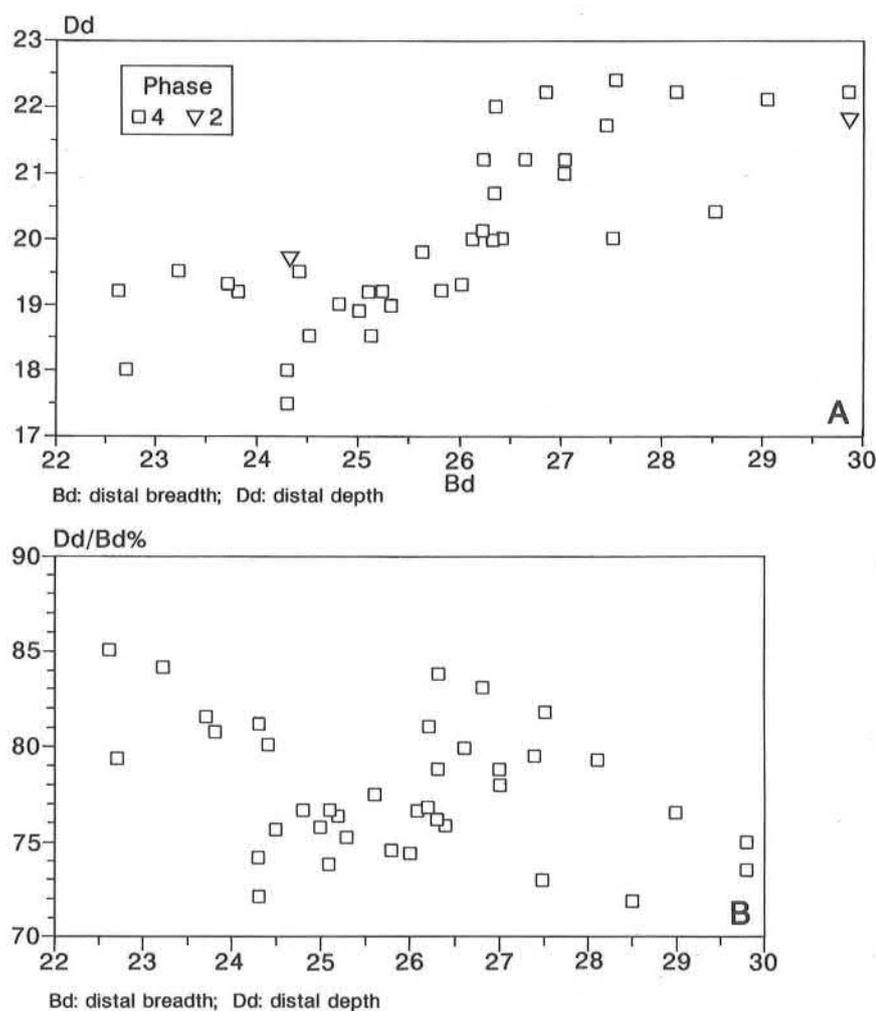


Figure 304: Sheep/goat tibia measurements (in mm) at the villa.

Other taxa of importance are horse, dog and domestic fowl. None were very common, and probably all played typical parts in the site economy and life. There is (slight) evidence that both small ponies and small horses were used, the latter being more frequent. In any case, most of the work required would have been done by oxen; horses were an expensive and relatively high-status possession.

Finally, something must be said of the potential relationship

of the site with other sites in the region. As it was a producer site, we must envisage that meat and other animal products were sent to markets in local towns. This means that the age data may be incomplete, since individuals sent to market for meat, for example, would be at the optimum meat-producing age. Thus the comments above regarding the site economy necessarily apply to what was produced for consumption at the site; obviously we can know nothing of the animals that were sold outside.

HUMAN BONE

The Mausoleum

Ann Stirling

Introduction

The human remains from Bancroft, apart from two unassociated discoveries of probable Iron Age date, fall into three main groups, which will be reported on chronologically. These are:

1. Fifteen cremations, dated to the first century AD.
2. Miscellaneous bones recovered from the fill of the temple-mausoleum burial chamber.
3. Eight inhumations, probably dating from the fourth to fifth centuries AD.

The Cremations

Of the seventeen cremations excavated, only fifteen produced human bone. Most individuals are incompletely represented, with Cremation 12 (C12) having the least amount of surviving bone, at 30 g. There are fragments of cranium, longbone and vertebra only. However, two individuals, C4 and C8, are very complete. C4 weighs 1.125 kg, and C8 2.0 kg. Although C4 seems to have been placed in several pots for burial, as far as one can tell the remains are only from one individual. C10 contains the remains of a young adult male and the unbutchered cremated remains of a young pig, the animal obviously having been cremated with the man. The human bone weighs 900 g, and the animal bone 200 g. This cremation and C11 also contained fuel ash slag, as at Baldock (J. McKinley, pers. comm., 1987), some of which was adhering to the bone. No other cremation contains this material, and it may suggest that these cremations were conducted in a different place to the others, and in an area where there was a degree of silica present, perhaps as sand. Some fragments of bone in this cremation were 'glued' together by the slag, and this may suggest that the body was moved about or stirred while burning. One other cremation, C14, also contains some cremated bone from a young pig. In this case, the human bone weighs 730 g, and the animal bone only 30 g. Since different parts of the pig cremation are present with each of these individuals, it is possible that the same animal may have been divided between the two burials. If this is so, it suggests that the ritual probably took place at the same time for both. It may also suggest that, since this animal cremation is unique for this group (p.71), these two individuals are related. C14 is also a probable adult male.

Another cremation which is of interest is C11. This contains the mixed remains of an adult female and a young child aged about 2 years. Both are very incomplete, the remains only weighing 400 g in total. The child is represented by some cranial bone and the proximal end of a femur, plus the unerupted crown of a right first mandibular molar. Fragments of iron survive with this cremation, perhaps part of an iron fibula. Some cranial fragments have been stained by iron. The leg bones of the adult are dark blue in colour, and were

probably not exposed to as high a temperature as the rest of the skeleton. The colour and degree of calcination of the bone, together with the patterns of cracking, splitting and hatching, suggest that the central and upper parts of the body were exposed to the greatest heat.

The largest surviving fragments from these cremations are rather small when compared with other contemporary groups such as Odell, Beds. (B. Dix, pers. comm., 1987). They are also fairly consistent in size, ranging from 31–68 mm only, whereas those from Odell range from 17–117 mm, and there is a difference in colour between the two groups. Those from Odell are predominantly light brown in colour, while those from Bancroft are mainly white, with only a smattering of blue and grey fragments. These colour differences are caused by proximity to the fire and length of burning. Combustion of human bone must occur at a minimum temperature of 800°C in order that the organic component is completely removed, and with an increased exposure to higher temperatures the bone becomes calcined, ranging in colour from blue/grey to white (Ubelaker 1984, 34). White calcined bone has been exposed to higher temperatures for a longer period of time than blue or grey. It has also been suggested experimentally that patterns of fracture of cremated bone indicate whether or not the body was cremated in a fleshed or de-fleshed condition (*ibid.*, 35). However, this evaluation is highly subjective, and awaits more experimentation and analysis. Three of the Bancroft cremations, C4, C8 and C16, appear to have been the most effectively incinerated, since all the bone is white and calcined, with twisting, splitting, and some transverse lines. In most of the others, the central part of the body seems to have been exposed to the most intense heat. The skull, and in some cases the leg bones, have more blue/grey fragments, whereas the fragments from the centre and back of the body are white and calcined. It seems that the cremations from Bancroft reveal an efficient method of burning, followed by the breaking of the burnt bone into fragments of a fairly consistent size for insertion into pots or graves. Apart from the animal cremations already mentioned, unburnt animal bone survives in twelve of the burials (Table 8; Appendix 9).

Bones from the Temple-Mausoleum

A single incomplete cremation (594) inserted in the ground below the ambulatory on the north side (p.90) contained small fragments of cranium, long bone and rib.

The fragments of bone which derived from the fill of the burial chamber represent small amounts of bone from four adults, one of which at least is a female. All bone is fragmented, and the estimation neither of age at death nor of stature is possible.

The Inhumations

Of the line of eight graves (G1-G8) excavated, only seven contained burials. Another grave (G9) was found subsequently, containing a very complete burial interred in a coffin. These nine inhumations, of late Roman and sub-Roman date, consist of three adult males (G1, G2 and G4),

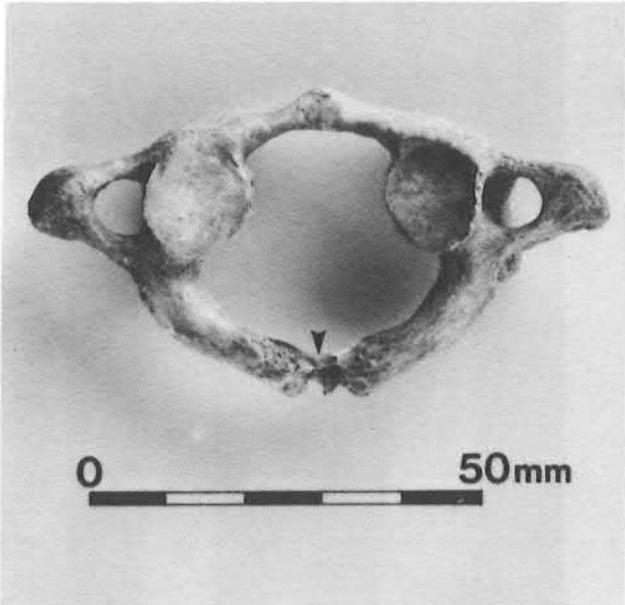


Plate 74: Incompletely fused posterior arch of the atlas of Inhumation 3.

two adult females (G3 and G9), and three young children (G5, G6 and G8, who was an infant). The youngest female was G3, who was 17–25 years and pregnant at her death. The fetus was not full-term, being about 4–6 months *in utero*, and it is therefore unlikely that the mother died in childbirth. The oldest male was G4, who is 38–42 years, and whose remains also contained fetal bones.

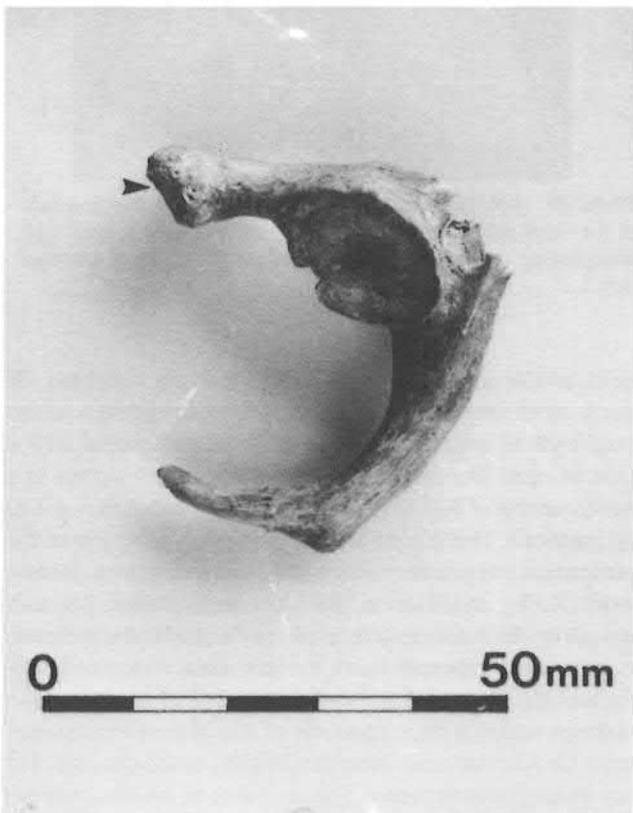


Plate 75: Incomplete fusion of the mid section of the anterior of the first cervical atlas of Inhumation 4.

G3 and G4 have another feature in common. Both these individuals share a morphological trait of the atlas or first cervical vertebra, where there is an incomplete fusion of the bone. In the case of G3, the posterior arch is incompletely fused (Plate 74), and G4 shows an incomplete fusion in the mid-section of the anterior arch (Plate 75). The latter case may have presented some problems in life, since this area is the articulation for the axis and, indeed, the bone seems to have created a new articulation on the unfused segment.

With the exception of the infant (G8), all the individuals have some pathological lesions. Both G1 and G2 were in their late 30s/mid 40s, but they present very different pathological pictures.

G1 has lipping and eburnation (polishing) of the distal condyles of the left femur and the matching proximal condyles of the left tibia, and therefore had an arthritic left knee. This is undoubtedly related to the pathology which is present in his left lower leg. Here there are large exostoses (bony lumps) on the distal ends of both the tibia and fibula, and the bones were probably fused *in vivo* (Plate 76). Although there is no swelling on the tibia, the fibula has an area of swelling just below the exostosis (Plate 77). When



Plate 76: Distal ends of the tibia and fibula of the left leg of Inhumation 1 with large exostoses.

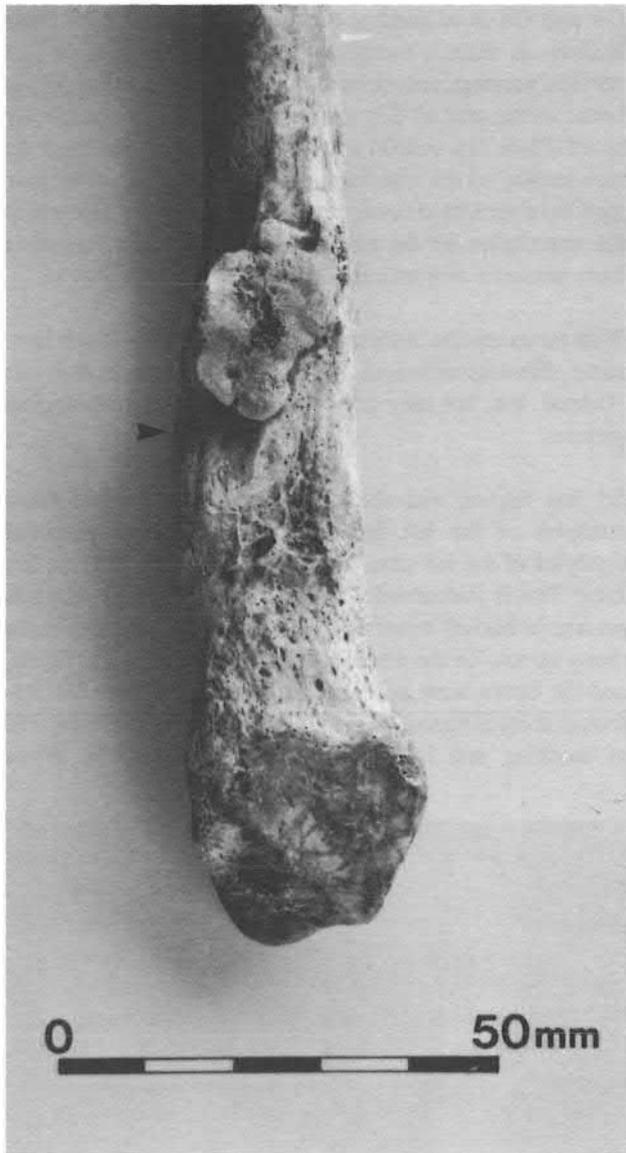


Plate 77: Area of swelling just below the exostosis on the left fibula of Inhumation 1.

radiographed, an old fracture line is visible in the bone (Plate 78, right). This old fracture, and consequent shortening and fusion of the bone with the tibia, would give rise to stress in the knee joint, resulting in the arthritis. The right radius of this individual also has a swelling at the distal end (Plate 79). Again, an old, healed fracture is clearly visible on the radiograph (Plate 78, left). In the vertebral column, there is arthritis of the joints of the upper cervical spine, and compression and pitting of the bodies of the lower portion. There is evidence of herniation of the intervertebral discs of the spine from the seventh thoracic vertebra (mid-back) downwards, with osteophytic lipping. All these conditions are often degenerative in nature, developing with increasing age, although they can also be related to specific stresses such as those induced by activity or trauma. There is also pitting of some rib articulations on the manubrium and sternum. This individual was about 1.64 m (5ft 4½ins) in height, and of gracile (slight) build.

The picture presented by G2 is very different. There is some slight lipping of the right glenoid fossa and the right femoral

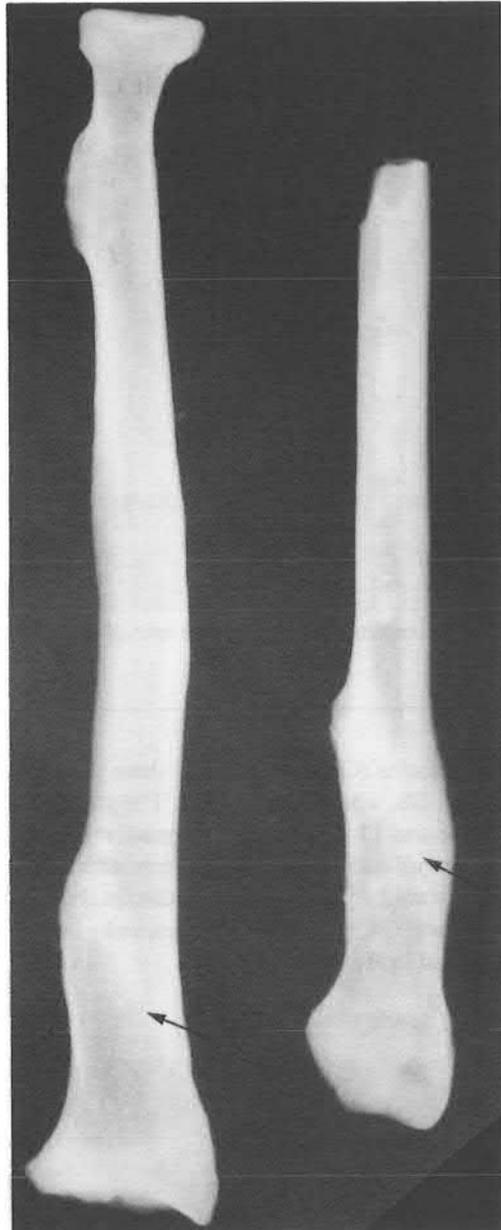


Plate 78: (left) Old healed fracture line visible in a radiograph of the distal end of the right radius of Inhumation 1. (right) Old fracture line visible in a radiograph of the left fibula of Inhumation 1.

head, and of some costal pits on two thoracic vertebrae. Of much more interest, however, are the lesions present on the head ends of some rib fragments. These are covered with a kind of coral-like plaque (Plate 80), which also occurs in a small number of burials from Ashton, Northants. (Stirland, in preparation). This plaque is an inflammatory response of the periosteum (membrane) which covers all living bone. Recent work (Kelley and Micozzi 1984) has demonstrated that such lesions on the inner surfaces of ribs are related to the presence of pulmonary tuberculosis in the individual concerned. Unfortunately, the very fragmented condition of the rest of the skeleton makes a firm diagnosis of this disease impossible, since the relevant areas are either missing or too damaged for any lesions to be apparent. The condition of the ribs, however, is strongly suggestive of the presence of the disease in this man, and it may well have been the cause of his death.



Plate 79: Swelling at the distal end of the right radius of Inhumation 1.

G3 has some interesting pathological lesions. The left scapula has an *os acromiale* of the acromial process. The lateral end of the acromion is a growing point or epiphysis. In a very small number of individuals, this epiphysis fails to unite with the rest of the bone during adolescence. This is thought by some workers to be a developmental defect, but the author considers it, in some cases at least, to be pathological in origin (Stirland 1984). The condition in G3 may well have been developmental, since there does not appear to be any inflammation of the unfused end of the acromion. This young woman also has fractures of the base of both fifth metatarsals in the feet (Plate 81). This is a common fracture in which the foot is twisted under and inwards, causing an avulsion or pulling off of the base of the bone by the strength of the tendon. In the case of this woman, the injury is worse on the left side, and these fractures could have occurred at different times. The lower thoracic and the fifth lumbar vertebrae all show signs of stress.

G4 has degenerative disc disease of the cervical spine, and some arthritis of the proximal right tibia, with eburnation.

There is a raised area 15 mm long on the proximal right femur which shows no inflammatory response, and may be a benign neoplasm of some kind.

G1 and the children G5 and G6 all have *cribra orbitalia*. This is a condition in which there is pitting of the superior portion of the eye sockets. It is thought by some to indicate iron deficiency anaemia suffered in the first three years of life. This causes a pitting of the bone which is retained into adult life.

G9 is a separate, incoffined burial of a female, aged mid 20s to mid 30s, with considerable vertebral pathology. The spinous process of cervical vertebra 7 is twisted to the left, and there is a scoliosis (twisting) of the column to the left, from cervical 7 downwards to thoracic 3. There is osteophytic lipping and enlargement of the apophyseal (articular) joints, predominantly on the right from cervical 7 down to thoracic 6. There are huge osteophytes (lipping) on the bodies of lumbar 3 and 4, and a pitted reaction on the edge of the body of lumbar 2 and on lumbar 5. All the joints and processes of the lumbar spine are enlarged. The sacroiliac joints on both sides are lipped. The scoliosis present towards the top of the spine is probably idiopathic in nature, since there is no other related pathology present. The condition involving the lower spine and sacroiliac joints, however, could be related to pregnancy and childbirth. The joints of the bony pelvis are cartilaginous in nature, and they move during the processes of pregnancy and labour. This tearing of the joint produces reaction in the bone. This reaction can appear as lipping in the sacroiliac joints, and as lesions and nodules at the pubic symphyseal joints (Plate 82). Since both these conditions are present in G9, then it is arguable that this woman had several pregnancies during life. *Cribrata orbitalia* is present in both orbits.

Other Miscellaneous Human Remains

Context 238 contained some fragments of adult bone, predominantly from the right leg and foot.

Layer 699 within the fill of the Iron Age Ditch 630 contained the fragmentary remains of a skull.

Summary

These three groups of burials from Bancroft are interesting, particularly as they seem to represent the remnants of the people who occupied the site from the early to late/sub-Roman periods. The cremations consist of fifteen adults and one child. A tentative attempt has been made to sex the cremated adult material, based on the method proposed by Gejvall (1963). This is based on the thickness of cranial and femoral fragments, and the general robustness of the bones. Using this method, seven males, three possible males, three females and two possible females have been derived for the group. However, it must be stressed that this is very tentative, and has only been undertaken since no diagnostic pieces of skeleton have survived well enough to facilitate the application of the normal sexing methods. The cremations seem to

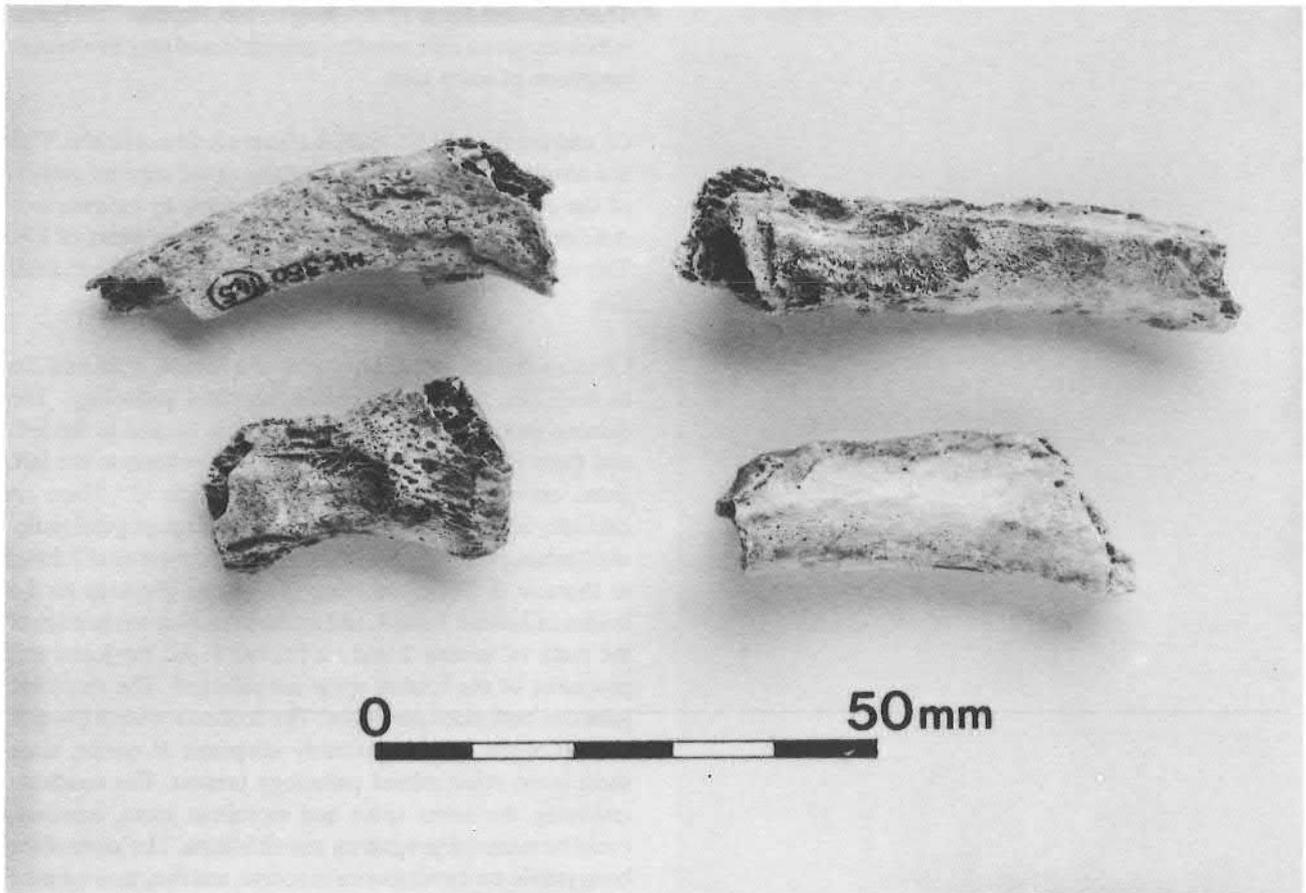


Plate 80: Coral-like plaque on the head ends of rib fragments of Inhumation 2.

have been burnt very efficiently, and broken to a consistent size for burial. The adult and child may have been genetically related, as may two of the other adults. The burials in the temple-mausoleum consist of fragments from four adults, one of which at least was a female. The inhumations consist of three adult males, two females, one of whom was pregnant, two children, and one infant. The pathology present in this group suggests the sort of stress associated with a hard working life, and some childhood dietary stress which may have been related to weaning. Tuberculosis may also have been present in the group.

Skeletal Inventory

The Cremations

C1

Colour: white: cranium, pelvis, tibia, radius, ulna.
blue/grey: femora, ribs, cortical bone.

Max. length: 54 mm.

Total weight: 690 g.

Identified bone: Femoral head, rib, tooth roots, pelvis, femur, tibia, radius, ulna.

No. of individuals: one.

Sex: male.

Age: adult.

Temperature: 800°C+.

Remarks: No vertebrae, hands or feet present. Metallic object present near head on cremation/burial.

C2

Colour: white: ribs, vertebrae, pelvis.
dark blue/grey: cranium.

Max. length: 50 mm.

Total weight: 660 g.

Identified bone: cranium, vertebrae, ribs, femur, fibula, metacarpal.

No. of individuals: one.

Sex: male.

Age: adult.

Temperature: 800°C.

C3

Colour: mostly blue; some white.

Max. length: 31 mm.

Total weight: 150 g.

Identified bone: cranium, longbone, rib.

No. of individuals: one.

Sex: ?male.

Age: -

Temperature: low.

C4

Colour: mostly white.
blue: few cranium and longbone fragments.

Max. length: 52 mm.

Total weight: 1.125 kg.

Identified bone: whole skeleton.

No. of individuals: one.

Sex: ?female.

Age: adult.

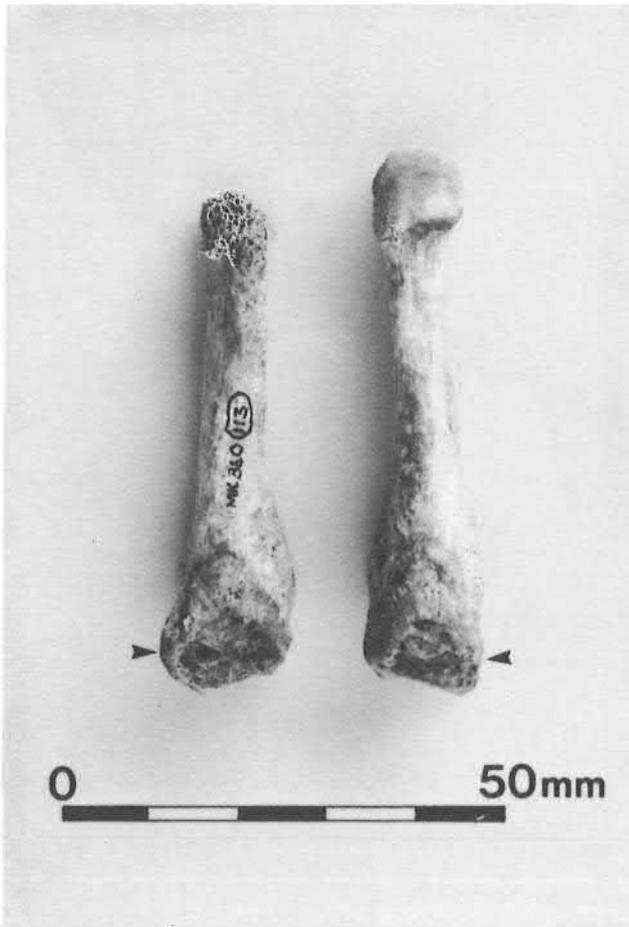


Plate 81: Fractures of the base of both fifth metatarsals in the feet of Inhumation 3.

Temperature: 800°C+. Most intense heat towards centre and back of body. Considerable shrinkage; efficient.

C5
Colour: blue: cranium and some longbone fragments.
 white: the rest.
Max. length: 32 mm.
Total weight: 180 g.
Identified bone: teeth, cranium, longbone, vertebra.
No. of individuals: one.
Sex: female.
Age: probably adult.
Temperature: 800°C. Cranium and some longbones at a lower temperature.

C6
Colour: white: longbones.
 blue: cranium.
Max. length: 40 mm.
Total weight: 230 g.
Identified bone: femur, tibia, fibula, cranium, scapula.
No. of individuals: one.
Sex: male.

Age: adult, probably young.
Temperature: 800°C+, apart from cranium.
Remarks: porosity survives on cranial surface fragments.

C7
Colour: blue to white
Max. length: 33 mm.
Total weight: 100 g.
Identified bone: femoral head, longbone, mandible; nothing else.
No. of individuals: one.
Sex: female.
Age: —
Temperature: mostly 800°C+.
Remarks: very incomplete.

C8
Colour: cream and white.
Max. length: 51 mm.
Total weight: 2.0 kg.
Identified bone: whole skeleton, including 21 teeth, minus crowns.
No. of individuals: one.
Sex: male
Age: adult.
Temperature: 800°C+ for entire skeleton.

C9
Colour: mostly white; a little grey.
Max. length: 54 mm.
Total weight: 330 g.
Identified bone: left patella, cranium, femora, tibia, ulna, vertebrae, right mandible.
No. of individuals: one.
Sex: male.
Age: adult.
Temperature: 800°C for entire skeleton.
Remarks: porosity on some cranial fragments; extosis on a mandibular and on a tibial fragment.

C10
Colour: white, apart from left upper orbit, right femoral condyle and longbone heads, all of which have blue trabeculae and cortices.
Max. length: 68 mm.
Total weight: human; 900 g; animal; 200 g.
Identified bone: whole skeleton, including two teeth, minus crowns.
No. of individuals: one human: one young pig, cremated.
Sex: male.
Age: young adult.
Temperature: 800°C+.
Remarks: quantity of fuel ash slag survives. Body may have been cremated in a different place to the others in group, where silica was present, causing the slag. May also have been moved around while being burnt, causing pieces to 'glue' together. Young, unbutchered pig also cremated, plus some unburnt pig as well. Some probable copper staining on a fragment of acetabula and of vertebra.

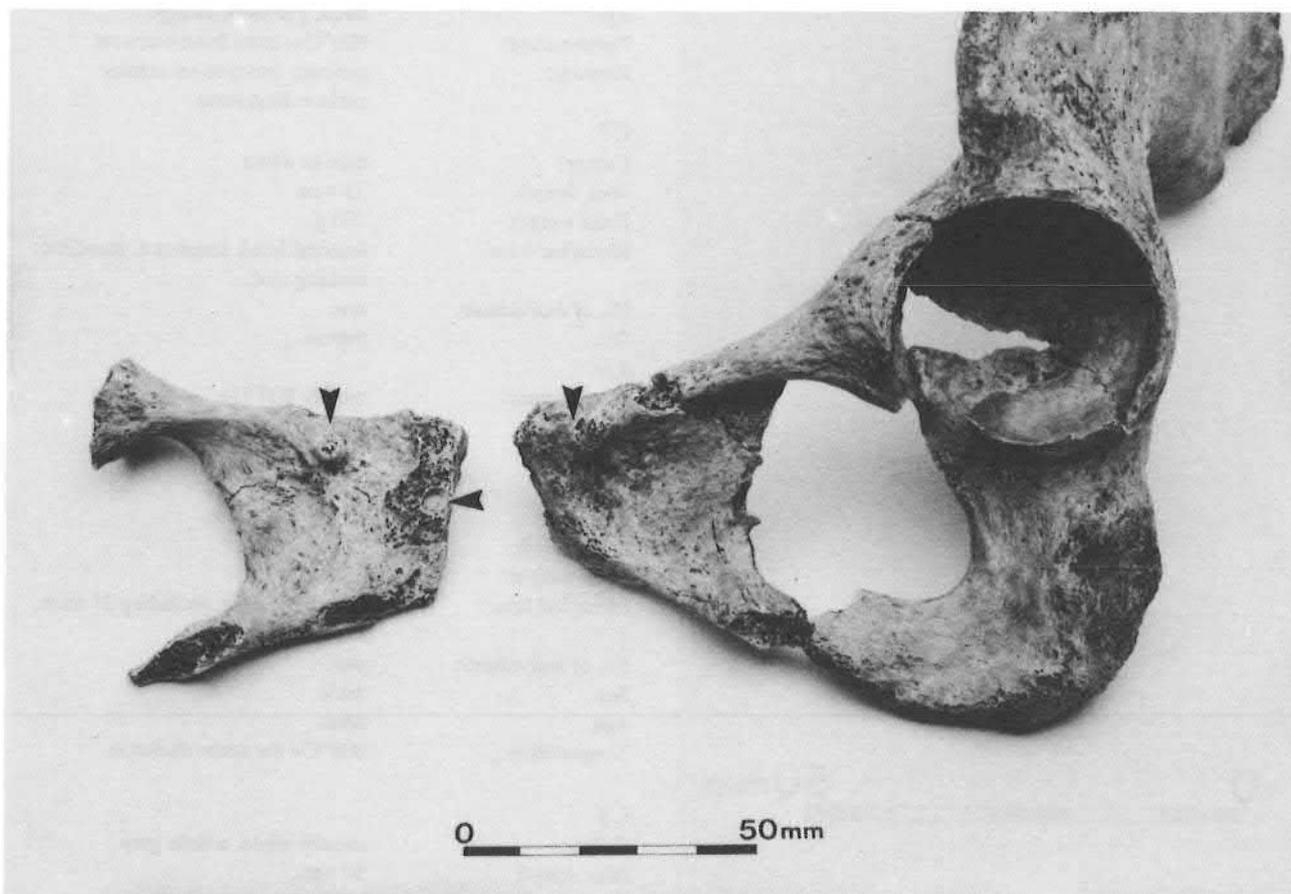


Plate 82: Lesions and nodules in the pubic symphyseal joint of Inhumation 9.

C11

Colour: dark blue; leg bones.
white; the rest.

Max. length: 43 mm.

Total weight: 460 g.

Identified bone: child: mandibular right M1 crown,
femoral capital epiphysis, cranial
fragments.
adult: dens, 2nd metatarsal, verte-
brae, etc.

No. of individuals: two.

Sex: female (adult).

Age: adult. Child; 2 years \pm 8 months.

Temperature: 800°C. Greatest heat in centre and
upper part of adult body; leg
bones poorly burnt.

Remarks: fragments of iron. Iron staining of
some cranial fragments.

C12

Colour: grey to white.

Max. length: 33 mm.

Total weight: 30 g.

Identified bone: cranium, longbone, vertebral
fragments.

No. of individuals: one, very incomplete.

Sex: ?female.

Age: ?adult.

Temperature: 800°C+.

C14

Colour: blue: parts of cranium and
longbone heads.
white: the rest.

Max. length: 47 mm.

Total weight: human; 730 g; animal; 30 g.

Identified bone: cranium, femur, tibia, 2 teeth,
mandible, ribs, feet, patella.
one human: part of a young pig.

No. of individuals: ?male.

Sex: adult.

Age: 800°C, apart from the cranium
and longbone heads.

C15

Colour: black: cranium.
blue: longbone.
white: the rest.

Max. length: 44 mm.

Total weight: 580 g.

Identified bone: cranium, face, femur, foot, pelvis,
longbone heads, ribs.

No. of individuals: one.

Sex: ?male.

Age: adult.

Temperature: 800°C+, apart from cranium and
some longbone.

C16

Colour: white.

Max. length: 44 mm.

Total weight: 950 g.

Identified bone: whole skeleton.

Sex: male.

Age: adult.

Temperature: 800°C+.

Note: the patterns of cracking, hatching, splitting and transverse lines are
consistent for all these cremations implying, with the colour, a similarity in
temperature and firing for all.

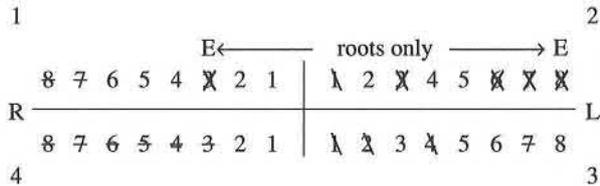
lipping. Schmorl's nodes on L1-3, with lipping of centra.

Large exostoses on distal ends of left tibia and fibula - fused *in vivo*. Old fracture of fibula. Proximal articulations of left tibia lipped, with eburnation on matching surface to femur. Articulation for fibula lipped. Large swelling at distal end of right radius - old fracture.

G2

Whole skeleton present apart from part of the lumbar and sacral spine, the manubrium, patellae and the feet.

Teeth:



- Caries: pulp exposure on 1,3 and 2,8.
- Periodontal disease: moderate. Many roots show an inflammatory response.
- Calculus: moderate.
- Attrition: M1=5; M3=3-.
- Age: 35-45 years. Mature adult.
- Sex: male.
- Morphology: post-cranial: right femur has a Poirer's facet.

Pathology: Cribrra: L=1; R=2.

Eight fragments of right ribs and three of left are covered with a coral-like periostitic plaque.

Labrum of right glenoid has raised rim.

Head of right femur is lipped inferiorly.

Lipping of costal pits on two thoracic vertebrae.

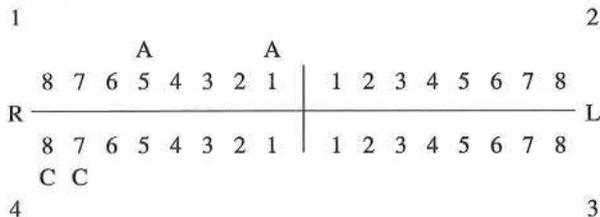
G3

Skeleton complete, and includes a small group of fetal bones:

Both proximal humeri, left ulna, radius fragments, parts of ribs, right pelvic fragment, both femora, four phalanges, cranial fragments.

Age; 4-6 months *in utero*.

Teeth: (adult):



- Caries: buccal neck on 4,7; occlusal on 4,8.
- Abscesses: small root apex on 1,1; root apex and margin on 1,5.
- Calculus: moderate.
- Rotation: 4, 5 rotated.
- Anomalies: protostylid on 4, 8.
- Hypoplasia: considerable. Marked episode at 3 years ± 12 months.
- Attrition: M1=3+; M2=2; M3=2.
- Age: 17-25 years. Young adult.
- Stature: 1.53 m; 5ft 0 ins ± 1.4 ins.
- Sex: female.

