

# Chapter 8: Grave Catalogue and Human Remains

## GRAVE CATALOGUE

The grave catalogue collates the evidence for graves from all parts of the site. The evidence from the late Iron Age cremation group 9200 is presented first, followed by that from the Area C cemetery and then the more scattered burials from various parts of Area B. In both these cases cremation graves are listed first, followed by inhumation graves.

### Late Iron Age Grave group 9200 (Fig. 8.1)

Cut 9201, ?rectangular and approximately 0.55 m x 0.50 m x 0.30 m, with steep sides and a flat base. Containing wooden box 9203 (itself containing cremated remains and unburnt animal bone, pottery and copper alloy vessels) and bucket 9207, packed around by yellow silt-clay 9208, partly overlain by light grey clay silt 9205, up to 0.3 m deep. See Chapter 3 for detailed description.

### *Copper alloy catalogue* by H E M Cool

This catalogue describes the principal recognisable pieces. No attempt has been made to catalogue the small unrecognisable fragments. To make the AML numbers more easily comprehensible where several have to be quoted as part of the catalogue entry for a single item, the convention will be used where '~' replaces number 2001914; thus '~23.7' will be used instead of '200191423.7'. The finds from the grave are discussed in Chapter 3 above.

1 **Jug.** Cast copper alloy. Curved handle with sloping upper surfaces forming slight ridge centrally accentuated by beaded decoration, groove parallel to each edge. Upper end expands to form curved upper attachment to (missing) jug rim with wide angular rebate below and female bust above; one arm of this attachment broken. Many collapsed fragments of back of neck found corroded to the handle (not shown in Fig. 8.1). Profile not reconstructable, but upper thickened edge of this mass clearly fits into rebate on the upper attachment. Majority of face and upper part of head of bust destroyed by corrosion with only one eye and part of finely grooved eyebrow remaining. Hair shown as a roll down either side of face, gathered at nape of neck in loose chignon, at back of head hair shown parted centrally. Three concentric channels below neck indicate necklaces on breast. Lower handle attachment shown as male mask with luxuriant curling beard and moustache with hair parted centrally and swept

down either side of forehead, eyebrows shown as finely grooved bands. Cast ridges forming the hair on both figures often accentuated by fine diagonal grooving. Traces of wood internally on mass. Total length of handle 145 mm, diameter of back of neck of jug *c* 80 mm, handle section 18 x 7 mm, thickness of wall 1.5 mm. (200191409).

- 2 **Patara handle.** Copper alloy; cast. Hollow cylindrical spout or handle with part of 'wall' (~11) - this the piece identified on site as the possible strainer bowl spout. Two loose fragments (~23.15) collected separately on site joined ~11 to complete the circuit of the base of the cylinder. A fragment of unknown provenance collected separately on site (~23.9) joined the edge of the 'wall'. Wall is asymmetrically curved with the junction with cylinder being *c* 120° at the 'top' and more gently curved *c* 150-160° at bottom. The lower edge of the more gentle slope has a straight finished edge with an angular moulding immediately above. ~23.9 also has a straight finished edge which would have met the other edge at an angle of approximately 60°. The base of the cylinder had two horizontal mouldings, traces of the ends of the vertical fluting running along the length of the cylinder. Additional fluted fragments were planned separately *in situ* (~23.7, ~23.9, ~23.14) or were excavated from soil Block C2. This complex of fragments was part of the area excavated as Block C2. ~12 was found during the excavation of that block. It consisted of many small fragments, many of which had clearly originally joined and which had been fragmented *in situ*. The fragments are consistent with being one side of the fluted cylinder. Fragments of the terminal of the cylinder were found (~12.5, ~12.27, ~12 unnumbered). A fourth fragment of the terminal had been collected on site (~23.9). The terminal had a straight edge with two narrow horizontal mouldings immediately behind with the vertical fluting running up to these mouldings. As excavated, these fragments were face down suggesting that they formed the underside of the cylinder and the ones collected on site the upper side. The extant length suggests the cylinder was at least 85 mm long. Including the base of the cylinder on ~11, this indicates a cylinder length of at least 100 mm. The junction of the cylinder and the 'wall' is smooth and well-finished on the exterior but ridged on the interior.
- 3 **Patara foot.** Cast copper alloy. Delta-shaped with central projection forked and small projection internally before pointed terminals.

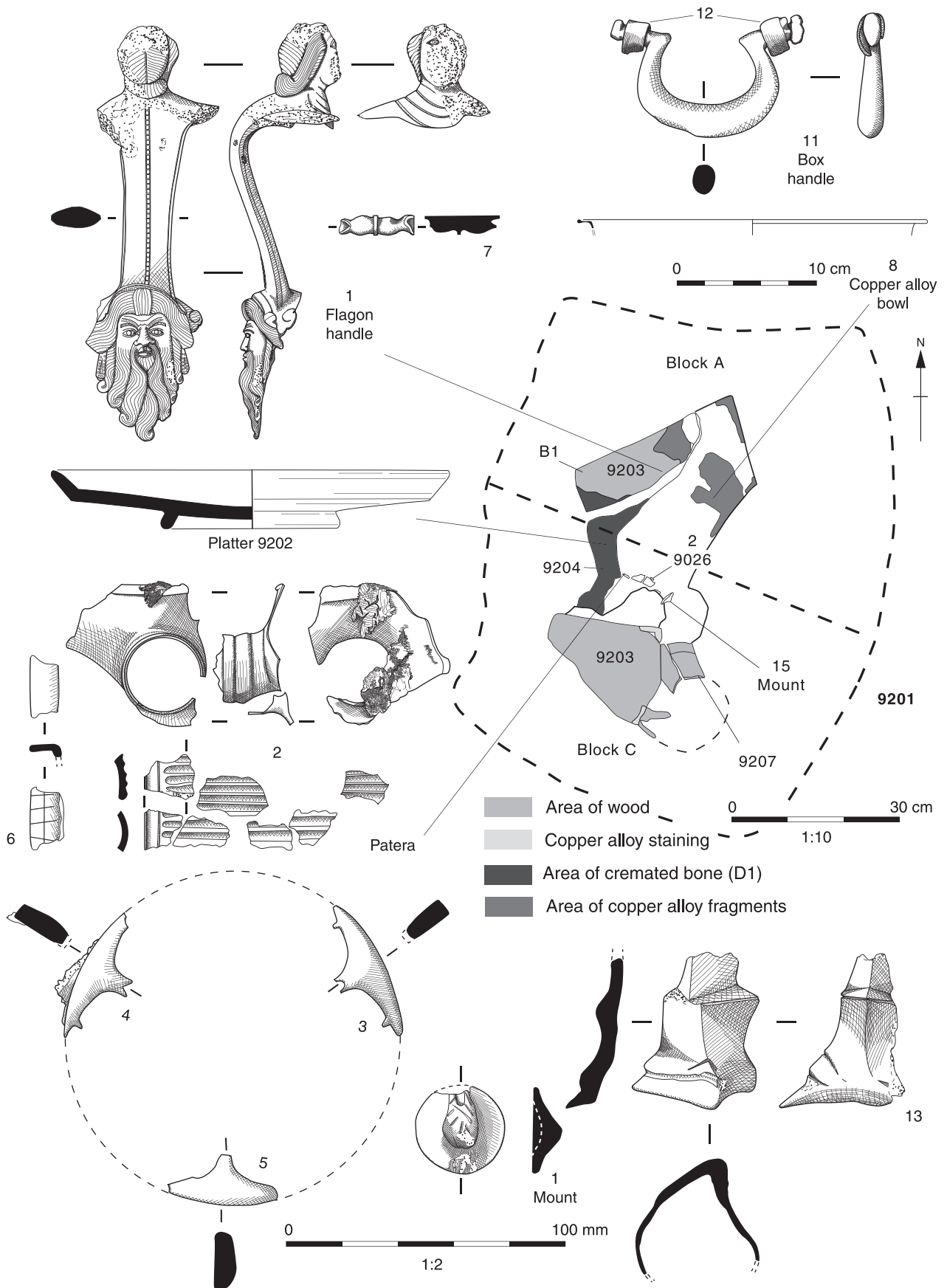


Figure 8.1 Cremation burial group 9200, plan and grave goods.

- Rectangular-sectioned with outer edge sloping in towards base. Traces of solder on upper surface. Length 50 mm, thickness 7 mm, outer diameter *c* 120 mm. (200191419).
- 4 **Patera foot.** Cast copper alloy. Description as no. 3 with one terminal broken. Retains part of base of vessel including small area projection beyond the curved edge of the base. Present length 47 mm, thickness 6 mm, outer diameter 120 mm. (200191420).
  - 5 **Patera foot.** Cast copper alloy. Description as no. 3 with terminals and central projection broken. Present length 38 mm, thickness 8 mm, outer diameter *c* 120 mm. (200191418).
  - 6 **?Patera rim fragment.** Cast copper alloy. Horizontally out-turned rim broken at junction with body. Lightly incised decoration on underside of rim in cross-hatch pattern. Fragment insufficient to obtain accurate rim diameter, but greater than 170 mm. (200191423.15).
  - 7 **Mount.** Cast copper alloy. D-sectioned bar, centrally two oval mouldings separated by a transverse rib; cupped ends. Length 27 mm, section 7 mm. (200191423.9).
  - 8 **Bowl.** Copper alloy; probably raised. Three rim fragments, horizontal out-turned rim with thickened edge; side bent over to vertical side. Approximately one-quarter of circumference extant. Rim diameter 250 mm. (200191423.2; 200191423.4; 200191423.8).
  - 9 **Bowl.** Copper alloy; probably raised. Rim fragment as 8 from the surface of Block B.
  - 10 **Bowl.** Copper alloy. Found in Block B. Now extant as a curve of much corroded sheet and corrosion products held together by fill showing a straight side sloping in and an apparently concave base. One area suggests a base diameter of *c* 200 mm, but it may not have been circular and that diameter may relate to the narrow end of an ellipse. Wood preserved on underside of the base. (200191424).
  - 11 **Drop handle.** Cast copper alloy. Omega-shaped with oval cross-section and circular-sectioned drum terminals, one chipped. Width 66 mm, depth 43 mm, maximum cross-section 12 x 10 mm. (200191416).
  - 12 **Handle attachments.** Copper alloy. Fragments of two rectangular curved strips of same width and internal diameter as attachment bars of omega mount. Width 8 mm, section 7.5 x 2 mm. (200191423.16).
  - 13 **Stand.** Cast copper alloy. Excavated from Block C2 below cylinder and cremated bone. Approximately half circumference of hollow casting; mineral preserved organics internally. Part of 'rim' extant with beaked outline; intermediate angular moulding with possibly square-sectioned leg above. Present height 50 mm. (200191414).
  - 14 **Bar.** Copper alloy. Much corroded solid bar which includes to one side a fragment of the fluted cylinder. The bar is currently *c* 18 mm wide and *c* 15 mm deep. (200191413).

- 15 **Mount.** Cast copper alloy. Flat circular disc, chipped at one point of circumference; slightly dished on underside with asymmetrical knob on upper side, central part damaged. Knob decorated with diagonal grooving on either side, with two ear-like features on upper margin. Possibly representing feline. Slight scar centrally on underside, but no evidence of any shank. Small lump with copper alloy corrosion products on face that fits into underside of mount; lump retains layer of wood. Diameter 31 mm, thickness of backing disc 2.5 mm. (200191417: Block C3).

### Textiles

by Penelope Walton Rogers

There are fragmentary remains of a textile adhering to one of the pieces of *patera* (9206). The textile lies both inside and outside the hollow handle and clearly passes over the broken edges of the metalwork, indicating that it must have come into contact with the object after it had been broken. The textile is crumpled and folded, but in the best preserved areas it appears to be a torn strip of fabric, 16-20 mm wide, folded in half lengthways. It has been woven in tabby (plain weave) from yarn spun Z in warp and weft. There are 18-20 threads per cm in one direction and 12-14 per cm in the other.

Examination of a sample of fibres under a high-power microscope (x100-x640 magnification) revealed the raw material to be a plant stem fibre ('bast'), processed down to its finest possible elements (the 'ultimates'). The fibres were 10-18 microns diameter, had a fine lumen (central channel) and well-spaced cross-markings, and when dried under a hot lamp, they consistently rotated clockwise. This indicates that the fibres come from the flax plant, *Linum usitatissimum* L. Individual fibres have the kind of frayed ends seen in heavily distressed linens and the textile as a whole has crown damage and fibrillation at the interstices of the weave (for different types of fibre damage in textiles, see Cooke and Lomas 1989). This textile evidently saw heavy wear before burial.

Cultivated flax has been recorded in the form of seeds and pollen from a number of Bronze Age and Iron Age sites in Great Britain (A R Hall, pers. comm.), but this is the first example of a textile from the British Iron Age to be confidently identified as flax. Textiles have been recovered from a number of other Iron Age sites, the largest collection being from the Arras Culture cemeteries of Yorkshire (Crowfoot 1991), where they were mostly too heavily mineralised to allow fibre identification. The textiles from late Iron Age cremation graves at Verulam Hills Field, St Albans (J P Wild in Anthony 1968, 14-16), and Westhampnett, Sussex (Walton Rogers 1997), were almost certainly wool. Only two textiles, both from a late Iron Age warrior's burial at St Peter's Port, Guernsey, have been firmly identified as plant fibre, although whether the plant was flax, hemp or nettle was impossible to tell (Watkins and Cameron 1987).

By the Roman period, linen production was well established in Britain and there is evidence for flax processing at Ickham, East Kent (Riddler *et al.* forthcoming), as well as linen textiles from other sites (Wild 1970, 91-4). The Ashford example of linen suggests that this industry may have been in existence before the Roman invasions.

Note: since this report was written one other certain example of linen cloth is now known from a late Iron Age context. This material was used to wrap the sword from the warrior burial at Kelvedon, Essex (Walton Rogers 2007).

### Bucket

The bucket was of yew wood, perhaps with metal binding and mounts (see above). Measurements for nine staves identified in post-excavation assessment are presented in Table 8.1. Fragments of seven 'additional' staves are likely to have derived from the staves tabulated, and are not listed separately. The estimated diameter is c 150 mm and the height may have been similar. The sides were presumably, but not demonstrably, vertical. The base was c 22 mm thick with the staves projecting c 5 mm below it. Context 9207.

### Pottery

The grave contained only one pottery vessel, a platter of *Camulodunum* form 1 in a fine micaceous *terra nigra* fabric. Some 23 fragments were recovered, forming seven sherds reflecting fractures predating the discovery of the burial, but not necessarily present at the time that the burial was put in place. Allowing for erosion of the already broken sherds and loss of a few tiny chips in the process of recovery by the building contractors, the vessel was complete, with a total weight of 909 g. Rim diameter 280 mm. Context 9202.

### Human bone

Some 703 g of cremated bone were recovered from context 9204, the number assigned to the spread of cremated bone as recovered, but possibly consisting of more than one distinct deposit. The individual

Table 8.1 Burial 9200: The wooden bucket stave measurements.

Stave no.	Length (mm)	Width (mm)	Thickness (mm)
1	137.3	76.8	3.4
2	101.4	49.9	8.2
3	22.8	15.2	-
4	55.3	11.7	6.3
5	13.4	-	-
6	66.8	12.5	10
7	92.5	5.9	9.7
8	79	5.3	9.5
9	108.1	22	10.1

represented was adult and probably male (see further below). Context 9204.

### Animal bone

A total of 314 fragments of animal bone (34 cremated, 280 unburnt) was recovered from contexts 9200, 9202, 9204 and 9205. Context 9200 (a general number for unstratified material associated with the burial) contained elements from a very young/neonatal sheep, including 26 fragments of vertebrae including the atlas and axis. Also identified were five pig teeth which had been stained green, almost certainly from contamination by associated material. The only burnt bone from this context was a single fragment of a radius, probably of sheep, which was completely burnt white. None of the 150 fragments of bone from context 9202 (in or above the *terra nigra* platter) had been burnt. These again consisted of the remains of a neonatal sheep including both the right and left femur and the unfused proximal articulation of a left tibia, in addition to more vertebral fragments. Many of the fragments were broken and could not be positively identified, but they included fragments of ribs which may have been associated with the neonatal sheep skeleton.

Sixty-three fragments of bone from context 9204 included 31 unburnt fragments, many of unidentified bone stained green, along with a stained fragment of pig molar. The remaining material was cremated and included three fragments of undiagnostic bird. Identifiable elements included three fragments of pig molar teeth and a small part of an innominate (pelvis) acetabulum, probably of sheep, though not positively identified. The remaining pieces were too fragmented for positive identification.

Twenty-nine fragments of bone came from context 9205. The only cremated fragments were most of a sheep astragalus and a fragmented pig molar. Other identified elements consisted of a pig's premolar tooth stained green and part of the lower shaft of a juvenile sheep's tibia. The remaining elements were not burnt and appeared to be from a juvenile animal consisting of fragments of the vertebral column and other broken and unidentifiable elements.

In summary, cremated material from 9204 and 9205 suggests the presence of sheep/lamb (possibly more than one animal), pig and bird on the cremation pyre. The unburnt remains were again of (neonatal) sheep and pig, but it is unclear if more than one animal of each kind was represented.

### Area C Cemetery

#### Cremation graves

##### Group 5050 (Fig. 8.2)

Cut 5010, sub-circular measuring 0.65 m x 0.4 m x 0.15 m deep, sides sloping steeply at approximately 70°, and rounded slightly to a flat base. Filled by 5011, yellow-brown silt clay.

