

## Chapter 7: The artefacts

### THE PREHISTORIC POTTERY

by *Melanie Hall*

#### *Introduction*

The excavation produced 7,100 prehistoric sherds, as well as 10 complete vessels. This compares closely with the 6,849 sherds published from the contemporary site at Aldermaston Wharf.

This material has been divided into 28 fabrics, based on minor differences of filler, treatment, surface texture and firing: six fine (B, J, O, P, Q, X), eight medium-coarse (E, F, T, V, W, Z, AA, BB), eight coarse (A, G, I, K, M, R, U, Y) and six extremely coarse (C, D, H, L, N, S). As at Aldermaston, the distinctions between the coarser fabrics were not always easy to apply, especially with the smaller sherds.

#### *Fabrics*

The fabrics have been amalgamated into 11 broad groups based in the main on similarity of filler, but also taking into consideration treatment, surface texture and firing. A visual comparison chart was used to aid percentage estimation of filler.

The principal filler used was crushed burnt flint. Occasionally grog was added and in two fabrics vegetable temper was identified. Naturally occurring haematite was also found in many examples. It is believed that the quartz sand found in six examples was also not a deliberately added filler.

#### Group 1 (38% of all sherds)

Burnt flint only (in the case of fabric D, also probable vegetable temper):

- C – Burnt flint 3%, ill-sorted, up to 8 mm. Haematite 5–10%. Mean thickness of body wall  $11 \pm 4$  mm (5% of all sherds).
- D – Burnt flint 20%, ill-sorted, up to 5 mm. Haematite 1%. Some cavities as result of vegetable tempering. Mean thickness of body wall  $13 \pm 6$  mm (17% of all sherds).
- K – Burnt flint 10%, ill-sorted, up to 8 mm. Haematite 1%. Quartz sand 40%. Mean thickness of body wall  $8 \pm 2$  mm (2% of all sherds).
- L – Burnt flint 20%, ill-sorted, up to 7 mm. Mean thickness of body wall  $9 \pm 2$  mm (5% of all sherds).
- N – Burnt flint 40–50%, ill-sorted, up to 10 mm Haematite 1%. Mean thickness of body wall  $11 \pm 5$  mm (2.5% of all sherds).

- R – Burnt flint 10%, ill-sorted, up to 5 mm. Mean thickness of body wall  $7 \pm 2$  mm (1% of all sherds).
- S – Burnt flint 10%, ill-sorted, up to 8 mm. Mean thickness of body wall  $9 \pm 3$  mm (1.5% of all sherds).
- U – Burnt flint 5%, ill-sorted, up to 4 mm. Haematite 1%. Mean thickness of body wall  $11 \pm 4$  mm (4% of all sherds).

#### Group 2 (4% of all sherds)

Finely crushed burnt flint only:

- G – Burnt flint 50%, well-sorted, up to 2 mm. Haematite 40–50%. Quartz sand also present – 1–3%. Mean thickness of body wall  $8 \pm 2$  mm (0.5% of all sherds)
- I – Burnt flint 30%, well-sorted, up to 3 mm. Mean thickness of body wall  $8 \pm 3$  mm (3.5% of all sherds).

#### Group 3 (41% of all sherds)

Burnt flint and grog:

- A – Burnt flint 10–20%, ill-sorted, up to 8 mm. Haematite 1%. Grog 1–3%. Mean thickness of body wall  $9 \pm 3$  mm (35% of all sherds).
- H – Burnt flint 10%, ill-sorted, up to 8 mm. Grog 10%, ill-sorted, up to 6 mm. Some haematite (less than 5%). Mean thickness of body wall  $12 \pm 3$  mm (3% of all sherds).
- M – Burnt flint 10%, ill-sorted, up to 5 mm. Grog 1% – large fragments. Mean thickness of body wall  $9 \pm 3$  mm (3% of all sherds).
- Y – Burnt flint 1%, ill-sorted, up to 4 mm. Grog 5–10%. Haematite 1%. Mean thickness of body wall  $8 \pm 3$  mm (0.1% of all sherds).

#### Group 4 (10% of all sherds)

Sparse burnt flint only (in the case of fabric T also probable vegetable tempering):

- E – Burnt flint 1%, ill-sorted, up to 3 mm. Haematite 20%. Mean thickness of body wall  $9 \pm 4$  mm (0.3% of all sherds).
- F – Burnt flint 1%, ill-sorted, up to 6 mm. Haematite 1%. Mean thickness of body wall  $8 \pm 2$  mm (8% of all sherds).
- T – Burnt flint 10%, ill-sorted, up to 4 mm. Haematite 1%. Many cavities caused by vegetable temper (leaving grass impressions) and perhaps missing flint inclusions. Mean thickness of body wall  $8 \pm 3$  mm (1.2% of all sherds).
- BB – Burnt flint 1%, ill-sorted, up to 4 mm. Mean thickness of body wall  $9 \pm 1$  mm (0.2% of all sherds).

## Group 5 (0.5% of all sherds)

Sparse burnt flint and quartz sand:

- V – Burnt flint 1%, ill-sorted, up to 3 mm. Haematite 30%. Quartz sand present. Mean thickness of body wall  $9 \pm 3$  mm (0.3% of all sherds).
- W – Burnt flint 1%, up to 1 mm. Quartz sand present. Mean thickness of body wall  $8 \pm 2$  mm (0.2% of all sherds).

## Group 6 (4% of all sherds)

Sparse/medium finely crushed burnt flint:

- B – Burnt flint 5%, well-sorted, up to 1 mm. Haematite 1%. Mean thickness of body wall  $6 \pm 2$  mm (1.5% of all sherds).
- O – Burnt flint, 10–20%, well-sorted, up to 2 mm. Mean thickness of body wall  $6 \pm 1$  mm (2.3% of all sherds).
- P – Burnt flint 30%, well-sorted, up to 2 mm. Mean thickness of body wall  $7 \pm 2$  mm (0.1% of all sherds).

## Group 7 (0.3% of all sherds)

Abundant finely crushed burnt flint:

- J – Burnt flint 50%, well-sorted, up to 1 mm. Mean thickness of body wall  $6 \pm 1$  mm (0.3% of all sherds).

## Group 8 (2% of all sherds)

Medium fine crushed burnt flint:

- Q – Burnt flint 30%, well-sorted, up to 1.5 mm, mainly 1 mm or less. Mean thickness of body wall  $7 \pm 2$  mm (2% of all sherds).

## Group 9 (0.1% of all sherds)

Grog only:

- AA – Grog 20–30%. Mean thickness of body wall  $10 \pm 1$  mm (0.1% of all sherds).

## Group 10 (0.03% of all sherds)

Very small proportion of burnt flint, quartz sand fabric:

- X – Burnt flint 1%, well-sorted, up to 2 mm, mainly 1 mm or less. Quartz sand present. Mean thickness of body wall  $7 \pm 0$  mm (0.03% of all sherds).

## Group 11 (0.1% of all sherds)

- Z – No filler. Quartz sand present. Mean thickness of body wall  $6 \pm 2$  mm (0.1% of all sherds).

*Forms* (Figs. 41–43)

The excavated material contains a minimum of 220 separate vessels. Apart from 23% which cannot be classified, they can be assigned to 25 basic forms, defined by rim sherds or whole pots. As the rims can rarely be associated with base sherds, the latter are described separately. The following description summarises their representation in two different ways: the percentage of each form among the material that could be classified, and the percentage of separate contexts in which these types are represented. Comparison between the two estimates emphasises the

strikingly uniform distribution of most of these vessels around the excavated areas. All percentages are rounded to the nearest whole number.

*Rim and body forms:*

- 1 Fine angular bowl with out-turned rim and pronounced shoulder. The rim diameter exceeds that of the shoulder and is between 110 and 130 mm. 3% of classifiable vessels; 2% of excavated contexts. Form 1a has a straighter rim and a more sharply defined shoulder. The rim diameter is 190 mm. 1% of classifiable vessels; 1% of excavated contexts. Cf. Aldermaston form 1 (Bradley *et al.* 1980, 234).
- 2 Larger and coarser variant of form 1, lacking a distinct rim, and characterised by a straight neck and a more rounded shoulder. Rim diameter 240 mm 1% of classifiable vessels; 1% of excavated contexts.
- 3 Fine bipartite angular bowl. The body profile is more angular and the neck slopes inwards to a rounded rim. Rim diameter 100 mm 1% of classifiable vessels; 1% of excavated contexts. Cf. Aldermaston form 2 (Bradley *et al.* 1980, 234).
- 4 Fine bipartite bowl with an upright, rather beaded rim, slight shoulder cordon and omphalos base. Rim diameters are between 110 and 150 mm 1% of classifiable vessels; 1% of excavated contexts.
- 5 Rounded bowl in which the shoulder and rim have almost the same diameter. Mainly coarse but also occasionally in fine fabrics. The rim can be slightly beaded. Rim diameter 180 mm. 1% of classifiable vessels; 1% of excavated contexts.
- 6 Generally fine rounded jar with plain flat base and sharp or slightly beaded rim. Rim diameters are between 80 and 180 mm. 2% of classifiable vessels; 3% of excavated contexts.
- 7 Mainly coarse plain jars of straight or rounded 'flower pot' profile with flat or rounded rim. The base is flat or slightly raised and sometimes expanded. The same basic form is found in a wide variety of sizes and rim diameters are between 80 and 330 mm 28% of classifiable vessels; 24% of excavated contexts. Cf. Aldermaston form 7 (Bradley *et al.* 1980, 234).
- 8 Generally coarse plain jar with a markedly biconical body profile, and simple hooked or rounded rim. Again the vessel is found in a wide variety of sizes, and rim diameters vary from 80 to 460 mm. 28% of classifiable vessels; 25% of excavated contexts. Cf. Aldermaston forms 5 and 6 (Bradley *et al.* 1980, 234).
- 9 A variant of form 8, equally coarse but with more finely tapering rim and pronounced shoulder angle. The rim diameter is uncertain. 2% of classifiable vessels; 2% of excavated contexts.
- 10 Large coarse shouldered jar with shallow neck, angular profile, simple rounded rim and flat or slightly raised base. Rim diameters are between 100 and 360 mm. 3% of classifiable vessels; 2% of excavated