Morphology: 3rd trochanters on both femora; large squatting facets on both tibiae.

Pathology: Left scapula has an *os acromiale*.

Insertions for both interosseous ligaments developed on fibulae.

Posterior arch of atlas incompletely fused.

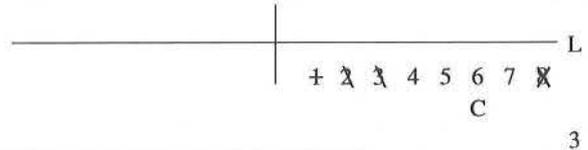
Periosteum raised and reactive on anterior bodies of all surviving thoracic and lumbar vertebrae. L5 compressed and inferior margin expanded and lipped, as are T10 and 11.

Avulsion of tubercles of both fifth metatarsals.

G4

Whole skeleton present, apart from the manubrium and sternum, part of the fingers and the right foot. The skull and mandible, the vertebrae and the ribs are fragmented. Also present: a fragment of cranium and longbone from a foetus.

Teeth: (left side of mandible only)



- Caries: distal crown on 1,6.
- Periodontal disease: moderate; inflammation of bony margins.
- Calculus: severe.
- Attrition: M1-5+; M2-4.
- Age: 35-45 years. Mature adult.
- Sex: male.

Pathology: Compression, marginal lipping and pitting of centra of surviving C's; lipping of one surviving thoracic and one lumbar vertebra; eburnation and pitting of some apophyseal joints, especially on lumbar.

C1 has a cleft anterior arch at the articulation for the odontoid. The odontoid itself is normal, but the cleft has a pitted and expanded surface on the medial side.

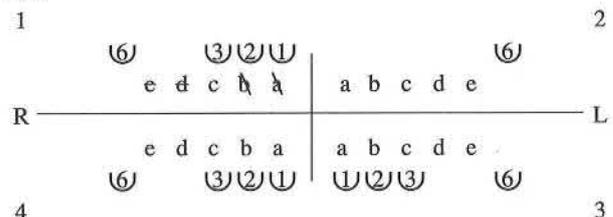
There is a patch of eburnation on the posterior proximal articulation of the right tibia. Probable arthritis.

There is a raised area on the proximal medial right femur, 15 mm long with no visible inflammatory response. Probable benign neoplasm.

G5

Parts of this skeleton survive. Missing are: the manubrium and sternum, the left clavicle and scapula, both ulnae, all carpals and phalanges and twelve metacarpals, left femur, both patellae, all tarsals and thirteen metatarsals. The skull and mandible are fragmented and the vertebrae are unfused.

Teeth:



- Hypoplasia: Areas of apparent defective enamel development on mandibular molars and maxillary left canine.
- Age: eruption = 2 years ± 8 months; epiphyses = 1-3 years.

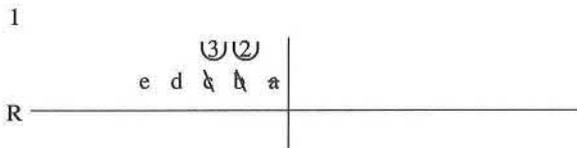
Pathology: Cribra medially in both orbits. Appears to be lying on top of the bone.

Also present: Some fragments of an adult: a maxillary first molar, attrition = 5+; fragments of pelvis and ribs; one proximal hand phalanx; fragments of talus, calcaneus and cuboid; parts of four metatarsals, probably from the right; one foot phalanx with osteochondritis dissecans.

G6

The legs and most of the feet of this skeleton survive, together with the right scapula, humerus, radius and ulna and fragments of ribs.

Teeth: (right side of maxilla only):



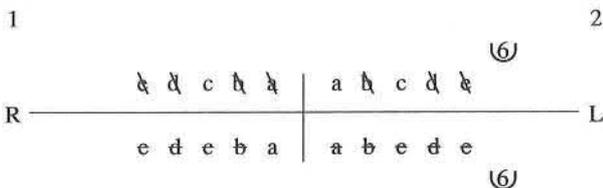
Age: eruption = 3 years ± 12 months;
epiphyses = <5 years.

Pathology: Cribra is present in both orbits, similar to that in G5. There is porosity on fragments of cranium, both on the inner and outer tables, with some healing.

G8

Both scapulae and humeri and the left radius of this skeleton survive, together with fragments of ribs, the left pelvis, both femora and fragments of both tibiae and fibulae.

Teeth:

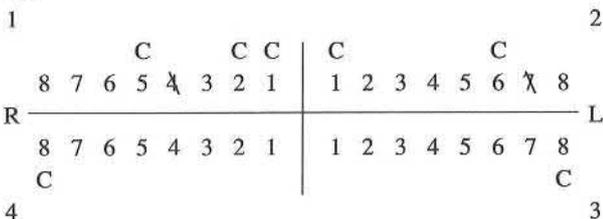


Age: eruption = 18 months ± 6 months;
epiphyses = <3 years.

G9

The whole skeleton is present, apart from the right patella and some hand and foot bones.

Teeth:



Caries: interstitial mesial and distal at contact points on maxillary teeth, and buccal at the cemento-enamel junction on the mandibular molars.

Periodontal disease: slight.

Calculus: moderate.

Hypoplasia: event at 3 years ± 12 months.

Attrition: M1=U4+, L4; M2=3; M3=U2, L2+ (greater on the left).

Age: 25-35 years. Mature adult.

Sex: female.

Stature: 1.62 m; nearly 5ft 4 ins ± 1.5 ins.
Morphology: the left tibia has a squatting facet, and both calcaneal facets are double.

Pathology: Grade 2 cribra centrally in both orbits.

There is an exostosis on the right 1st cuneiform at the insertion of the metatarsal ligaments.

There is ossified costal cartilage on two left ribs.

The spinous process of C7 is twisted to the left; there is a scoliosis from C7 downwards to T3. There is an enlargement and lipping of the apophyseal joints on the right on C7 and T1, on the left on T2, on both superior joints on T3 and on the right on T4, T5, and T6. There are huge osteophytes on the centra of L3 and L4, and reaction on the edge of the centrum of L2. The right inferior apophyseal joint on L5 and the superior joint on S1 are both enlarged. All lumbar apophyseal joints and mammary processes are enlarged, and there is lipping of the auricular surfaces on both ilia and sacra.

There are large scars on both pubic ventral surfaces at the superior edge on the ventral ridge, and both acetabulae are deep.

Other Human Bone

Context 238 (fragmentary burial north of Enclosure Ditch 60)

Fragments of both femora, the right tibia, fibula and part of the foot survive.

Age: adult.
Pathology: There is osteochondritis dissecans of one foot phalanx.

Context 699 (fill of Iron Age Ditch 630)

Three fragments of right parietal. Healed porosity along sagittal and coronal sutures.

The Villa

During the 1974 excavations, a number of human bones were recovered from Room 1, Building 1, buried in a shallow layer of windblown soil overlying the surface of the mosaic floor (Fig. 305). These were reported on by C.B. Denston, and the report published (Green 1975, 4). Four other human bones found in the vicinity of the others were also described by Betty Westley in the report on the faunal remains. These have been re-examined by Ann Stirland, whose report follows the main report by C.B. Denston. In 1978, a further inhumation was found to the south of Building 1 and two cremations and the burial of a neonate were discovered to the south of Building 2. Though described briefly in RMK (192), these were also recently re-examined by Ann Stirland, whose report appears below.

The Burials in Room 1, Building 1

C.B. Denston

The human material consisted of cranial and postcranial bones, the preservation of the bones being quite good, though breaks had occurred at the time of the excavation and at some time previously and had reduced all the bones, except one, to a fragmentary condition.

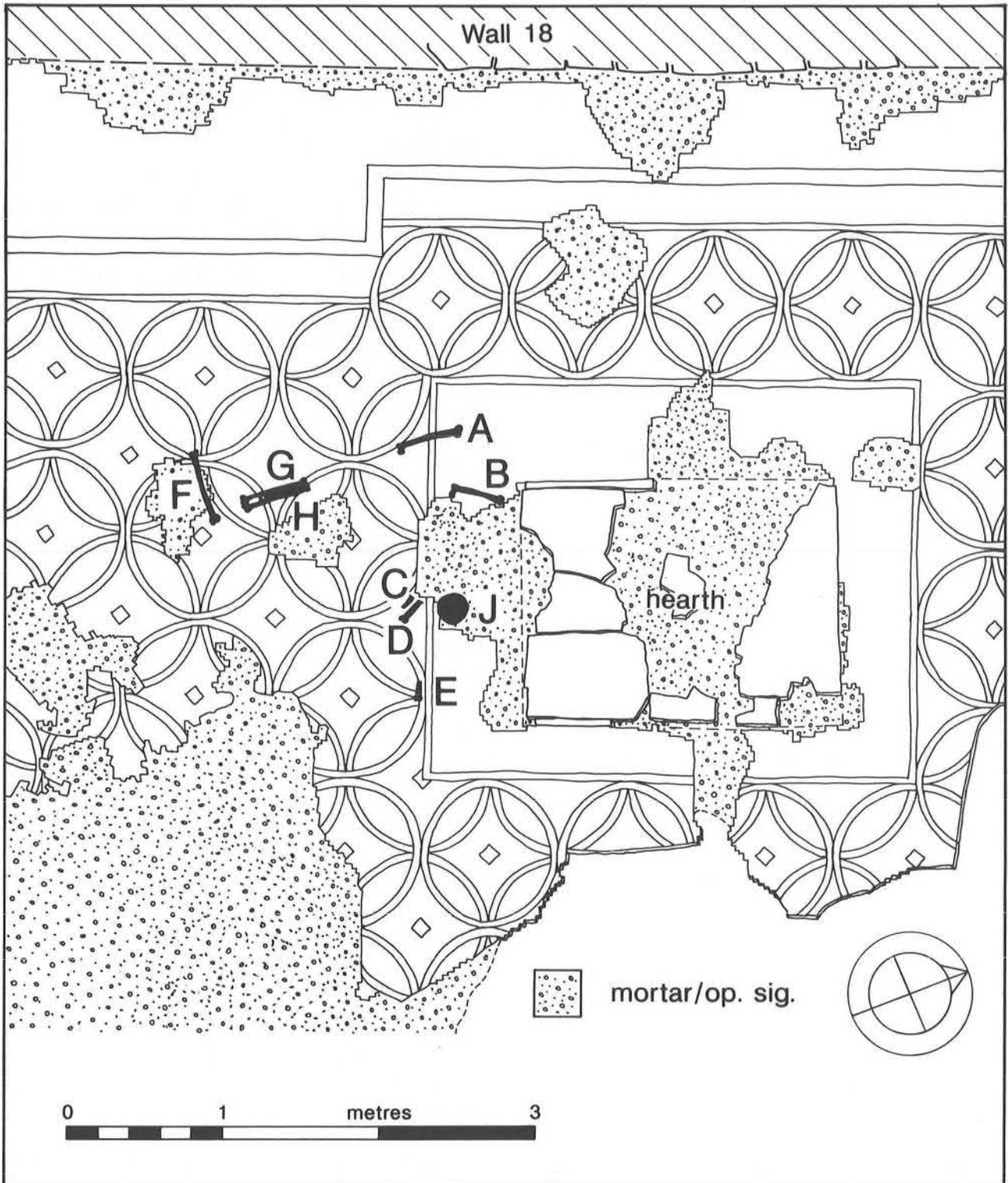


Figure 305: Location of dispersed 'burials' in Building 1, Room 1.

Reconstruction of the bones, insofar as this was possible, produced a calvarium (cranium minus face) though the maxilla and zygomatic bones were present they could not be assembled (Fig. 305, J), three femora (B, F, H), two tibiae (A, G), the distal half of a humerus (E) and a fragment of a rib (C). At the time of excavation another bone (D) described as human was subsequently found to have been the humerus of a large dog.

The duplication of femora, plus the overall length and robustness of the femora and tibiae, suggested two individuals were represented by the remains.

Individual 1

This individual was represented by right (F) and left femora (B), a right tibia (A), possibly the distal half of the humerus

(E), and the cranium (J). The size and lack of robustness of the postcranial bones suggested that the individual was a female, and this was substantiated by sexual features of the cranium. The individual was an adult, but a satisfactory conclusion as to the approximate age at death could not be reached owing to the loss of teeth from the maxilla and the lack of uniform closure of the sutures of the cranium.

The basi-occipital and basi-sphenoid were completely joined giving an age of at least 23 years and the second right maxillary molar, the only complete tooth in-situ, displayed attrition reminiscent of an age between 20–25 years. With so many teeth missing though, and no mandible to assess the state of the occluding molars, or perhaps of ante-mortem loss of one or more of the mandibular teeth, a specific age at death was indeterminable, but the individual would appear to be a young adult as opposed to old. One tibia was complete, of which the maximum length was measured, and reconstruction produced a femur sufficiently intact for a similar measurement to be recorded, and from these two measurements a tentative reconstructed stature was assessed at 1.59 m.

Dental Pathology

The dental arcade-palate was rather small, the shape coming more to a point at the alveoli for the incisor than the usual more rounded appearance. The portion of the alveolus at the left side which would have accommodated the second and third molar teeth had been broken away post-mortem and was missing, but the area for the first molar displayed that this tooth had been lost from the maxilla ante-mortem. The second right molar was the only complete tooth in-situ, but the root for the right lateral incisor remained in-situ, the crown having been broken away post-mortem but before the excavation. The roots of the two left premolar were also in-situ, the second reduced to this state by the destructive action of caries and possibly also the first. The rest of the teeth, that is to say the two incisors and the canine from the left side of the maxilla, and an incisor, two premolar, first and third molars from the right side were all possibly lost post-mortem. At the root apex of the first left premolar was a chronic abscess cavity, the infection affecting a small area around an opening in the lateral (buccal) surface of the maxilla. A chronic abscess cavity was situated in the alveolus of the first right molar and had spread to the root apex of the alveolus for the second premolar causing destruction of the bone separating the two alveoli. The infection had also affected an area on the lateral (buccal) surface of the maxilla spreading from the abscess cavity of the molar to the first premolar, though no opening had occurred. Resorption of the alveolar bone around the tooth sockets suggested periodontal disease, this amounting to a medium degree in the area of the right molar teeth.

General Pathology

Three small superficial cuts into the right parietal bone of the cranium were evident; these were not inflicted at the time of the excavation, and it could not be established with authority if they were of ante-mortem or post-mortem origin. In com-

parison to a smooth surface of most of the right parietal bone, an area medially to the eminence of this bone displayed a granular porotic surface, which occurred to a lesser degree on the opposite parietal bone. Cases of osteoporotic pitting are known in Europe from Neolithic and later periods, but the reason for its development is not understood. The shafts of the femora were bowed inwards (medially), which is possibly unusual, the anterior curve being normal. Associated with the medial curvature of the shafts of the femora were low platymeric indices, these being 63.9 mm for the right femur and 64.3 mm for the left. Platymeria is antero-posterior flattening of the shaft immediately below the lesser trochanter. The bowing and platymeria may be related, and Townsley (1946) considered that normal antero-posterior flattening of the neck part of the shaft is a mechanical adaptation, involving the economic use of material with sufficient strength to support weight acting on the inclined femur neck. This author also noted that a low platymeric index may be associated with some pathological conditions such as osteoarthritis and osteoporosis.

Non-Metrical Characteristics

The metopic suture of the cranium persisted during the life of the individual, the frontal bone still displaying faint traces of the suture. A slight degree of osteoporosis was present in the right orbit.

Individual 2

This individual was represented by a right femur (H) and a left tibia (G), the size and robustness of the bones suggesting the individual they represent was a male, and other features suggesting an adult age. A tentative reconstructed stature assessed from the maximum length of the femur came to 1.69 m.

Burnt Bone

There were two fragments of burnt bone (?cremation), both possibly human. One fragment was identified as coming from the area of the popliteal surface at the distal posterior surface of a femur, and the other fragment from the mid-anterior surface of a femur. The robustness of the fragments suggested that they were more likely to have come from a male adult bone than a female.

Additional Human Remains

Author's note: These few fragments have been re-examined and reported on by Ann Stirland.

Four pieces of adult bone found in the immediate vicinity of the two individuals described above consist of:

- The dens (peg) and left articulation of a cervical 2 vertebra;
- A right talus (ankle);
- A right patella;
- A lumbar 3 vertebra.

These bones probably belong with those earlier reported on by C.B. Denston. The lumbar vertebra is possibly male, from its size and robustness.

Other Human Burials from the Villa

Ann Stirland

Burial 66

This consists of the remains of a mature adult female and a late foetus or neonate.

The adult consists of:

A fragment of right innominate (pelvis), including the sacroiliac joint; a sacral 1 vertebra and most of the sacroiliac joint and the lateral part; lumbar vertebrae 3–5 and the epiphyseal joints of lumbar 2; fragments of sternum, femoral head, ribs, right humeral head and distal portion, the acromion of the right scapula, the head and shaft of the right radius, tibia, left calcaneus, 2 tarsals and 1 finger phalanx.

The morphology of the pelvis and sacrum are female. Ageing on rib changes gives a range of 43–58 years, an old adult. The surviving bodies of the lumbar spine are lipped, particularly the lumbar 5, which has large osteophytes all round both surfaces and is compressed. The right apophyseal joints on both lumbar 5 and sacral 1 are expanded and eburnated (polished); osteoarthritis of the lumbar/sacral spine. Both the sacroiliac joints are lipped on the right side, as is the iliac crest.

The immature consists of fragments of:

Cranium; cervical 1 and 2, plus 17 vertebral bodies and various neural arches, all unfused; the left innominate; right femur and tibia; 4 left, 2 right ribs, plus fragments. No epiphyses survive.

Ageing based on the form of the cranial base and the vertebrae, particularly the dens (peg) of the cervical 2, plus the general size of the bones, suggests a neonate or a foetus.

Cremations 1 and 2 (Fig. 113)

Although recorded on site as two cremations from separate pits, the two groups of bone had unfortunately become amalgamated during the post-excavation work. This resultant deposit undoubtedly consists of the remains of two adults, since there is duplication of the dens (peg) of the cervical 2 vertebra.

All parts of the skeleton are represented, apart from teeth and feet. There are a number of large, clearly recognisable fragments, including:

Cranium; femur; sacroiliac joint; vertebrae; patellae (also possibly duplicated); humerus; radius, ulna; ribs; a hamate and a metacarpal; metatarsal. From the size of the lumbar 5 vertebra and acetabulum (hip joint), one of the individuals at least is probably male; both may be.

There is variation in the temperature of firing, with some bone much bluer than the rest, a sign of poor calcination. Well calcined bone includes cranium, most ribs, long bones and vertebrae; poorly calcined bone includes femoral head and pelvis. Such variation suggests either the two individuals were burnt at a different temperature, or that some parts of the

bodies were nearer to the centre of the fire than others. The condition and size of the fragments suggests that the bone was not fragmented after burning and before burial.

The longest fragment = 105 mm of tibia; weight = 700 g. Both individuals are incomplete.

Inhumation 2 (Fig. 113)

An immature burial was found adjacent to the above cremations. Surviving fragments include:

Left innominate and other pelvic fragments; both humeri; right radius; cranium, face and mandible (no teeth); ribs and vertebrae, all unfused; metacarpals and phalanx; calcanei; both femora and tibiae. There is duplication of the proximal right tibia.

The bones are smaller than those of the previous immature and this and the presence of the humeri suggest a fetus of 7/8 lunar months. The presence of at least one duplicated bone suggests either two fetuses of a similar age (twins?) or a double burial.

PLANT REMAINS FROM THE MAUSOLEUM SITE

Sandra Nye and Martin Jones

Introduction

Various parts of Britain, including the area around Milton Keynes, have in recent years yielded a great deal of evidence of prehistoric settlement on clayey soils. This evidence has provided an opportunity to examine the early agricultural use of clay soils by archaeobotanical analysis, and to explore the common assumption that the cultivation of clays and clay loams was a development of the historic period.

Sites around Milton Keynes and Aylesbury sampled for plant material have produced data from clay catchments for sites of middle Iron Age (Jones 1993), late Iron Age and Roman (Jones, 1986 and 1987), Saxon (Jones 1993) and medieval (Jones 1986) date. The present site provides an opportunity to examine settlement refuse of late Bronze Age/early Iron Age date, and while samples from across the time range were examined, this was seen as the aspect of principal interest from an archaeobotanical point of view.

In the other studies cited above, attention was drawn to aspects of the records that one of us has argued (Jones 1984) could be related to different ways of exploiting a clay landscape for cereals. These include: the species of wheat present, the appearance of rye, oats and legumes, and the occurrence of weeds that may reflect soil fertility (eg. *Chenopodiaceae* and *Leguminosae*), soil texture (eg. *Anthemis cotula*) or soil mixing (eg. *Bromus* spp.) (cf. Jones 1984). These aspects were also borne in mind in the analysis of the results from the mausoleum site.

Method

Contexts were selected by the excavator from a limited range of deposits dating from the late Bronze Age/early Iron Age through to the sub-Roman/Saxon period. These were proc-

essed by flotation following the method outlined by Jones (1978). Fifty-one individual samples were processed in this way, and derived from; late Bronze Age Pit 330, Hollow 340 and Building 500; a range of Iron Age roundhouses, Well 880 and miscellaneous Iron Age pits and ditches; Layers 879, 884, 885, 890 and 913 in Section 877 of the early Roman Enclosure Ditch 60, and from the fill of the sub-Roman/early Saxon Ditch 94/95.

The dry flots were passed to Sandra Nye for scanning and identification, which was conducted with a Swift 80 stereomicroscope at $\times 10$ magnification. All seeds, chaff and wood fragments were identified as far as possible, by comparison with the macrofossil collection at the Department of Archaeology, University of Durham, together with the authors' own reference collections.

Results

Numbers of seeds, fruits and chaff fragments in each group/period are recorded in Table 64, and the number of identifiable charcoal fragments appear in Table 65.

The density of seeds and chaff in the deposits steadily increases through time to the Roman period, from an average of 2.6 fragments per litre in the late Bronze Age/Iron Age, to 3.2 for the Iron Age contexts. The contexts from the early Roman Ditch 60 have an average density of 9.3 fragments per litre. The few samples of sub-Roman/early Saxon date give the much lower figure of 0.1 fragments per litre. At least partly as a consequence of this, the minimum number of seed taxa increases *pari passu* with the increase in seed densities, and the minimum number of wood taxa (Table 65) also broadly follows this trend.

Among the seeds, cereal grains remain in the minority throughout, at an overall proportion of 17%. This proportion falls from 27% in the late Bronze Age/early Iron Age samples to 14% in the Iron Age samples. Chaff fragments are scattered, but in low quantities, throughout.

Economic Plants

Generally speaking, the cereals are in poor condition, with little of the epidermal layers intact. Where the grains can be identified to genus, wheat is encountered with a much greater frequency than barley. Oat seeds were found in the Iron Age contexts, but in the absence of the diagnostic floret bases it was not possible to determine whether any of the larger oat seeds came from a cultivar, rather than the wild plant.

Whereas a few wheat grains have been referred to particular species, *Triticum spelta* and *T. aestivocompactum*, it should be remembered that such grain identifications are no more than statements of probability based on the normal range of grain shapes of a particular species. The more secure cereal identifications come not from the grains, but from the chaff.

All the cereal chaff fragments recovered were the glume bases of hulled wheats, which occurred in small quantities from the late Bronze Age through to the early Saxon period.

The twelve that were measurable had basal widths ranging between 0.9 and 1.27 mm, with a median width of 1.14 mm. This range suggests the existence of at least spelt wheat, *Triticum spelta*. Of the better preserved specimens, three have the multiple-ridged dorsal surface associated with spelt wheat, and one has two prominent ridges in a manner more reminiscent of emmer, *T. dicoccum*. These data provide strong evidence of spelt wheat as early as the late Bronze Age.

In addition to the cereals, other potential food plants include the pips of *Sambucus*, and some *Vicia sativa* seeds from Ditch 60 which may be recognised by their wedge-shaped hila.

All the charcoal fragments are likely to reflect the use of wood as fuel. There is no indication of species that need have grown very far from the site.

Other Plants

As is generally the case with carbonised plant remains, the major category of plants apart from the cultivated seed crops are the segetal and ruderal weeds. All but a few taxa may be referred to this group. Of the remainder, there is a small group of possibly damp ground taxa, *Montia fontana* subsp. *chondrosperma*, *Stellaria alsine*, *Carex* sp., and Cyperaceae indet. This group is frequently found in association with carbonised cereals, and one of us has argued that they may be weeds of some particularly damp cultivated fields (Jones 1984).

In addition, there are a few taxa that may be of woodland and scrub, *Alnus* sp. and *Sambucus* sp. While the alder seed presumably arrived with alder wood in the same deposit, the elder/danewort may have been actively collected (see above).

The list of segetal and ruderal taxa is similar to many derived from later prehistoric carbonised assemblages. The taxa which reach 10% or more of the seeds from any single period are as follows:

Chenopodium spp. fall from 27% of the late Bronze Age/early Iron Age seeds to just over 1% of the early Roman Ditch 60 seeds, and *Vicia/Lathyrus* spp. are absent from all assemblages except those from Ditch 60, in which 34% of the seeds fall into this group. These two complementary trends are consistent with a decline in soil nitrogen (Jones 1984). Wild Graminae, absent from the late Bronze Age/early Iron Age assemblage, rise to 15% of the Ditch 60 seeds.

Among the weeds recovered from Ditch 60 are a group that on other sites in southern England one of us has linked with drier ground (Jones 1984). These are *Aphanes arvensis*, *Sherardia arvensis*, *Valerianella dentata*, and *Viola* sp. To this list we might also add *Ranunculus parviflorus*.

In the context of the points raised in the introduction to this section, we may note the absence of three species of weeds:

CARBONISED SEEDS	Late Bronze Age/early Iron Age			'Middle' Iron Age			Early Roman	Sub-Roman/early Saxon
	Pit 330	Hollow 340	Bldg 500	Rhs	Other ftrs	Well 880	Ditch 60	Ditch 94/95
BETULACEAE								
<i>Alnus</i> sp.	-	-	1	-	-	-	-	-
CAPRIFOLIACEAE								
<i>Sambucus</i> sp.	-	-	1	-	-	-	1	-
CARYOPHYLLACEAE								
cf. <i>Moehringia</i> sp.	-	-	-	-	-	-	1	-
<i>Spergula arvensis</i>	-	-	1	-	-	-	-	-
<i>Stellaria alsine</i>	-	-	-	-	1	-	-	-
<i>S. media</i>	-	1	1	2	-	-	-	-
Carophyllaceae, undif.	1	-	4	3	1	3	4	-
CHENOPODIACEAE								
<i>A. patula/hastata</i>	-	-	2	-	1	-	5	-
<i>Chenopodium album</i>	-	-	-	-	-	-	2	-
<i>Chenopodium</i> , undif.	-	-	6	1	5	-	4	-
Chenopodiaceae, undif.	-	-	6	2	-	3	-	-
COMPOSITAE								
cf. <i>Artemisia</i> sp.	-	-	-	-	1	-	16	-
<i>Matricaria maritima/perforata</i>	-	-	-	-	-	-	26	-
Compositae, undif.	-	-	-	-	1	-	2	-
CRUCIFERAE								
cf. <i>Diplotaxis</i> sp.	-	-	-	-	-	-	1	-
cf. <i>Raphanus</i> sp.	-	1	-	-	-	-	-	-
Cruciferae, undif.	-	-	-	-	-	-	-	1
CYPERACEAE								
<i>Carex</i> sp.	-	-	-	1	-	-	2	-
<i>Scirpus setaceus</i>	-	-	-	-	-	-	1	-
Cyperaceae indet.	-	-	-	-	-	-	2	-
GRAMINEAE								
<i>Avena</i> sp. (grains)	-	-	-	1	1	-	13	-
<i>Bromus</i> sp.	-	-	-	-	-	-	2	-
<i>Festuca</i> sp.	-	-	-	-	-	-	11	-
<i>Hordeum</i> sp.- (grains, undif.)	-	1	-	2	1	-	4	-
<i>Triticum aestivum/compactum</i>	-	-	-	-	1	-	1	-
<i>Triticum spelta</i>	-	-	-	-	-	-	13	-
<i>Triticum</i> (hexaploids, undif.)	-	-	-	-	-	23	-	-
<i>Triticum</i> , undif.	-	-	2	-	-	-	10	-
<i>Triticum</i> , sp.- (glume bases)	1	-	10	3	10	3	5	1
cereals, undif.	1	5	21	9	17	4	19	2
<i>Graminae</i> indet.	-	-	2	1	-	1	50	-
JUNCACEAE								
cf. <i>Luzula</i> sp.	2	-	4	3	1	1	19	-
LABIATAE								
<i>Calamintha</i> sp.	-	-	-	-	-	-	2	-
Labiatae indet.	-	-	-	-	-	-	1	-
LEGUMINOSAE								
<i>Vicia/Lathyrus</i> sp.	-	-	-	-	-	-	142	-
Leguminose, undif.	-	-	1	-	-	-	20	-
MALVACEAE								
<i>Malva sylvestris</i>	-	-	-	-	-	-	1	-
PLANTAGINACEAE								
cf. <i>Plantago major</i>	-	-	1	-	-	-	-	-
POLYGONACEAE								
<i>Polygonum aviculare</i>	-	-	-	-	-	1	2	-
<i>P. persicaria</i>	-	-	1	-	-	-	-	-
<i>Polygonum</i> , undif.	1	-	1	1	-	-	-	-
<i>Rumex acetosella</i>	-	-	-	1	-	-	2	-
<i>Rumex</i> , undif.	-	-	3	-	3	-	16	-
PORTULACACEAE								
<i>Montia fontana</i> subsp. <i>chondrosperma</i>	-	-	-	-	-	1	2	-
RANUNCULACEAE								
<i>Ranunculus acris</i> type	-	-	1	-	-	-	1	-
<i>R. parviflora</i>	-	-	-	2	-	-	1	-
ROSACEAE								
<i>Achillea</i> sp.	-	-	-	-	-	-	3	-
<i>Aphanes arvensis</i>	-	-	1	-	-	-	4	-
Rosaceae indet.	-	-	1	-	-	-	-	-
RUBIACEAE								
<i>Galium aparine</i>	-	-	2	2	-	-	-	-
<i>Sherardia arvensis</i>	-	-	1	-	-	-	2	-
SCROPHULARIACEAE								
<i>Euphrasia/Odontites</i>	-	-	-	-	-	-	18	-
<i>Veronica arvensis</i>	-	-	-	-	-	1	-	-
SOLANACEAE								
<i>Hyoscyamus niger</i>	-	-	1	-	-	-	2	-
UMBELLIFERAE								
Umbelliferae, undif.	-	-	-	-	1	-	2	-
URTICACEAE								
<i>Urtica urens</i>	-	-	-	-	-	-	1	-
VALERIANACEAE								
<i>Valerianella dentata</i>	-	-	-	-	-	-	4	-
VIOLACEAE								
<i>Viola</i> sp.	-	1	4	-	1	-	3	-
Indeterminate	5	2	25	10	18	14	24	-

TABLE 64: Carbonised plant macrofossils, other than charcoal.

SPECIES	Late Bronze Age/early Iron Age			'Middle' Iron Age			Early Roman	Sub-Roman/early Saxon
	Pit 330	Hollow 340	Bldg 500	Rhs	Other ftrs	Well 880	Ditch 60	Ditch 94/95
ACER								
cf. <i>Acer</i>	-	-	-	-	-	1	-	-
ALNUS			54					
cf. <i>Alnus</i>	1	-	22	-	2	-	5	-
BETULA	4	2	38	7	10	3	5	-
cf. <i>Betula</i>	-	4	15	4	5	-	1	-
CONIFERAE							1	
CORYLUS			8					
cf. <i>Corylus</i>	-	-	2	-	-	-	1	-
FRAXINUS	1	4	51	1	44	1	1	-
cf. <i>Fraxinus</i>	-	2	10	-	4	1	3	-
POMOIDAE	10	13	55	6	21	1	1	1
cf. <i>Pomoidae</i>	-	2	21	19	8	-	7	2
cf. <i>Populus</i>	1	-	-	-	-	-	-	-
PRUNUS			4					
cf. <i>Prunus</i>	-	-	1	-	2	-	1	-
QUERCUS	8	34	122	18	110	7	7	1
cf. <i>Quercus</i>	-	-	14	8	59	3	2	-
cf. <i>Rhamnus</i>	-	-	1	-	-	-	-	-
SALIX			1				1	
cf. <i>Salix</i>	-	-	2	1	1	-	-	-
cf. <i>Sambucus</i>	-	-	-	-	-	1	-	-
TILIA							3	
cf. <i>Tilia</i>	-	-	1	-	-	-	-	-

TABLE 65: Charcoal fragments.

Anthemis cotula, *Centaurea cyani*, and *Agrostemma githago*, species that appear in the late Iron Age or Roman period on some British sites, and which have been linked to the cultivation of bread wheat and rye, two cereals absent from the site, and to the changes in agricultural strategy that took place from the later Iron Age (Jones 1981, 1984).

The high proportion of grass seeds is not unusual in prehistoric carbonised assemblages, and may be associated with shallow cultivation (Jones 1984). However, it is interesting to note the very low numbers of *Bromus* spp., a genus that commonly occurs in high numbers in contemporary assemblages.

Discussion

The Carbonised Plant Evidence in Relation to the Immediate Landscape

The modern soils in the immediate vicinity of the site are of the Badsey 1 series, forming a strip of around two square kilometres of well-drained loamy soils over limestone. This strip runs up on the east to the clayey alluvium of the Bradwell Brook (Fladbury 1 series) and to the slowly permeable loams of the Wickham 2 series. On all other sides it is bounded by the slowly permeable calcareous clays of the Evesham 1 and Hanslope series (Soil Survey of England and Wales 1983).

The occupants of the site thus had within easy reach both the light tractable soils, which formed the backbone of earlier prehistoric culture, and the deeper heavier soils that became important in the historic period.

While the weeds of damper soils suggest the use of low-lying ground, the data lacks any firm indication of the intensive use of the heavy clays and clay loams. So, while the occurrence of weeds associated with drier conditions suggest that, as we would expect, the Badsey soils were cultivated, the data is consistent with an area of cultivation that did not extend far onto the lower, heavier ground.

The Remains in a Wider Context

There are some broad consistencies in the pattern of carbonised remains from this site and the patterns encountered on a range of other sites in Britain. These are as follows:

First, carbonised remains occur with noticeably greater densities and diversities from the Iron Age onwards than they do in earlier periods.

Secondly, in pre-Iron Age assemblages, many of the associated weeds have seeds that could be used as a food complement to the grain, and occur alongside other wild food plants, such as *Sambucus* berries.

Thirdly, the occurrence of certain specific weed species suggests a long-term depletion of the soil nitrogen under a regime of shallow cultivation.

The richest assemblages, those from the first-century AD Ditch 60, are quite consistent with the majority of Iron Age carbonised assemblages, and show none of the 'new' features that have been associated with the appearance of deep cultivation of clay soils and an emphasis on bread wheat. The one agriculture feature that is of particular note is the late Bronze Age occurrence of spelt wheat.

ENVIRONMENTAL EVIDENCE FROM THE VILLA

Elizabeth Pearson and Mark Robinson

Introduction

Investigations of macroscopic plant remains and invertebrates were concentrated on the area to the east of the farm buildings complex, close to the Bradwell Brook. In this area there were both waterlogged deposits and features containing carbonized remains. Samples from the fourth-century ornamental fishpond in front of the main villa building were also examined, but they were not waterlogged, neither did they

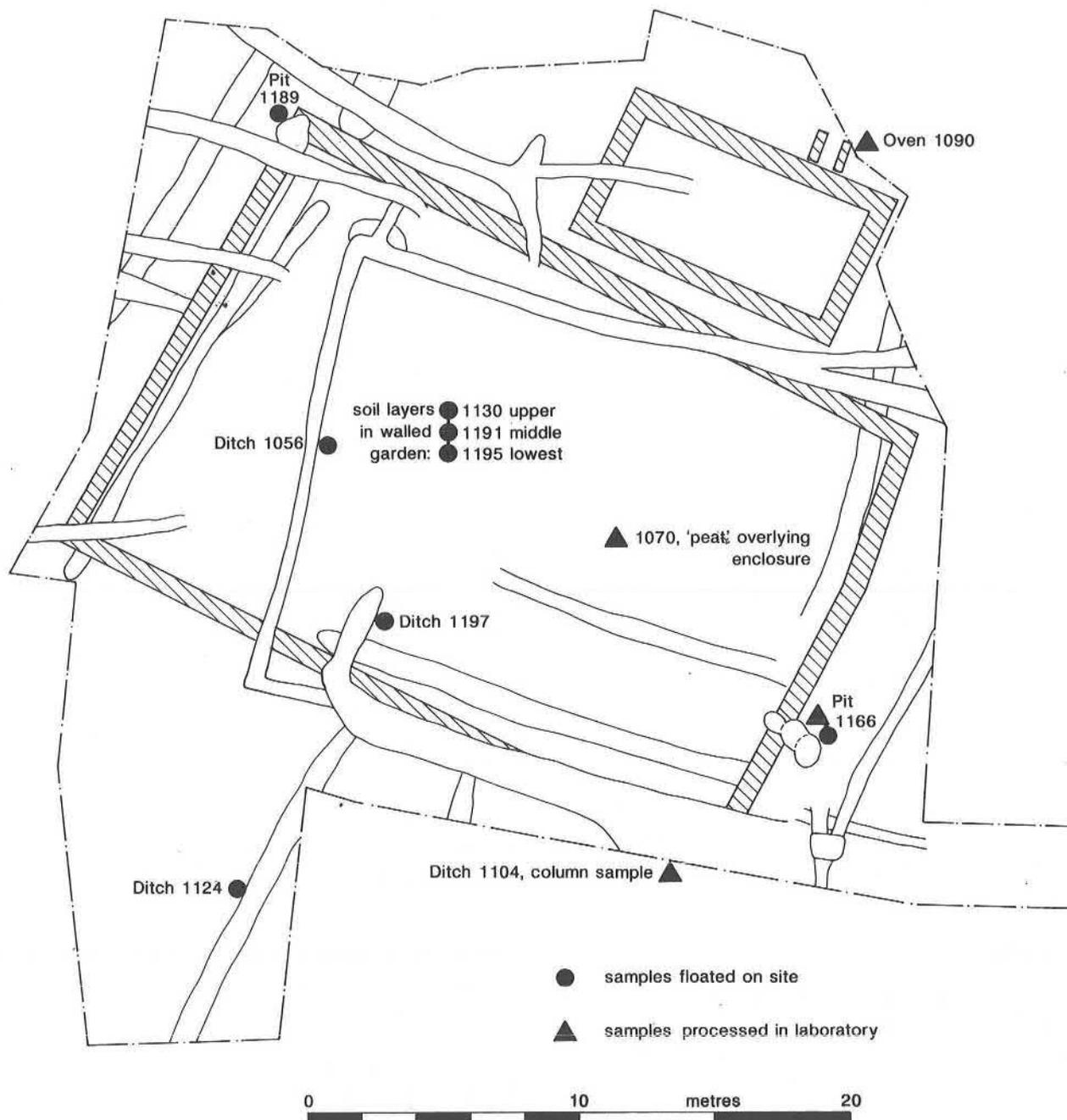


Figure 306: Location of environmental samples at the villa.

contain mollusc shells. Samples for carbonized plant remains were mostly floated on-site, while samples for mollusca and waterlogged plant remains were analysed in the Environmental Archaeology Laboratory at the University Museum, Oxford. This work was funded by HBMC (England).

The Archaeology

The area investigated was centred upon Enclosure 1208, which was in use from the late first until the mid second century (Fig. 306). Some ditches on a similar alignment predated the walled enclosure, and after the enclosure had been demolished, it was replaced by a similar-sized ditched enclosure (1210) on a somewhat different alignment. To the north of the walled enclosure lay Building 10, a structure of similar

date. Its north wall had been built over the remains of a hearth or corn drier (1090). The enclosure sloped eastward towards Bradwell Brook. The eastern wall of the enclosure stood on a clay bank, beyond which was an area deeply covered in alluvial deposits, possibly a first-century artificial pond or lake (1213) covering the valley bottom. Within the enclosure(s) was a deposit of up to 400 mm of soil, which appeared to have accumulated, possibly as alluvial deposits, by the fourth century. At the eastern edge was a pit or waterhole (1166).