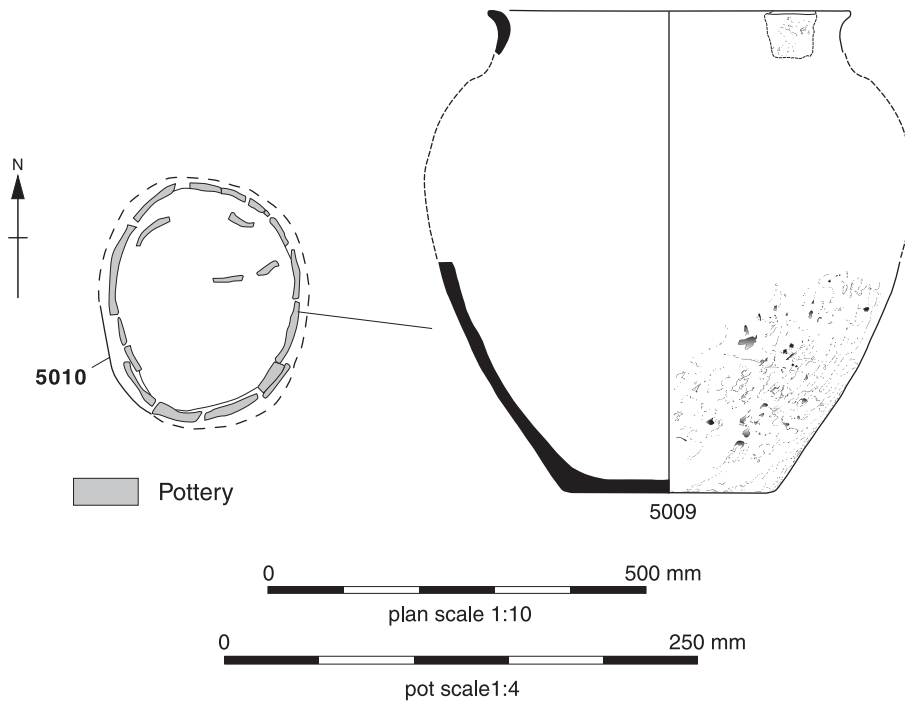


Figure 8.2 Cremation burial group 5050 (cut 5010).

Urned cremation burial, 814 g cremated bone in vessel 5009. Adult.

*Non ceramic finds:*

- 1 **Intaglio**, 3rd-century (see Cool, Chapter 5, cat. no. 22; Fig. 5.4). Fill of vessel 5009, SF508.

*Ceramic finds:*

- 1 **Jar**, in Native Coarse Ware fabric R1; high-fired grey with reddened patches externally, truncated. Vessel 5009.

*Date:* AD 200-250 (ceramics and intaglio); Period 2 Phase 5.

*Group 5060 (Fig. 8.3)*

Cut 5016, sub-circular measuring 0.5 m x 0.6 m x 0.12 m deep, with steeply-sloping to vertical sides and flat base. Filled by 5012, greyish yellow-brown silty clay. Possible cremation burial, but no cremated bone associated.

*Non ceramic finds:* None.

*Ceramic finds:*

- 1 **Flagon**, disc-rimmed in orange-red oxidised Upchurch fabric R17 with slightly more sand than is usual, incomplete and fragmented. Vessel 5013.
- 2 **Beaker or jar** of uncertain form, fine grey Upchurch fabric R16, only fragments. Vessel 5014.

*Date:* ?3rd-century (ceramics); Period 2 Phase 5.

*Group 5070 (Fig. 8.3)*

Cut 5061, sub-circular measuring 0.7 m x 0.6 m x 0.15 m deep, gradually sloping sides and a rounded base. Filled by 5062, brownish-grey clay silt.

Urned cremation burial, 31 g cremated bone in vessel 5063. Adult.

*Non ceramic finds:* None.

*Ceramic finds:*

- 1 **Jar**, fine oxidised Upchurch fabric R17, truncated ?c AD 150-250. Vessel 5063.
- 2 **Beaker**, fine grey Upchurch fabric R16, truncated, ?early 3rd century type. Vessel 5065.

*Date:* c AD 200-250 (ceramics); Period 2 Phase 5.

*Group 5080 (Fig. 8.4)*

Cut 5021, circular measuring 0.6 m diameter x 0.15 m deep, steeply-sloping sides and slightly rounded base. Filled by 5017, greyish yellow-brown silty clay.

Urned cremation burial, 706 g cremated bone in vessel 5019. Young adult male.

*Non ceramic finds:* None.

*Ceramic finds:*

- 1 **Jar** in patchy grog-tempered ?East Sussex Ware, truncated. Vessel 5019.
- 2 **Flagon** of uncertain form in reddish-brown Upchurch fabric R17, only a small fraction of this vessel is present. Vessel 5020.

*Date:* ?Mid 2nd century or later; Period 2 Phase 4 or 5.

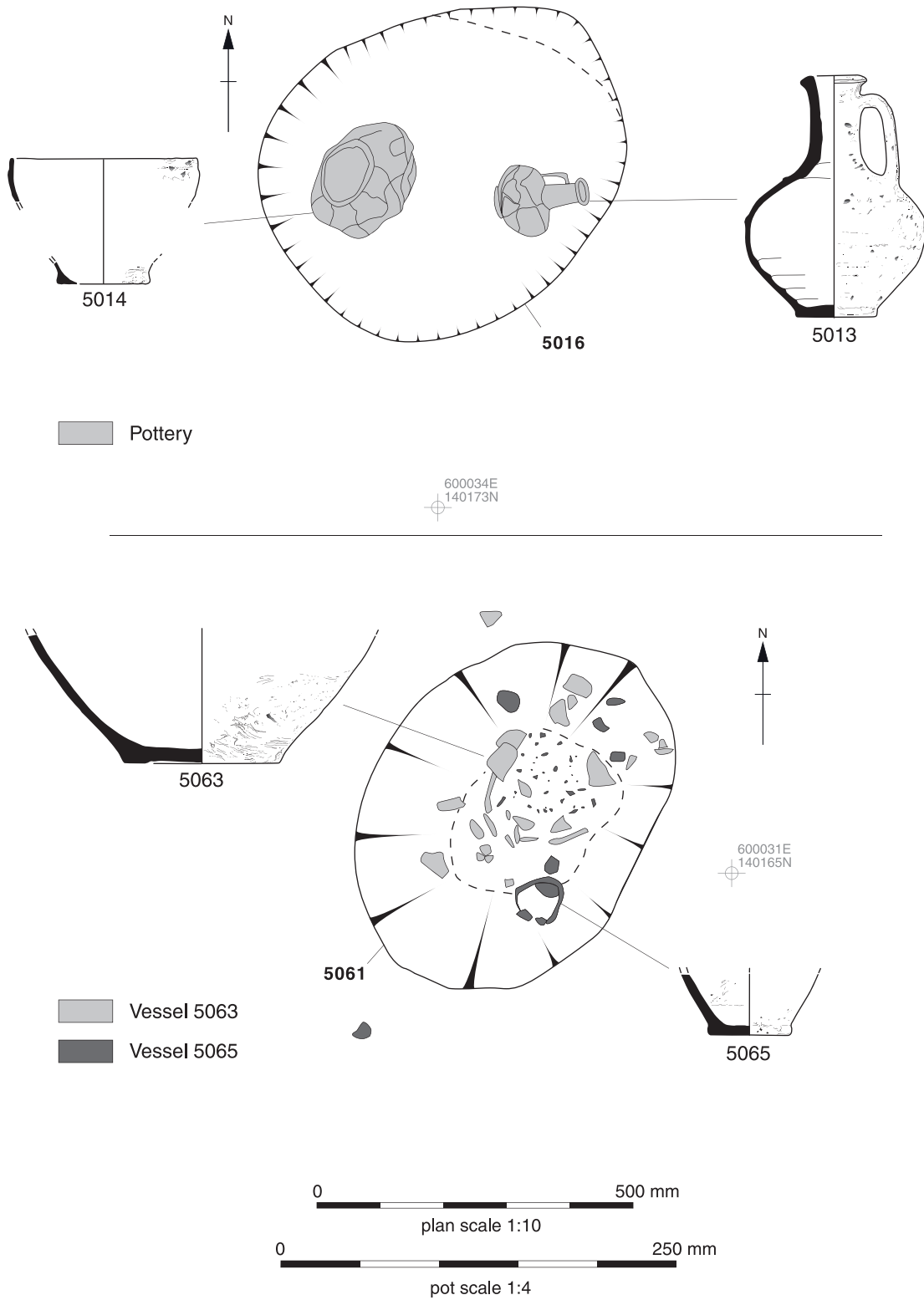


Figure 8.3 Cremation burial groups 5060 (cut 5016) and 5070 (cut 5061).

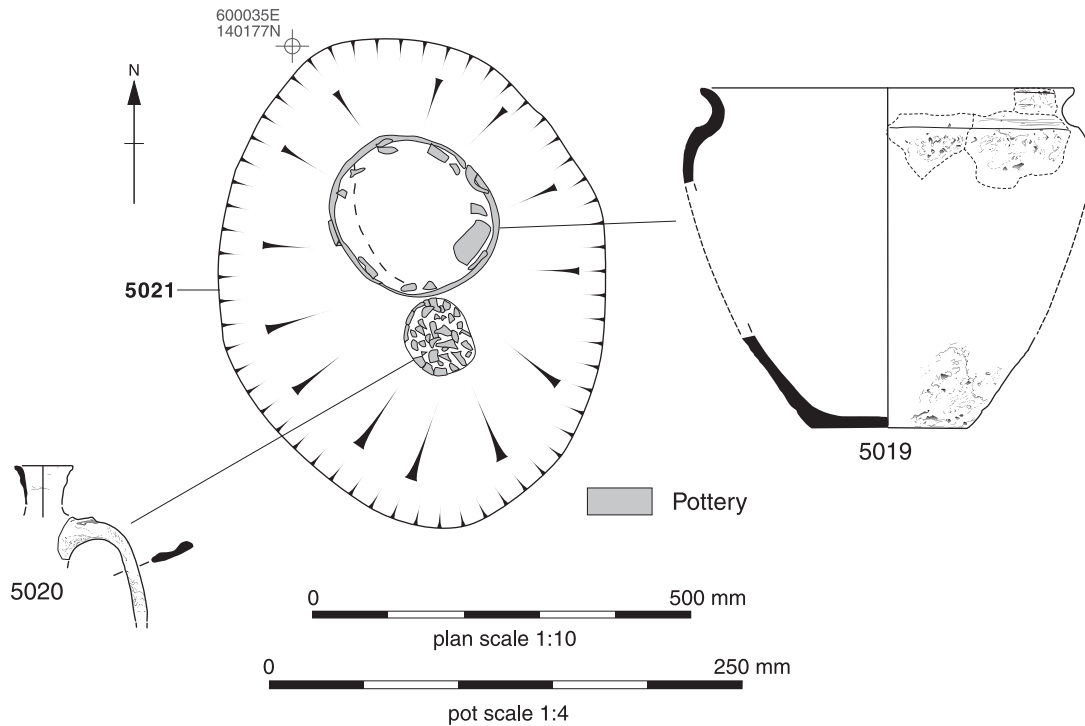


Figure 8.4 Cremation burial group 5080 (cut 5021).

Group 5090 (Fig. 8.5)

Cut 5028, sub-rectangular measuring *c* 1 m x 0.7 m x 0.25 m deep, with fairly steeply sloping sides and flat base. Only the south-east edge of the feature was well defined. Fill 5024, greyish yellow-brown silty clay.

Urned cremation burial, 1310 g cremated bone in fill 5025 of vessel 5026. Young adult male.

Non ceramic finds:

- 1 **Burnt animal bone** (x 22 fragments), includes juvenile sheep and bird. Fill 5025, of vessel 5026.
- 2 **Copper alloy armlet** (see Cool, Chapter 5, cat. no. 21; Fig. 5.4). Context 5025, SF563.
- 3 **Armlet** of jet and lignite beads. Formed from three large, oval, ridge-backed beads, on which traces of gold leaf were found, and 24 flat elliptical beads (see Allason-Jones, Chapter 5; Figs 5.8: 6-31, and 5.9). Context 5025, SF511, SF520, SF564, SF567-SF578, SF580-SF584, SF654-SF656, SF657-SF658.
- 4 **Necklace** comprising 183 jet cylinder beads (see Allason-Jones, Chapter 5; Fig. 5.8: 1-5). Context 5025, SF504, SF512-SF519, SF521-SF539, SF541-SF549, SF586, SF589-SF610, SF643-SF653, SF659-SF738.

Ceramic finds:

- 1 **Jar** in grog-tempered ware fabric LR1.1; fired black with profuse white siltstone grog, complete. *c* AD 270-370. Vessel 5026.
- 2 **Lid** in patchy brown/black grog-tempered East Sussex Ware, complete. Within jar 5026.

- 3 **Beaker** in cream Lower Nene Valley fabric with white-painted scroll decoration over brown-black colour-coat, complete. *c* AD 270-350. Vessel 5003.
- 4 **Flagon** (under)fired orange with black core, heavily truncated. Vessel 5027.

Date: AD 270-370 (all finds), but probably late 3rd- to early 4th-century; Period 2 Phase 6.

Group 5110 (Fig. 8.6)

Cut 5036, circular measuring 0.35 m diameter x 0.15 m deep, with steep sloping sides rounding to a flat base. Filled by 5033, redeposited natural silt clay.

Urned cremation burial, 411 g cremated bone in vessel 5035. Adult.

Non ceramic finds: None.

Ceramic finds:

- 1 **Beaker** in fine grey Upchurch fabric R16 with a large hole ?deliberately made in the base, truncated. The basal pedestal suggests an early date of *c* AD 43-100. Vessel 5035.

Date: Period 2 Phase 2 or 3.

Group 5120 (Fig. 8.7)

Cut 5043, circular measuring 0.6 m diameter x 0.15 m deep, with shallow sloping sides and a rounded base. Filled by 5040, yellow-brown silt clay.

Urned cremation burial, 343 g cremated bone in vessel 5042. Adult male.

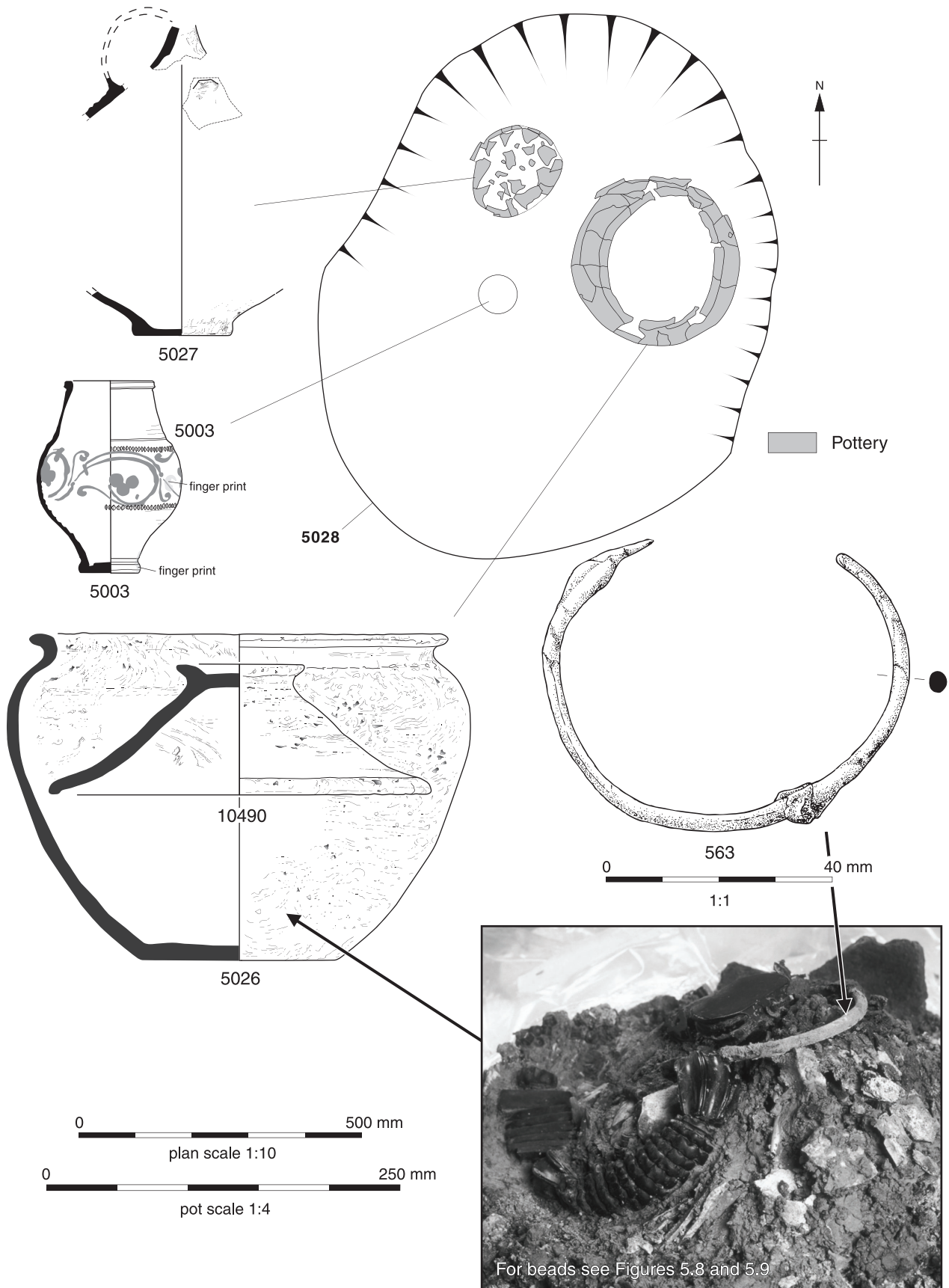


Figure 8.5 Cremation burial group 5090 (cut 5028).



