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Archaeological Excavations on the Route of the A27 Westhampnett Bypass, West Sussex, 1992

Volume 2: the Late Iron Age, Romano-British, and Anglo-Saxon cemeteries

by A.P. Fitzpatrick

with

Andrew B. Powell, S.E. James, Jacqueline I. McKinley, L.N. Mepham, and R. Montague

and contributions from

Jane Batcheller, Margaret Brooks, John A. Davies, Brenda Dickinson, Rowena Gale, Pat Hinton, Catherine Mortimer, Dominique de Moulins, J.P. Northover, Pippa Smith, Penelope Walton Rogers, Jacqui Watson, and Sarah F. Wyles

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Front cover: Excavation of Iron Age grave 20057 which contained the unurned cremated bone of a ?female older mature/older adult, accompanied by a single pottery vessel and cremated animal bone (photograph by Elaine Wakefield)

Back cover: The start of the excavations along the route of the new Westhampnett Bypass looking towards Chichester, with Area 2 in the middle distance. January 1992 (photograph by Elaine Wakefield)

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The excavation of Area 2 was achieved by the hard work of the field staff in unrelenting conditions through January to March 1992 and this was supervised directly in the field by Bob Davies with assistance from Neil J. Adam. On site finds processing and conservation was undertaken by Lorraine Mepham assisted by Melanie Gauden.

The analysis of the excavations on the route of the A27 Westhampnett Bypass has been funded by the Highways Agency who appointed Giffordand Pertners to manage the project on their behalf. English Heritage also funded the contributions of the Ancient Monuments Laboratory to this stage. Advice and assistance has been provided by Dr Julie M. Bond, University of Bradford; Professor John Collis, University of Sheffield; Margaret Cox; D.E. Farwell; Su Fullwood, Chichester District Museum; Dr Rosemarie Cordie-Hackenberg, Rheinisches Landesmuseum Trier; Fraser Hunter, National Museums of Scotland; Dr Anthony King, King Alfred's College, Winchester; Dr Malcolm Lyne, Littlehampton; Dr Gerry McDonnell, University of Bradford; Professor W. H. Manning, University of Wales, College of Cardiff; Fiona Roe, Wooton-under-Edge; Dr Alison Sheridan, National Museums of Scotland; Dr Ian Stead, British Museum; and Tina Tuohy, University of Exeter.

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Andrew B. Powell prepared the structural report and helped compile the other contributions for which I am very grateful. Assistance has been provided in many areas by the staff of Wessex Archaeology, and the computer based-analysis was programmed and run by W.A. Boismier. All the line drawings are by S.E. James and consequently she is one of the named contributors to this report. Plate 2 is by Steve Patterson, Plate 3 by Eva Smith, Plates 4–5, 19, 20–2, 25, 28, 30 are by Elaine A. Wakefield, Plate 18 by Alastair Marshall, and Plates 23–4 by Jacqui Watson. Figure 46 is from an original by Alastair Marshall. The project was directed in the field and managed throughout for Wessex Archaeology by A.P. Fitzpatrick.

religieux de la fin de l'âge du fer. En raison du type de sol très acide, aucun os humain n'a subsisté mais grâce à un petit nombre d'objets funéraires, dix sites ont été identifiés comme étant des tombes. Trois se trouvaient à l'intérieur d'une enceinte rectangulaire pour laquelle on ne connait pas encore d'équivalent. Trois couteaux, une unique pointe de flèche, et le dais dressé au-dessus d'une des tombes, ont donné à croire que le cimetière avait été utilisé entre les 5ème et 7ème siècles ap J.-C., peut-être au cours de la deuxième partie de cette période. C'est un des premiers cimetières de ce type et de cette période découvert dans la plaine côtière du West Sussex.

Annie Pritchard

Zusammenfassung

Vor dem Bau der Umfahrung der Hauptstraße A 27 von Westhampnett in der Nähe von Chichester, West Sussex, fanden 1992 an fünf Stellen Ausgrabungen statt. An einem dieser Orte ('Area 2'), der auf einem niedrigen Hügel liegt, wurden Bestattungen der Späten Eisenzeit, der romano-britischen und der angelsächsischen Zeitstufe sowie ein wahrscheinlich bronzezeitlicher Ringgraben ausgegraben.

Der wichtigste Befund betrifft einen späteisenzeitlichen religiösen Kultbezirk, der in seiner Größe und mit seinen Vergesellschaftungen in England bisher einzigartig dasteht. Der Kultbezirk wurde fast ganz ausgegraben, wobei mindestens zwei und vielleicht sogar vier einzelne Tempelchen, mehrere Scheiterhaufenstellen, verschiedene mit diesen vergesellschafteten Fundzusammenhänge und 161 Brandbestattungen zum Vorschein kamen. Die Erde aus den Scheiterhaufenstellen, den mit diesen vergesellschafteten Befunden und den Gräbern wurde gesiebt, wobei kleine fragmentierte Funde zurückbehalten werden konnten, die bei traditionellen manuellen Grabungstechniken nicht erfaßt werden.

Der räumliche Aufbau des Kultbezirks war klar gegliedert, wobei die Bestattungen entlang der südöstlichen Begrenzung einer kreisförmigen Anlage gruppiert waren. Südöstlich der Hauptanlage konnte eine wahrscheinlich zweite kleinere, ebenfalls kreisförmige Anlage identifiziert werden. Der größte Teil der kreisförmigen Begrenzung der Anlage wurde von den X-, Y-, und T-förmigen Überresten der insgesamt 46 Scheiterhaufenstellen und der mit diesen vergesellschafteten Befunden, die außerhalb der Gräber lagen, markiert. Östlich der kreisförmigen Anlage liegen die einzelnen Tempelchen und das einzige Grab, das durch ein Bestattungsmonument gekennzeichnet war. Reihen von Pfostenlöchern, von denen einige innerhalb der kreisförmigen Anlage lagen, könnten etwas mit den Totenriten zu tun gehabt haben.

Für die Tempelchen findet man nahe Parallelen in befestigten Höhensiedlungen, allerdings geben die Funde keinen Aufschluß über die Gottheiten, die dort verehrt, oder die Rituale, die dort abgehalten wurden. Die Scheiterhaufenstellen enthielten Holzkohle (in der Regel von Eichenholz), Überreste von Anmachholz, verbrannte Menschen- und Tierknochen und Fragmente von Scheiterhaufenbeigaben (in der Regel Kostümbestandteile oder Schmuck). Die Scheiterhaufen scheinen nach ihrem letzten Gebrauch bewußt gestört worden zu sein. Zur Befundkategorie der mit den Scheiterhaufen vergesellschafteten Befunden gehören wahrscheinliche Sockel für Scheiterhaufen und absichtlich ausgehobene und natürlich geformte Erdvertiefungen, in die Überreste der Scheiterhaufen geschüttet wurden.

Die Brandbestattungen wurden in der Regel ohne Urnen beigesetzt, könnten aber ursprünglich in Behälter aus Textil oder Leder eingeschlagen worden sein. Nur ein Teil der verbrannten Knochen wurde zur Bestattung ausgesondert. Mit den Knochen wurden die Überreste der Scheiterhaufenbeigaben gefunden. Die geringe Anzahl der bestatteten Knochen ergab nur beschränkt Material für anthropologische Untersuchungen. Dennoch kann man vom Alter und Geschlecht der bestatteten Personen darauf schließen, daß hier wahrscheinlich die meisten Mitglieder einer Lebensgemeinschaft begraben wurden, obwohl Bestattungen von Kleinkindern unterrepräsentiert war. Die kurze Gebrauchsdauer des Kultbezirks und die Anzahl von Bestattungen lassen vermuten, daß der Friedhof von mehreren Siedlungen gleichzeitig benützt wurde.

Die Broschen, die wenigen übrigen Metallobjekte und die Keramik lassen auf ein Datum in La Tène D1, vielleicht auf nur gerade 40 Jahre zwischen ca. 100–40 v. Chr. (vorzugsweise ca. 90–50 v. Chr), schließen. Die begrenzten Befunde der Horizontalstratigraphie deuten darauf hin, daß es nur eine Belegungsphase gab, und es war somit möglich, Vermutungen zu den kosmologischen Bezügen der Anlage des Kultbezirks anzustellen.

Zahlenanalysen deuten darauf hin, daß ältere Leute vorzugsweise nahe der kreisförmigen Anlage bestattet wurden, und — obwohl die Anzahl der Scheiterhaufen- und Grabbeigaben gering war — daß Frauen weniger Scheiterhaufen- und Grabbeigaben erhielten als Männer. Ebenso wurde jüngeren Leuten weniger Weihegaben mitgegeben als älteren. Auch zeigte es sich, daß junge Leute mit ganz bestimmten Keramiktypen begraben wurden. Ein großer Prozentsatz der Keramik ist verziert und im Vergleich zu Siedlungsfunden ist ein überdurchschnittlicher Anteil aus schamottiertem Ton gebrannt.

Obwohl die Keramik und die Metallarbeiten starke kontinentaleuropäische Einflüße aufweisen, sind gewisse ihrer Merkmale eindeutig einheimischen Ursprungs. Jedenfalls ergab die Grabungsstätte das bis anhin früheste Vorkommen eines eisenzeitlichen Brandgrabes in England. Die Rituale und vielleicht

auch ein Teil der damit verbundenen Glaubensvorstellungen könnten allenfalls von Frankreich eingeführt worden sein.

Nach einer Lücke von über einem Jahrhundert wurde der Hügel für einen kleinen romano-britischen Friedhof mit Brandbestattungen wiederverwendet. Der Friedhof lag südöstlich des eisenzeitlichen Kultbezirks, berührte diesen aber in keiner Weise. Die Bestattungen sind auf einen undatierten Ringgraben hin ausgerichtet, der Anklänge an die kreisförmige Anlage des eisenzeitlichen Kultbezirks zeigt. Nur eine einzige Scheiterhaufenstelle kam zum Vorschein. Die 36 Bestattungen datieren über einen Zeitraum von ungefähr 80 Jahren (ca. 70–150 n. Chr.). Wahrscheinlich wurde der Friedhof von ein bis zwei Familien während etwa eines Jahrhunderts als Bestattungsort benützt. Die meisten Bestattungen geschahen in Urnen und wiesen mehr Grabbeigaben auf als die eisenzeitlichen. Eine ähnliche Reihe von Analysen wie bei der eisenzeitlichen Kultstätte deutete auf eine Vorliebe hin, die Urnen im nördlichen Teil der Gräber zu bestatten. Im Vergleich mit den Friedhöfen der nur vier Kilometer entfernten *civitas*-Hauptstadt Chichester sind die Gräber hier mit reicheren Grabbeigaben versehen.

Während ungefähr 400 Jahren wurde der Hügel für einen kleinen angelsächsischen Friedhof mit Erdbestattungen benützt. Dieser Friedhof durchschnitt den nördlichen Teil des späteisenzeitlichen Kultbezirks. Wegen des stark säurehaltigen Bodens überlebten keine erdbestatteten Knochen. Nach der kleinen Anzahl von Grabbeigaben zu schließen, scheinen zehn der Befunde zu Gräbern zu gehören. Drei dieser Gräber lagen innerhalb einer rechteckigen Umfassung, für die es bis jetzt noch keine Parallelen gibt. Drei Messer, eine einzelne Speerspitze und ein Grab mit Abdeckung deuten darauf hin, daß der Friedhof irgendwann zwischen dem 5. und 7. Jahrhundert n. Chr. benützt wurde, vielleicht am ehesten gegen das Ende dieser Zeitspanne. Der Friedhof ist einer der ersten seines Typs aus dieser Zeit, der auf der West Sussex Coastal Plain gefunden wurde.

Christoph T. Maier

Foreword

As project manager for the Westhampnett Bypass scheme, it gives me great pleasure to introduce this archaeological analysis report, the first to be produced for a rescue archaeology project entirely funded by the Highways Agency.

In managing and improving roads, we must carry out a difficult balancing act, taking in the needs of industry, the economy, local communities, and the environment. Archaeology is one of the important factors considered in this process as known archaeological constraints are mapped and a route chosen which will avoid or reduce impacts on archaeological sites as far as possible.

On the A27 in Westhampnett, the local community has been transformed by the removal of over 50,000 vehicles per day from the old route — bringing much welcome relief to villagers. Construction of the bypass also provided an opportunity for archaeologists to discover and understand more about the use of the local landscape through time.

Archaeological activity first began in 1991 when an archaeological evaluation was carried out. Archaeological work first became apparent to the public in 1992 when the Wessex Archaeology site team began their months of intensive field work. This was followed by a site open day and later a museum exhibition.

The archaeological results are of national significance because three separate cemeteries dating to the Late Iron Age, Romano-British, and Anglo Saxon periods were discovered. Eventually, almost 200 graves were identified and investigated. It is rare that cemeteries of such size are discovered or investigated so thoroughly.

As with most archaeological projects, it is after this exciting phase that the less glamorous work of analysis and reporting begins. This process, which has taken several years, is as essential as the earlier field work, because when we have all moved on to the next project. It is only the systematic and meticulous documentation that remains as a record for others to study.

Wayne Norris
Highways Agency Project Manager

October 1996

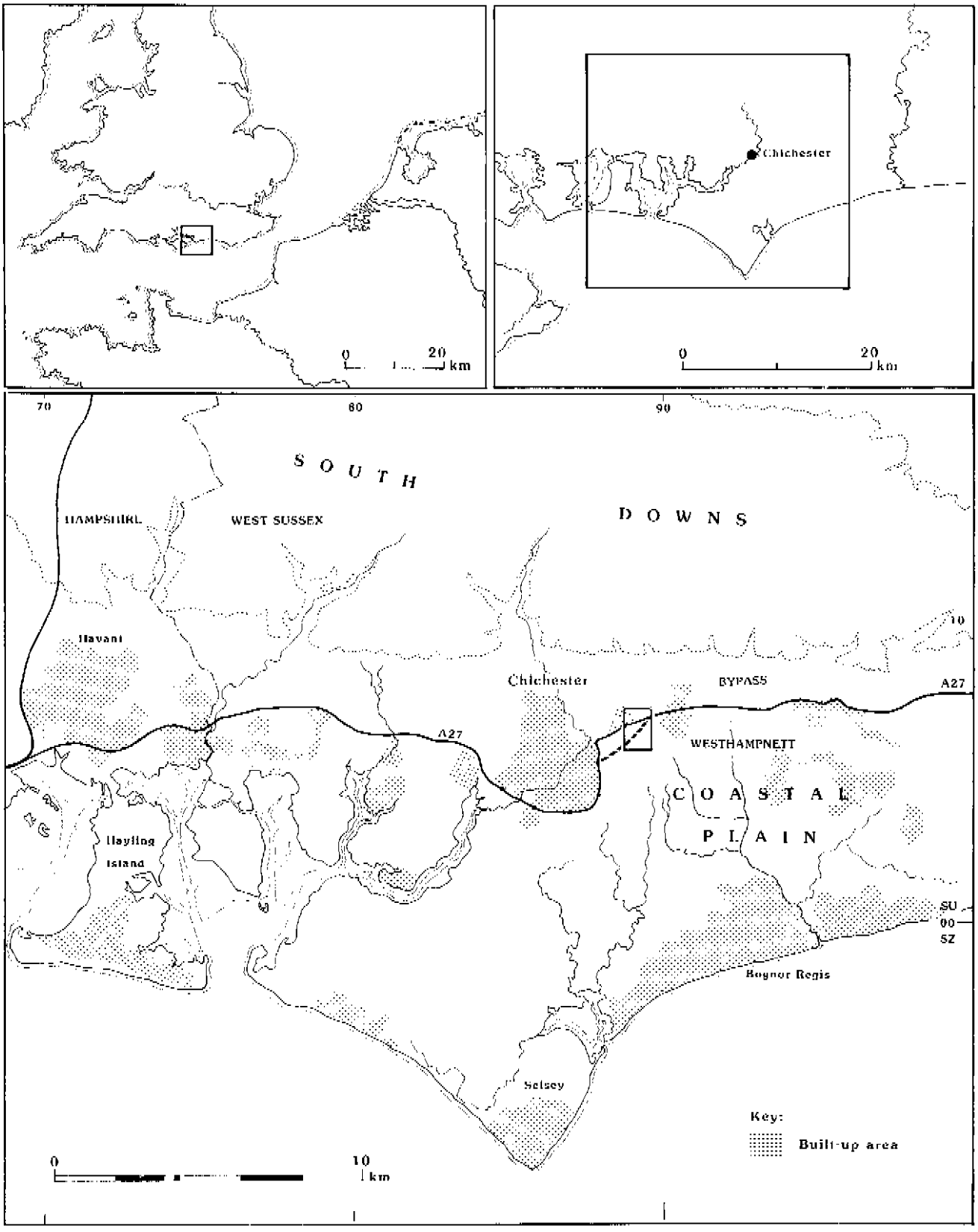


Figure 1 Location map of the Westhampnett Bypass excavations

1. Introduction

A.P. Fitzpatrick and Andrew B. Powell

1 The Project

The excavations reported here were undertaken in advance of the construction of the A27 Westhampnett Bypass, 3 km to the east of Chichester, West Sussex. Although having dual carriageways to both the east and west of Westhampnett and Maudlin, when the A27 passed through the villages it became a single carriageway. The volume of traffic on the road was both a hazard to, and unpleasant for, the residents and caused congestion and delay for motorists and other road users. Consequently a new 2.8 km length of dual carriageway was built to bypass the villages: the A27 Westhampnett Bypass.

A programme of archaeological works was undertaken in advance of the construction. This programme, which was awarded in competitive tender, consisted of an integrated strategy of Desk-Based Assessment, a Field Evaluation incorporating surface collection of artefacts, manually excavated Test Pits and Machine-Cut Trenches, and eventually Excavation. A Watching Brief was undertaken during the preliminary stages of road building. The Desk-Based Assessment and Evaluation were undertaken in November–December 1991, the Excavations between January and March 1992, and the Watching Brief in April of that year. Throughout, the project has followed *The Management of Archaeological Projects* (English Heritage 1991).

These stages of the project were sponsored by English Heritage to whom detailed Project Design Specifications were submitted before each stage of work commenced. During the course of the excavations the scale of some discoveries, notably the excavations at Area 2 which are reported here, necessitated the preparation of an amended Project Design Specification. On completion of the excavations an Assessment Report on the potential for analysis was prepared and after its approval by the Ancient Monuments Advisory Committee for English Heritage, responsibility for the funding of the Analysis stage of the project was passed to the Highways Agency.

The excavations at Area 2 examined cemeteries of Iron Age, Romano-British, and Anglo-Saxon date. The size and character of the cemeteries, particularly the Iron Age one, are such that the decision has been taken to publish them here as a separate volume. However, the excavations were one of five Areas examined simultaneously in the project, the methods and recording systems were the same, and the present report should be viewed in conjunction with *Westhampnett, Volume 1: Landscapes* where further details of the project may be found.

2 Site Location and Extent

The new road passes through the low lying and relatively flat West Sussex Coastal Plain but the South Downs rise only 2 km to the north. Area 2 was situated immediately south of the existing A27 trunk road, on a low hill opposite the junction of the minor road running north to Strettington (Figs 1 and 2). Machine-Cut Evaluation Trench 26 had revealed a single Iron Age unurned cremation burial (Evaluation Context 1085)

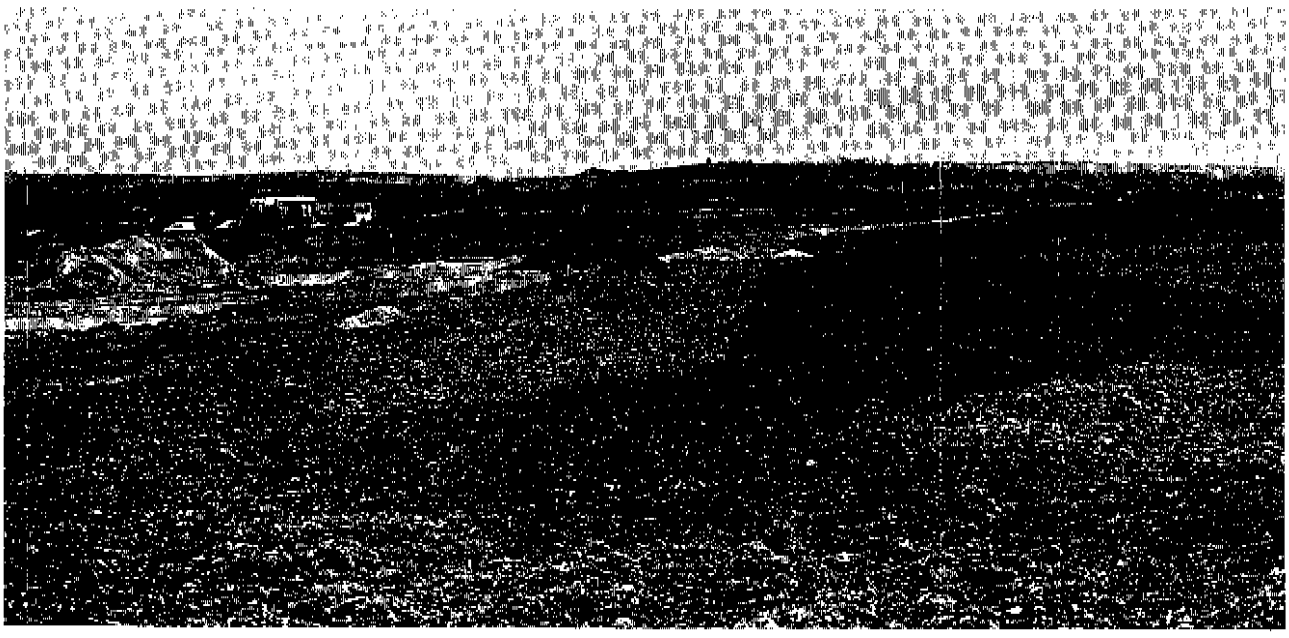


Plate 1 View of Area 2 from the south-west. The excavations lie on the low hill to the right, with the Area 3 excavations seen on the left