During the late fourth century this area of the site became increasingly waterlogged, and subsequently up to 1.0 m of peaty sediments were laid down in the valley bottom. Peat development was under way before the end of the Roman

period. The lowest third of the enclosures and the corn-drier were covered in organic sediments of Roman date.

The Samples

Samples were analysed in the laboratory from the following contexts/sequence (see Fig. 306 for locations).

1) Sequence of samples through Enclosure 795.

400–500 mm	-	grey/buff gritty clay loam.
300–400 mm	-	”
200–300 mm	-	”
100–200 mm	-	”
0–100 mm	-	grey, silty clay (top of sequence).

2) Sequence of samples from Ditch 1104

- F – brown, highly humified organic silt.
- E – grey gritty silt loam.
- D – dark grey, organic gritty silt loam.
- C – dark grey brown, organic gritty silt loam.
- B – grey, slightly organic silty clay.
- A – buff clay with iron panning (top of sequence).

3) Samples from within the later ditched enclosure.

- a) Pit group 1166
 - 1168 (bottom layer) – dark grey brown organic silt.
 - 1167 (top layer) – ”
- b) Context 1070 – brown/black organic silty clay layer overlying part of the enclosure.

4) Deposit of charred plant remains from an elongate hearth/corn drier (1090) beneath Building 10.

5) Waterlogged samples from the valley bottom to the north of the enclosure.

- a) Fill of possible artificial pond or lake (1213).
 - 1215 bottom layer – dark grey, organic silt loam.
 - 1214 top layer – dark grey, organic slightly gritty silt loam.
- b) 1212 Dark brown, very peaty silt, c. 50% organic material filling the valley bottom and overlying 1213.
- c) 1211 Dark grey organic clay loam layer continuous with 1212, overlying the corn-drier.

Samples were floated on site for carbonized plant remains from a range of contexts. The following were analysed in detail:

Context	Description
801	fill, Enclosure 795
854	fill, Ditch 839
1130	middle layer, Enclosure 1208
1176	fill, Ditch 1056
1167	upper fill, Pit 1166
1168	lower fill, Pit 1166
1190	fill, Pit 1189
1191	upper layer, Enclosure 1208
1194	fill, Ditch 1124
1195	middle layer, Enclosure 1208
1198	fill, Ditch 1197

Methods and Results

Processing of Samples

Sub-samples of the deposits analysed in the laboratory were weighed, broken up by hand and placed in a bucket, and the organic fraction was washed onto a 212 µm sieve mesh. The residue was then sieved over a 0.5 mm aperture mesh in order to recover molluscan shells and any other dense biological remains which had not previously been washed over. Paraffin flotation onto a 212 µm mesh was used to extract additional insect remains from a selection of samples. The total weights of the sub-samples processed for each category of evidence are given in the relevant tables of the results.

The flots and residues retained on sieves were sorted fully down to an aperture size of 0.5 mm. However, for some of the samples only a 25% or 10% sub-sample was taken from the fraction between 500 and 212 µm, and sorted for waterlogged plant remains. The results from this last fraction were appropriately multiplied up to allow inclusion in the main tables of results. The sample from the corn-drier was exceptionally rich in small charred cereal chaff remains, so a 1% sub-sample of the flot was sorted to estimate the numbers of lemma and awn fragments.

Flotation of samples on-site was undertaken over a 0.5 mm mesh. The flots were selectively sorted for (1) charred plant remains, (2) remains of any species not found in the samples processed in the laboratory, and (3) remains of particular interest, such as Brassica seeds. The other flots were sorted only for charred plant remains.

Identifications and Results

Identifications were made by direct comparison with modern reference specimens housed at the University Museum, Oxford. The results are given in Tables 66 to 70. Samples have only been included in tables if the appropriate remains were present. The waterlogged macroscopic plant remains included various vegetative parts, such as leaf fragments and bud-scales, as well as seeds, but effort was concentrated on seeds. Wood and twigs were not identified, but few were noted in the samples. Sample 1212 partly comprised moss, which Dr. R. Scaife kindly identified as *Mnium punctatum*. Fragments of charcoal were present in some of the flots, but were not identified.

Nomenclature for the plant remains listed in Tables 66 and 67 follows Clapham *et al.* (1962). Nomenclature for the Coleoptera in Table 69 follows Kloet and Hincks (1977), while the nomenclature for mollusca in Table 71 follows Kerney (1976) and Walden (1976).

Seeds from more than one species or variety of the tribe Brassicaceae of the Cruciferae had been preserved by waterlogging in the samples from Pit 1166 (Contexts 1167 and 1168). Usually, archaeological specimens of this tribe are present in fragmented form and in small numbers, so it can be difficult to identify them even to genus. Identifications within the genus Brassica are particularly difficult, because the various cultivated species show considerable intraspecific

SPECIES	ENGLISH NAME	COLUMN SAMPLE (SEC. III)						PIT GP.1166		CONT. 1070 1.0kg	Ditch 2 fill		MK343/2 Layers		Habitat groups
		F 500g	E 500g	D 500g	C 500g	B 500g	A 500	1168 250g	1167 1.0kg		Lower 1.0kg	Upper 1.0kg	2 1kg	1 250g	
RANUNCULACEAE															
<i>Ranunculus acris/repens/bulbosus</i>	buttercup	-	1	33	19	11	1	5	16	15	12	17	3	19	G,W,D
<i>Ranunculus sceleratus</i>	celery-leaved crowfoot	-	-	143	36	7	1	13	182	5	9	9	19	384	A(b)
<i>Ranunculus S. Batrachium</i> sp.		-	-	3	-	1	-	-	-	-	1	-	2	-	A
<i>Thalictrum flavum</i>	common meadow rue	-	-	1	1	-	-	-	-	-	-	-	-	-	Gm,F
PAPAVERACEAE															
<i>Papaver argemone</i>	long prickly-headed poppy	-	-	-	-	-	-	-	5	-	1	-	-	-	Da
<i>Chelidonium majus</i>	greater celandine	-	-	-	-	-	-	-	2	-	-	-	-	-	W,Sh
<i>Fumaria</i> sp.	fumitory	-	1	-	-	1	-	-	2	-	3	-	-	-	Da,Sh
CRUCIFERAE															
<i>Brassica rapa</i> spp. <i>campestris</i>	turnip	-	-	-	-	-	-	*	*3	-	-	-	-	-	Da,Ab
<i>Brassica nigra</i>	black mustard	-	-	-	-	-	-	*9	*12	-	-	1	-	-	Da,Ab
<i>Brassica</i> cf. <i>nigra</i>		-	-	-	-	-	-	-	-	-	1	-	-	-	
<i>Brassica</i> sp.	cultivated brassica	-	-	-	-	-	-	*2	*6	-	-	-	-	-	cult.
<i>Brassica</i> sp. indet.		-	-	-	-	-	-	*	1	-	1	-	-	-	
Brassicaceae sp. indet.		-	-	-	-	-	-	-	1	-	-	-	-	-	
<i>Thlaspe arvense</i>	field penny-cress	-	-	1	-	-	-	-	-	-	-	-	-	-	Da
<i>Capsella bursa-pastoris</i>	shepherd's purse	-	-	-	-	-	-	3	13	-	9	1	-	1	Da
<i>Rorippa nasturtium-aquaticum</i>	watercress	-	-	-	-	-	-	*	*	-	49	11	7	1	A
<i>Rorippa</i> cf. <i>islandica</i>	marsh yellowcress	-	-	1	-	-	-	-	-	-	16	2	-	2	M
<i>Cruciferae</i> sp. indet.		-	-	-	-	-	-	-	-	-	-	5	-	-	
RESEDACEAE															
<i>Reseda luteola</i>	dyer's rocket	-	-	-	-	-	-	-	-	-	-	-	1	-	Da
VIOLACEA															
<i>Viola</i> S. <i>Viola</i> sp.		-	-	1	-	-	-	-	-	-	-	-	-	-	
<i>Viola</i> S. <i>Melanium</i> sp.		-	1	-	-	-	-	-	-	-	-	-	-	-	
HYPERICACEAE															
<i>Hypericum</i> sp.		-	-	10	-	-	-	-	-	-	-	-	-	-	
CARYOPHYLLACEAE															
<i>Lychnis flos-cuculi</i>	ragged robin	-	-	-	-	-	2	2	-	-	-	-	4	-	Gm,F,M
<i>Cherastium</i> sp.		-	-	-	-	-	-	-	-	-	1	1	-	-	
<i>Myosoton aquaticum</i>	water chickweed	-	-	-	-	-	-	1	9	-	-	-	1	-	M,Ab
<i>Stellaria media</i>	chickweed	-	-	24	-	-	-	23	172	-	200	169	-	11	Da
<i>Stellaria</i> cf. <i>palustris</i>	marsh stitchwort	-	-	-	-	-	-	-	2	-	-	-	-	-	M,F
<i>Stellaria graminea</i>	lesser stitchwort	-	1	5	-	-	-	-	2	-	4	-	-	2	W,G
<i>Stellaria</i> sp.	chickweed/stitchwort	-	-	-	-	-	-	9	-	-	-	-	1	-	
cf. <i>Stellaria</i> sp.		-	-	-	-	-	-	-	27	-	-	-	-	-	
<i>Spergula arvensis</i>	corn spurrey	-	-	3	-	-	-	-	2	-	-	-	-	-	Da
<i>Caryophyllaceae</i> sp. indet.		-	-	-	-	-	-	1	-	-	-	-	1	-	

SPECIES	ENGLISH NAME	COLUMN SAMPLE (SEC. III)						PIT GP.1166			CONT. Ditch 2 fill		MK343/2 Layers		Habitat groups
		F 500g	E 500g	D 500g	C 500g	B 500g	A 500	1168 250g	1167 1.0kg	1070 1.0kg	Lower 1.0kg	Upper 1.0kg	2 1kg	1 250g	
<i>Polygonum convulvulus</i>	black bindweed	-	-	-	-	-	-	-	1	-	-	-	-	-	Da
<i>Polygonum</i> sp.		-	-	-	-	-	-	-	2	-	-	-	-	-	
<i>Rumex acetosella</i> agg.	sheep's sorrel	-	-	-	-	-	-	-	-	-	1	1	3	G, Da	
<i>Rumex obtusifolius</i>	broad-leaved dock	-	-	2	-	-	-	9	50	-	19	20	2	1	Da, Sh
<i>Rumex conglomeratus</i>	sharp dock	-	-	-	-	-	-	-	-	-	4	1	7	-	damp G, W
<i>Rumex</i> sp.		-	-	54	-	-	-	58	112	-	336	189	15	13	
URTICACEAE															
<i>Urtica urens</i>	small nettle	-	-	76	1	-	1	16	100	-	12	13	-	16	Da
<i>Urtica dioica</i>	stinging nettle	1	36	310	90	2	-	191	975	1	133	396	6	221	D, W, S
FAGACEAE															
<i>Corylus avellana</i> shell frag.	hazel	-	-	-	-	-	-	*	-	-	-	-	-	-	W, S
SALICAEAE															
<i>Salix</i> sp. bud		-	1	1	-	-	-	-	-	-	-	-	-	-	
PRIMULACEAE															
<i>Lysimachia vulgaris</i>	yellow loosestrife	-	-	-	-	-	-	-	-	-	-	-	2	-	Ab, F
<i>Anagallis</i> sp.		-	-	1	-	-	-	-	-	-	-	-	-	-	M, G, Da
SOLANACEAE															
<i>Hyoscyamus niger</i>	henbane	-	2	12	1	-	-	1	7	-	-	-	-	5	Da
LABIATAE															
<i>Mentha</i> sp.	mint	-	-	2	-	-	-	-	-	-	7	5	-	2	
<i>Lycopus europaeus</i>	gypsy-wort	-	-	4	-	-	-	-	-	-	-	1	-	-	Ab, M, F
<i>Prunella vulgaris</i>	self-heal	-	-	2	-	-	-	-	*	-	-	-	2	2	G, Da, W
<i>Satureja hortensis</i>	summer savory	-	-	1	-	-	-	-	1	-	1	-	-	-	cult.
cf. <i>Satureja hortensis</i>		-	-	1	-	-	-	-	-	-	-	-	-	-	cult.
<i>Stachys sylvatica</i>	hedge woundwort	-	-	2	-	-	-	2	5	-	-	-	-	-	W, Sh
<i>Lamium</i> sp.		-	-	1	-	-	-	-	1	-	-	-	-	-	Da, Sh
<i>Galeopsis</i> sp.		-	-	1	-	-	-	-	-	-	-	-	-	-	
<i>Glechoma hederacheae</i>	ground ivy	-	-	2	-	-	-	-	-	1	-	-	-	-	W, G, Da
PLANTAGINACEAE															
<i>Plantago major</i>	great plantain	-	-	6	-	-	-	-	2	-	10	2	-	3	Da, short G
RUBIACEAE															
cf. <i>Galium</i> sp.		-	-	-	-	-	-	-	*	-	-	-	-	-	
CAPRIFOLIACEAE															
<i>Sambucus nigra</i>	elder	-	-	41	3	-	1	42	121	4	2	5	1	20	Da

VALERIANACEAE																
	<i>Valerianella cf. carinata</i>	-	-	2	-	1	-	-	-	-	2	4	-	-	Da	
COMPOSITAE																
	<i>Bidens cernua</i>		nodding bur-marigold	-	-	-	-	-	1	-	-	-	20	-	A(b)	
	<i>Senecio</i> sp.			-	-	-	-	-	-	-	1	-	-	-		
	<i>Anthemis cotula</i>		stinking mayweed	-	-	-	-	-	3	-	-	-	-	2	Da	
	<i>Carduus</i> sp.			-	-	2	-	-	-	-	3	9	-	-		
	<i>Cirsium</i> sp.	1		-	-	-	-	1	7	-	14	9	-	-		
	<i>Carduus/Cirsium</i> sp.	-		-	-	-	-	-	-	-	-	-	-	-		
	<i>Onopordum acanthium</i>		cotton thistle	-	-	-	-	-	-	-	1	-	-	-	Da	
	<i>Lapsana communis</i>		nipplewort	-	-	-	-	-	-	-	1	-	-	-	D,W,Sh	
	<i>Leontodon</i> sp.			-	-	1	-	-	1	-	-	-	-	-	G	
	<i>Sonchus oleraceus</i>		milk thistle	-	-	-	-	-	4	-	10	8	-	-	Da	
	<i>Sonchus asper</i>		sow thistle	-	-	-	-	-	2	4	30	47	-	-	Da	
	<i>Sonchus</i> sp.			-	-	-	-	-	-	-	4	-	-	-		
	Compositae sp. indet.			-	-	-	-	-	-	-	1	-	-	-		
ALISMATACEAE																
	<i>Alismo plantaga-aquatica</i>		water plantain	-	-	-	-	-	-	-	-	-	-	-	A	
	<i>Sagittaria sagittifolia</i>		arrow-head	-	-	-	-	-	-	-	-	-	1	-	A	
JUNCACEAE																
	<i>Juncus bufonius</i> sp.	2	rush	-	-	10	50	110	-	-	410	225	-	-	Da,Ab	
	<i>Juncus effusus</i> gp.	97	tussock rush	930	270	1510	91	125	10	10	192	502	139	50	damp G,M	
	<i>Juncus articulatus</i> gp.	47	rush	1	110	320	61	6	10	50	56	9	23	10	G	
	<i>Juncus</i> sp. indet.	14		-	-	60	20	-	20	40	1247	212	11	202		
LEMNACEAE																
	<i>Lemna</i> sp.		duckweed	-	-	-	-	-	-	-	-	-	-	2	A	
CYPERACEAE																
	<i>Eleocharis</i> sp.	-		-	-	-	-	-	-	1	-	-	4	-	A(b),M	
	<i>Carex</i> spp.	2		1	22	79	17	-	2	8	42	5	2	2	3	
GRAMINAE																
	Graminae sp. indet.	-		-	-	20	-	16	1	13	98	-	134	13	6	12
CEREALIA																
	<i>Triticum spelta</i> glume base		spelt wheat	-	-	-	-	-	-	*	-	1	-	-	-	cult.
TOTAL SEEDS		169		1405	1306	2173	343	144	628	4171	130	3249	2127	369	1037	
* = also present in selectively sorted flots from Pit 1166.																
Key to habitat groups (also used in Table 67):																
	a	arable		b	bankside		F	fallow ground		h	hedgerow					
	M	marsh		W	woodland		A	aquatic		D	disturbed group					
	G	grassland		m	meadowland		S	scrub								

TABLE 66: Bancroft villa, waterlogged plant remains.

Species name	English name	Feature 795				Section III		Pit 1166		1130	1176	1190	1191	1194	1195	1198	cont 3 850g	343/2			cont 1 250g	Habitat group				
		0-10 cm 1.5kg	10-20 cm 1kg	30-40 cm 1kg	40-50 cm 1kg	D 500g	C 500g	1168 250g	1167 1kg									upper 1kg	Ditch 2 lower 1kg	cont 2 1kg						
RANUNCULACEAE <i>Ranunculus acris/repens/ bulbosus</i>	buttercup	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	G,W,D					
PAPAVERACEAE <i>Papaver</i> sp. (not <i>argemone</i>)	poppy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	Da					
CARYOPHYLLACEAE cf. <i>Agrostemma githago</i>	corncockle	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	Da					
CHENOPODIACEAE <i>Atriplex</i> sp.	orache	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-						
POLYGONACEAE <i>Rumex acetosella</i> agg. <i>Rumex</i> sp.		2	8	-	-	-	-	3	-	-	-	-	2	2	6	2	2	4	2	1	-	-	-	-	-	-
FAGACEAE <i>Corylus avellana</i> shell fragment	hazel	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	W	
URTICACEAE <i>Urtica dioica</i>	stinging nettle	-	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D,W,S	
SCROPHULARIACEAE <i>Veronica hederifolia</i>	ivy speedwell	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Da	
VALERIANACEAE <i>Valerianella</i> cf. <i>carinata</i>	corn salad	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Da	
COMPOSITAE <i>Anthemis cotula</i> <i>Tripleurospermum maritimum</i> ssp. <i>inodorum</i> cf. <i>Cirsium</i> sp. <i>Carduus/Cirsium</i> sp.	stinking mayweed scentless mayweed	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2	-	1	-	-	-	2	-	-	Da	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	-	-	-	-	-	-	-	-	Da	
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-		
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-		
GRAMINEAE <i>Bromus mollis/secalinus</i> agg. cf. <i>Bromus mollis/secalinus</i> agg. <i>Avena</i> sp. cf. <i>Avena</i> sp. Gramineae sp. indet.	lop-grass/rye-brome1 oat grasses	3	-	-	-	-	-	3	-	*	*2	1	3	-	-	-	-	1	5	8	2	-	3	-	Da,G Da,G Da, cult?	
		-	-	-	-	-	-	-	-	*	-	-	1	-	-	-	-	2	-	-	-	-	-	-		
		-	-	-	-	-	-	-	-	*	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
		1	8	-	-	-	1	14	1	-	*5	20	34	22	5	-	6	18	84	9	4	-	5	-		
CEREBALIA <i>Triticum dicoccum</i> grain <i>Triticum spelta</i> rachis	emmer wheat spelt wheat	-	1	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	cult. cult.	
		-	-	-	-	-	-	8	-	*	*1	-	1	-	-	-	-	-	-	5	-	2	2	-		

glume bases	6	3	-	-	-	-	18	-	-	*4	11	41	32	1	7	7	7	3270	23	25	6	8	
spikelet forks	-	-	-	-	-	-	2	-	*1	*	-	1	-	-	-	-	-	89	1	2	1	-	
grain	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	3	-	-	-	1	
grain + glumes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	
<i>Triticum cf. spelta</i>																							
rachis	1	-	1	-	-	-	-	3	-	-	10	12	20	-	4	-	2	642	-	-	-	3	cult.
grain	-	-	-	1	-	-	-	-	-	*	-	1	-	-	-	-	-	-	-	3	-	-	
<i>Triticum dicoccum/spelta</i>	emmer/spelt wheat																						
glume bases	21	8	2	-	-	-	11	2	*	*	39	99	87	6	10	12	30	1249	24	4	-	-	
spikelet fork	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	246	1	-	-	2	
grain	-	-	-	-	-	-	-	-	-	*	2	1	2	4	-	1	-	2	-	-	-	-	
<i>Triticum sp. hexaploid</i>	hexaploid wheat																						
rachis	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	cult.
<i>Triticum sp. hexaploid free-thresh</i>																							
rachis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	-	-	-	cult.
<i>Triticum sp. hex. cf. free-thresh</i>																							
rachis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-	-	cult.
<i>Triticum sp.</i>																							
rachis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	29	-	-	-	-	cult.
spikelet fork	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	-	-	
grain	-	25	-	-	4	-	11	2	-	*1	5	7	4	5	3	*9	5	41	4	1	-	4	cult.
cf. <i>Triticum sp.</i>																							
awn fragments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	340	1	-	-	-	cult.
<i>Hordeum sativum</i>	barley																						
awn fragments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	-	-	-	-	cult.
rachis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43	-	-	1	1	
grain (hulled, straight)	-	-	-	-	-	1	-	*	-	-	1	-	1	4	2	1	1	-	-	-	-	-	
<i>Hordeum/Triticum sp.</i>	barley/wheat grain																						cult.
<i>Hordeum/Secale sp.</i>	barley/rye																						cult.
rachis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	
Cereal indet.	cereals																						cult.
lemma fragments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	300	-	-	-	-	
grain	8	29	-	-	-	-	5	-	*	1	11	25	10	21	26	11	11	56	-	2	-	1	
sprouted embryo	-	1	-	-	-	-	-	-	*	-	1	2	2	-	1	-	-	247	-	1	-	1	
Total chaff (no. glume bases)	27	11	2	0	0	0	35	2	1	4	50	142	119	7	17	19	37	4519	51	33	7	15	
Total grain	8	55	0	1	4	0	17	2	0	1	18	35	16	31	34	25	17	103	1	3	0	7	
Total weed seeds	4	28	0	0	0	1	21	1	0	8	21	47	31	5	7	14	25	145	18	6	3	10	

*= also present in selectively sorted flots from Pit 1166.

For key to habitat groups, see Table 66.

TABLE 67: Bancroft villa, charred plant remains.

Species name	English name	Habitat groups	1168 bottom layer	1167 top layer
WATERLOGGED PLANT REMAINS				
CRUCIFERAE				
<i>Brassica rapa</i> ssp. <i>campestris</i>	turnip	Da,Ab	1	12
<i>Brassica nigra</i>	black mustard	Da,Ab	4	11
<i>Brassica</i> sp.	cultivated brassica	cult.	8	40
Brassicaceae sp. indet.			7	14
<i>Rorippa nasturtium-aquaticum</i>	watercress	A	-	1
UMBELLIFERAE				
<i>Coriandrum sativum</i>	coriander	cult.,Da	-	1
EUPHORBIACEAE				
<i>Euphorbia lathyris</i>	caper spurge	cult.,Da	3	1
FAGACEAE				
<i>Corylus avellana</i> shell frags	hazel	W,S	1	-
RUBIACEAE				
cf. <i>Galium</i> sp.			-	1
CEREBALIA				
<i>Triticum spelta</i> glume base	spelt wheat	cult.	-	1
CHARRED PLANT REMAINS				
GRAMINEAE				
<i>Bromus mollis/secalinus</i> agg.	lop-grass/rye-brome	Da,Gm	7	7
cf. <i>Bromus mollis/secalinus</i> agg.			6	-
cf. <i>Avena</i> sp.	oat	cult.,Da	1	-
large Gramineae spp. indet.	grasses		-	4
Gramineae spp. indet. (total)			-	17
CEREBALIA				
<i>Triticum spelta</i>	spelt wheat	cult.		
rachis			6	12
glume bases			12	22
spikelet fork			1	1
<i>Triticum</i> cf. <i>spelta</i>				
grain			-	1
<i>Triticum dicoccum/spelta</i>	emmer/spelt wheat	cult.		
glume bases			10	10
grain			-	1
<i>Triticum</i> sp.	wheat	cult.		
grain			-	5
<i>Hordeum</i> sp.	barley	cult.		
grain			1	-

TABLE 68: Bancroft villa, plant remains from selectively sorted flots from Pit 1166.

variation of their seed morphology. However, in these samples the seeds were mostly intact, had retained their colour and were present in sufficient numbers to enable their identification to be attempted. Three species/categories could be identified:

1. *Brassica nigra* (black mustard)
2. *Brassica rapa* ssp. *campestris* (wild turnip)
3. *Brassica* sp. – not above (cultivated brassica)

The criteria used for these determinations are given below.

The size, more or less spherical shape, and general appearance of the seeds enabled all the British genera of the Brassicaceae, with the exception of *Brassica* and *Sinapis*, to be excluded from consideration. *Sinapis alba* could be eliminated because its seeds are much larger and paler

than any of the archaeological specimens. Apart from the rare casual aliens, *Brassica oleraceus* (cabbage), *B. napus* (rape), *B. rapa* (turnip), *B. nigra* (black mustard) and *Sinapis arvensis* (charlock) are the remaining British members of these genera.

The archaeological specimens of *B. nigra* could be distinguished from the other specimens by their rougher texture, owing to a reticulum of irregular high ridges forming a network of more or less regular polygonal cells. It may be necessary to soak reference specimens in water to bring out this character fully. The ridges have a distinctive translucent appearance. The seeds are smaller than those of most other *Brassica* cultivars, and have a reddish-brown colour.

Species name	Minimum number of individuals					
	Pit 1166		343/2 Ditch 2		343/2	343/2
	1168	1167	bottom 1.0	top 3.0	2 3.0	1 3.0
Sample weight (kg)						
HISTERIDAE						
<i>Onthophilus striatus</i> (Forst.)	-	1	-	-	-	-
<i>Atholus duodecimstriatus</i> (Schr.)	-	-	1	-	-	-
HYDRAENIDAE						
<i>Ochthebius bicolon</i> Germ.	-	-	-	-	-	1
<i>O. minimus</i> (F.)	1	-	-	-	-	-
<i>Ochthebius</i> spp.	1	4	1	4	4	1
<i>Hydraena</i> sp. (not <i>palustris</i>)	-	-	-	-	1	-
<i>Limnebius papposus</i> Muls.	2	1	1	1	-	1
PTILIIDAE						
<i>Ptenidium</i> sp.	-	1	-	2	1	-
Ptiliidae gen. et sp. indet. (not <i>Ptenidium</i>)	-	1	-	1	1	2
STAPHYLINIDAE						
<i>Lesteva longoelytrata</i> (Gz.)	2	4	2	4	5	1
<i>Omalius</i> sp.	-	-	-	1	1	-
<i>Platystethus arenarius</i> (Fouc.)	-	1	-	-	-	2
<i>P. cornutus</i> gp.	2	4	1	1	1	1
<i>P. nitens</i> (Sahl.)	2	-	1	1	1	5
<i>Anotylus nitidulus</i> (Grav.)	-	-	-	2	1	1
<i>A. rugosus</i> (F.)	1	3	2	5	1	1
<i>Stenus bimaculatus</i> Gly.	2	-	-	-	-	-
<i>Stenus</i> spp.	2	4	1	2	3	2
<i>Lathrobium</i> sp.	-	1	1	-	-	-
<i>Rugilus orbiculatus</i> (Pk.)	-	1	-	-	-	-
<i>Gyrohypnus angustatus</i> Step.	-	-	1	2	-	-
<i>G. fracticornis</i> gp.	-	1	-	-	-	1
<i>Xantholinus linearis</i> (Ol.)	1	-	1	1	-	1
<i>X. longiventris</i> Heer	1	-	-	-	1	-
<i>Philonthus intermedius</i> (B. & L.) or <i>laminatus</i> (Cretz.)	1	1	-	-	1	-
<i>Philonthus</i> spp.	3	7	1	-	-	-
<i>Gabrius</i> sp.	-	1	-	-	1	-
<i>Tachyporus</i> sp.	1	1	-	-	1	-
<i>Tachinus</i> spp.	4	8	2	-	2	-
Aleocharinae gen. et sp. indet.	2	3	1	3	4	3
GEOTRUPIDAE						
<i>Geotrupes</i> sp.	1	-	1	1	-	-
SCARABAEIDAE						
<i>Aphodius</i> cf. <i>ater</i> (Deg.)	1	2	-	-	-	-
<i>A.</i> cf. <i>contaminatus</i> (Hbst.)	1	-	1	1	-	-
<i>A. fimetarius</i> (L.)	2	1	-	1	-	-
<i>A.</i> cf. <i>fimetarius</i> (L.)	-	1	-	-	-	-
<i>A. granarius</i> (L.)	2	2	-	-	-	-
<i>A. rufipes</i> (L.)	2	2	1	-	-	-
<i>A.</i> cf. <i>rufus</i> (Moll)	-	-	-	1	-	-
<i>A.</i> cf. <i>sphacelatus</i> (Pz.)	2	1	1	2	2	1
<i>Aphodius</i> sp.	-	1	1	-	1	1
<i>Oxyomus sylvestris</i> (Scop.)	1	2	-	1	-	-
<i>Onthophagus similis</i> (Scriba)	-	1	-	-	-	-
SCIRTIDAE						
cf. <i>Cyphon</i> sp.	-	1	-	-	-	1
HETERO CERIDAE						
<i>Heteroceris</i> sp.	-	-	-	-	1	-
DRYOPIDAE						
<i>Dryops</i> sp.	-	-	-	-	1	-
ELATERIDAE						
<i>Athous haemorrhoidalis</i> (F.)	1	1	-	-	-	-
<i>Agriotes obscurus</i> (L.)	-	-	-	-	1	-
<i>Agriotes</i> sp.	-	1	-	-	-	-
CANTHARIDAE						
<i>Cantharis</i> sp.	1	2	-	1	-	-
<i>Rhagonycha</i> sp.	-	-	-	1	-	-
ANOBIIDAE						
<i>Stegobium paniceum</i> (L.)	-	1	-	-	-	-
<i>Anobium punctatum</i> (Deg.)	-	2	-	-	-	1
PTINIDAE						
<i>Ptinus fur</i> (L.) (Table continues next page)	-	-	-	-	1	1

Species name	Minimum number of individuals					
	Pit 1166		343/2 Ditch 2		343/2	343/2
	1168	1167	bottom 1.0	top 3.0	2 3.0	1 3.0
Sample weight (kg)						
MELYRIDAE						
<i>Malachius</i> sp.	1	-	-	-	-	-
NITIDULIDAE						
<i>Kateretes rufilabris</i> (Lat.)	1	-	-	-	-	-
<i>Brachypterus urticae</i>	-	1	-	1	1	-
<i>Meligethes</i> sp.	1	2	-	1	-	-
CUCUJIDAE						
<i>Cryptolestes ferrugineus</i> (Step.)	-	-	-	-	-	1
SILVANIDAE						
<i>Oryzaephilus surinamensis</i> (L.)	-	-	-	1	-	-
CRYPTOPHAGIDAE						
<i>Atomaria</i> sp.	3	3	1	5	2	1
Cryptophagidae gen. et sp. indet. (not <i>Atomaria</i>)	1	4	-	1	-	-
PHALACRIDAE						
<i>Stilbus</i> sp.	-	1	-	-	-	1
CORYLOPHIDAE						
<i>Orthoperus</i> sp.	3	5	-	3	-	-
COCCINELLIDAE						
<i>Coccidula rufa</i> (Hbst.)	-	1	-	-	-	-
<i>Propylea quattuordecimpunctata</i> (L.)	1	-	-	-	-	-
LATHRIDIIDAE						
<i>Lathridius minutus</i> gp.	2	3	-	-	1	4
<i>Enicmus transversus</i> (Ol.)	-	-	-	-	-	2
Corticariinae gen. et sp. indet.	2	2	-	1	-	4
MYCETOPHAGIDAE						
<i>Typhaea stercorea</i> (L.)	-	-	-	-	1	-
CHRYSOMELIDAE						
<i>Plateumaris sericea</i> (L.)	-	-	-	-	2	-
<i>Chrysolina polita</i> (L.)	1	-	-	-	1	-
<i>Gastrophysa polygoni</i> (L.)	-	1	-	-	-	-
<i>G. viridula</i> (Deg.)	1	2	1	-	1	-
<i>Hydrothassa marginella</i> (L.)	1	1	-	-	-	-
<i>Hydrothassa</i> sp.	-	-	-	-	-	1
<i>Prasocuris phellandrii</i> (L.)	1	2	1	1	1	-
<i>Phyllotreta atra</i> (F.)	-	-	-	2	-	-
<i>P. nemorum</i> (L.) or <i>undulata</i> Kuts.	-	1	-	-	-	-
<i>P. vittula</i> Redt.	-	-	-	-	1	-
<i>Longitarsus</i> spp.	-	3	2	1	1	-
<i>Chaetocnema cocinna</i> (Marsh.)	-	1	2	1	2	-
<i>Chaetocnema</i> sp. (not <i>cocinna</i>)	-	-	-	-	-	1
<i>Psylliodes</i> sp.	2	-	-	2	1	2
APIONIDAE						
<i>Apion aeneum</i> (F.)	-	-	-	-	1	-
<i>A. urticarium</i> (Hbst.)	-	-	-	1	-	1
<i>Apion</i> spp. (not above)	1	1	1	1	3	-
CURCULIONIDAE						
<i>Phyllobius</i> sp.	1	-	-	-	-	-
<i>Barynotus</i> sp.	-	-	-	-	1	-
<i>Sitona</i> sp.	-	-	-	-	1	-
<i>Tansphyrus lemnae</i> (Pk.)	1	-	-	-	-	-
<i>Bagous</i> sp.	-	-	-	-	2	1
<i>Notaris acridulus</i> (L.)	-	2	1	2	-	1
<i>Thryogenes nereis</i> (Pk.)	-	-	-	-	1	-
<i>Cidnorhinus quadrimaculatus</i> (L.)	1	-	-	1	-	2
<i>Ceuthorhynchidius horridus</i> (Pz.)	-	1	-	-	-	-
<i>Ceuthorhynchus atomus</i> Boh.	-	-	-	-	1	-
<i>C. erysimi</i> (F.)	-	1	-	-	-	-
<i>C. pollinarius</i> (Forst.)	-	1	-	-	-	-
<i>Ceuthorhynchinae</i> gen. et sp. indet.	1	2	-	2	-	-
<i>Gymnetron labile</i> (Hbst.)	1	-	-	-	-	-
<i>G. pascuorum</i> (Gyl.)	-	1	-	-	-	-
TOTALS	114	191	51	110	143	74

TABLE 69: Bancroft villa; Coleoptera.

Species name	Minimum number of individuals					
	Pit 1166		343/2 ditch 2		343/2	343/2
	1168	1167	bottom	top	2	1
DERMAPTERA						
<i>Forficula auricularia</i> L.	2	2	–	1	–	–
HEMIPTERA HETEROPTERA						
<i>Sehirus luctuosus</i> Muls.	–	1	–	–	–	–
<i>Heterogaster urticae</i> (F.)	–	2	–	–	–	–
<i>Scolopostethus</i> sp.	–	1	–	–	–	–
<i>Saldula</i> S. <i>Saldula</i> sp.	–	1	–	–	1	–
Heteroptera gen. et sp. indet.	–	–	1	–	1	–
HEMIPTERA HOMOPTERA						
<i>Megophthalmus</i> sp.	–	–	–	–	1	–
<i>Aphrodes albifrons</i> (L.)	–	1	–	–	–	–
<i>A</i> cf. <i>fuscofasciatus</i> (Gz.)	–	1	–	–	–	–
Aphidoidea gen. et sp. indet.	–	2	1	1	–	–
Homoptera gen. et sp. indet.	–	1	1	–	6	–
TRICHOPTERA						
Trichoptera gen. et sp. indet.	–	–	–	–	2	–
Trichoptera gen. et sp. indet.	–	1	–	–	–	–
HYMENOPTERA						
<i>Lasius fuliginosus</i> (lat.)	–	2	–	–	–	1
Hymenoptera gen. et sp. indet.	3	23	1	4	6	–
DIPTERA						
Chironomid larval head capsule	+	+	+	+	+	+
Bibionidae gen. et sp. indet.	2	2	–	–	1	1
Diptera gen. et sp.	4	9	2	2	1	–
Diptera gen. et sp. indet.	6	4	–	2	–	–

TABLE 70: Bancroft villa; other insects.

Species name	Minimum number of individuals									
	Column, feature 795						Pit 1166		343/2 Ditch 2	
	F	E	A	40–50 cms	30–40 cms	20–30 cms	1168	1167	bottom	top
Sample weight (kg)	0.5	0.5	0.5	1.0	1.0	1.0	0.25	1.0	1.0	1.0
GASTROPODA										
<i>Carychium</i> sp.	–	1	17	1	–	–	–	1	3	3
<i>Lymnaea truncatula</i> (Müll.)	–	–	3	–	–	–	3	1	–	–
<i>L. peregra</i> (Müll.)	–	–	–	–	–	1	1	5	–	–
<i>Anisus leucostoma</i> (Milt.)	–	–	–	–	–	2	3	1	–	–
<i>Bathymphalus contortus</i> (L.)	–	–	2	–	–	–	–	–	–	1
<i>Succinea</i> or <i>Oxyloma</i> sp.	–	–	2	–	–	–	2	1	–	2
<i>Cochlicopa</i> sp.	–	1	1	–	–	–	4	1	1	–
<i>Vertigo antivertigo</i> (Drap.)	–	–	–	–	–	–	1	–	1	1
<i>V. pygmaea</i> (Drap.)	1	–	–	–	–	–	2	–	–	–
<i>Vallonia costata</i> (Müll.)	–	–	–	–	–	–	1	1	–	–
<i>V. pulchella</i> (Müll.)	–	–	2	1	1	–	2	2	1	–
<i>V. excentrica</i> Sterki	–	1	–	–	–	–	–	–	–	–
<i>Vallonia</i> sp.	–	–	3	4	2	1	2	4	1	2
<i>Punctum pygmaeum</i> (Drap.)	–	–	–	–	–	–	–	2	–	1
<i>Discus rotundatus</i> (Müll.)	–	–	–	–	–	–	–	1	–	–
<i>Nesovitrea hammonsii</i> (Ström)	–	–	–	–	1	–	–	–	–	–
<i>Trichia hispida</i> gp.	–	–	5	10	7	8	1	3	3	2
<i>Arianta arbustorum</i> (L.)	–	–	–	–	–	–	–	1	–	–
<i>Cepaea</i> sp.	–	–	–	1	1	–	–	1	–	–
BIVALVA										
<i>Pisidium</i> sp.	–	–	1	–	–	–	2	–	–	1
TOTAL	1	3	36	17	12	12	24	25	10	13

TABLE 71: Bancroft villa, mollusca.

Habitat	Pit 1166 MK105 1168 & MK105 1167	MK343/2 Ditch 2	Valley peat MK343/2/21+ MK343/2/1	Total
1. Aquatic	35.5	46	85	51.1
2. Pasture/Dung	10.0	10	4	8.4
3. ?Meadowland	1.0	2	3	1.8
4. Wood and Trees	0	0	0	0
5. Marsh and Aquatic Plants	2.5	5	7	4.2
6a. General disturbed ground/Arable	2.0	0	0	0.9
6b. Sandy/dry disturbed ground/Arable	1.5	0	0	0.7
7. Dung/Foul organic material	6.0	12	9	8.2
8. Lathridiidae	4.0	1	9	4.6
9. Synanthropic	0.5	1	3	1.3
10. Esp. Structural Timbers	1.0	0	1	0.7
11. On roots in grassland	1.5	0	1	0.9
Total number of terrestrial Coleoptera	225	110	117	452

TABLE 72: Bancroft villa; coleoptera species group percentages.