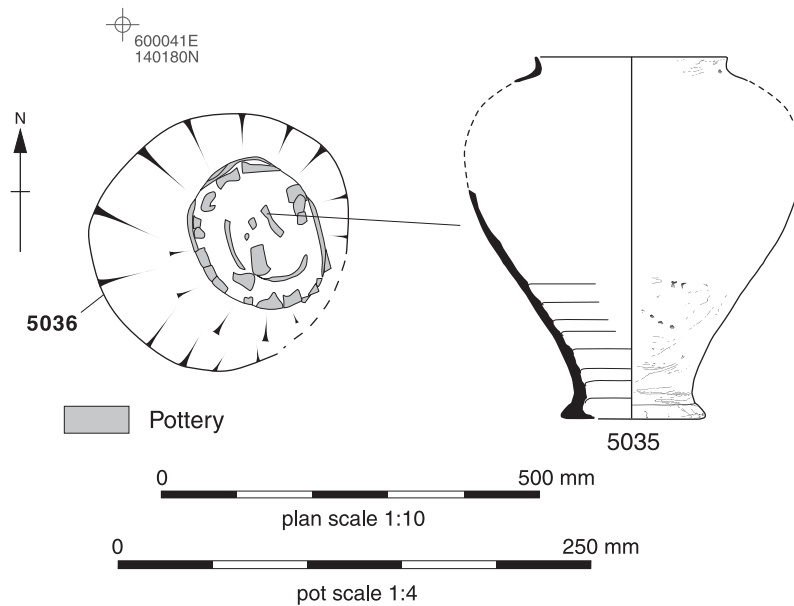


Figure 8.6 Cremation burial group 5110 (cut 5036).

*Non ceramic finds:* None.

*Ceramic finds:*

- 1 Large **jar** in grog-tempered fabric B2.1; fired black, truncated. Vessel 5042.

*Date:* ?1st- to 2nd-century; Period 2 Phase 2 to 5.

**Group 5210 (Fig. 8.8)**

Cut 5128, sub-rectangular measuring 0.94 m x 0.52 m x 0.05 m deep. The remaining edges were shallow and sloped gradually to an irregular base. Filled by 5127, grey brown clay silt.

Unurned cremation burial, 478 g cremated bone in pit 5128. Adult.

*Non ceramic finds:* None.

*Ceramic finds:*

- 1 **Beaker** in fine grey Upchurch fabric R16, badly truncated. The plain base suggests a late 2nd- to 3rd-century date. Vessel 5125.

*Date:* Late 2nd- to 3rd-century (ceramics); Period 2 Phase 5.

Note: Beaker 5125 lay on its side at the northern edge of the pit, and a spread of cremated bone lay to the south of this. The bone may have originally been within the beaker and displaced by post-Roman ploughing. Alternatively, the cremated bone could have been held within an organic container.

**Group 5220 (Fig. 8.9)**

Cut 5131, sub-circular measuring 1.7 m x 1.1 m x 0.2 m deep, with steeply-sloping sides and flat base. Filled by 5132, grey-orange silt clay. Cremated bone

and ancillary vessels in box c 0.70 m x 0.85 m (depth unknown) indicated by soil stain and 5 nails along the northern edge of the pit.

Urned cremation burial, 756 g cremated bone in vessel 5134 and 119 g in backfill of pit 5133. Adult male.

*Non ceramic finds:*

- 1 Cremated **animal bone**, 6 fragments including sheep and bird. Fill 5135 of jar 5134.
- 2 **Nails** (x 9). Fe. Context 5133, SF550-SF553, SF555-SF558, SF560.
- 3 **Hobnails** (x3). Fe. Context 5133, SF554 and SF558-SF559.

*Ceramic finds:*

- 1 **Cordoned jar** in polished reddish-brown grog-tempered fabric with black patches. c AD 100-160. Vessel 5134.
- 2 **Flagon** in buff-brown Canterbury fabric R6.3, truncated. c AD 70-150. Vessel 5136.
- 3 **Beaker** of uncertain form, in fine grey Upchurch fabric R16, badly truncated. Vessel 5138.
- 4 **Platter**, Drag. 18/31, Central Gaulish samian. The stamp has been eroded away. c AD 120-150. Vessel 5141.

*Date:* AD 120-150 (ceramics); Period 2 Phase 3.

**Group 5230 (Fig. 8.10)**

Cut 5146, circular measuring 0.33 m diameter and 0.07 m deep, with gently sloping sides and a rounded base. Filled by 5143, grey-brown silt clay.

Urned cremation burial, 3 g cremated bone in vessel 5145. Tiny flecks of cremated bone were seen on the surface of 5143.

Non ceramic finds: None.

Ceramic finds:

- 1 Base of **jar** in grog-tempered fabric B2.1, fragmentary. Vessel 5145.

Date: 1st- to 2nd-century (ceramics); Period 2 Phase 2 to 4.

Group 5240 (Fig. 8.11)

Cut 5166, roughly square measuring 0.51 m x 0.54 m x 0.07 m deep, sides slope at c 45° to a flattish base. Filled by 5163, grey-brown silt clay.

Urned cremation burial, 55 g cremated bone in vessel 5165. Adult.

Non ceramic finds: None.

Ceramic finds:

- 1 Necked **jar** in fine grog-tempered grey fabric fired polished reddish-brown, fragmentary. c AD 100-160. Vessel 5165.

Date: AD 100-160 (ceramics); Period 2 Phase 3.

Note: The shape of the grave suggested that the burial had originally been within a box. No nails or

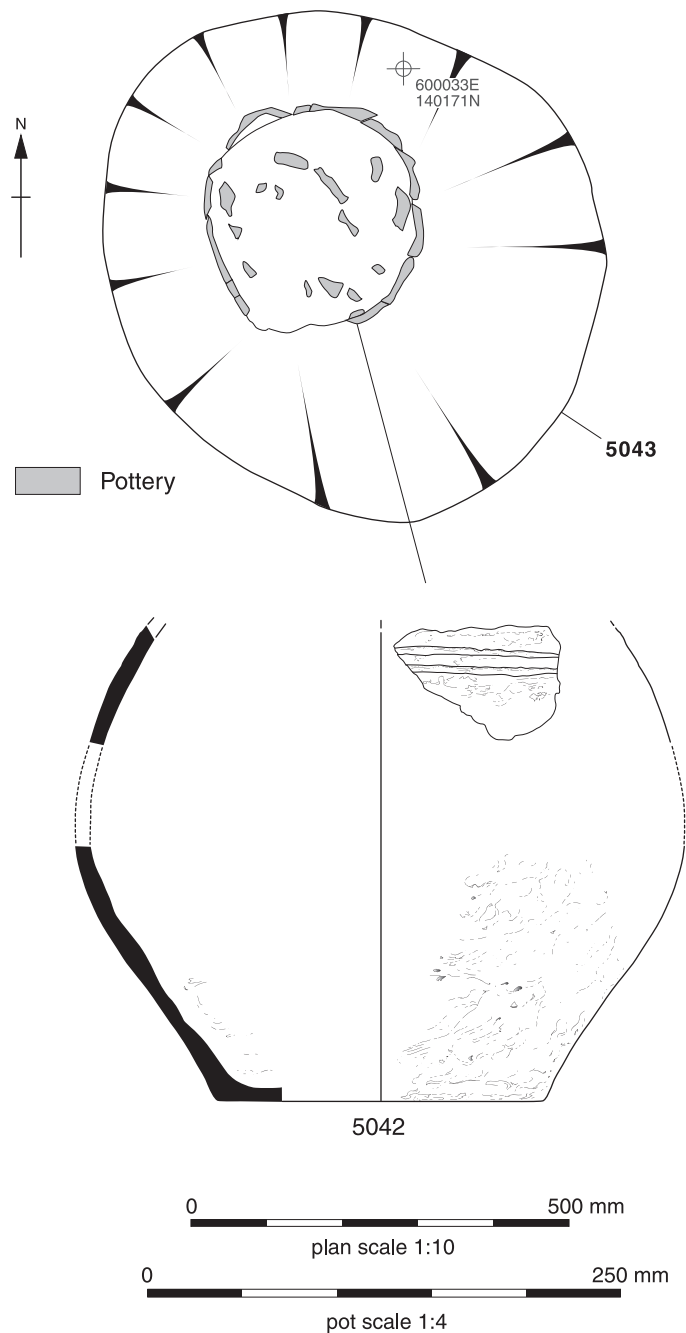


Figure 8.7 Cremation burial group 5120 (cut 5036).

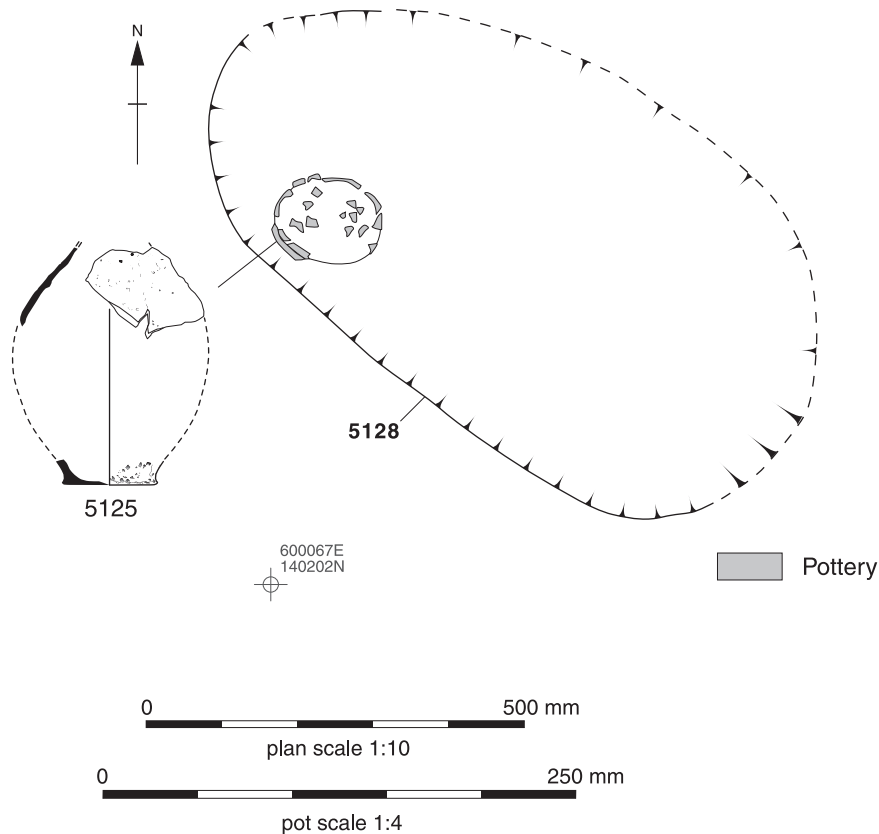


Figure 8.8 Cremation burial group 5210 (cut 5128).

other fittings were recovered, but these could easily have been lost to the plough.

#### *Inhumation graves*

##### *Group 5100 (Fig. 8.12)*

Cut 5032, E-W, sub-rectangular measuring 2.8 m x 1.0 m x 0.15 m deep, with moderate to steep edges and an irregular base. Filled by 5031, grey brown clay silt.

No human bone preservation.

*Non ceramic finds:* None.

*Ceramic finds:*

- 1 **Pottery sherds** (x 34) mostly abraded, in various fabrics and only datable within a 1st- to 3rd-century range. Wt: 150 g. Context 5031.

*Date:* Uncertain; Period 2 Phase 3 to 5.

##### *Group 5130 (Fig. 8.13)*

Cut 5047, E-W, sub-rectangular measuring 1.8 m x 0.9 m x 0.12 m deep, with steep sloping sides and an irregular base. Filled by 5046, dark grey silt clay.

No human bone preservation. Small amount of burnt animal bone.

*Non ceramic finds:* None.

*Ceramic finds:*

- 1 **Beaker** of Monaghan form 217.1 in dull reddish-brown Upchurch fabric R17 variant with a little mica and occasional iron-stained quartz (up to 0.2 mm), badly shattered. Vessel 5044.

*Date:* AD 43-60 (ceramics); Period 2 Phase 2.

##### *Group 5140 (Fig. 8.14)*

Cut 5052, NW-SE, sub-rectangular measuring 3.0 m x 1.2 m x 0.2 m deep, with steep but irregular sides and an uneven base. Filled by 5051, mid grey silt clay.

No human bone preservation.

*Non ceramic finds:* Iron slag.

*Ceramic finds:*

- 1 **Pottery sherds** (x 6). Wt: 48 g. Context 5051.

*Date:* After AD 270 (ceramics); Period 2 Phase 6.

##### *Group 5150 (Fig. 8.15)*

Cut 5054, E-W, sub-rectangular measuring 2.5 m x 0.6-1.1 m x 0.18 m deep, steeply sloping sides and flat base. Filled by 5053, greyish-brown silty clay.

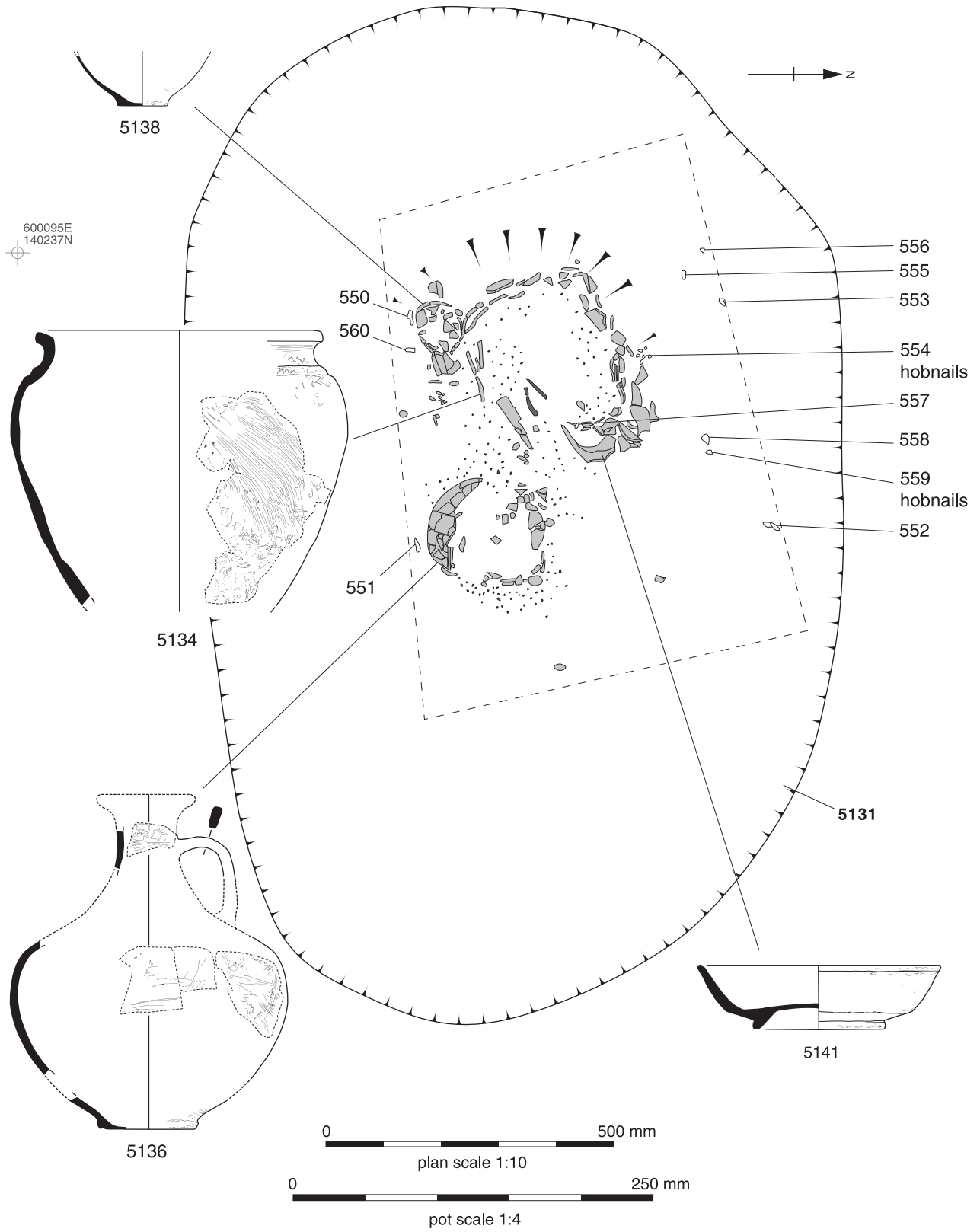


Figure 8.9 Cremation burial group 5220 (cut 5131).

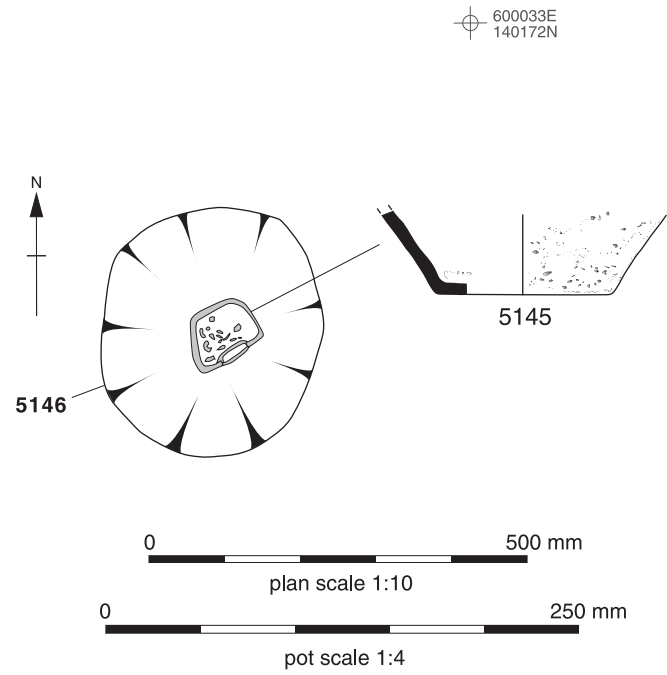


Figure 8.10 Cremation burial group 5230 (cut 5146).