The artefacts

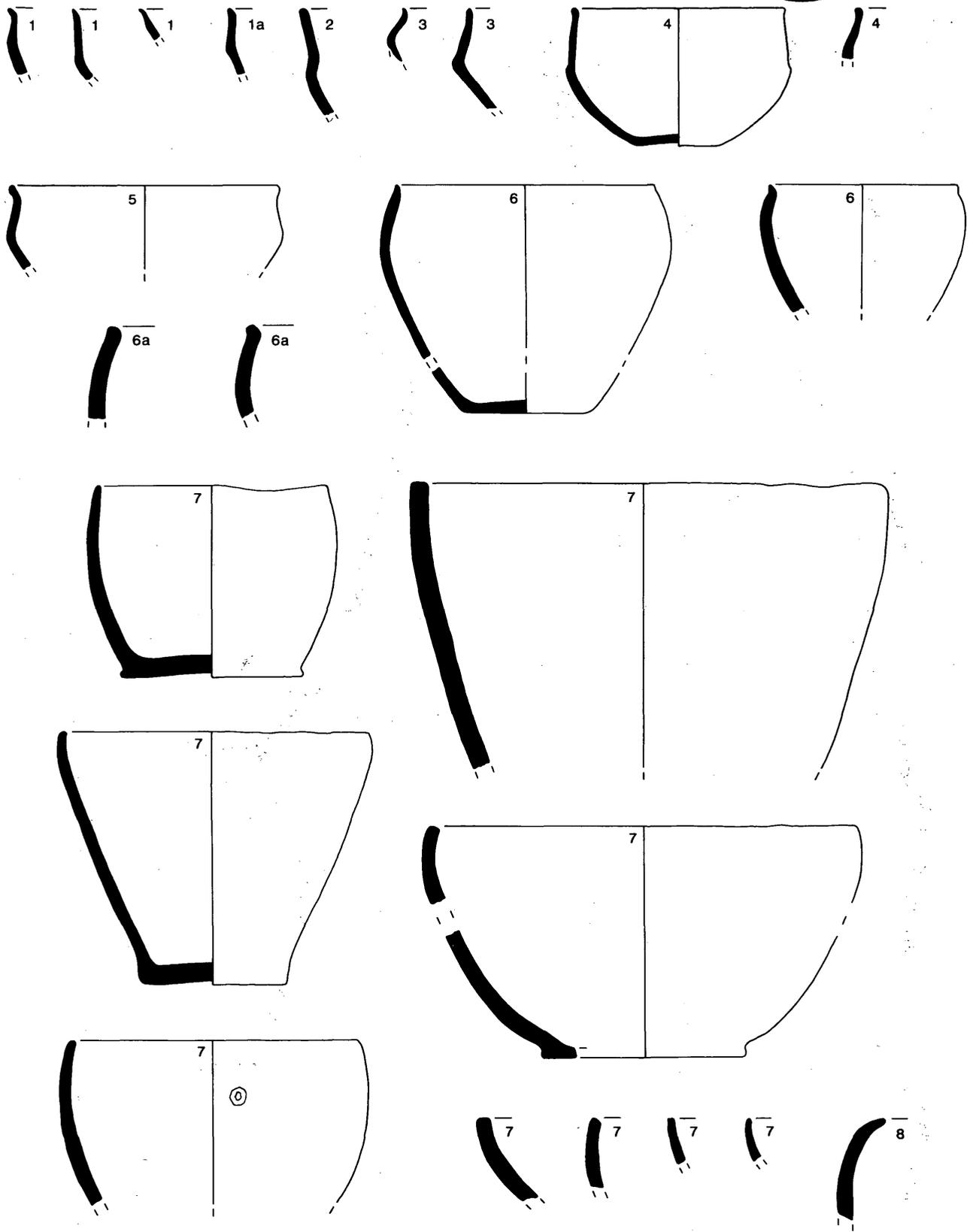


Figure 41 Type series 1-8

1/4 Scale

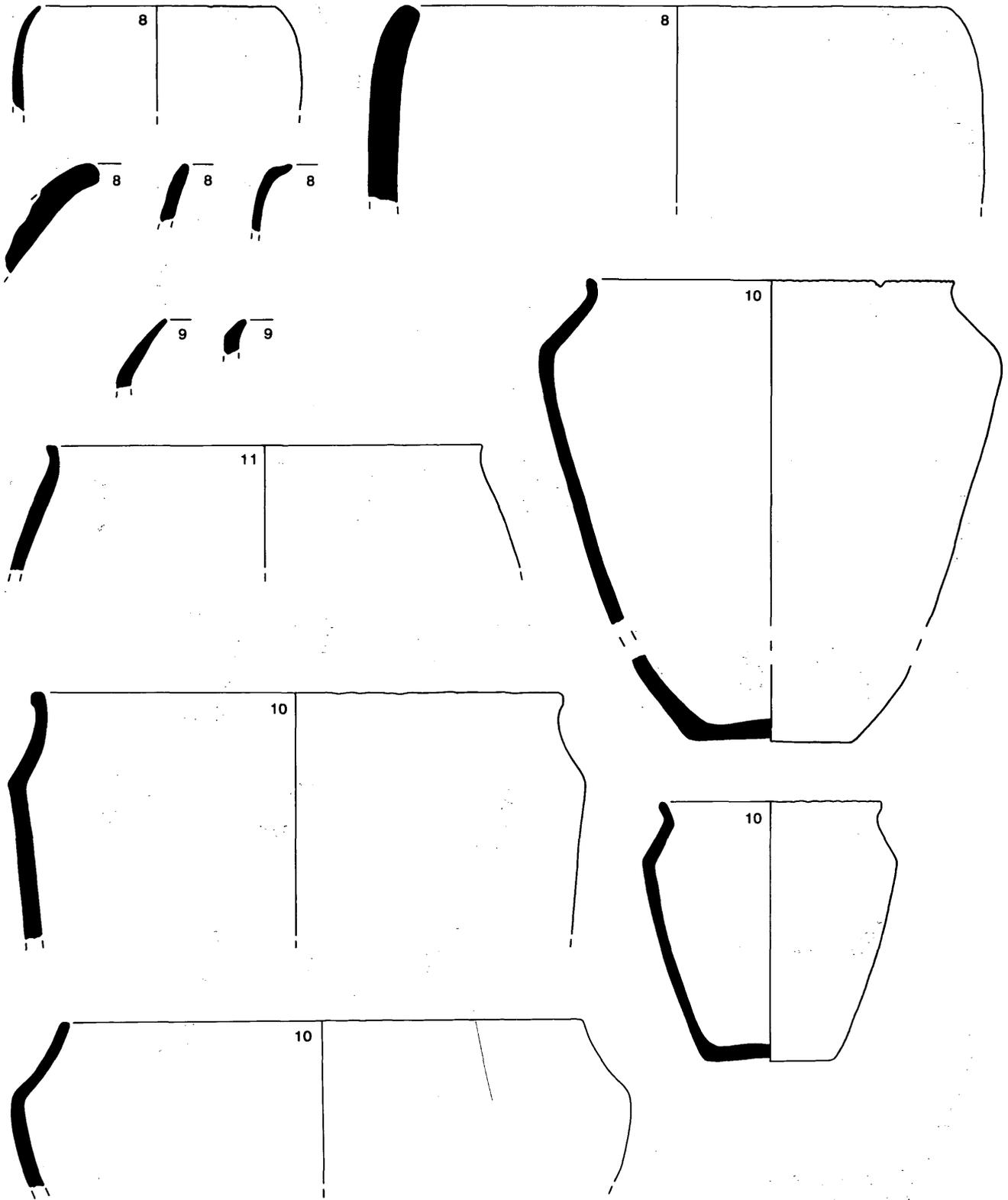


Figure 42 Type series 8-10

1/4 Scale

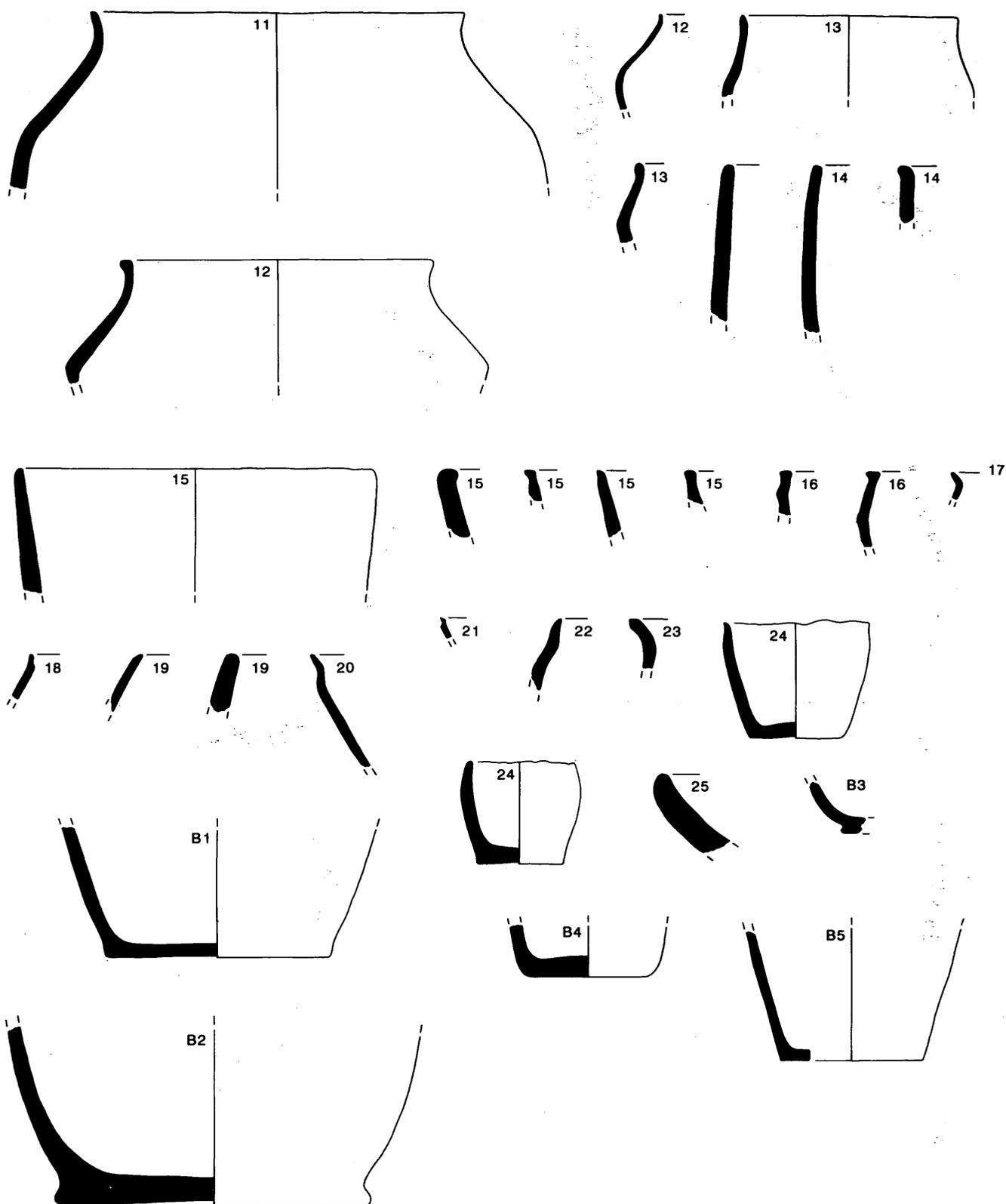


Figure 43 Type series 11-B5

1/4 Scale

contexts. Cf. Aldermaston form 9 (Bradley *et al.* 1980, 234).

- 11 Large relatively coarse jar with rounded or slightly flattened rim and globular body profile. Rim diameter 300 mm. 1% of classifiable vessels; 1% of excavated contexts. Cf. Aldermaston form 9 (Bradley *et al.* 1980, 234).
- 12 Finer and more angular variant of form 11, sometimes with flat expanded rim. Rim diameters are between 140 and 220 mm. 3% of classifiable vessels; 2% of excavated contexts.
- 13 Coarser variant of form 11 with more upright body profile and rounded rim. Rim diameter 150 mm. 2% of classifiable vessels; 1% of excavated contexts.
- 14 Coarse upright straight-sided vessel, with simple flat or rounded rim top. The rim diameter is less than that of any surviving part of the body. Rim diameter 80 mm. 3% of classifiable vessels; 2% of excavated contexts.
- 15 Coarse upright straight-sided vessel similar to form 14, but in this case the body of the vessel slopes inwards from the rim. This form occurs in a variety of sizes, and rim diameters are between 60 and 250 mm. 7% of classifiable vessels; 6% of excavated contexts.

Apart from 24, the remaining rim forms are suggested by much smaller sherds and are correspondingly tentative:

- 16 Coarse vessel of uncertain form with expanded flattened rim top and neck cordon. The rim diameter is uncertain. 1% of classifiable vessels; 1% of excavated contexts.
- 17 Fine rounded out-turned rim. The vessel form is unknown and its size is uncertain. 1% of classifiable vessels; 1% of excavated contexts.
- 18 Upright rim, with internal lid-seat and sharply out-turned body. Rim diameter 14 mm. 1% of classifiable vessels; 1% of excavated contexts.
- 19 Variant of 14, but with more sharply out-turned body. The rim diameter is uncertain. 4% of classifiable vessels; 3% of excavated contexts.
- 20 Fine angular jar, with flaring rim, slight rounded shoulder and steeply in-turned body. Rim diameter 16 mm. 1% of classifiable vessels; 1% of excavated contexts.
- 21 Coarse variant of 20 with sharply moulded rim and neck cordon. The diameter is uncertain. 1% of classifiable vessels; 1% of excavated contexts.
- 22 Coarse hooked internal rim, with shallow rounded out-turned body. The rim diameter is uncertain. 1% of classifiable vessels; 1% of excavated contexts.
- 23 Coarse flattened out-turned rim. The vessel form is unknown and the rim diameter is uncertain. 1% of classifiable vessels; 1% of excavated contexts.
- 24 Upright 'cup' or 'tub' with sharp rim and flat base. It occurs in a range of fine and coarse fabrics. Rim

diameters are between 5 and 12 mm 5% of classifiable vessels; 3% of excavated contexts. Cf. Aldermaston form 11 (Bradley *et al.* 1980, 234).

- 25 Coarse rounded rim and steeply in-turned body. Possibly a lid. The rim diameter is uncertain. 1% of classifiable vessels; 1% of excavated contexts.

#### *Base Forms*

- B1 Coarse angular, slightly expanded base. The bottom of the vessel is flat or slightly raised. Diameters are between 70 and 180 mm. 54% of the base sherds in the assemblage; 52% of those from excavated contexts.
- B2 Similar to B1 but with rounded vessel wall and a more expanded base angle. Diameters are between 60 and 250 mm 16% of the base sherds in the assemblage; 17% of those from excavated contexts.
- B3 Similar to B2 but with a shallower basal angle. It is found in both coarse and fine fabrics. The diameter is uncertain. 2% of the base sherds in the assemblage; 2% of those from excavated contexts.
- B4 Simple slightly rounded basal angle in a coarse fabric. The bottom of the vessel is thicker towards the middle. Diameters are between 70 and 120 mm 13% of the base sherds in the assemblage; 15% of those from excavated contexts.
- B5 Generally coarse angular flat base, with no signs of an expanded basal angle. The bottom of the vessel is entirely flat and of even thickness. Diameters are between 100 and 140 mm 15% of the base sherds in the assemblage; 13% of those from excavated contexts.

The relationship of this type series to the basic fabric groups is set out in Table 9. It should be noted that Fabric Groups 5 and 10 do not include any distinctive forms.

This material can also be considered in terms of the five functional classes defined by Barrett (Table 10).

The associations between the different forms are set out in Table 11, which includes both rim and base forms.

To a large extent the frequency of associations depends on the relative proportions of each type in the assemblage as a whole. For this reason Table 12 sets out the number of associations that occur on three or more occasions.

This shows clearly how often the main categories of coarse ware are associated together. These are types 7, 8 and 15, which together comprise 62% of the classifiable pottery on the site. Associations between these three types and the finer vessels recorded in Table 12 (types 1 and 12, which amount to only 6% of classifiable material) occur much less often.

#### *Treatment and decoration*

Approximately 5.5% of the prehistoric sherds showed some signs of surface treatment. The most common was to smooth or wipe the surfaces of the vessel (inside, outside,

or both). The two most obvious techniques used were finger wiping, and wiping with grass or vegetation. In virtually every case finger wiping extended vertically down the surface of the vessel. Other methods may have been used. Very few examples had been burnished. The majority of sherds that displayed any kind of surface treatment were either roughly finger wiped on the outside, or smoothed inside. Generally, though not in all cases, the finer vessels were more smoothly finished than the coarser ones.

460 sherds had signs of surface finish on the inside only (the majority being smoothed). 367 had been finished on the outside only, most commonly by finger wiping down the surface of the pot. 474 sherds had been finished on both sides, the most frequent combinations being: smoothing on both sides, smoothing outside and grass wiping inside, grass wiping both sides, or finger wiping outside and grass wiping inside. Finger wiping was used predominantly on

the outside of vessels and grass wiping on the inside; for example, the combination of finger wiping inside and grass wiping outside did not occur. Burnishing was almost always on the outside of the vessel and was sometimes combined with grass wiping or smoothing on the interior.

Each fabric had a wide variety of finishes applied to it. In each case the most common finish was also most frequent in the collection as a whole.

Bases were often 'pinched out' where they join the sides, and many of the coarser vessels had a greater proportion of flint grit under the base. In a few cases the bottom of the base appeared to have been stood upon vegetation instead. Some examples showed clearly that a separate base slab had been attached to the vessel sides, and occasionally evidence of coil building was apparent.

Firing generally resulted in patchy colouring, varying between a bright orange-red and black, the majority being

Table 9: Bronze Age pottery, representation of each form according to fabric group, as a percentage (note that no classifiable vessels occur in fabric groups 5 and 10)

Type:	Fabric Group:								
	1	2	3	4	6	7	8	9	11
1	-	-	-	-	77	23	-	-	-
1a	-	100	-	-	-	-	-	-	-
2	-	-	100	-	-	-	-	-	-
3	-	-	-	-	100	-	-	-	-
4	-	-	-	-	-	-	100	-	-
5	-	-	67	-	33	-	-	-	-
6	-	3	3	-	68	3	23	-	-
7	28	4	49	14	3	-	2	-	-
8	36	3	52	6	1	-	2	-	-
9	-	20	70	10	-	-	-	-	-
10	-	-	77	23	-	-	-	-	-
11	-	-	12	88	-	-	-	-	-
12	7	-	7	14	22	-	50	-	-
13	-	17	66	17	-	-	-	-	-
14	14	14	58	14	-	-	-	-	-
15	36	-	50	14	-	-	-	-	-
16	-	-	60	40	-	-	-	-	-
17	-	-	-	-	100	-	-	-	-
18	-	-	-	-	100	-	-	-	-
19	22	11	22	11	3	-	-	-	-
20	-	-	-	-	100	-	-	-	-
21	-	-	-	-	-	-	-	-	100
22	-	-	-	-	-	-	-	100	-
23	-	-	100	-	-	-	-	-	-
24	17	-	41	25	17	-	-	-	-
25	100	-	-	-	-	-	-	-	-
Unclassified	33	5	36	11	11	-	4	-	-

Table 10: Bronze Age pottery in terms of Barrett's five functional categories

Class I	(Coarse jars)	82%
Class II	(Finer jars)	6%
Class III	(Coarse bowls)	2%
Class IV	(Finer bowls)	6%
Cups		5%

Table 11: Bronze Age pottery, associations between different forms. Pairs with three or more associations are marked with an asterisk. See also Table 12

Form	Associated forms	Base forms
1 and 1a	5, 7, 8*, 14, 15, 24	B1, B4
2	3	-
3	2, 8, 12, 15	B1
4	10, 12	B1, B2, B5
5	1, 7, 8, 14, 15, 24	B4, B5
6	7, 8, 12, 15, 16, 18, 24	B1, B2
7	1, 5, 6, 8*, 10, 12, 14, 15*, 16, 18, 19*, 20, 22, 24*, 25	B1*, B2*, B3, B4*, B5
8	1*, 3, 5, 6, 7*, 9, 12*, 13, 14, 15*, 16, 19, 20, 22, 24*, 25	B1*, B2*, B3, B4*
9	8, 15	B2
10	4, 7, 11, 12, 13, 18, 23	B1, B2, B4, B5
11	10, 13, 23, 24	B5
12	3, 4, 6, 7, 8*, 10, 15, 16, 20, 24	B1*, B2, B5*
13	8, 10, 11, 23	B5
14	1, 5, 7, 8, 15, 24	B3, B4, B5
15	1, 3, 5, 6, 7*, 8*, 9, 12, 14, 16, 19, 24, 25	B1*, B2, B3, B4*
16	6, 7, 8, 12, 15, 24	B1
17	-	-
18	6, 7, 10	-
19	7*, 8, 15, 22, 25	B1, B3, B4
20	7, 8, 12	-
21	-	-
22	7, 8, 19	-
23	10, 11, 13	B5
24	1, 5, 6, 7*, 8*, 11, 12, 14, 15, 16	B1, B4
25	7, 8, 15, 19	B1, B3, B4
B1	1, 3, 4, 6, 7*, 8*, 10, 12*, 15*, 16, 19, 24, 25	B2*, B3, B4, B5
B2	4, 6, 7*, 8*, 9, 10, 12, 15	B1*, B4, B5
B3	7, 8, 14, 15, 19, 25	B1, B4
B4	1, 5, 7*, 8*, 10, 14, 15*, 19, 24, 25	B1, B2, B3
B5	4, 5, 7, 10, 11, 12, 13, 14, 23	B1, B2

Table 12: Bronze Age pottery, the number of forms found in three or more contexts

Form	1	7	8	12	15	19	24	B1	B2	B4
1	-	-	3	-	-	-	-	-	-	-
7	-	-	14	-	7	4	3	8	5	4
8	3	14	-	3	6	-	5	7	4	4
12	-	-	3	-	-	-	-	3	-	-
15	-	7	6	-	-	-	-	4	-	3
19	-	4	-	-	-	-	-	-	-	-
24	-	3	5	-	-	-	-	-	-	-
B1	-	8	7	3	4	-	-	-	4	-
B2	-	5	4	-	-	-	-	4	-	-
B4	-	4	4	-	3	-	-	-	-	-

a shade of red-brown with darker brown or grey patches. Occasionally more care was taken to produce an even result, particularly with the finer bowls and jars, some of which had a totally reduced finish which had then been smoothed or burnished (eg Fig. 48, 143). Of the finer fabrics, Q was almost always reduced, and sometimes showed signs of burnishing. Fabric O tended also to have a reduced finish. The remaining fine fabrics had, like the coarser ones, a mix of oxidised and reduced finishes.

Coarse jar forms 7 and 8 had the greatest variety of surface finishes applied to them (these are also the most common forms found on the site). Fine bowl forms 1, 2, 3,

4 and 20, together with fine jar form 6, were generally smoothed on one or both sides, and in the case of type 4 the outer surface was burnished. Coarse jar form 10 had a wide variety of finishes on inside and outside.

The majority of vessels in this collection are plain wares. Those that are not were usually decorated by using the fingernail or fingertip to make an impression along the rim or shoulder. In one example the decoration seems to have been made by pressing a piece of grass or vegetation against the rim edge (Fig. 47, 135). Occasionally the rim was slightly built up or out before decoration (eg Fig. 45, 68). Several shoulders were decorated with applied and

fingertipped cordons (eg Fig. 51, 211). Sometimes fingernails appear to have been used to create incised lines (eg Fig. 45, 66). Most of the decorated vessels are coarse or relatively coarse jars (forms 7, 8, 9, 10, 11, 13, 14, 15, 21 and 23).

There are several vessels where the rim alone was decorated and the shoulder left plain (forms 4, 10 and 13) and only two examples where the shoulder only was decorated (forms 9 and 10). Where both rim and shoulder were decorated the technique used in each area was the same (six examples – five of form 10 and one of form 13). Finger decoration was not applied to any other part of a vessel, except in the case of a single base where the inside was covered with fingertip impressions (Fig. 48, 155). Another unusual example (Fig. 45, 57) had incisions (probably scored with the fingernail) leading up to a fingertip-decorated rim.

As a rule, pot bodies were not decorated, but there was one vessel in a smoothed black fabric (Q) which had vertical marks (possibly made with grass) running randomly down the body of the pot (Fig. 48, 149). Another body sherd had vertical score marks on the outside, but in this case it is not possible to say whether the marks are original (Fig. 45, 51).

There are two very distinct examples of decorated necks (Fig. 47, 127 and Fig. 50, 185). The first is a fragment with parallel incised (?combed) lines in a geometric design. The second is a badly preserved but almost complete vessel with a curvilinear pattern and incised dotted infilling.

Three vessels had perforations (?repair holes) 20–30 mm below the rim (Fig. 44, 10 – type 7; Fig. 45, 60 – type 8; and Fig. 50, 195 – type 7). The first had evidence of two holes 35 mm apart; the other two examples had single perforations only.