The seeds of *B. rapa* ssp. *campestris* were identified by their coarse reticulum, which included oblong cells. The reticulum is higher than in most of the other species, but not as high as in *B. nigra*, and of a more even height. The seeds of the other sub-species of *B. rapa* are larger, and have a finer reticulum without the large oblong cells.

The final group of seeds could be distinguished from those of *B. nigra* and *B. rapa* ssp. *campestris* primarily by their larger size and less prominent reticulation (as mentioned above). They can be distinguished from the seeds of *Sinapis arvensis* by the following criteria. The surface reticulation of *S. arvensis* forms irregular oblong-shaped cells which tend to be aligned in rows. In contrast, the reticulum of the cultivars of *B. oleraceus*, *B. napus* and *B. rapa* comprise more regular polygonal cells which are larger and not obviously aligned in rows. The archaeological specimens most closely resemble seeds of *B. napus*, but *B. oleraceus* and the cultivars of *B. rapa* cannot be excluded. *B. napus* is only known as a cultivar and an escape from cultivation in Britain, but *B. oleraceus* includes the wild cabbage, a maritime cliff plant which appears to be native, as well as the cultivated cabbage (Clapham *et al.* 1962, 122–5). However, given the location of the site, it seems reasonable to assume that the seeds were from a cultivated Brassica of some sort.

Some habitat information has been displayed in the tables of the results. It has been derived from various sources, but particular use has been made of Clapham *et al.* (1962) and Silverside (1977) for ecological details of the plants; Freude *et al.* (1964–83) and Royal Entomological Society Handbooks for insects; and Boycott (1936) and Evans (1972) for

mollusca. The Coleopteran results have been summarized into species/ecological groups in Table 72. They are expressed as a percentage of total terrestrial Coleoptera, following the groups given in Robinson (1981, 279–82) and Robinson (1983, 33–5).

Interpretation

The results enable environmental conditions in the valley bottom and within the enclosure to be traced through the Roman period. They also throw some light on site activities, but the picture is by no means complete. The results will be considered under four headings:

1. The environment of the valley bottom.
2. Conditions and activities within the enclosure.
3. The evidence from the corn-drier.
4. Aspects of the arable economy.

The Environment of the Valley Bottom (Samples: Ditch 1104, 1211, 1212, 1213)

Possible Lake Area 1213

The earliest samples in this series were the two waterlogged samples from Contexts 1214 and 1215. They both contained numerous small water beetles from species which tend to live in stagnant or temporary bodies of water, particularly *Helophorus* spp. The aquatic snail *Bathymphalus contortus*, which occurs under similar conditions, was also present. The fauna did not contain flowing-water species, as might be expected to have lived in Bradwell Brook, so did not represent a canalization of the stream. The seeds suggest that the

ditch supported an emergent aquatic flora dominated by *Rorippa nasturtium-aquaticum* (water cress) and *Apium nodiflorum* (fool's water cress). There also seems to have been an exposed mud community of *Ranunculus scleratus* (celery-leaved crowfoot), *Rorippa cf. islandica* (marsh yellow-cress) and *Juncus bufonius* (toad rush).

The majority of the plant and invertebrate remains from the ditch, however, seem to have entered the deposits naturally from the surrounding terrestrial landscape. Conditions seem to have been very open. Wood and tree-dependent Coleoptera were entirely absent (Table 72: Group 4), while macroscopic remains of trees and shrubs were confined to a few seeds of *Sambucus nigra* (elder) and a *Crataegus* or *Prunus* (hawthorn or sloe) type thorn.

There was a strong disturbed-ground element amongst the waterlogged seeds. They were mostly from two communities: nitrophilous annual weeds belonging to the order Polygono-Chenopodietalia, such as *Stellaria media* gp. (chickweed), *Polygonum persicaria* (redshank) and *Urtica urens* (small nettle), and ruderals of fertile neglected ground such as *Conium maculatum* (hemlock), *Urtica dioica* (stinging nettle) and *Rumex obtusifolius* (broad-leaved dock). The former community probably grew on frequently disturbed ground alongside the ditch, perhaps grading into wetter conditions which favoured *Chenopodium rubrum/glaucum* (red goosefoot). The latter community was probably established in less frequently disturbed areas alongside the ditch.

There were few seeds of general grassland plants, although seeds from the tussock group of rushes (*Juncus effusus/conglomeratus/inflexus*) were particularly abundant. The very small size of *Juncus* seeds means that they tend to be dispersed over a wide radius, and they had probably been derived from a larger catchment than the majority of the seeds. This suggests that there was some wet pasture or grazed marshland in the valley bottom.

The terrestrial Coleoptera from the two ditch samples comprised an appropriate and diverse fauna of open, well vegetated countryside. The nettle-feeding weevil *Apion urticarium* was present. It now has a restricted distribution in southern and south-east England (Fowler 1891, 142; Fowler and Donisthorpe 1913, 302), being absent from Buckinghamshire. Similarly, it is now absent from the Upper Thames Valley, but seems to have been widespread in the region during the Roman period (Robinson 1981, 277). Scarabaeoid dung beetles of the genera *Gestrupes* and *Aphodius* (Species Group 2) comprised 10% of the terrestrial Coleoptera. They feed on the dung of domestic herbivores in the form of droppings on pasture land. Their abundance in the ditch samples is sufficient to suggest the proximity of some pasture, although not high enough to indicate a concentration of domestic animals close to the ditch.

There was a relatively high concentration of carbonized plant remains in the two samples from the ditch. Cereal debris predominated, particularly glume bases of *Triticum spelta* (spelt wheat). Either the dehusking of spelt wheat was taking

place in the vicinity of the ditch, or it was used for the dumping of cereal processing waste. The sample from Context 1214 also contained a single waterlogged specimen of *Oryzaephilus surinamensis*, a grain beetle which can be a serious pest of stored grain. Other synanthropic beetles were absent from the samples and the abundance of beetles which feed on various sorts of foul organic material (Species Group 7) was no greater than would be expected from natural accumulations of such material. However, of particular note from Context 1215 were a couple of seeds of *Apium graveolens* (celery), a seed of *Coriandrum sativum* (coriander) and a seed of *Satureja hortensis* (summer savory), all of which are likely to have come either from cultivated plants or escapes from cultivation. The use of Building 10 and Enclosure 1208 was probably contemporaneous with the ditch deposits.

Ditch 1104 Column Sample

The waterlogged sequence of this sample shows that wet conditions prevailed in the area of this feature. Waterlogged plant remains were not very well preserved in Sample F, but thereafter seeds of the tussock rushes (*Juncus effusus* gp.) predominated. Samples E and D also contained many seeds from annual plants, both of waterlogged places, such as *Ranunculus scleratus* (celery-leaved crowfoot) and *Montia fontana* ssp. *chondrosperma* (blinks), and also more generally of disturbed ground, such as *Chenopodium* spp. (goosefoot) and *Urtica urens* (small nettle). Seeds of *Hyoscyamus niger* (henbane), which was formerly a frequent denizen of nutrient-rich habitats around settlements and in farmyards, was well represented in Sample D. However, in Sample C seeds of the annual plants had mostly been replaced by seeds of *Carex* spp. (sedges). The lower part of the sequence would have been deposited when human activity on this part of the site would have been creating suitable habitats for colonization by weeds, but from Sample C upwards activity seems to have ceased on this part of the site. Samples B and A probably represented alluvium, and were probably post-Roman. Sample B had been decalcified, but molluscan shells survived in Sample A. They included the aquatic *Bathynomphalus contortus*, and marsh or wet meadowland species such as *Carychium* sp., *Succinea/Oxyloma* sp. and *Vallonia pullchella*.

An interesting find made during the excavation of this part of the site was a waterlogged cone of *Pinus pinea*. It is a native of the Mediterranean region but it could have grown on the site; indeed, a mature tree in the Royal Botanic Gardens, Kew, sets seed. However, it could also have been imported, either for its edible kernels (pine nuts), or for the use of the cones as altar fuel.

Contexts 1211, 1212

Context 1212 was peat which had formed over Ditch 1213, and Sample 1211 was from a thin organic deposit over the corn-drier. Clearly conditions must have become very much wetter in the valley bottom for such deposits to have accumulated. The abundance of small water beetles from the genus

Helophorus in these samples confirms that they formed under water. Various other small aquatic and amphibious beetles were present, but the assemblages did not contain beetles of flowing water.

The macroscopic plant remains did not suggest a rich aquatic flora, indeed apart from a couple of seeds of *Ranunculus S. batrachium* sp. (water crowfoot) and a seed of *Sagittaria sagittifolia* (arrow-head) in Sample 1212, seeds of deeper water aquatics were absent. The only truly aquatic marginal plant which was at all well represented by its seeds was *Apium nodiflorum* (fool's watercress), a plant of ditches and shallow ponds. Instead, the flora in the vicinity of the samples seems to have belonged to the Alliance Bidentation of the order *Bidentalialia tripartitae*, a community of nitrogen-rich wet mud or peat around pools (Silverside 1977, 231–2). The characteristic members of this community from the samples included *Bidens cernua* (bur-marigold), *Ranunculus scleratus* (celery-leaved crowfoot) and *Polygonum persicaria* (red shank). It is an annual community, colonizing drying mud during exposure, and cannot tolerate inundation for long periods.

The insects from Sample 1212 contained a small element of phytophagous species which feed on marsh and aquatic plants, including *Plateumaris sericea*, which feeds on various Cyperaceae (sedges etc.), *Prasocuris phellandrii* on aquatic Umbelliferae such as *Apium* spp. and *Thryogenes nereis* on aquatic grasses. There were also ground beetles of marshy places, such as *Agonum cf. viduum*.

The overall picture given by the plant and invertebrate remains of aquatic conditions from these two samples is of a shallow pond or lake in the valley bottom, the edge of which extended over some of the earlier Roman structures. Both samples contained extremely well-preserved carbonized glumes of spelt wheat, suggesting these deposits to have been of Roman rather than post-Roman date. The archaeological evidence also suggests that the valley bottom became waterlogged during the late Roman period. Although the single seed of *Sagittaria sagittifolia* had perhaps been derived from Bradwell Brook, there does not seem to have been much contribution from the stream to the biological assemblages from these samples. The pond or lake does not seem to have supported the dense emergent and floating-leaved flora which might naturally be expected to have colonized it. Instead, it had a marginal flora of seasonally exposed mud. There are several possible explanations for this. Firstly, the pond might have been drained relatively frequently, or regularly weeded as part of its management. The insect fauna would then be consistent with a pool that was temporarily drained. It is also possible that domestic animals were able to wade into shallow water to browse the emergent vegetation, although the seeds did not show the grazed marsh element of species such as *Ranunculus flammula* (lesser spearwort), *Mentha aquatica* (water mint), numerous *Juncus* spp. (rush) seeds and *Carex* spp. (sedges) which might be expected to result.

It is very unlikely that a lake could have formed on the site in the late Roman period as a result of natural sedimentary

processes. Increased rainwater run-off and sediment load in the stream could have resulted from agricultural activity further up the catchment. This might have raised the water table in the valley bottom, causing brief seasonal inundation and alluviation but not complete blockage of the valley. Although the deposits had an alluvial component, Sample 1212 was about 50% peat. The only satisfactory explanation is that the valley bottom was deliberately blocked to create a pond. Such a feature could have been used to supply a water mill (being emptied by each milling operation), to support a fishery, or for ornamental purposes.

The two samples contained significant terrestrial components in their plant and invertebrate assemblages which were, for the most part, similar to the assemblages from Ditch 1213. They again indicate an open landscape with weedy areas. Sample 1212 contained a single seed of *Reseda luteola* (weld or dyer's rocket), which was formerly cultivated for the yellow dye that it yields. However, this plant also grows on waste ground or in rubbish heaps. Also of interest was a specimen of the grain beetle *Cryptolestes ferrugineus* from Sample 1211. The abundance of scarabaeoid dung beetles (Species Group 2), however, had declined to 4% of the terrestrial Coleoptera, which suggests only a slight presence of domestic animals in the vicinity of these deposits.

A significant part of Sample 1212 comprised shoots of the moss *Mnium punctatum*, which usually occurs in such habitats as damp rocks by streams and decaying wood in forests (Dickson 1973, 101). It is difficult to reconcile its presence in the sample with most of the other evidence from the deposits, though there is no reason to suspect that it had been deliberately imported. Possibly it grew on a steep-graded bank to the pond or a stone structure adjacent to the water. One of the beetles from this sample, *Agonum fuliginosum*, usually occurs in damp, mossy places.

Enclosure 795 Column Sample

The column of samples through the sediments within the Enclosure 795 was not waterlogged. The bottom 400 mm of the sequence (from 500–100 mm) comprised a gritty clay loam, and it is possible that it had built up under conditions of cultivation. A somewhat restricted molluscan fauna was present in some of the samples. Between 500 and 300 mm, the shells were mostly of *Vallonia excentrica* and *Trichia hispida* gp., terrestrial species which can tolerate disturbance. However, above 300 mm they were joined by the slum aquatic species *Lymnaea peregra* and *Anisus leucostoma*. From 100 mm to the top of the column the sediment was clean silty clay of possible alluvial origin. The column thus showed the same trend as shown by the samples from the valley bottom for increasing wetness.

Pit Group 1166

Cutting the remains of the wall of Enclosure 1208 and within the later Enclosure 1210 were two interlinked pits (1166). Two samples (1168 and 1167) from them were investigated. The stagnant water in the feature supported a fauna of small

water beetles, particularly *Helophorus brevipalpis* group, and slum aquatic mollusca such as *Lymnaea peregra*. The numerous seeds of *Apium nodiflorum* (fool's watercress) from the samples suggests that this plant grew in the feature, and remains of the leaf beetle *Prasocuris phellandrii*, which feeds on aquatic Umbelliferae, were also present. The water's surface was probably covered with *Lemna* (duckweed), as evinced by the weevil *Tanysphyrus lemnae*. Duckweed seeds were absent, but it only sets seeds sporadically.

The pits were probably surrounded by nutrient-rich muddy ground. The samples contained many seeds of *Ranunculus scleratus* (celery-leaved crowfoot) and *Chenopodium rubrum/glaucum* (red goosefoot), which is suggestive of the Chenopodium fluviatile alliance of the Bidentalia (Silverside 1977, 231-4). *Myosoton aquaticum* (water chickweed) also seems to have grown around the margins of the feature. Various bankside Coleoptera were present, such as *Agonum marginatum*.

As was the case for Ditch 1213, the majority of the biological remains from the samples seem to have entered the feature naturally from the surrounding landscape, and again there was a strong disturbed-ground element among the seeds. A basophilous alliance of the order Polygono-Chenopodietalia is suggested by *Brassica rapa* ssp. *campestris* (wild turnip), *Stellaria media* gp. (chickweed), *Chenopodium ficifolium* (goosefoot), *Polygonum persicaria* (redshank) and *Urtica urens* (small nettle). It is a nitrophilous community of root crops, spring cereals, disturbed ground around settlements and gardens. Members of this community might also have been joined by *C. rubrum/glaucum* (red goosefoot), *Hyoscyamus niger* (henbane) and *Anthemis cotula* (stinking mayweed) on old compost-heap-type habitats. Other waterlogged annual weed seeds included *Papaver argemone* (long prickly-headed poppy), *Spergula arvensis* (corn spurrey) and *Anthriscus caucalis* (bur chervil). *P. argemone* is more usually associated with arable than other habitats, but there was little other evidence from the waterlogged remains for arable activities, although there was much charred processing debris in the sample floated from 1167 for carbonized plant remains. *S. arvensis* is a weed of circumneutral to acidic soils, and its presence perhaps reflects local variation in conditions. The third plant, *A. caucalis*, is a plant of waste places that is no longer common in the region, but it has frequently been recorded from Iron Age and Roman sites in the Upper Thames Valley (Robinson 1981, 275).

There was also strong evidence of weedy neglected ground, on which grew *Rumex obtusifolius* (broad-leaved dock), *Conium maculatum* (hemlock), *Urtica dioica* (stinging nettle) and *Sambucus nigra* (elder). Although seeds of *S. nigra* were abundant, a full scrub community had not developed. Apart from a couple of *Rubus fruticosus* agg. (blackberry) seeds and a fragment of hazel nut shell, remains of trees and shrubs were absent. Of particular interest was the occurrence of seeds of *Chelidonium majus* (greater celandine) in Sample 1167. It is a plant of hedgerows and walls, chiefly near habitations, which was formerly much used by herbalists (Clapham *et al* 1962, 102).

The Coleoptera from the two samples included a rich fauna of weedy and neglected ground, with various Carabidae such as *Pterostichus melanarius* and *Harpalus* S. *Ophonus* sp. well represented. The caraboid beetles which comprise Species Group 6 (Disturbed Ground/Arable), *Amara bifrons*, *A. tibialis* and *Harpalus rufipes*, could all have been living amongst the weedy vegetation inferred from the seeds, and need not indicate the proximity of arable. The phytophagous Coleoptera included several which feed on *Urtica* spp. (nettles): *Brachypterus urticae*, *Cidnorhinus quadrimaculatus* and *Ceutorhynchus pollinarius*. The nettle-feeding bug *Heterogaster urticae* was also present.

The samples contained a few seeds of possible grassland plants including *Ranunculus acris/repens/bulbosus* (buttercup), *Potentilla erecta* (common tormentil) and *Leontodon* sp. (hawkbit), but they could all have been growing in small grassy areas amongst the weeds. The scarabaeoid dung beetles which feed on the dung of domestic mammals in pastureland (Species Group 2) made up 10% of the terrestrial Coleoptera. This suggests that there was some pastureland in the surrounding landscape, but a much higher value would be expected if domestic animals had been kept within the enclosure.

The pit samples contained a couple of individuals of *Anobium punctatum*, the woodworm beetle which tends to infest structural timbers (Species Group 10) and a specimen of *Stegobium paniceum*, a minor pest of stored products (Species Group 9). Doubtless the occurrence of these beetles was related to the buildings on the site but their presence would be expected on a Roman villa. The percentages of beetles which feed on various sorts of foul organic material including manure heaps and wet compost (Species Group 7), and Lathridiidae (Species Group 8), which feed on mouldy plant remains such as damp thatch and 'sweet' compost, were not particularly high.

As has already been mentioned, some carbonized waste from cereal processing was present in the pit samples. *Triticum spelta* (spelt wheat) was the only cereal which could be identified from the carbonized remains. A single waterlogged spelt glume was also found in a Sample 1167. Another arable crop, *Linum usitatissimum* (flax), was represented by a single seed in this sample. However, the concentration of arable crop remains in the water hole was no greater than might be expected as part of the background of debris on a major Roman site.

Of much greater interest was the presence of waterlogged seeds from plants which were probably garden cultivars in the pit group samples:

<i>Brassica nigra</i>	black mustard
<i>Brassica</i> sp. (not <i>B. nigra</i> or <i>rapa</i> sp. <i>campestris</i>)	rape, cabbage, turnip etc.
<i>Coriander sativum</i>	coriander
<i>Apium graveolens</i>	celery
<i>Euphorbia lathyris</i>	caper spurge
<i>Satureja hortensis</i>	summer savory

The unidentified Brassica cultivars, *C. sativum* and *S. hortensis*, are alien species. Their occurrence implies importation of seeds, cultivation of these species, or their escape from cultivation on the site. *B. nigra* is regarded as native on sea cliffs and on stream banks, but its widespread occurrence nowadays as a weed of waste places is thought to result from its escape (Clapham *et al.* 1962, 126). *A. graveolens* is a native plant of brackish marshes and ditch sides, which does not seem to be a member of natural non-saline communities in the British Isles. *E. lathyris* is regarded by Salisbury (1962, 300) as a Southern European plant of open woodland, whereas Clapham *et al.* (1962, 537) allow the possibility if its having native status in a few southern British woods.

The discovery of one or two seeds from culinary herbs is quite usual on rural Roman sites in the Midlands and southern England, even on sites of apparently low status, provided suitable waterlogged deposits are excavated. However, the finds from Pit Group 1166 are exceptional in both the number of seeds and number of taxa, as such rich assemblages tend only to be found in urban cess-pits. The other plant and invertebrate remains are not characteristic of cess-pits, indeed cereal bran was absent. The occurrence of these known garden cultivars is suggestive of horticulture in the vicinity of the pit group.

Some of the cultivars mentioned above can also grow as casuals, escapes from cultivation, or weeds of waste ground. However, weedy populations of most of them are unlikely to survive for long in the face of competition from native weeds such as nettles and docks without human intervention. Of the six taxa, only *B. nigra* and *A. graveolens* are likely to have been able to persist after casual introduction if the area of the enclosure were not being cultivated as a garden, the former requiring some disturbance of the ground, while the latter might have been able to have become established at the margins of the pits for a few years.

Garden cultivation would seem an appropriate activity within the enclosure, as would also have been the case for its walled predecessor. There was little evidence for other activities, and indeed, the layer of dark soil within the later ditched enclosures may well have been dumped in order to provide good soil for garden cultivation. The species present suggest a utilitarian or kitchen garden rather an ornamental garden. Their uses are varied, and all but caper spurge are mentioned in the Roman literature. The cultivated brassica group (excluding *B. nigra*) comprises many varieties. They may have been grown as a vegetable for human consumption (as for instance cabbage, turnip etc.), as a fodder crop (kale, turnip etc.) or as an oil seed (rape etc.). Cultivated brassicas are cited extensively in the classical literature, for example Pliny (Book XVIII, Section xxxiii) remarks on how turnips or naves thrive in the colder climate north of the Po, where they rank third after wine and corn. They are described by Collumella as being commonly grown for cattle fodder in Gaul. The vegetable varieties seem the most likely to have been grown on a small scale in a garden whereas the others are most likely to have been grown in arable fields. Celery

may have been grown for the leaf petioles or for the seeds, which were used as a general seasoning in Roman cookery (Apicius, trans. Flower and Rosenbaum). Seeds of black mustard and coriander, and sprigs of summer savory were also widely used for flavouring (Apicius, *op. cit.*). Caper spurge is a biennial plant which is nowadays cultivated for ornamental purposes, but was formerly grown in herb gardens for its strongly purgative seeds, although Gerard (1597, Vol. I, 405–408) warns of the dangers of its use.

The high proportion of seeds of weed species in relation to seed numbers of cultivars need not imply that the crops were grown under very weedy conditions. Many of the weed species are prolific seed producers, while the garden cultivars would either be varieties that were not often allowed to run to seed or would be varieties grown for seed, in which case the seeds would be harvested. The number of seeds of biennial and perennial weeds, such as *Conium maculatum* (hemlock), which are not serious weeds amongst crops in well-cultivated gardens requires some explanation. It is possible that garden refuse was dumped in the vicinity of the pits, or that areas of the enclosure were periodically neglected or the deposits accumulated as the enclosure fell out of use. Any of these conditions would have greatly contributed to the whole weedy flora of the samples. Interestingly, caper spurge can be a persistent weed in old gardens for long periods after its cultivation (Salisbury 1962, 300).

Corn Drier 1090

The assemblage from the corn drier comprised large quantities of charred cereal chaff and loose coleoptile shoots, with only a small proportion of cereal grain and weed seeds. Most of the grains either showed signs of germination, or had lost embryos. Almost all of the cereal remains that could be identified were from *Triticum spelta* (spelt wheat) but a few fragments of tough rachis from a free-threshing hexaploid wheat, and a few fragments of barley, were also present. The only grain of barley identified had not germinated. The weed seeds were mostly from *Rumex* sp. (dock) and small-seeded Gramineae (wild grasses).

The assemblage clearly represents waste from cereal processing rather than the accidental charring of the contents of the corn drier. The large number of embryo sprouts and the high proportion of grains that had germinated suggests two possibilities:

1. That the assemblage was the waste from rubbing parched, malted, spelt wheat in order to remove the husks and sprouts prior to grinding.
2. That spelt wheat which had germinated in the field or during storage under damp conditions had been parched and dehusked.

The latter event would probably have been of rare occurrence, so although it remains a possibility, the discussion will concentrate on the interpretation that the waste was from the parching of spelt for brewing beer. Brewing using wheat was known to the Romans (Pliny, Book XVIII).

Malting grain for brewing generally involves steeping the grain in water until it is swollen, leaving it to germinate until the sprout is two-thirds the length of the grain, then terminating the germination by parching. The temperature of the parching must be carefully controlled, and not allowed to rise above 104°C, otherwise the diastase enzymes become denatured. Hulled wheats are no longer used for brewing, but by analogy with the modern use of two-row hulled barley, the grain would have been malted in the hulled state and dehusked along with the removal of sprouts after parching. The parched grain is then ground and infused in water, enabling the diastase which had built up during the malting to act on the starch and release sugars. Finally, this solution (the wort) is fermented.

Although the carbonized assemblage represents material which had been burnt on the fire of the corn drier rather than its contents, it is very likely that the corn drier had been used for parching the malt, the resultant chaff from the cleaning of the malt being added to the fire of the corn-drier. Chaff was apparently a favoured fuel for corn driers (Hillman 1982, 138). The small quantity of grain in the assemblage could have accidentally separated from the malt along with the chaff, while the presence of weed seeds suggests that the crop had not been completely cleaned prior to malting. There was a single charred sprouted grain still enclosed by its glumes, which helps to confirm the interpretation that the grain was still in spikelets when malted. However, the large quantity of awn fragments raises the possibility that the spelt had been malted as whole ears, or that the ears had only been roughly broken into spikelets without further cleaning.

Aspects of the Arable Economy

(samples investigated for carbonized plant remains, Table 67).

Sample 1210 represented the concentrated remains from a single process, perhaps even a single event. There was a much lower concentration of charred plant remains in the other samples, and they probably represent the background spread of debris from various aspects of crop processing and many events. Remains of spelt wheat predominated, but there were also small quantities of free-threshing hexaploid wheat, emmer wheat, hulled barley and oats. It was not possible to determine whether the oats were of a cultivated variety, or were wild oats which had been growing as weeds amongst other cereal crops. The waterlogged plant remains add flax to the arable crops of the villa.

The charred weed seeds were almost all from species which can grow as arable weeds, and it seems reasonable to assume that they too had their origins in the arable fields of the villa. Most of them occur in the Centauretalia-cyani, the order of weeds characteristically associated with cereal crops (Silverside 1977, 317–21). The ecological requirements of two of the better represented weeds throw some light on the soils which were under cultivation. *Rumex acetosella* agg. (sheep's sorrel) is a member of arable weed communities on acid and circumneutral light soils (Silverside 1977, Table

80). *Anthemis cotula* (stinking mayweed), however, favours basic heavy soils (Kay 1971, 624). Suitable circumneutral soil for the former occurs on the terrace gravels of the River Ouse, while the calcareous Boulder Clay would have provided ideal conditions for the latter.

Chaff items of spelt wheat and indeterminate hulled wheats (including spelt) were the most abundant carbonized plant remains in the majority of the samples. It is likely that most of the carbonized plant remains had their origin in the dehussing and final cleaning of spelt wheat.

Discussion

There is at present little other environmental evidence from the Milton Keynes area for the Roman period with which the results from the villa can be compared. However, a useful comparison can be made with Roman sites on the gravel terraces of the Upper Thames Valley (Robinson and Wilson 1987, 51–4). Both Bancroft villa and the Thames Valley settlements were set in open agricultural landscapes, as was a Roman site on the Ouzel gravels at Caldecotte, Milton Keynes (Chadburn and Robinson, forthcoming). The same arable crops, spelt wheat, free threshing (bread type) wheat, emmer wheat, hulled barley and flax were grown, with remains of spelt wheat greatly outnumbering those of other wheats both at Bancroft and on the Thames valley sites. A similar picture is beginning to emerge from the villa at Stanwick, in the Nene valley (Campbell and Robinson, unpublished). The evidence of a mixed agricultural economy at Bancroft, with strong pastoral as well as arable elements was also seen at Barton Court, a small villa on the second gravel terrace of the Upper Thames near Abingdon (Jones and Robinson *in Miles* 1986, 9:A1–9:94). It has been noted that two aspects of romanisation shown by sites in the Thames Valley as compared to earlier periods were the appearance of horticultural crops and a greater abundance of synanthropic insects (Robinson 1981, 264–5, 275–7). The results from Bancroft fall into the Roman pattern. At the level of individual species, the flora and insect fauna of Bancroft was mostly similar to that from Roman sites on the Upper Thames gravels.

One major difference between Bancroft villa and the Thames Valley sites is that Bancroft was, at least in the fourth century, a palatial villa, whereas the other sites were villages or farmsteads and a small villa. This difference in status was perhaps reflected by the presence of the beetles *Cryptolestes ferrugineus* and *Oryzaephilus surinamensis* at Bancroft, which can be very serious pests of stored grain. Minor pests of stored products, such as *Stegobium paniceum*, were recorded from some of the Thames Valley sites, but the three major pests of stored grain, *C. ferrugineus*, *O. surinamensis* and *Sitophilus granarius*, all more closely dependent on long-term large-scale storage of grain than the minor pests, were absent. These three beetles have been recorded from several Roman towns, for example York (Kenward and Williams 1979, 67), Alcester, Warks., (Osborne 1971) and Ashton, Northants. (Robinson, unpublished), and from other substantial villas such as Barnsley Park, Glos. (Coope and Osborne 1967) and Winterton, Lincs. (Robinson, unpub-

lished). These results suggest that the grain produced on smaller and lower status sites was mostly being exported, perhaps to towns, whereas grain storage was undertaken on a greater scale at larger villas.

The waterlogging of the valley bottom at Bancroft seems to have resulted from the blocking of Bradwell Brook in order to create a shallow pond or lake. While it is uncertain whether this was done for a water mill, a fishery or for ornamental purposes, it shows that major alterations were made to the landscape during the life of the villa.

Two aspects of the environmental archaeology of Bancroft villa are of major importance; the evidence for horticulture, and the evidence of malting from a corn drier. There are already many records of horticultural crops from Roman Britain, particularly for culinary herbs and orchard fruit (eg. Robinson and Wilson 1987, 51–4) but also vegetables (Moffet 1987). What makes the results from Bancroft particularly interesting is the association of the crop remains with an enclosure where it is possible they were grown. Two of the species identified from the enclosure, coriander and celery, are quite familiar from Romano-British sites. There are very few records of summer savory, but it has been identified from Roman York (A. Hall, pers. comm.) and Roman London (D. de Moulins, pers. comm.). Black mustard and the other variety of cultivated Brassica present some problems of identification, but black mustard and another species of Brassica, probably a cultivar, were noted from Claydon Pike, Glos. (Robinson, unpublished). Caper spurge has not been recorded from any other Roman site in Britain. Bulk sieving of features in the vicinity of the enclosure added *Prunus domestica* (plum) to the list of horticultural plants from the site.

There was no certain botanical evidence for ornamental gardens at Bancroft, although there was archaeological evidence for a formal garden in front of the house in the fourth century. Caper spurge is now grown as an ornamental plant, but its medicinal use has been mentioned. The stone pine cone could have been from an ornamental tree growing on the site, but it could have been imported. There are several records of stone pine from Roman sites in Britain, including Chew Park Villa, Somerset (Kislev 1988).

While the horticultural crops grown in Roman Britain reflect Romanisation of the diet, the use of spelt wheat for brewing probably reflects the survival of a Celtic tradition. Romans generally drank wine rather than beer, but Pliny (Book XVIII Section xii) refers to the use of wheat for brewing beer in Gaul; “The corn of Gaul and Spain of the kinds we have stated (wheat) is steeped to make beer. . .”.

Charred deposits from other corn driers excavated in the British Isles suggest that they had a variety of functions as well as parching malt, probably including the parching of hulled cereals prior to dehusking and milling for flour. Sprouted grain has been recorded from several of them (M. van der Veen, pers. comm), but the only other assemblage comparable to that from Bancroft, with large numbers of both *coleoptiles* (sprouts) and spelt glume bases, was from Catsgore, Somerset (Hillman 1982).

THE LAND AND FRESHWATER MOLLUSCA FROM THE MAUSOLEUM SITE

Beverly Meddens and Mark Robinson

Introduction

During the excavation, various deposits were sampled for Mollusca. These samples were processed and the shells identified by Beverly Meddens. Subsequently, the identifications were checked by Mark Robinson, who also prepared the following report on the sequences that contained useful numbers of Mollusca. A full list of identifications is contained in the Level III site archive.

The Samples

The samples were from the following contexts;

1. Upper layer of sandy clay loam (Layer 893: Fig. 27) within Iron Age Well 880.
2. A column of seven samples (Column I, Section 178) from the first-century AD Enclosure Ditch 60 (Fig. 38).
3. A column of six samples (Column V, Section 172) from the very late Roman or fifth-century Ditch 94/95 (Fig. 58).
4. The Saxon sediments (Layer 69: Fig 49) within the temple-mausoleum burial chamber.

The air-dried sample weights and identifications are listed in Tables 73 to 76. All depths in the following discussion are measured from the stripped upper surface of each feature downwards.

Interpretation

Iron Age Well 880 (Table 73)

Although the majority of the Mollusca from this layer of silting within the well were terrestrial, a strong presence of *Lymnaea truncatula* suggests it still held a pool of stagnant water. The remaining shells, particularly *Pupilla muscorum* and *Vallonia excentrica* suggest open, probably grassy surroundings.

<i>Lymnaea truncatula</i> (Mull.)	16
<i>Cochlicopa</i> sp.	2
<i>Pupilla muscorum</i> (L.)	18
<i>Vallonia pulchella</i> (Mull.)	1
<i>V. excentrica</i> Sterki	20
<i>Vallonia pulchella/excentrica</i>	52
<i>Trichia hispida</i> (L.)	20
Unidentified	2

TOTAL	131
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Air-dried weight 1.799 kg.

TABLE 73: Mollusca sample from Iron Age Well 880.

First Century AD Enclosure Ditch 60: Column I (Table 74)

The enclosure ditch seems to have held pools of stagnant water, at least seasonally, throughout about its entire period of silting. Between 900 and 500 mm, *Anisus leucostoma*, which lives in stagnant water but can tolerate episodes of drying out, comprised about half the number of shells in the assemblage. Also present in these lower levels were a few individuals of *Planorbis planorbis*, which has more fastidious aquatic requirements. Above 500 mm the proportion of aquatic Mollusca declines, but *A. leucostoma* was present in all the samples.

The terrestrial Mollusca sequence from the column can be divided into three zones. Between 900 and 760 mm, the assemblage is dominated by *Vallonia excentrica*, an open country species, and shade-loving Mollusca are few. This deposit was rapid primary fill, and perhaps gives information on conditions around the time of construction of the ditch. Interestingly, there was a single specimen of *Truncatellina cylindrica*. This species, which occurs in dry calcareous

grassy places, is now rare in Britain (Kerney and Cameron 1979, 68, 263) but is known to have declined over part of its range since the Bronze Age (Evans 1972, 140).

Between 760 and 380 mm, the rate of deposition had slowed down and there was a higher concentration of shells. Various shade-loving species, particularly *Discus rotundatus* and *Aegopinella nitidula*, predominated amongst the terrestrial Mollusca. Other shade-loving species present include *Lauria cylindrica* and *Ena obscura*. The change in the fauna is not what would be expected if all that happened was that taller herbaceous vegetation had grown up with ditch. Neither was there sufficient stone in the ditch for the development of a rock-rubble fauna. There was continuous archaeological activity on the site, so general scrub colonisation seems unlikely. The most satisfactory explanation is that a hedge with associated vegetation was established alongside the ditch. This could have provided a dry enough habitat for *Lauria cylindrica* and copious leaf litter for *Discus rotundatus*. Species of *Vallonia* were not entirely absent, probably reflecting open conditions beyond the hedge and ditch.

Sample No. Context	1 190	2 189	3 189	4 181	5 181	6 178	7 178
<i>Carychium tridentatum</i> (Risso)	—	3	5	2	—	—	—
<i>Lymnaea truncatula</i> (Mull.)	—	3	2	2	4	9	—
<i>L. peregra</i> (Mull.)	4	16	2	—	—	—	—
<i>Planorbis planorbis</i> (L.)	2	5	4	—	—	1	—
<i>Anisus leucostoma</i> (Millet)	15	164	94	41	11	10	1
<i>Succinea</i> or <i>Oxyloma</i> sp.	—	2	2	1	—	—	—
<i>Cochlicopa lubrica</i> (Mull.)	—	1	—	—	—	2	—
<i>Cochlicopa</i> sp.	—	5	4	7	2	—	—
<i>Truncatellina cylindrica</i> (Ferus.)	1	—	—	—	—	—	—
<i>Vertigo pygmaea</i> (Drap.)	—	1	2	—	—	—	—
<i>Vertigo</i> spp.	—	—	—	1	—	—	—
<i>Pupilla muscorum</i> (L.)	1	—	1	—	1	1	—
<i>Lauria cylindracea</i> (da Costa)	—	3	4	2	—	—	—
<i>Vallonia costata</i> (Mull.)	—	5	1	2	4	4	—
<i>V. excentrica</i> Sterki	12	9	4	4	—	4	1
<i>Vallonia</i> spp.	—	3	—	1	—	1	—
<i>Ena obscura</i> (Mull.)	—	—	1	1	2	—	—
<i>Discus rotundatus</i> (Mull.)	—	7	39	54	4	—	2
<i>Vitrina</i> spp.	—	—	1	—	—	—	—
<i>Vitrea contracta</i> (West.)	—	3	1	1	—	2	—
<i>Aegopinella nitidula</i> (Drap.)	2	4	13	8	—	2	—
<i>Oxychilus cellarius</i> (Mull.)	1	2	6	5	2	1	—
Zonitidae	—	12	21	6	—	—	—
Limacidae	—	2	—	4	—	2	2
<i>Cecilioides acicula</i> (Mull.)	—	4	1	2	—	3	2
<i>Clausilia bidentata</i> (Strom)	1	—	—	2	—	—	—
<i>Trichia hispida</i> (L.)	1	8	10	27	47	18	5
<i>Trichia</i> sp.	—	—	—	—	—	—	3
<i>Cepaea nemoralis</i> (L.)	—	—	1	—	—	—	—
<i>Cepaea</i> spp.	4	5	—	2	1	1	1
<i>Pisidium</i> spp.	—	—	1	—	—	—	—
Unidentified	—	8	1	2	—	—	1
TOTAL	44	275	221	177	78	61	18
Air-dried weights of samples:							
1	1.650 kg.	5	1.750kg.				
2	1.230 kg.	6	1.475kg.				
3	1.500 kg.	7	1.710kg.				
4	1.620 kg.						

TABLE 74: Mollusca from Column I of Enclosure Ditch 60.

Sample No. Context	1 182	2 173	3 173	4 172	5 172	6 172
<i>Carychium tridentatum</i> (Risso)	3	14	—	—	1	—
<i>Lymnaea truncatula</i> (Mull.)	35	—	—	—	—	—
<i>Succinea</i> or <i>Oxyloma</i> sp.	—	—	—	1	—	—
<i>Cochlicopa lubrica</i> (Mull.)	—	6	—	5	—	—
<i>Cochlicopa</i> spp.	5	3	1	3	—	3
<i>Vertigo pygmaea</i> (Drap.)	—	—	1	—	3	3
<i>Vertigo</i> spp.	2	1	—	1	—	—
<i>Pupilla muscorum</i> (L.)	4	9	1	5	3	7
<i>Vallonia costata</i> (Mull.)	32	24	4	10	9	10
<i>V. excentrica</i> Sterki	16	21	9	13	14	49
<i>Vallonia</i> spp.	5	—	—	—	—	—
<i>Punctum pygmaeum</i> (Drap.)	2	1	—	—	—	—
Arionidae	+	—	—	+	—	+
<i>Vitrina</i> spp.	1	—	—	—	—	—
<i>Vitrea contracta</i> (West.)	1	4	—	—	—	—
<i>Aegopinella nitidula</i> (Drap.)	3	1	—	—	1	1
<i>Oxychilus cellarius</i> (Mull.)	5	3	—	—	1	—
Zonitidae	3	—	—	1	—	1
Limacidae	2	—	1	2	1	1
<i>Cecilioides acicula</i> (Mull.)	17	28	5	26	27	8
<i>Helicella itala</i> (L.)	20	10	2	6	—	8
<i>Trichia hispida</i> (L.)	87	20	8	32	18	18
<i>Cepaea nemoralis</i> (L.)	—	—	—	1	3	1+
<i>Cepaea</i> spp.	—	+	—	1	—	2+
Unidentified	—	—	—	—	—	3
TOTAL	243	145	32	107	81	115
Air-dried weight of samples:	1 2.085 kg.	4 2.080 kg.				
	2 2.170 kg.	5 1.450 kg.				
	3 2.080 kg.	6 1.920 kg.				