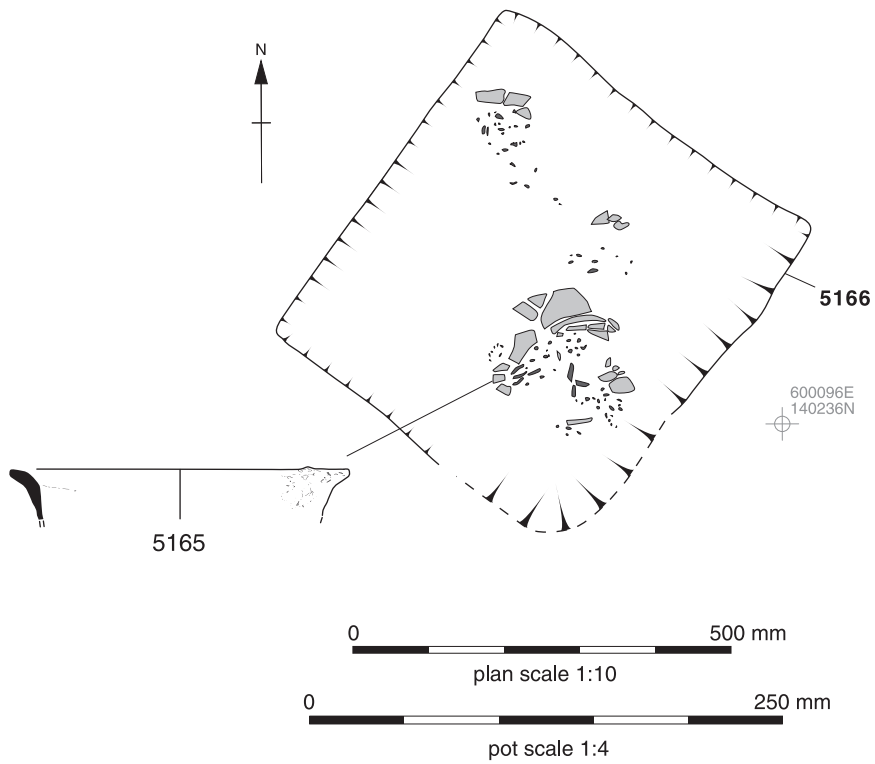


Figure 8.11 Cremation burial group 5240 (cut 5166).

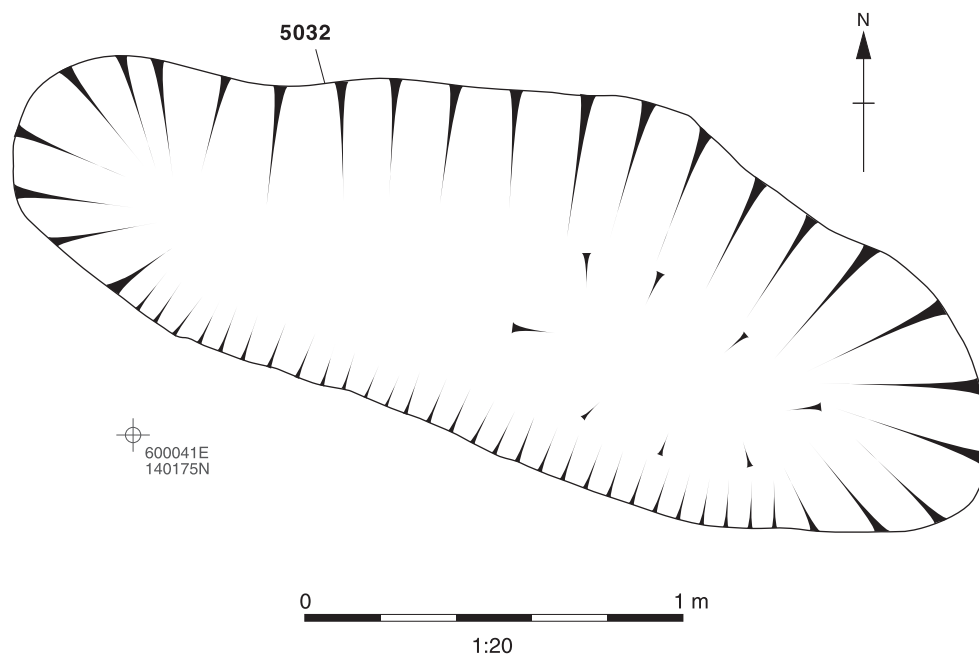


Figure 8.12 Inhumation burial group 5100 (cut 5032).

No human bone preservation.

*Non ceramic finds:* None.

*Ceramic finds:*

1 **Pottery sherds** (x 11). Wt: 86 g. Context 5053.

*Date* Early 2nd-century or (probably) later (ceramics); Period 2 Phase 5.

*Group 5160 (Fig. 8.16)*

Cut 5072, north-west to south-east, irregular measuring up to 2.3 m x 1.1 m x 0.19 m deep, but the width of the base averaged 0.8 m. The sides were near vertical apart from the south-east edge which sloped at approximately 30° to a flat base. Filled by 5071, grey silt-clay.

No human bone preservation.

*Non ceramic finds:* None.

*Ceramic finds:*

1 **Pottery sherds** (x 9). Wt: 32 g. Context 5071.

2 **Tile fragment** (x 1). Wt: 4 g. Context 5071.

*Date* ?1st- to 2nd-century (ceramics); Period 2 Phase 2 to 4.

*Group 5170 (Fig. 8.17)*

Cut 5023, E-W, sub-rectangular measuring 1.9 m x 1.0 m width x 0.1 m deep, with near vertical sides and a generally flat base. Filled by 5022, grey-brown silt clay.

No human bone preservation.

*Non ceramic finds:* None.

*Ceramic finds:*

1 **Pottery sherds** (x 15). Wt: 92 g. Context 5022.

*Date* ?Late 1st- to 2nd-century (ceramics); Period 2 Phase 3.

*Group 5180 (Fig. 8.18)*

Cut 5099, N-S, sub-rectangular measuring 2.1 m x 1.0 m width x 0.12 m deep, steeply sloping sides and flat base. Filled by 5098, dark greyish yellow-brown silty clay.

No human bone preservation.

*Non ceramic finds:*

1 **Pillar-moulded-bowl**. Two body fragments (see Cool, Chapter 5, cat. no. 35). Context 5098, SF504.

*Ceramic finds:*

1 **Pottery sherds** (x 12). Wt: 46 g. Context 5098.

*Date* ?1st- to 2nd-century (ceramics); Period 2 Phase 2 to 4.

*Group 5190 (Fig. 8.19)*

Cut 5085, NW-SE, irregular measuring c 3.0 m x, 1.0 m x 0.2 m deep, sides slope up to 50° to flattish base. Filled by 5084, grey silt clay.

No human bone preservation.

*Non ceramic finds:*

1 **Pillar-moulded-bowl**. Single body fragment (see Cool, Chapter 5, cat. no. 36). Context 5084, SF503.

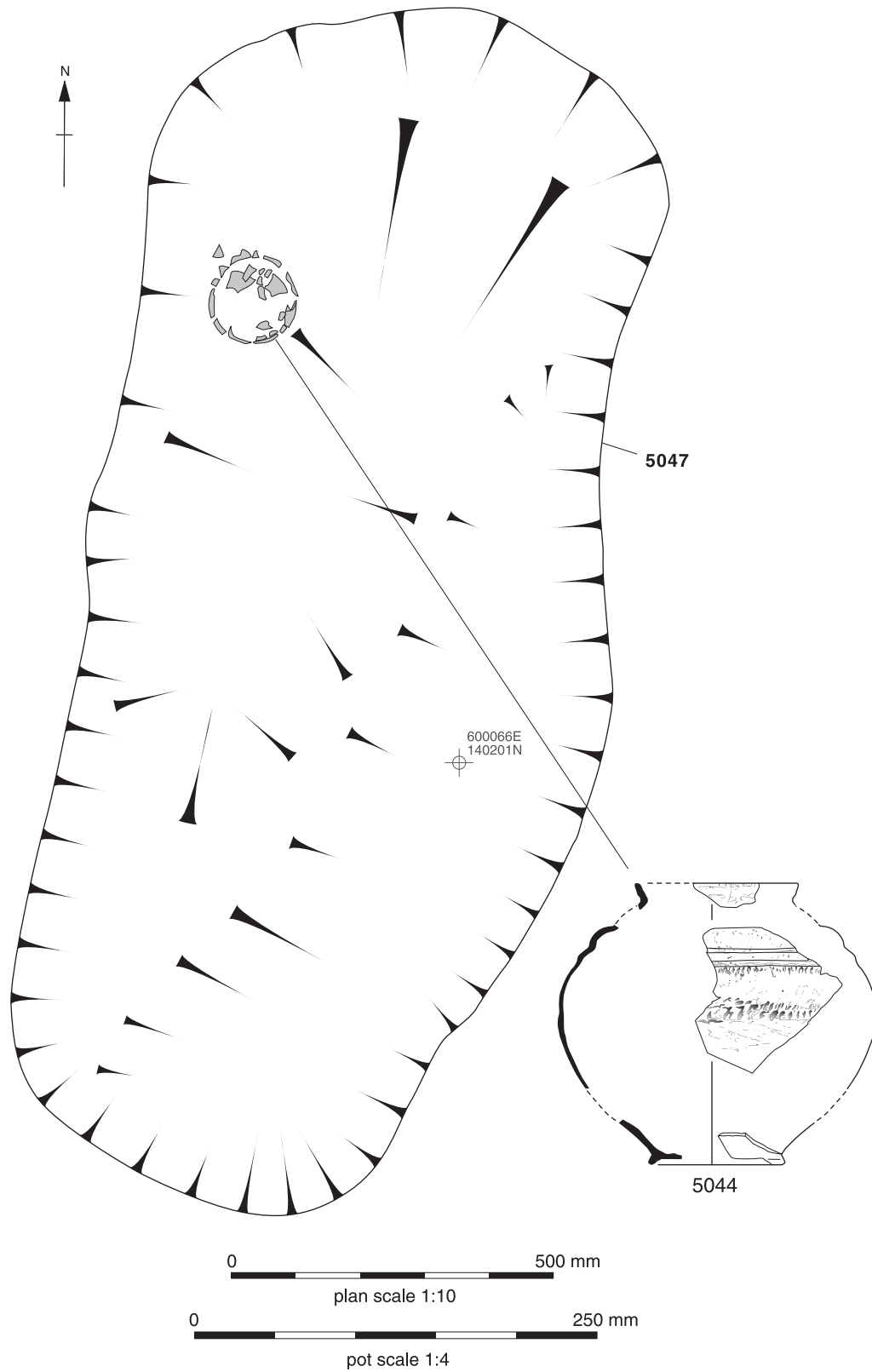


Figure 8.13 Inhumation burial group 5130 (cut 5047).

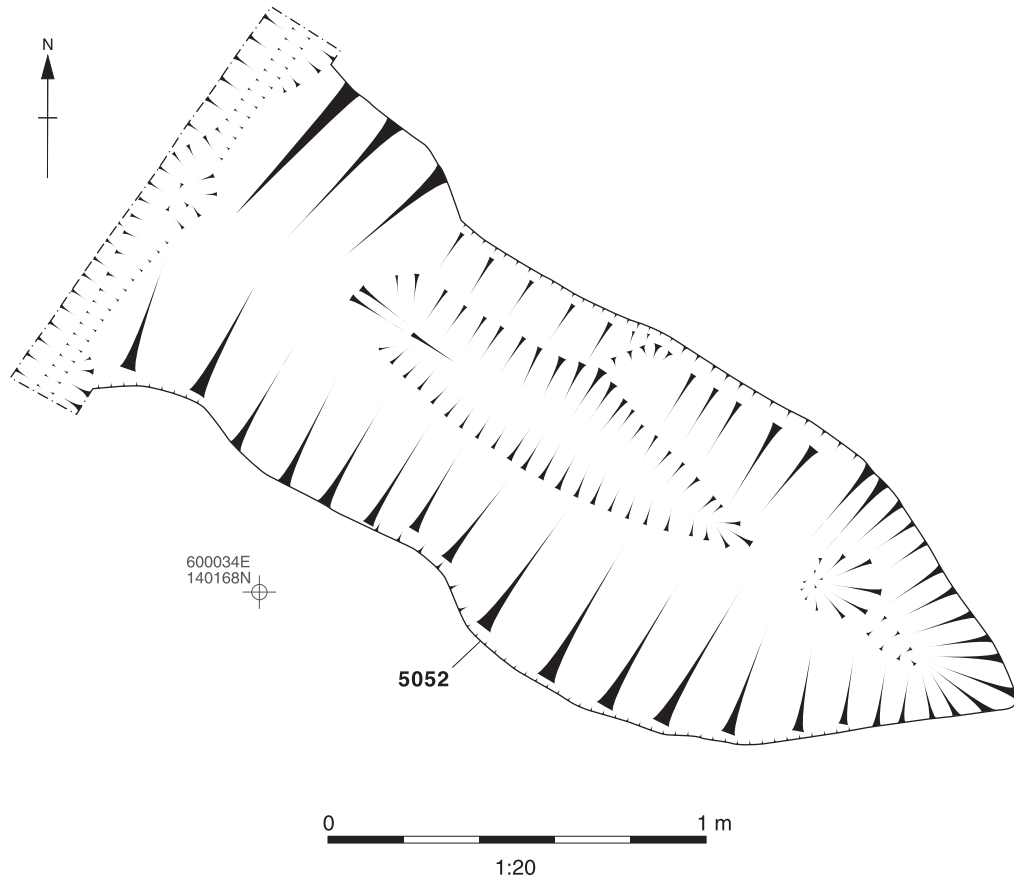


Figure 8.14 Inhumation burial group 5140 (cut 5052).

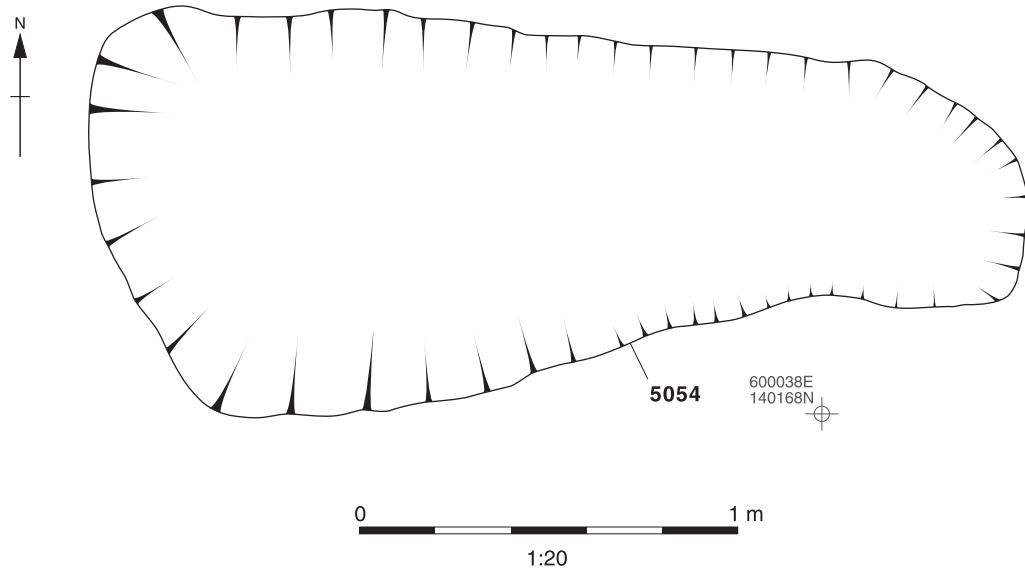


Figure 8.15 Inhumation burial group 5150 (cut 5054).



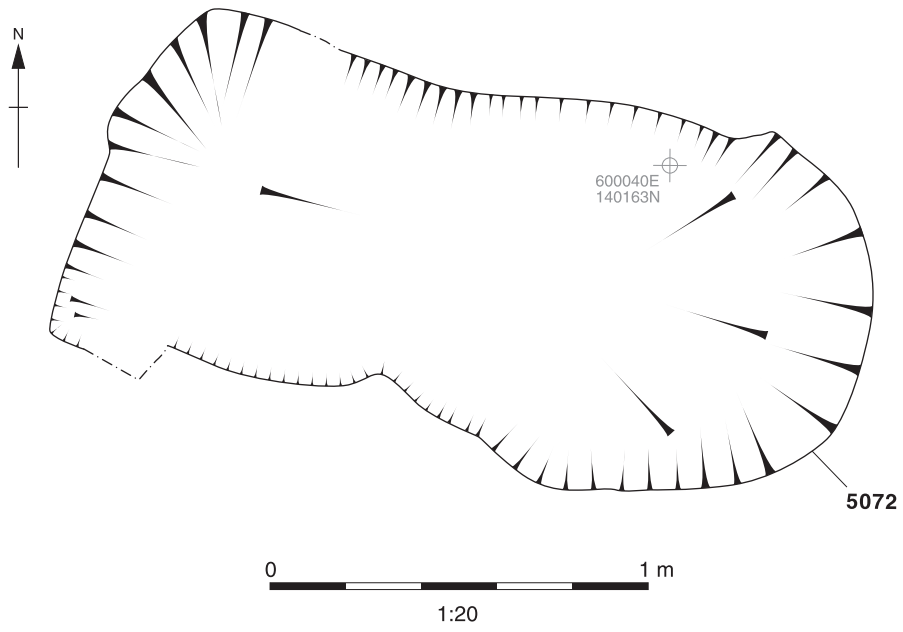


Figure 8.16 Inhumation burial group 5160 (cut 5072).