No handles were identified and only one lug with a finger impression in the centre was found (Fig. 45, 54).

### *Illustrated sherds*

The illustrations (Figs. 44 to 51) are arranged by feature groups and consist of rims, bases and distinctive shoulders. Only sherds of uncertain rim angle have been omitted. The sherds are not described individually but the fabric of each is lettered on the drawing, next to the illustration number. The full range of forms is represented in Figs. 41 to 43.

The sherds illustrated in Figures 44–51 are from the following contexts:

- Figure 44: 20 (1–4); 23 (5, 6); 28 (7–9); 18 and 33 (10); 38 (11, 12); 43 (13); 44 (14); 45 (15–17); 121 (18); 136 (19); 139 (20–24); 143 (25, 26); 145 (27); 146 (28,29); 148 (30–34); 149 (35,36); 151 (37–40); 152 (41–48)
- Figure 45: 152 (49); 159 (50, 51); 177 (52); 180 (53, 54); 183 (55); 185 (56); 201 (57, 58); 222 (59–62); 223 (63); 237 (64, 65); 247 (66–69)
- Figure 46: 247 (70–71); 282 (72, 73); 311 (74); 312 (75);

314 (76); 339 (77, 81); 373 (78–81); 391 (82–86); 403 (87, 88); 410 (89); 415 (90); 417 (91–93); 440 (94–96); 451 (97–98)

Figure 47: 451 (99–100); 461 (101, 102); 572 (103–105); 573 (106, 107); 581 (108–117); 590 (118); 603 (119); 622 (120, 121); 680 (122–124); 699 (125); 785 (126); 3115 (127); 3158 (128–130); 3253 (131); 3315 (132–134); 3463 (135); 3469 (136, 137)

Figure 48: 3473 (138–142); 3475 (143–150); 3480 (151, 152); 3481 (153–155); 3497 (156, 157); 3515 (158)

Figure 49: 3515 (159–170); 3585 (171–173); 3631 (174–177); 3681 (178)

Figure 50: 3681 (179–180); 3791 (181); 3810 (182); 3828 (183–192); 3845 (193, 194); 3870 (195–197); 3887 (198–200); 5050 (201); 5176 (202); 5177 (203); 5182 (204)

Figure 51: 5182 (205–208); 5195 (209); 7256 (210); 7290 (211); 7291 (212); 7296 (213); 7321 (214–219)

### *Contexts, chronology and wider associations by Richard Bradley and Melanie Hall*

We are fortunate that the sequence of later Bronze Age pottery in the Thames Valley and its hinterland has been worked out in some detail. We have the additional advantage that two substantial collections of stratified pottery, both supplemented by radiocarbon dates, come from the nearby settlements of Aldermaston Wharf and Knight's Farm (Bradley *et al.* 1980, 232–42 and 265–74).

The basic chronological sequence is derived from several complementary sources: the succession of stratified deposits in the enclosure at Rams Hill on the Berkshire Downs (Bradley and Ellison 1975, 94–118); a series of associations between diagnostic pottery and radiocarbon dates; and a number of direct associations between distinctive ceramics and finds of Bronze Age metalwork. Although Barrett published his study of this material ten years ago (Barrett 1980), more recent work has tended to confirm his chronology. Much more pottery has now been published, and among the additional sources of chronological information are the stratigraphic sequence at Wittenham Clumps (Hingley 1980) and the horizontal sequences at Knight's Farm (Bradley *et al.* 1980, 284–5) and at Albury (Russell 1989) where in each case material attributed to different ceramic phases appears in separate areas of the site. Similar evidence is provided by the contrasting ceramic assemblages from the neighbouring settlements at Runnymede Bridge and Petters Sportsfield, Egham (O'Connell 1986, 60–73). At the same time, more metalwork has been discovered in association with ceramics. Some of the radiocarbon dates referred to in Barrett's analysis have also been reassessed, and a number of those from Deverel Rimbury sites in Wessex and late Bronze Age sites in the Middle Thames have been revised or replaced (Bowman *et*

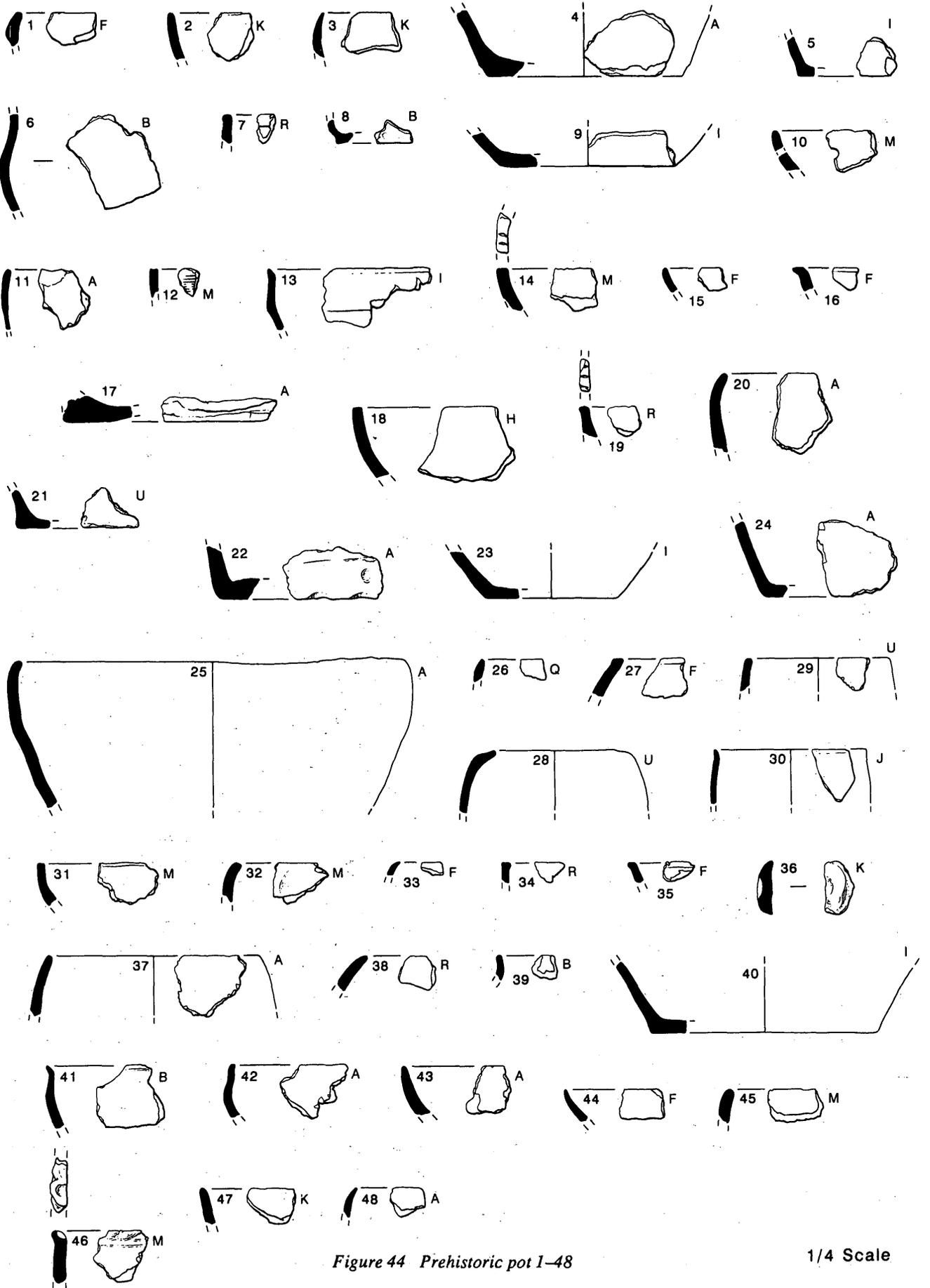
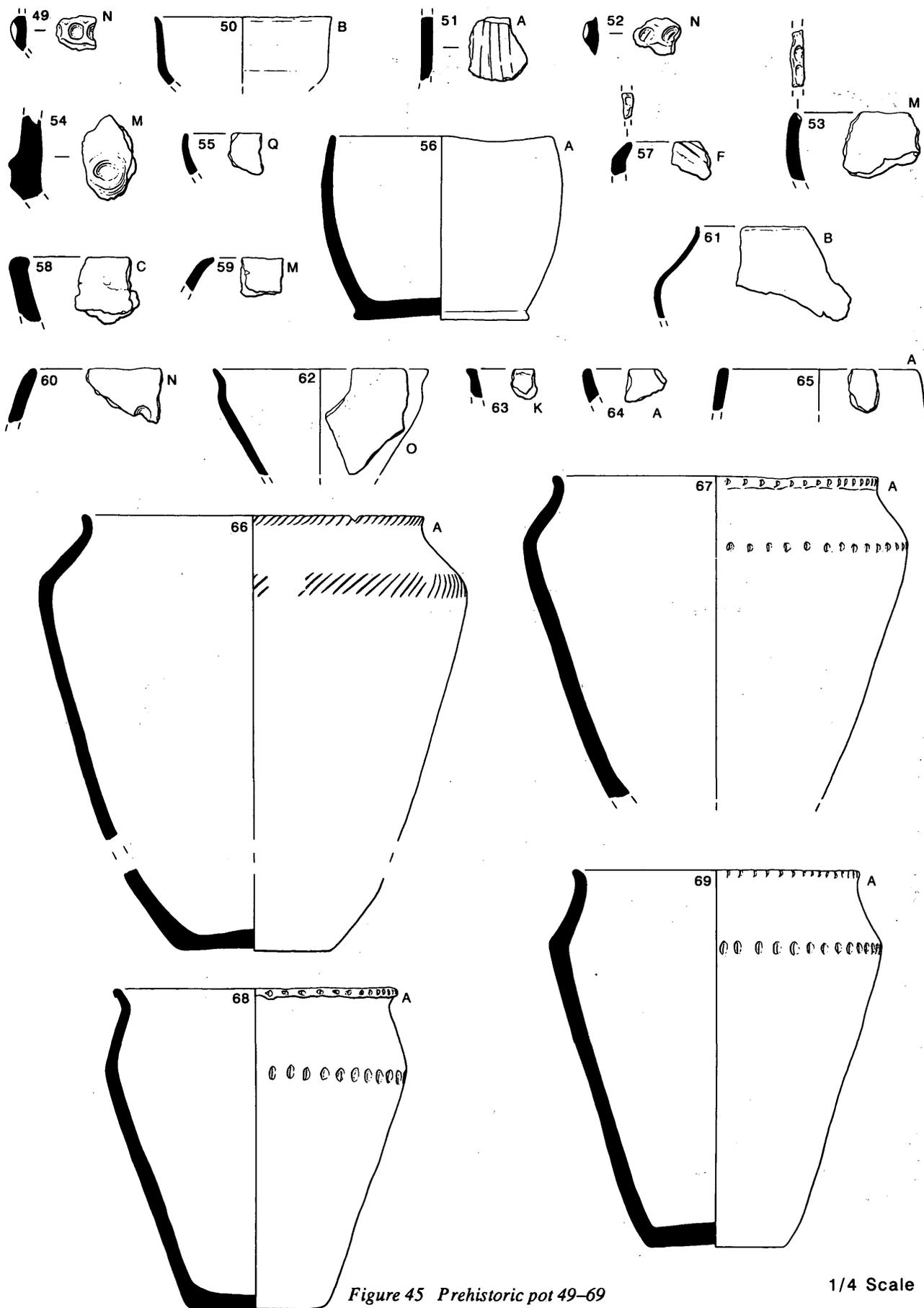