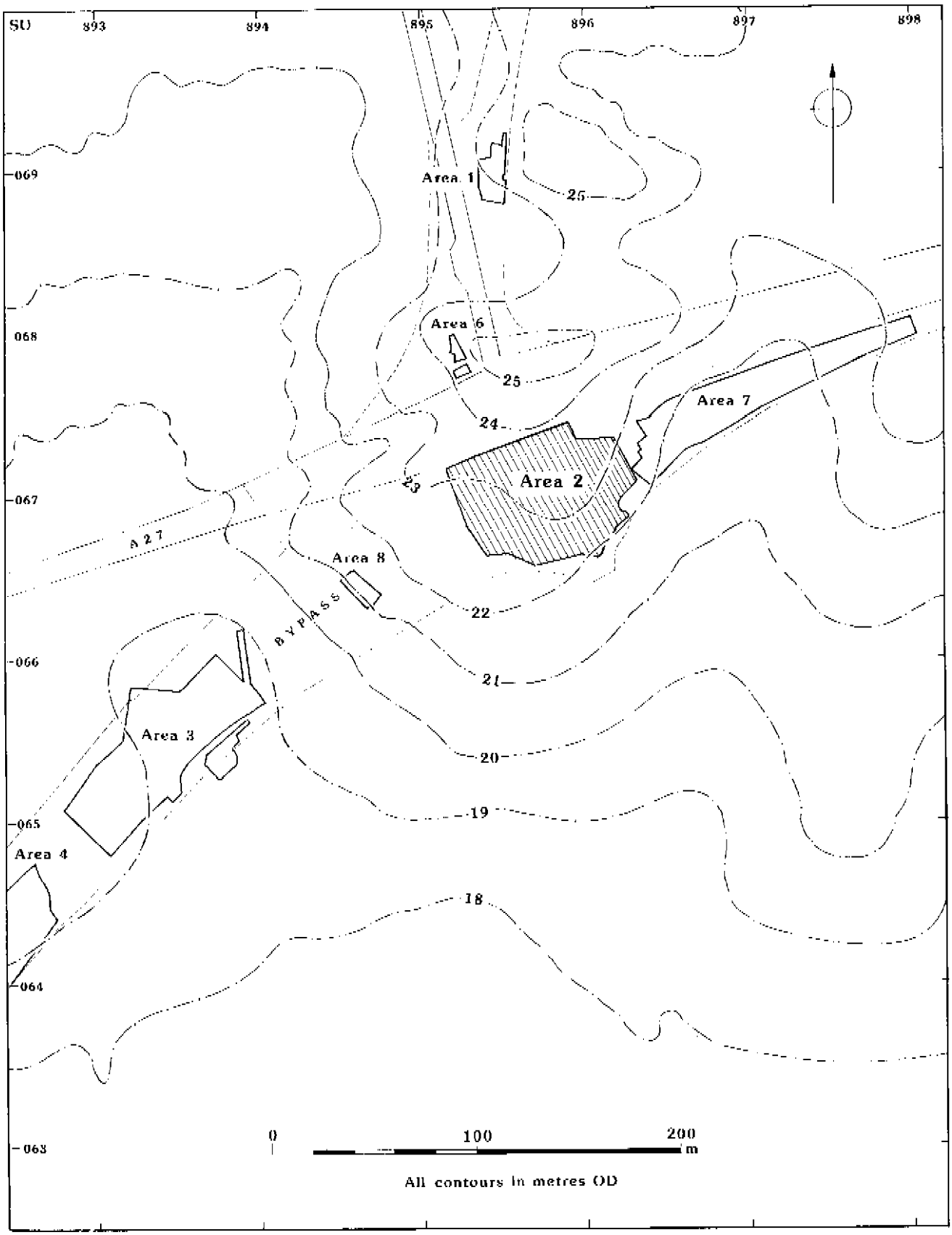


Figure 2 Contour map around Area 2

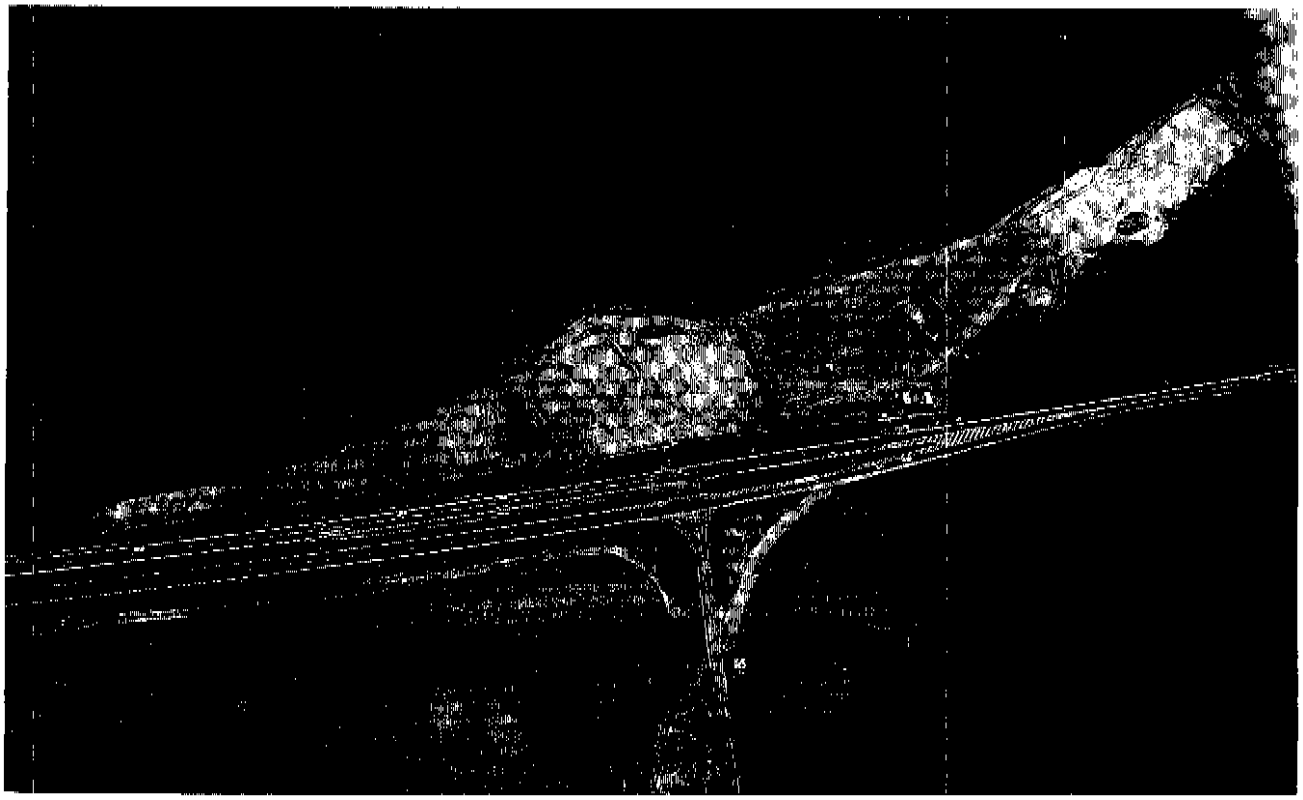


Plate 2 An aerial view, from the north, of the eastern end of the A27 Westhampnett Bypass route, with Area 2 in the centre. Areas 1, 3, 7, and 8 are also visible. Reproduced by permission of Steve Patterson

accompanied by two pottery vessels. Most of the hill was to be taken to widen the existing dual carriageway and the construction of a bridged interchange with roundabouts to link the A27 with the A285 (the Romano-British Stane Street). This involved the extensive excavation of the existing landscape to a depth of 12 m or more. Although relatively flat, there is nonetheless considerable topographic diversity in the West Sussex Coastal Plain. This diversity is examined more fully in *Volume 1* and the salient point here is that the cemeteries were sited on a hill which, while low, is prominent in the low-lying landscape (Pl. 1).

The original intention was to examine the site of this burial (which was presumed to be within a barrow or a small flat cemetery), the Romano-British features identified in Evaluation Trench 24, and the small Neolithic pit identified in Evaluation Trench 28 in a combined area. On the basis of evidence from sites such as Owslebury, Hampshire (Collis 1977a), an Iron Age cemetery containing approximately 20 burials was anticipated. However, it soon became apparent that the Iron Age cemetery and its associated features were much larger and consequently the Romano-British and Neolithic features were recorded as Areas 7 and 8 respectively (Pl. 2).

Eventually approximately 200 graves of Late Iron Age, Romano-British, and Anglo-Saxon date were identified. A ring ditch presumed to be of Bronze Age date was also identified. The burials in the Iron Age and Romano-British cemeteries were all cremation burials while the Anglo-Saxon cemetery contained inhumation burials. The smaller Romano-British cemetery lay to the east of the Iron Age one, while the Anglo-Saxon cemetery partly overlay the northern zone of the Iron Age one. The true character of the Anglo-Saxon cemetery was only identified during the analysis stage.

The Iron Age cemetery was by far the largest and revealed a range of features directly related to the use of the site for mortuary and funerary purposes. In addition to the graves, sites of cremation pyres, deposits of pyre debris, a series of small square or rectangular enclosures, probably shrines or some other form of mortuary/ritual structure, and settings of postholes were identified. There is no evidence which allows either the association or sequence between the shrines and the cemetery to be established. Consequently the site is called a religious site here rather than simply a cemetery.

3 Geological Context

The hill lies on the Ipswichian Cliff Line of the West Sussex Coastal Plain and is covered with what may be mixed Hoxnian marine gravels deposited in the Late Glacial (Fig. 3) (Scaife and Allen in prep.; Mottershead 1976). The marine gravels represents the western end of the ridge of marine gravels, while the low hill was partly formed by the shallow valley to the west (Area 3) which breaches the cliff line.

The superficial geological deposits were coarse gravels in a silty loam soil matrix but these were often involuted with localised dense orange clay. Faint stone-free lines containing a sterile silty clay loam (including 20160, 20461, 20547), forming a basic polygonal pattern were noted on the highest point of the hill in the west of the Area with stripes running downslope to the south.

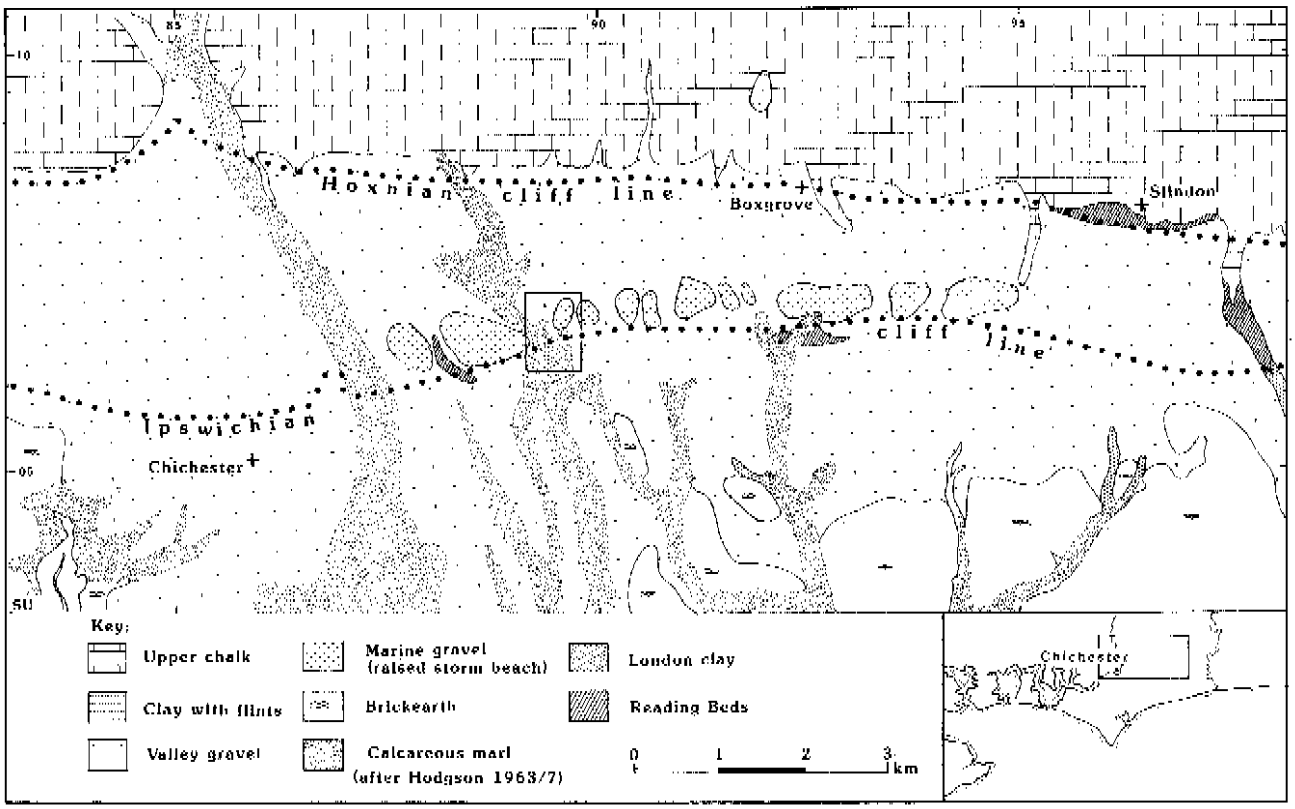


Figure 3 Geology of the West Sussex Coastal Plain and South Downs

These are interpreted as periglacial features. In the winter that the Area was excavated a perched water table was noted. This may have occurred only seasonally but the soils were highly acidic, with a pH of *c.* 5.6, creating an aggressive burial environment which had completely destroyed inhumed bone.

4 Excavation Methods

Before the excavations commenced the Project Conservator, Margaret Brooks, provided advice on likely conservation requirements based on the evidence of the Field Evaluation, a site visit, and consultation with Chichester District Museum. Visits to the excavations were also made by most of the members of the Project Team, including the Osteoarchaeologist, Jacqueline McKinley, and the Environmental Archaeologist, Pat Hinton.

In order to ensure that the limits of the Iron Age cemetery had been defined the area was enlarged twice during the course of the excavation. The final stages of this resulted, almost inevitably on the penultimate day in the field, in the discovery of a ring ditch, presumed to be of Bronze Age date. Area 6 was also examined to the north of the A27 to determine whether the cemetery had extended that far to the north but no evidence for Iron Age activity was found. Ultimately an area measuring approximately 100 m east to west by 75 m north to south, and covering c. 6700 m^2 centred on SU 8930 0660, was uncovered (Fig. 6 and Figs 34–45). The site grid was laid out as an extension of the Area 3 grid to the south-west, with site north lying 45° to the west of true north and site co-ordinates 650/450 corresponding to SU 9543 6670. The excavation of Area 2 was undertaken over ten weeks with a team of, on average, 12 people (Pl. 3).

After the removal of the ploughsoil using a mechanical excavator, the site grid was laid out and the Area was then systematically cleaned in 10 m squares with shovels and hoes. Wessex Archaeology's standard *pro forma* context-based recording system was employed. In the west of the Area there was an area of brown loam (20211) approximately 25 m by 30 m, centred on 685/465 (Fig. 6), within which the rims of a large number of pottery vessels were identified. This area proved to contain the majority of the Iron Age graves. The superficial geology was a brown coarse gravelly subsoil (20153), and although it appeared to underlie the brown loam, the disturbance of the ground within the cemetery, and the mixed nature of the marine deposits, meant that a consistent relationship between these layers — if there was one — could not be demonstrated with certainty.

The brown loam is interpreted as an accumulated soil produced either by the destruction of small barrows covering the graves or by the repeated turning over of the ground by the excavation of the graves or related actions in a comparatively short period. This same process contributed to the fact that some 45 Iron Age graves were identified only by their contents, often being first recognised by the rims of the pots, as their fills were indistinguishable from the matrix into which they were cut. This reworking of the subsoil had also led to the graves having been archaeologically excavated from different heights and many burials were only identified

Plate 3 Excavation of the Iron Age cemetery, a view westwards towards Chichester Cathedral. Reproduced by permission of Eva Smith

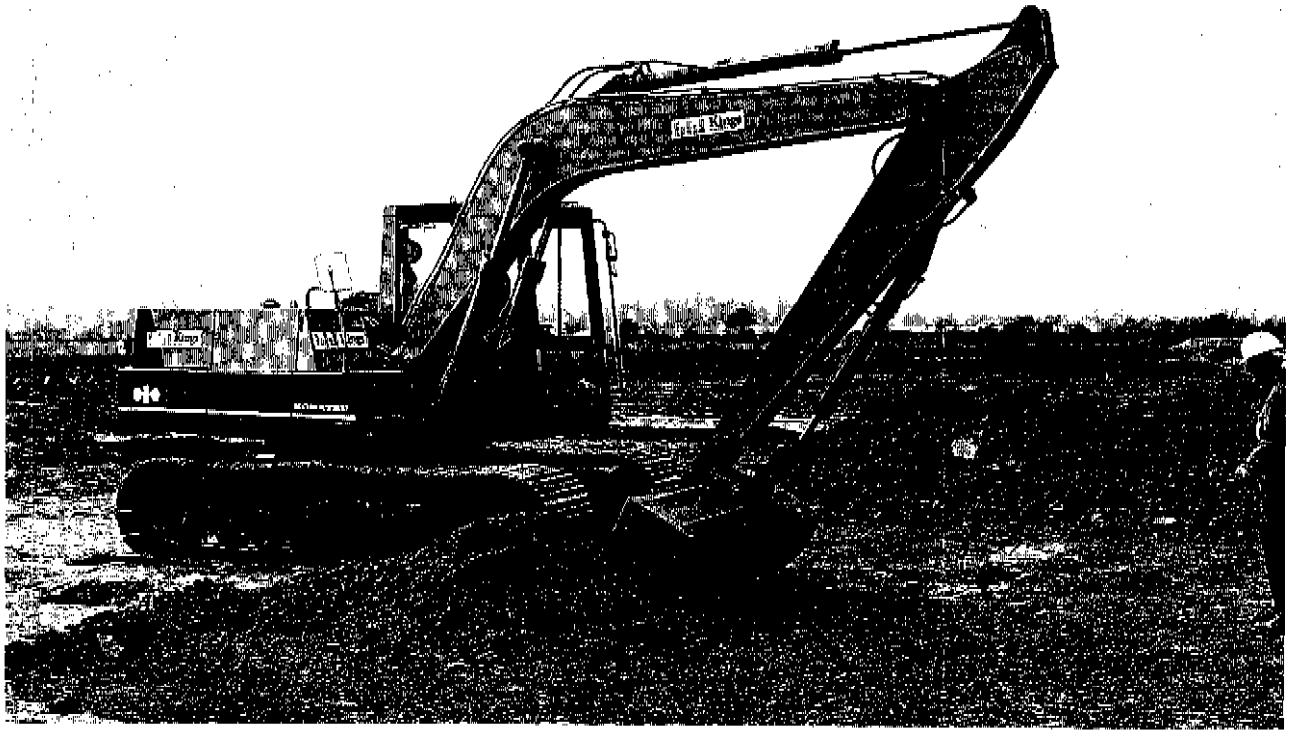


Plate 4 Supervising the final machine cleaning of the excavated Iron Age cemetery in order to remove any of the reworked loam sealing features cut into the natural gravel. Note the excavated graves beside the excavator. The view to the south-west includes the edge of Area 3 to the right

after the repeated cleaning of areas. The demonstration of this mixing tends to support the idea that the soil was created by the upcast from grave digging or related actions rather than deriving from small barrows.

Eventually pressure of time required that manual cleaning of the brown loam should be replaced by its mechanical excavation, a less than ideal method and one which is likely to have increased the fragmentation of the unurned cremated bone (Pl. 4). In contrast, the Romano-British burials and the Iron Age shrines which were not surrounded by the reworked deposit were readily identifiable in the gravels. A small number of recent land drains filled with chalk rubble crossed the site, and these, along with a very small number of other recent or modern features, are not described here.

Whole-earth Sampling

From the outset it was intended that a whole-earth sampling strategy should be followed to ensure maximum recovery of the unurned cremated bones and any associated pyre goods. Sub-samples for environmental evidence could then be extracted for flotation before the wet sieving of the whole-earth samples. In practical terms this meant that the whole fill of the grave was retained (Pl. 5) and the same policy was followed for pyre sites and pyre-related features. Bulk samples for environmental evidence were systematically taken from other types of features such as gullies and postholes where a whole-earth sampling strategy was not employed.

Recording

Each of the eight Areas examined in the excavation stage of the project was allocated a unique number sequence for its records, so that in Area 1 all records were prefixed with 10000, in Area 2, 20000 and so on. As five of the Areas were substantial excavations running concurrently and being processed centrally, a simple and clear recording system was essential and similar criteria applied in the analysis phase of the project. The temptation (slight) to renumber anything for publication has been firmly resisted. The number blocks for Area 2 are:

Contexts	20,000–26,999
Object numbers	27,000–27,999
Artefact samples	28,000–28,999
Whole-earth Samples	29,000–29,999
Graphics	2000 2999
Photographic (Film nos)	200–299

Four-figure numbers refer to the evaluation.

All artefactual pyre and grave goods identified in the field were given Object Numbers (i.e. 'small finds' *and* pots) and where possible complete pottery vessels were wrapped with bandage or similar materials and lifted intact. The whole-earth samples were sub-sampled for environmental evidence and the same sample number was applied to the sub-sample. The residues from the sub-samples have been stored with any residues from the remainder of the whole-earth sample. Samples from inside pots, whether for micro-excavation or wet-sieving, were recorded using the Object Number of the pot but any 'small finds' from them were given new Object Numbers.

Preservation

The factors affecting preservation on any individual archaeological site are various and their interactions complex. Water, soil type, temperature, oxygen, flora and fauna, and human agency all affect rates of decay (Janet Henderson 1987). Extensive considerations of the implications for this for mortuary sites can be found in the papers in Boddington *et al.* (1987) and Roberts *et al.* (1989), and a case study for a single Iron Age burial is presented by Foster (1986, 152–7, table 5). Here, it is necessary only to emphasise briefly what sorts of evidence are available, and why.

Archaeological features and deposits across the whole area had been greatly reduced by cultivation and many features were heavily truncated. It is likely that the repeated passage of heavy agricultural machinery increased the fragmentation amongst the cremated bones. The leaching and dissolution caused by the high water table and acidic soil have, in their most extreme, completely removed any traces of inhumed bone visible to the naked eye. No bone or dental enamel was observed in any of the Anglo-Saxon inhumation burials excavated. If, as seems likely, animal or bird carcasses were placed with the Iron Age cremation burials, they too were invisible using the methods of excavation and analysis employed, although phosphate analysis might have assisted (*cf.* Nowakowski 1991, 221–2).

In considering grave goods the micro-environment of graves and the association of organic materials will determine what, if anything, of organic materials other than human bone, survives (Jannaway 1987; 1989). At Westhampnett objects of wood, wood and horn, and evidence for textiles and straw only occurs as mineralised or mineral-replaced remains on metal objects. The presence of at least some wooden bowls in Iron Age graves has been recognised only because they had been repaired with metal staples on which diagnostic traces of mineral-replaced wood were identified (*cf.* Watson 1988). It must be assumed that wooden vessels without metal fittings or metal repair clamps were also placed as grave goods.