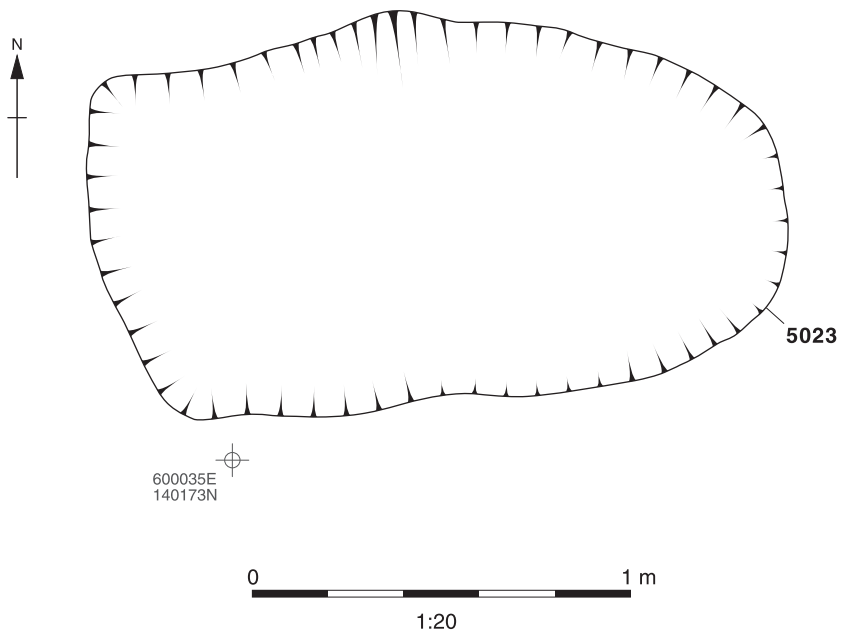


Figure 8.17 Inhumation burial group 5170 (cut 5023).

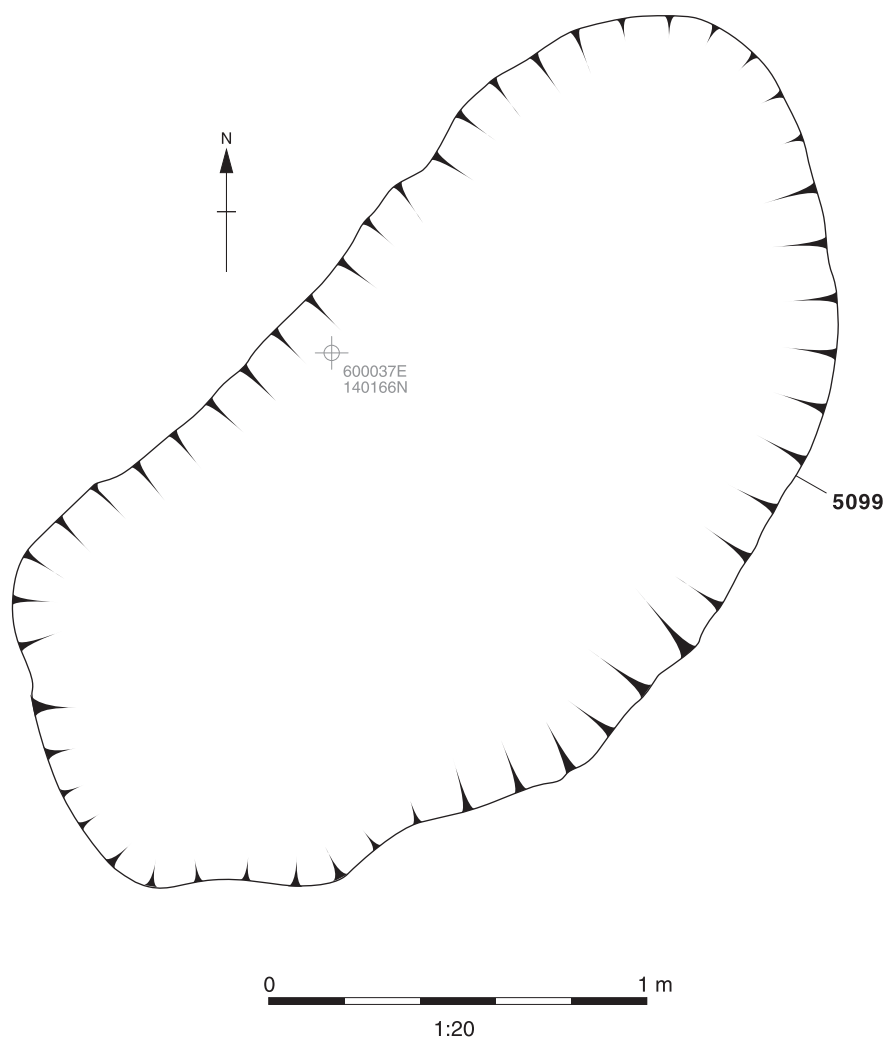


Figure 8.18 Inhumation burial group 5180 (cut 5099).

*Ceramic finds:*

1 **Pottery sherds** (x 24). Wt: 102 g. Context 5084.

Date ?1st-century (ceramics and glass); Period 2 Phase 2.

**Burials in Area B**

*Cremation graves*

Group 210 (Fig. 8.20)

Cut 232, sub-oval measuring 0.9 m x 0.75 m x 0.2 m deep, near vertical sided with a slightly uneven base. Filled by 233.

Urned cremation burial, 386 g cremated bone partly in vessel 205 but also scattered through grave fill. Adult female.

*Non ceramic finds:*

1 **Needle**, cu alloy (see Cool, Chapter 5, cat. no. 34; Fig.5.4). Context 233, SF32.

2 **Hobnails** (x 27). Fe. Context 233, sample 6.

*Ceramic finds:*

1 **Jar** with shoulder cordon, in grey Native Coarse Ware fabric R1, truncated. c AD 170-250. Vessel 205.

2 Small **beaker** in fine grey Upchurch fabric R16; unusual form with a high shoulder and stubby everted rim. Vessel 207.

3 Ovoid **poppyhead beaker** of Monaghan form 2A5.5 in similar fabric without decoration. c AD 160-190. Vessel 209.

4 **Cup** Drag. 33, Central Gaulish samian. No stamp. Date c AD 120-200. Vessel 249.

5 **Flanged bowl** in brown-black grog-tempered ware fabric B2.1. Vessel 212.

6 **Bowl** of Monaghan form 5C2, polished black BB2. Date c AD 150-210. Vessel 216.

7 **Platter** Drag. 31 Central Gaulish samian. Stamp completely eroded away. The vessel has been broken and riveted together in antiquity. c AD 150-200. Vessel 214.

Date AD 170-200 (ceramics); Period 2 Phase 4.

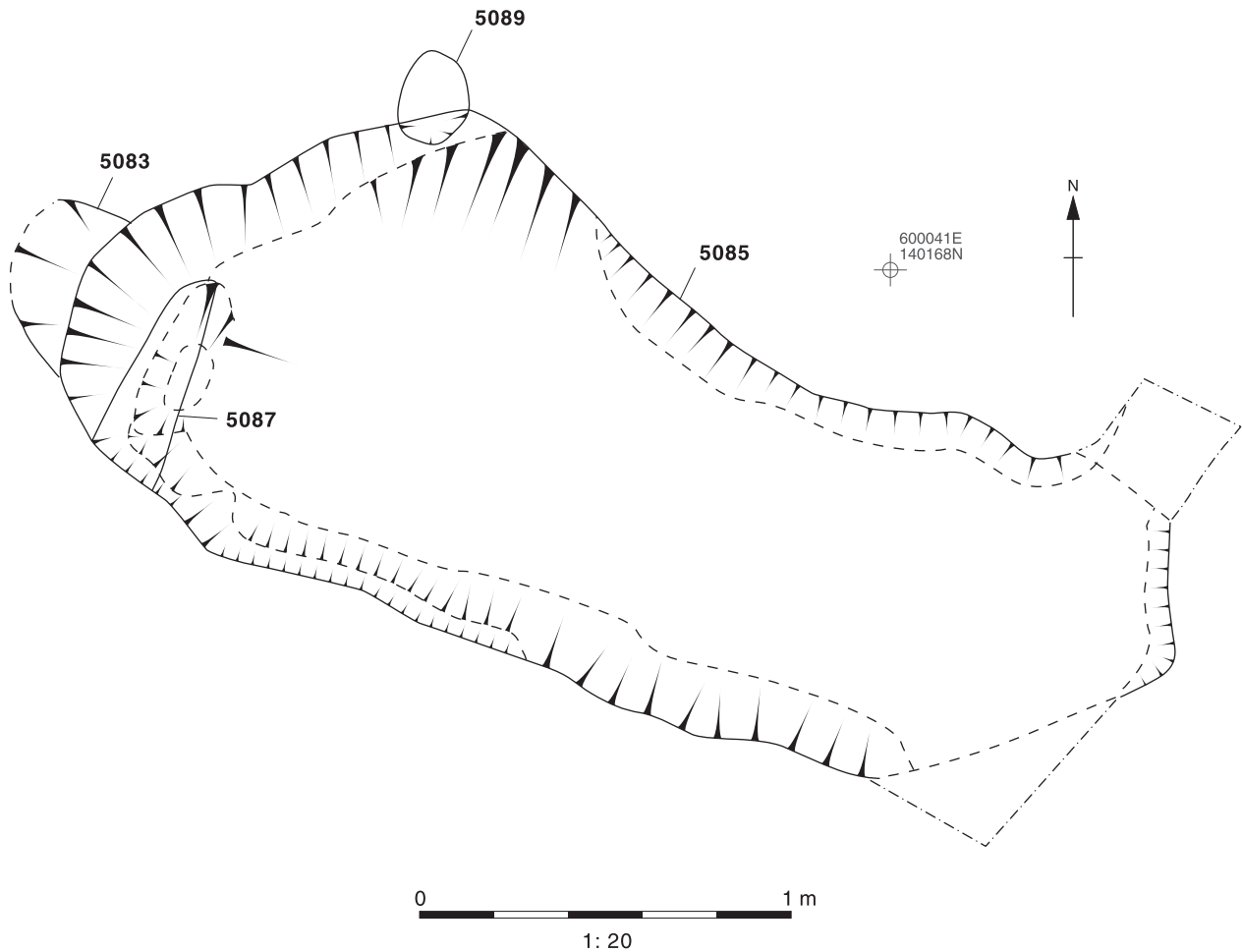


Figure 8.19 Inhumation burial group 5190 (cut 5085).

Group 220 (Fig. 8.21)

Cut 251, sub-rectangular measuring 0.88 m x 0.72 m x 0.12 m deep, with near-vertical edges and a flat base. Filled by 231. Possible box burial (?c 0.60 x 0.60 m, height unknown) suggested by arrangement of vessels and iron nails.

Urned cremation burial, 1364 g cremated bone in vessel 218. Young adult female.

Non ceramic finds:

- 1 **Burnt animal bone** (not identifiable to species) (x 12 fragments). Fill 219, of jar 218.
- 2 **Nails** (x 3). Fe. Context 231, SF29-SF31.
- 3 **Hobnails** (x 74). Fe. Context 231, SF34 (x 19 hobnails) and sample 7 (x 55 hobnails).

Ceramic finds:

- 1 Large **jar** in brown-black grog-tempered fabric B2.1, truncated. Vessel 218.
- 2 **Ovoid beaker** of Monaghan form 2A6 in fine grey Upchurch fabric R16 without decoration, truncated. Date c AD 190-230. Vessel 223.

- 3 **Cup**, Drag. 33, Central Gaulish samian. The stamp has been obliterated by acidic soil conditions. Date c AD 120-200. Vessel 227.
- 4 **Cup**, Drag. 33, Central Gaulish samian in similar condition to above. Date c AD 120-200. Vessel 240.
- 5 **Platter** of Monaghan Form 5C3 in smooth black BB2 fabric. Date c AD 170-250. Vessel 244.
- 6 **Platter**, Drag. 31, Central Gaulish samian, stamped. '...AZI.M'. Date c AD 150-200. Vessel 229.
- 7 **Platter**, Drag. 31, Central Gaulish samian stamped 'OFNONV...'. Date c AD 150-200, below 246. Vessel 10491.
- 8 **Platter**, Drag. 31, Central Gaulish samian, of similar size to 10491 but with the stamp obliterated by acidic soil conditions. Date c AD 150-200. Vessel 246.
- 9 Large **platter**, Drag. 31/Sb, East Gaulish samian. Surface and stamp eroded by acidic soil conditions. Date c AD 200-250. Vessel 221.
- 10 Small **platter**, Drag. 31/Sa, East Gaulish samian. Condition as Vessel 221. Date c AD 200-250. Vessel 225.

Date AD 200-250 (ceramics); Period 2 Phase 5.

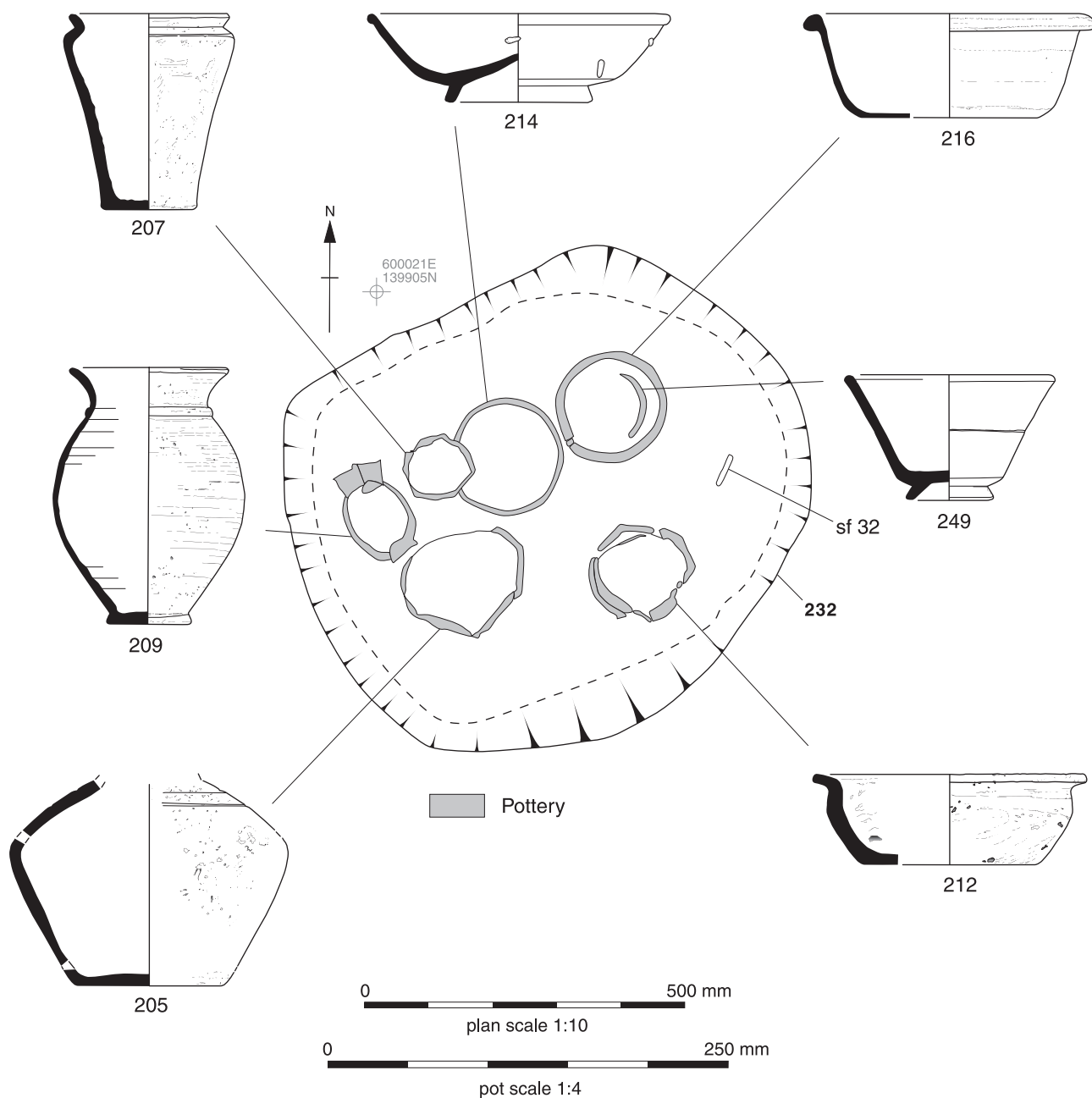


Figure 8.20 Cremation burial group 210 (cut 232).

*Group 1007 (Fig. 8.22)*

Cut 1007, circular measuring 0.36 m diameter x 0.15 m deep. Filled by 1006.

Urned cremation burial, 1225 g cremated bone in vessel 1004. Adult male.

*Non ceramic finds:* None.

*Ceramic finds:*

1 **Storage jar** in fabric B2.1, truncated. Vessel 1004.

*Date* AD 43-100 (ceramics); Period 2 Phase 2 to 3.

*Group 1261 (Fig. 8.22)*

Cut 1261, sub-rectangular measuring 0.46 m x 0.2 m x 0.12 m deep. Filled by 1263, mid-grey clay silt.

Unurned cremation burial, 125 g cremated bone in pit backfill 1263. Adult.

*Non ceramic finds:* None.

*Ceramic finds:*

1 **Cordoned jar** in fabric B1, fragmented. Vessel 1262.

*Date* ?Late Iron Age-AD 50 (ceramics); Period 2 Phase 2.