Figure 44 Prehistoric pot 1-48

1/4 Scale



1/4 Scale

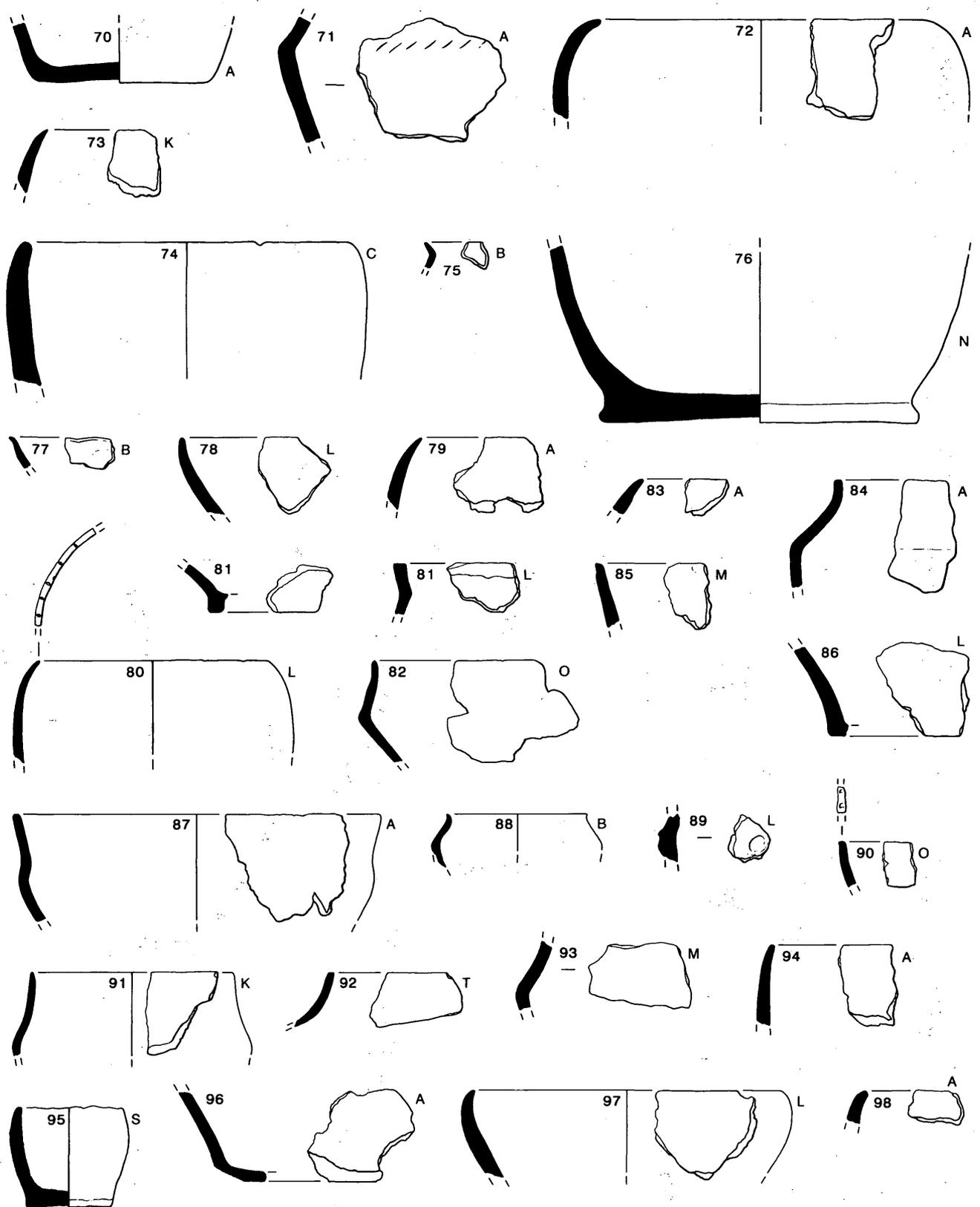


Figure 46 Prehistoric pot 70-98

1/4 Scale

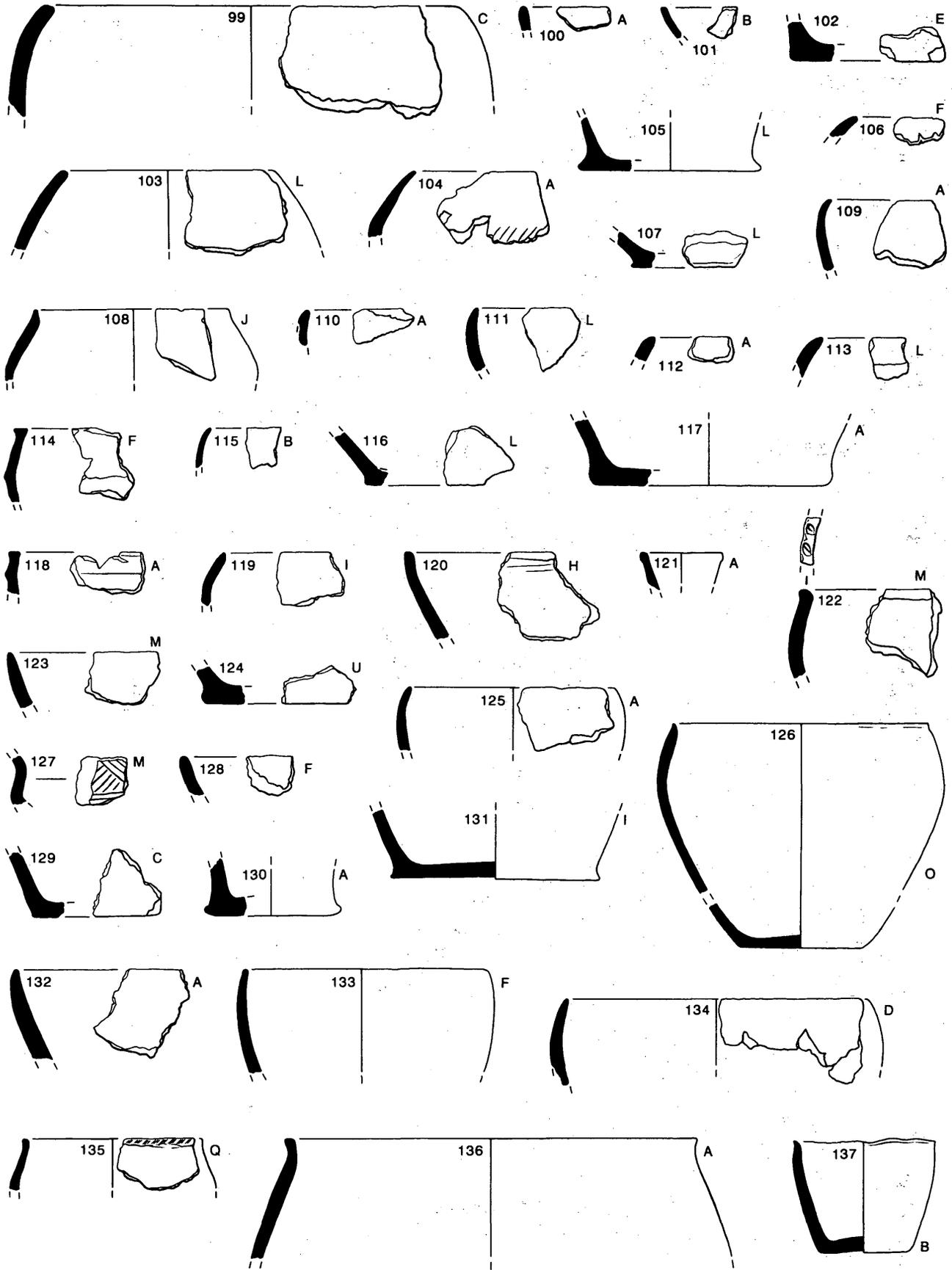


Figure 47 Prehistoric pot 99-137

1/4 Scale

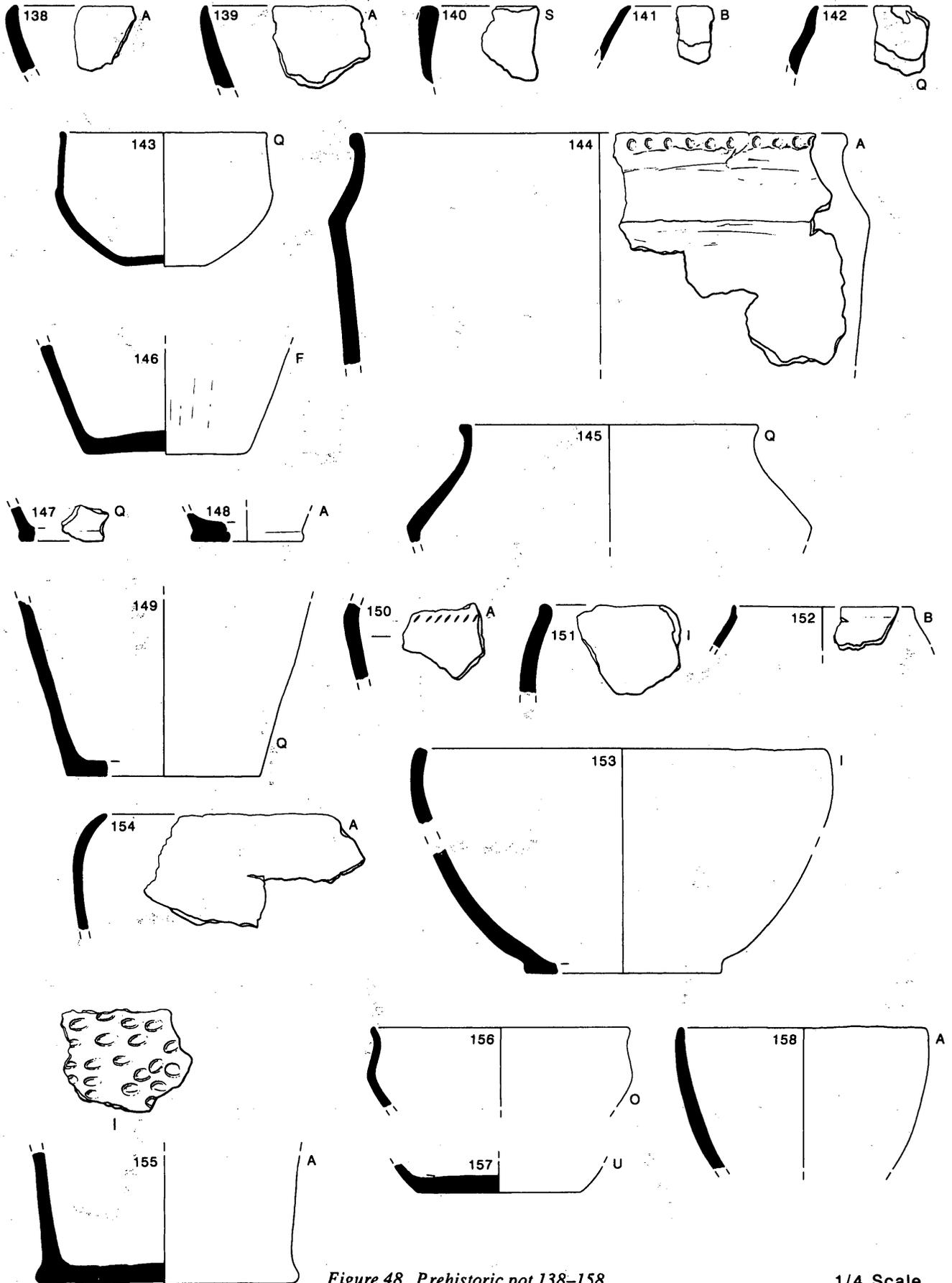


Figure 48 Prehistoric pot 138-158

1/4 Scale

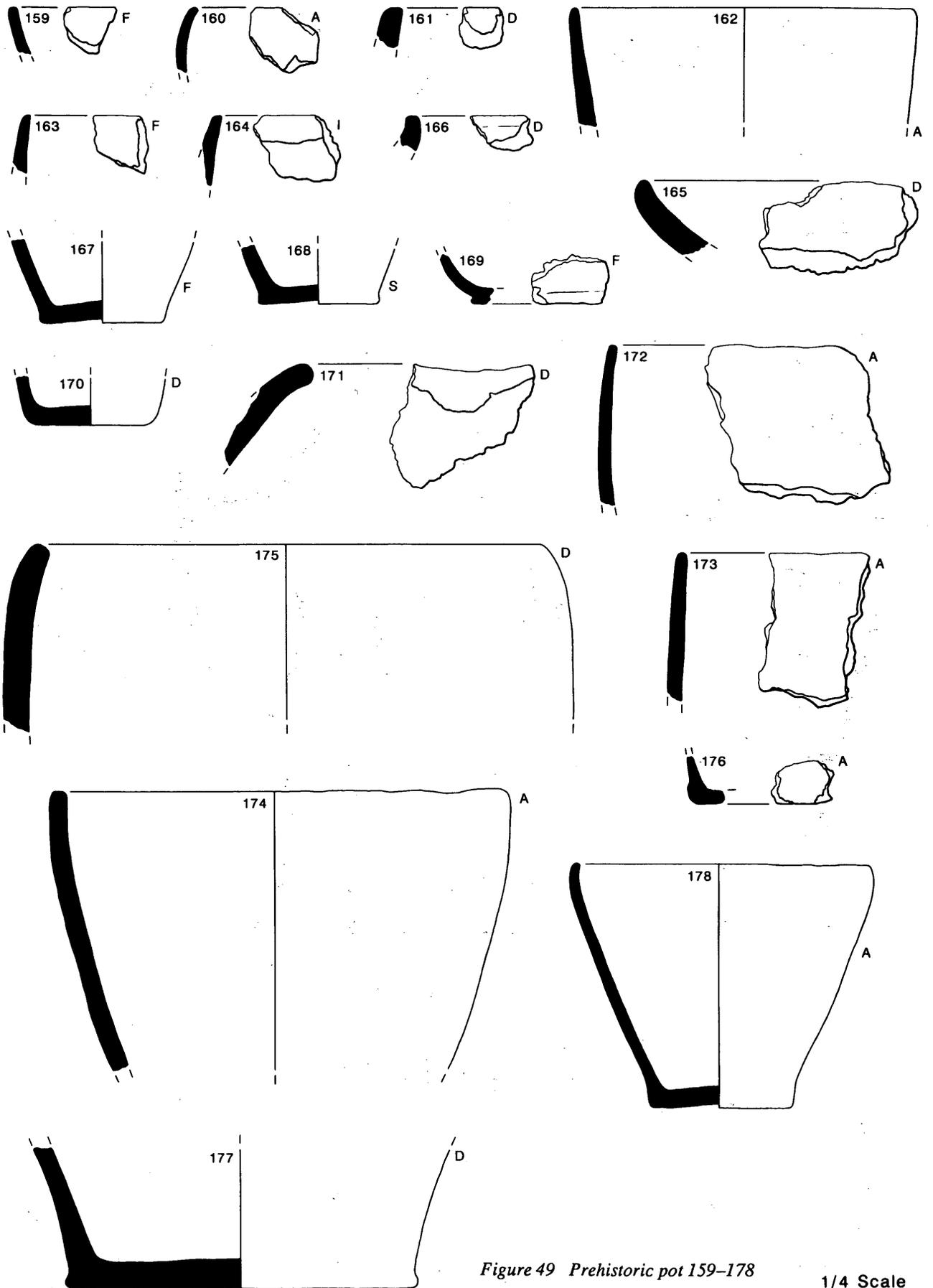
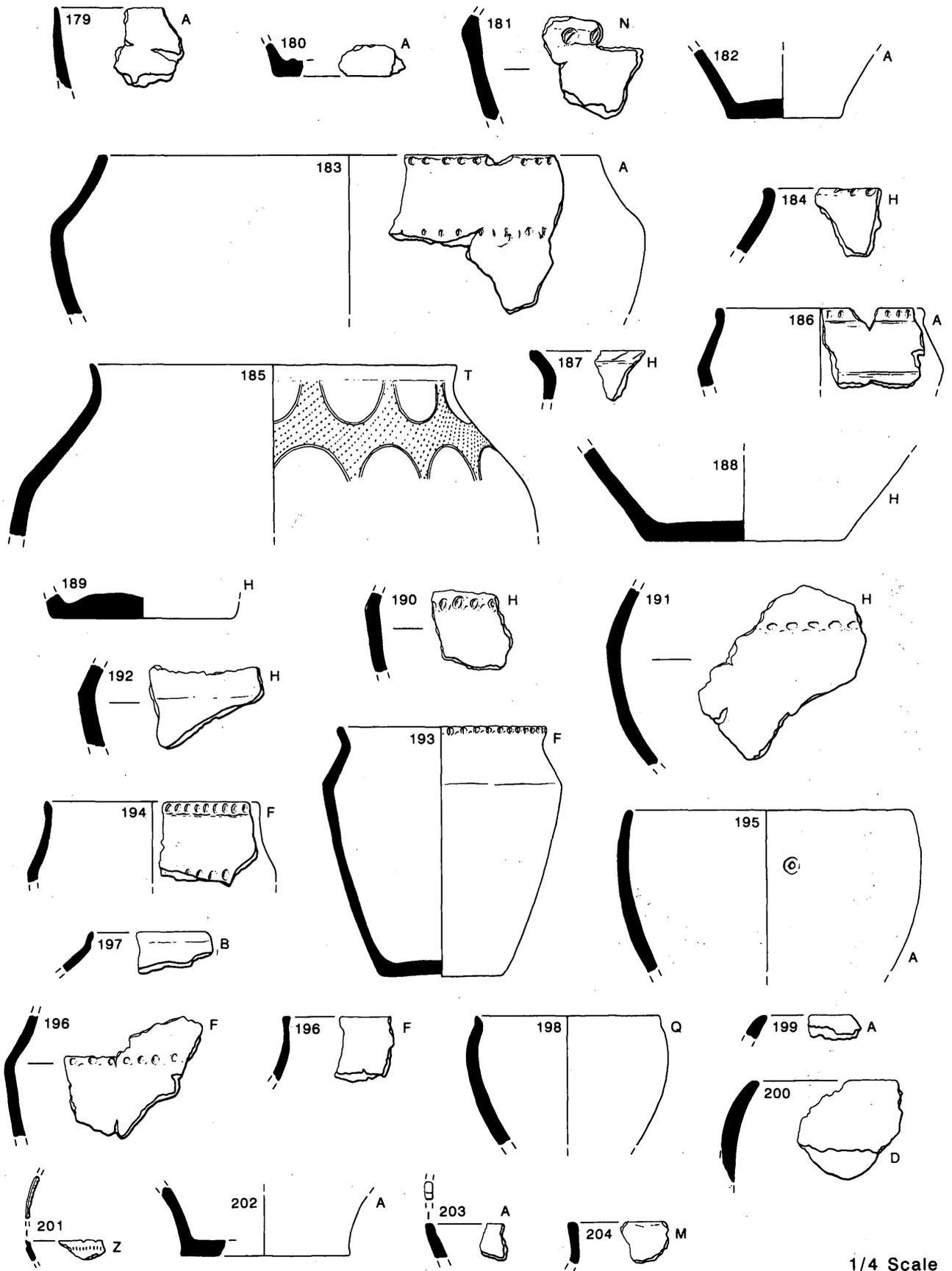


Figure 49 Prehistoric pot 159-178

1/4 Scale



1/4 Scale

Figure 50 Prehistoric pot 179-204

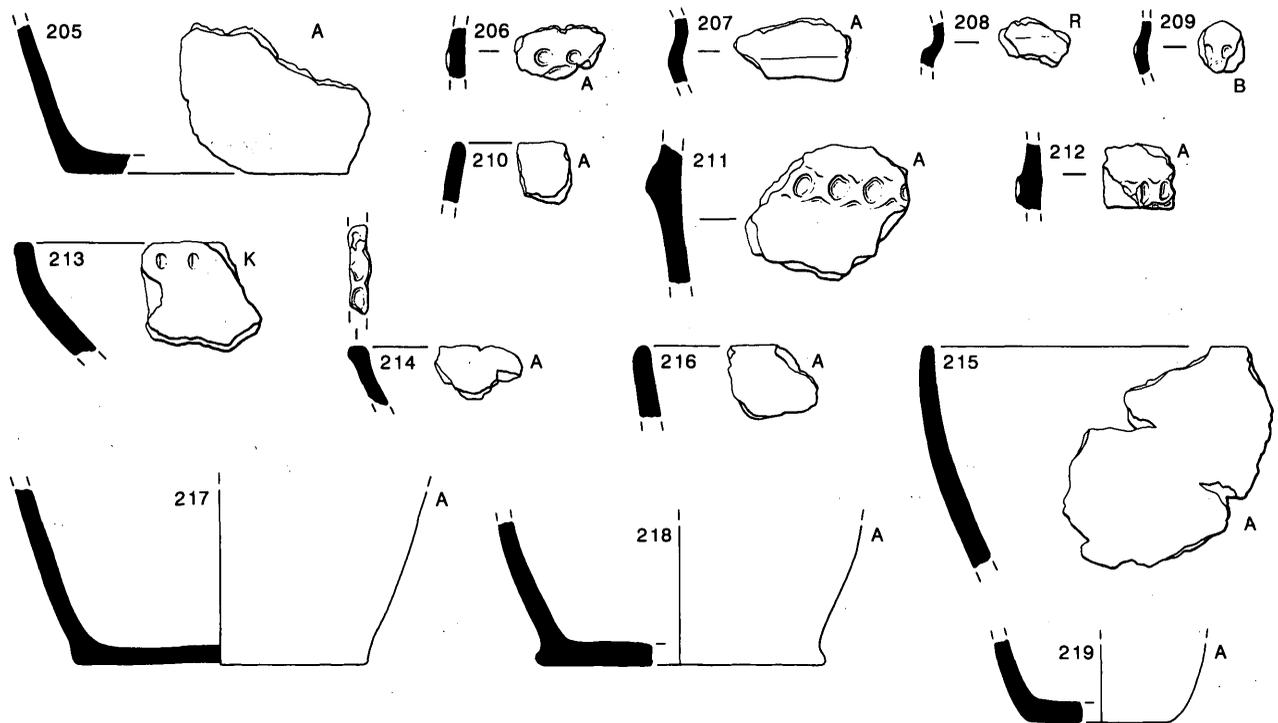


Figure 51 Prehistoric pot 205-219

1/4 Scale

al. 1990). The result is that the overall pattern of development can be seen with much greater clarity.

As a result of all this work, it is possible to suggest three broadly successive ceramic horizons in the Middle Thames and Kennet Valleys. The earliest is the Deverel Rimbury tradition, the later stages of which belong to the middle Bronze Age (Barrett 1980, 298-301). It is succeeded by what Barrett originally described as a 'Post-Deverel Rimbury' assemblage. He now prefers to describe this material as late Bronze Age 'plain ware'. The sequence is completed by a series of decorated vessels, which extend into the period of overlap between the Bronze and Iron Ages (Barrett 1980, 303). All three groups are represented at Reading Business Park, but in very different quantities.

It now seems likely that the Deverel Rimbury tradition was over by the end of the 2nd millennium BC. At Pinge-wood material in this tradition is associated with an assemblage of 'plain ware', but such an overlap is rather unusual. (Johnston 1985, 26-32). Normally material in these two traditions appears on different sites. At Reading Business Park there are very few vessels that might belong to this phase. They include several sherds with decorated lugs or cordons (36, 49, 52 and 54, 211 and 212) which probably belonged to bucket or barrel urns. Material attributed to this early period accounts for about 2% of the identifiable pottery from Area 5 (Trench 5). Two further vessels of this date were found in Area 7000, where only ten vessels of Bronze Age character could be identified.