As McKinley has set out in detail (1989; 1994a; and below), the process of cremation preserves some materials and destroys others. Whatever is preserved still has to be retrieved from the pyre site and eventually selected for burial. With the exception of a few fragments of mineral-replaced straw found in graves, all the evidence for trees and plants, either as fuel for the pyre or as pyre goods, has been preserved at Westhampnett by carbonisation, very probably on the pyres.

The result of these processes, some the result of deliberate choice, others of natural processes, is simple and is that — as with all archaeological sites — the evidence recorded from the Westhampnett cannot simply be 'read off', either as an index of social status or wealth.

Scientific Analyses

A limited range of scientific analyses were employed, mostly to answer questions concerning the composition of materials. These are summarised briefly here along with, perhaps more importantly, the reasons why other techniques were not employed. Attention should also be drawn to the potential for organic residue analysis.

Chemical analyses were used on a variety of materials. Electron probe micro-analysis with wavelength dispersive spectrometry was undertaken on a fragment of gold foil, which

Plate 5 Excavating and collecting the whole-earth sample from Iron Age grave 20055 (Fig. 68). The oval grave contained the unurned cremated bone of an unsexed older mature/older adult accompanied by two pottery vessels, an iron crescent-shaped knife, and a wood and horn object with rectangular iron collars (Plate 24)

was also examined by scanning electron microscopy. The silver brooch was examined qualitatively using energy-dispersive X-ray fluorescence to its composition. However, as there are comparatively few objects of copper alloy from Area 2, and these are mainly from brooches, the sample was not considered large enough to make a useful contribution either to existing compositional analyses of brooch alloys (Bayley and Butcher 1981) or impurity patterns (e.g. Northover 1991) so further analyses were not undertaken. The poor preservation of the metal objects, particularly the iron ones, which are considered to have been placed on the pyre meant that this hypothesis could not be verified by metallurgical examination of their crystal structure. The possible glass fragments were examined using a scanning electron microscope with an attached energy dispersive X-ray analysis system (SEM-EDX). Scanning electron microscopy was also used in examining the mineralised wood remains.

Matrix analysis was undertaken for selected pottery fabrics as it was considered that the preponderance of non-distinctive inclusion types in the assemblage rendered thin sectioning for petrological analysis inappropriate in this instance. Further lithological study of the worked stone was also not felt to be necessary. Although it was considered that the large collection of pots deposited as grave goods provided a suitable sample for organic residue analysis by high temperature gas chromatography and gas chromatography/mass spectrometry, as a major programme of reviewing these methods was in progress (Charters *et al.* 1993), it was considered inappropriate to undertake such analyses at the time. This is an area where future study of the archive might be pursued profitably.

Chronometric dating methods were not employed for a variety of reasons. The carbonised wood was generally not well enough preserved or intact to be considered suitable for dendrochronological analysis, while the deposits of fired clay in pyre sites and pyre related features were either too shallow or too disturbed to be suitable for archaeomagnetic dating. Although radiocarbon dating was considered, the expected dates would fall into the Late Iron Age where the resolution of radiocarbon dates due to the oscillations in the calibration curve would be unable to refine the chronology, and when combined with the absence of *sequences* of stratified deposits, it was considered that dates derived from typological considerations, particularly from the metal objects, would be more accurate.

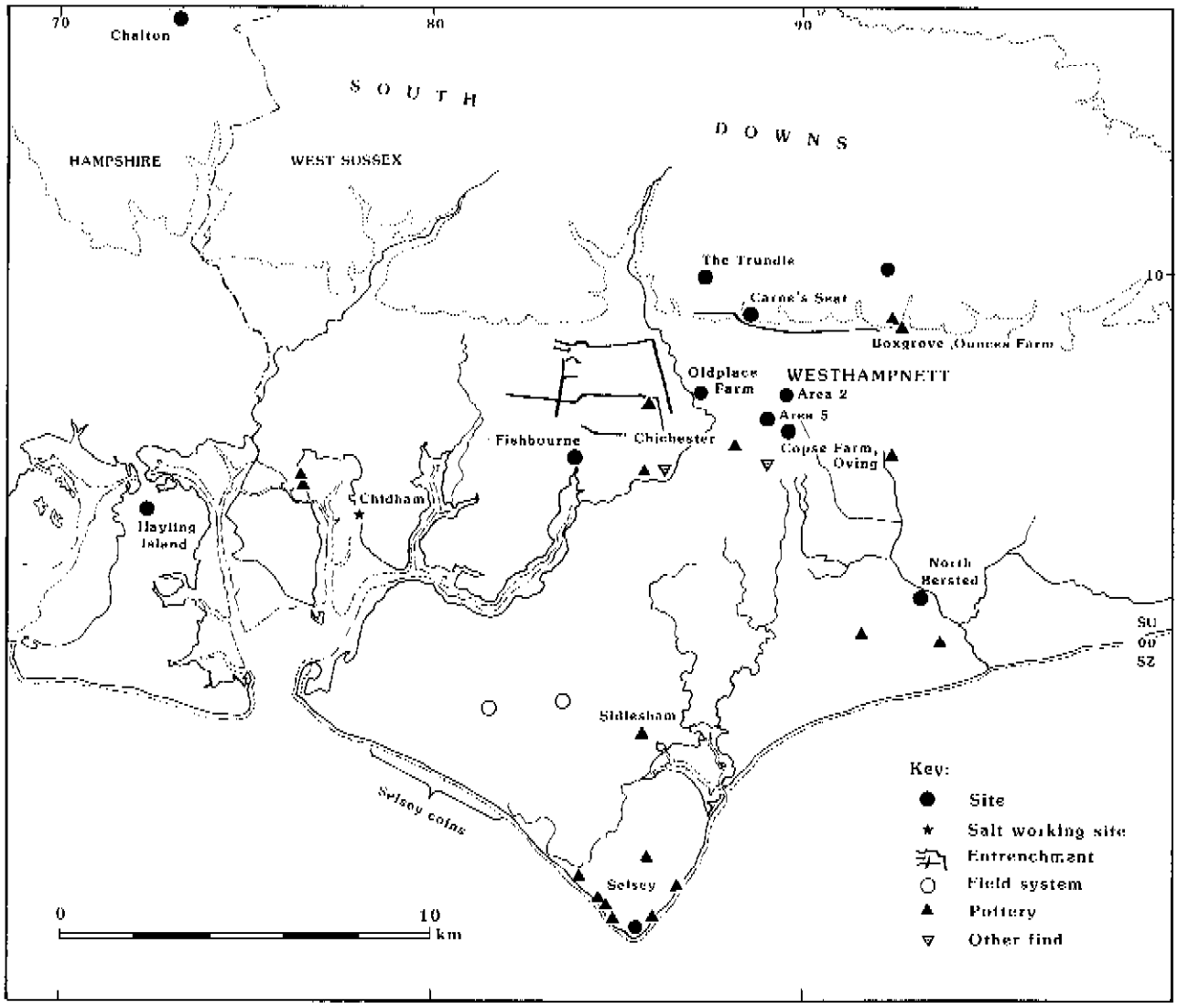


Figure 4 Iron Age sites on the West Sussex Coastal Plain and South Downs

5 The Archive, by Sarah F. Wyles

The project archive has been deposited at Chichester and District Museum, under the accession number 7221. The project code used on site was W474 and the archive, which is fully indexed, comprises the human and animal remains, the artefacts, the environmental materials, and the paper, graphic, and photographic records. Microfilm copies of the paper records are held by Chichester District Museum, the National Archaeological Record, and Wessex Archaeology.

As the materials from the Iron Age and Romano-British cemeteries comprise a large assemblage excavated from whole-earth samples, 10% have been retained in their entirety. This sample comprises all the bulk samples, artefact samples, and also the residues from the fills of pots from 20 Iron Age graves, 4 Romano-British graves, 4 Iron Age pyre sites, and the single Romano-British pyre site.

The 2 mm fractions of all whole-earth samples and pot fills scanned by the osteoarchaeologist were assessed for the quantities of cremated bone present. On this basis the 2 mm residues from 60 Iron Age and 10 Romano-British samples (or graves) with significant quantities of cremated bone were retained, as were the residues from a further 63 Iron Age and 3 Romano-British samples which contained moderate amounts of bone. All the other residues, which may include tiny fragments of bone, have been reburied as close to the area of excavation as was possible.

All analysed charcoal and plant macrofossils together with the unanalysed flots from the whole-earth samples and pot fills have been retained. The whole-earth samples comprised the 10 litre standard environmental sample residues and any additional artefact sample 2 mm residues. The only material retained elsewhere is a duplicate of the pottery fabric type series which has been retained by Wessex Archaeology.

6 The Westhampnett Religious Site and the Chichester–Selsey *Oppidum*

In the Romano-British period Chichester became a *civitas* capital and it has long been assumed that there *should* be an Iron Age antecedent. Superficially, this would appear to be directly relevant to the most important element of the excavations reported here, the Westhampnett religious site, and to provide the context in which it should be viewed. This is not the case and it

is appropriate to briefly consider the question of an *oppidum* at Chichester.

Around the site of the later town of Chichester there is a series of dykes, the Chichester Entrenchments (Fig. 4), which are a characteristic feature of British *oppida*. but, as Bedwin has set out (1983a, 38–43), evidence for Late Iron Age settlement has proved elusive. The difficulties in locating a predecessor may lie not so much in the data set as in the mind set, which seeks a proto-urban settlement and, as Woolf has shown, the characteristics of sites called *oppida* vary widely across Europe (Woolf 1993). In the case of many British sites considered to be *oppida* one of the key criteria is the presence of dykes (Trow 1990, 108–10), yet this characteristic may have been created relatively late in their development. This would certainly be consistent with the limited dating evidence from the Chichester Entrenchments, setting aside those elements of the Entrenchments at Halnaker that may be late medieval in date (Bradley 1969; 1971; Bedwin 1982; 1983a, 41–3, fig. 6; Bedwin and Orton 1984; Holgate 1986a). As Crummy has shown (1993), the search for a central place or 'core' may also be misguided and that instead the *territory* of the *oppidum* may have been the important space, within which there may have been many settlements and other defined areas. Despite this, in the absence of a clearly identified site at Chichester, a 'core' settlement has been sought elsewhere, at Selsey (*cf.* Bedwin 1984, 51). However, careful scrutiny has shown that the evidence is not as impressive as often asserted (Bedwin 1983a, 40–1) and it is not a satisfactory explanation for the large numbers of Iron Age coins eroded out of the coast (Aldsworth 1987; Bone and Burnett 1987) which seem more plausibly explained as a series of votive deposits (Haselgrove 1987, 149, 458–61).

Such limited evidence as has become available recently hints at Late Iron Age settlement somewhere beneath or near to modern Chichester. The coins and brooches from excavations in Chichester would just be compatible with a foundation date in the Romano-British period (Mackreth 1989, 182–4; Haselgrove 1987, 149, 458–61) but this does not account for the imported Arretine and Gallo–Belgic fine wares from Chichester or Fishbourne (Dannell 1978, 226; 1981; Rigby 1978, 200–1; Down 1978, 188–9) or for the increasing number of Dressel 1 (Down 1978, 243, no. 3; Williams 1989, 128) and Pascual 1 amphorae (A. Down pers. comm.) which would be consistent with a settlement of some status. These cannot all be explained away as from 'old stock' or having been reused (*pace* Cunliffe 1978, 178–9). Some aspects of the coin assemblage also suggest an Iron Age origin (Haselgrove 1987, 149), but if there was a mint at Chichester it was not established until the 1st century AD (Bean 1991, 3). The character and extent of the Late Iron Age settlement(s) at Chichester and Fishbourne remain to be defined and, as with the Chichester Entrenchments, it is not known if they were in existence at the time the religious site at Westhampnett was set out. One topic for which there is increasing, and relevant, evidence in the immediate vicinity is cross-channel trade. As well as the Dressel 1 amphorae, there is inferential evidence for pottery from Armorica and Normandy at Westhampnett, and a range of Gaulish inspired silver and bronze coinage (pp. 209–10).

In the absence of clear evidence for a mid-1st century BC *oppidum* at Chichester, for the moment at least, the immediate context of the Westhampnett religious sites appears to lie with nearby farm sites which have been shown to be of Mid–Late Iron Age date such as Copse Farm, Oving (Bedwin and Holgate 1985), Carne's Seat, Goodwood (Holgate 1986b), Oldplace Farm, Westhampnett (Bedwin 1983a, 36, fig. 4; 1984, 50, fig. 3.3), Westhampnett Area 5, or which are suspected to be of this date, such as Selhurstpark Farm (Bedwin 1984, 46, fig. 3.2; Holgate 1986b, fig. 1) and Denge Bottom (Bedwin 1984, 46; Holgate 1986b, fig. 1). The hillfort at the Trundle appears to pass out of use at approximately the same time that the religious site was set out or, perhaps, slightly earlier (Curwen 1929; 1931; Bedwin 1983a, 38).

As Bedwin suggests this relative proliferation of settlements datable to the Mid–Late Iron Age on the West Sussex Coastal Plain (North Bersted, Copse Farm, Oldplace Farm, Westhampnett Area 5) may represent a considerable increase in settlement in this period (Bedwin 1983a, 35–8). Many of the farms appear to have been built in a landscape which was increasingly bounded and drained by ditched field systems. Even so the Westhampnett religious site was founded well after these developments had begun, and before the development of a settlement of high status at or near Chichester.

2. Bronze Age Ring Ditch

A.P. Fitzpatrick and Andrew B. Powell

1 The Ring Ditch

A ring ditch (20882) was recorded at the east side of Area 2 (Plate 6; Fig. 5), centred on SU 89618 06719. It was found on the penultimate day of excavation as the spoilheaps were being moved to ensure that the full extent of the Late Iron Age religious site had been established.

Consequently only a single 1 m wide section was excavated through the ring ditch on its western side. There was no evidence for any graves having lain beneath a former mound but this could be due to; i) there not having been any graves originally, ii) graves cut into a barrow mound (if one had existed), or iii) any graves having been destroyed by cultivation.

The ditch was between 1.5 m and 2.3 m wide, and 0.7 m deep, the inner side being moderately steep at the top and near vertical towards the base. The primary fills at the sides of the base (20831 and 20832) consisted of light grey silt, with a light grey silty clay loam (20830) overlying them and covering the rest of the base. Cutting into the outer side of the ditch there was a 0.4 m wide gully (20826), with a vertical inner side and a very steep outer side, its fill (20833), which was similar to 20830, yielding a rim sherd, which appears burnt, from a Romano-British jar of 1st/2nd century AD date. These layers were sealed by a light grey gravelly layer (20829) containing sherds of coarse, flint-tempered Late Bronze Age pottery, including the rim of a small, rounded jar. This layer and the outer side of the ditch was cut, at the southern end of gully 20826, by a posthole 0.35 m in diameter (20827) and 0.5 m deep containing an orangey–brown clay loam (20834). The upper fill of the ditch (20828), which sealed the posthole, consisted of a light brown silty loam containing sherds of Romano-British pottery from at least two jars of 1st/2nd century date, some of which, appearing burnt, may come from the same vessel as the rim sherd from 20833.

2 Discussion

This dating evidence is insufficient to establish with certainty the date of the ring ditch. In view of the presence of a Romano-British cemetery hard-by and evidence for contemporaneous settlement only 150 m to

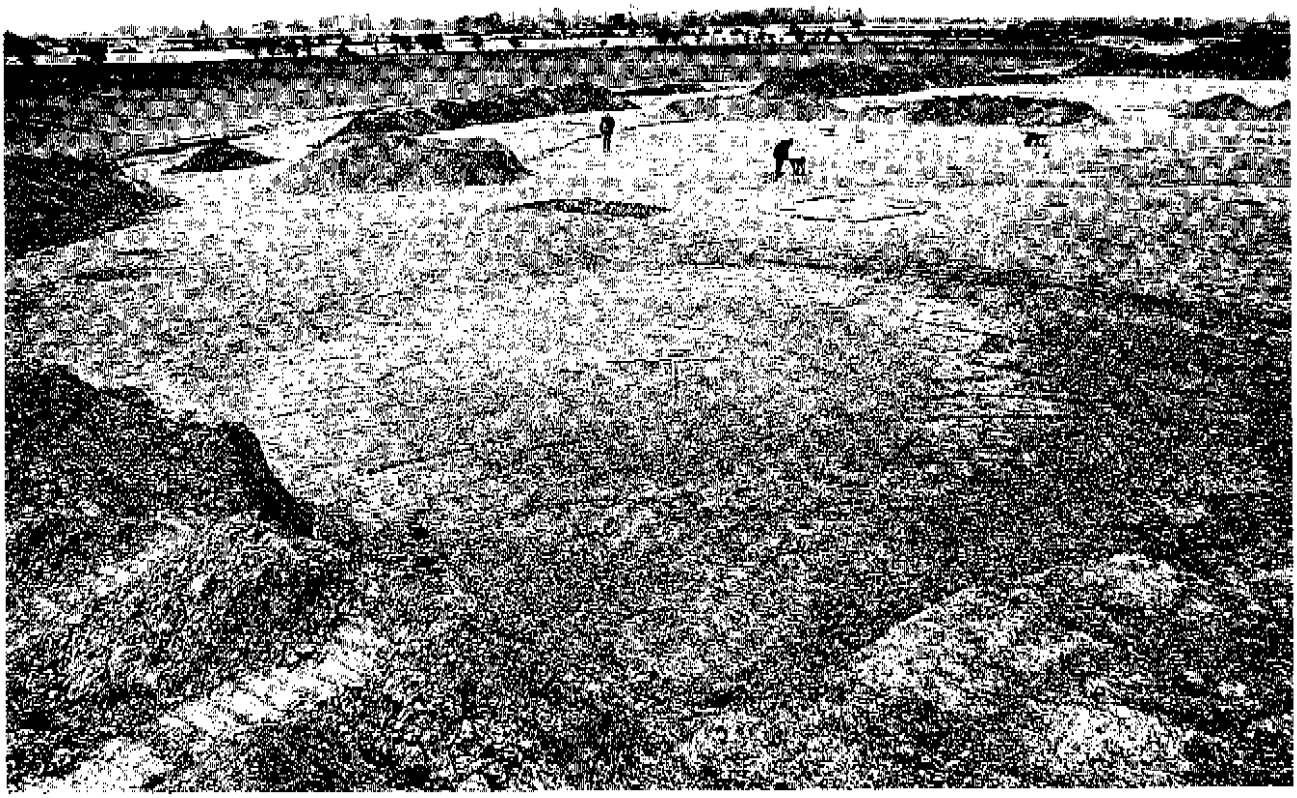


Plate 6 The large ring ditch, probably Bronze Age, exposed when Area 2 was extended to the north-east in the final stages of the excavation. The view to the south-west shows the Iron Age square ditched enclosure for grave 20566 (Fig. 98) and the small spoilheaps resulting from the final machine cleaning (Plate 4)

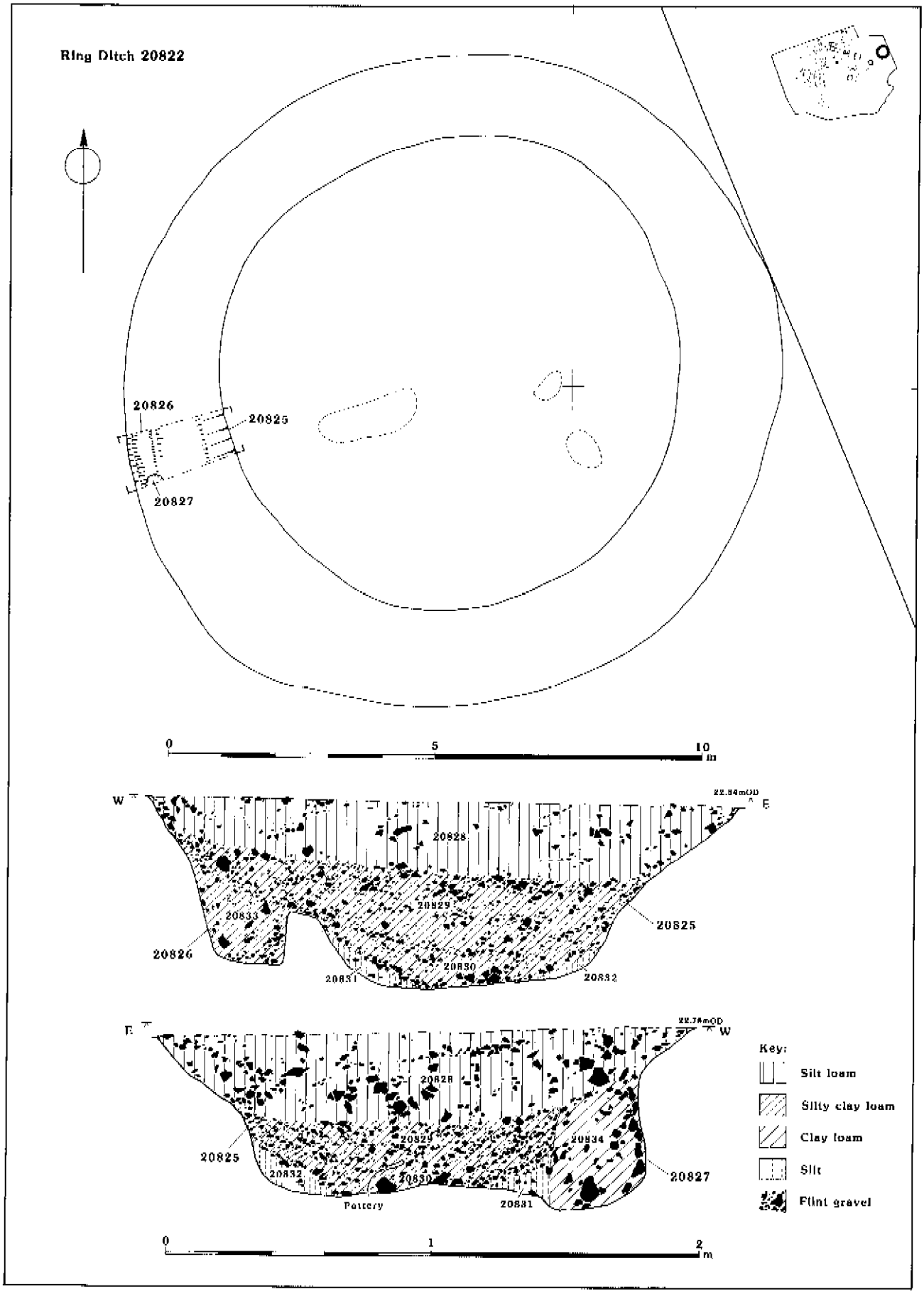


Figure 5 Ring ditch 20822: plan and ditch sections

the east in Westhampnett Area 7, the presence of Romano-British pottery is unsurprising. The fact that some appears burnt suggests that it could derive from pyre sites or related features. The possibilities of the ring ditch being either Romano-British or Anglo-Saxon in date are considered in the relevant sections below, but on balance a later prehistoric date, probably Bronze Age, would seem most plausible. A single sherd of Middle Bronze Age date was found in a Late Iron Age pyre-related feature as were quantities of worked and burnt flint (dicussed in *Volume 1*) but all appeared to be residual in later features.