TABLE 75: Mollusca from Column V of Ditch 94/95.

Above 380 mm, the concentration of shells declines and the proportion of woodland Mollusca decreases. *Trichia hispida* becomes the only abundant species. These deposits perhaps represent accumulation of sediment in the top of the ditch when it was little more than a slight hollow that had ceased to have any boundary function. The fauna was probably increasingly one of disturbed sparsely vegetated ground.

Late Roman or Saxon Ditch 94/95: Column V (Table 75)

The ditch initially seems to have had puddles of water along the bottom, *Lymnaea truncatula* being well represented in the sample from 950 to 800 mm. Thereafter, conditions in the ditch seem to have been relatively dry, with aquatic species absent. The terrestrial fauna of the ditch throughout its entire period of silting was dominated by a fauna of dry open, probably grassy, ground. *Vallonia costata* and *V. excentrica* were abundant throughout the sequence, with smaller numbers of *Pupilla muscorum* and *Helicella itala*. There was no evidence for either a hedgerow or the development of scrub.

Saxon Sediments in the Temple-Mausoleum Burial Chamber: Layer 69 (Table 76)

By the Saxon period the temple-mausoleum seems to have become a grassy hollow with a rich molluscan fauna. *Vallonia costata*, *V. excentrica* and *Trichia hispida* were by far the most abundant species. The presence of a couple of

<i>Carychium</i> sp.	1
<i>Lymnaea truncatula</i> (Mull.)	2
<i>Cochlicopa lubrica</i> (Mull.)	6
<i>C. lubricella</i> (Porro)	3
<i>Cochlicopa</i> spp.	10
<i>Vertigo pygmaea</i> (Drap.)	21
<i>Pupilla muscorum</i> (L.)	27
<i>Vallonia costata</i> (Mull.)	208
<i>V. excentrica</i> Sterki	250
<i>Punctum pygmaeum</i> (Drap.)	16
Arionidae	+
<i>Vitrina</i> sp.	4
<i>Vitrea contracta</i> (West.)	23
<i>Aegopinella nitidula</i> (Drap.)	61
<i>Oxychilus cellarius</i> (Mull.)	4
Zonitidae	65
Limacidae	7
<i>Cecilioides acicula</i> (Mull.)	43
<i>Helicella itala</i> (L.)	53
<i>Trichia hispida</i> (L.)	316
<i>Trichia</i> sp.	2
<i>Cepaea nemoralis</i> (L.)	1
Unidentified	3
TOTAL	1126
Air-dried weight of sample	4.26 kg

TABLE 76: Mollusca from Context 69 within the temple-mausoleum burial chamber.

shells of *Lymnaea truncatula* perhaps suggests a tendency for puddles to form in the centre after heavy rain, but overall the fauna does not suggest marshy conditions. The moderately high number of Zonitidae, particularly *Aegopinella nitidula*, was perhaps the result of either the presence of some tall herbaceous vegetation or the shelter provided by some large stones in the hollow. In the absence of many specimens of *Carychium* sp., the latter explanation seems more likely.

WATERLOGGED WOOD FROM THE VILLA

Rowena Gale

Introduction

During the 1986 excavation a quantity of wood, some of which was worked or showed tool marks, was retrieved for examination and species identification from the area of Enclosure 1208. The samples retained for identification related to the following contexts:

1039 Gully: Context 1040

1081 Artificial lake/pond area: Contexts 1122, 1123, 1133, 1142, 1146.

1104 Ditch: Contexts 1105, 1196.

1140 Gully: Context 1141

1155 Ditch: Context 1156

1197 Ditch: Context 1198

1208 Enclosure: Contexts 1071, 1095, 1103, 1110.

Materials and Methods

Approximately 400 fragments of waterlogged wood were examined. These included many short lengths of straight stem material. Some still had the bases of lateral branches *in situ*, but sometimes these had been cut off close to the stem. A few specimens arose from the base of a stem and showed the remains of the heel typical of stems or rods grown from coppice stools. The roundwood was divided into three groups based on stem diameters of <10 mm, 10–25 mm and >25 mm. Since in most instances either the bark was *in situ* or the vascular cambium was obviously intact the annual growth rings were counted. Where the surface was badly abraded the minimum number of annual rings present was noted.

In addition to the roundwood, a number of wood fragments, chips with tool marks and pointed ends of stakes were present. A large quantity of narrow, twiggy material was retrieved from Context 1105, and only a representative sample of this was examined.

Most fragments were rather soft in texture with fungal hyphae and spores present, and a few were too badly decomposed to examine in detail. Several fragments were partially charred. Thin sections were taken using double sided razor blades in the transverse, tangential longitudinal and radial longitudinal planes. All sections were mounted in 70% glycerol on microscope slides and protected with coverslips. The

Genera	Species	Common name
Aceraceae	<i>Acer campestre</i> L.	maple
Caprifoliaceae	<i>Sambucus nigra</i> L.	elder
Corylaceae	<i>Corylus avellana</i> L.	hazel
Fagaceae	<i>Quercus</i> sp.	oak
Oleaceae	<i>Faxinus excelsior</i> .	ash
Pomoidae	<i>Crateagus</i> sp.	hawthorn
	<i>Malus</i> sp.	apple
	<i>Pyrus</i> sp.	pear
	<i>Sorbus aria</i> L. (Crantz)	whitebeam
	<i>Sorbus acuparia</i> L.	rowan
	<i>Sorbus torminalis</i> L. (Crantz)	wild service
Rosaceae	<i>Prunus avium</i> L.	cherry
	<i>Prunus domestica</i> L.	plum
	<i>Prunus padus</i> L.	bird cherry
	<i>Prunus spinosa</i> L.	blackthorn
Salicaceae	<i>Populus</i> sp.	poplar
	<i>Salix</i> sp.	willow
Ulmaceae	<i>Ulmus</i> sp.	elm

TABLE 77: The villa; species identified in waterlogged contexts.

sections were examined using a transmitted light microscope at magnifications up to $\times 400$. The anatomical structure was matched to authenticated, modern reference material.

It is not usually possible to identify wood to species level using anatomical methods, and in some instances even generic certainty poses problems. For instance, in the family Rosaceae the closely related members of the subfamily Pomoideae (*Crataegus*, *Malus*, *Pyrus* and *Sorbus*) are anatomically indistinguishable, and similarly *Salix* and *Populus*, the closely related members of the Salicaceae.

The Romans are known to have introduced some exotic species including *Castanea* (sweet chestnut) and *Juglans* (walnut). Records indicate that some cultivated woody species such as *Prunus domestica* (plum) have been grown in Britain since the Iron Age (Godwin 1956), and it is worth noting that a plum stone was found at Bancroft. However, most of the exotic species now growing in Britain, some of which have related species native to this country, were not introduced until some time after the fifteenth century, and it can be assumed that most of the wood associated with Roman sites was from locally-grown native stock.

Results

Taking the assemblage as a whole, the species identified are shown in Table 77. Comment on the properties and use of these species, as well as detailed information resulting from this study of the waterlogged material, has been retained in the site archive. What follows is a summary of the material in each context group.

Gully 1039: Context 1040

From this feature, the lower end of a willow/poplar stake was recovered. The stake had been cut to a point. It was made from a fast-grown pole about 50 mm dia., with eight annual rings. The bark was still *in situ*.

The age, diameter and species of wood selected to make this stake was very similar to the remnants of the stakes from Gully 1140 in the bed of the artificial lake/pond (below). While this may have been merely coincidental, it did suggest a possible linkage in dating where the phasing of the earlier gully is currently in doubt.

Artificial Lake/Pond: Contexts 1122, 1123, 1133, 1142, 1146.

Several contexts in the fill of the lake area yielded water-logged wood, including a large quantity of roundwood, some with tool marks, and a few other fragments also with tool marks.

Context 1122 included roundwood (<10–25 mm dia.) from hazel, elder, cherry/blackthorn/plum, willow/poplar and the Pomoideae (hawthorn, apple, pear, whitebeam, rowan); some miscellaneous fragments of elder and ash heartwood; a piece of burnt oak sapwood and three pieces of wood with tool marks present, one piece of ash (heartwood) and two of oak (one heartwood, one sapwood).

Context 1123 included roundwood (<10–25 mm dia.), mostly in short, rod-like lengths, with annual rings from 1–11+ years. Willow/poplar was the predominant type, with hazel and elder present in smaller quantities. Some pieces were partially charred. Worked wood was represented by two pieces of oak heartwood with tool marks.

Context 1133 included roundwood (<10–>25 mm dia.) with annual rings from 1–19+ years. Willow/poplar and hazel were the commonest genera, but oak, elder and cherry/blackthorn were also present. Some pieces of hazel and oak presented tool marks.

Two short rod-like pieces of cherry/blackthorn with abundant tool marks had been cut or sawn almost into wedges, perhaps the waste from trimming the ends of a longer piece of rod. Interestingly, the annual rings ran across not around the transverse surface, indicating that they had been cut from a much wider piece of timber than first appearances (of roundwood) suggested.

Contexts 1142 and 1146 included a quantity of roundwood (<10–50 mm dia.) with annual rings showing 2–28 years. Willow/poplar predominated over oak and the Pomoideae group (hawthorn, apple, pear, whitebeam, rowan). The wider fragments (mainly willow/poplar) with a diameter of almost 50 mm were all from fast-grown stems with up to five wide annual rings, whereas the two fragments under 10 mm dia., also willow/poplar, were from much slower growing specimens, one with as many as six annual growth rings. Many of these fragments, including one of the narrowest, showed tool marks.

Some of this material may represent driftwood which fell into the silting lake/pond through natural causes. However, the abundance of woody material with tool marks suggested that some other activity was carried out on the bank, or that the

area was used to deposit this type of refuse. The presence of charred fragments suggested some waste material. Willow/poplar predominated over the other genera, and if this material represented willow, which thrives in damp or boggy areas, it may well have been growing close to the lake, which was abandoned and well silted up by the fourth century, and was perhaps regularly cut for some particular use, thus allowing trimmings to fall into the water.

Large quantities of roundwood would have been required for the rebuilding and refurbishment of the main house and environs in the fourth century. Willow is particularly suitable for hurdle making and basketry, and was evidently used for stakes and poles. This area close to the lake may have been a source of the raw material for the production of such artefacts.

Ditch 1104: Contexts 1105, 1196.

This ditch was situated to the south of the garden area, and the fill from these two contexts included several well-preserved artefacts in addition to roundwood and twiggy material. The roundwood in Context 1105 ranged in diameter from <10–25+ mm, with 1–13 annual growth rings. A wide range of genera were present, but hazel appeared to be the most common. Many of the fragments were partially charred, and some maple, hazel and oak showed tool marks.

A large quantity of twiggy debris included some slivers of wood. The narrow twiggy fragments derived from elder, oak, blackthorn, hazel, willow/poplar and the Pomoideae group (hawthorn, apple, pear, whitebeam, rowan), while the woody slivers had been cut from oak (heartwood), ash and hazel.

Worked wood included oak (heartwood and sapwood) and some miscellaneous pieces of oak, ash, hazel and *Prunus*. A long-handled spatula made from a member of the Pomoideae group and a turned knob of maple were also found (Fig. 187.404 and 405).

Context 1196 included a small quantity of hazel, ash, cherry/blackthorn, willow/poplar, elder and Pomoideae roundwood, <10–25 mm dia., with 1–7 annual growth rings, and a few miscellaneous pieces of hazel and oak.

Fragments from a bowl or plate, and four lozenge-shaped fragments with bevelled edges, all made from maple, were present (Fig. 107.407 and 408).

Gully 1140: Context 1141

Context 1141 included four short lengths of willow/poplar roundwood, 10–25 mm dia., with annual ring counts ranging from 7–11 years. Two pieces showed possible 'heels' at one end, typical of stems growing from coppiced or pollarded trees. A knobbly piece of Pomoideae with three annual rings was also present.

Also present were three wider pieces of willow/poplar roundwood, about 55 mm dia. One of these had been sharp-

ened to a point at one end and was probably the base of a stake, while one of the remaining two pieces also showed tool marks. These samples had wide, fast-growing annual rings which exceeded a total diameter of 50 mm in eight years, in contrast to the narrower roundwood fragments which had taken 7–11 years to reach a maximum diameter of 25 mm. The similarity in dimensions and growth patterns of the three wider pieces suggested that they may have originated from the same stake or have been growing and cut at the same time.

Ditch 1155: Context 1156

Context 1156 contained a few pieces of roundwood with diameters from <10–25+ mm, and 1–6 annual growth rings. The genera present included hazel, blackthorn/cherry and elder. A sample of elder presented a possible coppice 'heel', and a further piece (25+ mm dia.) had been slashed at one end with a sharp tool.

Ditch 1197: Context 1198

Context 1198 included a few fragments of roundwood, dia. 10–25 mm, with annual rings from 2+–4, from hazel, oak and elder. Pieces from the two former genera showed tool marks. Three miscellaneous pieces of oak heartwood and sapwood were also present, as was a small carved knob made from maple (Fig. 187.406).

Enclosure 1208: Contexts 1071, 1095, 1103, 1110.

The seeds recovered from contexts within the walled garden show strong evidence of cultivated vegetables and herbs, but very little woody vegetation apart from elder, hazel and blackberry. The vegetation was fairly open, although weedy in parts (p.579).

The sample from Context 1071 contained short lengths of roundwood. Four pieces were less than 10 mm dia., and included oak and hazel, the latter being partly charred. The remainder was approximately 25 mm+ dia., and mainly hazel, with annual ring counts ranging from 4+–12+. One rather knobbly piece of ?*Prunus* was also present. Several miscellaneous fragments of wood included maple, oak, elder and possibly *Prunus*.

Wood with evidence of tool marks included two lengths of elder stem, one 55 mm in dia., which had been cut diagonally to a point at one end, and a piece of hazel which had been 'squared'.

Wood from Context 1095 included a few roundwood fragments from 10–25 mm dia., and some miscellaneous fragments. Several of these pieces were in very poor condition. The genera present were willow/poplar, hazel, the Pomoideae, ash (heartwood), oak and elder.

Context 1103 contained a quantity of roundwood from <10–25+ mm dia., with 1–14 annual growth rings. Several of the fragments were partly charred. The genera present included

maple, hazel, ash, oak, the Pomoideae, cherry, blackthorn, plum, willow/poplar and elder. Some miscellaneous pieces included willow/poplar and fragments from a largish stem or branch of ash.

Context 1110 included roundwood from <10–25 mm in dia., with 1–20+ annual growth rings. The genera included hazel, ash, cherry, blackthorn, plum, willow/poplar and elm. A few miscellaneous pieces, some of which were partly charred, represented ash, oak, willow/poplar and the Pomoideae group. At least nine genera of woody plants were present in the fill of the enclosed garden. The garden was under cultivation during the second century, after which it was abandoned. Some species such as blackthorn, hawthorn and ash readily colonize cleared areas, and others, including elder, particularly thrive on the nitrogen-rich soils associated with cultivated land and derelict buildings. It is possible that a certain amount of woody growth sprang up within the garden during this late phase but it seems unlikely that all the genera present as woody material would have grown there; indeed, other environmental evidence suggests that this was not so.

It was apparent that some of the woody material had been brought into the area for some purpose. Although some of the fragments were partly charred, none showed evidence of tool marks or coppice 'heels', suggesting that they may have been gleanings or dead wood. The presence of elm is interesting, since this was the only area on the site from which it was identified.

Discussion

Woody Vegetation of the Environment

Wood from a minimum of nine genera (Table 77) was identified, indicating that a wide range of shrubby and arborescent species was growing in the vicinity. However, examination of the insect and other plant remains from the site suggested that the local environment in the valley bottom was mainly open, with sparse evidence of shrubs such as elder, hawthorn and blackthorn.

The wood examined included a large quantity of roundwood up to 50 mm dia., with some miscellaneous shaped pieces, some worked pieces of both sapwood and heartwood, and several artefacts, together with some apparent twiggy debris. Tool marks were present on the many samples of roundwood, and a large number of fragments were partially charred. This suggested that a large proportion of the woody material was used or prepared on the site, and in view of the paucity of local wood was probably brought in from a more wooded area.

Woody material from the second-century contexts included oak, hazel, elder, willow/poplar, and members of the Pomoideae group. A much larger quantity of waterlogged wood related to the fourth-century phases and added maple, ash, cherry/blackthorn and elm to the earlier list. These genera were all represented by roundwood and/or twiggy samples, while in addition there were fragments of heartwood from oak and ash, indicating that while shrubby or

stem/twiggy material was plentiful, trees of some maturity also grew in the vicinity, if not on the site. The maple wood used to make the artefacts would most probably also have been from a fairly large or mature tree. Oak, ash and maple may have formed a mixed woodland not far from the site, or have been growing as more isolated specimen trees. Roundwood from these larger trees was not as common as that from the shrubbier or smaller species such as hazel, elder, willow and the Pomoideae which perhaps grew on the site. Elm, a large tree particularly favouring the rich alluvial soils of meadows and floodplains, also grew in the vicinity, but the minimal woody remains suggested that it was either fairly rare or that the wood was not as desirable as that from the other species present.

The roundwood most commonly present was willow/poplar. The presence of possible coppice heels on some samples suggested that these were probably more likely to have been willow, since these coppice more successfully than poplar (Rackham 1990). Willow often grows in damp or boggy ground, and in this instance may have grown close to the stream or lake, particularly once the silting of the latter allowed the area to become boggy. However, the possibility of pollarded poplar cannot be ruled out.

The members of the Pomoideae represented on site would almost certainly have included hawthorn. This genus often forms a small tree, but depending on the habitat can be scrubby, and may have colonized the derelict land as scrub. Woody remains from the genus *Prunus* were also present. *P. spinosa* (blackthorn) is a large, shrubby species which like hawthorn rapidly colonizes open ground. A spine that could have derived from either hawthorn or blackthorn was found at the site (p.569). A fruit stone found in the vicinity of the enclosure was identified as *P. domestica* (plum), (Rackham, *op. cit.*) and it is possible that some of the *Prunus* wood may have come from the prunings of these trees if they were grown on site.

Hazel roundwood was more abundant than some other taxa, and may have grown close to the site in its shrubby form. A nut shell was identified from Enclosure 795 (Rackham, *op. cit.*). Hazel shrubs will only flower and produce fruit when growing in sunlit situations.

Elder, another shrubby species, is particularly prevalent on the nitrogen-rich soils associated with human habitation, and the plants frequently germinate from seeds dispersed by birds after eating the berries. Seeds were identified from the site (Rackham, *op. cit.*).

Wood from two species was notably absent. The stream could have provided a suitable habitat for *Alnus glutinosa* (alder) particularly once the ground became boggy. However, there was no evidence of its presence. The cone of the stone pine (*Pinus pinea*), an exotic species, was identified from Ditch 1104, and it has been suggested (Rackham, *op. cit.*) that this may have been either an import or from a tree grown as an ornamental in the formal garden. However, wood from this species was certainly absent from the material

identified from the site. This does not deny the possibility that the tree may have been grown at Bancroft, but may reflect the fact that pine trees were rarely pruned, and that this particular tree may have been of fair status and importance at the site and unlikely, therefore, to have been cut about or felled.

With the exception of elm, the woody species associated with the environment of Bancroft villa were consistent with those identified from the Roman site at Wavendon Gate (Williams *et al.*, forthcoming).

The Selection and use of Wood

While it seems most probable that a large proportion of the excavated wood had been brought into the site for a specific purpose there was little indication as to what this may have been. The roundwood ranged in diameter from <10 to 50 mm. Many fragments had marks showing that they had been cut from the parent plant with a sharp tool, and sometimes the lateral branches had been trimmed away. Twiggy fragments suggested the presence of brushwood. Some of this may have been the result of local clearance and tidying up of scrubby overgrowth in the vicinity. The presence of narrow twigs from large species such as oak in the face of evidence indicating the existence of an open, non-wooded environment suggested that this growth was either from saplings, possibly growing on the site, or that the material had been brought in as brushwood. The mixture of species identified from all contexts suggested that either species selection was not important, or that the general paucity of wood did not allow for selection. The wood may represent general debris from a number of activities.

In addition, slivers of wood from heartwood, some with tool marks present, and some worked fragments indicated that some type of activity took place. The many fragments of roundwood, chips and worked wood which had been partly burnt suggested clearance of rubbish following pruning, carpentry or some other activity. Some material may have been cut for fuel. Considerable supplies would have been necessary to maintain the residence and other on-site activities connected with farming, such as the corn-drier.

The pointed bases of several stakes were present. These were all approximately 50 mm in diameter. One from the Gully 1140 and one from Gully 1039 were willow/poplar, and one from the walled garden (Context 1071) was elder. The two former were made from fast grown poles with eight annual growth rings. The latter was in poor condition, and it was not possible to assess the number of rings.

Woodland Management

There is some evidence to suggest that coppicing or pollarding of some species was practised at Bancroft. The predominant species identified from the roundwood fragments included willow/poplar, elder and hazel, and possible coppice heels were observed on fragments of the two former genera. Many of the samples were short, rod-like lengths that may have originated from coppiced or pollarded wood. Tool

marks were particularly evident on roundwood samples of willow/poplar, hazel, elder and oak. Although the annual growth rings were counted for all roundwood samples, there were insufficient numbers of each species within any context to draw significant conclusions as to cyclical harvesting of the rods.

The rate of growth appeared rather mixed, with some samples arising from very fast-growing stems with wide annual rings, such as the willow/poplar roundwood from the fill of the lake (Context 1142) which grew to a diameter of 50 mm in five years, to moderately slow-growing stems as seen in the willow/poplar roundwood from Context 1146, which took six years to grow to <10 mm. To a certain extent this may reflect the prevalent climatic or edaphic conditions.

Many of the fast-growing Salicaceae stems appeared to have been cut early in the season after some spring growth had occurred, but only a small ratio of the total annual growth when compared to previous rings.

Records show that coppicing has been practised in Britain since the prehistoric period (Coles and Orme 1982). Willow, hazel, elder and oak coppice very successfully, although historically elder has not been as commonly coppiced as the other genera (Rackham 1990). However, elder is extremely fast-growing.

Conclusion

The wood identified from the villa indicated that a wide range of species was available in the neighbourhood, although the larger woodland trees, such as oak, ash, elm and maple were probably growing outside the immediate vicinity of the valley bottom, which appears to have supported an open and sparsely woody vegetation.

The high proportion of roundwood and woody slivers with tool marks suggested that some of the wood was used for on-site activities and was probably brought into the area for such purposes. Much of the wood was charred, suggesting the burning of waste material and/or the disposal of burnt wood fuel debris. The fragments of rods and poles suggest that woodland management in the form of coppicing and/or pollarding was practised at the site.

CHARCOAL FROM THE MAUSOLEUM

Caroline Cartwright

Introduction

Forty charcoal samples were submitted for identification. These comprised:

- Twenty-six from the late Bronze Age/early Iron Age roundhouse (500), taken from the fill of the postholes and ring-trenches, including a carbonised post-stump (570), and Pits 282 and 319, inside and outside the structure respectively.
- A single sample (583) from the contemporary metalled area (Hollow 340) to the north-east of the building.

Context	Weight(g)	Identification	Component
1. Roundhouse 500			
<u>Postholes:</u>			
289	5.0	<i>Quercus</i> sp. (oak)	twig
290	25.0	<i>Quercus</i> sp.	heartwood
295	44.0	<i>Quercus</i> sp.	heartwood
297	25.0	<i>Quercus</i> sp.	heartwood
306	4.0	<i>Quercus</i> sp.	twig
311	8.0	<i>Fraxinus</i> sp. (ash)	heartwood
312	3.5	<i>Quercus</i> sp.	twig
313	32.0	<i>Fraxinus</i> sp.	heartwood
314	28.0	<i>Quercus</i> sp.	heartwood
317a	48.0	<i>Quercus</i> sp.	heartwood
317b	2.0	<i>Corylus</i> sp. (hazel)	twig
318	9.0	<i>Quercus</i> sp.	heartwood
371	350.0	<i>Quercus</i> sp.	heartwood
379	42.0	<i>Quercus</i> sp.	heartwood
380	175.0	<i>Quercus</i> sp.	heartwood
390	4.0	<i>Corylus</i> sp.	roundwood
396	11.0	<i>Quercus</i> sp.	heartwood
511	5.0	<i>Corylus</i> sp.	twig
517	14.0	<i>Corylus</i> sp.	roundwood
538	52.0	<i>Quercus</i> sp.	heartwood
539a	1.2	<i>Corylus</i> sp.	twig
539b	15.0	<i>Quercus</i> sp.	heartwood
570	870.0	<i>Fraxinus</i> sp.	heartwood
<u>Ring trenches:</u>			
41	45.0	<i>Quercus</i> sp.	heartwood
532	2.5	<i>Quercus</i> sp.	twig
581	5.0	<i>Quercus</i> sp.	heartwood
<u>Pits:</u>			
282	12.0	<i>Corylus</i> sp.	twig
319	2.3	<i>Prunus</i> sp. (plum, etc)	twig
2. Hollow 340:			
583	0.5	<i>Quercus</i> sp.	heartwood
3. Iron Age contexts			
Rh 334	5.0	<i>Quercus</i> sp.	heartwood
Rh 347	1.8	<i>Quercus</i> sp.	twig
Rh 620	1.5	<i>Prunus</i> sp.	twig
Ditch 99	4.0	<i>Quercus</i> sp.	heartwood
Pit 757	12.0	<i>Quercus</i> sp.	twig
4. 'Belgic' contexts			
Ditch 591	7.0	<i>Salix/Populus</i> (willow/poplar)	twig
Pit 607	2.9	<i>Prunus</i> sp.	twig
5. Enclosure Ditch 60, Section 877			
878	4.0	<i>Quercus</i> sp.	twig
879	5.0	<i>Corylus</i> sp.	roundwood
884	3.0	<i>Fraxinus</i> sp.	heartwood
890	0.5	<i>Quercus</i> sp.	twig
6. Temple-mausoleum burial chamber			
63	0.5	<i>Quercus</i> sp.	twig
69	3.0	<i>Prunus</i> sp.	twig

TABLE 78: Catalogue of identified charcoal samples from the mausoleum site

- c) Five from Iron Age contexts, including three from Roundhouse ditches 334, 347 and 620, one from Ditch 99 and one from Pit 757.
- d) Two from the late Iron Age/Belgic Ditch 591 and Pit 607.
- e) Four from Section 877 (Fig. 38) of the mid to late first-century Enclosure Ditch 60.
- f) Two from the fill of the burial chamber of the temple-mausoleum.

A detailed catalogue of the identification results is given in Table 78.

Results

Late Bronze Early Iron Age

The charcoal fragments recovered from post-hole and ring-trench fill contexts associated with the late Bronze Age/early Iron Age roundhouse have been identified as largely *Quercus* sp. (oak), with some *Fraxinus* sp. (ash) and *Corylus* sp. (hazel). It seems probable that oak provided the main structural timber for the posts, as many of the larger charcoal fragments derive from heartwood. Ash appears to supplement the structural use of oak, but the role of hazel is less clear. The small quantity and size of the hazel charcoal fragments may be accounted for either as wedging or supporting material for main post timbers, or alternatively as simply representing general post-hole and ring-trench debris, possibly related to hedging or fencing. Posthole 570 contained very large heartwood fragments of a carbonised post, identified as ash.

Outside the house a shallow pit (319) contained a small amount of *Prunus* charcoal twig fragments.

Iron Age

The fills of the mid to late Iron Age penannular drainage gullies, ditch and pit contexts produced small amounts of mainly oak twig and heartwood charcoal fragments, and a small twig of *Prunus*. Such low quantities and tiny fragments afford little scope for conclusive interpretation. All the timber represented can be used for artefactual and constructional purposes as well as fuel.

Late Iron Age and Roman

Similar constraints on interpretation of the charcoal fragments from late Iron Age and early and late Roman contexts apply. Oak is represented consistently, and ash, hazel, willow/poplar and *Prunus* occur also. As the overall quantity is again low, attempts to characterise artefactual, structural and hearth material from the archaeological contexts concerned would be hazardous.

Author's note: This report was prepared soon after the completion of the 1985 excavation, on a relatively small quantity of hand-collected charcoal. During the flotation of soil samples taken for the collection of carbonised seed remains (p.562), a significant quantity of small charcoal fragments were collected. These were identified, and the results are given in Table 65. This has substan-

tially increased the number of wood taxa represented on the site. In particular, the types of wood found in association with Building 500 have doubled, with numerous fragments of *Alnus* sp., *Betula* sp. and *Pomoideae* sp., and occasional fragments of *Salix* sp. and *Tritia* sp. all being represented.

RADIOCARBON DATING

The Mausoleum

In 1990 four samples were submitted to the Queens University, Belfast, following identification of the samples by the relevant specialists. UB-3233 and 3234 were both from heartwood, of oak and ash respectively. The latter sample derived from the charred stump of one of the upright posts of Building 500. Therefore it is likely that the calibrated dates should, if anything, be slightly older than the construction date of the building. Curiously this is at odds with the ceramic evidence which, whilst consisting of many unusual vessel types, invites close comparison with later Bronze Age and earlier Iron Age assemblages from southern England. The significance of this apparent anomaly has been discussed more fully in the pottery report (p.387). Following a detailed assessment of the incidence and distribution of the earliest diagnostic pottery sherds from the building, it is thought that the C-14 determinations which suggest a fifth or sixth-century date for the building are correct, and that the early pottery sherds are mainly residual, derived from an earlier midden (p.33).

UB-3235 and UB-3236 were obtained from the skeletal remains of two of the adult inhumation burials in the line of eight graves (G1-G8). The calibrated dates are considered to be a very accurate reflection of the dates of burial. Whilst there is no independent dating evidence, it is possible that the line of eight burials slightly overlaps with the shrine, which is of mid to late fourth-century date, and which from the coin evidence may have continued in use into the first quarter of the fifth century. On balance, it is likely that the graves are of early fifth-century date, and represent burials of some of the final inhabitants of the villa before its ultimate desertion.

The Villa

In 1992 two further bone samples, UB-3586 and UB-3642, were submitted to the Queen's University, Belfast. Both derived from the remains of the two 'skeletons' found lying on the mosaic in Room 1, Building 1 during the 1974 excavations (Green 1975, 4-5). Since the *terminus ante quem* allocated to the mosaic on stylistic grounds is c.350 (p.252), and the building appears to have remained in use into the early fifth century (p.205), it was assumed that the 'skeletons' were of fifth-century or later date. However, the C-14 determinations have demonstrated that the individuals died before the end of the fourth century. Consequently, the bones must have been redeposited from earlier burials elsewhere (p.561).

<i>Lab.no.</i>	<i>Context</i>	<i>Material</i>	<i>Age BP</i>	<i>Calibrated range</i>	
				<i>1 Sigma</i>	<i>2 Sigma</i>
UB-3233	Building 500 (Posthole 380)	Charcoal	2339±42	405–391BC	513–375BC
UB-3234	Building 500 (Posthole 570)	Charcoal	2383±42	513–399BC	757–392BC
UB-3235	Grave 2	Human bone	1656±29	349–418AD	265–433AD
UB-3236	Grave 4	Human bone	1606±34	410–447AD	382–542AD
UB-3586	Individual 1 (Villa, Bldg 1)	Human bone	1739±41	238–345AD	149–403AD
UB-3642	Individual 2 (Villa, Bldg 1)	Human bone	1798±51	134–318AD	90–350AD

Calibrated age ranges at 1 and 2 sigma attained from intercepts using Method A of Stuiver and Pearson (1986).

TABLE 79: Summary of C-14 determinations from both sites.

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APPENDICES

APPENDIX 1: Catalogue of the architectural stonework. (Illustrated pieces Figs 117–122)

CATNO	SITE	CONTEXT	SF-NO	TYPE	MAT	L	B	Ht	Dia	DESCRIPTION
1	M	160	57	capital	A	–	–	–	260	85+ ht Abacus. Mouldings: pulvinus–cavetto–multiple small mouldings.
2	M	160	59	capital	B	–	–	–	290	Mouldings:pulvinus–cavetto–torus–cavetto.
3	M	160	58	capital	A	–	–	–	254	100+ abacus. Mouldings: pulvinus–lip/cavetto+. Joins 4.
4	M	160	60	capital	A	–	–	–	254	Joins 3. Abacus 135+ deep.
5	V	899	768	capital	A	–	–	485	168	Abacus 100 × 268 × 268. Mouldings: cyma–cyma reversa–lip–cavetto, necking ring. 42 mm sq. lathe pocket at angle from top. Fragmented.
6	M	94/5	139	capital	D?	–	–	268	185	Abacus 60 × 280 × 280. Mouldings: cyma–bead–cyma–bead–band–bead–?cyma. 48 mm sq. lathe pocket. Hard crystalline stone, Towcester type.
7	M	Grave 2	65	capital	A	–	–	270	164	Lowest part of capital mouldings: ?cavetto–cyma, on shaft with large entasis. Neck ring. Tapered lathe pocket.
8	M	Grave 2	66	capital	A	–	–	295+	315	Grooved and chevron decorated abacus. Bulbous capital with girth annulets, on flared cavetto. Lightly fire stained.
9	M	Grave 1	52	coping	B	580	86	–	–	Three pieces. Smoothed and rounded top, coarsely axe dressed underside. End vertically tooled. Broken faces have traces of mortar from ?secondary use.
10	M	Grave 1	54	coping	A	510	273	80	–	Smoothed top with rounded edges, slightly sloped. Underside chisel–dressed. See also 38.
11	M	Grave 1	53	coping	A/B	150	230	58+	–	Similar to 10. Thickness incomplete. Transverse rectangular upstand with chamfered corners, top swelling to rough mouldings and ?chevron decoration. Some fire staining. Joins 12.
12	M	Grave 1	79	coping	A	170	?	55–75	–	Joins 11. Base of second broken chamfered upstand, 65 mm away from first. Joining faces have been burned post–breaking.
13	V	unstrat.	–	?finial	B	150	140	95	–	Small stone with turning for two small arches. ‘V’–incised lines. Previously published in RMK.
14	M	Grave 1	56	coping	A	250	240	60	–	Radiused coping with cramp socket and channel to one finished end, dressed with 50 mm chisel. Underside has scored line 57 mm from one edge.
15	M	219	92	?coping	D	–	425	105	–	Roughly chamfered stone with radiused top, end face herringbone tooled using 25 mm chisel. Unusual hard crystalline stone.
16	M	219	87	division	B	188	71	300	–	Edge ogee moulded, using 2.5 mm wide saw under ogee. One finished end. Sides chiselled and rubbed smooth approx. 150 mm below thickened top. Lower part roughly worked.
17	M	219	88	division	B	150	80	305	–	Edge moulded. Thickened top and sides finished as 16. The 305 mm depth is full original depth.
18	M	219	89	division	B	–	80	127+	–	Edge moulding and thickened top as 17.
19	V	636	426	division	B	200	61–74	300	–	Similar. Tapers back to 47 mm thick. Saw cut back, ?secondary, and some mortar on top.
20	M	219	86	cladding	A	230	415	–	–	Moulded top, cavetto–lip–pulvinus flat 100 mm deep. Rear side has rebate and chamfer for full height of slab, set at slight angle to mouldings. Other edge burned.
21	M	219	98	cladding	A	260	320	–	–	Mouldings as last, but flat field not differentiated from rougher work below. No chamfer at rear. Similar to 45.
22	V	266	–	lining	A	130	40+	278	±2.5m	Concave curve on plan. Mouldings cavetto–lip–small torus and flat field, axed below. Mouldings finely finished. Diameter very approximately estimated.
23	V	266	–	lining	?	45	54	225	–	Curved. Similarly moulded, but cavetto shallow, and with groove at top.
24	V	132	–	lining	A	105	52	95+	–	Curved. Similar to 22 and 23, cavetto more vertical.
25	M	94/95	138	lining	A	300	30+	275	–	Slightly curved, with one finished end. Inner face scribed as a gaming board. See description and drawing in main report (Fig. 190.418).
26	M	219	82	bead	B	185	300	–	–	Three–quarter bead moulding on 45° plane on top edge of stone between v–quirks leaving small upstand. Back of stone curved. One end worked flat.

APPENDIX 1: (continued)

CAT NO	SITE	CONTEXT	SF-NO	TYPE	MAT	L	B	Ht	Dia	DESCRIPTION
27	M	93	105	bead	B	140	185	—	—	Curved on plan. Mouldings as last. Inner face finely chiselled and rubbed to finish. Face finished 30 mm below lower quirk.
28	V	—	—	bead	B	—	—	—	—	Fragment of top moulding of similar piece.
29	M	93	112	bead	A	90	38+	142	—	Similar. Face finished 50 mm below lower quirk.
30	M	93	112	bead	A	34	80	—	—	Similar. Bead squarish. Face finished 50 mm below lower quirk.
31	M	219	129	modillion	B	120	170	60	—	Simple ogee console bracket within continuous hollow moulding.
32	M	160	61	block	A	27	240+	360+	—	Block, drilled to 110 mm with 19 mm bit, the upper part enlarged with a second drill to 26 mm. One side has 16 mm chisel dressings. Adjacent side smoothed, but secondary deep pick marks to provide for key.
33	M	219	84	block	B	280	190	82	—	Block roughly chamfered, the face worked back by 5 mm by 4 mm saw cut across corner, and top face inscribed with two lines approximately at right angles.
34	M	219	93	block	A-C	270	90	—	—	?Plinth with 60° arris chamfer one edge, and small step. Top faced, finished 30 mm back from step. Poorly finished. Axe dressed on under side. 19 mm drilling 70 mm from one end face.
35	M	219	130	quadrant	C	125	—	—	—	Quadrant moulding with chamfered fillet.
36	V	899	—	quadrant	—	130	—	—	—	?Quadrant moulding of rough segmental profile, flat top.
37	V	—	—	curved piece	—	220	—	—	—	?Quadrant or fragment of shaft.

The following pieces are not illustrated, as they are adequately represented in drawn specimens, or are not suitable for illustration:

38	M	Grave 1	55	coping	A/B	530	280	—	—	Smooth weathered top. No upstands. Re-used as footstone in the grave. Underside has been coarsely dressed with a 42 mm blade chisel or axe in 3 bands. Relates to 10-12, but without upstands.
39	V	636	426	?division	B	143	80/68	195+	—	Finished 5 faces, probably part of a division slab. Narrow.
40	V	636	426	division	B	100	86/72	178+	—	Finished 4 faces. Tapered in 2 directions. Bottom part of division slab.
41	M	219	101	division	B	200	200+	78	—	Tapered bottom part of a division slab.
42	M	93	106	division	B	200	140	60/53	—	Two faces finished. Tapered thickness. Probably part of division slab.
43	M	93	108	?division	B	—	—	—	—	Bottom section of tapered stone of division slab type.
44	M	219	90	cladding	A	244	90max	130+	—	Moulding: cavetto-lip-pulvinus.
45	M	219	91	cladding	A	100	76max	—	—	Moulding: cavetto-lip-pulvinus. No finished ends.
46	M	219	80	cladding	—	165	—	—	—	Moulding: cavetto-lip-pulvinus, the pulvinus gouged with spoon chisel.
47	M	93	112	bead	A	70	37	195	—	—
48	M	93	112	bead	A	130	37	140	—	Finished 2 flat faces. Relates to 46.
49	M	93	109	?bead	B	200+	250	42	—	One square unmoulded edge, probably part of a bead moulding.
50	M	93	104	block	C	176+	95	—	—	Stone worked to finish on 2 adjoining faces and one end. Saw cut on long face.
51	M	93	107	?block	A	130	130	55	—	Heavy axe cuts one face, finer working one edge.
52	M	219	81	block	B	1350	130	90	—	Block worked on top, bottom and two adjoining faces.
53	M	219	85	?block	C	172	155	60	—	Square cut, 5 worked faces. Slight taper, possibly bottom of a division slab.
54	M	219	99	block	A	550	180	155	—	Worked smooth one face, 1 long side has slight lip to saw cut.
55	M	219	102	block	A	450	350	250	—	Block with 8 mm blade saw cut penetrating 85 mm, then apparently abandoned.
56	M	219	95	block	C	—	—	70	—	Finished two flat faces and 2 adjacent sides. Vertical dressing.
57	M	219	100	stone	A	440	340	80	—	One sawn end only.
58	M	93	110	fragment	?	—	—	—	—	Unworked piece, but one small smoothed facet.
59	M	93	83	3xfragments	A	110	80	—	—	Finished on one face only. Second and third pieces rubbed and end chiselled.
60	M	93	103	voussoirtufa	—	240+	98+	—	—	Faces at 88.3° angle to each other.
61	V	218	—	?statuary	A	—	—	—	—	Spalled face of gently rounded work, possibly part of a carved subject. From a depression at the west end of the ornamental pond.