The great majority of the pottery from Reading Business Park belongs to Barrett's tradition of plain ware. By this stage

the very restricted Deverel Rimbury repertoire had given way to a much wider range of vessels, including more angular jars in both coarse and fine fabrics, and distinctive bowls, some of exceptional quality. There was also a small number of cups. Virtually the whole of our type series can be attributed to this phase, which in Barrett's opinion extended down to the 8th century BC (Barrett 1980, 306-9). The principal forms are the angular bowls of types 1-5, the larger angular or rounded jars of types 6, 11, 12 and 13, the coarse straight-sided vessels represented by types 7, 8, 14 and 15 and the distinctive cups or tubs of type 24. All seem to have originated at this stage, and this group bears a striking resemblance to the large assemblage excavated at Aldermaston Wharf, as well as the pottery from Knight's Farm Sites 2 and 4 (Bradley *et al.* 1980, 232-42 and 265-74).

Some of these forms may have continued in use into the following phase, when a small number of vessels were more extensively decorated. Generally speaking, the two assemblages are distinguished less by differences of form than by changes in the nature and extent of that decoration. There were few decorated vessels in the assemblage from Aldermaston, and such treatment was effectively confined to the rim (Bradley *et al.* 1980, 232-42). In Barrett's 'decorated' phase, however, shoulders came to be decorated as well as rims, and vessels also show areas of incised decoration for the first time, sometimes dividing the surface into distinct panels. This is more characteristic of the pottery from Knight's Farm site 1 (Bradley *et al.* 1980, 265-74).

Few of the vessels were found in stratigraphic relationship to one another, but where this did occur it

lends support to this sequence. In Area 5 there are two cases in which sherds in the decorated tradition are found in later contexts than vessels of plain ware (contexts 152, 282, 150, 177 and 281 in one case, and contexts 159 and in the other). In Area 3100 sherds belonging to the decorated tradition were stratified above plain ware in contexts 3475 and 3514 respectively.

Typical plainware assemblages include those from the following contexts at Reading Business Park: 20 (1–4), 139 (20–24), 148 (30–34), 152 (41–49; note that sherd 49 is Deverel Rimbury and probably residual), 222 (59–62), 373 (78–81), 391 (82–86), 417 (91–3), 440 (94–6), 451 (97–100), 581 (108–17), 3315 (132–4), 3473 (138–42), 3515 (158–70), 3585 (171–3), 3631 (174–7), 3681 (178–80) and 3887 (198–200). The most obvious groups of decorated pottery come from contexts 247 (66–71), 3475 (143–50), 3828 (183–92) and 3845 (193–4).

Few of the vessels call for individual comment, as the majority are of widespread types and are already well known among the published collections from Aldermaston Wharf, Knight's Farm (Bradley *et al.* 1980) and Pingewood (Johnston 1985). A few exceptional pieces should be mentioned, however. The finest vessel in the entire assemblage was a complete bowl from Context 3475. It might belong to either of the main chronological groups on the site and was associated with sherds from several other pots of unusual quality. An important group of complete vessels which certainly do belong to the decorated series were found together in context 247 (66–71), and three of these were so strikingly similar to one another that they might have been made together. Another decorated vessel is far harder to assess as it bears a series of fingertip impressions extending in a regular fashion across the inside of the base. This seems to be unparalleled in this area. Lastly, it is worth drawing attention to the exceptionally fine decorated jar (185) found in a large group from context 3828 (183–192). No fewer than seven separate vessels in this group had been decorated, but the treatment of this pot sets it apart from all the other material on this site. Its finely executed curvilinear decoration is best paralleled on the Wessex chalk at sites like All Cannings Cross (Cunnington 1923). Some of these deposits are described in more detail at the end of this report.

Taking the collection as a whole, it would seem that most of the pottery dates from the 'plain ware' phase and a much more limited proportion of the material belongs to Barrett's 'decorated' tradition, which extends down to the early Iron Age. The representation of all three ceramic traditions is summarised in Table 13. Again all percentages have been rounded to the nearest whole number.

At a more detailed level, it is worth considering the distribution of these three groups within the two most prolific subsites.

In Area 5 sherds of Deverel Rimbury pottery came from the positions occupied by two of the houses, 10 and 12, although the buildings themselves were probably of later date. Plain ware was much more widely distributed, and as

we have seen, was the main ceramic tradition to occur in this area. It is found in the group of pits at the north-eastern limit of the excavated area and was associated with postholes belonging to each concentration of circular buildings, as well as two of the four post structures. It also occurred in pits close to Buildings 4, 11 and 12 and the group of overlapping structures centred on Building 19. Pottery belonging to the decorated tradition had a more restricted distribution, however, and was not found in any features further N than Building 9, where it occurred in one of the postholes of this structure. To the S it was found in two postholes belonging to Building 5 and in a whole series of postholes and pits in the cluster of overlapping structures at the southern limit of the excavated area: Buildings 2, 6, 10, 13, 14, 15 and 20, and Pits 38, 147, 152, 155, 247, 312, 403 and 785. It is thought that Building 14, which contained decorated pottery, was paired with Building 17 and replaced Buildings 2 and 18. Building 2 was associated with sherds of plain ware. In the same way, Building 5, which also included decorated pottery, seems to have succeeded Building 3, which was associated with plain ware. Buildings 8A and 9 produced sherds of similar character and were probably replaced by Building 15 which had pottery of the decorated phase.

In this case two kinds of spatial patterning can be recognised through close examination of the pottery. There are indications of a shift in the nucleus of activity through time, so that plain wares are found throughout the excavated area, whereas pottery belonging to the decorated tradition is found mainly in its southern part. At the same time, there is an obvious tendency for the decorated pottery to be most abundant where there is evidence for the repeated replacement of structures. Both types of evidence suggest that this part of the excavated area was the last to be abandoned.

The other extensively excavated area was 3100. This lacked any Deverel Rimbury material, so that all the Bronze Age pottery can be assigned to just two phases. Plain ware was widely distributed in this area and was found in two pits, 3164 and 3158, associated with Building 3101. It was also found in a pit close to Building 3104, but in an area which also contained pottery of the succeeding phase. In addition, plain ware was recorded from two major clusters of pits towards the southern limit of the excavated area and close to a series of post built structures, most of which lack closer dating evidence.

The pottery of the decorated phase, although less frequent, has a more distinctive distribution. It is found in a pit or posthole at the northern end of the excavated area, and in a major cluster of pits closer to its southern limit, where plain ware is also represented, including Contexts 3475, 3480 and 3497. As we have seen, this is one of the few areas in which decorated pottery is in a later stratigraphic context than sherds of plain ware.

Decorated pottery is found in two pits (3845 and 3828) near the round house 3108 on the southern edge of the excavated area. Although there is plain ware from posthole 3869 and it is found mixed with decorated pottery in Con-

Table 13: Bronze Age pottery: distribution by area

	Deverel Rimbury	Plain ware phase	Decorated
Area 5	2% (4)	67% (116)	31% (54)
Area 3000/3100	-	61% (43)	39% (28)
Area 5000	-	11% (1)	89% (8)
Area 7000	20% (2)	60% (6)	20% (2)

Table 14: Bronze Age pottery: Barrett's five functional classes of Late Bronze Age pottery as a percentage of all classifiable material. Distribution according to excavated contexts is very similar to the first set of figures, suggesting its even distribution about the site

	% of classifiable material	% of excavated contexts
I	82%	83%
II	6%	7%
III	2%	2%
IV	6%	4%
V	5%	4%

Table 15: Bronze Age pottery: Barrett's five functional classes of Late Bronze Age pottery according to the type of context in which they are found

	Class I	II	III	IV	V
Area 5					
Postholes	61	3	-	6	3
Pits	32	3	2	2	4
Ditches	-	-	-	-	-
Area 3100					
Postholes	7	-	1	-	-
Pits	25	3	-	1	1
Ditches	-	-	-	-	-
Area 5000					
Pits	1	-	-	-	-
Area 7000					
Pits	3	-	-	-	-
Ditch	1	-	-	-	-

text 3870, there is less sign of a sustained occupation in this part of the site.

In this case the evidence of spatial patterning is extremely limited. There seem to be signs of a pattern of post-built structures and pit clusters not unlike that at Aldermaston Wharf, but too few of these contexts have diagnostic associations. For the most part each cluster of features shares pottery of both phases, but the small groups of contexts on the extreme southern edge of the excavated area are most often associated with decorated pottery, whilst the large groups of pits at the SE corner of the excavation contain sherds of plain ware but nothing of later date. Although there is some evidence for changing configurations within this part of the site, they remain much more elusive than those in Area 5.

Lastly, it is worth considering the distribution of particular classes of ceramic within the excavated areas. There are two ways of looking for spatial patterning. First, we can develop an observation made earlier. We saw how closely the percentage of different forms among the classifiable

material matches the percentage of contexts in which these types occur. Is this true when we reduce those 25 forms to Barrett's five functional classes (Barrett 1980, 302-3)? In Table 14 the percentages have been rounded to the nearest whole number.

The two figures remain strikingly similar, suggesting that most classes of material were distributed rather uniformly around the excavated areas. The largest difference is created by the finer bowls of Class IV.

A second approach is to consider whether different classes of vessel are generally found in particular kinds of feature (see Table 15); for example, if certain types were associated mainly with postholes, it would be worth asking whether they were more closely linked with the house sites than other classes of material.

In fact, there is very little evidence of variation, and again an obvious contrast occurs with the finer bowls of Barrett's Class IV, which in Area 5 seem to be associated with postholes rather than pits. There is also a contrast with Class I coarse jars; in Area 5 65% were from postholes and

35% from pits, whereas in area 3100 22% were from postholes and 78% from pits. In this case the figures are distorted by the relative frequencies of these two kinds of context among the excavated features.

There are several contexts of particular interest. The fine burnished bowl (Fig. 48, 143), mentioned earlier, came from pit 3475, part of a large isolated group of pits in Area 3100. It may be no coincidence that the only piece of metal from the site was discovered in the same feature, although the two were not found close together. From the same pit came a larger jar in the same black fabric, which may also have been burnished (Fig. 48, 145), together with the bottom half of a flat-bottomed vessel in the same fabric but with unusual random vertical marks on the outside (Fig. 48, 149). Pit 3887, also a part of this pit group, contained a good example of one of the finest jars found on the site (Fig. 50, 198).

Also from Area 3100 is the highly decorated jar (Fig. 50, 185) with curvilinear and stabbed decoration, found together with fragments of at least six fingernail-decorated vessels (Fig. 50, 183–192). These were discovered in pit 3828 near building 3108.

The last context worthy of mention in Area 3100 contained a fragment of bowl with incised or combed decoration on the neck and shoulder (Fig. 47, 127). This came from pit 3115, close to the group of buildings 3100, 3104 and 3111. It is the only sherd with this type of decoration found on the site.

Area 5 has two deposits of particular interest, the first being pit 247, situated a short distance from the cluster of buildings in the S of the excavated area. This pit contained four almost complete decorated vessels and fragments of at least one other. Three of these were of the same fabric and had identical decoration; indeed, they are so similar they may have been made together (Figs. 45–46, 67–69; see above). The other almost complete vessel was of the same form and fabric but this time showed variation in the decoration of rim and shoulder (Fig. 45, 66).

A fine jar (Fig. 47, 126) found in Area 5 is very similar to that in context 3887 in Area 3100 described above. This jar was deposited in part of a large cluster of rubbish pits in the northern part of the excavated area.

With those limited exceptions, the pottery provides no real evidence of spatial patterning around the excavated sites.

## THE ROMAN POTTERY

By Jane R Timby

### Introduction

Approximately 30 kg, 1737 sherds, of Roman pottery was recovered from the site. The condition of the pottery was generally very poor, many of the sherds being small, abraded and in some cases discoloured, thus rendering identification difficult. In a number of cases the surface finishes of the vessels (eg slip, colour-coat) had been totally removed. The pottery ranged in date from the 1st century

through to the 4th century but most of the material was of 2nd- to 3rd-century date.

The material was sorted by fabric type and the sherds quantified by number of sherds, weight and vessel, equivalent for each stratigraphic context/grid reference. The fabric system employed was that already established for pottery from the recent excavations at Silchester (see Timby 1989 and in prep.). These fabrics are briefly described below. A summary of the quantified information is presented in Table 16.

### Description of fabrics

#### Imported wares

##### *Fine wares*

E3/4 Central and South Gaulish Samian

Forms: mainly dishes Drag. 18/31, 31 and 31R, bowl Drag.

37

E43 North Gaulish colour-coated beaker

E00 Flagon, white fabric with a brown interior surface

##### *Amphorae*

A1 Amphorae, Dressel 20

A6 Amphorae, Dressel 2–4

##### *British mortaria*

M2 Oxford whiteware mortaria

Forms: Young 1977, type M17

#### Coarsewares

##### *Grog-tempered wares:*

G1 'Belgic' grog-tempered fabric

Fabric:

A moderately hard (but sometimes soft) dark brown to black ware. The surfaces are generally smooth with a soapy or waxy feel. The core is grey or brown, occasionally with reddish-brown margins. The matrix shows a temper of medium to fine rounded to subangular grog and iron inclusions in variable quantities and frequently accompanied by sparse angular flint and rounded quartz grains.

Forms:

Vessels include both hand-made and wheel-turned types, usually jars, bowls and beakers.

Date:

This fabric is one usually associated with pre-conquest occupation although evidence at Silchester shows it to be present in small quantities in the mid 1st century AD. Its quite marked presence in this assemblage, forming approximately 5% by weight, might suggest pre-conquest occupation/activity in the area.

G3 Fabric: A hard dark grey ware with smooth but lumpy surfaces. The matrix is tempered with subangular hard grey and white grog fragments up to 3 mm across, accompanied by sparse angular flint inclusions.

Table 16: Summary of Roman pottery

Fabric code	Weight (gms)	No. of sherds	E.V.E.
E4	572	47	72
E43	2	1	-
E-	40	1	-
A1	448	7	-
A6	25	1	-
M2	131	3	16
M12	61	2	-
G1	1404	107	38
G3	148	2	-
G4			
575	46	40	
G5	6	1	3
G6	96	13	6
G8	4737	144	54
G-	78	6	14
F1	4919	222	219
F3	16	1	6
GF1	287	46	26
GF5	13	2	-
GF9	471	4	22
GF-	17	2	-
SF1	45	4	7
SF3	148	21	16
SF-	53	3	-
GS1	2774	100	93
GS2	8	1	-
GS3	34	7	-
GS4	14	2	-
GS5	8	2	-
SGF2	224	4	-
S2	189	5	-
S3	152	10	-
S5	317	29	31
S6	70	5	18
S8	1141	84	116
S11			
220	16	136	
S12	122	25	21
S13	1	1	-
S14	404	14	13
S16	5	1	-
S18	937	82	143
S22	74	7	22
S23	41	1	-
S24	5848	328	426
S28	1187	86	123
S34	1494	173	173
S37	16	3	4
S38	56	9	100
S43	12	3	-
S-	497	53	172
TOTAL	30137	1737	2130

Forms: Not a common fabric and only represented by two sherds. 1st century.

G4 Fabric: A moderately hard reddish-brown fabric, generally with a grey core. The clay is finely micaceous and tempered with fine reddish-brown and dark grey rounded to subangular grog/clay pellets; sparse quartz grains, flint and burnt-out organic matter.

Forms: Vessels are generally wheel-made with thin walls. Forms include jars and a barrel-shaped cordoned beaker.

Date: The fabric is mainly a pre-conquest one, fairly well represented, forming 2% by weight of the assemblage and again suggesting some pre-conquest activity.

G5 Fabric: A moderately hard, oxidised ware with a light grey core. The matrix contains fine grey and reddish-brown rounded to subangular grog/clay pellets, very fine mica and occasional quartz.

Forms: Lid

Date: ? post-1st century

G6 Fabric: A usually hard grey-brown or red-brown ware tempered with a common density of angular pale orange to buff grog fragments averaging 1–2 mm in size. In addition, sparse angular flint, mostly subangular quartz and dark brown iron grains are present.

Forms: Hand-made jars

Date: 1st century

G8 Fabric: A moderately soft light grey ware with a speckled appearance, occasionally orange-brown. Tempered with a density of usually dark grey grog fragments with occasional quartz sand, quartzite and iron.

Forms: Hand-made large jars with everted thickened rims.

Date: This fabric is well represented here, forming 16% by weight of the assemblage (8% by sherd count). It appears to be largely a 2nd-century form which was rare within the Silchester assemblage, perhaps signifying a functional difference between the sites.

#### *Flint tempered wares*

##### 'Silchester' ware

F1 Fabric: A moderately hard smooth clay matrix fired to a dark grey or to variable shades of brown. The paste is tempered with a moderate to common

density of white calcined flint fragments ranging up to 4 mm in size. Sparse quartz and red iron grains are also present.

Forms: Vessels are hand-made and restricted to lids and everted or beaded rim jars.

Date: This was one of the commonest fabrics on the site, accounting for 16% by weight. Its close similarity to some of the Bronze Age fabrics may have resulted in some unfeathered sherds being wrongly classified, but its presence alongside other wares of Roman date would suggest that this figure is fairly accurate. The fabric is one that was current from the later years of the 1st century BC at Silchester but appeared to reach its apogee around the Claudian-Neronian period.

F3 Fabric: A grey or brown moderately soft ware. The fabric contains a density of angular calcined flint and grains of quartzite (up to 1 mm) with occasional iron.

Forms: A single bead-rimmed jar.

Date: ? 1st century.

#### *Grog and flint tempered wares*

GF1 Fabric: As G1 but with added white calcined flint temper.

GF5 Fabric: A moderately hard brown very fine sandy micaceous ware. The clay is tempered with subangular light-coloured grog/clay pellets and white angular flint.