Although the scant evidence available for Bronze Age activity on the West Sussex Coastal Plain in the earlier 1980s was dominated by metalwork (Bedwin 1983a, 34–5, fig. 2), the quantity of evidence available has increased, including two finds of Bronze Age burials and a settlement in the immediate vicinity, which might support a Bronze Age date for the ring ditch.

A Middle Bronze Age ring ditch was excavated only 300 m to the west at Westhampnett in Area 3. Oak charcoal associated with the central cremation burial gave a radiocarbon determination of 3360±50 GU–5308, calibrated to 1870–1520 cal BC. At Shopwyke, 1.5 km to the west, a group of three Bronze Age urned cremation burials, presumably of Middle Bronze Age date, were recovered during a Watching Brief (Kenny 1992), although no sign of a ring ditch or mound was noted. Lastly, part of a Middle Bronze Age settlement was excavated in Westhampnett Area 4, 1 km to the west.

Note: The radiocarbon date has been calibrated to two standard deviations (95% confidence) with the atmospheric calibration curve using CALIB 2.0 with the end points rounded out to ten years following the form recommended by Mook (1986).

3. The Late Iron Age Religious Site

A.P. Fitzpatrick and Andrew B. Powell

The Iron Age religious site incorporated a range of distinct features representing different aspects of the site's mortuary, funerary, and ritual functions. To a large extent particular activities appear to have been undertaken within discrete and well-defined areas, so that the different types of features tended to be grouped together. The graves appear to have been set out around a circular or semi-circular space at the western side of the excavated area, the pyre sites and pyre-related features were ranged around the eastern perimeter of the graves, and the enclosures lay further to the east. In so far as it is possible to tell, this spatial patterning was maintained largely unchanged throughout the time, perhaps 40 years in a 60 year period between c. 100–40 BC, when the cemetery was in use.

1 The Structure of the Site

Summary

The site's crematory function was represented by some 46 non-burial features containing either *in situ* or re-deposited pyre debris. Of these, 11 are interpreted, primarily on the basis of their X, Y, or T-shaped forms (see below), as *pyre sites*. The remainder had less diagnostic forms but the similarity of their fills indicates that they were either different forms of pyre sites, or were associated in some other way with cremation. These features have been designated as *pyre-related features*. Many of the pyre sites and pyre-related features were distributed in groups spaced at roughly equal intervals around the margins of the main con-

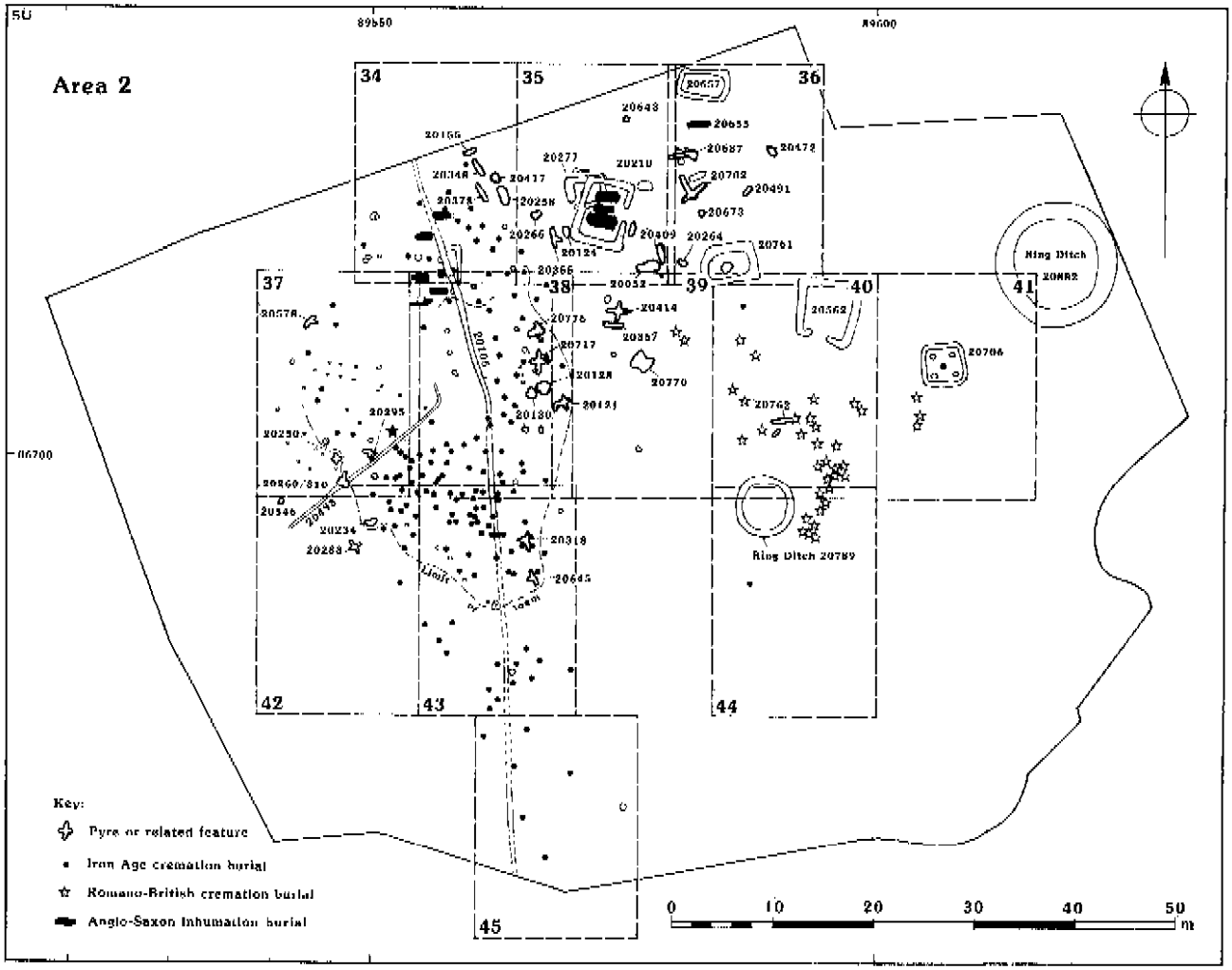


Figure 6 Area 2, unphased, showing sub-division plans 1–12 (Figs 34–45)

centration of graves in the cemetery, with a further dispersed group to the north-east of the cemetery.

A series of postholes flanking two of the pyre sites (20717 and 20776) on the east side of the cemetery (Figs 29; 38) may represent part of a formal, physical, boundary between the cremation and burial zones. No pyre sites or pyre-related features were found within the centre of the burial area, suggesting that separate areas were maintained for cremation and burial. However, it also appears that over time the cemetery encroached on the cremation area, as a number of those pyre sites closest to the cemetery are surrounded by graves, and a small number of pyre sites were cut through by the easternmost graves.

To the north-east of the cemetery there were four small ditched enclosures positioned in a line running to the east-south-east (Figs 35, 36 and 40). Three of these contained Iron Age pottery (20277, 20761, and 20562); the most northerly (20657) was undated. These are here interpreted as *shrines*. A fifth enclosure lying further to the east (20706) contained a four-post structure and a central cremation burial (grave 20566) (Fig. 41).

The whole cemetery contained some 161 graves within an area measuring 70 m north to south by 30 m east to west, with two single isolated graves, both some 20 m to the east, as well as the grave in enclosure 20706. However, of these, 140 graves (87.0%) were confined within the area, approximately 45 m by 25 m, which was encircled by the pyre sites. These graves were covered by a clearly defined layer of brown loam (20211) which may have been formed by the repeated turning of the soil during grave digging or by other, related, actions. The cuts of only ten graves overlapped, indicating that graves are likely to have been marked in some way, and those that did overlap were all within the area with the highest density of graves, where the build-up of redeposited soil would be more likely to have concealed the positions of earlier graves. The short duration of the cemetery's use, only 40 years, and the absence of sufficiently different datable artefacts to distinguish between earlier and later graves, made it hard to discern much change or growth within the cemetery although there is some evidence for expansion from a core through time.

The main concentration of graves lay to the south of the circular or semi-circular area, measuring approximately 17 m east to west by 12 m north to south centred on SU 89553 06709, which was almost completely empty of graves, as well as of pyre sites and pyre-related features. However, situated inside, and possibly associated with this empty space, were a series of postholes, many of them arranged in lines and possibly forming timber structures. A similar group of postholes, also possibly related, was recorded immediately to the west outside the limits of the cemetery. Further postholes were recorded across the site, some in lines possibly demarcating the boundaries to the burial area, others set individually, two of them possibly associated with pyre sites.

The boundary of the empty area was clearest on the eastern and southern sides where the density of graves was the highest, there being little more than a single

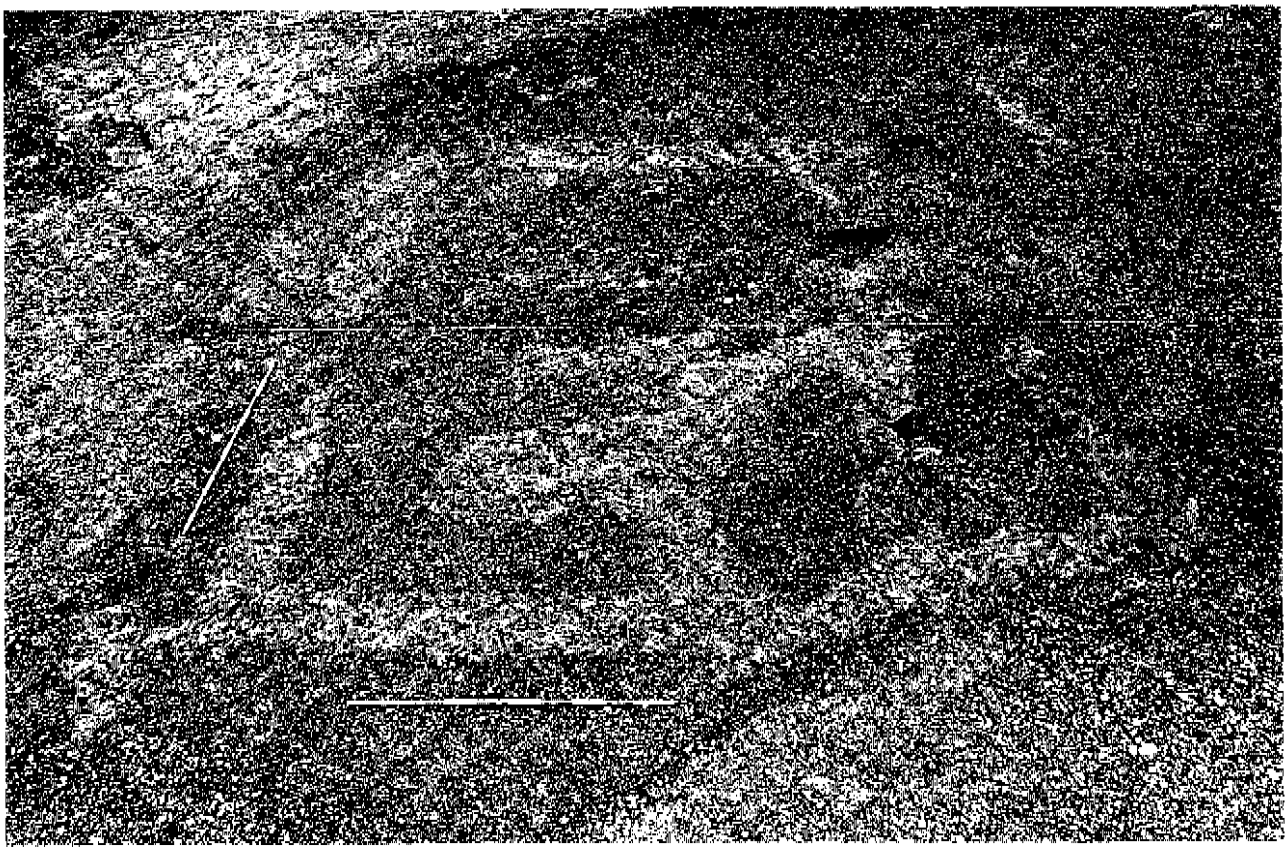


Plate 7 A pre-excavation view from the south of the small Iron Age enclosure 20277, visible at an angle towards the bottom right of the frame (see Fig. 7, opposite), cut by the graves and ditch of the Anglo-Saxon funerary enclosure (20210) (see Plate 32)

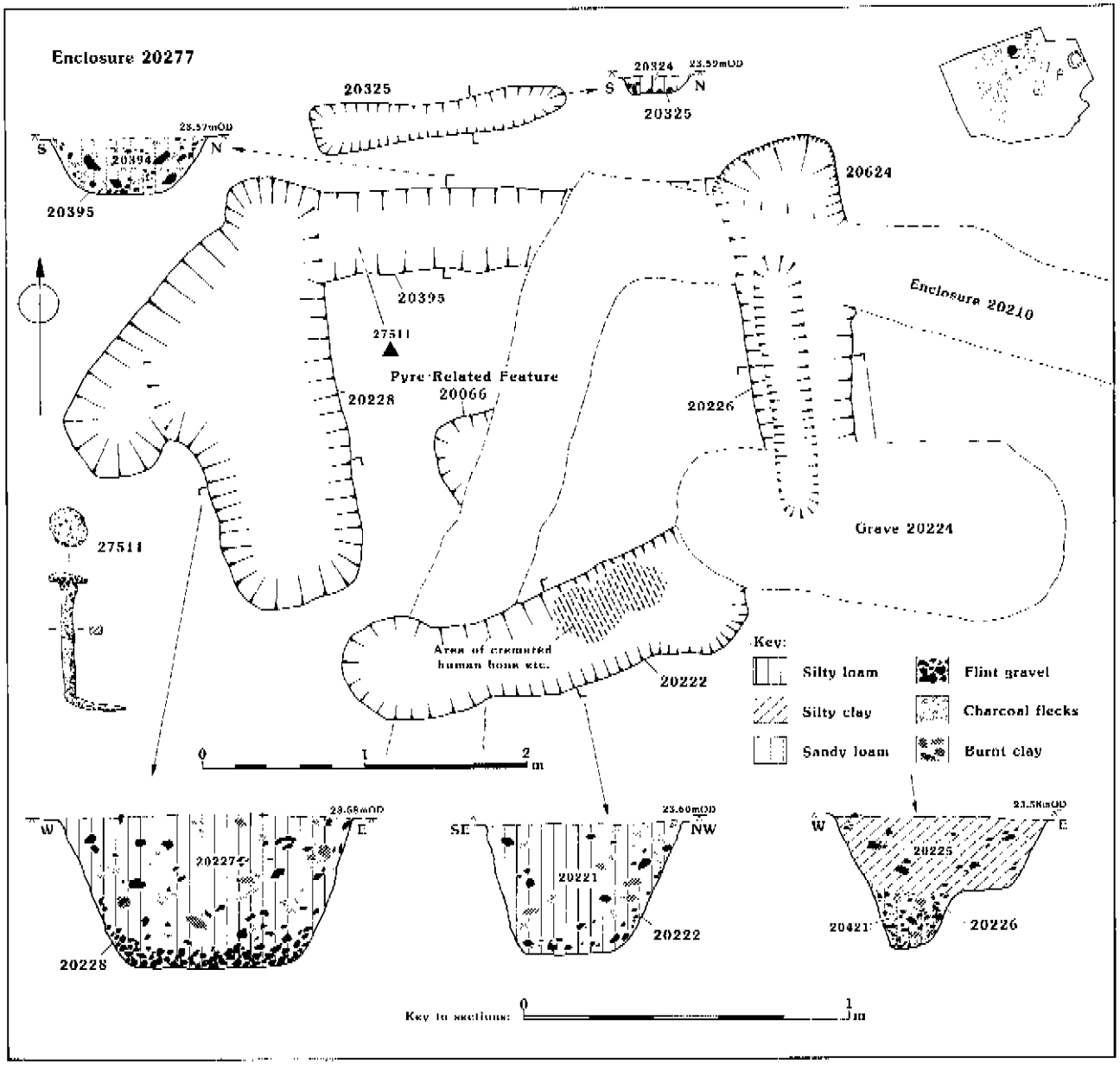


Figure 7 Enclosure 20277: plan, sections, and nail from ditch 20395 (ON 27511)

line of graves between it and the outer edge of the cemetery to the north and west. However, the distribution of graves around the margins of the empty area indicates that an unambiguous boundary was maintained during most of the period of the cemetery's use, and suggests that this space was reserved for other activities associated with the mortuary practices. It is surely significant that on the southern side of this area, where the boundary was maintained most firmly, the only grave which lay inside the area, grave 20457, contained two pots, one of which (27472) is apparently of Romano-British type, indicating that only after the main period of the cemetery's use may the significance of the boundary have been lost or disregarded.

The proximity of the different features, representing different aspects of Iron Age mortuary practices, permits a more comprehensive analysis than at most comparable cemeteries of those individual and collective processes which ultimately resulted in the formal deposition of human remains and other materials in individual graves. While the precise functions of certain features, in particular the enclosures to the east of the cemetery, remain unclear, the site is described in the order of a suggested sequence of mortuary ritual practices; i) liminality, ii) cremation and, iii) burial. As this is one of the first occasions on which later prehistoric pyre sites and pyre-related features have been published in Britain they are considered here in some detail.

2 Enclosures

A small enclosure (20277), approximately 4 m square externally, defining a rectangular area 2.5 m east to west by 2 m north to south, was recorded centred on SU 89571 06726 (Pl. 7; Figs 7; 35). Although it was cut by the north-west corner of Saxon funerary enclosure 20210, its probable shape can be deduced from those

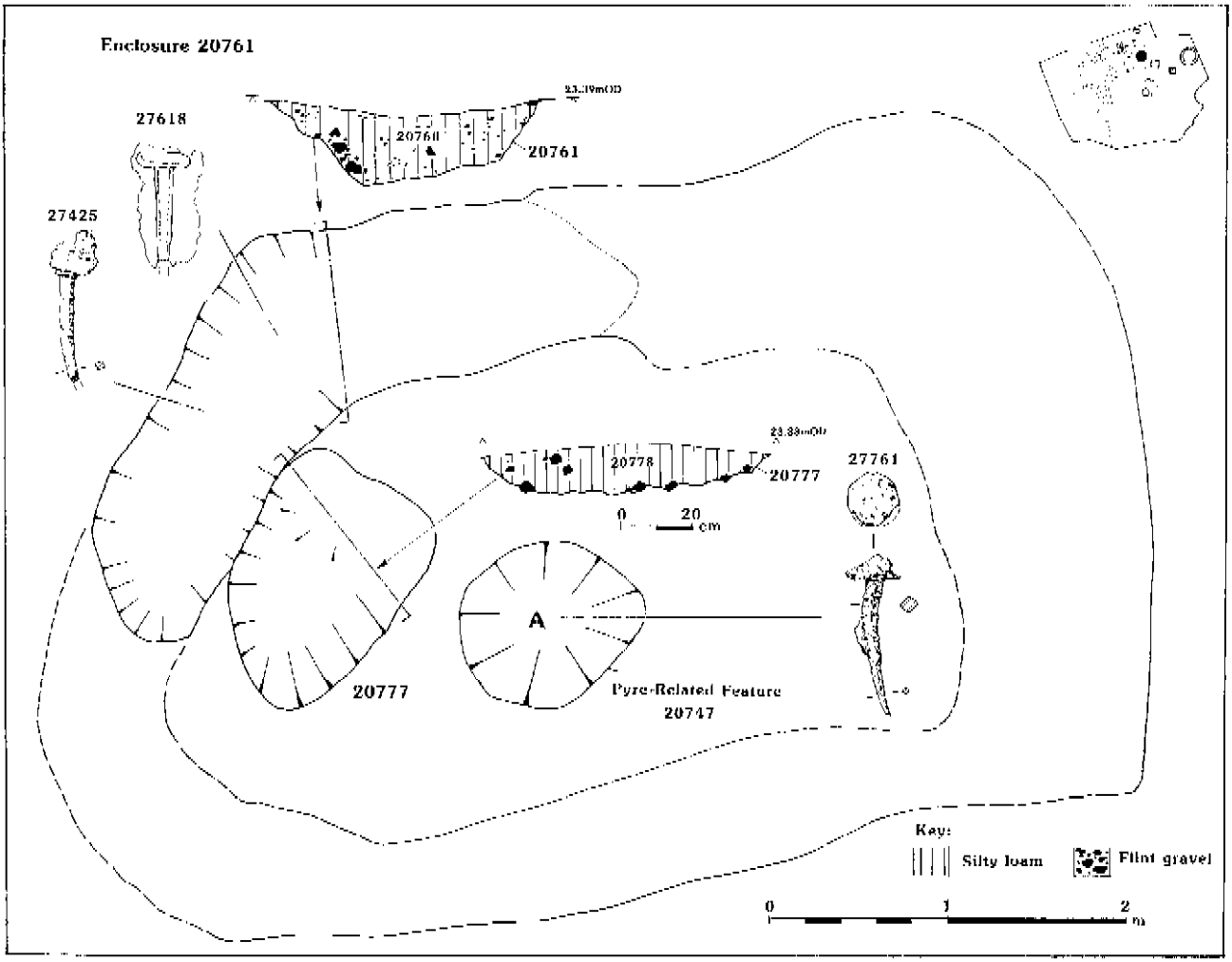


Figure 8 Enclosure 20761 and pyre-related feature 20747: plan, sections, and nails (ON 27425, 27618, 27761)

parts which survived. It was defined on its four sides by a ditch (20222, 20226, 20228, and 20395), 0.5–0.6 m wide and up to 0.45 m deep, with narrow openings at its south-eastern and south-western corners. The east and west sides extended slightly north of the north side, making that side slightly concave. There was a narrow slot (20325) immediately north of, and parallel to, the north side. There was an amorphous spread of burnt soil and charcoal (20066), possibly pyre debris, near the centre of the structure.