Key:

M Mausoleum site
 V Villa site

SF-NO Site small-find number
 Mat Stone type (p.236)

All dimensions are in millimetres unless otherwise stated.

APPENDIX 2: The wallplaster.

A. Buildings with marine wallpaintings:

Site	Date
Bancroft, Milton Keynes	early second cent. (Bldg 7, Room 2) late third cent. (Bldg 1, Room 4) mid fourth cent. (ex-Bldg 1, Room 17?)
High Wycombe, Bucks.	late second cent.
St Albans, Herts.	mid second to early third cent.
Southwell, Notts.	late second to early third cent.
Winterton, Lincs.	late second to early third cent.
Sparsholt, Hants.	third to fourth cent.
Witcombe, Gloucs.	third to fourth cent.
Lullingstone, Kent	fourth cent.

B. Romano-British mosaics with dolphins and fish:

(based on original list compiled by David Johnson).

Site	Room	Room function	No. beasts	Comments
Bath, Avon	?	domestic	1	with sea beasts
Bignor, Sussex	26	domestic (hypocaust)	multiple	in panels
	33	?	multiple	in panels
Bramdean, Hants	?	reception	multiple	2 doubles in lunettes
Brislington, Humbs.	2	main room	2	in panels
Bromham, Wilts	?	?	multiple	marine scene
Caerwent (a), Gwent	3	-	multiple	frieze and fish
Caerwent (b), XXVII	13	-	4	in panels with an urn
Chester, St Michaels Arcade	?	-	2	central motifs
Cirencester, Gloucs:				
i) Ashcroft Rd	?	baths	2	flanking Neptune
ii) Dyer St	?	-	multiple	marine scene
iii) Ins. VI, 4	?	main room	2	in panels
Colchester, Ins. 40	?	-	4?	in panels
Combe End, Gloucs.	?	found in 1787!	?many	fish and dolphins
Combley, I. of Wight	5	baths	2	in panel
Dewlish, Dorset	-	baths, changing room	1	marine scene
	11	reception/dining	2	springing from urn
Dorchester (Fordington)	?	reception/dining	2	in apse, with fish framing sea god
Downton, Wilts.	1	-	2	urn handles
Fifehead Neville, Dorset	-	floor 1	multiple	2 friezes with urn
Fishbourne, Sussex	3	-	1	boy on a dolphin
	5	-	8	4 pairs flanking urns
	19	-	4	2 pairs flanking urns
	56	-	4	2 pairs
Frampton, Dorset	A	-	multiple	with sea beasts
	B	main reception/dining	26	frieze and dolphins
Gloucester	?	-	?	fish and dolphins
Great Tew, Oxon.	-	baths	2	flanking urn
Great Witcombe, Gloucs.	6	baths	3	marine scene
Hemsworth, Dorset	-	baths	multiple	frieze in apse
High Wycombe, Bucks.	?	reception	multiple	frieze border
Keynsham, Avon	L	-	2	flanking urn
Kingscote, Gloucs.	1	-	2 pairs?	in panel
Leicester, Norfolk St	-	-	2	in apse flanking shell
LLanfrynach, Brecon	4	-	?	fish and dolphins
Lufton, Somerset	14	octagonal building	none	but several fish
Littlecote, Wilts.	?	-	2	flanking urn
Lullingstone, Kent	?	reception	4	around Bellerophon
Lydney, Gloucs.	LXIII	temple	multiple	frieze
Nunney, Somerset (a)	?	-	1	in semicircle, assoc. with urns in panels and Orpheus
Nunney, Somerset (b)	?	-	2	In centre panel, + panel of fish
Rudston, Yorks.	-	-	3	of 6? in marine scene
St Albans, Herts:				
i) Insula IV, 10	9	-	2	flanking urns
ii) Insula XXIII, 3	9	-	2	flanking urns
Silchester, Insula XXIII	18	-	2	in panel (now lost)
Winchester, Minster St	-	-	6?	in panels (NB body curled)
Withington, Gloucs.	?	main room	{2 4	with Neptune in adjacent panels
Wynford Eagle, Dorset	?	-	4	in panels

APPENDIX 3: The villa coin catalogue

(i) Coins from the 1973–78 excavations

(Identified by Dr C.E. King)

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
1	Tasciovanus	Bull and crescent	Bronze	Mack 174	e.1st.c	–	15	1	23
2	Illegible	Illegible	Sest.	–	1st/2nd	–	29	163	437
3	Illegible	Illegible	As/Dup	–	2nd c.	–	17	161	463
4	Philip I	PM TRP III COS II PP	Ant.	–	244–49	Rome	22	63	1
5	Claudius II	FELIC TEMP...	Ant.	–	268–70	–	22	117	35
6	Claudius II	PAX AVG	Ant.	–	268–70	–	19	14	107
7	Barb.rad.:DIVO CLAUDIO CONSECRATIO	eagle	–	–	270–84	–	17	156	437
8	Barb.rad.:Claudius II	Illegible	–	–	270–84	–	15	148	425
9	Aurelian	CONCORDIA AVG	Ant.	–	270–74	–	21	26	213
10	Postumus	SALVS PROVINCIARVM	Ant.	RIC5,2,87	260–68	–	22	172	1
11	Victorinus	Illegible	Ant.	–	268–70	–	17	168	437
12	Barb.rad.:Tetricus I	Illegible	–	–	270–84	–	14	137	40
13	Barb.rad.:Tetricus I	Illegible	–	–	270–84	–	16	25	238
14	Barb.rad.:Tetricus I	Illegible	–	–	270–84	–	10	146	425
15	Barb.rad.:Tetricus I	Illegible	–	–	270–84	–	15	36	314
16	Barb.rad.:Tetricus I	Illegible	–	–	270–84	–	18	102	30
17	Barb.radiate:Illeg.	Illegible	–	–	late 3rd	–	16	153	433
18	Barb.radiate:Illeg.	Illegible	–	–	late 3rd	–	frag	89	23
19	Illegible	–	Ant.	–	late 3rd	–	frag	31	1
20	Barb. radiate	Illegible	–	–	late 3rd	–	15	112	30
21	Barb. radiate	Illegible	–	–	late 3rd	–	18	22	221
22	Barb. radiate	Illegible	–	–	late 3rd	–	14	109	30
23	Barb. radiate	Illegible	–	–	late 3rd	–	16	125	23
24	Constantine I	SOLI INVICTO COMITI	Fol.	RIC7,40	313–18	Trier	20	62	358
25	Crispus	VIRTVS EXERCIT, VOT/XX	Fol.	RIC7,194	318–20	London	19	19	141
26	Constantine II	VIRTVS EXERCIT, VOT/XX	Fol.	RIC7,265	318–20	Trier	18	44	359
27	Illegible	VIRTVS EXERCIT, VOT/XX	Fol.	–	318–20	–	19	35	281
28	Constantine II	VIRTVS EXERCIT, VOT/XX	Fol.	–	318–20	–	20	132	1
29	Constantine II	VIRTVS EXERCIT, VOT/XX (perf)	Fol.	–	318–20	–	18	17	148
30	Constantine II	BEAT TRANQVLITAS, VOT/IS/XX	Fol.	RIC7,236	320–25	London	19	51	364
31	Constantine II	BEAT TRANQVLITAS, VOT/IS/XX	Fol.	RIC7,237	320–25	London	19	52	364
32	Constantine II	BEAT TRANQVLITAS, VOT/IS/XX	Fol.	RIC7,237	320–25	London	19	55	366
33	Crispus	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	RIC7,347	320–25	Trier	20	34	281
34	Constantine I	SARMATIA DEVICTA	Fol.	RIC7,429	320–25	Trier	20	54	366
35	Constantine I	DN CONSTANTINI AVG, VOT/XX	Fol.	RIC7,237	320–25	Rome	19	49	364
36	Constantine I	DN CONSTANTINI MAX AVG	Fol.	RIC7,148	320–25	Siscia	20	61	358
37	Constantine II	CAESARVM NOSTRORVM, VOT/V	Fol.	RIC7,164	320–25	Siscia	19	266	1
38	Crispus	CAESARVM NOSTRORVM, VOT/XX	Fol.	RIC7,440	320–25	Trier	19	104	30
39	Constantine I	PROVIDENTIAE AVGG	Fol.	RIC7,504	325–30	Trier	20	280	559
40	Constantine I	PROVIDENTIAE AVGG	Fol.	RIC7,461	325–30	Trier	20	53	364
41	Constantine I	PROVIDENTIAE AVGG	Fol.	RIC7,504	325–30	Trier	20	103	30
42	Constantine II	PROVIDENTIAE CAESS	Fol.	RIC7,40	325–30	Arles	19	46	360
43	Constantine II	PROVIDENTIAE CAESS	Fol.	RIC7,464	325–30	Trier	19	12	122
44	Constantine II	PROVIDENTIAE CAESS	Fol.	RIC7,311	325–30	Arles	20	164	458
45	Fausta	SALVS REIPUBLICAE	Fol.	RIC7,459	325–30	Trier	24	50	364
46	Constantine I	GLORIA EXERCITVS, 2 standards	Fol.	RIC7,525	330–35	Trier	17	68	425
47	Constantine I	GLORIA EXERCITVS, 2 standards	Fol.	RIC7,526	330–35	Trier	16	29	243
48	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	RIC7,527	330–35	Trier	17	278	515
49	Constantine I	GLORIA EXERCITVS, 2 standards	Fol.	RIC7,236	330–35	Lyons	16	126	23
50	Constantius II	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	Lyons	17	57	380
51	Constantius II	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	Arles	17	66	425
52	Constantine I	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	Arles	18	128	23
53	Constantine I	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	Arles	17	98	30
54	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	LRBCI,856	330–35	Thessa'ika	18	3	61
55	Constantine II?	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	–	17	265	716
56	H. of Constantine	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	–	16	87	23
57	H. of Constantine	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	–	16	123	35
58	H. of Constantine	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	–	16	59	408
59	H. of Constantine	GLORIA EXERCITVS, 2 standards	Fol.	–	330–35	–	frag	85	23
60	Constantine II	GLORIA EXERCITVS, 2 standards	<i>Irreg.</i>	–	335–48	As Trier	16	43	359
61	Constantine I?	GLORIA EXERCITVS, 2 standards	<i>Irreg.</i>	–	335–48	As Trier	13	74	23
62	Constantine I	GLORIA EXERCITVS, 2 standards	<i>Irreg.</i>	–	335–48	As Lyons	13	176	1

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
63	H. of Constantine	GLORIA EXERCITUS,2 standards	<i>Irreg.</i>	—	335–48	—	14	120	35
64	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,523	330–35	Trier	17	141	425
65	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,530	330–35	Trier	16	67	425
66	CONSTANTINOPOLIS	Victory on prow	Fol.	—	330–35	—	17	271	535
67	CONSTANTINOPOLIS	Victory on prow	Fol.	—	330–35	—	15	177	529
68	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	335–48	As Trier	12	135	1
69	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	335–48	As Lyons	12	20	143
70	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	335–48	As Lyons	11	86	23
71	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	335–48	As Lyons	14	268	716
72	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	335–48	—	9	281	590
73	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	335–48	—	14	274	1
74	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	335–48	—	16	101	30
75	VRBS ROMA	Wolf and twins	Fol.	RIC7,542	330–35	Trier	17	277	559
76	VRBS ROMA	Wolf and twins	Fol.	RIC7,542	330–35	Trier	18	5	58
77	VRBS ROMA	Wolf and twins	Fol.	RIC7,553	330–35	Trier	16	258	546
78	VRBS ROMA	Wolf and twins	Fol.	RIC7,553	330–35	Trier	16	76	23
79	VRBS ROMA	Wolf and twins	Fol.	RIC7,553	330–35	Trier	16	65	425
80	VRBS ROMA	Wolf and twins	Fol.	RIC7,522	330–35	Trier	16	138	58
81	VRBS ROMA	Wolf and twins	Fol.	RIC7,522	330–35	Trier	16	69	546
82	VRBS ROMA	Wolf and twins	Fol.	—	330–35	Lyons	17	72	23
83	VRBS ROMA	Wolf and twins	Fol.	—	330–35	—	18	40	319
84	VRBS ROMA	Wolf and twins	Fol.	—	330–35	—	16	39	313
85	VRBS ROMA	Wolf and twins	Fol.	—	330–35	—	frag	48	364
86	VRBS ROMA	Wolf and twins	Fol.	—	330–35	—	16	142	404
87	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	—	335–48	—	9	262	710
88	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	—	335–48	—	12	170	497
89	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	—	335–48	—	12	15	147
90	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	—	335–48	—	13	24	205
91	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	—	335–48	—	13	73	23
92	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	—	335–48	As Trier	12	108	30
93	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	—	335–48	As Lyons?	13	260	546
94	VRBS ROMA?	Wolf and twins?	<i>Irreg.</i>	—	335–48	—	13	94	23
95	Constantine II	GLORIA EXERCITVS,1 standard	Fol.	LRBCII,107	335–41	Trier	15	282	529
96	Constans	GLORIA EXERCITVS,1 standard	Fol.	LRBCII,131	335–41	Trier	16	259	546
97	Constantine I	GLORIA EXERCITVS,1 standard	Fol.	—	335–41	Trier	16	45	359
98	H. of Constantine	GLORIA EXERCITVS,1 standard	Fol.	—	335–41	Trier	16	38	314
99	H. of Constantine	GLORIA EXERCITVS,1 standard	Fol.	—	335–41	Trier	14	158	433
100	Constantius II	GLORIA EXERCITVS,1 standard	Fol.	—	335–41	Trier	16	130	35
101	H. of Constantine	GLORIA EXERCITVS,1 standard	Fol.	—	335–41	Trier	14	100	30
102	Constans	GLORIA EXERCITVS,1 standard	Fol.	—	335–41	Trier	14	160	463
103	Constantine II	GLORIA EXERCITVS,1 standard	Fol.	RIC8,395	335–41	Arles	15	257	547
104	H. of Constantine	GLORIA EXERCITVS,1 standard	Fol.	—	335–41	—	15	139	383
105	Constantine II	GLORIA EXERCITVS,1 standard	Fol.	—	335–41	—	14	121	35
106	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	As Trier	12	119	35
107	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	As Trier	11	99	30
108	Constantine II	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	As Trier	14	133	35
109	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	As Trier	12	276	585
110	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	As Trier	16	159	433
111	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	—	15	124	23
112	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	—	13	113	40
113	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	—	13	13	115
114	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	—	14	58	408
115	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	—	12	83	23
116	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	—	12	27	188
117	H. of Constantine	GLORIA EXERCITVS,1 standard	<i>Irreg.</i>	—	335–48	—	13	90	23
118	Theodora	PIETAS ROMANA	Fol.	LRBCII,120	337–41	Trier	14	166	495
119	Helena	PAX PVBLICA	Fol.	LRBCII,112	337–41	Trier	16	275	585
120	Helena	PAX PVBLICA	<i>Irreg.</i>	—	337–48	As Trier	11	136	40
121	Constantine I	Quadrige (commemorative)	Fol.	LRBCII,245	337–41	Lyons	14	147	433
122	POP ROMANVS	Star in wreath	Fol.	LRBCII,1067	337–41	Const'ople	12	144	425
123	Constans	VICTORIAE DD AVGG Q NN	Fol.	LRBCII,140a	341–46	Trier	15	93	23
124	Constans	VICTORIAE DD AVGG Q NN	Fol.	LRBCII,155	341–46	Trier	15	114	23
125	Constans	VICTORIAE DD AVGG Q NN	Fol.	LRBCII,160	341–46	Trier	15	155	439
126	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	341–46	Trier	14	273	718
127	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	341–46	Trier	14	154	439
128	Constantius	VICTORIAE DD AVGG Q NN	Fol.	LRBCII,266	341–46	Lyons	17	64	405
129	Constantius	VICTORIAE DD AVGG Q NN	Fol.	LRBCII,259	341–46	Lyons	14	107	23
130	Constans	VICTORIAE DD AVGG Q NN	Fol.	LRBCII,263	341–46	Lyons	15	111	30
131	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	341–46	—	14	150	437

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
132	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	341–46	—	15	157	463
133	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	—	341–50	—	13	11	114
134	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	—	341–50	—	14	145	425
135	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	—	341–50	—	13	56	385
136	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	—	341–50	—	10	84	23
137	Magnentius	VICTORIAE DD NN AVG ET CAE	—	LRBCII,13	350–53	Amiens	22	41	313
138	Magnentius/Decentius	VICTORIAE DD NN AVG ET CAES	—	—	350–53	Amiens	21	78	23
139	Constans	FEL TEMP REPARATIO, hut	—	LRBCII,30a	348–60	Trier	22	178	1
140	Constans	FEL TEMP REPARATIO, hut	—	—	348–60	—	22	71	23
141	H. of Constantine	FEL TEMP REPARATIO, FH	—	—	348–60	As Lyons	17	79	23
142	H. of Constantine	FEL TEMP REPARATIO, FH	—	—	348–60	—	15	283	581
143	H. of Constantine	FEL TEMP REPARATIO, FH	—	—	348–60	—	8	279	585
144	H. of Constantine	FEL TEMP REPARATIO, FH	—	—	348–60	—	7	32	250
145	H. of Constantine	FEL TEMP REPARATIO, FH	—	—	348–60	—	8	169	497
146	H. of Constantine	FEL TEMP REPARATIO, FH	—	—	348–60	—	10	30	190
147	H. of Constantine	FEL TEMP REPARATIO, FH	—	—	348–60	—	12	82	23
148	Constantius II	FEL TEMP REPARATIO, FH	—	—	348–60	—	19	134	35
149	Gratian	GLORIA NOVI SAECVLI	—	—	364–78	Arles	16	42	357
150	Gratian	GLORIA NOVI SAECVLI	—	LRBCII,529	364–78	Arles	16	284	1
151	Gratian	GLORIA NOVI SAECVLI	—	LRBCII,529	364–78	Arles	17	110	30
152	Valentinian I	GLORIA ROMANORVM	—	—	364–78	Lyons	17	129	23
153	Valentinian I	GLORIA ROMANORVM	—	LRBCII,525	364–78	Arles	18	105	30
154	Gratian	SECVRITAS REIPVBLICAE	—	LRBCII,1022	364–78	Aquileia	18	106	30
155	Valentinian I	GLORIA ROMANORVM	—	—	364–78	Siscia	16	75	23
156	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	17	151	437
157	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	18	264	711
158	Valentinian I/II	SECVRITAS REIPVBLICAE	—	—	364–78	—	18	143	425
159	Valentinian I/II	SECVRITAS REIPVBLICAE	—	—	364–78	—	16	131	35
160	Valens	SECVRITAS REIPVBLICAE	—	—	364–78	—	18	33	?
161	Valens	SECVRITAS REIPVBLICAE	—	—	364–78	—	17	267	714
162	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	—	17	81	?
163	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	—	18	4	?
164	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	—	17	97	30
165	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	—	17	149	437
166	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	—	17	255	1
167	Valentinian II	VICTORIA AVGGG	—	LRBCII,389	388–402	Lyons	13	263	711
168	Illegible	VICTORIA AVGGG	—	—	388–402	Lyons	13	47	364
169	Illegible	VICTORIA AVGGG	—	—	388–402	Lyons	13	269	711
170	Arcadius	VICTORIA AVGGG	—	—	388–402	—	12	95	30
171	Arcadius	Illegible	—	—	388–402	—	12	21	142
172	Arcadius	SALVS REIPVBLICAE	—	—	388–402	—	12	261	700
173	Arcadius	Victory	—	—	388–402	—	13	174	479
174	Illegible	SALVS REIPVBLICAE	—	—	388–402	—	11	272	714
175	Illegible	SALVS REIPVBLICAE	—	—	388–402	—	13	270	717
176	Illegible	SALVS REIPVBLICAE	—	—	388–402	—	12	256	1

177–208 Illegible small bronzes, 3rd/4th centuries

(ii) *The 1978 coin hoard*

(Identified by Dr C.E. King)

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
1	Constantine II	PROVIDENTIAE CAESS	Fol.	RIC7,455	325–30	Trier	—	252	527
2	Constantine I	GLORIA EXERCITVS,2 standards	Fol.	RIC7,525	330–35	Trier	—	229	527
3	Constantius II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,528	330–35	Trier	—	220	527
4	VRBS ROMA	Wolf and twins	Fol.	RIC7,529	330–35	Trier	—	212	527
5	VRBS ROMA	Wolf and twins	Fol.	RIC7,529	330–35	Trier	—	203	527
6	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,530	330–35	Trier	—	186	527
7	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,530	330–35	Trier	—	180	527
8	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,530	330–35	Trier	—	190	527
9	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,530	330–35	Trier	—	183	527
10	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,530	330–35	Trier	—	179	527
11	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,530	330–35	Trier	—	191	527
12	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,530	330–35	Trier	—	182	527
13	Constantine I	GLORIA EXERCITVS,2 standards	Fol.	RIC7,537	330–35	Trier	—	234	527
14	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,539	330–35	Trier	—	236	527
15	Constantius II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,540	330–35	Trier	—	237	527

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
16	VRBS ROMA	Wolf and twins	Fol.	RIC7,542	330-35	Trier	-	214	527
17	VRBS ROMA	Wolf and twins	Fol.	RIC7,542	330-35	Trier	-	196	527
18	VRBS ROMA	Wolf and twins	Fol.	RIC7,542	330-35	Trier	-	199	527
19	VRBS ROMA	Wolf and twins	Fol.	RIC7,542	330-35	Trier	-	215	527
20	Constantine I	GLORIA EXERCITVS,2 standards	Fol.	RIC7,544	330-35	Trier	-	224	527
21	Constantine I	GLORIA EXERCITVS,2 standards	Fol.	RIC7,544	330-35	Trier	-	230	527
22	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,545	330-35	Trier	-	232	527
23	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,545	330-35	Trier	-	240	527
24	Constantius II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,546	330-35	Trier	-	228	527
25	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,548	330-35	Trier	-	187	527
26	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,548	330-35	Trier	-	193	527
27	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,548	330-35	Trier	-	195	527
28	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,550	330-35	Trier	-	238	527
29	VRBS ROMA	Wolf and twins	Fol.	RIC7,553	330-35	Trier	-	201	527
30	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,554	330-35	Trier	-	194	527
31	VRBS ROMA	Wolf and twins	Fol.	RIC7,561	330-35	Trier	-	205	527
32	VRBS ROMA	Wolf and twins	Fol.	RIC7,561	330-35	Trier	-	204	527
33	VRBS ROMA	Wolf and twins	Fol.	RIC7,561	330-35	Trier	-	207	527
34	VRBS ROMA	Wolf and twins	Fol.	-	330-35	Trier	-	208	527
35	CONSTANTINOPOLIS	Victory on prow	Fol.	-	330-35	Trier	-	188	527
36	CONSTANTINOPOLIS	Incuse of obverse	Fol.	-	330-35	Trier?	-	253	527
37	Constantius II	GLORIA EXERCITVS,1 standard	Fol.	LRBCI,107	337-41	Trier	-	251	527
38	Theodora	PIETAS ROMANA	Fol.	LRBCI,120	337-41	Trier	-	254	527
39	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,238	330-35	Lyons	-	227	527
40	VRBS ROMA	Wolf and twins	Fol.	RIC7,242	330-35	Lyons	-	200	527
41	VRBS ROMA	Wolf and twins	Fol.	RIC7,242	330-35	Lyons	-	213	527
42	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7,246	330-35	Lyons	-	189	527
43	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,254	330-35	Lyons	-	242	527
44	Constantius II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,255	330-35	Lyons	-	244	527
45	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,263	330-35	Lyons	-	218	527
46	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,263	330-35	Lyons	-	239	527
47	Constantine I	GLORIA EXERCITVS,1 standard	Fol.	RIC7,280	335-37	Lyons	-	249	527
48	Constantine I	GLORIA EXERCITVS,2 standards	Fol.	RIC7,345	330-35	Arles	-	248	527
49	Constantius II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,360	330-35	Arles	-	246	527
50	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,376	330-35	Arles	-	225	527
51	VRBS ROMA	Wolf and twins	Fol.	RIC7,379	330-35	Arles	-	209	527
52	VRBS ROMA	Wolf and twins	Fol.	RIC7,379	330-35	Arles	-	206	527
53	Constantine II	GLORIA EXERCITVS,2 standards	Fol.	RIC7,328	330-35	Rome	-	235	527
54	VRBS ROMA	Wolf and twins	Fol.	RIC7,128	330-35	Aquileia	-	211	527
55	VRBS ROMA	Wolf and twins	Fol.	RIC7,222	330-35	Siscia	-	197	527
56	Constantius II	GLORIA EXERCITVS,1 standard	Fol.	-	337-41	-	-	250	527
57	Constantine II	GLORIA EXERCITVS,1 standard	Fol.	-	335-37	-	-	245	527
58	Constantine I	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Trier	-	216	527
59	Constantius II	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Trier	-	241	527
60	Constantine II	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Trier	-	221	527
61	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	-	335-48	As Trier	-	210	527
62	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	-	335-48	As Trier	-	198	527
63	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	-	335-48	As Trier	-	192	527
64	VRBS ROMA	Victory on prow, Hybrid	<i>Irreg.</i>	-	335-48	As Trier	-	185	527
65	Constantine I	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Trier	-	223	527
66	Constantine I	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Trier	-	247	527
67	Constantine I	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Lyons	-	226	527
68	Constantine I	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Lyons	-	222	527
69	Constantine II	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Lyons	-	219	527
70	Constantine II	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Lyons	-	217	527
71	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	-	335-48	As Lyons	-	184	527
72	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	-	335-48	As Lyons	-	181	527
73	Constantine II	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	As Lyons	-	243	527
74	Constantine II	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	-	-	233	527
75	Constantine II	GLORIA EXERCITVS,2 standards	<i>Irreg.</i>	-	335-48	-	-	231	527
76	VRBS ROMA	Wolf and twins	<i>Irreg.</i>	-	335-48	-	-	202	527

(iii) Coins from the 1983–86 excavations

(Identified by Dr J.A.Davies)

coins marked * appear in Plate 71.

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
1*	Cunobelin	Obv; CVNOBELINI Rev; TASCIOVANI	Bronze	Mack 242	cAD10–40	Camalodunum	15	436	694
2*	Cunobelin	Obv; CVNOBELIN Rev; TASCIO	Bronze	Mack 248	cAD10–40	Camalodunum	17	220	336
3	Durotriges	Obv; Laureate head, Apollo Rev; Disjointed horse, l.	Bronze Stater	Mack 318	–	–	19	866	1
4	Cast coin blank	Celtic/Roman	–	–	–	–	15	938	1
5	Vespasian	PROVIDENT, S.C.	As	As BMC810	71	Lyons	27	342	571
6	Domitian	FORTVNAE AVGVSTI, S.C.	Dup.	RIC2:326a	86	Rome	28	358	551
7	Domitian	Illeg.	Dup.	–	81–96	Rome	27	747	973
8	Trajan	S.P.Q.R.OPTIMO PRINCIPI, S.C.	Sest.	RIC2:459	103–11	Rome	32	748	973
9	Trajan	Pax, stg. l.	Sest.	–	98–117	Rome	33	493	737
10	Marcus Aurelius	PROV DEOR TRP.XV COS.III	Den.	RIC3:22	161	Rome	17	734	910
11	Faustina II	VENVS, S.C.	Dup/As	As RIC3:1408	161	Rome	25	357	551
12	Marcus Aurelius	FORT.RED; TR.POT.XXIII IMP.V. COS.III; S.C.	Sest.	RIC3:962	168–9	Rome	32	230	416
13	Marcus Aurelius	Roma seated l.	Sest.	–	161–80	Rome	29	449	736
14	Severus Alexander	Salus seated l.	Den.	As RIC4:32	222–35	Rome	frag	338	551
15	Salonina	Illeg.	Ant.	–	253–60	–	22	377	620
16	Gallienus	AEQVITAS AVG	Ant.	As RIC5:159	260–68	Rome	19	932	1
17	Gallienus	SECVRIT PERPET	Ant.	As RIC5:280	260–68	As Rome	19	981	1
18	Gallienus	SALVS AVG	Ant.	–	260–68	–	21	1093	1
19	Gallienus	Illeg., female fig. l.	Ant.	–	260–68	–	20	1231	1
20	Claudius II	AEQVITAS AVG	Ant.	RIC5:15	268–70	Rome	17	610	736
21	Claudius II	PROVID AVG	Ant.	As RIC5:87	268–70	Rome	20	1237	1
22	Claudius II	SECVRIT AVG	Ant.	RIC5:100	268–70	Rome	18	1134	1
23	Claudius II	VIRTVS AVG	Ant.	RIC5:109	268–70	Rome	18	353	578
24	Claudius II	LIBER T AVG	Ant.	Robertson 33	268–70	Rome	19	893	1
25	Postumus	HERC PACIFERO	Ant.	Elmer 299	259–68	Princ. mint	20	751	931
26	Victorinus	INVICTVS	Ant.	As Elmer 653	268–70	Cologne	18	1086	1
27	Victorinus	FIDES MILITVM	Ant.	Elmer 654	268–70	Cologne	17	480	735
28	Victorinus	INVICTVS	Ant.	Elmer 683	268–70	Cologne	19	1262	1
29	Victorinus	PIETAS AVG	Ant.	Elmer 741	268–70	Trier	20	753	975
30	Victorinus	PROVIDENTIA AVG	Ant.	Elmer 743	268–70	Trier	22	1169	1
31	Victorinus	Illeg.	Ant.	–	268–70	–	19	750	931
32	Tetricus I	VICTORIA AVG	Ant.	Elmer 765	270–74	Cologne	20	1361	1
33	Tetricus I	PAX AVG	Ant.	Elmer 771	270–74	Cologne	19	698	901
34	Tetricus I	PAX AVG	Ant.	Elmer 771	270–74	Cologne	21	1339	1
35	Tetricus I	LAETITIA	Ant.	As Elmer 786	270–74	Trier	17	1328	1
36	Illeg.	FORTVNA AVG	Ant.	–	260–74	–	18	1132	1
37	Tacitus	SALVS PVBLI	Ant.	RIC5:121	275–76	Ticinum	22	206	329
38	Probus	ROMAE AETER	Ant.	As RIC5:183	276–82	As Rome	21	957	1
39*	Carausius	PAX AVG	Ant.	RIC5:121	287–93	London	25	1115	1
40*	Carausius	PAX AVG	Irreg.	–	287–93	–	25	319	551
41	Carausius	PAX AVG	Ant.	–	287–93	–	17	852	1
42	Carausius	Illeg.	Ant.	–	287–93	–	25	877	1
43	Allectus	FELICITAS SAECVLI	Ant.	As RIC5:66	293–96	'C' mint	23	380	613
44	Barb.rad: Claudius II	PROVIDENTIA AVG	–	–	270–84	–	16	124	176
45	Barb.rad: DIVO CLAVDIO CONSECRATIO	eagle	–	–	270–84	–	17	483	737
46	Barb.rad: Victorinus	INVICTVS	–	–	270–84	–	17	889	1
47*	Barb.rad: Victorinus	PIETAS AVG	–	As Elmer 741	270–84	–	20	356	551
48*	Barb.rad: Tetricus I	LAETITIA AVG	–	As Elmer 787	270–84	–	18	1234	1
49*	Barb.rad: Tetricus I	PAX AVG	–	As Elmer 771	270–84	–	18	1097	1
50	Barb.rad: Tetricus I	PAX AVG	–	–	270–84	–	20	979	1
51	Barb.rad: Tetricus I	PAX AVG	–	–	270–84	–	16	154	207
52	Barb.rad: Tetricus I	PAX AVG	–	–	270–84	–	15	469	737
53	Barb.rad: Tetricus I	SALVS AVG	–	–	270–84	–	15	327	551
54*	Barb.rad: Tetricus I	FIDES MILITVM	–	–	270–84	–	18	229	418
55	Barb.rad: Tetricus I	HILARITAS AVG	–	–	270–84	–	15	8b	3
56	Barb.rad: Tetricus I	SPES PVBLICA	–	As Elmer 764	270–84	–	19	182	225
57	Barb.rad: Tetricus I	SPES PVBLICA	–	–	270–84	–	19	1238	1
58	Barb.rad: Tetricus I	SPES PVBLICA	–	–	270–84	–	17	1338	1
59	Barb.rad: Tetricus I	SPES	–	–	270–84	–	17	570	735

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
60	Barb.rad: Tetricus I	SPES	—	—	270–84	—	14	446	736
61	Barb.rad: Tetricus I	VICTORIA AVG	—	—	270–84	—	19	934	1
62	Barb.rad: Tetricus I	VICTORIA AVG	—	—	270–84	—	17	452	736
63	Barb.rad: Tetricus I	Illeg.	—	—	270–84	—	13	950	1
64*	Barb.rad: Tetricus II	SPES AVGG (reversed)	—	—	270–84	—	13	1348	1
65	Barb.radiate	Illeg.	—	—	270–84	—	16	1089	1
66	Barb.radiate	Illeg.	—	—	270–84	—	18	1108	1
67	Barb.radiate	Illeg.	—	—	270–84	—	16	1174	1
68	Constantine I	GENIO POP ROM	Fol.	RIC6:259	307–8	Lyons	29	1248	1
69	Constantine I	SOLI INVICTO COMITI	Fol.	RIC6:127	310	London	21	167	206
70	Constantine I	VICTORIAE LAETAE PRINC PERP	Fol.	RIC7:159	319–20	London	18	1358	1
71	Constantine I	VIRTVS EXERCIT	Fol.	RIC7:191	320–21	London	20	899	1
72	H. of Constantine	BEAT TRANQLITAS	Fol.	As RIC7:215	321–24	London	19	1293	1
73	Constantine I	BEAT TRANQLITAS, VOT/IS/XX	Fol.	As RIC7:239	321–24	London	18	1241	1
74	Constantine II	BEAT TRANQLITAS, VOT/IS/XX	Fol.	RIC7:257	322–23	London	19	518	737
75	Constantine II	BEAT TRANQLITAS	Fol.	RIC7:258	322–23	London	19	849	1
76	Constantine II	BEAT TRANQLITAS, VOT/IS/XX	Fol.	RIC7:287	323–24	London	19	378	620
77	Crispus	BEATA TRANQLITAS, VOT/IS/XX	Fol.	RIC7:279	323–24	London	21	1298	1
78	Constantine II	CAESARVM NOSTRORVM, VOT/X	Fol.	RIC7:292	323–24	London	19	1278	1
79	Constantine II	PROVIDENTIAE CAESS	Fol.	RIC7:296	324–25	London	19	235	1
80	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	RIC7:129	321	Lyons	20	1184	1
81	Crispus	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	RIC7:133	321	Lyons	20	16c	14
82	Crispus	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	As RIC7:133	321	Lyons	20	1181	1
83	Constantine I	SOLI INVICTO COMITI	Fol.	RIC7:134	317	Trier	20	754	975
84	Constantine I	VICTORIAE LAETAE PRINC PERP, VOT/PR	Fol.	As RIC7:209	318–19	Trier	17	7	7
85	Constantine I	VICTORIAE LAETAE PRINC PERP, VOT/PR	Fol.	RIC7:209	318–19	Trier	19	878	1
86	Licinius II	VIRTVS EXERCIT	Fol.	RIC7:264	320	Trier	20	1331	1
87	Constantine II	VIRTVS EXERCIT, VOT/XX	Fol.	RIC7:300	320–21	Trier	20	297	496
88	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	RIC7:303	321	Trier	19	1336	1
89	Constantine II	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	RIC7:327	321	Trier	19	695	901
90	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	RIC7:368	322–23	Trier	19	947	1
91	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	RIC7:368	322–3	Trier	21	1158	1
92	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	RIC7:369	322–23	Trier	20	251	1
93	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	As RIC7:371	322–23	Trier	20	946	1
94	Constantine I	SARMATIA DEVICTA	Fol.	RIC7:429	323–24	Trier	20	1180	1
95	Constantine I	DN CONSTANTINI MAX AVG, VOT/XX	Fol.	RIC7:439	323–24	Trier	19	497	737
96	Constantine I	DN CONSTANTINI MAX AVG,	Fol.	As RIC7:439	323–24	As Trier	20	896	1
97	Constantine II	CAESARVM NOSTRORVM, VOT/X	Fol.	RIC7:441	323–24	Trier	20	332	551
98	Constantine II	CAESARVM NOSTRORVM, VOT/X	Fol.	RIC7:441	323–24	Trier	17	563	735
99	Crispus	PROVIDENTIAE CAESS	Fol.	RIC7:452	324–5	Trier	20	931	1
100	Constantine II	PROVIDENTIAE CAESS	Fol.	As RIC7:454	324–25	Trier	19	600	735
101	Constantine II	PROVIDENTIAE CAESS	Fol.	RIC7:456	324–25	Trier	21	256	461
102	Constantine I	PROVIDENTIAE AVGG	Fol.	RIC7:461	325–26	Trier	20	1	1
103	Constantine I	PROVIDENTIAE AVGG	Fol.	RIC7:475	326	Trier	20	6	W23
104	Constantine II	PROVIDENTIAE CAESS	Fol.	RIC7:479	326	Trier	20	494	737
105	Fausta	SPES REIPUBLICAE	Fol.	RIC7:484	326	Trier	19	1357	1
106	Constantine I	PROVIDENTIAE AVGG	Fol.	RIC7:504	327–28	Trier	18	508	737
107	Constantine I	PROVIDENTIAE AVGG	Fol.	RIC7:504	327–28	Trier	19	719	1
108	Constantine II	DN CONSTANTINI MAX AVG, VOT/XX	Fol.	RIC7: obv. as 232, rev. as 228	321	Arles	18	401	637
109	H. of Constantine	PROVIDENTIAE CAESS	Fol.	As RIC7:269	324–25	Arles	19	988	1
110	Constantine II	VIRTVS CAESS	Fol.	RIC7:305	326–7	Arles	19	1182	1
111	Constantine I	VIRTVS AVGG	Fol.	RIC7:313	327	Arles	21	956	1
112	Constantine I	PROVIDENTIAE AVGG	Fol.	RIC7:287	326	Rome	21	501	737
113	Constantine II	CAESARVM NOSTRORVM, VOT/X	Fol.	RIC7:79	320–21	Aquileia	20	331	551
114	Licinius	VIRTVS EXERCIT, VOT/X	Fol.	RIC7:132	320	Siscia	20	759	975
115	Constantine I	VICTOR OMNIVM GENTIVM	Solidus	RIC7:100	326–30	Heraclea	19	1360	1
116	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	—	321	—	20	959	1
117	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	—	321–24	—	19	832	1
118	H. of Constantine	BEATA TRANQVILLITAS	Fol.	—	321–3	—	19	101	92
119	Crispus	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	—	322–23	—	19	1276	1
120	H. of Constantine	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	—	322–23	—	19	1277	1
121	Constantine I	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	—	322–23	—	19	1359	1
122	Constantine I	SARMATIA DEVICTA	Fol.	—	323–24	—	21	1270	1
123	H. of Constantine	CAESARVM NOSTRORVM, VOT/X	Fol.	—	323–24	—	17+	1286	1
124	H. of Constantine	PROVIDENTIAE AVGG	Fol.	—	324–25	—	20	1327	1
125	Constantine II	PROVIDENTIAE CAESS	Fol.	—	324–28	—	19	234	1
126	H. of Constantine	PROVIDENTIAE AVGG	Fol.	—	324–28	—	19	573	735
127	H. of Constantine	PROVIDENTIAE AVGG/CAESS	Fol.	—	324–30	—	20	1329	1
128	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:518	330–31	Trier	18	208	336