GF9 Fabric: A hard grey well fired ware with a lumpy texture. The paste contains a moderate density of dark grey subangular grog and sparse flint.

Forms: Mainly jars; fabric GF9 appears to be largely used for hand-made storage jars.

Date: 1st century.

#### *Sand and flint tempered wares*

SF1 Fabric: A hard oxidised dark orange ware in a finely micaceous clay containing angular white flint and fine quartz sand.

SF3 Fabric: Dark grey to brown ware with a black interior surface. A hard, very fine sandy clay matrix with sparse angular calcined flint fragments up to 2 mm in size.

Forms: Beaded rim and everted rim jars.

Date: 1st century.

#### *Grog and sand tempered wares*

GS1 Fabric: a moderately hard, grey to pale brown ware tempered with frequent fine well sorted quartz,

- mostly subangular in shape and sparse subangular grey grog.
- Forms:** Jars, both wheel-made everted rim type and hand-made large storage type.
- Date:** This fabric is particularly well represented in this assemblage, accounting for 20% by weight (6% by sherd count). This is in marked contrast to the Silchester assemblages where the fabric made only a minor contribution. Probably 1st–3rd century.
- GS2 Fabric:** A hard ware with dark grey surfaces and a light grey core. The matrix shows a dense scatter of fine well sorted rounded polished grains of quartz and fine fragments of subangular grog up to 1 mm in size.
- Forms:** Hand-made, no featured sherds.
- Date:** ? 1st century
- GS3 Fabric:** A hard ware with black exterior surfaces, a red-brown interior and a dark grey inner core. The matrix contains a dense frequently of fine ill-sorted rounded to subangular quartz sand, sparse clay pellets/grog and occasional larger grains of quartz up to 1.5 mm in size.
- Forms:** No featured sherds.
- Date:** ? 1st century.
- GS4 Fabric:** A moderately hard, brownish-orange ware with a grey inner core. The paste contains dense fine quartz and red iron/clay pellets.
- Forms:** No featured sherds.
- Date:** ? 1st century.
- GS5 Fabric:** A soft, reddish-brown ware with a black surface. The finely micaceous sandy fabric contains a sparse scatter of subangular, light-coloured grog and dark orange iron.
- Forms:** No featured sherds.
- Date:** ? 1st century.
- SGF2 Fabric:** A moderately hard ware with a light grey interior surface, orange-brown exterior and dark grey inner core. The matrix contains a dense frequency of fine rounded polished quartz grains and a moderate scatter of angular grog and white flint.
- Forms:** Hand-made, no featured sherds.
- Date:** ? 1st century.
- Sandy wares*
- S2 Fabric:** A very hard, reduced ware characterised by a dense frequency of well sorted rounded to subangular quartz. The surfaces have a pimped appearance.
- Forms:** No featured sherds.
- Date:** ? 1st century.
- S3 Fabric:** Similar to S2 but coarser in texture.
- Forms:** No featured sherds.
- S5 Fabric:** A mid-grey, dense sandy ware with distinctive pimped surfaces. The clean clay matrix has a temper composed of abundant fine, well sorted, rounded to subangular quartz. Sparse dark grey hard inclusions of iron? are also present.
- Date:** Everted rim jars.
- S6 Fabric:** A finer version of S5. Some sherds show horizontal streaking on the exterior surface.
- Forms:** Flared rim jars and a straight-sided bowl with wavy line decoration.
- S8 Fabric:** A mainly black ware with a hard sandy texture. The core is frequently red-brown in colour. The quartz grains have polished surfaces creating a sparkling effect along with flecks of white mica. Sparse iron, flint and quartzite inclusions are also occasionally present.
- Forms:** A variety of jars, mainly bead-rimmed and everted rim type, lids and bowls (Lyne and Jefferies 1979, type 5).
- Date:** 1st – 2nd century. Probably an Alice Holt ware.
- S11 Fabric:** A light sandy grey ware often with a white slip over part of the exterior surface.
- Forms:** Jars, flagons (Lyne and Jefferies 1979, type 8.10), lids and flat rim bowls.
- Date:** 2nd–4th century. An Alice Holt product.
- S12 Fabric:** A miscellaneous category for fine sandy wares not allocated elsewhere.
- Forms:** Jars, hemispherical bowl and disc-mouthed flagon.
- S13 Fabric:** A fine mid grey-blue micaceous ware with a lighter grey core.
- Forms:** No featured sherds but generally used for poppy head beakers.
- Date:** Late 1st – 2nd century.
- S14 Fabric:** A hard sandy ware ranging from grey to red-brown in colour. The fabric is characterised by a scatter of large rounded quartz grains in a background of finer ill-sorted grains and sparse fine white mica.
- Forms:** Hand-made and wheel-made jars including a number of larger storage type vessels.
- Date:** 1st century onwards. Probably an Alice Holt / Farnham area product.
- S16 Fabric:** A hard brownish-orange thin-walled ware with

a brittle appearance. This is a reflection of the high density of well-sorted quartz present in the clay. Occasional red grains of iron are also visible.

Forms: No featured sherds but usually used exclusively for beakers.

Date: 1st century.

S18 Fabric: Dorset black-burnished ware (BB1).

Forms: Jars including Gillam (1976) type 4, flat rim and flanged rim bowls, straight-sided dishes and a lid.

Date: 2nd-4th century.

S22 Fabric: A moderately hard fine sandy micaceous ware with a sandy texture.

Forms: Everted jar rim.

S23 Fabric: A very hard greenish grey ware containing a high density of well sorted quartz, sparse clay pellets and dark grey iron.

Forms: No featured sherds.

Date: 1st century.

S24 Fabric: A mid to light grey or brown hard ware with a lighter core. The matrix has a temper of abundant. Fine, well sorted rounded quartz grains, fine white mica and sparse iron.

Forms: Everted rim jars, beakers, flat-rimmed dish and a flagon. Date: 1st - 2nd century. An Alice Holt ware; well represented in this assemblage, accounting for 19% by weight of the group.

S28 and S34 Fabric: Miscellaneous grey sandy wares of medium (S28) and fine (S34) texture.

Forms: Everted and flared rim jars, necked cordoned jars, lids, beakers, straight-sided, flat-rimmed and flanged rim bowls.

Date: 2nd - 4th century. Probably mostly products from the Alice Holt industry.

S37 Fabric: Soft, very fine orange micaceous ware with abraded surfaces.

S38 Fabric: Miscellaneous oxidised sandy wares.

Forms: Flagon with a flanged neck. Possibly a New Forest product with a surface slip removed.

Date: 3rd - 4th century.

S43 Fabric: Oxford white ware.

Forms: No featured sherds

Date: 2nd - 4th century.

#### Comments

All the fabrics from the Reading Business Park excavations can be closely paralleled by those from recent excavations at Silchester. The overall range represented at Reading Business Park, however, is not nearly as extensive as that from Silchester. This is very clearly apparent in the earlier period where the types of ware present from the Business Park would suggest some sort of pre-conquest/early 1st-century AD occupation, but these are exclusively coarseware unaccompanied by the vast numbers of imported finewares typical at Silchester. This would suggest that the site may have been of quite low status. Moreover,

Table 17: Contexts containing Roman and post-medieval pottery

List of feature types	1st century	2nd century	2nd-3rd century	3rd century +	3rd-4th century	Post-medieval
o.g.s		2031				
bank		2027				
alluvium		2062				
gully		2203			2206	
pits	2089, 2101, 2263	2108		2129	2252	
post-hole		2229				
ditches	2212, 2213, 2217, 2255, 2263, 2272	2022, 2052, 2205, 2221, 2224	2075	2053, 2282	2204, 2230, 2280	
contexts with post-medieval material						1, 1006, 4000, 6010

Table 18: Fired clay, identifiable fragments

	Area 5	2000	3000+3100	5000	7000
Cylindrical	4	-	2	-	-
Annular	-	-	1	-	-
Pyramidal	2	6	-	-	-
Uncertain	1	3	2	-	-

such a picture would fit the pattern already emerging from other sites in Silchester's hinterland, which similarly do not appear to have had access to quantities of imported pottery. Samian accounted for approximately 2% of the Reading Business Park assemblage and this would appear to consist mainly of later types dating to the 2nd century. The 2nd- to 3rd-century material contrasts with the Silchester assemblage in the preponderance of sherds from hand-made storage jars, which may reflect a functional difference between the two sites.

Many of the features from the Business Park contained very small quantities of unfeatured Roman sherds whose date could not be more precisely defined. 18% of the assemblage by weight, 26% by sherd number, derived from the ploughsoil 2022 and this material ranged in date from the 1st through to the later 3rd-early 4th century. British colour-coated wares such as those from the Oxford and New Forest industries were conspicuous by their absence, suggesting that the site did not extend very far into the 4th century.

Those features with enough diagnostic sherds to allow dating have been broadly grouped into approximate date ranges based on the latest material present (see Table 17). It is clear from the associated material from these negative features that there is a considerable amount of residual material present in the fills.

#### FIRED CLAY OBJECTS (Fig. 52)

by *Richard Bradley and Melanie Hall*

A minimum of 21 fragmentary weights were recovered in the excavation. None is complete and not all can be assigned to any specific form. With that proviso, the identifiable fragments seem to belong to the types listed in Table 18.

The only annular loom weight came from Area 3100, pit Context 3473 (Fig. 52, 1). This is part of a cluster of pits in the middle of the excavated area. A cylindrical loom weight came from part of the same cluster of pits, Context 3631. The only other identifiable clay weight from this area was a fragment of cylindrical loom weight (Fig. 52, 2) from pit 3315 to the N of building 3105.

In Area 5 two of the cylindrical loom weights were from postholes belonging to the large group of buildings in the southern part of the area, together with one fragment of pyramidal loom weight. Another fragment of cylindrical loom weight came from a large pit to the W of the building group 7, 11 and 12, near the northern limit of the excavation.

There is an interesting concentration of pyramidal loom weight fragments from Area 2000, contexts 2075, 2202, 2212 (Fig. 52, 3), 2230 (Fig. 52, 4) and 2263.

All these types have been found in nearby Bronze Age settlements. Cylindrical loom weights are usually found in Deverel Rimbury contexts, but at Pingewood they are associated with a mixture of Deverel Rimbury pottery and late Bronze Age plain ware (Johnston 1985, 33). Here they were also associated with an annular weight. The pyramidal weights, on the other hand, characterise the plain ware

assemblage from Aldermaston Wharf, which should occupy a rather later position in the local Bronze Age sequence (Bradley *et al.* 1980, 243–4. There was no evidence for triangular weights of the kind found in the early Iron Age. An unusual feature of this assemblage is the absence of spindle whorls, since these are a regular feature of the late Bronze Age settlements in the region.

#### CLAY MOULD FRAGMENT (Fig. 52, 5)

by *Peter Northover*

*Mould fragment: RBP 87-680/A/1*

*Pot number 4958*

A fragment of the inner section of a ceramic mould. A thin layer at the outer surface is oxidised fired and a light orange colour; the remainder of the thickness is reduced fired and dark grey in colour. The fabric is uniformly very fine with a few small voids and virtually no large inclusions. The mould matrix shows a central midrib with round cross-section tapering from 11 mm to 13.5 mm along the length of the sherd, and with two flat-surfaced wings sloping away from it. The matrix surface has been eroded both in the ground and by subsequent cleaning.

Length 63 mm Width 34 mm Thickness (max) 15 mm Weight 16 g

The matrix is for casting a simple pegged spearhead of standard late Bronze Age type. This would have had a leaf-shaped blade; it is not possible to tell from the short length of mould surviving whether the midrib had a continuous taper or was waisted to give a slender ogival profile. The blade is plain and not stepped, or channelled, nor is there any fillet along the midrib; any further embellishments such as bevelled edges would have been worked in after casting. It would appear that our fragment is from quite close to the tip of a long spearhead, say 250 mm in length with a blade width of 40–50 mm.

The structure of late Bronze Age ceramic moulds has been well described (Needham 1980a). Each valve of the mould matrix would have been formed from a wooden pattern in a very carefully prepared, moderately refractory fine clay matrix. After mating the two halves they would be dried and probably fired, accounting for the oxidised firing of the outside of the surviving fragment here. Prior to use they would be bound together with a wrapper, probably of the same clay but less well prepared. The assembly would be fired again, and metal poured while the mould was hot, both to make it easier to fill the mould and to make sure that absolutely no moisture could come into contact with the hot metal. Because the socket of the spearhead is hollow a core is required; this would be suspended from a core-print in the matrix by a peg formed in the core. If the spear is very long additional chaplets might supply support and centring.

*Mould fragment: RBP 87-680/A/1*

*Pot Number 4957*

A reduced fired fragment of the same fabric as the above

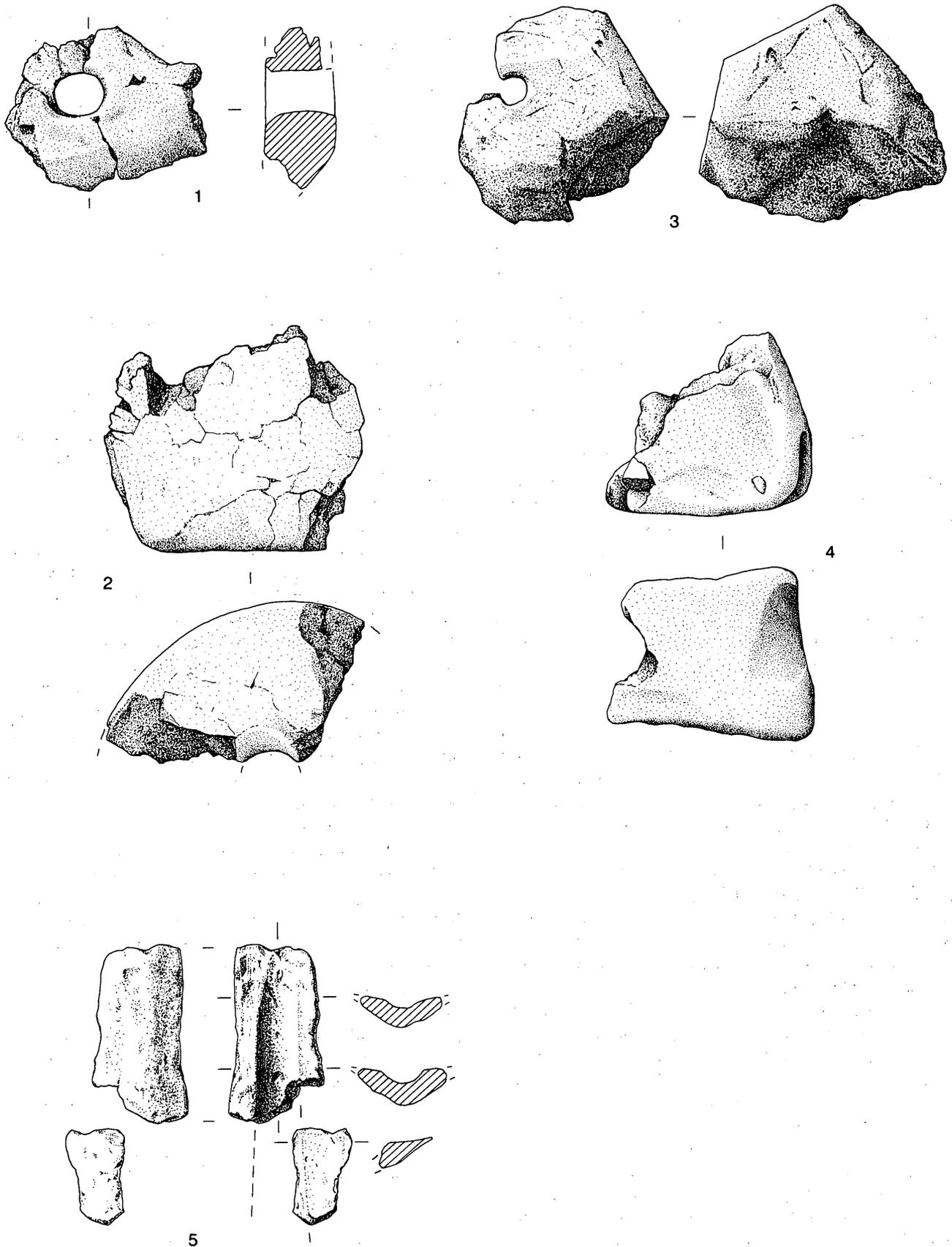


Figure 52 Fired clay objects

mould fragment. One flat face and part of a short face angled away from it are smooth, while all other faces and edges are fractured. The fragment would appear to be part of a spearhead mould similar to that described above, the flat face being part of the matrix for one of the blade faces. Very probably both fragments come from the same mould.

Length 35 mm Weight 22 mm Thickness (max) 8 mm Weight 4 g

The presence of a ceramic mould is reasonable evidence for metalworking on or close to the excavated site. Bronze moulds could easily be exchanged between metalworkers for use or as scrap; the same might also be true of stone moulds, witness a fragment of South Welsh socketed axe in the Petters deposits (Needham 1990). This would not be true of ceramic moulds which were used only once and then discarded. The firing of our fragments means that there is a strong possibility that the mould had actually been used, although failure at the firing stage is possible. The most difficult stage in preparing the mould is drying it and our mould has been taken beyond that.

This site adds to those in the Thames valley where bronzeworking has been discovered, although the other sites are on the river itself. The most important is at Runnymede Bridge (Needham 1980b), where an extensive riverside habitation and manufacturing site has been excavated. The Oxford Archaeological Unit's excavation at Wallingford has produced some evidence in the form of oxidised bronze hearth debris. This too is something that is not likely to have been picked up and taken away from a metalworking site.