As the enclosure was sited close to a number of the pyre sites and pyre-related features on the north-eastern perimeter of the Iron Age cemetery, it is not surprising that small quantities of pyre debris, including charcoal, burnt clay and burnt flint, should have become incorporated in the ditch fill. The fill (20394) of the ditch of northern side of the enclosure also produced sherds of a single pot and a nail (Fig. 7).

A second possible enclosure (20761), also severely truncated, was situated some 12 m to the east-south-east, centred on SU 89585 06718 (Figs 8; 36). It was possible to excavate only a single section through its ditch, at the north-west corner. The enclosure was c. 6 m east to west by 4 m wide, apparently with rounded corners at the north-east and north-west. The ditch was 0.8 m wide with moderately steep sides and a flat base up to 0.2 m deep, but growing shallower to the south-west, with the line of the ditch being only faintly visible around the rest of its circuit. Four sherds of Iron Age pottery and one, considered as intrusive, Romano-British sherd, were recovered from the ditch fill (20760), as well as two nails (Fig. 8). Approximately in the centre of the enclosure there was a shallow circular feature (20747), c. 0.9 m in diameter and 0.12 m deep, its fill (20746) contained charcoal, a small quantity of cremated human bone (29.1 g, adult), and a number of iron nails (Fig. 8), a composition very similar to those found in pyre-related features. A shallow, possibly natural, hollow (20777) in the north-west corner of the enclosure, was found to contain only dark brown soil (20778).

A third enclosure (20562), measuring c. 6.5 m square, was recorded immediately to the east-south-east at SU 89595 06714 (Figs 9; 40). It shared a similar orientation with enclosure 20277 and had a 1.5 m wide entrance in the centre of the southern side. Its ditch, which was only partly excavated, was 0.56–0.85 m wide and up to 0.2 m deep, with steep sides and a flat base. Its fill (20563) produced a number of sherds of Iron Age pottery and a copper alloy object (Fig. 9).

There was also a fourth rectangular ditched enclosure (20657) sited close to the northern limit of the site, at SU 89583 06736 (Pl. 8; Figs 10; 36). It was 5.2 m

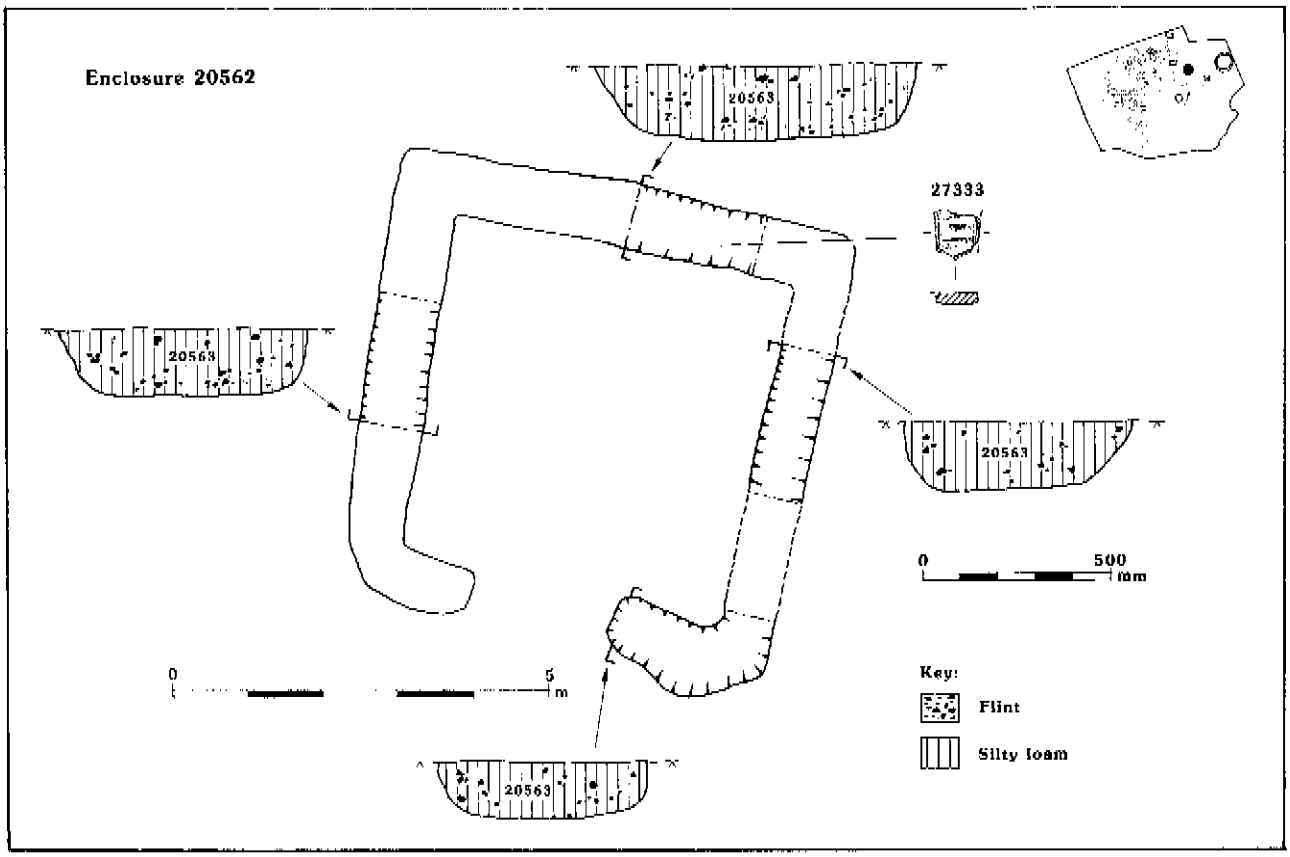


Figure 9 Enclosure 20562: plans, sections, and tabular copper alloy object (ON 27333)

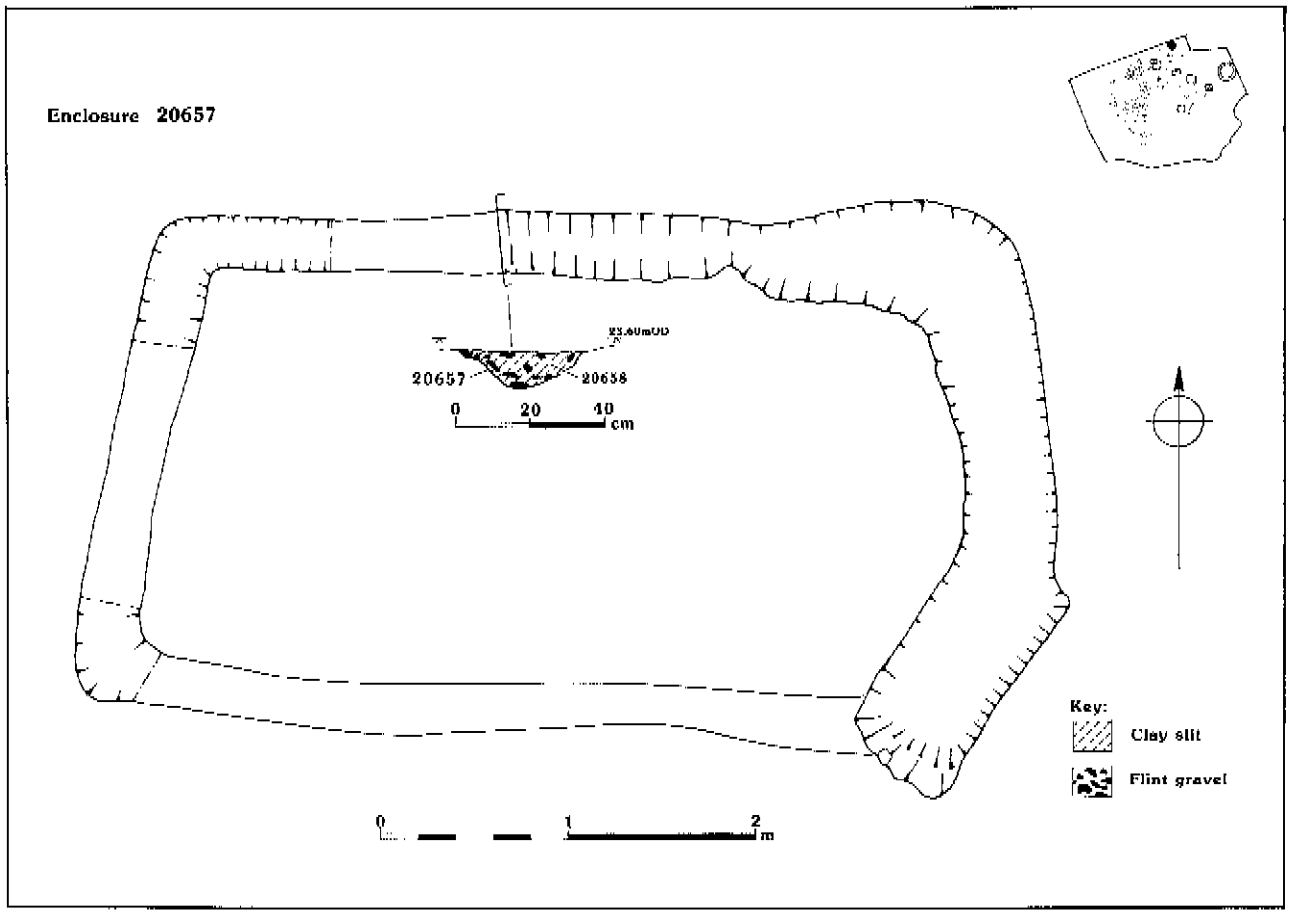


Figure 10 Enclosure 20657: plan and section

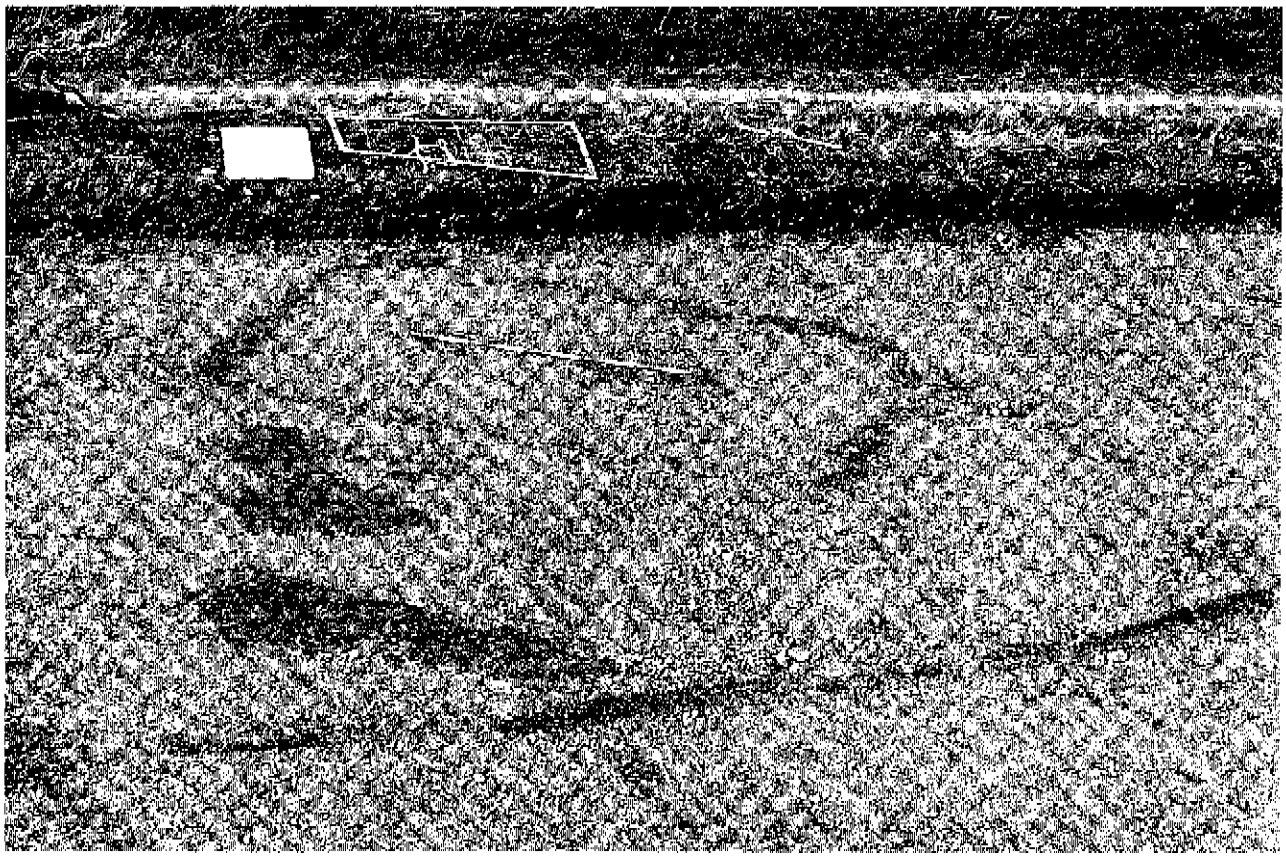


Plate 8 Undated rectangular enclosure 20657 (Fig. 10), possibly associated with the Iron Age cemetery, viewed from the south, with Anglo-Saxon grave 20655 in the foreground (Fig. 171)

long aligned east to west and 3 m wide, the eastern end being slightly rounded. The ditch was severely truncated, particularly on the south side, and was c. 0.3 m wide and up to 0.1 m deep. In the centre of the enclosure there was the faint trace of a linear slot oriented east–west, measuring 2.2 m long by 0.2 m wide, but there was no direct evidence that the structure had enclosed a burial. It was not sufficiently diagnostic in its form to be assigned a date with any degree of confidence, but its orientation and position suggest it was contemporary with the Iron Age enclosures.

3 Pyre Sites and other Pyre-related Features

The clearly identifiable sites of 11 pyres were recorded on the margins of, and outside, the cemetery, with at least a further eight features also indicating the possible positions of pyres. The most readily recognisable of these features consisted of shallow X, Y, or T-shaped cuts, the arms of which are considered likely to have formed ventilation channels running under the pyre in order to aid combustion. The fills within these cuts contained variable quantities of either undisturbed or redeposited pyre debris, consisting of charcoal, burnt soil, cremated human bone, burnt flint and gravel, and the remains of animals and objects burnt on the pyres (Pl. 9).

In a few cases there were signs of *in situ* burning of the ground surface within and around these features, but in many others such evidence was missing and the fills were mixed. While this may be due to damage by cultivation it is considered more likely to be the result of deliberate reworking of the remains of the pyre. However, truncation caused by cultivation could have resulted in not all pyre sites surviving in such clearly recognisable forms. In many cases, therefore, it is not possible to distinguish solely on the basis of their form between truncated pyre sites and other features evidently associated with the cremation process and termed here 'pyre-related features'. Neither is it possible to define them on the basis of their contents, as the fills of some of the pyre-related features are indistinguishable from those of some of the pyre sites, examples of both containing large quantities of charcoal, sometimes apparently carefully laid out, and also other pyre debris. As the deposits on pyre sites are considered to have been mixed after use, the quantity of material is not a reliable indicator.

For these reasons it is considered that the category of pyre-related features is likely to include features with different functions and origins. These will include pyre sites, either truncated T-shaped types, or other less clearly recognisable forms, as well as natural or other deliberately-made hollows into which pyre debris either has been deliberately deposited or, given the quantity of such debris likely to be present at the site, found its way by other processes.

20578

There was a single isolated pyre site (20578) just beyond the north-west limits of the cemetery, at SU 89544 06713 (Figs 11; 37). It consisted of a linear cut, c. 1.8 m long and 0.5 m wide,

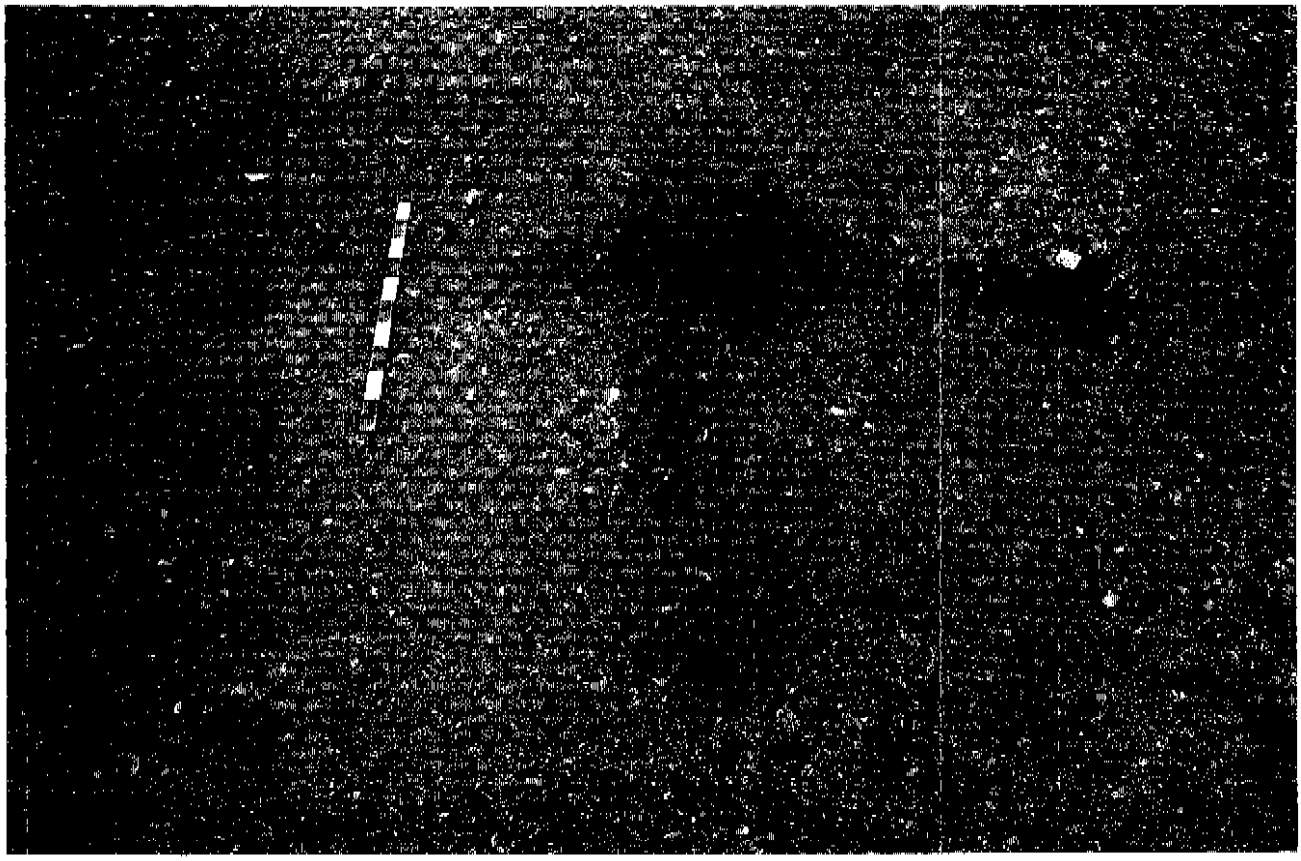


Plate 9 A pre-excavation view, from the south, of Iron Age pyre site 20717 showing the spread of charcoal within the gullies surrounded by a wider area of reddish burnt soil (Fig.18). The eastern arm of the pyre site is cut by Iron Age grave 20680 (Fig. 107)

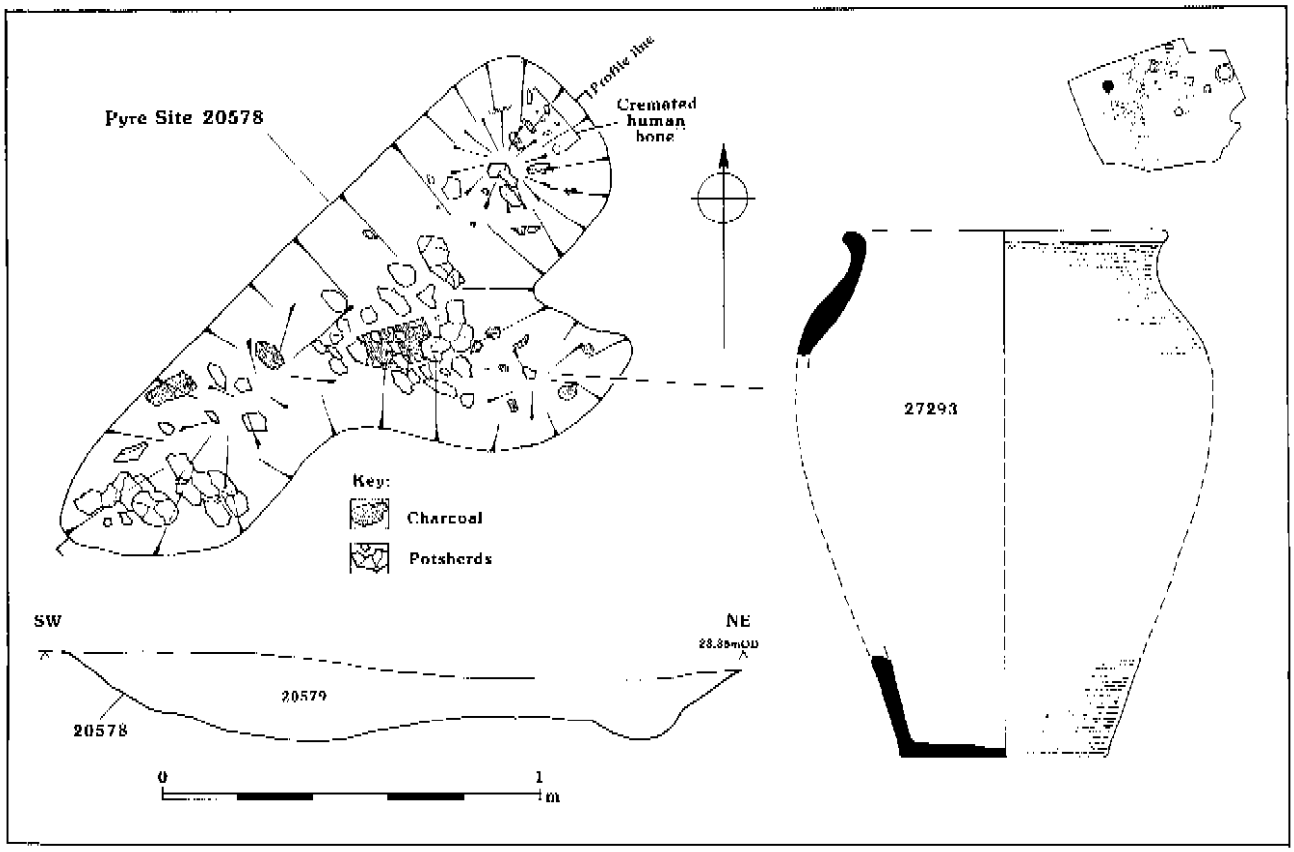


Figure 11 Pyre site 20578: plan and profile with rim and base of jar of unknown form, fabric F4, handmade, burnt (ON 27293)