Chapter Eight

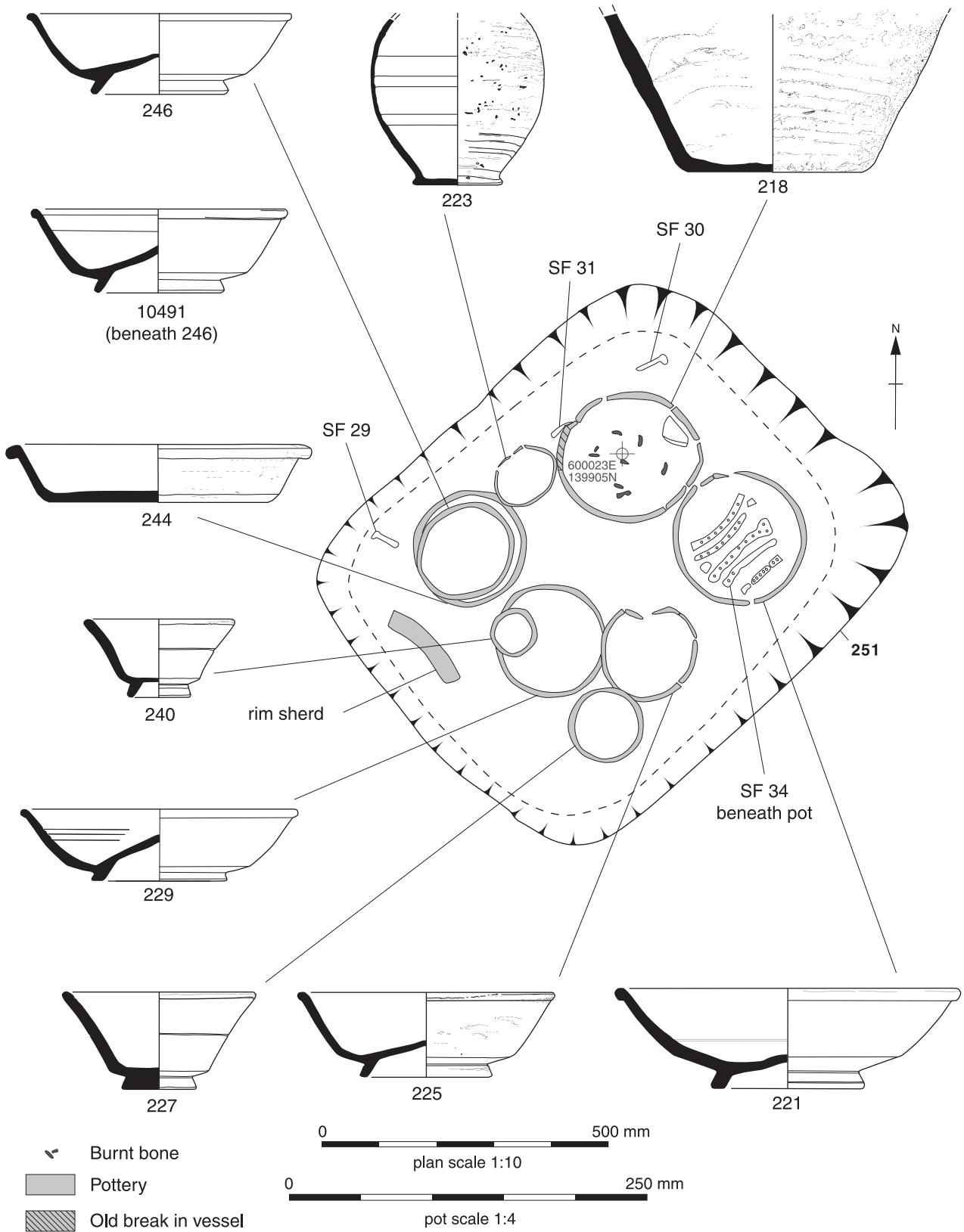


Figure 8.21 Cremation burial group 220 (cut 251).

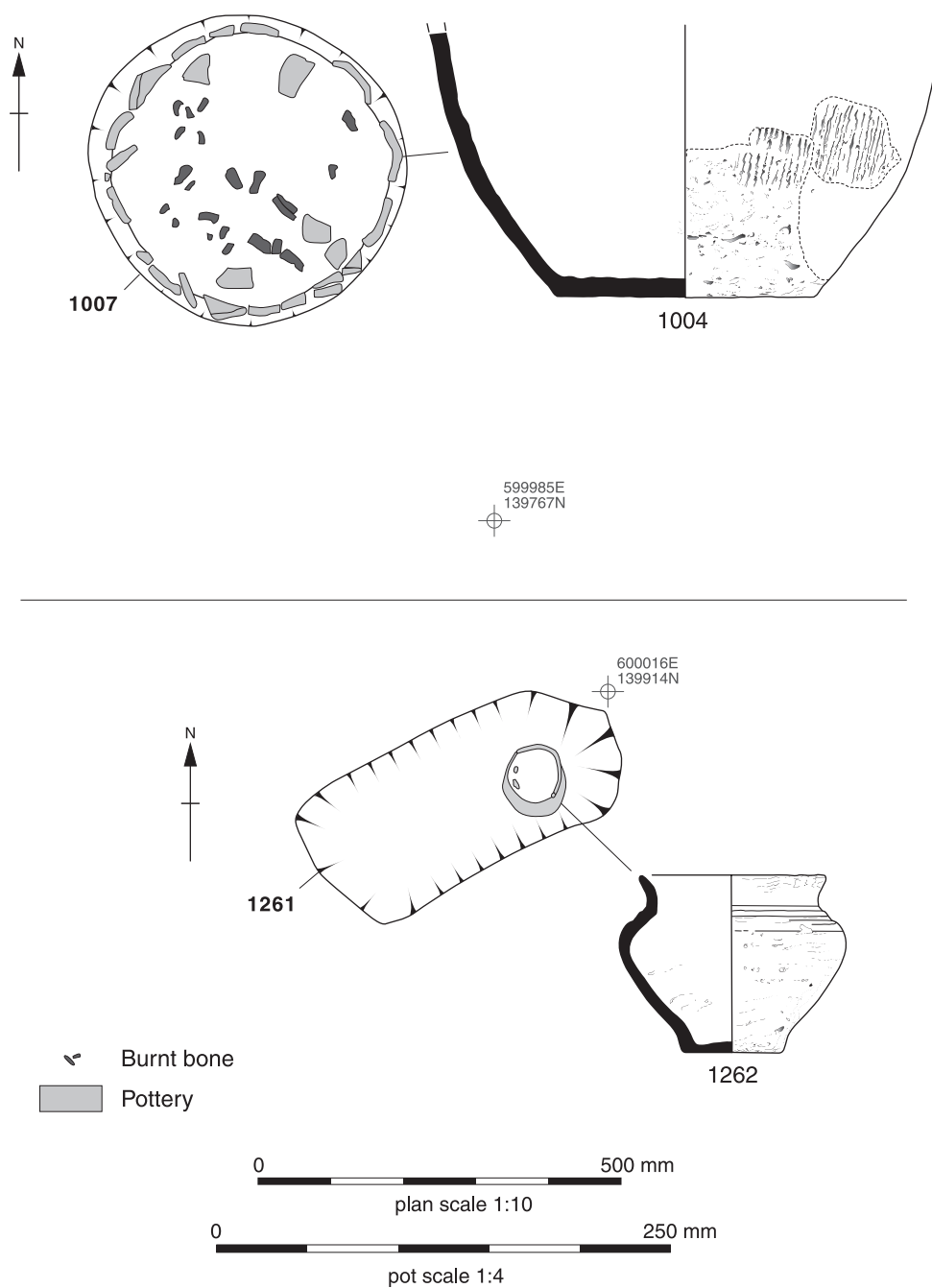


Figure 8.22 Cremation burial groups 1007 (cut 1007) and 1261 (cut 1261).

Group 8956 (Fig. 8.23)

Cut 8956, sub-rectangular measuring 0.5 x 0.35 x 0.19 m deep. Filled by 8955.

Unurned cremation burial, 53 g cremated bone in pit 8956. Adult.

Non ceramic finds: None.

Ceramic finds:

1 **Pottery sherds** (x 4). Wt: 32 g. Context 8955.

Date ?AD 70-175 (ceramics); Period 2 Phase 4.

Group 9860 (Fig. 8.24)

Cut 9840, rectangular measuring 0.6 x 0.7 x 0.03 m deep. Filled by 9841, redeposited natural silt clay.

Unurned cremation burial, 283 g cremated bone in pit 9840. Adult.

Non ceramic finds: None.

Ceramic finds:

1 **Cordoned jar**, everted-rim, in brown-black fabric B2.1 with resin on shoulder, shattered. Vessel 10488 (SF1530).

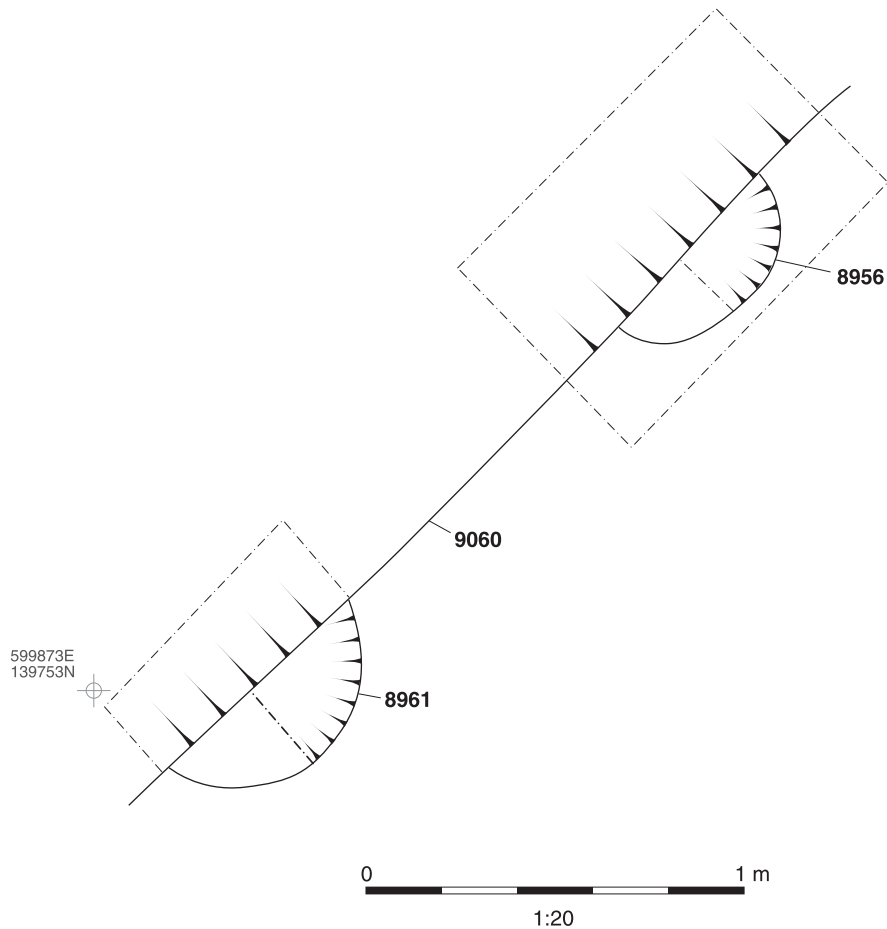


Figure 8.23 Cremation burial group 8956 (cut 8956).

2 **Flagon** in sandy orange Canterbury fabric R6.1, shattered. Vessel 10487 (SF1529).

*Date* AD 70-150 (ceramics); Period 2 Phase 3.

Note: The majority of the cremated bone was within a shallow bowl-shaped depression in the centre of the grave and does not seem to have been placed within the jar. It may originally have been held in a bag or some other organic container.

*Group 9940* (Fig. 8.25)

Cut 9468, circular measuring 0.6 m diameter x 0.32 m deep with steep sides and a rounded base. Filled by 9469, redeposited natural silt clay.

Urned cremation burial, 837 g cremated bone in vessel 9523. Mature adult.

*Non ceramic finds:* None.

*Ceramic finds:*

- 1 **Jar**, plain narrow-necked in grog-tempered black fabric B2.1. Date c AD 43-100. Vessel 9523.
- 2 **Flagon** in fabric R6.3, comminuted. Vessel 10489.
- 3 **Cup**, Drag. 46, South Gaulish samian, inverted. Date c AD 70-110. Vessel 9521.

*Date* c AD 70-100 (ceramics); Period 2 Phase 3.

*Group 10337* (Fig. 8.26)

Cut 10337, circular measuring 0.3 m diameter x 0.06 m deep, with steep near vertical sides. Filled by 10338, dark brown silt clay.

Unurned cremation burial, 268 g cremated bone in fill 10338. Adult.

*Non ceramic finds:* None.

*Ceramic finds:* None.

*Date:* Uncertain; Period 2 Phase 4?

#### **Inhumation graves**

*Group 8160* (see Fig. 3.36)

Cut 8188, NE-SW, rectangular measuring 1.94 m x 0.76 m x 0.54 m deep, with near-vertical sides and a flattish base. Filled by backfill 8189 and 8547, light grey silt clay and coffin stain 8548 of dark grey clay.

No human bone preservation, 1 g unidentified cremated (animal?) bone in backfill 8189.

Non ceramic finds:

- 1 Possible **awl**. Fe. (See Scott, Chapter 5, cat. no. 5; Fig. 5.10). Context 8189, SF 1447.
- 2 **(Coffin) nails** (x 2). Fe. Context 8548, SF1440, Context 8606, SF1442.

Ceramic finds:

The remains of some 30 near complete pottery vessels were found within the backfill. Many appeared to have been deliberately broken before being placed into the grave, the only exception being a small but complete crucible (see Assemblage 25, Chapter 6; Figs 6.6 and 6.7).

Date c AD 170, Period 2 Phase 4 (ceramics).

Group 8520 (Fig. 8.27)

Cut 8002, NE-SW, sub-rectangular measuring 2.46 m x 0.75 m x 0.14 m deep, with irregular, near vertical edges and a very uneven base. Filled by 8026.

Human bone: only incomplete parts of the right and left tibia and the right femur survive.

Non ceramic finds:

- 1 **(Coffin?) nail** (x 1). Fe. Context 8026, SF1406.

Ceramic finds:

- 1 **Flagon** in Hoo fabric R17, shattered. Late 1st century. Vessel 8051.

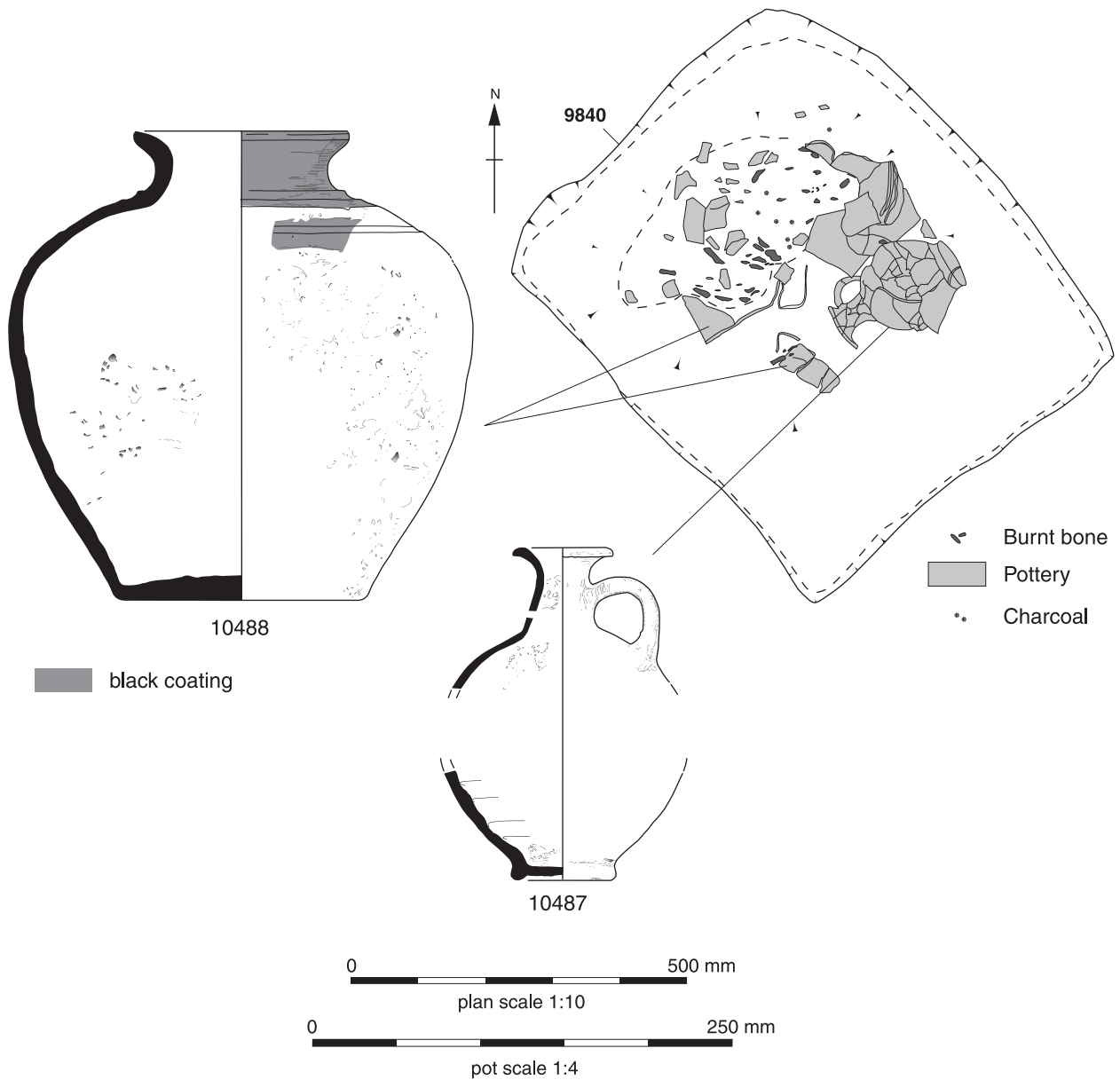


Figure 8.24 Cremation burial group 9860 (cut 9840).