## OVEN FRAGMENTS OR PIT LINER

*By Richard Bradley and Melanie Hall*

This is a class of fired clay slabs, some flat and others rounded, which have occasionally been smoothed on the inside but not on the outer surface. This material is extremely coarse and friable and in certain cases it may overlap with the coarsest pottery sherds on the site, especially those of Fabric C and D. Its interpretation poses a problem. Many pieces were found at Aldermaston, where they appear to have lined some of the shallower pits (Bradley *et al.* 1980, 244–5). If these linings had been fired *in situ*, this practice would explain why so many of the sherds had been smoothed on the inside only. There were other pits on that site which held complete upright pots suitable for storage. On the other hand, fired clay fragments of very similar character have also been found at Albury, where they are interpreted as the remains of ovens (Russell 1989, 13). This suggestion needs to be taken seriously; although few fragments have a smoothed outer surface, those elements set into subsoil features could have survived better than the rest. At all events one sherd from Reading Business Park showed evidence of two successive linings which had fused together in firing. They were separated by a lens of unburnt occupation debris.

Most of this material came from a cluster of pits in Area

3100, with major concentrations in Contexts 3631, 3651 and 3473, and smaller amounts in Contexts 3515, 3585. In Area 5 possible examples were found in Context 373 between Building 5 and those on the southern edge of the excavated area. There is some uncertainty in the latter case as these pieces resemble the coarsest of the pottery in Fabric C.

## FLINT ARTEFACTS (Fig. 53)

*by Richard Bradley and Andrew Brown*

The 1850 pieces of flint recovered from the excavations fall clearly into two industries – one Neolithic in date, the other late Bronze Age. The industries have been separated for analytical purposes, since the questions asked of such artefacts differ considerably between the two periods, although neither group can be addressed without reference to aspects of the other.

### *Worked flint – Neolithic*

*by Richard Bradley*

The two industries showed least overlap in Areas 5 and 7000, and observations made while studying the finds from these parts of the site acted as a guide for analysis of the Neolithic collection as a whole. In Area 7000, most of the identifiable raw material was chalk flint, other sources being represented only in the upper fills of features. Regular cores could be recognised and 24% of the debitage consisted of distinctive blades or narrow flakes. A high proportion of the flakes lacked any cortex. The ratio of regular implements to flakes was 1:15. The majority of these implements were of Neolithic type.

In Area 5, on the other hand, only 36% of the raw material was chalk flint, the remainder consisting of poor quality gravel flint obtained on or around the site itself. There were few regular cores, their place being taken by a variety of unsystematically flaked pebbles. The products of flaking were extremely irregular and blades/narrow flakes were unusual. The ratio of flakes to regular implements here was 1:43. The average number of pieces in any one context was lower than in Area 7000.

On the basis of these broad distinctions, Neolithic material from Area 7000 was isolated and further characterized:

Cores/core fragments 9  
Flakes 263  
Blades/narrow flakes 84  
Implements 23

The industry had been based on quite good quality chalk flint. Nodules had been extensively reduced to form regular cores: four blade cores, four flake cores and a distinctive 'tortoise' core were identified (Fig. 53, 7319). The resulting debitage included some regular blades, but a higher proportion was rather more irregular, although the length:breadth ratios still fell below 5:2, the defining criterion for this type. Five of the flakes had serrated edges (eg

F7204/B/2, F7009/B/1) and another five had been retouched to form 'knives'.

A more minor source of raw material had been the reworking of axes – polished and flaked – of fine-grained chalk flint which had corticated to a greater degree than the more typical type of flint. At least four flakes from reworked flaked axes and two from polished axes were identified, along with an axe fragment which had been reused as a core. One polished axe fragment was of gravel flint (F7078/C/1) (Fig. 53, 7218) and may have been manufactured on site.

In addition to these types, there were a number of arrowheads (one leaf-shaped – F7193 – and at least three transverse, eg F7204/B/2 Fig. 53, 7594) and a heavily corticated chisel fragment (F7128/A/1 Fig. 53, 7309), probably from a more distant source. All of these are likely to be of Neolithic date. The remaining retouched items from Area 7000 are less diagnostic and are types that were made over a long period.

The collection from Area 7000 may have taken some time to form; the high proportion of blades and narrow flakes in some features suggests an earlier Neolithic date while the 'tortoise' core (Fig. 53, 7319) is a form usually found in later Neolithic contexts. Both leaf-shaped and transverse arrowheads are present. An alternative interpretation, however, is that the features with high proportions of blade-like material – Features 7009, 7063, 7078, 7128, 7199, 7277, and perhaps 7137, 7193, 7257 – do not contain a full range of debitage but are biased by depositional selection. These contexts have particularly high flake:core ratios and brief low-power use-wear analysis suggests a very high rate of usage for cutting/whittling activities (A. Brown, pers. comm.). They may contain disproportionate numbers of used flakes.

The flint artefacts from Area 5000 share most of these characteristics, but the numbers (total = 160) are too small for them to be studied in detail. Again, blades and narrow flakes formed a significant element of the collection, and two blade cores were recovered. Much of the remaining material consisted of fine, thin flakes and spalls. Gravel and chalk flint occurred in roughly equal proportions (although this estimate may be misleading because some 60% of the debitage lacked any cortex), suggesting a greater admixture of later material than was the case in Area 7000. The only implement from this area was a flake scraper.

We can also compare the finds from Area 7000 with those from Area 2000, although that part of the site may again include an admixture of later material. Only 160 pieces of worked flint were recovered but these included three cores and four implements. One of the cores has been used for producing blades. The implements may belong to both periods; one of the two flake scrapers may be Neolithic while the others, a notched flake and a large double-ended borer reminiscent of an oversized obliquely blunted point are more characteristic of late Bronze Age industries. Artefacts of the latter date dominate the collection from the

other two main areas, 5 and 3100, and these are dealt with separately below.

Little needs to be said of the Neolithic material. It is not certain whether material of both earlier and later Neolithic date is present or whether the collection belongs to a transitional period during which both leaf-shaped and transverse arrowheads were in use concurrently. The material has a number of similarities with the finds from the Abingdon causewayed enclosure, not least in the use of imported flint on the river gravels during the Neolithic (Case 1986; Holgate 1988). The small quantities of material are entirely consistent with the evidence from field survey, and both Ford (1987) and Holgate (1988) have documented a series of surface sites sharing this characteristic. The location of this material on low-lying ground in a major river valley recalls the results of Ford's systematic study of Neolithic activity around North Stoke (op. cit., 118).

#### *Worked flint – late Bronze Age by Andrew Brown*

Large and comprehensively collected assemblages of lithic material from late prehistoric contexts are unusual, generally poorly understood and often considered to be less important than earlier assemblages. This may in part be ascribed to the difficulty of recognising and analysing the less regular components of these later industries. Qualitative judgements of the skilfulness of the reduction sequence replace the more usual analytical language used for earlier material and this militates against an understanding of the role of flint in later prehistory. This late material should ideally be drawn into the same analytical framework as earlier material.

The Reading Business Park late Bronze Age collection provides an opportunity to assess the feasibility of a standard approach to late prehistoric material. Statistical analysis precedes the technological characterisation of the material. Low-power microscopic analysis then allows some inferences to be made concerning function and depositional history of the artefacts.

The presence of two distinct industries on the site has already been noted. The later component can be dated to the late Bronze Age (LBA) by association with pottery. As stated above, this lithic material differed almost without exception from the Neolithic flintwork in its raw material source (gravel rather than chalk flint) and a number of other broad characteristics have been noted above. A straightforward length/breadth index from a sample from each of the two main areas of LBA activity and from Area 7000 demonstrated the similarity between the former areas and their difference from Area 7000 (Table 19).

A Chi-squared test confirmed the pattern at a 95% confidence level. A similar exercise using the thickness of the butt of a flake produced identical results. Mean flake thickness of both Areas 5 and 3100 was 6.7 mm, 5.1 mm for Area 7000. These differences bear out the observation that flake shape becomes squatter through time and that both butt thickness and flake thickness tend to increase

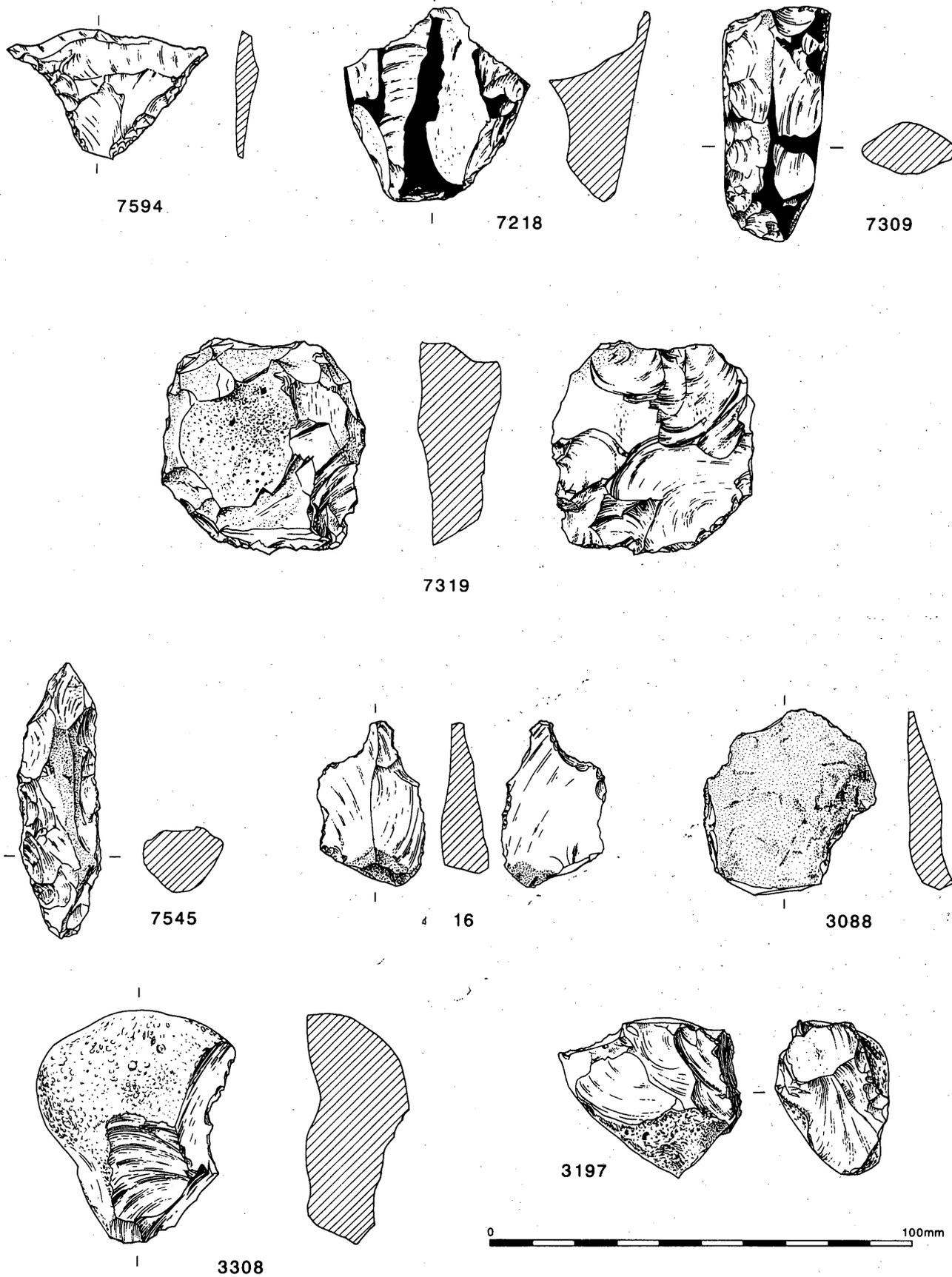


Figure 53 Neolithic and Bronze Age flints

through time. It is interesting that Area 5, though always similar to Area 3100, was consistently more like Area 7000 than was Area 3100, suggesting that more Neolithic material had become incorporated into Area 5 than Area 3100, and that more Neolithic activity can be anticipated along the Area 5/Area 7000 axis.

These broad statistical patterns can be used in the technological characterisation of the LBA material. The skewing of the length/breadth index distribution, for example, was manifested in the form of a large number of short and wide flakes which had been detached from the edge of the split pebbles. All such flakes had broad and plain butts. If the butt-dorsal plane angle had been measured systematically, it would probably have revealed that the LBA material averaged well under 90° as a result of this method of reduction, in contrast to the Neolithic material which was probably close to a right angle. A more direct relationship between butt thickness and flake thickness was identified in the less diluted Area 3100, again reflecting this difference in flaking angle.

In the Neolithic sample, short flakes were plentiful but retained blade-like proportions because impacts were aimed above existing aretes, thereby providing a crest to carry the force lineally and resulting in a narrow removal. Indeed, the form of the shortest flakes was as diagnostic as any of the parameters used in the analysis as a means of identifying Neolithic material: large blades may find their way into later contexts through reuse because of their sharpness and manageability, while short blades are less likely to be reused.

The cores of the LBA sample—all gravel pebbles—were seldom extensively reduced: 3–5 flake scars is an estimated average (eg Fig. 53, 3197). Some were more heavily exploited, however, these being typically the split pebbles mentioned above where a single platform provided access to a larger number of flakes without requiring a change in approach. The frequent appearance of incipient cones of percussion over the platform edge where persistent but futile attempts were made to detach another flake testify to reluctance to re-orientate a core. This probably reflects the abundant availability of the raw material, as a result of which rejuvenation of all but the best quality cores would have been uneconomical, rather than showing any lack of skill.

The reduction sequence was clearly a matter of convenience, with appropriate flakes being detached for the

immediate task and the core discarded. The corollary of this is the absence of hammerstones from the LBA collections, although several have been identified in the earlier contexts. The expediency extends to the use of retouch, which is minimal except for the creation of 'scraper' edges. Some scrapers had an irregular edge (Fig. 53, 3308), while others had been worked into concave scraping edges (Fig. 53, 3088). Borers feature in the retouched item inventory (Fig. 53, 16), as does a single 'rod' (Fig. 53, 7545).

The results of microscopic inspection of the scraper edges were of interest. Such items have usually been seen as the poor relatives of Neolithic or earlier Bronze Age scrapers because of their typically ragged edges, contrasting with the smooth edges of the earlier tools. Smooth edges are essential for hide scraping in order to avoid tearing or scoring the hide when defleshing or working in preservatives. Only two of the 25 scrapers examined, however, bore the edge-rounding associated with hide scraping. The majority of edges bore damage resulting from contact with a medium-hard material such as wood or soaked bone (closer identification is not possible at low power). The concave retouched areas might suggest the working of just such cylindrical material. The irregular, apparently casually formed scraping edges, however, do not make sense in this context.

One possible interpretation of the damage in the particular context of the site is in connection with flax stripping, which might plausibly have involved incidental contact of flint edges with a wooden backing such as a split plank section in the course of stripping decomposed bark etc. from flax stems. The ragged edge may have been essential to prevent damage to the linen fibres. Experimental work would enable the possibility to be assessed.

The distribution of the used and unused pieces within Area 3100 was examined. Cutting/whittling flakes had been deposited only in the linear pit cluster with a single exception found on the surface of F3386. Scraping tools were distributed widely, but only one of the type with ragged edges mentioned above was found away from the linear pit cluster. This could suggest that the processing activities related to the pits were carried on in their immediate vicinity. Evidence of flaking activities in the form of cores and unused preparatory flakes tended to concentrate in the NW sub-group of the pit cluster, especially in F3473

Table 19: Length/breadth index in flint samples from the two main areas of BA activity and Area 7000

	% in length/breadth index class						
	<0.7	0.7-0.9	0.9-1.1	1.1-1.3	1.3-1.5	1.5-1.7	>1.7
Area 5	20.4	18.1	18.1	13.4	11.0	6.3	12.6
Area 3100	13.3	18.7	20.3	18.7	9.4	8.6	10.9
Area 7000	9.0	13.1	17.6	13.5	9.8	10.6	26.2

and F3475, but was also present on the periphery of the group of structures B3100–3106.

Post-depositional damage such as edge nicks from dropping or short irregular pseudo-retouch scar sequences from 'trampling' (which can include *in situ* soil movements or pressure from passing vehicles etc.) was present on many of the flakes. This is interpreted as indicating that the flakes were, in general, recovered from secondary contexts rather than having been deposited directly into the features in this area.

The key to redressing the lack of enthusiasm for late prehistoric struck stone assemblages lies in establishing the value of the contribution which they can make to an understanding of site formation processes. By applying a number of standard approaches to lithic analysis to a sample from the Reading Business Park site a contribution has been made to the understanding of the nature and organisation of activities on the site as well as the characteristics of the industry.

## SMALL FINDS

by David Jennings

### Neolithic finds (Fig. 54)

492 Fragment of stone axe. Found in ploughsoil 92.

7054 Subrectangular fragment of a stone axe. Stone sliver with one slightly convex polished surface. Found in context 7009/A/1

7716 Fragile beam of antler, no signs of working. Found in pit 7033.

### Bronze Age finds

#### Copper alloy object

3101 Pin shaft fragment, 57 mm long, tapered and broken at both ends, with a round cross-section. Found in pit 3475 in association with decorated ware pottery of late Bronze Age date. For the results of an analysis of

this pin see Table 20 and Appendix 1.

### Bone objects

643 Fragment of a bone awl. Overall length 61 mm. The point has been broken off and it bears a polish, possibly the result of prolonged use. Found in posthole 291 in association with late Bronze Age pottery.

477 Fragment of an object, 20 mm long, consisting of a shaft with a rectangular cross-section and a flange projecting from one side. One face has two parallel incised lines running down the shaft. The object has been polished. Found in pit 221 in association with Bronze Age pottery.