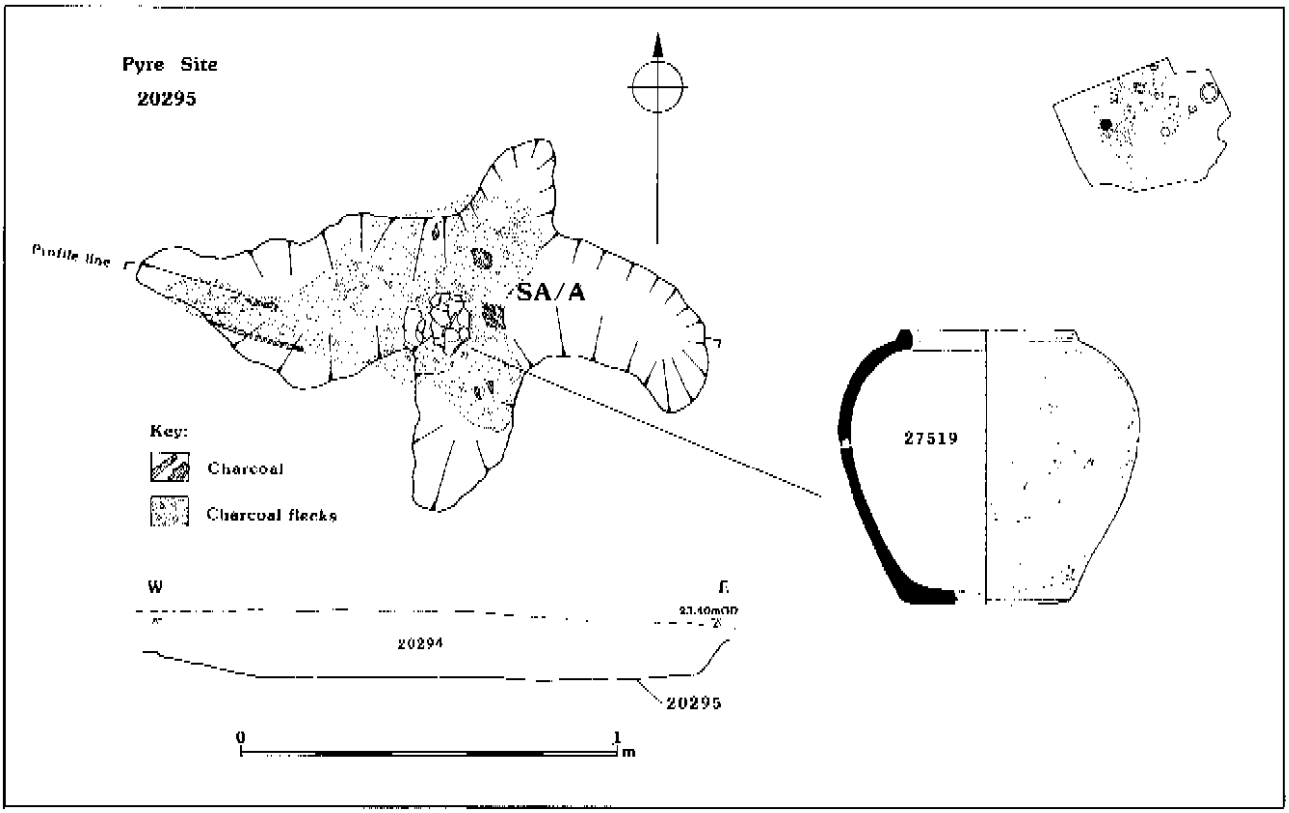


Figure 12 Pyre site 20295: plan and profile with ovoid bowl of form B231 in fabric G7, handmade, burnished inside and out (ON 27519)

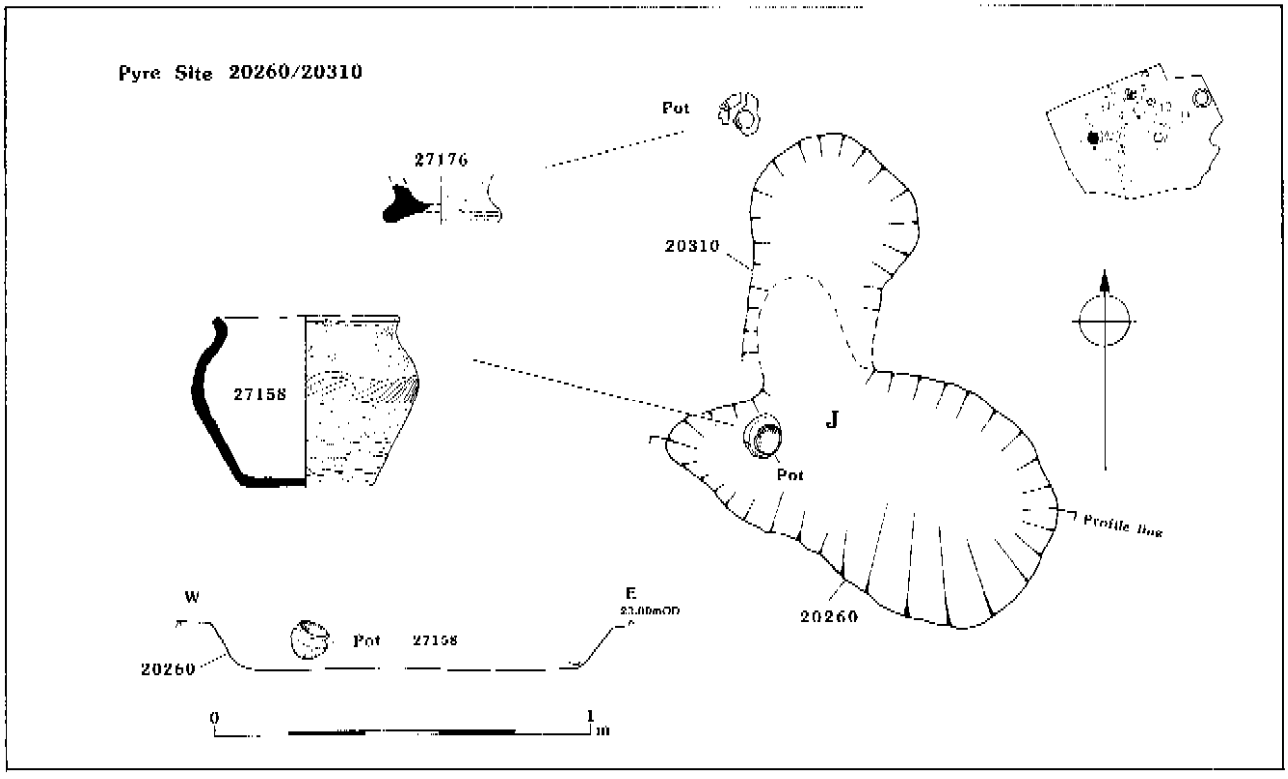


Figure 13 Pyre site 20260/20310: plan and profile with pottery vessels. ON 27158, rounded bowl, form B321, fabric F3, handmade, burnished exterior with band of burnished curvilinear hatching below shoulder and ON 27176, pedestal base from jar or bowl, fabric G5, handmade, burnt

aligned north-east to south-west with a short arm running east midway along the south side, forming a stunted T-shape. It had a maximum depth of 0.08 m, there being slight depressions in the base of each arm. The dark brown silty loam fill (20579) contained lumps of charcoal and a large quantity of burnt flint and stone, as well as a small amount of cremated human bone (13.5 g), most of it from the north-eastern end of the feature. There were also many sherds of burnt pottery (Fig. 11) spread across the surface of the fill, and an iron nail shank. This feature appears to have been severely truncated, but its shape and contents suggest that it was a pyre site.

20250 and 20300

Some 13–23 m to the south of feature 20578, centred on SU 89548 06697, there was a group of eight pyre sites or pyre-related features immediately outside the western limits of the cemetery. To the north-west, there was an irregularly shaped feature (20250), approximately X-shaped in plan, measuring c. 1 m east to west and north to south (Fig. 37). Its fill (20249), which had a maximum depth of 0.2 m, contained towards the base an X-shaped spread of large pieces of charcoal, as well as sherds of burnt pottery (Fig. 38), pieces of burnt flint and a few fragments of cremated human bone (2.3 g, infant). The edge of the southern arm of the cut showed some signs of *in situ* burning, and although this feature is small in comparison with pyre sites on the eastern perimeter of the cemetery, the other pyre sites in this group are of equivalent dimensions. Immediately to the north of the pyre site (Fig. 37), there was an approximately rectangular pyre-related feature (20300). Its fill (20301) contained a large quantity of charcoal, burnt flint, fragments of an iron brooch and sherds of burnt pottery from a single vessel as well as a quantity of cremated human bone (264.3g, adult) (Fig. 38).

20295

Pyre site 20295 was positioned approximately 2 m to the east of pyre site 20250 (Figs 12; 37). It had a slightly irregular X-shape, its long axis, aligned east to west, measuring 1.5 m, and its north to south axis measuring 1 m. It had a maximum depth of 0.1 m, and contained mixed pyre debris within its fill (20294). This consisted of small quantities of charcoal, fragments of cremated human bone (94.6 g, sub-adult/adult), and, at the centre of the cut, sherds of a single pot (Fig. 12).

20260/20310

Two overlapping features (20260 and 20310), arranged in an approximate L-shape, which were recorded immediately south of pyre site 20250, proved on excavation to be a single feature, considered to be the truncated remains of another pyre site (Figs 13; 37). The two arms of the cut run to the north-east and the south-east, with part of a possible third arm to the north-west. The fill (20259/ 20309), which was almost devoid of cremated human bone (0.1 g, juvenile), contained a large quantity of charcoal along the base of the cut and some burnt flint, as well as yielding a complete burnt pot at the junction of the arms, and the base of another (Fig. 13).

20283

Some 6 m to the south of feature 20260/20310, there was a small X-shaped pyre site (20283), with its axes aligned north-north-west to south-south-east (1.2 m long) and east-north-east to west-south-west (1.35 m long), the bases of each arm sloping downwards from the centre towards the ends (Figs 14; 42). It was filled with a dark brown silty loam (20282) containing some large pieces of charcoal. The gravel on the base of the cut was discoloured, possibly by burning. No cremated human bone was recovered.

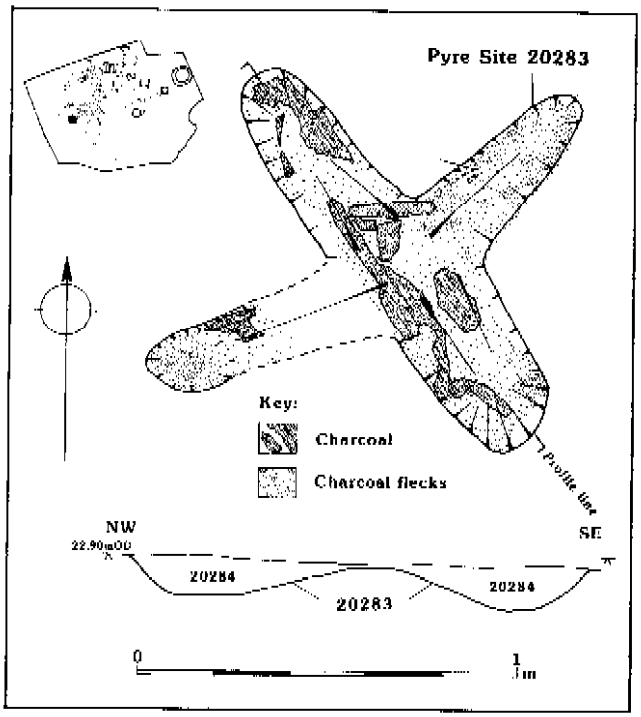


Figure 14 Pyre site 20283: plan and profile

20234, 20068 and 20546

Three other pyre-related features were recorded among this group of pyre sites. One, in the form of a crescent-shaped cut (20234) c. 1.3 m wide and 0.2 m deep, was situated 2 m to the north-east of pyre site 20283 (Fig. 42). Its fill (20233) contained moderate amounts of charcoal, cremated human bone (66.6 g, subadult/adult), and sherds from at least two pots, as well as an iron object, perhaps a latch lifter or key (Fig. 28). Its irregular shape may suggest a truncated pyre site. Its base was a dark grey but this may be due to staining from redeposited charcoal rather than *in situ* burning. The second feature (20068) consisted of a very shallow round cut, 1.1 m in diameter (Fig. 37) filled with a brown silty loam fill (20069) containing charcoal, cremated human bone (22.1 g, older subadult/adult), burnt flint, and a fragmented, but originally complete, iron brooch (Fig. 27). The third feature (20546), situated some 6 m west of the cemetery (Fig. 42) consisted of a small spread of charcoal and burnt soil, containing cremated human bone (59.9 g, subadult/adult), as well as burnt flint, sherds of pottery, a number of copper alloy fragments, some of which were melted, and an iron ring (Fig. 28).

Grave 20252

A single cremation burial on the western side of the cemetery also contained a large quantity of pyre debris. Feature 20252, at SU 89552 06687, was an approximately rectangular cut measuring 0.9 m by 0.8 m and 0.28 m deep (Figs 42; 82). It contained a large quantity of cremated human bone (740.7 g, adult), much of it at the base of the cut, with concentrations in the four corners. There were at least two iron brooches, but no pots. Unlike the majority of burials, however, it is clear that after the placing of the burial deposit, the grave had been filled with pyre debris, the grave fill (20251) containing a very large quantity of charcoal, much of it as recognisable pieces of wood, as well as fragmented and burnt pottery. The size, location, and contents of this feature distinguish it from all other graves within the cemetery. Only two other graves contained significant, although smaller, quantities of charcoal, and as

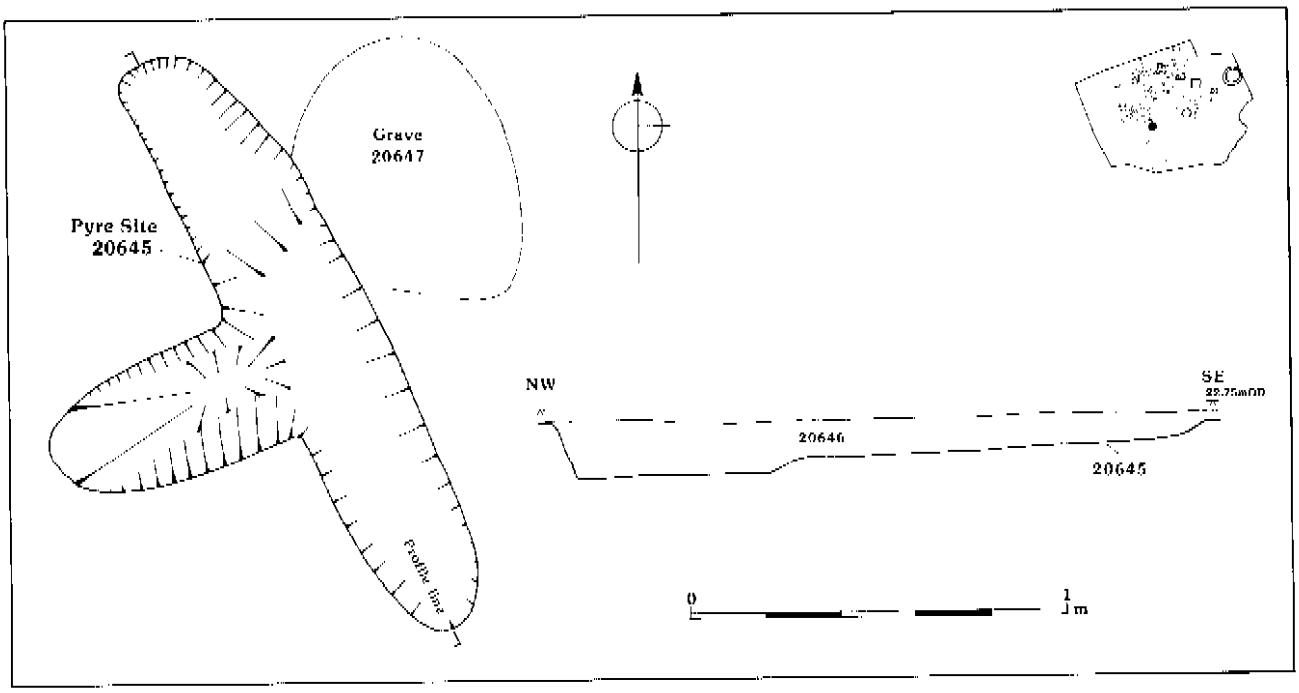


Figure 15 Pyre site 20645: plan and profile

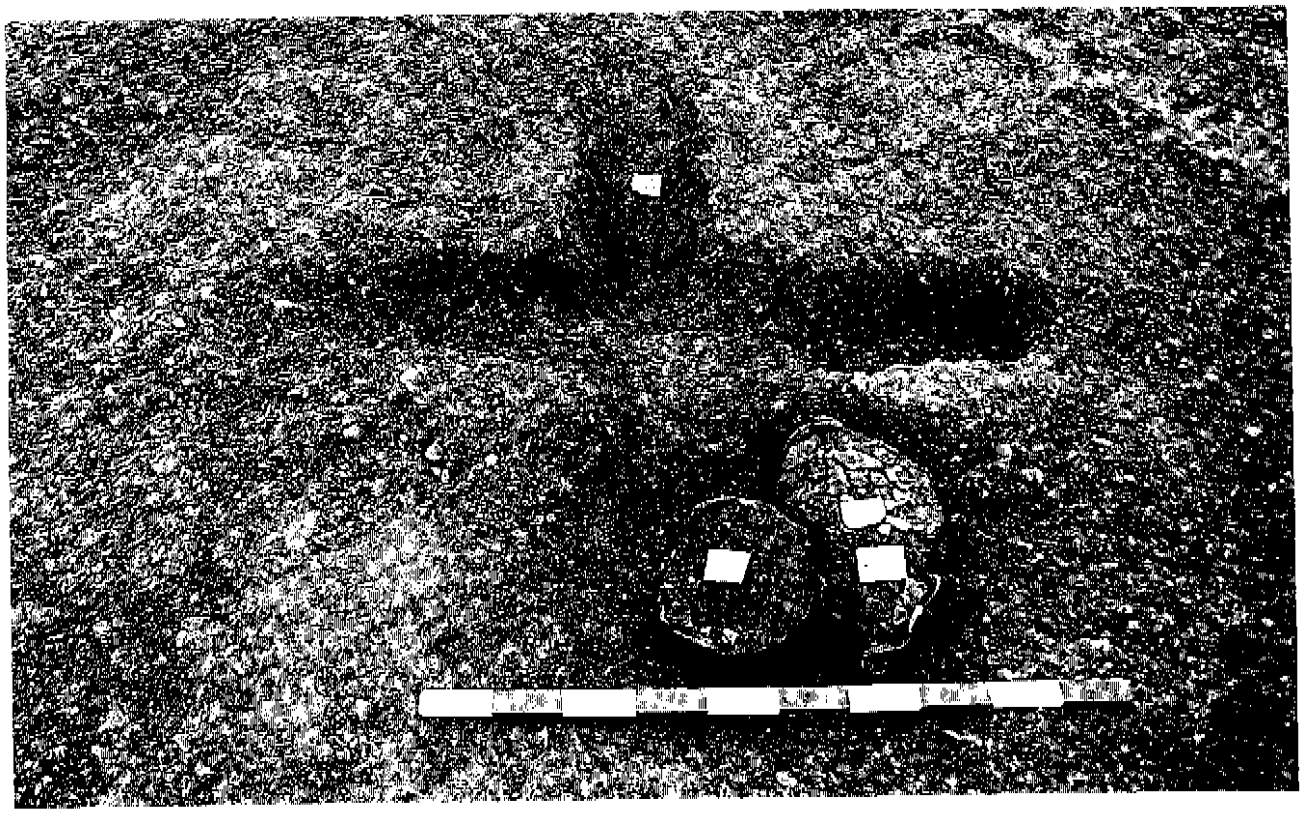


Plate 10 Iron Age T-shaped pyre site 20645 from the north-east, cutting the edge of truncated grave 20647 (Fig. 104), to the right . The 12.5 g of cremated bone in the grave (age and sex not identified) was accompanied by three pottery vessels

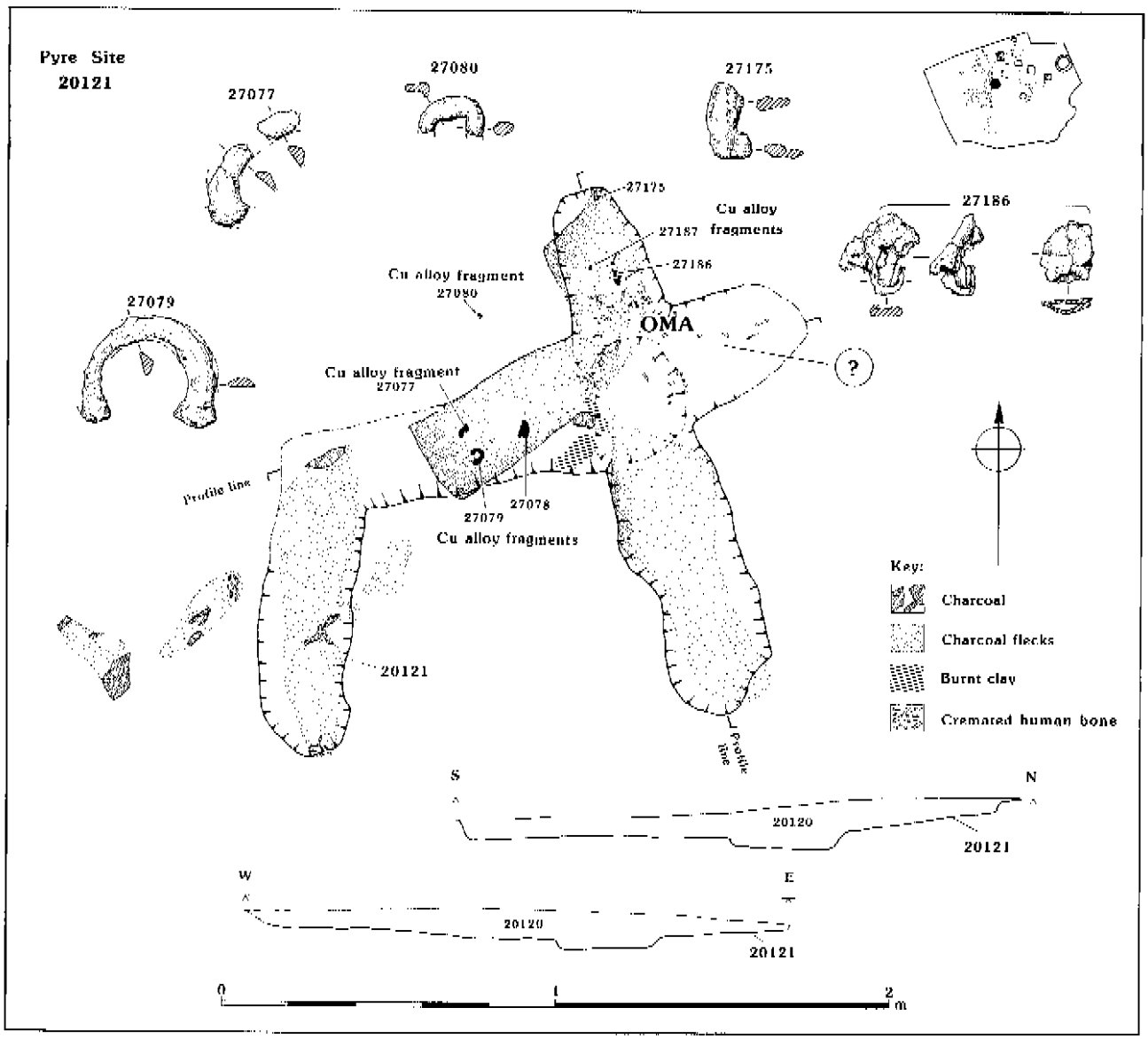


Figure 16 Pyre site 20121: plan and profiles, with copper alloy penannular objects (ON 27077, 27079) and 'melted' fragments (ON 27080, 27175, 27186)

both of these (20647 and 20680) are closely associated with pyre sites (20645 and 20717 respectively, below) it may be that the charcoal in them is residual.