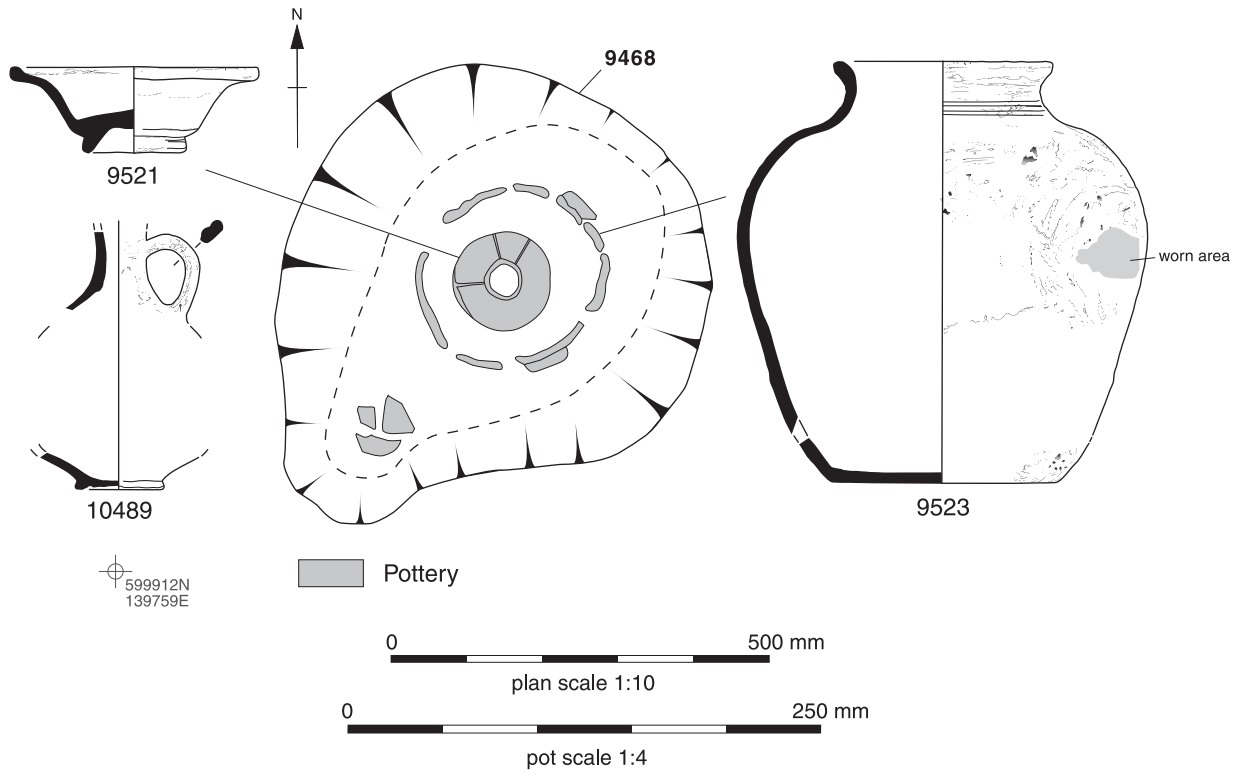


Figure 8.25 Cremation burial group 9940 (cut 9468).

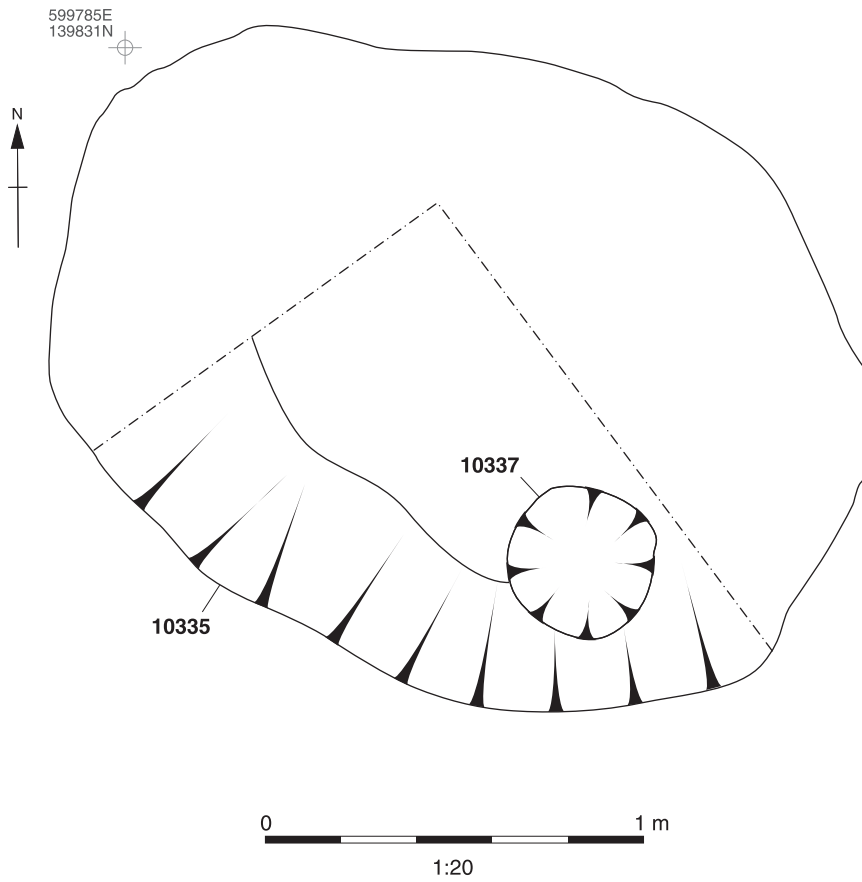


Figure 8.26 Cremation burial group 10337 (cut 10335).

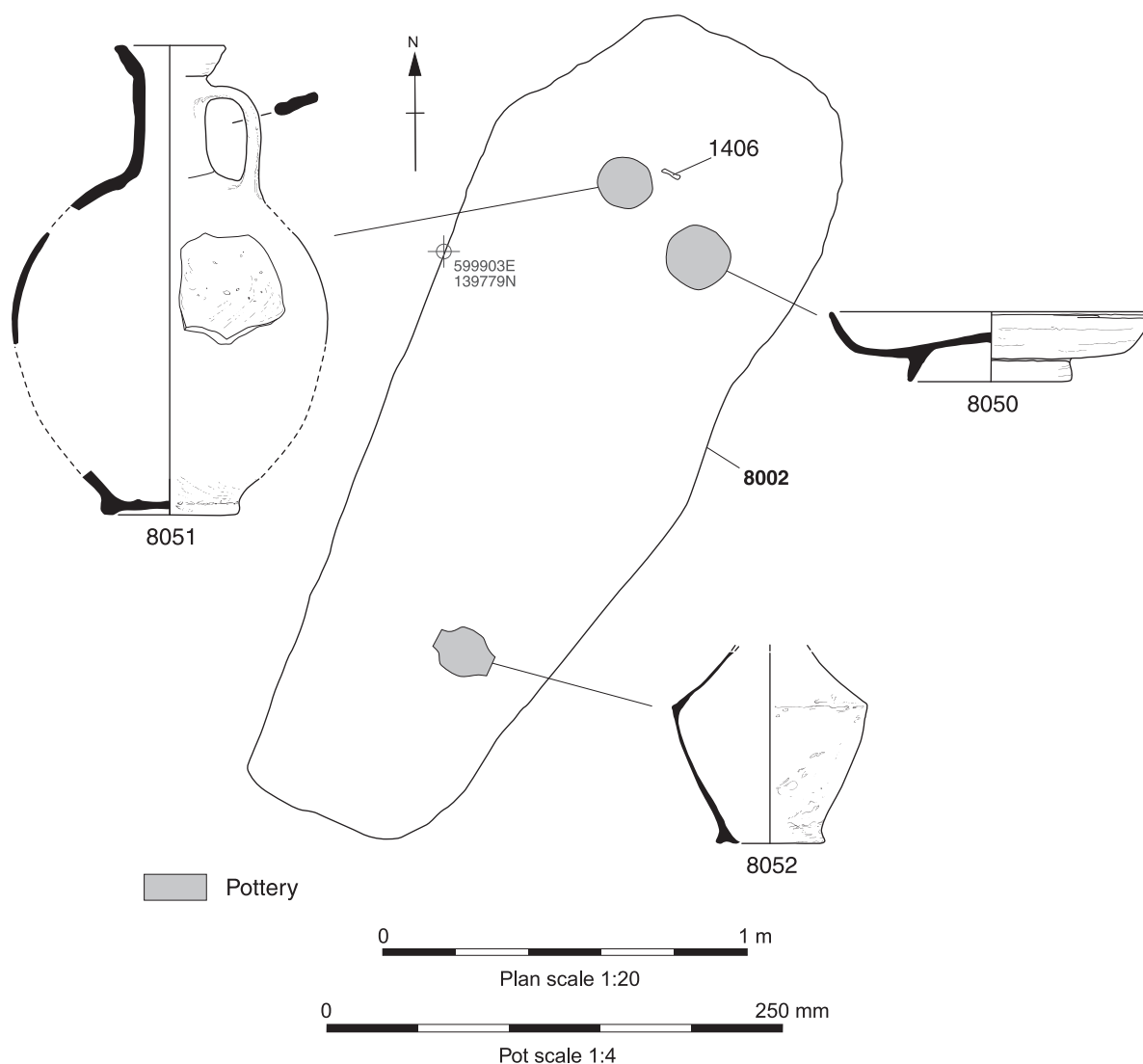


Figure 8.27 Inhumation burial group 8520 (cut 8002).

- 2 **Biconical beaker** of Monaghan type 2G1-9 in grey Upchurch fine ware, fabric R16, shattered. Date *c* AD 70-110. Vessel 8052.
  - 3 **Platter**, Drag. 18, South Gaulish samian, stamp illegible, complete. Date *c* AD 43-90. Vessel 8050.
  - 4 Abraded **sherd** in grog-tempered fabric B2.1. Context 8026.
- Date AD 70-90 (ceramics); Period 2 Phase 3.

**Uncertain**

*Unstratified complete vessel (Fig. 8.28)*

Complete pottery vessel, suggestive of grave context, an unstratified find from a service trench north-west of Area B.

- 1 **Platter**, Drag. 18/31, South Gaulish samian, stamp illegible, complete but very eroded. Date *c* AD 90-110. An eight-pointed 'star' has been incised on the underside of the vessel within the footing. Vessel 8068.

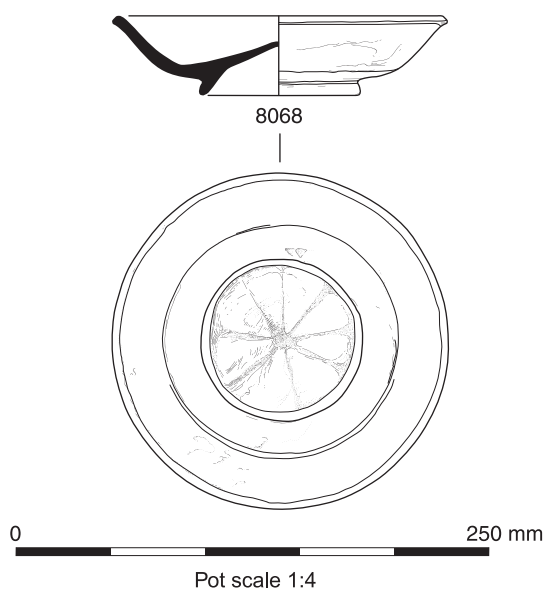


Figure 8.28 Samian Drag. 18/31 platter, unstratified find, probably derived from a grave.

## HUMAN REMAINS

by Annsofie Witkin

### Introduction

A total of twenty probable or possible cremation burials and ten possible inhumation graves were excavated: eleven cremations and eight inhumation graves in the Area C cemetery, eight cremations and two inhumation graves at various locations in Area B, and one cremation grave (9200) located outside of the area of investigation. Fragmentary bone survived from only one inhumation grave (8058 in grave group 8520) as a consequence of the acidic nature of the soils on the site, while burnt bone was recovered from nineteen cremation graves. Sixteen cremation graves (seven from Area B, eight from the Area C cemetery and the late Iron Age burial 9200) produced sufficiently large amounts of cremated bone to merit full osteological and palaeopathological analysis. These comprised six male, two female and eight unsexed adult individuals. Fragments from a further seven deposits (5046, 5144, 5164, 8189, 8955, 9469 and 9841) were thought to be from primary cremation burials, the first three from within the Area C cemetery. These burials produced between 1 and 55 grams of cremated bone each, groups which were too small to warrant full analysis. The investigation of the burial ritual concluded that there had been no preference in the selection of bone included in the burials. Three cremation burials were excavated in 20 mm spits to investigate the order of deposition, but the placement of the bone in the urns appears to have been random. Cremated animal bone was also found in four burials indicating that these had been present on the pyre.

### Methods

#### Recovery

In excavation, most of the cremation burials were subjected to 100% recovery as whole-earth samples and subsequently wet sieved. Three urns, 218, 5025 and 5034 were complete enough to be lifted and excavated in 20 mm spits. A plan of each spit was produced to illustrate the distribution of the bones and any grave-goods within the urn. Material from the >2 mm fraction was retained *en masse*.

#### Osteological procedures

The cremated bone from each context was passed through a sieve stack of 10, 5 and 2 mm mesh size. The bones from each sieve were weighed and calculated as a percentage of the total weight of the burial. This allowed the degree of fragmentation to be calculated for each burial. The degree of fragmentation may indicate if the cremated bones have been further processed after the body had been burnt.

In each of the sieved groups, the bones were examined in detail and sorted into identifiable bone

groups, which were defined as skull (including mandible and dentition), axial (clavicle, scapula, ribs, vertebra and pelvic elements), upper limb and lower limb. This may elucidate any deliberate bias in the skeletal elements collected for burial. Each sample was weighed on digital scales and details of colour and largest fragment were recorded. Where possible, the presence of individual bones within the defined bone groups was noted.

In any cremation burial, the majority of the bones are unidentifiable fragments of long bone shafts and spongy bones. The quantity of the unidentified bone is dependent upon the degree of fragmentation. It is of course easier to identify larger fragments than smaller. Some areas of the skeleton, for example the skull, are also easier to identify than other bones. This is a factor which needs to be considered when analysing cremation burials.

The estimation of age of a cremated individual is dependent upon the survival of particular skeletal elements indicative of age. In cremations of adult individuals, cranial suture closure (Meindl and Lovejoy 1985), degenerative changes to the auricular surface (Lovejoy *et al.* 1985) and pubic symphysis (Suchey and Brooks 1990) may be used as a general guide. The age categories used are:

Young Adult (YA)	19-25 years
Mature Adult (MA)	26-45 years
Older Adult (OA)	45 years +
Adult (A)	19-45 years +

Sex of the individual was obtained from the sexual dimorphic traits visible on the skeleton. A combination of traits are usually used to securely ascribe the sex of an individual. However, when dealing with fragmented material, the sexing of cremated remains is usually based on isolated features. Assessment of sex should therefore be viewed as tentative.

#### Condition of the bone and disturbance

Most of the cremated bone was in good condition. However, fragments from a few contexts were abraded. This may be due to erosion from acid solution passing through the burial medium. All but one (10338) of the cremation burials had been placed in urns. These were in turn positioned in graves. The graves were generally between 0.05 m and 0.25 m deep and had all been truncated by post-Roman ploughing which had usually also damaged the urns and the ancillary vessels. The urns recovered from the shallowest graves (between 0.05 and 0.07 m, group numbers 210, 5210, 5230 and 5240) were all broken with the cremated bone spread out around the fragmented vessel. This disturbance may also have contributed to the abrasion of bone fragments. Three burials were complete or near complete. Burial 5025 was situated within the Area C cemetery and was deposited at a depth of 0.25 m which had protected it from plough damage. The burial from group 220 and burial 1005, both in Area B, were also located

at a slightly greater depth which favoured greater survival of the urns and their contents.

The burial found outside the area of excavation (9204) had been badly disturbed by the machine stripping approximately 75 mm into the natural and the subsequent investigation made by the workmen. Approximately half of the deposit of cremated bone remained *in situ* and the rest was relocated by the archaeologists, but due to the circumstances involving the discovery and recovery of the cremated deposit, it has been treated as incomplete. The bone was, however, in good condition and none of the fragments was abraded.

### Quantification

A summary of the deposits that underwent full osteological and palaeopathological analysis is given in Table 8.2. This table also includes the material from seven context groups thought to derive from primary burials, but which were too small for full analysis (these are indicated by an asterisk in the table) The cremation burials ranged considerably in date (ex-

cluding the single late Iron Age example), from perhaps as early as *c* mid 1st century AD (1263) to late 3rd-mid 4th century (group 5090).

### Age and sex

Of the 16 fully recorded cremation burials, none represented an immature individual. Three (18.75%) were aged between 19 and 25 (young adult). Two (12.5%) were estimated to be aged between 26 and 45 years (mature adult) and eleven individuals (68.75%) could not be aged any closer than adult. Eight (50%) of the 16 individuals could be tentatively sexed. Of these, two were female and six male.

### Pathology

Pathological lesions may be present on cremated bone, although the lesions seen may be fewer than one would expect from inhumation burials. The cremated bones present in a burial do not necessarily represent a complete individual and this may hamper the diagnosis of a specific disease.

Table 8.2 Human remains: Summary of cremated bones (Contexts that produced too little bone for analysis are marked with an asterisk).

Context	Group	Period	Weight (Total)	NI	Age	Sex	Pathology/identifiable fragments of small groups
206	210	AD 170-200	116 g	1	A	?	
208	210		57 g		A	?	
211	210		99 g		MA?	F?	Degenerative spinal joint disease
213	210		1 g		?	?	
215	210		29 g		A	?	
233	210		47 g		A	?	
217/250	210		37 g		A	?	
			386 g				
219	220	AD 200-250	1362 g	1	YA	F?	
231	220		2 g		?	?	
			1364 g				
1005	1007	AD 43-150	1225 g	1	A	M?	
1263	1261	AD 0-50	125 g	1	A	?	
5008	5050	AD 170-250	814 g	1	A	?	
5018	5080	AD 150-250	706 g	1	YA	M	
5025	5090	AD 270-350	1310 g	1	YA	M?	
5034	5110	AD 43-100	411 g	1	A	?	
5041	5120	AD 43-200+	343 g	1	A	M?	
5046*	5130		1 g	1	?	?	
5062	5070		31 g	1	A	?	
5064	5070	AD 200-250	575 g		A	?	
			606 g				
5129	5210	AD 170-250	478 g	1	A	?	
5133	5220		119 g	1	A	?	
5134	5220		206 g	1	A	?	
5135	5220	AD 120-150	550 g	1	A	M?	
			875 g				
5144*	5230		3 g	1	?	?	(long bone)
5164*	5240		55 g	1	A		(skull vault, humerus)
8189*	8160		1 g	1	?	?	
8955*	8956		53 g	1	A?	?	(humerus)
9204	9200	Late Iron Age	703 g	1	A	M?	
9469*	9940		7 g	1	?	?	(skull vault, long bone shaft)
9524	9940	AD 70-100	837 g	1	MA?	?	
9841*	9860		1 g	1	?	?	
9843	9860	AD 70-150	283 g	1	A	?	
10338	10337		268 g	1	A	?	Maxillary dental abscess

Two (12.5%) of the individuals had pathological lesions present. Cremation deposit 211 had one vertebral body fragment with new bone formation along the rim. This osteophyte formation is a compensatory reaction to the degenerative changes of the intervertebral disc (Roberts and Manchester 1995, 106). The condition would have caused stiffness and intermittent back ache.