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
129	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:518	330-31	Trier	17	352	578
130	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	As RIC7:520	330-31	Trier	17	1343	1
131	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:520	330-31	Trier	17	1130	1
132	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:520	330-31	Trier	18	1166	1
133	Constantius II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:521	330-31	Trier	17	1179	1
134	Constantius II	GLORIA EXERCITVS, 2 st.	Fol.	As RIC7:521	330-31	Trier	17	1190	1
135	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	As RIC7:525	330-35	Trier	16	576	735
136	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:525	330-31	Trier	16	16d	14
137	VRBS ROMA	Wolf & twins	Fol.	As RIC7:522	330-31	Trier	18	1095	1
138	CONSTANTINOPOLIS	Victory on prow	Fol.	As RIC7:523	330-31	Trier	17	1334	1
139	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:523	330-31	Trier	15	1126	1
140	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:527	330-31	Trier	16	1155	1
141	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:527	330-31	Trier	18	1225	1
142	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:527	330-31	Trier	18	1226	1
143	Constantius II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:528	330-31	Trier	17	1135	1
144	VRBS ROMA	Wolf & twins	Fol.	RIC7:529	330-31	Trier	17	451	736
145	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:530	330-31	Trier	17	466	735
146	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:530	330-31	Trier	17	701	901
147	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:530	330-31	Trier	16	1117	1
148	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:537	332-33	Trier	16	411	637
149	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:537	332-33	Trier	17	888	1
150	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	As RIC7:537	332-33	Trier	16	1287	1
151	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:539	332-33	Trier	18	665	801
152	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:539	332-33	Trier	17	1247	1
153	VRBS ROMA	Wolf & twins	Fol.	RIC7:542	332-33	Trier	17	1280	1
154	VRBS ROMA	Wolf & twins	Fol.	RIC7:542	332-33	Trier	16	1351	1
155	VRBS ROMA	Wolf & twins	Fol.	RIC7:542	332-33	Trier	16	1168	1
156	CONSTANTINOPOLIS	Victory on prow	Fol.	As RIC7:543	341-46	Trier	18	379	630
157	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:543	332-333	Trier	17	543	735
158	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:545	332-33	Trier	16	1129	1
159	VRBS ROMA	Wolf & twins	Fol.	RIC7:547	332-33	Trier	18	1304	1
160	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:548	332-33	Trier	18	16b	14
161	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	As RIC7:555	333-34	Trier	18	1172	1
162	Constantius II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:559	333-34	Trier	18	257	462
163	VRBS ROMA	Wolf & twins	Fol.	RIC7:561	333-34	Trier	17	976	1
164	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	RIC7:586	335-37	Trier	16	1347	1
165	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	As RIC7:586	341-46	As Trier	15	423	663
166	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	As RIC7:586	335-37	Trier	15	459	735
167	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:589	335-37	Trier	18	463	737
168	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	As RIC7:590	335-37	Trier	16	404	637
169	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	As RIC7:590	335-37	Trier	15	1291	1
170	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	As RIC7:592	335-37	Trier	17	461	737
171	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	As RIC7:592	335-37	Trier	15	1330	1
172	Helena	PAX PVBLICA	Fol.	RIC8:55	337-40	Trier	14	453	736
173	Theodora	PIETAS ROMANA	Fol.	RIC8:56	337-40	Trier	16	5	1
174	Helena	PAX PVBLICA	Fol.	As RIC8:78	337-40	Trier	14	465	737
175	Helena	PAX PVBLICA	Fol.	RIC8:78	337-40	Trier	14	604	735
176	Helena	PAX PVBLICA	Fol.	RIC8:78	337-40	Trier	15	663	735
177	Helena	PAX PVBLICA	Fol.	RIC8:78	337-40	Trier	15	953	1
178	Theodora	PIETAS ROMANA	Fol.	RIC8:79	337-40	Trier	16	1356	1
179	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	RIC8:81	337-40	Trier	15	490	735
180	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	RIC8:83	337-40	Trier	15	952	1
181	Theodora	PAX ROMANA	Fol.	RIC8:91	337-40	Trier	14	441	736
182	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	RIC8:102	337-40	Trier	15	1239	1
183	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	RIC8:102	337-40	Trier	16	1249	1
184	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	As RIC8:180	347-48	Trier	15	1161	1
185	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:182	347-48	Trier	16	930	1
186	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:182	347-48	Trier	15	1354	1
187	Constans	VICTORIAE DD AVGG Q NN	Fol.	As RIC8:182	347-48	Trier	16	525	735
188	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	As RIC8:183	347-48	Trier	14	1194	1
189	Constantius II	VICTORIAE DD AVGG Q NN	Fol.	RIC8:183	347-48	Trier	16	1195	1
190	Constantius II	VICTORIAE DD AVGG Q NN	Fol.	RIC8:184	347-48	Trier	15	833	1071
191	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:186	347-48	Trier	15	517	737
192	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:186	347-48	Trier	17	398	637
193	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:186	347-48	Trier	15	408	637
194	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:186	347-48	Trier	15	454	736
195	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:186	347-48	Trier	15	972	1
196	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:188	347-48	Trier	16	1266	1
197	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:195	347-48	Trier	16	862	1
198	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:195	347-48	Trier	16	396	637

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
199	Constans	VICTORIAE DD AVGG Q NN	Fol.	As RIC8:195	347-48	Trier	15	1090	1
200	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:196	347-48	Trier	17	16e	14
201	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:196	347-48	Trier	18	166	207
202	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:196	347-48	Trier	14	412	637
203	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:196	347-48	Trier	16	458	736
204	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:196	347-48	Trier	16	875	1
205	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	As RIC8:197	347-48	Trier	15	57b	35
206	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:198	347-48	Trier	17	1189	1
207	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:199	347-48	Trier	15	479	737
208	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	As RIC8:203	347-48	Trier	15	476	737
209	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:204	347-48	Trier	15	980	1
210	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:205	347-48	Trier	15	442	736
211	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:210	347-48	Trier	15	470	735
212	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:236	330-31	Lyons	16	1100	1
213	VRBS ROMA	Wolf & twins	Fol.	RIC7:247	330-31	Lyons	17	1185	1
214	VRBS ROMA	Wolf & twins	Fol.	RIC7:252	332	Lyons	17	1279	1
215	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:263	333-34	Lyons	18	109	130
216	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:266	333-34	Lyons	15	1183	1
217	VRBS ROMA	Wolf & twins	Fol.	RIC7:270	333-34	Lyons	17	1092	1
218	Constantine II	GLORIA EXERCITVS, 1 st.	Fol.	RIC7:281	336	Lyons	15	46a	49
219	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	Lyons	11	1228	1
220	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:44	347-48	Lyons	15	694	901
221	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	As RIC8:62	347-48	Lyons	14	1283	1
222	Constantius II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:347	330-31	Arles	17	512	737
223	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:350	330-31	Arles	18	460	735
224	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:370	333	Arles	17	882	1
225	Constantius II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:372	333	Arles	17	897	1
226	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	RIC7:383	334	Arles	16	1289	1
227	VRBS ROMA	Wolf & twins	Fol.	RIC7:392	335	Arles	19	1153	1
228	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	RIC8:56	340	Arles	15	756	975
229	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	RIC8:56	337-40	Arles	15	1340	1
230	VRBS ROMA	Wolf & twins	Fol.	RIC7:354	333-35	Rome	18	1236	1
231	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:84	347-48	Rome	17	407	637
232	Constantius II	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:237	334-35	Siscia	18	361	551
233	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	RIC7:111	330-33	Heraclea	17	1318	1
234	POP ROMANVS	Bridge over river	Fol.	RIC8:21	330	Const'ople	14	280	465
235	POP ROMANVS	Star in wreath	Fol.	RIC8:22	330	Const'ople	15	1362	1
236	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	15	8c	3
237	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	19	274	495
238	H. of Constantine	GLORIA EXERCITVS	Fol.	-	330-40	-	16	485	735
239	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	16	544	735
240	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	16	874	1
241	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	18	879	1
242	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	16	965	1
243	Constantius II	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	19	983	1
244	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	18	1210a	1
245	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	16	1085	1
246	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	16	1118	1
247	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	17	1233	1
248	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	16	1246	1
249	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	17	1254	1
250	H. of Constantine	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	18	1284	1
251	Constantine II	GLORIA EXERCITVS, 2 st.	Fol.	-	330-35	-	17	1309	1
252	Constantine II	GLORIA EXERCITVS	Fol.	-	330-40	-	18	1133	1
253	VRBS ROMA	Wolf & twins	Fol.	-	330-35	-	17	1111	1
254	VRBS ROMA	Wolf & twins	Fol.	-	330-35	-	16	1139	1
255	VRBS ROMA	Wolf & twins	Fol.	-	330-35	-	17	1193	1
256	VRBS ROMA	Wolf & twins	Fol.	-	330-35	-	18	1305	1
257	CONSTANTINOPOLIS	Victory on prow	Fol.	-	330-35	-	16	10	11
258	CONSTANTINOPOLIS	Victory on prow	Fol.	-	330-35	-	16	474	737
259	CONSTANTINOPOLIS	Victory on prow	Fol.	-	330-35	-	17	513	737
260	CONSTANTINOPOLIS	Victory on prow	Fol.	-	330-35	-	17	1112	1
261	CONSTANTINOPOLIS	Victory on prow	Fol.	-	330-35	-	17	1211	1
262	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	-	335-40	-	16	2	1
263	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	-	335-40	-	14	210	1
264	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	-	335-40	-	15	248	1
265	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	-	335-40	-	15	254	459
266	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	-	335-40	-	13	289	466
267	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	-	335-40	-	15	313	551
268	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	-	335-37	-	15	406	637

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
269	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	—	335–37	—	15	605	736
270	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	16	625	736
271	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	16	699	901
272	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	15	876	1
273	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	14	885	1
274	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	14	973	1
275	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	15	1106	1
276	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	13	1109	1
277	Constantius II	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	15	1113	1
278	Constantine I	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	16	1157	1
279	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	15	1187	1
280	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	16	1208	1
281	Constantius ?	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	15	1217	1
282	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	14	1229	1
283	Constans	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	15	1255	1
284	Constantine II	GLORIA EXERCITVS, 1 st.	Fol.	—	335–40	—	15	1316	1
285	Helena	PAX PVBLICA	Fol.	—	337–40	—	17	609	736
286	Helena	PAX PVBLICA	Fol.	—	337–40	—	16	861	1
287	Helena	PAX PVBLICA	Fol.	—	337–40	—	14	1302	1
288	Theodora	PIETAS ROMANA	Fol.	—	337–40	—	13	561	735
289	Theodora	PIETAS ROMANA	Fol.	—	337–40	—	14	632	757
290	Constantius II	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	15	16a	14
291	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	14	489	735
292	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	12	574	735
293	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	14	653	801
294	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	17	1110	1
295	Constans ?	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	15	1120	1
296	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	16	1186	1
297	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	14	1206	1
298	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	16	1232	1
299	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	16	1256	1
300	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	16	1322	1
301	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	15	1333	1
302	Constantine II	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	As RIC7:238	341–46	As Lyons	14	255	459
303	Constantine II	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	As Lyons	16	857	1
304	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	As RIC7:518	341–46	As Trier	13	1344	1
305	Constantine I	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	As RIC7:537	341–46	As Trier	17	1346	1
306	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	16	281	465
307	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	14	291	468
308	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	18	316	551
309	Constantine II	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	15	320	549
310	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	13	343	571
311	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	14	360	551
312	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	13	443	736
313	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	16	516	737
314	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	15	519	737
315	Constantius II	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	18	527	735
316	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	14	602	735
317	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	13	697	901
318	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	14	864	1
319	Constantine I	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	15	1124	1
320	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	14	1235	1
321	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	12	1303	1
322	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg.</i>	—	341–46	—	10	1342	1
323*	H. of Constantine	Oby; helmeted bust r., Rev; ; Wolf & twins Hybrid	<i>Irreg.</i>	—	341–46	—	14	1335	1
324	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	As RIC7:242	341–46	As Lyons	13	1128	1
325	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	As RIC7:242	341–46	As Lyons	14	1131	1
326	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	As RIC7:242	341–46	As Lyons	15	1222	1
327*	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	As RIC7:242	341–46	As Lyons	14	1264	1
328	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	As RIC7:529	341–46	As Trier	17	890	1
329	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	—	341–46	—	12	330	551
330	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	—	341–46	—	13	354	578
331	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	—	341–46	—	14	499	737
332*	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	—	341–46	—	14	557	735
333	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	—	341–46	—	16	895	1
334	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	—	341–46	—	12	966	1
335	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	—	341–46	—	14	1119	1
336	VRBS ROMA	Wolf & twins	<i>Irreg.</i>	—	341–46	—	11	1156	1
337*	H. of Constantine	Victory on prow Hybrid	<i>Irreg.</i>	—	341–46	—	16	400	637

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
338	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	As RIC7:241	341-46	As Lyons	13	621	736
339	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	As RIC7:421	341-46	As Lyons	12+	191	66
340	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	As RIC7:523	341-46	As Trier	15	126	185
341	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	As RIC7:523	341-46	As Trier	14	145	176
342	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	17	246	1
343	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	9	253	1
344	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	14	311	515
345	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	13	314	551
346	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	12	317	551
347	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	12	509	737
348	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	12	859	1
349	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	18	884	1
350	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	15	903	1
351	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	15	929	1
352	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	14	937	1
353	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	19	963	1
354	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341-46	—	15	1178	1
355*	CONSTANTINOPOLIS	Wolf & twins Hybrid	<i>Irreg.</i>	—	341-46	As Trier	17	471	737
356	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC7:586	341-46	As Trier	14	587	735
357	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC7:586	341-46	As Trier	17	666	834
358	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC7:586	341-46	As Trier	14	1210b	1
359*	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC7:586	341-46	As Trier	16	1263	1
360	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC7:586	341-46	As Trier	15	1341	1
361	Constantius II	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC8:82	341-46	As Trier	14	164	207
362	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC8:101A	341-46	As Trier	15	1323	1
363	Constans	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC8:104	341-46	As Trier	16	146	20
364	Constans	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	As RIC8:117	341-46	As Trier	15	506	737
365	Constantius II	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	As Trier	16	1308	1
366	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	312	551
367	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	318	551
368	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	328	551
369	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	355	578
370	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	456	736
371	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	16	466	735
372	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	526	735
373	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	13	622	736
374	Constantius II	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	693	901
375	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	13	752	975
376	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	847	1
377	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	860	1
378	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	16	901	1
379	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	13	951	1
380	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	13	954	1
381	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	962	1
382	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	13	968	1
383	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	969	1
384	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	974	1
385	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	975	1
386	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	982	1
387	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	1098	1
388	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	1116	1
389	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	1171	1
390	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	14	1207	1
391	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	15	1272	1
392	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	341-46	—	13	1273	1
393	Helena	PAX PVBLICA	<i>Irreg.</i>	—	341-46	—	10	601	735
394	Theodora	PIETAS ROMANA	<i>Irreg.</i>	—	341-46	—	16	1137	1
395	Constans	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:186	347-48	As Trier	16	949	1
396	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:187	347-48	As Trier	17	977	1
397	Constans	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:189	347-48	As Trier	14	121	175
398	Constantius II	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:193	347-48	As Trier	15	275	1
399	Constans	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:195	347-48	As Trier	15	1114	1
400	Constans	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:204	347-48	As Trier	15	329	551
401	Constans	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:206	347-48	As Trier	15	958	1
402	Constans	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:77	347-48	As Arles	15	397	637
403	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:83	347-48	As Arles	13	550	735
404	Constans	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	—	347-48	—	18	247	459
405	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	—	347-48	—	12	403	637
406	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	—	347-48	—	15	1096	1
407	H. of Constantine	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	—	347-48	—	15	1282	1

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
408	H. of Constantine	Illeg.	<i>Irreg.</i>	–	341–46	–	15	1244	1
409	Magnentius	VICTORIAE DD NN AVG ET CAE	–	RIC8:9	351–52	Amiens	21	496	737
410	Decentius	VICTORIAE DD NN AVG ET CAE	–	RIC8:11	351–52	Amiens	23	504	737
411	Magnentius	VICTORIAE DD NN AVG ET CAE	–	RIC8:17	351–52	Amiens	23	19	3
412	Magnentius	VICTORIAE DD NN AVG ET CAE	–	RIC8:27	351–52	Amiens	22	850	1
413	Magnentius	VICTORIAE DD NN AVG ET CAE	–	RIC8:31	351–52	Amiens	22	936	1
414	Magnentius	SALVS DD NN AVG ET CAES	–	RIC8:34	353	Amiens	26	450	736
415	Constantius II	FEL TEMP REPARATIO, hut	–	RIC8:212	348–50	Trier	22	168	207
416	Constans	FEL TEMP REPARATIO, galley	–	RIC8:219	348–50	Trier	24	528	735
417	Constans	FEL TEMP REPARATIO, phoenix/rock	–	As RIC8:226	348–50	Trier	16	515	737
418	Constans	FEL TEMP REPARATIO, phoenix/rock	–	RIC8:226	348–50	Trier	18	984	1
419	Constans	FEL TEMP REPARATIO, phoenix/rock	–	RIC8:226	348–50	Trier	18	1088	1
420	Constans	FEL TEMP REPARATIO, phoenix/rock	–	RIC8:228	348–50	Trier	17	520	737
421	Constans	FEL TEMP REPARATIO, phoenix/rock	–	RIC8:228	348–50	Trier	16	1324	1
422	Constans	FEL TEMP REPARATIO, phoenix/globe	–	RIC8:232	348–50	Trier	20	511	737
423	Constantius II	FEL TEMP REPARATIO, phoenix/globe	–	RIC8:233	348–50	Trier	17	1140	1
424	Constans	FEL TEMP REPARATIO, phoenix/globe	–	RIC8:234	348–50	Trier	18	14a	20
425	Magnentius	FEL TEMP REPARATIO, galley	–	RIC8:260	350–53	Trier	21	1154	1
426	Constantius II	FEL TEMP REPARATIO, FH	–	RIC8:183	353–55	Lyons	18	1173	1
427	Magnentius	VICTORIAE DD NN AVG ET CAE	–	RIC8:125	350–53	Lyons	16	405	637
428	Constans	FEL TEMP REPARATIO, hut	–	RIC8:140	348–50	Rome	21	100	74
429	Constantius II	FEL TEMP REPARATIO, FH	–	As RIC8:350	351–55	Siscia	17	1267	1
430	H. of Constantine	FEL TEMP REPARATIO, galley	–	–	348–50	–	24	249	1
431	H. of Constantine	FEL TEMP REPARATIO, FH	–	–	350–55	–	19	455	735
432	Magnentius	SALVS DD NN AVG ET CAES	–	–	350–53	–	frag	514	737
433	Magnentius/Decentius	SALVS DD NN AVG ET CAES	–	–	351–53	–	25	48	24
434	Magnentius/Decentius	SALVS DD NN AVG ET CAES	–	–	351–53	–	22	402	637
435	Magnentius	VICTORIAE DD NN AVG ET CAE, VOT/V/MVLT/X	–	–	350–53	–	16	629	756
436	Constans?	FEL TEMP REPARATIO, hut	–	–	348–50	–	20	1213	1
437	Magnentius/Decentius	Illeg.	–	–	350–53	–	20	1258	1
438	H. of Constantine	FEL TEMP REPARATIO, hut	–	–	348–50	–	19	1297	1
439	H. of Constantine	Legend within wreath	–	–	360–64	–	19	960	1
440	Julian Augustus	VOT/X/MVLT/XX, legend in wreath	–	–	360–63	–	20	1177	1
441	Constantius II ?	FEL TEMP REPARATIO, FH	–	–	355–60	–	16	1188	1
442	Constantius II	FEL TEMP REPARATIO, galley	<i>Irreg.</i>	–	348–50	–	21	935	1
443	Constantius II	FEL TEMP REPARATIO, galley	<i>Irreg.</i>	–	348–50	–	18	1311	1
444*	Magnentius	FELICITAS REIPVBLICE	<i>Irreg.</i>	As RIC8:260	350–53	As Trier	19	495	737
445	Magnentius	FELICITAS REIPVBLICE	<i>Irreg.</i>	–	350–53	–	21	1257	1
446	Magnentius	VICTORIAE DD NN AVG ET CAE	<i>Irreg.</i>	As RIC8:307	351–53	As Trier	17	20	3
447	Magnentius	VICTORIAE DD NN AVG ET CAES	<i>Irreg.</i>	–	350–53	–	15	278	459
448	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	12	351	578
449	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	19	359	551
450	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	8	409	637
451*	Constantius II	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	As RIC8:189	354–64	As Lyons	13	410	637
452	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	13	464	735
453*	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	10	475	735
454	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	11	477	735
455*	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	17	500	737
		overstruck on CONSTANTINOPOLIS							
456	Constantius II	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	15	502	737
457	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	13	554	735
458	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	14	569	735
459	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	10	575	735
460	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	8	585	735
461	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	13	603	735
462	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	12	633	757
463	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	7	654	815
464	Constantius II	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	As RIC8:358	354–64	As Trier	18	664	801
465	Constantius II	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	20	758	975
466	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	18	761	975
467	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	10	843	1107
468	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	11	853	1
469	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	15	856	1
470	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	11	858	1
471	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	11	891	1
472*	Constantius II	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	14	961	1
473	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	13	970	1
474	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	17	978	1
475	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	11	1127	1
476	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	–	354–64	–	15	1141	1

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
477	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	15	1152	1
478	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	As Arles	14	1159	1
479	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	16	1163	1
480	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	13	1215	1
481	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	10	1240	1
482	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	11	1268	1
483	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	13	1319	1
484	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	14	1321	1
485	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	15	1355	1
486	Valentinian I	GLORIA ROMANORVM	—	As RIC9:10a	364–75	Lyons	17	1138	1
487	Valentinian I	GLORIA ROMANORVM	—	RIC9:20a	367–75	Lyons	17	57a	35
488	H. of Valentinian	GLORIA ROMANORVM	—	As RIC9:20a	367–75	Lyons	19	211	286
489	Valentinian I	GLORIA ROMANORVM	—	RIC9:20a	367–75	Lyons	19	755	975
490	Valentinian I	GLORIA ROMANORVM	—	RIC9:20a	367–75	Lyons	17	881	1
491	Valentinian I	GLORIA ROMANORVM	—	RIC9:20a	367–75	Lyons	18	1350	1
492	Gratian	GLORIA ROMANORVM	—	RIC9:20c	367–78	Lyons	17	472	737
493	Valentinian I	GLORIA ROMANORVM	—	—	364–75	Lyons	19	194	273
494	Valentinian I	GLORIA ROMANORVM	—	—	364–75	Lyons	18	207	286
495	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	Lyons	18	473	735
496	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	Lyons	17	933	1
497	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	Lyons	17	692	901
498	Valentinian I	GLORIA ROMANORVM	—	RIC9:7a	364–67	Arles	18	89	52
499	Valentinian I	GLORIA ROMANORVM	—	As RIC9:7a	364–67	Arles	18	165	207
500	H. of Valentinian	GLORIA ROMANORVM	—	As RIC9:7a	364–67	Arles	18	1091	1
501	H. of Valentinian	SECVRITAS REIPVBLICAE	—	As RIC9:9	364–78	Arles	17	433	570
502	Valentinian I	SECVRITAS REIPVBLICAE	—	As RIC9:9a	364–75	Arles	18	1292	1
503	Valentinian I	SECVRITAS REIPVBLICAE	—	As RIC9:9a	364–75	Arles	18	1352	1
504	Valens	SECVRITAS REIPVBLICAE	—	As RIC9:9b	364–78	Arles	18	1353	1
505	Gratian	GLORIA NOVI SAECVLI	—	RIC9:15	367–75	Arles	18	122	17
506	Gratian	GLORIA NOVI SAECVLI	—	RIC9:15	367–75	Arles	18	564	735
507	Gratian	GLORIA NOVI SAECVLI	—	RIC9:15	364–75	Arles	19	865	1
508	Gratian	GLORIA NOVI SAECVLI	—	RIC9:15	367–75	Arles	18	898	1
509	Gratian	GLORIA NOVI SAECVLI	—	RIC9:15	364–75	Arles	18	1209a	1
510	Gratian	GLORIA NOVI SAECVLI	—	RIC9:15	364–75	Arles	16	1317	1
511	Gratian	GLORIA NOVI SAECVLI	—	RIC9:15	364–75	Arles	18	1349	1
512	Valentinian I	GLORIA ROMANORVM	—	RIC9:16a	367–75	Arles	20	8a	3
513	Valentinian I	GLORIA ROMANORVM	—	RIC9:16a	367–75	Arles	17	468	735
514	Valentinian I	GLORIA ROMANORVM	—	RIC9:16a	367–75	Arles	20	505	737
515	Valens	GLORIA ROMANORVM	—	RIC9:16b	367–75	Arles	17	233	1
516	Valens	SECVRITAS REIPVBLICAE	—	RIC9:17b	367–75	Arles	18	964	1
517	H. of Valentinian	SECVRITAS REIPVBLICAE	—	As RIC9:19a	364–78	Arles	17	457	735
518	Valens	SECVRITAS REIPVBLICAE	—	RIC9:19a	375–78	Arles	18	434	566
519	Valens	SECVRITAS REIPVBLICAE	—	RIC9:19b	375–78	Arles	19	1320	1
520	Valentinian I	SECVRITAS REIPVBLICAE	—	RIC9:19c	375–78	Arles	19	839	1091
521	Valentinian I	GLORIA ROMANORVM	—	—	364–75	Arles	18	955	1
522	Valentinian I	SECVRITAS REIPVBLICAE	—	—	364–75	Arles	18	503	737
523	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	Arles	18	854	1
524	Valens	SECVRITAS REIPVBLICAE	—	RIC9:2b	364–67	Aquileia	17	700	901
525	Valentinian I	GLORIA ROMANORVM	—	RIC9:11a	367–75	Aquileia	18	1087	1
526	Valentinian I	GLORIA ROMANORVM	—	RIC9:11a	367–75	Aquileia	18	1245	1
527	Valens	SECVRITAS REIPVBLICAE	—	RIC9:12b	367–75	Aquileia	19	855	1
528	Valens	SECVRITAS REIPVBLICAE	—	RIC9:12b	367–75	Aquileia	19	871	1
529	Valentinian I	GLORIA ROMANORVM	—	RIC9:14a	367–75	Siscia	18	435	566
530	Valens	SECVRITAS REIPVBLICAE	—	RIC9:15b	367–75	Siscia	18	146	182
531	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	17	15	12
532	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	17	444	736
533	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	17	447	736
534	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	17	507	737
535	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	18	696	901
536	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	18	702	901
537	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	19	867	1
538	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	17	868	1
539	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	19	886	1
540	H. of Valentinian	GLORIA ROMANORVM/SECVRITAS REIPVBLICAE	—	—	364–78	—	18	892	1
541	Valens	GLORIA ROMANORVM	—	—	364–78	—	18	1094	1
542	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	13	1105	1
543	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	15	1162	1
544	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	17	1165	1
545	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	16	1218	1
546	Valentinian I	GLORIA ROMANORVM	—	—	364–78	—	17	1230	1

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
547	H. of Valentinian	GLORIA ROMANORVM	--	--	364-78	--	18	1307	1
548	Gratian	SECVRITAS REIPVBLICAE	--	--	364-78	--	17	448	736
549	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	18	462	735
550	Valens	SECVRITAS REIPVBLICAE	--	--	364-78	--	18	478	735
551	Gratian	SECVRITAS REIPVBLICAE	--	--	364-78	--	18	586	735
552	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	16	735	910
553	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	17	760	975
554	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	18	844	1116
555	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	17	848	1
556	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	18	851	1
557	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	18	880	1
558	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	17	894	1
559	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	19	948	1
560	Valens	SECVRITAS REIPVBLICAE	--	--	364-78	--	18	1107	1
561	Valens	SECVRITAS REIPVBLICAE	--	--	364-78	--	16	1121	1
562	Valens ?	SECVRITAS REIPVBLICAE ?	--	--	364-78	--	18	1192	1
563	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	11	1212	1
564	Valens	SECVRITAS REIPVBLICAE	--	--	364-78	--	17	1214	1
565	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	15+	1219	1
566	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	17	1251	1
567	H. of Valentinian	SECVRITAS REIPVBLICAE	--	--	364-78	--	18	1290	1
568	H. of Valentinian	Illeg.	--	--	364-78	--	19	252	1
569	Valens	SECVRITAS REIPVBLICAE	<i>Irreg.</i>	As RIC9:19b	364-78	As Arles	19	315	551
570	Gratian	VOT/XV/MVLT/XX	--	RIC9:30	378-83	Lyons	16	846	1
571	Maximus	SPES ROMANORVM	--	RIC9:65	387-88	Rome	13	1285	1
572	Gratian	VOT/XV/MVLT/XX, in wreath	--	--	378-83	--	14	1269	1
573	H. of Theodosius	VICTORIA AVGGG	--	RIC9:30	388-95	Arles	13	50	32
574	H. of Theodosius	VICTORIA AVGGG	--	As RIC9:30	388-95	Arles	14	1142	1
575	H. of Theodosius	VICTORIA AVGGG	--	As RIC9:30	388-95	Arles	14	1281	1
576	H. of Theodosius	VICTORIA AVGGG	--	As RIC9:30	388-402	Arles	13	1299	1
577	Valentinian II	SALVS REIPVBLICAE	--	RIC9:58a	388-92	Aquileia	15	1175	1
578	H. of Theodosius	SALVS REIPVBLICAE	--	--	388-402	Aquileia	12	863	1
579	H. of Theodosius	VICTORIA AVGGG	--	--	388-95	--	13	529	1
580	H. of Theodosius	VICTORIA AVGGG	--	--	388-95	--	12	595	735
581	H. of Theodosius	SALVS REIPVBLICAE	--	--	388-402	--	13	250	1
582	H. of Theodosius	VICTORIA AVGGG	--	--	388-402	--	13	845	1
583	H. of Theodosius	SALVS REIPVBLICAE	--	--	388-402	--	11	900	1
584	H. of Theodosius	VICTORIA AVGGG	--	--	388-402	--	14	1196	1
585	H. of Theodosius	Illeg.	--	--	383-95	--	14	577	735
586	Illegible	--	As/Dup.	--	1st-2nd	--	28	1122	1
587	Illegible	--	Ant.	--	260-94	--	16	1164	1

588-611 Illegible small bronzes, third and fourth centuries

612-619 Missing coins

620-641 Illegible small bronzes, third and fourth centuries

642-646 Missing coins

647	Coin blank, pear-shaped	--	--	?	3rd	--	17x11	985	1
648	Missing coin	--	--	unknown	--	--	17	486	737
649	Nuremburg jetton	--	--	1550-1610	--	--	22	565	1
650	Unstruck - gaming counter?	--	--	post-RB?	--	--	18	913	1132

(iv) Coins found by detectorists between 1982-85, and returned to finders.

(Identified by R.J.Zeevat)

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
1	Illeg.	Celtic	Bronze	--	--	--	17	1020	1
2	Claudius II	FORTVNA AVG	Ant.	--	268-70	--	18	1132	1
3	Claudius II	Illeg.	Ant.	--	268-70	--	--	1017	1
4	Poss. Gallic Empire	Illeg.	Ant.	--	260-74	--	--	1054	1
5	Barb. rad: DIVO CLAUDIO NEPTVNO CONS	AVG	Ant.	--	270-84	--	19	1055	1
6	Constantine I	BEAT TRANQVLITAS, VOT/IS/XX	Fol.	--	317-24	--	18	1241	1
7	Constantine II	CAESARVM NOSTRORVM, VOT/X	Fol.	--	317-24	--	--	1064	1

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
8	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:523	330-31	Trier	17	1066	1
9	Crispus	BEATA TRANQVILLITAS, VOT/IS/XX	Fol.	—	323	Lon./Trier	19	1005	1
10	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	HK1,49	330-35	Trier	17	1130	1
11	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	HK1,49	330-35	Trier	18	1166	1
12	Constantius II	GLORIA EXERCITVS, 2 standards	Fol.	HK1,50	330-35	Trier	17	1190	1
13	Constantius II	GLORIA EXERCITVS, 2 standards	Fol.	HK1,50	330-35	Trier	17	1179	1
14	CONSTANTINOPOLIS	Victory on prow	Fol.	HK1,52	330-35	Trier	15	1126	1
15	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	HK1,56	330-35	Trier	18	1225	1
16	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	HK1,56	330-35	Trier	18	1226	1
17	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	HK1,56	330-35	Trier	16	1155	1
18	CONSTANTINOPOLIS	Victory on prow	Fol.	HK1,59	330-35	Trier	16	1117	1
19	VRBS ROMA	Wolf & twins	Fol.	HK1,65	330-35	Trier	16	1168	1
20	Constantine II	CONSTANTINVS CAESAR	Fol.	HK1/508	324-30	Trier/Rome frag		1029	1
21	VRBS ROMA	Wolf & twins	Fol.	RIC7:561	333-34	Trier	—	1009	1
22	VRBS ROMA	Wolf & twins	Fol.	—	330-35	Trier ?	—	1023	1
23	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	335-40	Trier ?	—	1068	1
24	Constans ?	VICTORIAE DD AVGG Q NN	Fol.	—	347-48	Trier ?	—	1038	1
25	Constantine I	GLORIA EXERCITVS, 2 standards	Fol.	HK1,180	330-35	Lyons	16	1100	1
26	CONSTANTINOPOLIS	Victory on prow	Fol.	HK1,206	330-35	Lyons	15	1183	1
27	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:246	330-31	Lyons	—	1011	1
28	CONSTANTINOPOLIS	Victory on prow	Fol.	—	330-35	—	17	1211	1
29	CONSTANTINOPOLIS	Victory on prow	Fol.	—	330-35	—	17	1112	1
30	VRBS ROMA	Wolf & twins	Fol.	—	330-35	—	16	1139	1
31	VRBS ROMA	Wolf & twins	Fol.	—	330-35	—	17	1193	1
32	H. of Constantine	GLORIA EXERCITVS, 2 standards	Fol.	—	330-35	—	16	1118	1
33	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	—	330-35	—	18	1133	1
34	Constantine I	GLORIA EXERCITVS, 2 st.	Fol.	—	330-35	—	—	1075	1
35	H. of Constantine	GLORIA EXERCITVS, 2 standards	<i>Irreg.</i>	—	330-35	As Lyons	11	1228	1
36	H. of Constantine	GLORIA EXERCITVS, 2 st.	<i>Irreg?</i>	—	330-46	—	—	1012	1
37	VRBS ROMA	Wolf & twins	Fol.	—	330-35	—	—	1079	1
38	Constantius II	VICTORIAE DD AVGG Q NN	Fol.	HK1,139	341-46	Trier	16	1195	1
39	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	341-46	Trier	14	1194	1
40	Constantius II	GLORIA EXERCITVS, 1 standard	Fol.	HK1,130	337-41	Trier	15	1239	1
41	Constantine II	GLORIA EXERCITVS, 1 standard	Fol.	HK1,130	337-41	Trier	16	1249	1
42	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	337-41	—	—	1018	1
43	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	337-41	—	—	1050	1
44	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	337-41	—	—	1065	1
45	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	337-41	—	—	1069	1
46	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	337-41	—	—	1077	1
47	H. of Constantine	GLORIA EXERCITVS, 1 st.	Fol.	—	337-41	—	—	1078	1
48	H. of Constantine	GLORIA EXERCITVS, 1 standard	Fol.	—	335-37	—	15	1106	1
49	Constantius II	GLORIA EXERCITVS, 1 standard	Fol.	—	335-37	—	15	1113	1
50	Constantine II	GLORIA EXERCITVS, 1 standard	Fol.	—	337-41	—	16	1157	1
51	H. of Constantine	GLORIA EXERCITVS, 1 standard	Fol.	—	335-41	—	15	1217	1
52	Constans	GLORIA EXERCITVS, 1 standard	Fol.	—	337-41	—	15	1255	1
53	Constantine II	GLORIA EXERCITVS, 1 standard	Fol.	—	335-37	—	15	1257	1
54	H. of Constantine	GLORIA EXERCITVS, 1 standard	<i>Irreg.</i>	—	335-41	—	13	1109	1
55	H. of Constantine	GLORIA EXERCITVS, 1 st.	<i>Irreg.</i>	—	335-40	—	11	1080A	1
56	Theodora	PIETAS ROMANA ?	Fol.	—	337-41	—	14	1081	1
57	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	347-48	—	16	1032	1
58	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	347-48	—	—	1052	1
59	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	347-48	—	—	1083	1
60	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	341-46	—	17	1110	1
61	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	341-46	—	15	1120	1
62	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	341-46	—	16	1232	1
63	H. of Constantine	FEL TEMP REPARATIO, galley	—	—	348-50	—	—	1022	1
64	Constans	FEL TEMP REPARATIO, phoenix	—	RIC8:232	348-50	Trier	—	1002	1
65	Constantius II	FEL TEMP REPARATIO, FH	—	HK2,249	353-54	Lyons	18	1173	1
66	Constantius II?	FEL TEMP REPARATIO, FH	—	—	353-60	—	16	1188	1
67	Constans?	FEL TEMP REPARATIO, hut	—	—	346-50	—	20	1213	1
68	Magnentius	Illeg.	—	—	350-53	—	—	1019	1
69	Valentinian I	GLORIA ROMANORVM	—	RIC9:10a	364-67	Lyons	—	1004	1
70	Gratian	GLORIA ROMANORVM	—	HK2/322	364-78	Lyons	17	1028	1
71	H. of Valentinian	GLORIA ROMANORVM	—	—	364-78	—	—	1001	1
72	H. of Valentinian	GLORIA ROMANORVM	—	—	364-78	—	—	1053	1
73	Valens ?	GLORIA ROMANORVM	—	—	364-78	—	—	1067	1
74	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364-78	—	18	1192	1
75	Illegible	SECVRITAS REIPVBLICAE	—	—	364-78	—	11	1212	1
76	Illegible	SECVRITAS REIPVBLICAE?	—	—	364-78?	—	13	1227	1
77	H. of Valentinian	GLORIA ROMANORVM	<i>Irreg.</i>	—	364-78	—	13	1105	1

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
78	H. of Valentinian	GLORIA ROMANORVM	<i>Irreg.</i>	—	364–78	—	—	1082	1
79	Valens	SECVRITAS REIPVBLICAE	<i>Irreg.</i>	—	364–78	—	—	1031	1
80	Illegible	—	—	—	4th cent.	—	—	1026	1
81	Illeg. minim	—	—	—	4th cent.	—	—	1030	1
82	Illeg.	—	—	—	4th cent.	—	—	1033	1
83	Illegible	Illegible	—	—	4th cent.	—	10	1136	1
84	H. of Valentinian?	GLORIA ROMANORVM ?	—	—	late 4th	—	—	1039	1
85	Illegible	—	Fol.	—	mid 4th	—	—	1076	1
86	Illegible	—	—	—	4th cent.	—	—	1051	1
87	Illegible	Illegible	<i>Irreg.</i>	—	4th cent.	—	14	1151	1
88	Illegible	Illegible	<i>Irreg.</i>	—	4th cent.	—	11	1160	1
89	Uncertain	—	—	—	4th cent.	—	—	1084	1
90	Nuremberg jetton	—	—	—	16th c.	—	—	1024	1
91	Illegible	—	—	—	unknown	—	11	1080B	1

(v) Coins from the mausoleum site.