20645

Pyre site 20645, which just cut the western edge of grave 20647 at SU 89565 06688, is the more southerly of a pair of T-shaped pyre sites, 2 m apart, towards the south-east of the cemetery (Pl. 10; Figs 15; 43). It measured 1.7 m along its main north-north-west to south-south-east axis, with a 0.6 m long arm running from the centre of the western side. There was a concentration of pyre debris, including charcoal, burnt flint, cremated human bone (15.4 g, subadult/adult), a copper alloy fragment, and an iron nail shank in the western arm of the feature, although, within the main channel, it appeared to be mixed in with the dark grey silty loam fill (20646).

20318

Immediately to the north, pyre site (20318) had its main axis, measuring 2 m long, aligned north to south, with a 0.8 m long arm to the west (Fig. 43). It had a maximum depth of 0.1 m and its base and sides were coloured red by burning. Its fill (20317) contained a large quantity of charcoal and burnt soil, and yielded a significant quantity of cremated human bone (368.2 g, older adult), a bone toggle, six sherds of burnt pottery, and an iron nail shank and small ring, as well as fragments of copper alloy (Fig. 28). It also contained pieces of burnt quern-stone, similar to the adjoining quern fragments recovered from two postholes (20192 and 20194; p. 138), c. 8 m to the west.

Another group of pyre sites and pyre-related features was centred SU 89570 06712 on the eastern perimeter of the cemetery. It consisted of three pyre sites (20121, 20717, and 20776) arranged more or less in a line along the edge of the burial area (Fig. 38), with another pyre site (possibly two) situated some 7 m to the east (20770 and 20693). There were at least five other features within the immediate vicinity containing pyre debris (eg. 20128 and 20130).

20121 and 20660

The most southerly of the pyre sites (20121), was approximately X-shaped (Figs 16; 38). Its southern and western arms, 0.8 m and 1.0 m in length respectively, were longer than those, measuring 0.4 m, running to the north and east. The end of the

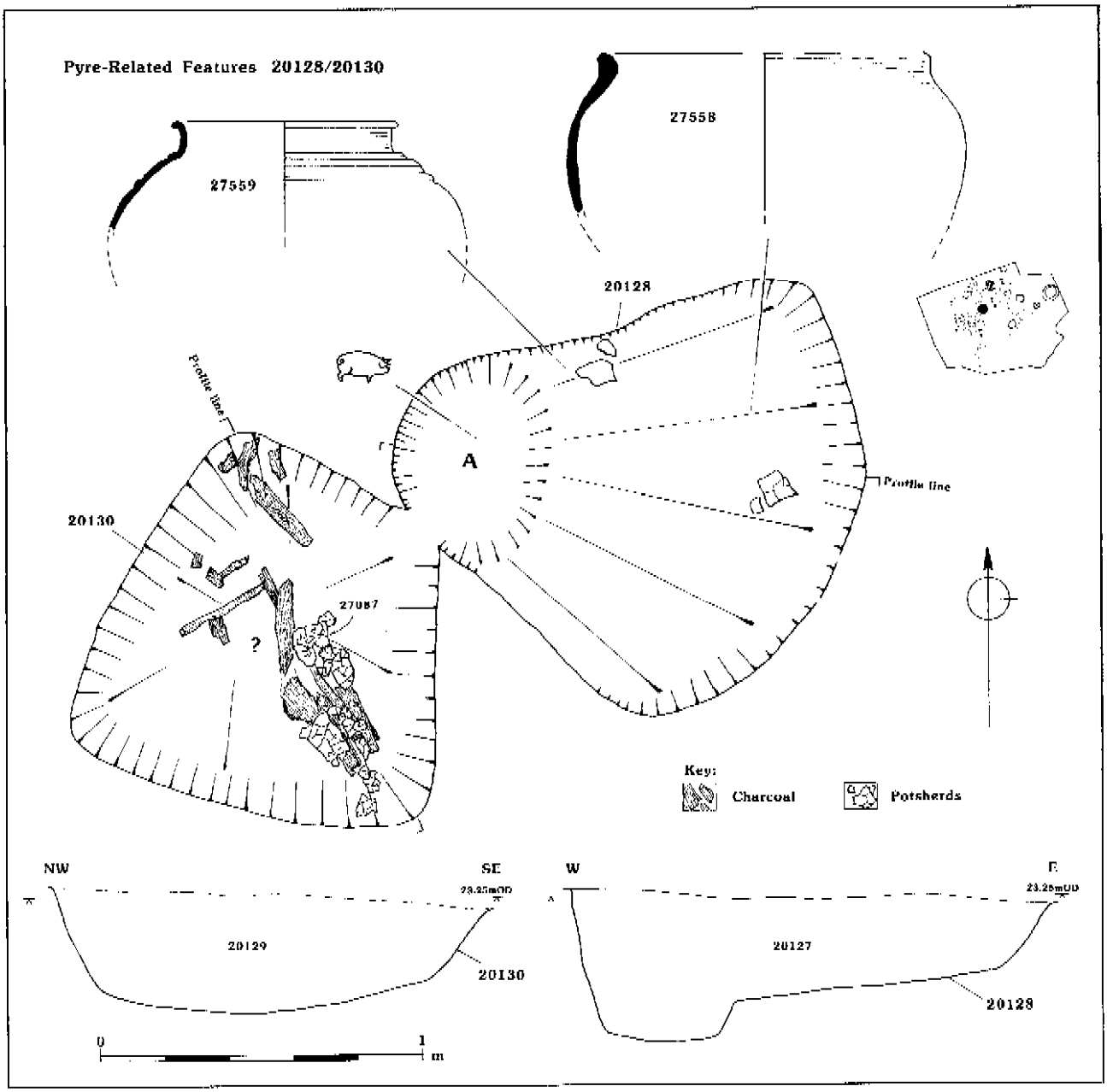


Figure 17 Pyre-related features 20128 and 20130: plan and profiles with pottery vessels. ON 27558, bead-rimmed ovoid bowl, form B230, Fabric Q11, handmade; ON 27559, high-shouldered jar, form J010, fabric Q5, ?wheelthrown, burnished exterior, neck and shoulder cordons

western arm also had a 0.7 m long extension running south-south-west, unless it was a separate pyre site which could not be distinguished. This is possible as the edges of the cut were not clearly defined, but its fills (20120 and 20302), incorporated patches of possibly *in situ* burnt soil, as well as concentrations of charcoal and other pyre debris. This debris included, near the centre of the cross, a significant quantity of cremated human bone (422.7 g, older mature adult), possibly representing a single cremation burial, with two penannular copper alloy objects and a number of copper alloy fragments (Fig. 16), a nail shank, and burnt and unburnt pottery sherds in a number of different fabric types. A small circular pyre-related feature (20660), containing a high proportion of charcoal, as well a small quantity of cremated human bone (0.9 g) and sherds of pottery from a single vessel (Fig. 28) in its fill (20700 and 20701), was 2 m to the south-west (Fig. 38).

20128 and 20130

There were two adjacent features (20128 and 20130) containing pyre debris, c. 2 m north-west of pyre site 20121 (Figs 17; 38). The more westerly was a sub-rectangular steep-sided cut (20130), approximately 1 m square and c. 0.4 m deep. It had a dark grey silty clay fill (20129), on the surface of which was a spread of pottery sherds from a single vessel, together with five sherds from at least two other vessels. The fill also contained a few fragments of cremated human bone (11.4 g), as well as a large quantity of charcoal, including some large pieces in a spread between the north and south corners. Immediately to the east, and cut by the northern corner of 20130, was an irregularly-shaped feature consisting of a 0.47 m deep oval cut (20128), c. 0.5 m by 0.7 m, with a shallower fan-shaped extension, 1.4 m wide, sloping down into it on the eastern side. It also had a dark grey silty clay fill (20127) mixed

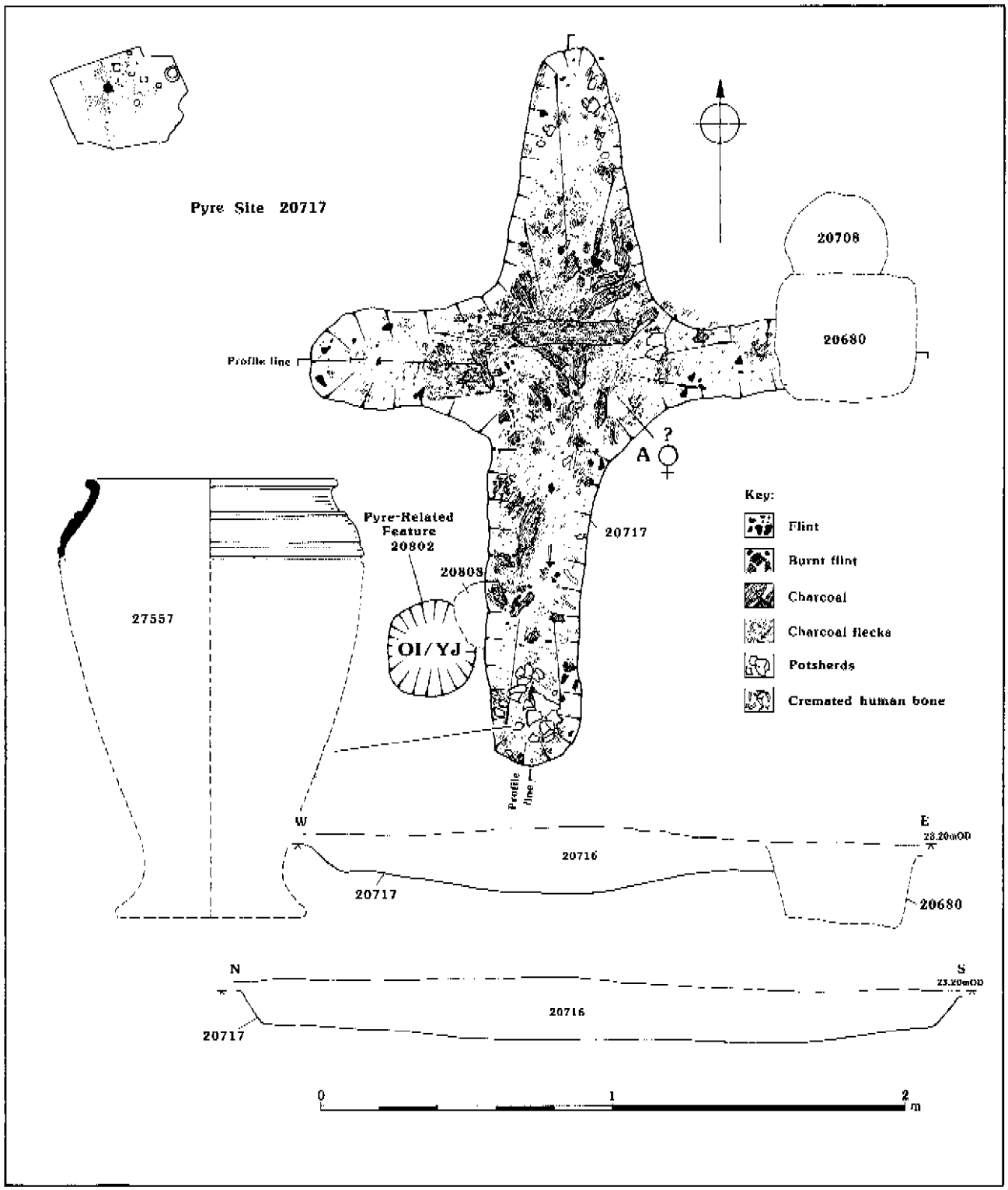


Figure 18 Pyre site 20717 and pyre-related feature 20802: plan and profiles, with ON 27557 high-shouldered jar, form J010, fabric Q7, handmade, neck and shoulder cordons

within which was a large quantity of pyre debris, including charcoal, burnt soil, burnt flint, cremated human bone (99 g, adult), and sherds of burnt and unburnt pottery in several different fabrics (Fig. 17).

20717 and 20802

Pyre site 20717, some 3 m north-north-west of pyre site 20121, was X-shaped with its longer axis, measuring 2.5 m, aligned north to south (Pl. 9; Figs 18; 38). The shorter east to west axis was at least 1.6 m long but the eastern arm was cut by grave 20680. Each arm of the feature consisted of a shallow channel averaging 0.3 m wide and 0.1 m deep but getting wider and deeper towards the centre of the cut. The feature contained a brown gravelly soil (20716) in the upper parts of which were large quantities of pyre debris. This included, towards the centre of the feature, a large amount of charcoal, with some lengths of burnt poles being up to 0.45 m long. Quantities of cremated human bone (61.1 g, adult) were recovered primarily

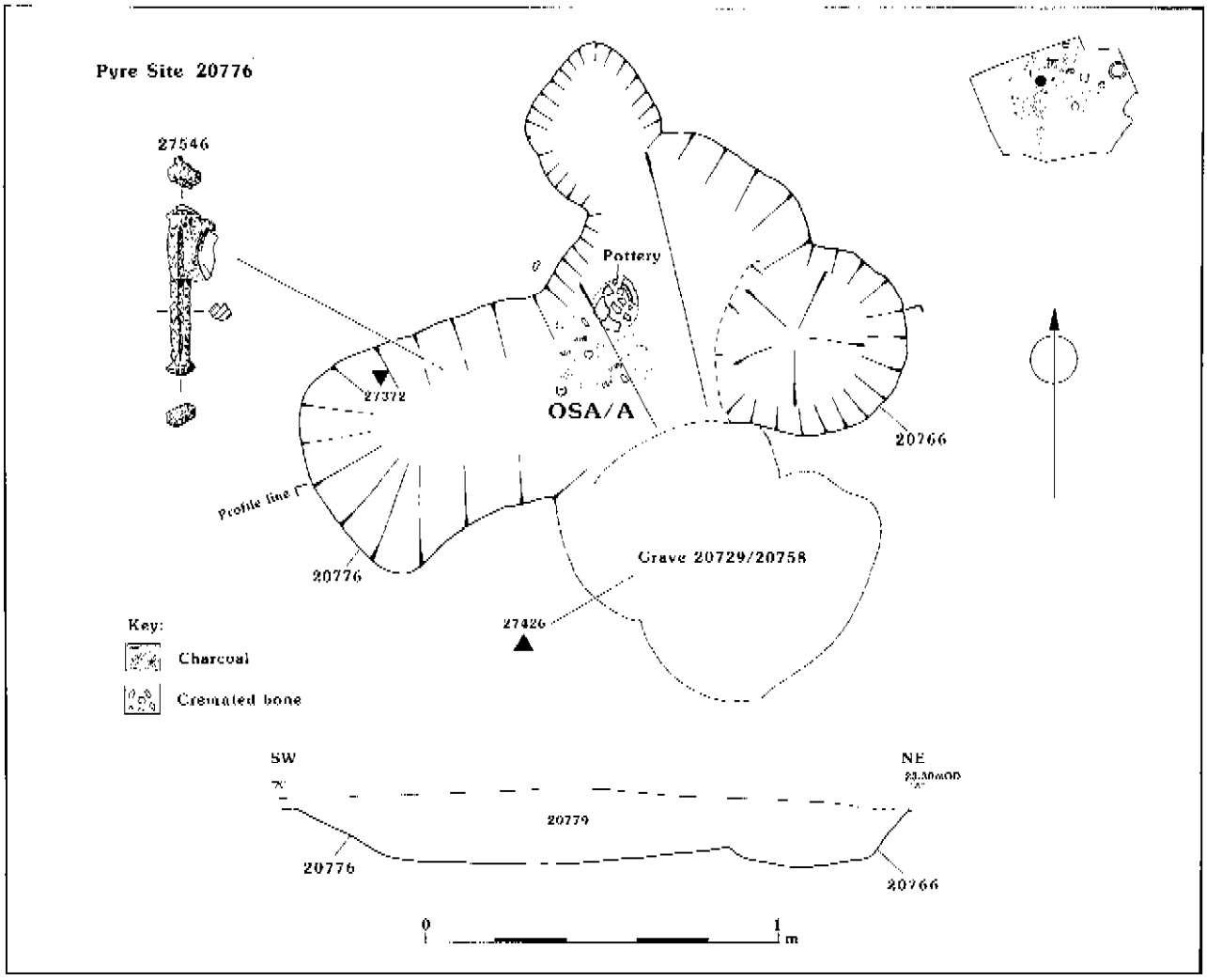


Figure 19 Pyre site 20776: plan and profile with iron holdfast (ON 27546)

from the north and south arms, with a large number of pottery sherds, mostly from a single vessel, being found at the ends of these arms (Fig. 18). A small and very shallow feature (20802), immediately west of the southern arm of the pyre site and possibly associated with it (and west of posthole 20808), contained charcoal and a small concentration of cremated human bone (14.8 g, older infant/young juvenile) in fill 20801.

20776

Immediately north of pyre site 20717 was an irregular arrangement of features (Figs 19; 38). This included pyre site 20776 which was at least 1.7 m wide east to west but the southern arm was entirely cut by grave (20729/20758), and the remaining arms varied in size, dimensions, and shape. The main fill (20779) consisted of a brown silt loam incorporating pyre debris, including charcoal, burnt flint, 12 small fragments of copper alloy and an iron structural fitting (Fig. 19), possibly a holdfast, and cremated human bone (49.3 g, older subadult/adult) distributed evenly through it. The short eastern arm of the feature consisted of a circular concave depression (20766), with a concentration of pyre debris (including 10 g of cremated human bone) at the centre of its fill (20767).

20414

Pyre site 20414, was situated some 7 m to the east of pyre site 20776 and therefore well beyond the cemetery (Pl. 11; Figs 20; 39). It was X-shaped with its longer axis, measuring 2.6 m, aligned east to west. The shorter north–south axis was at least 2 m long but the southern arm was just cut by feature 20357. Each arm consisted of a moderately steep-sided channel up to 0.2 m deep, the north and south arms averaging 0.35 m wide, the east arm being only 0.2 m wide. The western arm, which was 0.4 m wide, had within the base of its terminal a circular cut, possibly a posthole, 0.25 m in diameter and 0.15 m deep. The feature was filled with a brown silty clay (20413), increasingly gravelly towards the base, containing flecks of charcoal, a small quantity of cremated human bone (20 g, subadult/adult) and six iron nails and ten nail shanks (Fig. 20). Pieces of burnt flint and small patches of reddish burnt soil also provided evidence of burning, although the manner with which these were mixed within the soil matrix of the fill suggests that they may have been redeposited within the cut rather than being burnt *in situ*.