Cremation deposit 10338 had a maxillary apical abscess. These are commonly caused by the introduction of bacteria to the pulp cavity through a carious lesion. The pus collected may track to the apex of the root. As the pus accumulates, a hole is formed which drains it. An abscess may also occur when an individual develops periodontal disease and a periodontal pocket (Roberts and Manchester 1995, 50).

## Pyre technology and ritual

### *Efficiency of cremation*

The efficiency of a cremation is dependent upon the construction of the pyre, position of the body, tending of the pyre, duration of the cremation and the temperature of the pyre (McKinley 1994, 82-84). The process of cremation is one of oxidisation of the organic components of the body and dehydration. If there is poor oxidisation, the bones will be grey, black, blue or even brown in colour.

When colouration and cracking is variable, the skeleton is likely to have been exposed to a variety of temperatures on the pyre. This may be caused by the movement of the body on the pyre during the cremation process, such as during the collapse of the pyre. When the bones are mainly charred black or blue-grey, this might indicate insufficient time for the completion of the cremation process. It may also signify that the pyre was not tended properly. Poorly oxidised small bones and fragments may be those which fell to the lower, cooler part of the pyre during the initial stages of the process. Large fragments may also indicate a lack of pyre-tending which may serve to break up the bone (Boyle 1999, 178).

The colour of the bone fragments from the Westhawk Farm cremation burials was predominantly white. Only a very small amount of small fragments was black or grey coloured. This indicates a high degree of efficiency in the cremation process and that the process was complete. Moreover, since it was only small fragments which were coloured, it is likely that the pyres were well tended.

### *Weight of bone*

Observations at modern crematoria have shown that collectable fragments (<2 mm fraction) from an adult cremation burial weigh between 1000-2400 g with an average of 1650 g. Weights between 1600-3000 g have also been cited, but it is unclear whether this also includes the weight of bone dust (McKinley 1997a, 68).

The weights of the Westhawk Farm deposits are variable ranging from 118 g to 1364 g (see Tables 8.2

and 8.3). Of the sixteen burials, three appeared to be undisturbed: 220 (1362 g), 1005 (1225 g) and 5025, (1310 g). The weight of these complete burials are lower than the average weight values quoted above. It therefore appears that all bones were not collected from the pyre for burial. It was observed during analysis that there was very little spongy bone present - including the small bones of the hands and feet, articular surfaces of long bones and vertebral body fragments. This suggests poor bone survival which could equally account for the lower bone weight. Alternatively, a combination of the two aforementioned explanations may account for the lower than average weight of the cremation burials.

Six cremation burials weighed between 500 and 1000 grams. These were burials 5008, 5018, 5070, 5220, 9204 and 9524. Seven weighed between 1 and 500 grams and these were burials 1263, 5034, 5041, 5129, 9843 and 10338 and from cremation group 210. The weights of these burials are relatively low. This may signify selection of bones for a token deposit. However, the most likely explanation is that the low weight is due to significant post-Roman disturbance, which took place in the form of ploughing.

### *Fragmentation*

The factors governing fragmentation of cremated bones are cremation, collection, burial, excavation and post-excavation treatment (McKinley 1997a, 69). These processes do not involve deliberate breakage of the bone. Since larger bones are easier to identify, the level of fragmentation is reflected in the percentage of identifiable bones.

Of all the Westhawk Farm cremation burials, 44.5% of the bone fragments were in the 10 mm fraction. The average maximum fragment size was 49.4 mm. Within the category of undisturbed burials, 56.9% of the bone fragments were in the 10 mm group and the average maximum fragment size measured 56.5 mm.

The fragmentation rates were compared with those from a late Iron Age cremation cemetery (90-50 BC) and a Romano-British cremation cemetery (AD 70-150) from the A27 Westhampnett Bypass site, West Sussex (McKinley 1997a and b). The late Iron Age burials were unurned. The Romano-British burials were mostly dated *c* AD 70-150 and thus fall in the central part of the date range of the Westhawk Farm assemblage (see Table 8.3).

It is apparent that the maximum fragment size in both the undisturbed category and the total assemblage at Westhawk Farm is slightly larger than both the Iron Age and Romano-British assemblages at Westhampnett. However, the percentages of fragments present in the 10 mm group (all cremation burials) is more comparable with the figure given for all late Iron Age burials at Westhampnett. This probably reflects the level of disturbance amongst the Westhawk Farm burials since unurned burials are more prone to fragmentation than urned burials. The proportion of fragments present in the 10 mm

Table 8.3 Human remains: Comparison of fragmentation data from Westhawk Farm and Westhampnett Bypass Late Iron Age and Romano-British periods.

Fragments	Westhawk Farm		Westhampnett Late Iron-Age		Westhampnett Romano-British	
	All	Undisturbed	All	Undisturbed	All	Undisturbed
Max size	49.4 mm	56.5 mm	41.1 mm	43.0 mm	42.0 mm	50.0 mm
10 mm group	44.5%	56.9%	42.7%	68.4%	55.7%	69.8%

fraction in the undisturbed burials is lower than in both the Iron Age and Romano-British groups at Westhampnett. Although the total burnt bone present in the Westhawk Farm undisturbed burials suggest that the burials were intact, the lower percentage represented in the 10 mm fraction may again reflect the level of ground disturbance present on site.

The level of fragmentation and fragment size of the Westhawk Farm burials are within the normal ranges observed (McKinley 1994). There is nothing to suggest that any deliberate fragmentation of the burnt bone took place prior to burial.

#### Skeletal elements within the burials

Fragments from all body part groups were present amongst all the burials (see Table 8.4). In general, fewer fragments from the upper limb were identified than any other body group. This was related to the fragment size. Moreover, humeri, ulnae and radii can be easily confused with femora and fibulae. When fragments are generally small, fewer fragments may therefore be identified. The relatively high proportion of cranial fragments is due to the ease of identification since the bone morphology displayed is unique to this part of the skeleton. Since bone from all areas of the skeleton was included in the burials this suggests that there was no preference in the selection of bones included in the burials.

#### Deposition of bone

Three urns were excavated in 20 mm spits in order to investigate the sequence of deposition. The proportions of bone fragments within each spit are presented in Figure 8.29. Comparatively, the pattern of deposition of bone in the urns is very similar in cremation burials 5025 and 5034, in which the majority of all fragments are situated in the middling spits and there is very little bone in the top of the urn or in the bottom. In cremation group 220, however, the bone fragments are more evenly distributed throughout the different levels of fill of the urn. There is also a slightly higher proportion of bone in spit 5, at the base of the urn.

Since this is a very small sample, it is very difficult to speculate as to the reasons why there is a difference in the deposition of the bone fragments. It is also impossible to discern which one of the two patterns may have been the norm. There is, however, a difference in the burial location. Cremation burials 5025 and 5034 were located in the cemetery in Area C while 220 was situated in Area B. The different location of the burials may hint at a difference in the burial practice which may be reflected in the deposition of the bone within the urns.

When comparing the distribution of identified fragments per body group, the pattern of deposition is broadly similar in all three burials. Skull and lower limb bones are found throughout the different levels

Table 8.4 Human remains: Weights of cremated bone within anatomical groups and size ranges.

Context	10 mm					5 mm					2 mm					Total Weight
	Skull	Axial	Upper Limb	Lower Limb	Unidentified	Skull	Axial	Upper Limb	Lower Limb	Unidentified	Skull	Axial	Upper Limb	Lower Limb	Unidentified	
210	10 g	19 g	12 g	7 g	80 g	4 g	6 g	2 g	2 g	153 g	1 g	1 g	0 g	0 g	89 g	386 g
220	72 g	106 g	23 g	125 g	295 g	19 g	14 g	14 g	9 g	436 g	2 g	2 g	0 g	0 g	245 g	1362 g
1005	111 g	74 g	76 g	98 g	595 g	12 g	12 g	6 g	6 g	130 g	0 g	1 g	0 g	0 g	104 g	1225 g
1263	2 g	9 g	4 g	11 g	16 g	3 g	1 g	0 g	0 g	52 g	0 g	0 g	0 g	0 g	27 g	125 g
5008	92 g	30 g	12 g	43 g	137 g	28 g	22 g	12 g	8 g	296 g	1 g	2 g	1 g	0 g	130 g	814 g
5018	59 g	3 g	25 g	76 g	132 g	17 g	9 g	0 g	7 g	269 g	1 g	0 g	0 g	0 g	108 g	706 g
5025	147 g	92 g	26 g	73 g	306 g	21 g	20 g	4 g	6 g	397 g	1 g	2 g	0 g	0 g	215 g	1310 g
5034	70 g	44 g	7 g	54 g	55 g	9 g	11 g	3 g	3 g	123 g	0 g	1 g	1 g	0 g	30 g	411 g
5041	22 g	12 g	7 g	32 g	64 g	1 g	7 g	1 g	3 g	140 g	0 g	1 g	0 g	1 g	52 g	343 g
5070	16 g	28 g	29 g	54 g	109 g	6 g	13 g	3 g	3 g	211 g	0 g	1 g	0 g	0 g	102 g	575 g
5129	22 g	16 g	6 g	14 g	117 g	6 g	9 g	3 g	5 g	204 g	0 g	1 g	0 g	0 g	75 g	478 g
5220	61 g	11 g	26 g	60 g	187 g	31 g	18 g	4 g	11 g	334 g	2 g	2 g	0 g	0 g	138 g	875 g
9204	14 g	7 g	4 g	45 g	89 g	10 g	4 g	5 g	7 g	274 g	5 g	0 g	0 g	0 g	239 g	703 g
9524	13 g	16 g	19 g	58 g	256 g	6 g	7 g	1 g	6 g	266 g	1 g	2 g	0 g	0 g	186 g	837 g
9843	11 g	5 g	7 g	10 g	34 g	13 g	8 g	4 g	3 g	101 g	0 g	2 g	1 g	1 g	83 g	283 g
10338	13 g	2 g	12 g	12 g	16 g	9 g	5 g	3 g	3 g	149 g	1 g	1 g	1 g	1 g	40 g	268 g

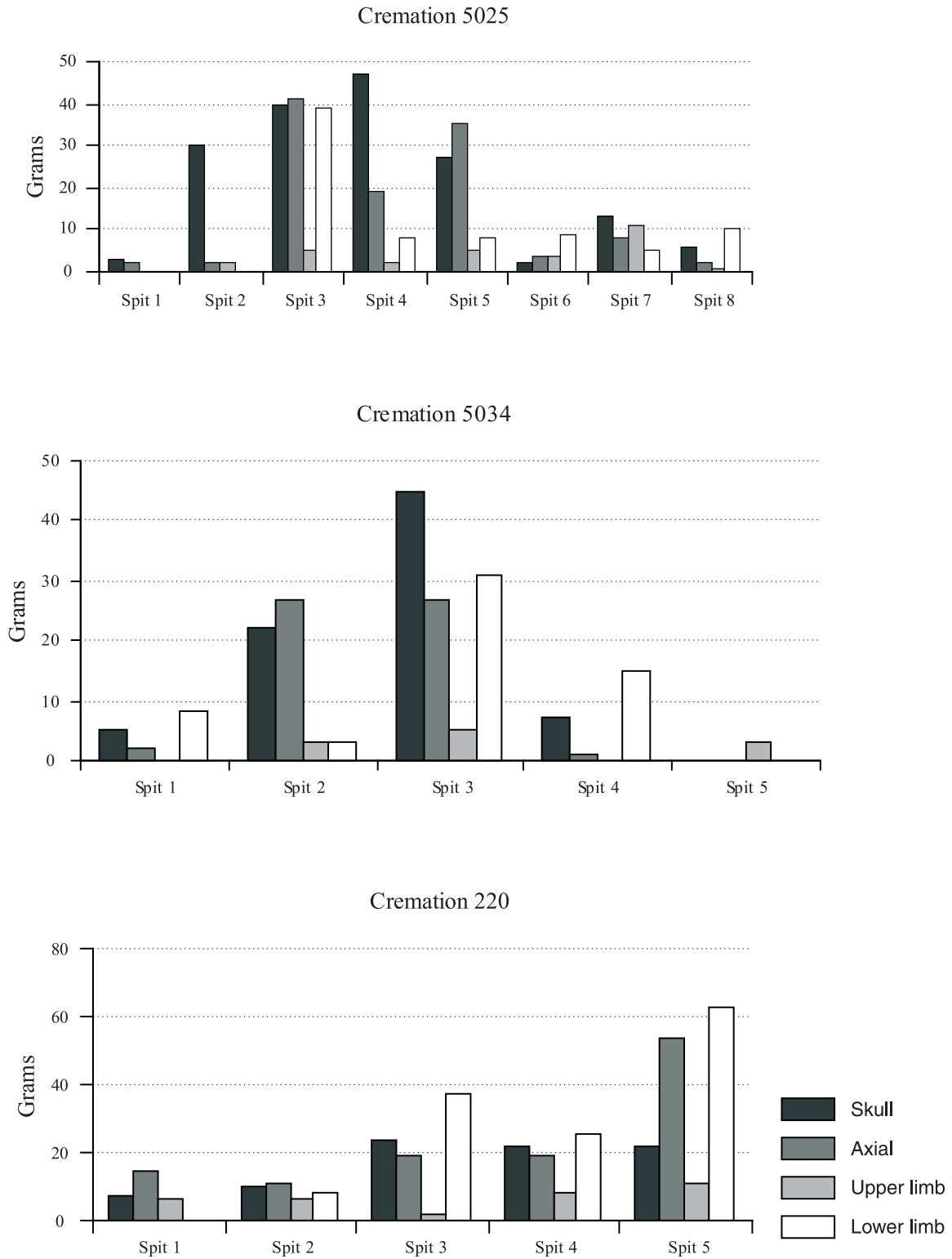


Figure 8.29 Quantities of bone fragments within each spit, cremations 5025, 5034 and 220.

of the urns. This pattern of deposited bone in the urns does not suggest a systematic order of deposition with, for example, collection beginning at one end of the pyre and progressing to the other. There are various possible explanations for the random deposition of the bone. It may be that the bone was raked together off the pyre prior to collection and mixed in the process; several people may have taken part in the collection of the bone and deposited the bone at random, or the urn may not have been the original receptacle used during collection (McKinley 1997b, 252).

### Animal bone and grave goods

Cremated animal bone was found with four cremation burials: 5025, 5135, 9204 and group 220, with bird, pig and sheep bones identified (see Charles, Chapter 9 below). The quantities were in general very small, a few grams in each burial. However, cremation deposit 9204 contained a substantial amount of bone from bird, sheep and pig. The presence of animal bone is dependent upon a) it being collected from the pyre along with the human remains and b) the fragments being recognised as animal and not

human. Since the surviving sample sizes show that not all human bone was collected from the pyre, it is likely that not all animal bone was collected. Moreover, some fragments of unidentifiable animal long bone are also likely to have been overlooked in analysis. It may be noted that while cremation deposit 5025 contained jet beads and a copper alloy bracelet these objects were, unlike the bird bones present, unburnt and had therefore been deposited in the urn after the cremated bone had been collected from the pyre.

### Cremated remains from non-burial contexts

Small quantities of cremated bone were recovered from a variety of non-burial contexts and are listed below (Table 8.5). The bones derived from fills of pits, ditches, post holes and gullies as well as from various layers. These cremated bone deposits listed here weighed between 1 and 18 grams and were too small to warrant full analysis. They occurred sporadically in all phases up to the middle of the 3rd century AD, with no particular concentration in any one phase. In no case was the material sufficiently diagnostic to provide an indication of age or sex.

Table 8.5 Human remains: Small groups of cremated bone from non-burial deposits.

Context	Context type	Phase	Weight	Identifiable fragments
414	Fill of ditch 413	3	1 g	
461	Fill of pit 415	3	1 g	
530	Fill of hollow way 626	3-4	2 g	Skull vault
538	Fill of pit 539	4	3 g	
687	Layer	5	1 g	
873	Fill of pit 844	3	4 g	
971	Fill of ditch 975	4	2 g	
1092	Fill of pit 1093	5	1 g	
1156	Layer	3	18 g	Long bone shaft
5154	Fill of ?waterhole 5153	3	3 g	Long bone shaft
7126	Layer	4	7 g	Long bone shaft
7127	Layer	4	3 g	Long bone shaft
7212	Fill of gully 7211	4	15 g	
7240	Fill of waterhole 7239	5	2 g	Long bone shaft
7255	Fill of ditch 7254	5	1 g	
7265	Fill of ditch 7266	5	1 g	
7282	Fill of gully 7280	4	1 g	
7309	Fill of pit 7269	4-5	1 g	Long bone shaft
7313	Fill of pit 7312	3-4	7 g	Long bone shaft
7732	Fill of pit 7733	4	2 g	Long bone shaft
8128	Fill of ditch 8127	4-5	1 g	Long bone shaft
8191	Fill of posthole 8190	5	1 g	Long bone shaft
8366	Fill of ditch 8240	2-3	2 g	Long bone shaft
8697	Fill of gully 8696	4-5	1 g	
8793	Fill of gully 8792	2	4 g	
8879	Fill of gully 8880	2	3 g	Skull vault, long bone shaft
9504	Fill of gully 9503	2-4	2 g	
9823	Layer	?	2 g	
10336	Fill of hollow 10335	2-4	2 g	