558 Fragment of an object similar to 477, 15 mm long, consisting of a shaft with a rectangular cross-section, with a projecting flange. Three parallel lines are incised on one face of the object. The opposite side, which is more fragmentary, has the trace of one incised parallel line. The object has received polish. Found in the same pit as object 477.

888 Fragment of an object, 5 mm thick, with a curved profile and two deeply incised parallel lines. It has received polish and it is possibly a handle with an oval/round cross section. Found in pit 177.

### Antler

3215 Broken tine with no signs of working found in pit 3475.

3216 Main beam of antler. No signs of working. Found in the same pit as 3215.

### Stone objects

332 Hammer. A large pebble, probably from the Bunter

Table 20: Analysis of bronze pin

RBP 1	Element	1	2	3	Mean
	Iron	Fe	0.07	0.01	0.03 weight %
	Cobalt	Co	.	0.03	0.01
	Nickel	Ni	0.18	0.17	0.18
	Copper	Cu	81.76	83.14	86.54
	Zinc	Zn	.	.	83.81
	Arsenic	As	0.57	.	.
	Antimony	Sb	0.44	0.55	0.51
	Tin	Sn	10.86	13.53	11.51
	Silver	Ag	0.37	0.31	0.29
	Bismuth	Bi	.	0.13	.
	Lead	Pb	5.71	2.04	0.79
	Gold	Au	0.10	.	.
	Sulphur	S	0.02	0.04	0.02

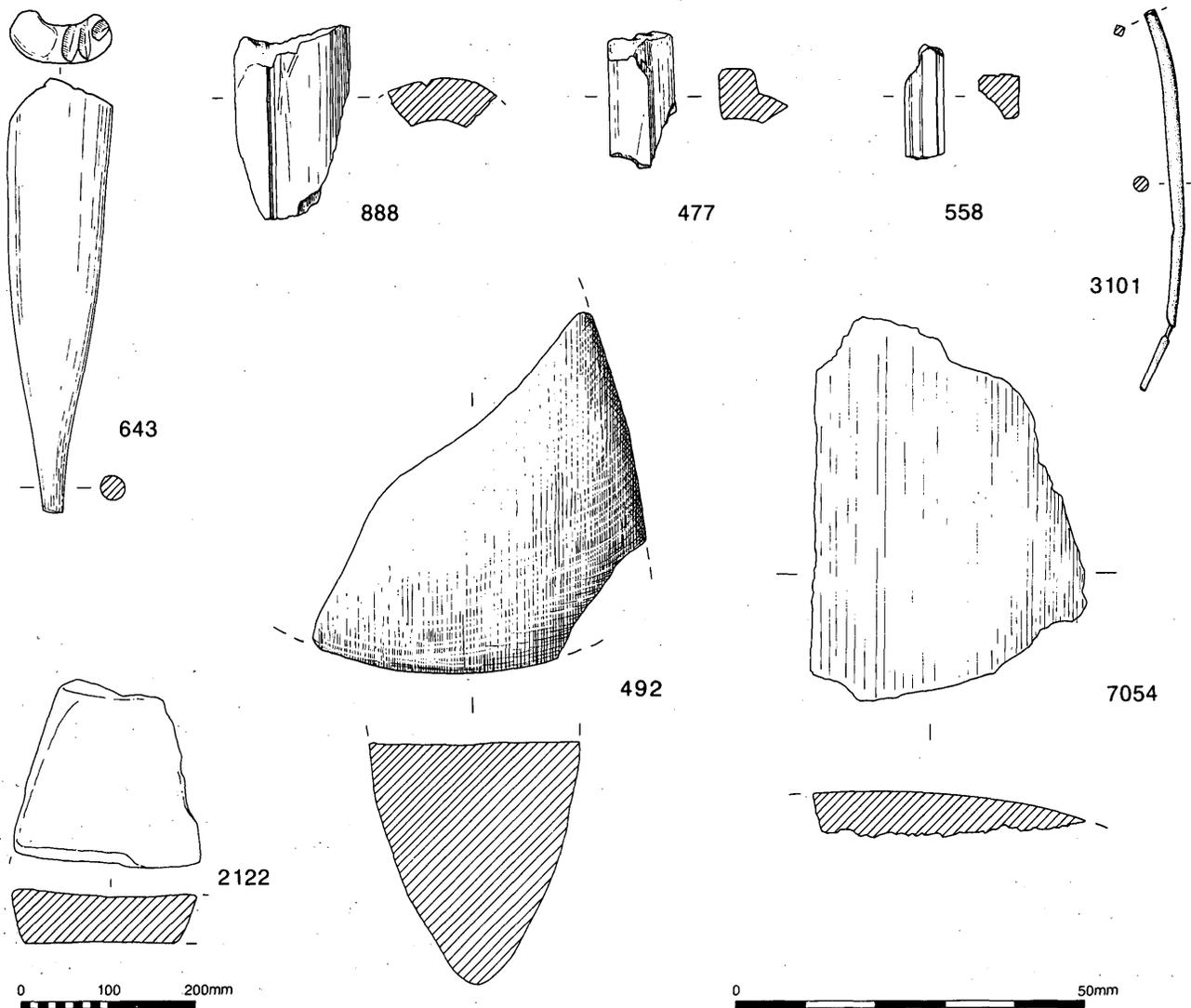


Figure 54 Neolithic and Bronze Age small finds

pebble beds, heavily pitted on one face. Found in posthole 45/B/2.

333 Hammer. A large pebble, probably from the Bunter pebble beds, heavily pitted on one face. Found in posthole 45/B/1

3218 Hammer. A large pebble, probably from the Bunter pebble beds, partially burnt and heavily pitted at one end. Found in pit 3475/B/4

3241 Whetstone fragment with a square cross-section, 113 mm long, 36 mm wide. Found in ditch 3648.

469 A flint pestle worn at both ends with an oval cross-section. 70 mm long, 25 mm wide and 20 mm broad. Found in posthole 213/A/1.

#### Saddle querns

The geological identifications were made by Professor J

Allen of the Postgraduate Research Institute for Sedimentology, University of Reading.

2122 Fragment with a slightly concave and well worn grinding surface. Maximum thickness 35 mm. Found, redeposited, in a Roman ploughsoil 2203.

3227 Subrectangular fragment with a slightly convex grinding surface. Sarsen. Maximum thickness 45 mm. Found in ploughsoil 3466.

7345 Fragment, with a slightly concave, well worn grinding surface. Lower Greensand, Oxfordshire/Bedfordshire. Maximum thickness 40 mm. Found in ditch 7076/C/3.

#### Stone rubbers

3189 Fragment of a stone rubber, possibly circular, with a well worn flat grinding surface. Sarsen. Found in posthole 3481.

- 3199 Fragment of a stone rubber, possibly circular, with a well worn flat grinding surface. Sarsen. Found in pit 3475.
- 3255 Fragment of a stone rubber with a flat grinding surface. Sarsen. Found in pit 3631.
- 3324 Fragment of a bolster-shaped upper stone of a saddle quern with a flat grinding surface. Friable quartzite with ferruginous rootlets, possibly Tertiary, from the North London basin. Found in pit 3961.
- 5066 Fragment of a possibly circular stone rubber with a flat grinding surface. Sarsen. Found in subsoil 5166.
- 2115 Lead tube, 29 mm long and 6 mm in diameter, formed by rolling a piece of lead sheet. Broken at one end. Found in Roman ploughsoil 2202.
- 2119 Fragment of a cast triangular cross-sectioned bar or strip. 44 mm long, 20 mm wide. Recovered from Roman ploughsoil 2202.
- 2150 Irregular ovoid shaped weight pierced by a hole, with a diameter of 5 mm, placed in its approximate centre. Maximum length 20 mm, height 15 mm. Recovered from posthole 2229/A/1, dated by pottery to the 2nd century.

### Roman finds (Fig. 55)

#### Coins

Four coins were recovered from the excavations, three coming from a Roman ploughsoil 2202. They have been examined by Dr C King of the Ashmolean Museum, who made the following identifications.

- 2125 Bronze *as* Vespasian/Titus. Found in Roman ploughsoil 2202.
- 2104 Bronze *minimus*, probably 4th-century. Found in Roman ploughsoil 2202.
- 2082 Bronze *minimus*, 4th-century. Found in Roman ploughsoil 2202.
- 2011 Bronze *as*, Vespasian/Titus. Found in stakehole 2201.

#### Copper alloy objects

- 2009 Pin with a ribbed conical head segmented by four incised lines radiating from the apex. The shaft is tapering and has a circular cross-section. 46 mm long. Found in Roman ploughsoil 2202.
- 2010 Fragment of a copper alloy bracelet terminal, with a D-shaped cross section. Found in ditch 2028/C/1, overlain by a layer of alluvium dated to the 2nd century.
- 2010 Fragment of a flat bronze sheet with one preserved rounded corner. A hole in the sheet has been filled with a lead rivet. Found in Roman ploughsoil 2202.
- 2229 Brooch spring fragment, consisting of three coils and a portion of the pin shaft. Recovered from ditch 2028/C/1 sealed by a layer of alluvium dated to 2nd century.

#### Lead objects

- 2103 'Butterfly'-shaped flat sheet folded over on itself. 30 mm x 15 mm. Found in Roman ploughsoil 2202.

#### Iron objects

- 2003 Knife blade fragment with a triangular cross-section 60 mm long, 24 mm broad. Recovered from old ploughsoil 2032.
- 2208 Object consisting of a broken shaft with a rectangular cross section, flattened at the end. Probably the tang and blade of a small knife or hook. Overall length 36 mm. Recovered from Roman ploughsoil 2202.
- 2008 Small adze-shaped object, 53 mm long, broken at its tapered end, possibly used as a chisel or wedge. Recovered from old ploughsoil 2161 in trench 2010.
- 2034 Heavily corroded object consisting of iron strip with a rectangular cross-section bent into an overlapping oval loop. Length 65 mm, width 40 mm. Found in ditch 2204, dated to the 3rd or 4th century.
- 2139 Hinge, comprising a loop and broken tang. Found in ditch 2204//1, dated to the 3rd or 4th century.
- 2134 Crossbow brooch, length 56 mm. Collingwood type T. An early example with the bow of slender proportions, a D-shaped cross section, and a disc on the bow. The bronze pin is missing. Date late 3rd to 4th century (cf. Hattat 1982, 122 Fig. 101). Recovered from Roman ploughsoil 2202.
- 2185 Strip with a shallow concave section, broken at both ends, 42 mm long, 27 mm wide. Recovered from Roman ploughsoil 2202.
- 2127 Triangular, slightly concave plate length 54 mm. Recovered from Roman ploughsoil 2202.
- 2186 Fragment of an iron strip with a U-shaped cross-section. 57 mm long, 27 mm wide. Found in ditch 2279/B/2.
- 2225 Heavily corroded object, probably a nail fragment,

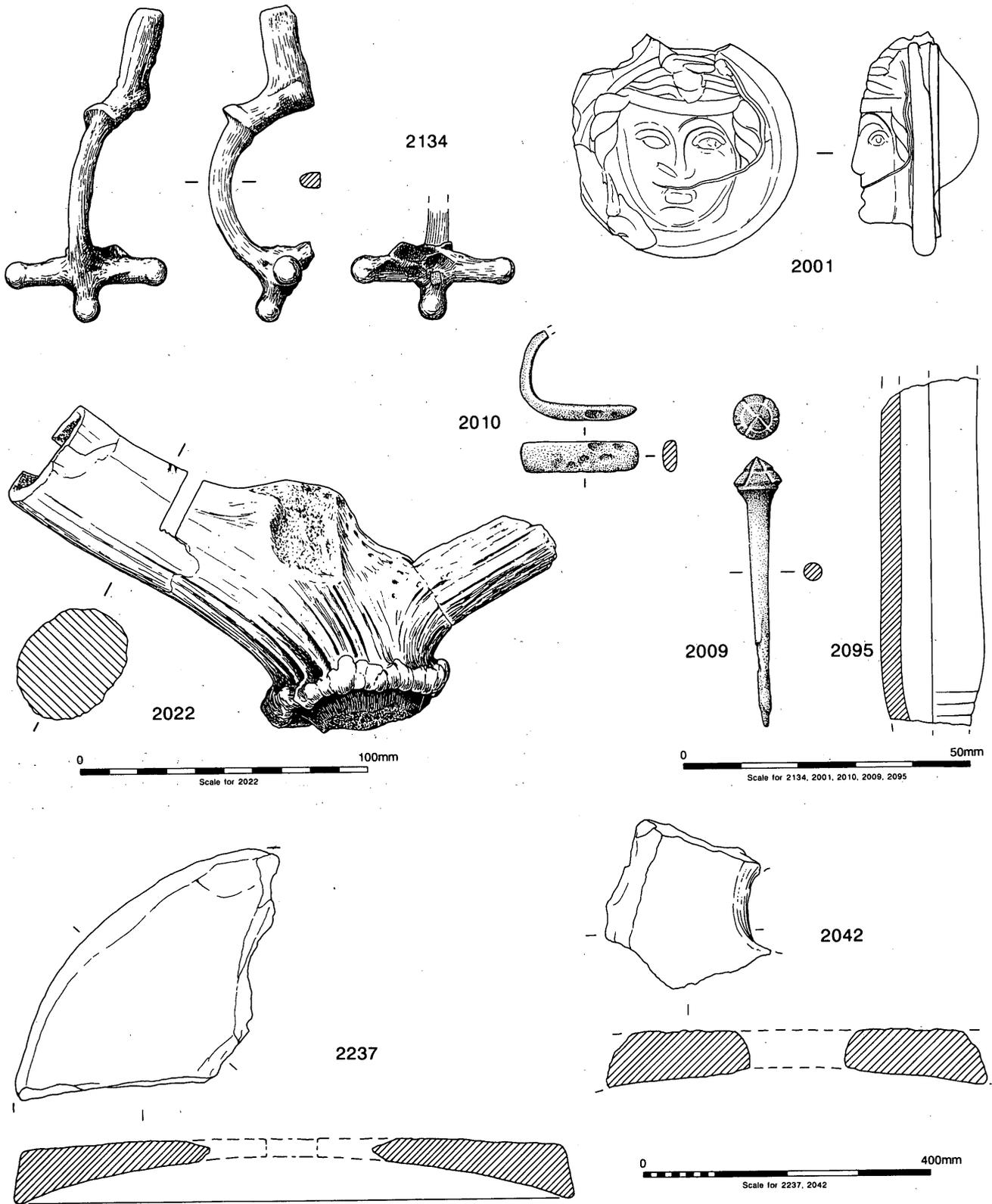


Figure 55 Roman small finds

shaft has a rectangular cross-section. Found in old ground surface 2240.

- 2024 Small nail shaft fragment, rectangular cross section. 14 mm long, 2 mm wide. Recovered from 3rd- to 4th-century ditch 2204/C/1.
- 2236 Circular head of an iron nail or carpentry stud. Diameter 35 mm. Recovered from 2nd-century ditch 2221/C/1.

#### Glass objects

- 2001 Moulded medallion of pale blue glass bearing a 'Medusa-type' head. This class of artefact has been defined by Toynbee (1964, 380) and they are found attached to glass jugs, either at the base of the handle or on the shoulder of the vessel. A close parallel was recorded at Wroxeter from a 1st-century context (Atkinson 1942, 233 and Pl. 62, a, no. 4). Other parallels have been found at Verulamium, London, Bexhill and Littleington (Toynbee 1964, 380). In general they appear to date from the 1st through to the 2nd centuries and to have been imported from Germany or Gaul. Found in pit 2200/A/2 in association with Roman pottery.
- 2095 Possibly a fragment of the neck of a glass 'candlestick' unguentarium although the walls of the vessel seem to be too thick. Isings type 82 A1 or A2, dating to the late 1st century. Found in old ground surface 2031 dated to the 2nd century.

#### Antler

- 2022 Three joining pieces of deer antler and numerous small fragments were recovered. The antler had been sawn across its end, and a cut approximately 6 mm wide, 47 mm from this end seems to have been left uncompleted, with the antler being discarded. Recovered from Roman ploughsoil 2202.

#### Quernstones

Twelve rotary quern fragments were recovered during the excavations. Five were fragments of top stones, two were the bottom stone fragments and five fragments could not be classified as belonging to either one category or another (2039, 2058, 2107, 2199, 2224). The geological identifications were made by Professor J Allen of the Postgraduate Research Institute for Sedimentology, University of Reading.

- 2023 Incomplete upper rotary stone. Upper Old Red Sandstone, from the Mendip/Forest of Dean. Diameter 360 mm, maximum thickness 45 mm, found in Roman ploughsoil 2202.
- 2042 Incomplete upper rotary stone with a flat upper surface. Sarsen. Diameter 410 mm, maximum thickness 35 mm. Found in pit 2252/A/3 dated to 3rd/4th century.
- 2126 Two fragments of an upper rotary stone. Millstone  
2304 grit. Diameter 470 mm maximum thickness 45 mm. Found in Roman ploughsoil 2202.
- 2237 Fragment of an upper rotary stone, with a portion of the (possibly subrectangular) hopper intact. Upper Old Red Sandstone, Mendip/Forest of Dean. Maximum thickness 35 mm. Recovered from gully 2247/A/1, cut by a 3rd to 4th-century ditch.
- 2167 Fragment of lower rotary stone. Possibly sarsen. Diameter 150 mm, maximum thickness 36 mm. Found in ditch 2217 dated to the 1st century.
- 2234 Fragment of lower rotary stone. Possibly millstone grit. Diameter 500 mm; maximum thickness 40 mm. Recovered from ditch 2028, overlain by a layer of alluvium dated to the 2nd century.