(Identified by Dr John A. Davies)

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
1	Addedomaros	Obv: Head to left Rev: Horse to left	Bronze	Mack 273	c15–1BC	—	14	196	600
2	Vespasian	FIDES PVBLICA, S.C.	As	RIC2:486	AD71	Rome	32	117	60
3	Vespasian	S.C., eagle on globe	As	As RIC2:764	77–78	Rome	27	39	1
4	Faustina I	IVNONI REGINAE, S.C.	As	RIC3:1091	138–41	Rome	27	127	1
5	Faustina II	S.C., Diana stg. I.	Dup.	RIC3:1405 (Ant.Pius)	145–46	Rome	27	128	1
6	Claudius II	VIRTVS AVG	Ant.	As RIC5:110	268–70	Rome	20	6	37
7	Allectus	PAX AVG	Ant.	RIC5:32	293–96	London	21	71A	1
8	Constantine I	SOLI INVICTO COMITI	Fol.	—	313–18	—	20	71B	1
9	Constantine II	GLORIA EXERCITVS, 2 standards	Fol.	RIC7:527	330–31	Trier	18	25	56
10	Constantine I	GLORIA EXERCITVS, 2 standards	Fol.	RIC7:537	332–33	Trier	18	35	68
11	CONSTANTINOPOLIS	Victory on prow	Fol.	RIC7:543	332–33	Trier	17	8	21
12	Constantius II	GLORIA EXERCITVS, 1 standard	Fol.	RIC7:592	335–37	Trier	16	10	21
13	Constans	VICTORIAE DD AVGG Q NN	Fol.	As RIC8:195	347–48	Trier	16	71C	1
14	Constans	VICTORIAE DD AVGG Q NN	Fol.	RIC8:206	347–48	Trier	15	16	21
15	H. of Constantine	GLORIA EXERCITVS, 1 standard	Fol.	—	335–40	—	14	71G	1
16	Constans	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	15	17	21
17	H. of Constantine	VICTORIAE DD AVGG Q NN	Fol.	—	347–48	—	frag	242a	1
18	H. of Constantine	GLORIA EXERCITVS, 2 standards	<i>Irreg.</i>	—	341–46	—	14	122B	1
19*	CONSTANTINOPOLIS	GLORIA EXERCITVS, 2 standards	<i>Irreg.</i>	<i>Hybrid</i>	341–46	As Lyons	13	45	147
20	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341–46	As Lyons	17	43	7
21	CONSTANTINOPOLIS	Victory on prow	<i>Irreg.</i>	—	341–46	—	14	126B	1
22	Constans	VICTORIAE DD AVGG Q NN	<i>Irreg.</i>	As RIC8:194	347–48	As Trier	17	126A	1
23	Constantius II	FEL TEMP REPARATIO, FH	—	RIC8:192	353–55	Lyons	19	21	49
24	Magnentius	Illeg.	—	—	350–53	—	20	71D	1
25	Constantius II	FEL TEMP REPARATIO, FH	—	—	355–60	—	18	2	1
26*	Magnentius	VICTORIAE DD AVG ET CAES, VOT/V/MVLT/X	<i>Irreg.</i>	—	351–53	—	16	140	471
27	Constans	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	17	48	151
28	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	10	49	151
29	H. of Constantine	FEL TEMP REPARATIO, FH	<i>Irreg.</i>	—	354–64	—	8	242b	1
30	Valentinian I	GLORIA ROMANORVM	—	RIC9:20a	367–75	Lyons	18	9	21
31	Valens	SECVRITAS REIPVBLICAE	—	—	364–78	Lyons	17	244	1
32	Valentinian I	GLORIA ROMANORVM	—	RIC9:7a	364–67	Arles	19	12	21
33	Valentinian I	GLORIA ROMANORVM	—	RIC9:7a	364–67	Arles	18	20	49
34	Valens	SECVRITAS REIPVBLICAE	—	RIC9:9b	364–67	Arles	19	255	1
35	Valens	SECVRITAS REIPVBLICAE	—	RIC9:19b	375–78	Arles	18	18	21
36	Valentinian I	GLORIA ROMANORVM	—	As RIC9:11a	367–75	Aquileia	19	183	1
37	Valentinian I	GLORIA ROMANORVM	—	As RIC9:14a	367–75	Siscia	19	46	151
38	Valens	GLORIA ROMANORVM	—	—	364–78	—	19	50	151
39	H. of Valentinian	GLORIA ROMANORVM	—	—	364–78	—	16	189	600
40	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	—	16	62B	1
41	H. of Valentinian	SECVRITAS REIPVBLICAE	—	—	364–78	—	17	184	1
42	H. of Valentinian	GLORIA ROMANORVM/ SECVRITAS REIPVBLICAE	—	—	364–78	—	18	213	600
43	Valentinian I	GLORIA ROMANORVM	<i>Irreg.</i>	—	364–75	—	18	233	1

No.	Issuer	Type	Denom.	Ref.	Date	Mint	Dia.	SFNo.	Cont
44	Theodosius	VICTORIA AVGGG	--	RIC9:30d	388-92	Arles	15	243	1
45	Arcadius	VICTORIA AVGGG	--	As RIC9:30e	388-95	Arles	12	47	151
46	H. of Theodosius	VICTORIA AVGGG	--	As RIC9:30	388-95	Arles	11	15	21
47	H. of Theodosius	SALVS REIPVBLICAE	--	RIC9:58	388-92	Aquileia	13	3	16
48	H. of Theodosius	SALVS REIPVBLICAE	--	--	394-95	--	12	245	1
49	Valentinian II	VICTORIA AVGGG	--	--	388-95	--	13	29	56
50	H. of Theodosius	VICTORIA AVGGG	--	--	388-95	--	13	44	147
51	H. of Theodosius	VICTORIA AVGGG	--	--	388-95	--	15	246	1
52	H. of Theodosius	VICTORIA AVGGG	--	--	388-402	--	13	254	1
53	H. of Theodosius	Illeg.	--	--	388-402	--	13	247	1
54	H. of Theodosius	Illeg.	--	--	388-402	--	11	248	1
55	Illegible	--	--	--	275-402	--	9	62A	1
56	Illegible	--	--	--	260-402	--	17	62C	1
57	Illegible	--	--	--	275-402	--	15	71E	1
58	Illegible	--	--	--	270-402	--	16	71F	1
59	Illegible	--	--	--	275-402	--	15	122A	1
60	Illegible	--	--	--	330-402	--	5+	11	21
61	Illegible	--	--	--	330-402	--	15	234	1
62	Charles I	Rose farthing token	--	North 2291	1634-36	--	13	190	600

APPENDIX 4: Illustrated artefacts and all coins from the 1983–86 excavations, listed by context.

Context No.	Artefact Publication No.	Coin No. (Appendix 3v)
<i>MK343:</i>		
1	409	—
2	410	—
<i>MK345:</i>		
	113	—
<i>THE MAUSOLEUM:</i>		
1	86, 4, 8, 12, 27, 30, 138, 146, 149, 152, 251, 254, 255, 257, 260, 262, 265, 266– 268, 424, 440.	3, 4, 5, 7, 8, 13, 15, 18, 21, 22, 24, 25, 31, 34, 36, 40, 41, 43, 44, 48, 51–59, 61.
5	258	—
7	—	20
16	—	47
21	11, 283.	11, 12, 14, 16, 30, 32, 35, 46, 60.
30	—	17, 29.
37	206	6
38	441	—
39	67, 105, 213, 252, 253, 387.	—
44	385	—
45	69, 256.	—
49	263	23, 33.
56	31, 264.	9, 49.
60	5, 10.	2
68	—	10
70	336	—
73	200, 201.	—
94	392	—
126	442	—
145	300	—
147	19	19, 50.
149	434	—
150	68	—
151	—	27, 28, 37, 38, 45.
152	403	—
155	402	—
159	301	—
176	15, 397, 401, 428.	—
177	14	—
181	398	—
195	383	—
196	399	—
197	425	—
275	433	—
278	394	—
303	396	—
390	395	—
421	18, 235.	—
427	261	—
431	418	—
433	393	—
437	420	—
460	302	—
460	303, 304.	—
463	379	—
465	1, 16, 17, 20, 29, 112, 145, 192, 299, 381, 382.	—
469	164	—
469	165	—
471	—	26
472	343	—
485	432	—
506	429	—

Context No.	Artefact Publication No.	Coin No. (Appendix 3v)
508	3, 21.	—
512	23, 24, 225.	—
518	28, 32.	—
589	435	—
595	400	—
600	7, 25, 308.	1, 39, 42.
601	2, 26.	—
603	210	—
711	117	—
726	427	—
765	391	—
815	13, 259, 426.	—
830	212	—
831	9	—
879	6	—
879	121	—
885	22	—

THE VILLA:

Context No.	Artefact Publication No.	Coin No. (Appendix 3iii)
+	34–36, 39, 40, 42, 43, 51, 52, 55.1, 57, 70, 80, 87, 91, 97, 99, 100, 101, 102, 103, 127, 136, 137, 144, 147, 148, 151, 156, 305, 306.	—
1	63, 98, 114, 128, 166, 176, 185, 220, 281, 290, 310, 314, 317, 331, 342, 350, 362, 363, 389, 422, 436, 443–447, 449.	3, 4, 16–19, 21–22, 24, 26, 28, 30, 32, 34–36, 38–39, 41–42, 46, 48–50, 57–58, 61, 63–68, 70–73, 75, 77–80, 82, 85–86, 88, 90–94, 96, 99, 102, 105, 107, 109–111, 115–117, 119–125, 127, 130–134, 137–143, 147, 149–150, 152–155, 158–159, 161, 163, 164, 169, 171, 173, 177, 178, 180, 182–186, 188, 189, 195–197, 199, 204, 206, 209, 212–214, 216, 217, 219, 221, 224–227, 229–230, 233, 235, 240–256, 260–264, 272–284, 286–287, 294–301, 303–305, 318–328, 333 ³ 36, 341–342, 347–353, 357–359, 361, 364–391, 393–395, 397–398, 400, 405–407, 411–412, 417–418, 420, 422, 424–425, 428, 429, 435–442, 444, 467–485, 489–490, 495, 499–502, 505–509, 513–514, 517, 519, 521, 523–526, 535–545, 553–566, 568–570, 572–577, 579–582, 584, 585, 591–605, 607–609, 615–617, 623–632, 638, 639, 641–645.
2	421	—
3	—	55, 236, 410, 445, 510.
6	326	—
7	159	84
11	169, 340.	257
12	195, 344, 388, 390.	529
20	—	362, 423.
23	78, 217.	—
24	373	432
27	179, 181, 182.	—
32	—	571
33	367	—
35	335	205, 486.
47	355	—
49	—	218
52	64, 77, 129.	497
54	74	—
56	289	—
62	141, 172.	—
66	132, 237.	—
68	231	—
72	79	—
74	—	427

Context No.	Artefact Publication No.	Coin No. (Appendix 3iii)
76	71, 365.	—
78	81	—
89	56	—
92	—	118
121	288	—
130	—	215
131	328	—
175	421	396
176	158	—
176	353	44, 340.
181	174	—
182	232, 320.	528
185	126	339
197	175	—
206	—	69
207	109, 131, 177, 372.	51, 201, 360, 414, 498.
218	227, 228.	—
219	366	—
225	—	56
231	221	—
245	448	—
257	380	—
262	88	—
273	—	492
286	—	487, 493.
288	44	—
290	329	—
316	437	—
329	—	37
332	241	—
336	316	2, 128.
339	133	—
347	249, 358, 359, 374.	—
355	282	—
360	92	—
362	124	—
372	46	—
384	173	—
416	—	12
417	47	—
418	—	54
422	375	—
424	222	—
457	33	—
459	134, 352, 368.	265, 302, 403, 446.
461	193, 223, 229.	101
462	123	162
465	—	234, 306.
466	59, 65, 111, 349.	266
489	438	—
495	—	237
496	208, 215, 226, 284, 291, 322.	87
504	53, 107, 120, 230, 370.	—
512	95	—
513	371	—
515	—	343
525	153, 347.	—
544	248	—
545	360	—
549	—	309
551	90, 106, 161, 270, 307, 309, 311, 323.	6, 11, 14, 40, 47, 53, 97, 113, 232, 267, 308, 311, 329, 344–345, 365, 366, 367, 399, 448, 567.
555	275	—
559	277	—
566	—	516, 527.
571	423	5, 310.
573	170	—
573	250	—
578	—	23, 129, 330, 368, 447.

Context No.	Artefact Publication No.	Coin No. (Appendix 3iii)
589	351	—
601	271	—
604	143	—
607	96, 135.	—
608	346	—
613	—	43
614	430	—
616	186	—
618	278, 332.	—
620	419	15, 76.
625	197, 357.	—
626	122, 163.	—
630	—	156
637	55, 72, 218, 287.	108, 148, 168, 192, 193, 198, 202, 231, 268, 337, 401, 404, 426, 433, 449, 450.
657	298	—
663	49	165
675	85	—
675	183, 450.	—
688	295	—
694	—	1
716	313	—
735	58, 75, 160, 194, 196, 198, 202, 203, 216, 233, 243, 246, 247, 272, 273, 330, 378, 386, 439.	27, 59, 98, 100, 126, 135, 145, 157, 166, 175–176, 179, 187, 211, 223, 238, 239, 288, 288, 291, 292, 315, 316, 332, 355, 370, 371, 392, 402, 415, 430, 451–453, 456–460, 494, 504, 511, 515, 547–549, 578, 583, 586, 589, 590, 611–614, 619, 620–622, 634, 640.
736	50, 61, 83, 93, 108, 157, 199, 236, 244, 327, 354.	13, 20, 60, 62, 144, 172, 181, 194, 203, 210, 269, 270, 285, 312, 338, 369, 372, 413, 530–531, 546, 633.
737	37, 38, 84, 162, 219.	9, 45, 52, 74, 95, 104, 106, 112, 167, 170, 174, 191, 207, 208, 222, 258, 259, 313, 314, 331, 346, 354, 363, 408, 409, 416, 419, 421, 431, 443, 454, 455, 491, 512, 520, 532, 587, 588, 606, 610, 618, 646.
739	189	—
	—	434
757	—	289, 461.
763	224	—
769	279	635
777	184	—
781	139	—
801	292	151, 293, 463.
805	274	—
813	240	—
814	321	—
815	154	462
822	41	—
824	89, 115.	—
831	361	—
834	48, 180, 187, 188.	356
847	337	—
854	294	—
861	369	—
866	66, 384.	—
881	238	—
895	276	—
899	155	—
901	130, 234, 285, 312, 348.	33, 89, 146, 220, 271, 317, 373, 496, 522, 533, 534.
909	119	—
910	190, 205, 214, 239, 293, 296, 297.	10, 550, 636
924	356	—
926	242	—
928	73	—
931	76, 118, 280.	25, 31.
954	94	—
964	245	—
965	54	—

Context No.	Artefact Publication No.	Coin No. (Appendix 3iii)
973	325	7, 8.
975	-	29, 83, 114, 228, 374, 464, 465, 488, 551, 637.
1000	125	-
1002	82, 168.	-
1004	45, 150, 167, 178, 207, 269, 431.	-
1053	191	-
1061	204	-
1064	315	-
1069	60, 171, 211.	-
1071	62, 377.	190
1091	104	518
1095	318, 319, 339, 341.	-
1103	333, 411.	-
1105	110, 116, 142, 404, 405.	-
1107	-	466
1110	324, 412, 413.	-
1116	209	552
1117	286	-
1122	334	-
1123	414	-
1132	-	647
1133	415	-
1137	364	-
1156	406	-
1168	416	-
1178	338	-
1191	140	-
1195	345, 376.	-
1196	407, 408, 417.	-
W23	-	103

APPENDIX 5: The illustrated artefacts, listed by period/phase.

<i>Publ. No.</i>	<i>Artefact description</i>	<i>Publ. No.</i>	<i>Artefact description</i>
UNSTRATIFIED/UNPHASED ARTEFACTS			
4	Colchester brooch	265	Iron spear blade
7	Colchester brooch	266	Iron socket
8	Colchester derivative brooch	267	Iron socket
12	Late La Tène type brooch	268	Iron socket
25	Aesica brooch	278	Iron ferrule
27	Hod Hill brooch	281	Iron ferrule
30	Plate brooch	290	Iron fitting
34	Colchester brooch	305	Lead weight
35	Colchester brooch	306	Lead weight
36	Colchester brooch	308	Lead steelyard weight
39	Colchester derivative brooch	310	Lead weight
40	Colchester derivative brooch	313	Lead repair plug
42	Colchester derivative brooch	314	Lead tripod
43	Colchester derivative brooch	317	Lead papal bull
51	Aucissa-Hod Hill brooch	321	Bone hairpin
52	Plate brooch	331	Bone hairpin
55a	Small long brooch	342	Bone decorated plaque
57	Copper alloy ribbon-strip bracelet	350	Glass handle
63	Copper alloy ribbon-strip bracelet	362	Glass bowl
70	Copper alloy 'D' section bracelet	363	Glass beaker
76	Copper alloy cable bracelet	369	Glass base fragment
80	Copper alloy ribbon-strip ring	389	Pottery counter
86	Silver finger ring	409	Leather shoe
87	Copper alloy plain round ring	410	Leather shoe
91	Copper alloy plain round ring	422	Carved marble fragment
92	Copper alloy split ring	424	Stone macehead
97	Copper alloy buckle	436	Rotary quern
98	Copper alloy buckle	440	Flint scraper
99	Copper alloy buckle	441	Flint scraper
100	Copper alloy buckle	443	Flint scraper
101	Copper alloy buckle	444	Flint knife
102	Copper alloy buckle	445	Flint knife
103	Copper alloy buckle	446	Flint knife
114	Copper alloy tweezers	447	Flint arrowhead
118	Copper alloy toilet spoon	449	Flint arrowhead
122	Copper alloy needle	1b LATE BRONZE AGE/EARLY IRON AGE	
125	Copper alloy pin	393	Clay mould
127	Copper alloy seal box lid	394	Daub
136	Copper alloy handle	395	Clay disc
137	Copper alloy handle fitting	396	Clay cylindrical weight
138	Copper alloy vessel foot?	420	Stone bangle
143	Copper alloy stud	433	Saddle quern
144	Copper alloy stud	2a 'MIDDLE' IRON AGE	
146	Copper alloy strap/button-and-loop fastener		
147	Copper alloy garter hook		
148	Copper alloy button	435	Rotary quern
149	Copper alloy button	442	Flint scraper
151	Copper alloy harness fitting	2b LATE IRON AGE/'BELGIC'	
152	Copper alloy horse pendant		
156	Copper alloy split hinged ring		
163	Copper alloy fitting	2	Colchester brooch
166	Copper alloy cockerel figurine	9	Colchester derivative brooch
176	Iron socketed tool	26	Hod Hill brooch
185	Iron pitchfork	212	Iron knife
186	Iron 'U' shaped object	295	Iron sheet fragment
188	Iron linch pin	397	Clay triangular weight
220	Iron knife	399	Clay plate
251	Iron spearhead	400	Clay perforated plate
254	Iron spearhead	401	Clay perforated plate
255	Iron spearhead	402	Clay perforated plate
257	Iron bolt head	425	Stone spindle whorl
260	Iron bolt head	428	Stone spindle whorl
262	Iron spear blade	429	Stone spindle whorl

Publ.
No. *Artefact*
description

2b/3I FIRST CENTURY AD

1 Colchester brooch
3 Colchester brooch
14 Late La Tène type brooch
15 Late La Tène type brooch
16 Rosette brooch
17 Rosette brooch
20 Langton Down brooch
21 Langton Down brooch
23 Unclassified brooch
24 Unclassified brooch
28 Plate brooch
29 Plate brooch
32 Unclassified brooch
112 Copper alloy nail cleaner
145 Copper alloy hollow rivet?
164 Copper alloy mount?
165 Copper alloy mount?
192 Iron latch lifter
225 Iron knife
299 Iron unidentified object
379 Glass bead
381 Glass bead
382 Glass bead

3I MID TO LATE FIRST CENTURY AD

438 Flaked flint axe
5 Colchester brooch
6 Colchester brooch
10 Headstud brooch
22 Langton Down brooch
67 Copper alloy 'D' section bracelet
69 Copper alloy 'D' section bracelet
85 Copper alloy bezel ring
88 Copper alloy plain round ring
105 Copper alloy hairpin
113 Copper alloy nail cleaner
117 Copper alloy tweezers
121 Copper alloy ligula
153 Copper alloy horse trapping
183 Iron scythe
206 Iron bucket handle mount
210 Iron cauldron hook
213 Iron knife
238 Iron joiners dog
252 Iron spearhead
253 Iron spearhead
256 Iron bolt head
282 Iron ferrule
347 Glass jug
360 Glass bowl
380 Glass bead
383 Glass bead
385 Glass bead
387 Glass bead
398 Clay plate/kiln bar
403 Unidentified clay object
423 Stone macehead
432 Saddle quern
434 Rotary quern
450 Flint arrowhead

3I/3II MID FIRST TO LATE SECOND CENTURY

361 Glass bowl?

Publ.
No. *Artefact*
description

3II LATE FIRST TO LATE SECOND CENTURY

18 Langton Down brooch
45 Colchester derivative brooch
47 Langton Down brooch
48 Aucissa-Hod Hill brooch
54 Penannular brooch
68 Copper alloy 'D' section bracelet
74 Copper alloy cable bracelet
82 Silver ribbon-strip ring
89 Copper alloy plain round ring
107 Copper alloy hairpin
109 Copper alloy hairpin
115 Copper alloy tweezers
120 Copper alloy ligula
131 Copper alloy spoon
150 Copper alloy harness fitting
167 Iron woodworking saw
168 Iron woodworking saw
173 Iron awl
175 Iron adze/axe blade
177 Iron socketed tool
178 Iron reaping hook
179 Iron reaping hook
180 Iron small hook
181 Iron small hook
182 Iron sickle
187 Iron bridle bit
197 Iron lock
207 Iron barrel hoop
230 Iron ringheaded pin
231 Iron wall hook
235 Iron Loop-headed spike
245 Iron double spiked loop
249 Iron catapult bolt head
258 Iron spear/bolt head
261 Iron bolt head
269 Iron child's bracelet?
271 Iron buckle
286 Iron ring
292 Iron fitting
294 Iron spike
298 Iron swivel hook?
315 Lead unidentified object
325 Bone hairpin
351 Glass handle
357 Glass blue-green bottle
358 Glass pale green bottle
359 Glass beaker
372 Glass base fragment
374 Glass base fragment
375 Glass base fragment
431 Whetstone

3II/3III LATE FIRST TO LATE THIRD CENTURY

53 Penannular brooch
200 Iron key
201 Iron key
222 Iron knife
336 Bone comb

3III LATE SECOND TO LATE THIRD CENTURY

123 Copper alloy needle
174 Iron awl

<i>Publ. No.</i>	<i>Artefact description</i>	<i>Publ. No.</i>	<i>Artefact description</i>
190	Iron linch pin	108	Copper alloy hairpin
205	Iron bucket handle	110	Copper alloy nail cleaner
406	Wooden bung	111	Copper alloy nail cleaner
3IV LATE THIRD TO MID FOURTH CENTURY			
33	Colchester brooch	116	Copper alloy tweezers
37	Colchester brooch	119	Copper alloy toilet spoon
38	Colchester derivative brooch	124	Copper alloy needle
41	Colchester derivative brooch	126	Copper alloy pin
46	Late La Tène type brooch	128	Copper alloy spoon
66	Copper alloy ribbon-strip bracelet	129	Copper alloy spoon
81	Copper alloy ribbon-strip ring	130	Copper alloy spoon
94	Copper alloy split ring	132	Copper alloy skillet handle
139	Copper alloy chain	133	Copper alloy vessel foot
189	Iron linch pin	135	Copper alloy sheet fragment
191	Iron key	140	Copper alloy chains
214	Iron knife	141	Copper alloy boss
221	Iron Knife	142	Copper alloy stud
239	Iron joiners dog	154	Copper alloy unfinished object
274	Iron stylus	155	Copper alloy dividers?
279	Iron ferrule	157	Copper alloy cast fitting
288	Iron 'L' shaped bracket	160	Copper alloy strip
293	Iron fitting	161	Copper alloy armlet terminal
296	Iron ring headed pin?	162	Copper alloy cast fragment
297	Iron washer	169	Iron chisel
329	Bone hairpin	170	Iron chisel
338	Bone handle	171	Iron drill bit
356	Glass blue-green bottle	172	Iron awl
366	Glass beaker/cup	184	Iron shears
384	Glass bead	193	Iron key
3IV/V LATE THIRD TO LATE FOURTH CENTURY			
224	Iron knife	194	Iron key
328	Bone hairpin	195	Iron key
373	Glass base fragment	196	Iron key
437	Millstone	198	Iron key
3V MID TO LATE FOURTH CENTURY			
11	Late La Tène type brooch	199	Iron key
19	Langton Down brooch	202	Iron socketed hook
31	Penannular brooch	203	Iron flesh hook?
44	Colchester derivative brooch	208	Iron swivel loop
50	Aucissa-Hod Hill brooch	209	Iron swivel hook
55	Penannular brooch	215	Iron knife
56	Copper alloy ribbon-strip bracelet	216	Iron knife
58	Copper alloy ribbon-strip bracelet	218	Iron knife
59	Copper alloy ribbon-strip bracelet	219	Iron knife
60	Copper alloy ribbon-strip bracelet	223	Iron knife
61	Copper alloy ribbon-strip bracelet	226	Iron knife
62	Copper alloy ribbon-strip bracelet	229	Iron water pipe collar
64	Copper alloy ribbon-strip bracelet	233	Iron hook
65	Copper alloy ribbon-strip bracelet	234	Iron Loop-headed spike
72	Copper alloy crenellated bracelet	236	Iron 'T' staple
73	Copper alloy crenellated bracelet	237	Iron 'T' staple
75	Copper alloy cable bracelet	240	Iron joiners dog
77	Copper alloy ribbon-strip ring	241	Iron joiners dog
79	Copper alloy ribbon-strip ring	242	Iron cleat
83	Copper alloy crenellated ring	243	Iron double spiked loop
84	Copper alloy crenellated ring	244	Iron double spiked loop
90	Copper alloy plain round ring	246	Iron spearhead
93	Copper alloy split ring	247	Iron spearhead
95	Copper alloy earring	248	Iron spearhead
96	Copper alloy earring	250	Iron catapult bolt head
104	Copper alloy buckle	263	Iron spear blade
106	Copper alloy hairpin	264	Iron spear blade
		270	Iron finger ring
		272	Iron buckle
		273	Iron buckle
		275	Iron stylus
		276	Iron stylus
		277	Iron stylus
		280	Iron ferrule
		283	Iron collar ferrule
		284	Iron ring

APPENDIX 6: Catalogue of window glass from the villa.

Obj.no.	Context	Item	Context description
<i>Matt-glossy window glass (all blue-green):</i>			
99	97	1 edge fragment.	Mosaic bedding, Room 1, Building 1.
177	223	1 fragment.	Mosaic bedding, Room 2, Building 1.
183	255	1 fragment.	Floor, Building 6.
184	288	1 fragment.	East wall, Room 12, Building 1.
219	339	2 fragments.	Floor makeup, Room 9, Building 1.
262	1	1 fragment.	Topsoil.
743	950	1 fragment.	Floor makeup, Building 12.
777	1002	1 corner fragment.	Destruction, Building 10.
785	1004	1 fragment.	Destruction, Building 10.
786	1004	1 fragment.	Destruction, Building 10.
787	1004	1 fragment.	Destruction, Building 10.
788	1004	1 edge fragment.	Destruction, Building 10.
789	1004	1 edge fragment.	Destruction, Building 10.
806-24	1053	19 frags, inc. 6 edges	Destruction, Building 10.
826	1049	1 fragment, melted.	Fill, Gully 1025.
<i>Double glossy window glass:</i>			
-	2	5 fragments, pale green.	Destruction, Building 1.
-	55	1 fragment, green.	Destruction, baths, Building 7.
25	12	7 frags, inc. 2 edges, pale green.	Fill of pond.
32	14	2 fragments, greenish-colourless.	Fill of pond.
33	26	1 fragment, pale green.	Fill, Ditch 260.
38	7	4 fragments, pale olive green.	Destruction, Building 1.
38	7	1 edge fragment, olive green.	Destruction, Building 1.
39	14	4 fragments, pale green.	Fill of pond.
43	33	4 fragments, pale green.	Destruction, Building 1.
47	24	2 frags, pale blue-green	South bath drain, Building 1.
49	32	2 frags, pale olive green.	Destruction, baths, Building 7.
51	35	2 fragments, greenish-colourless.	Destruction, Building 1.
59	33	2 fragments, pale blue-green.	Destruction, Building 1.
63	54	1 frag., green, heavily weathered	Destruction, baths, Building 7.
67	47	1 fragment, blue-green.	Fill of pond.
69	32	1 fragment, green.	Destruction, baths, Building 7.
71	62	1 fragment, olive green.	Ash layer, Room 10, Building 1.
76	72	1 fragment, pale green.	Fill, Ditch 447.
79	71	1 fragment, pale blue-green.	Gully in floor, Building 6.
80	52	2 fragments, pale green.	Destruction, Building 6.
81	52	1 fragment, pale green.	Destruction, Building 6.
98	93	5 fragments, olive green.	Ash in hypocaust, Room 5, Building 1.
138	187	1 fragment, olive green.	Burnt layer, Room 11, Building 1.
140	183	1 fragment, pale green.	Destruction, Building 1.
155	176	2 fragments, pale green.	Destruction, Building 8.
155	176	1 fragment, green.	Destruction, Building 8.
158	199	1 fragment, colourless.	Trackway, east of Building 1.
170	207	2 fragments, pale green.	Trackway, east of Building 1.
170	207	1 fragment, blue-green.	Trackway, east of Building 1.
179	235	1 fragment, green.	Patch on mortar floor, Room 2, Building 1.
185	248	1 fragment, green.	Fill, Ditch 263.
199	256	1 fragment, pale blue-green.	Fill, Ditch 256.
201	362	1 fragment, pale green.	Floor makeup, Room 12, Building 1.
202A	424	1 frag, pale green, partly burnt	Rubble makeup, Room 1, Building 1/7.
217	342	1 fragment, olive green.	Mortar floor, Room 3, Building 1.
228	410	1 fragment, pale blue-green.	Destruction, Building 7?
262	1	4 fragments, green.	Topsoil.
266	462	1 fragment, green.	Soil spread, farmyard.
276	459	1 fragment, green.	Destruction, Building 8.
284	466	2 fragments, green.	Soil spread east of trackway.
295	496	1 fragment, blue-green.	Soil spread east of trackway.
301	504	1 fragment, blue-green.	Soil spread east of trackway.
302	504	2 fragments, blue-green.	Soil spread east of trackway.
305	504	1 fragment, blue-green.	Soil spread east of trackway.
307	504	1 fragment, green.	Soil spread east of trackway.
325	538	1 fragment, pale blue-green.	Fill, Ditch 537.
341	571	2 fragments, green.	Fill, Gully 699.
366	587	1 frag, ?green, heavily weathered	Floor makeup, Room 1, Building 8.
391	623	1 fragment, pale blue-green.	Soil spread, farmyard.
392	620	1 fragment, green.	Soil spread, farmyard.
393	602	1 fragment, blue-green.	Fill, Ditch 708.
394	620	1 fragment, green.	Soil spread, farmyard.
778	1002	1 fragment, green.	Destruction, Building 10.
796	1026	1 fragment, pale green.	Fill, Gully 1025.
840	1103	1 fragment, pale green.	Fill, Enclosure 1208.
904	1116	1 fragment, pale blue-green.	Fill, Enclosure 1208.

APPENDIX 7: Catalogue of slag from the villa, listed by context.

Context	SSL	SSL-CIN	HB	CIN	HL	OTHER
1	-	1878	-	-	-	-
6	-	173	-	-	-	-
112	18	-	-	-	-	-
117	365	-	-	-	-	-
176	-	1278	-	-	-	15
181	-	-	-	-	-	35
182	295	-	-	-	-	-
185	167	-	-	-	-	-
199	542	-	263	-	-	-
218	115	31	-	-	-	-
219	33	-	-	-	-	-
262	27	-	-	-	-	-
288	91	-	-	-	-	-
311	-	-	-	37	-	-
335	-	-	255	-	-	-
347	192	-	-	-	-	-
359	-	15	-	-	-	-
362	270	-	-	-	-	-
365	-	6	-	-	-	-
459	83	1155	-	-	-	-
463	-	5	-	-	-	-
466	18	-	-	-	-	-
467	151	-	-	-	-	-
468	77	-	-	-	-	-
469	-	-	-	-	-	86
496	369	-	359	-	-	-
515	-	47	-	-	-	-
530	-	-	-	236	-	-
581	459	-	175	-	-	-
595	-	23	-	-	-	-
600	-	-	-	96	-	-
606	-	696	-	-	-	-
607	-	86	-	-	-	-
609	-	-	-	46	-	-
611	-	-	-	43	-	-
613	-	168	-	-	-	-
614	372	843	-	-	-	-
616	-	238	-	-	-	-
618	-	38	-	-	-	-
628	161	-	-	-	-	-
630	-	9030	-	-	436	-
816	-	-	-	-	-	363
880	-	-	-	-	-	386
881	-	1765	-	-	-	-
883	-	506	-	-	-	-
892	-	407	-	-	-	-
897	-	-	-	-	-	42
901	-	-	-	-	-	355
915	-	-	-	-	-	95
926	54	-	-	-	-	115
TOTAL	3859	18388	1052	458	436	1492

All weights in grammes.

Key:

SSL
HB
HL

Smithing slag
Hearth bottom
Hearth lining

SSL-CIN
CIN
OTHER

Cindery smithing slag
Cinder
Other materials

APPENDIX 8: Catalogue of samian found at the 'mausoleum' site (Identified by Hedley Pengelly)

No.	Cont.	Context description	Form	Comments
1	590	Cremation 17	18	Stamp of Felix i, c.50–70.
2	19	Enclosure Ditch 2	27	Two sherds same cup.
3	52	above Enclosure Ditch 2	–	Cup sherd, prob. pre-Flavian.
4	155/831	Pit 156	18	Fabric and slip of c.50–75.
5	181	Enclosure Ditch 60	–	Dish sherd, pre-Flavian, probably Neronian.
6	421	Enclosure Ditch 2	–	Dish sherd, pre-Flavian, probably Neronian.
7	482	Pit 475	–	Dish sherd. Fabric like 1, slip like 2, c.50–75.
8	485	Ditch 474	15/17	8 joining sherds. Fabric like 1, slip slightly earlier.
9	595	Pit 595	18	Fabric and slip like 1.
10	617	Ditch 474	18	Claudio-Neronian.
11	831	Pit 608	–	Dish sherd, fabric and slip like 1.
12	831	Pit 608	18	Fabric and slip like 1.
13	885	Enclosure Ditch 60	27	Probably Neronian or early Vespasianic.
14	467	Cremation 6	18	Stamp of Pontus of la Graufsenque, c.65–90.
15	879	Enclosure Ditch 60	18	Dish type like 14, but better quality. Prob. c.65–80.
16	94/95	Ditch 94/95	37	Burnt base and footring, with a 'name' graffito. Flavian–Trajanic?
17	595	Pit 595	37	Scraps from panelled bowl. Flavian–Trajanic. Conceivably same bowl as 16, but sherds are unburnt.
18	879	Enclosure Ditch 60	29	Lezoux. Pre-Flavian, most likely Claudio–Neronian.
19	19	Enclosure Ditch 2	18/31R	Hadrianic–Antonine.
20	19	Enclosure Ditch 2	38	Hadrianic or early Antonine.
21	2	Fill, Enclosure Ditch 2	31	Antonine, prob. early–mid period.

Claudio–Vespasianic Graufsenque groupings:

1–13

Other South Gaulish samian:

14–17

Central Gaulish samian:

18–21

APPENDIX 9: List of animal bone associated with the first-century cremation burials.
(Identified by J. Holmes and Ann Stirland)

CREMATION 1

Forty-eight fragments (mostly very small). 52 g.

- 1) Sheep – right femur (greater trochanter epiphysis not fused; at least five fragments), right tibia (missing proximal end, distal epiphysis just fused), tibial tarsal (astragalus) – intact and articulates with tibia.
- 2) Most of the rest of the fragments probably belong to this leg except two rib fragments.

CREMATION 2

Twenty-one very small fragments. 8 g.

All fragments of a mandible – no teeth present – probably sheep, but not possible to identify with certainty.

CREMATION 3

Nine very small fragments. 4 g.

Clearly all the fragments are from one bone – unidentified (?? large avian).

CREMATION 4

Twelve fragments. 29 g.

- 1) Articulating together fragments of a left elbow of mutton. Adult sheep (all epiphysis fused) – distal humerus, chopped across cleanly leaving about one-third shaft and four fragments of radius which was probably intact (both ends are present) and also fragments of the ulna.
- 2) Four small fragments, probably of two adjacent sheep thoracic vertebrae – neural spine only identifiable – probably a small segment of dorsal vertebral column meat after removal of spinal cord.

CREMATION 5

Six fragments. 48 g.

- 1) Distal end of a horse tibia (much weathered).
- 2) Two fragments of a rib shaft – ox or horse, but not possible to say which.
- 3) Three small unidentified fragments.

CREMATION 6

Five fragments. 42 g.

Main fragment – tentatively part of the right radius of an ox (proximal epiphysis fused). The other fragments probably belong to it.

CREMATION 8

105 fragments, mostly very small. 97 g.

- 1) Five larger fragments – part of the distal end of the scapula (epiphysis missing), the shaft of the humerus (both ends missing), part of the proximal ulna (two fragments – distal end missing, proximal epiphysis not fused, knife mark on the cranial articular surface), small piece of the head of the radius – all right hand side – from a pig. Not possible to tell if they were articulated.
- 2) Three fragments – sheep right hand side – part of distal scapula (epiphysis fused), part of humerus shaft (both ends missing), piece radius shaft (both ends missing).
- 3) Two pieces of another right sheep radius (no ends).
- 4) Nothing identifiable from the remaining small pieces except to note a fragment of rib shaft and a fragment of tooth (species not identifiable).

CREMATION 9

Thirteen fragments. 85 g.

- 1) Pig – left leg – whole of the tibia (four fragments, both epiphysis separate but present), tibial tarsal (astragalus) intact, fibular tarsal (calcaneus) intact except proximal epiphysis missing.
- 2) Six unidentified fragments – two are largish pieces of the shaft of a long bone of a large species.

CREMATION 10

200 g. (cremated)

Young animal unbutchered, probably a pig, burnt at a lower temperature than the human, or for a shorter time.

CREMATION 11

Thirteen fragments. 45 g.

- 1) Sheep – distal tibia and most of the shaft (two fragments) – epiphysis just fused. Also articulating tibial tarsal (astragalus) intact.
- 2) The rest of the fragments (except perhaps one or two very small ones) are from a large piece of rib shaft, almost certainly of ox, although horse cannot be ruled out.

CREMATION 12

One fragment. 10 g.

Sheep or goat late thoracic vertebra virtually intact. Caudal epiphysis missing, cranial just fused, so fairly mature animal.

CREMATION 14

30 g. (cremated)

Parts of an animal also burnt – probably a young pig.

CREMATION 15

One fragment. 2 g.

Centrum of the first sacral vertebra of a sheep – epiphysis unfused and neural arch missing.

CREMATION 16

Twelve fragments. 42 g.

- 1) Patella of an ox, entirely intact.
- 2) All but one (an unidentifiable fragment) of the remaining fragments are of ribs. Two proximal ends suggest a pig origin. Could be all from two right ribs.

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ABBREVIATIONS:

<i>AnJ</i>	<i>Antiquaries Journal</i>	<i>PPS</i>	<i>Proceedings of the Prehistoric Society</i>
<i>ArJ</i>	<i>Archaeological Journal</i>	RBP	Marney 1989
<i>BAJ</i>	<i>Bedfordshire Archaeological Journal</i>	<i>RoB</i>	<i>Records of Buckinghamshire</i>
BAR	British Archaeological Reports.	RMK	Mynard 1987
BASMS	Buckinghamshire Archaeology Society Monograph Series.	RRC SAL	Report of the Research Committee of the Society of Antiquaries of London.
CBARR	Council for British Archaeology Research Report.	<i>TBGAS</i>	<i>Transactions of the Bristol and Gloucestershire Archaeology Society</i>
NA	<i>Northamptonshire Archaeology</i>		

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