20681 / 20416 and 20357

Two features were possibly associated with pyre site 20414 (Fig. 39). Immediately to the north-west was a roughly circular feature (20681), initially under-excavated and interpreted as a small posthole (20416, fill 20415), but subsequently shown to be c. 0.7 m in diameter and 0.2 m deep with steep sides and a flat base. Its clay loam fill (20682) contained burnt soil and charcoal, as well as sherds of pottery and two featureless lumps of pottery, indicating that it was probably a pyre-related feature. Feature 20357, which cut the end of the southern arm

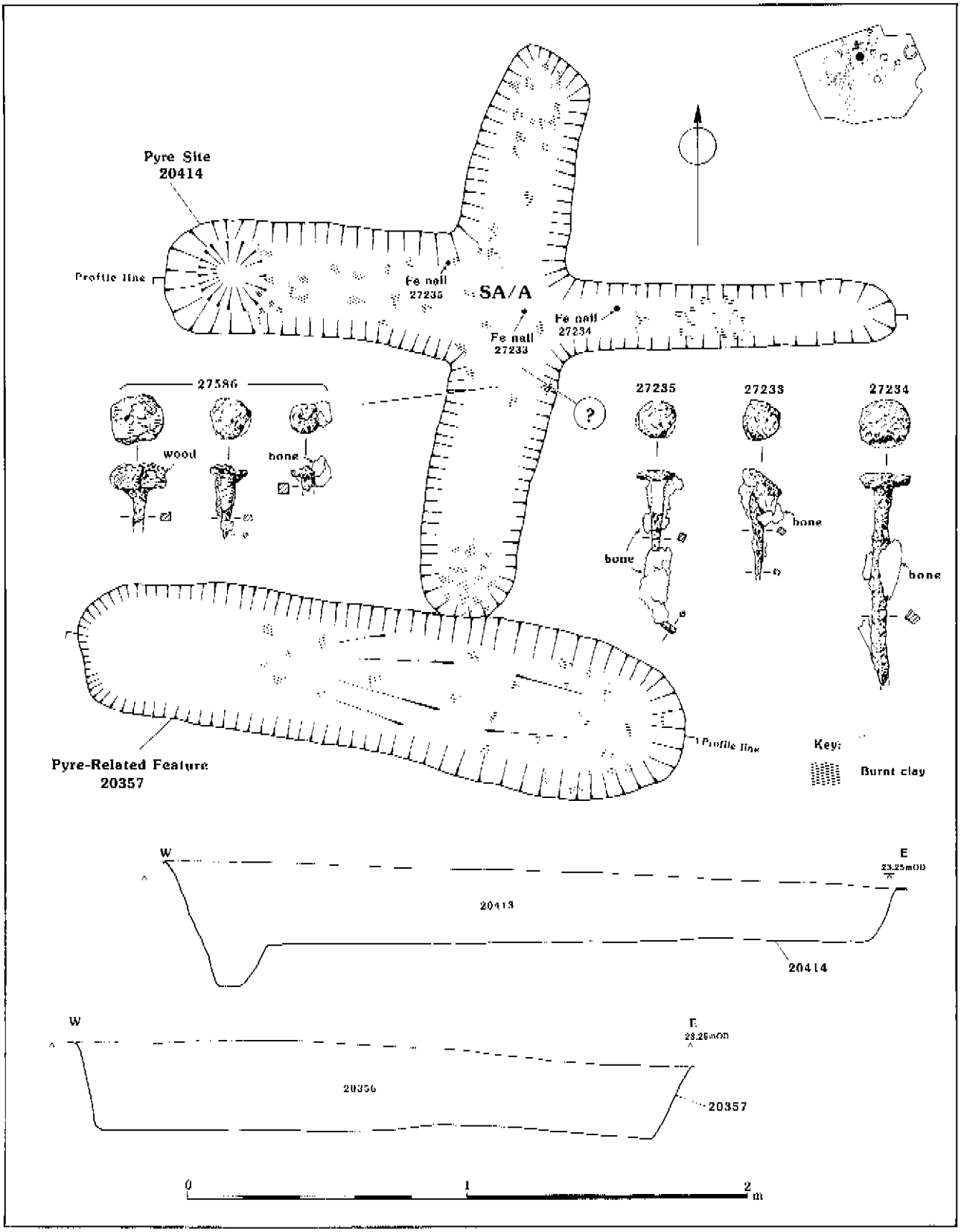


Figure 20 Pyre site 20414 and pyre-related feature 20357: plans and profiles, with nails (ON 27233, 27234, 27235, 27586)

Plate 11 Iron Age X-shaped pyre site 20414 and adjacent pyre-related feature 20357, from the north-west (Fig. 20)

of the pyre site, consisted of a linear cut, aligned east to west, 2.2 m long, 0.5–0.6 m wide and up to 0.25 m deep (Fig. 20). It contained a brown gravelly fill (20356) in which there was a large quantity of charcoal, with one large piece of burnt wood on the base of the cut at the west end. The fill also yielded burnt flint, burnt soil, and a few fragments of cremated human bone (0.7 g), with a few pottery sherds on the surface at the east end. The material did not appear to have been burnt *in situ*.

20770, 20693, and 20709

Approximately 4 m south-south-east of pyre site 20414 was a large irregular shaped feature (20770) with a very irregular shape (Figs 21; 39). Upon excavation it proved to be a shallow hollow, 0.2 m deep and approximately 2 m square in plan, with three slightly concave sides. The feature contained a fill of brown silt loam (20771), containing large quantities of burnt soil mixed in with it, as well a some fragments of charcoal and many iron nails (Fig. 21). There was a small cluster of cremated human bone fragments towards the south corner of the feature, with other fragments distributed through the fill (in total 359.9 g, adult). On the base near to the centre was a small patch of soil (20790) containing a concentration of charcoal. Two further small pyre-related features were recorded near this feature, one 2 m to the west (20693), the other (20709) 7 m to the south, containing 28.2 g (adult) and 1 g of cremated human bone respectively (Fig. 39).

20125

Feature 20125, at SU 89560 06716, was the only pyre-related feature located clearly within the distribution of graves in the cemetery (Fig. 22; 34). It was an irregular shaped cut approximately 1 m by 0.7 m, and 0.2 m deep with steep sides and a flat base. A large fragmented sherd of pottery showing signs of burning (Fig. 22) was exposed at the top of the brown silty loam fill (20126) as were flecks and fragments of charcoal, which increased in concentration towards the base of the cut. A small quantity of cremated human bone was recovered (2.6 g).

At the north end of the cemetery, just to the east of the distribution of graves, there was a further group of pyre sites and pyre-related features centred on SU 89564 06725 (Figs 34; 35). Although none had the distinctive X-shape of the other pyre sites. Other features in this general vicinity are more irregular in their form.

20355, 20124, 20266, and 20066

Feature 20355, towards the south-east end of the group, consisted of a 0.4 m wide slot, 2.3 m long aligned approximately north to south, with a 0.6 m long arm on the eastern side, forming a very irregular T-shape (Figs 23; 35). Its fill (20354) contained charcoal, burnt soil, burnt flint, and three tiny fragments of burnt pottery, but no cremated human bone. Immediately to the east, there was a sub-rectangular feature (20124), measuring 1.1 m north to south and 0.6 m wide, with a shallow sloping base 0.15 m deep at the south (Fig. 23). It had a brown silty loam fill (20123) containing some large pieces of charcoal lying along the line of the cut, as well as burnt soil, burnt flint, the head of a nail (Fig. 23), and a few fragments of cremated human bone (5.6 g). There was a similar feature (20266), 3 m to the north-west (Figs 24; 35), its fill (20265) also containing pyre debris including cremated human bone (20.4 g) and sherds of burnt pottery. There was also a spread of burnt soil and charcoal (20066), containing up to three iron nail

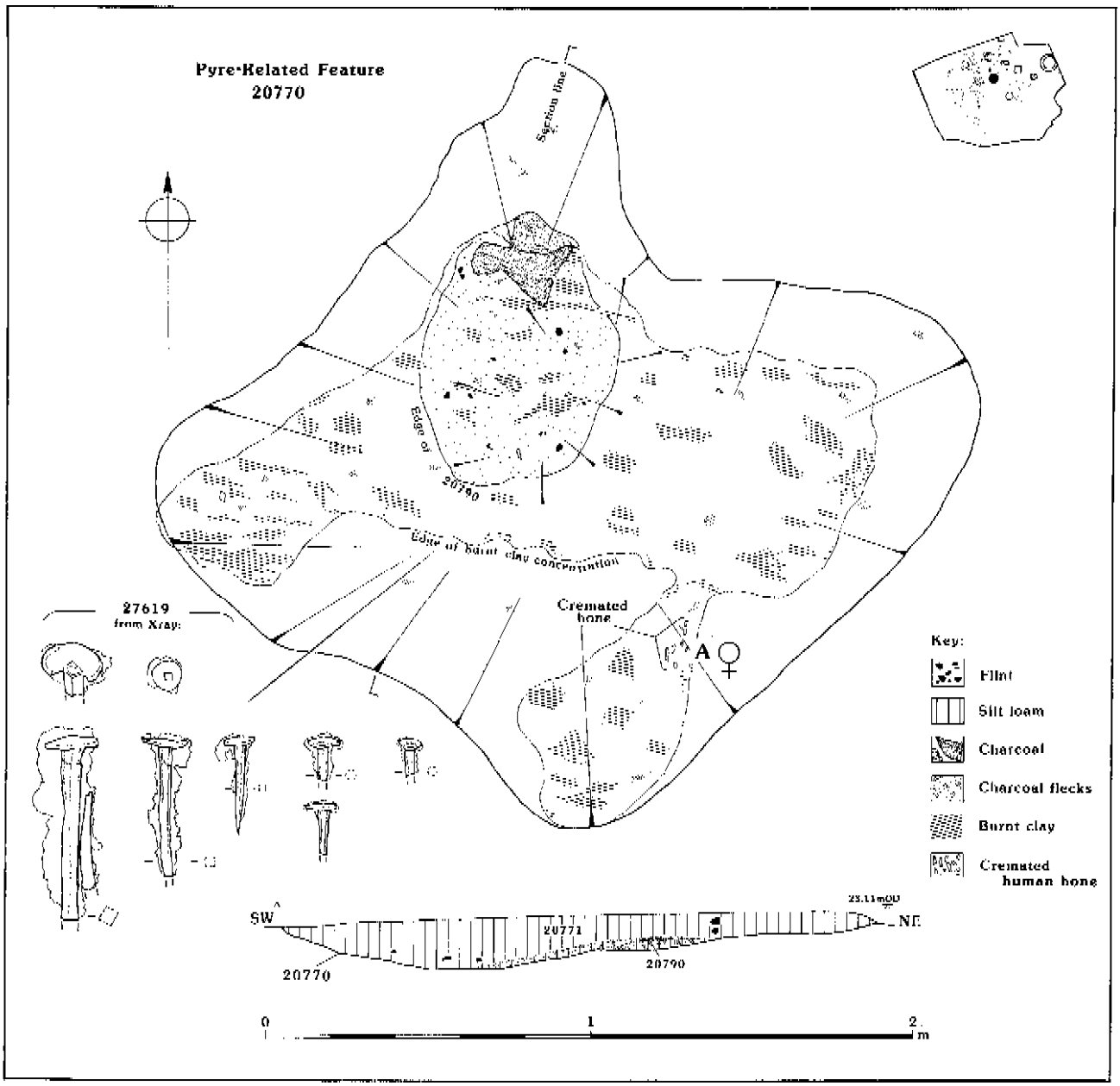


Figure 21 Pyre-related feature 20770: plan and section with nails (ON 27619)

fragments as well as 2.6 g of cremated human bone, near the centre of enclosure 20277 (Fig. 7).

20378 and 20258

Feature 20378, 7 m to the north-west of pyre site 20355, consisted of a similar narrow linear cut 2.1 m long and 0.3 m wide aligned north-north-west to south-south-east (Figs 25; 34). It was c. 0.25 m deep with steep sides, and had two 0.1 m diameter stakeholes in the base, one at the southern end and one near the centre, with a further narrow slot in the base towards the northern end. It contained much evidence of burning throughout the fill (20379), including charcoal, burnt flint and much burnt soil, but only 0.8 g of cremated human bone. A nail and a possible iron brooch pin were recovered from the top of the layer (Fig. 25). The structure of the feature suggests a possible pyre site, the linear slot perhaps being a single ventilation channel. Approximately 1 m to the east, there was a vaguely sub-rectangular feature (20258), 2.2 m long and 0.9 m wide aligned, approximately north to south (Fig. 25; 34). It had shallow sides and a maximum depth of 0.15 m. Its brown silty clay fill (20257) contained patches of burnt soil and some large pieces of charcoal, as well as a large quantity of cremated human bone (369.8 g, young/mature adult) concentrated at the north end, and a number of iron nails (Fig. 25). The presence of burnt stones and burnt flint on the base, and around the edges, of the cut suggests the occurrence of *in situ* burning, pointing to the possibility that it too was a pyre site.

20417, 20348, and 20155

Immediately to the north of feature 20258 there was an oval feature (20417), 0.85 m by 0.6 m, with a shallow concave base 0.1 m deep (Fig. 34). It had a brown loam fill (20418), containing some charcoal and a high proportion of red burnt soil, as well as a fragment of sheet iron. The high degree of burning may indicate the remnants of a pyre site, but the high degree of truncation prevents closer identification. Approximately 1 m to the north-west, feature (20348) was at least 1.4 m long and 0.35 m wide, aligned north-north-west to south-south-east, but

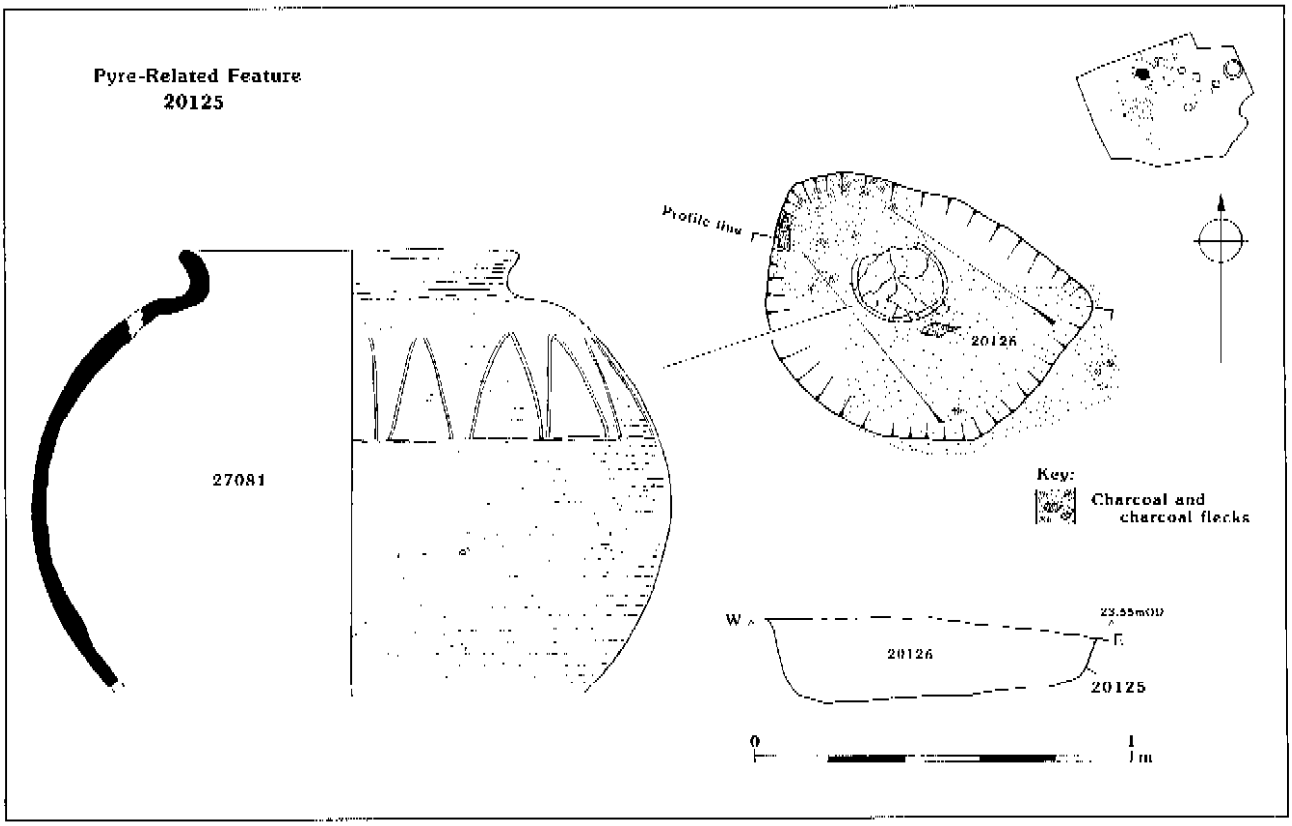


Figure 22 Pyre-related feature 20125: plan and profile, with rounded jar, form J320, fabric Q10, handmade, burnished decoration on shoulder (ON 27081)

was very truncated and survived to a maximum depth of only 0.02 m (Fig. 34). It contained in its fill (20349) a large quantity of charcoal along the base of the cut, some of it in large pieces, with a spread of burnt pottery sherds, from two vessels (Fig. 28). A few fragments of cremated human bone (1.9 g) were found under the charcoal. Immediately to the north of 20348, an approximately oval feature (20155), extending beyond the northern edge of the excavation area, also contained pyre debris (Fig. 34). It was 1.4 m long, aligned approximately east-north-east towest-south-west, and at least 0.5 m wide. It had a brown gravelly fill (20156), 0.15 m thick, containing burnt stone and flint, and patches of charcoal. A number of fragments of copper alloy were found at the top of the fill (Fig. 27), which also yielded a small quantity of cremated human bone (2.6 g, infant).

20702 and 20687

The most easterly group of possible pyre sites was located some 15 m north-east of the cemetery, centred on SU 89580 06728 (Figs 35, 36). There was a large T-shaped feature (20702) consisting of a narrow cut aligned north-east to south-west, 3.2 m long and c. 0.4 m wide, with a 2 m long arm running north-west from its mid-point. The feature was not excavated, but its shape, and the charcoal and burnt soil visible in its fill (20703), suggests that it was a pyre site. Some 2 m to the north there was another possible pyre site. This consisted of a linear feature (20687), c. 3.1 m long, aligned east to west, and 0.4 m wide, also containing abundant charcoal and burnt soil, as well as burnt flint, mixed in the brown silty clay fill (20688). Only its western end was excavated so it was not possible to determine whether the enlarged rounded terminal at the east end, and a smaller parallel linear cut running from its northern side, formed part of the same feature. No cremated human bone was recovered from the excavated section. A large posthole (20689), c. 0.8 m in diameter and 0.3 m deep, positioned midway along its southern side, also contained charcoal and burnt soil, most in the upper fill (20690), suggesting some association with the pyre site.

20052, 20409, 20212, 20264, 20747

There were up to nine other pyre-related features of varying size and shape around the two north-eastern pyre sites. Four shallow hollows with irregular shapes, centred on SU 89578 06720, contained quantities of pyre debris. Feature 20052, possibly a natural hollow in the ground measuring 2.6 m east to west by c. 1 m wide (Fig. 35), was filled with a brown sandy loam (20047), containing charcoal, burnt soil, an iron joiner's dog, two iron nails, and six iron nail shanks, and a few fragments of cremated human bone (19.2 g, adult) (Fig. 27). Feature 20409 was 2.1 m long aligned approximately north to south, and up to 0.8 m wide (Fig. 35). It was c. 0.45 m deep, with sloping sides, and had slots at either end, possibly for posts or some other timber structure. Its fill (20410) contained charcoal, burnt flint, burnt soil and a few fragments of cremated human bone (1.4 g), as well as a tapering iron bar (Fig. 28). Feature 20212 (Figs 26; 35) was 1.8 m long and up to 0.8 m wide, with a number of large pieces of charcoal on the base of the cut, and further charcoal, fragments of cremated human bone (12.7 g, subadult/adult), four iron nail shanks, and burnt sherds of pottery, probably from a single vessel, mixed throughout the fill (20211). Feature 20264 was oval in shape, 1.1 m long and 0.6 m wide (Fig. 36). The amount of burnt soil and the significant quantity of cremated human bone (176.5 g, older mature/older adult) in its fill (20263), which also contained charcoal, burnt flint, an iron needle, four nails, and two nail shanks, may point to this feature being the base of a

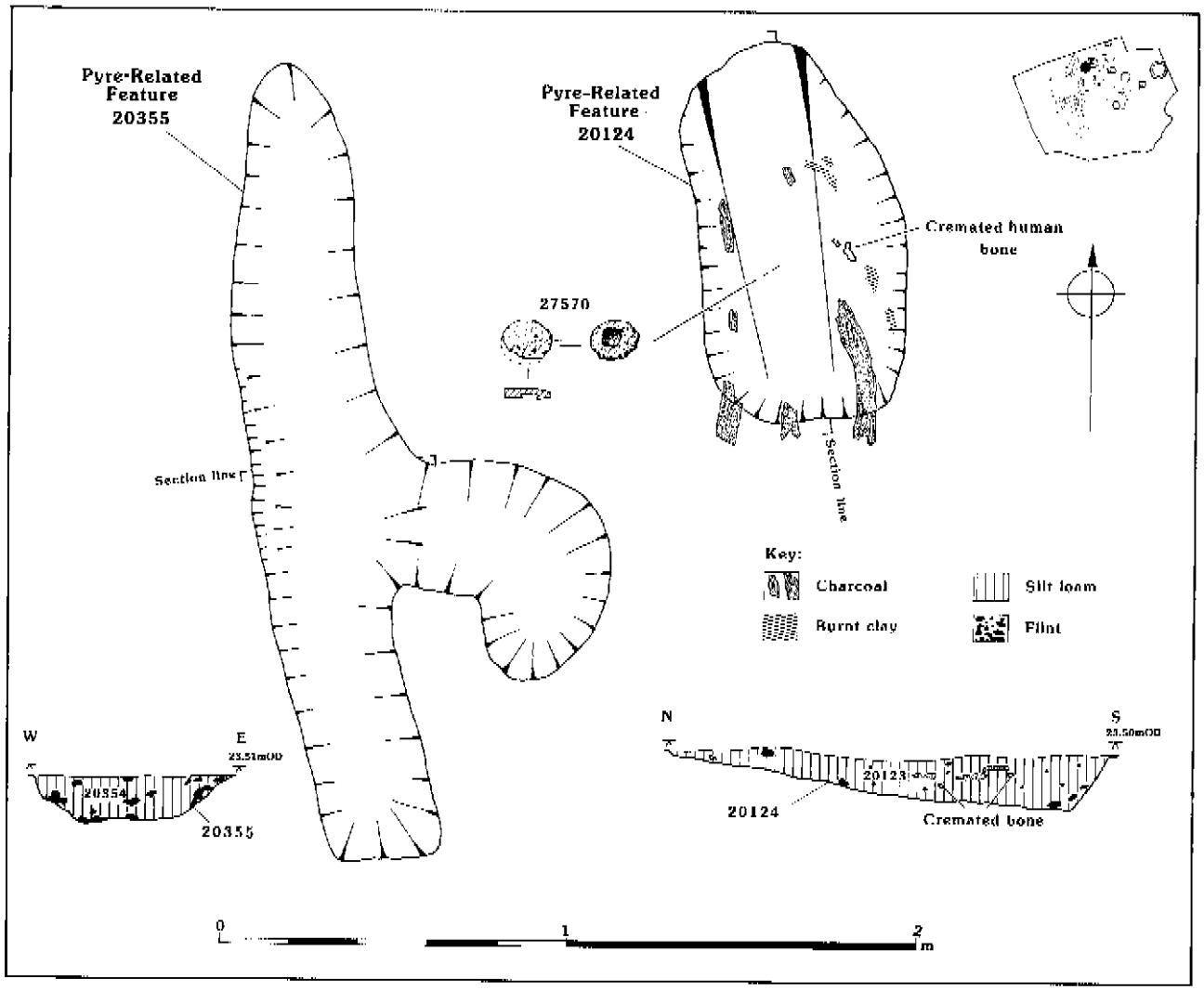


Figure 23 (above) Pyre-related features 20124 and 20355: plans and sections, with head of nail (ON 27570)

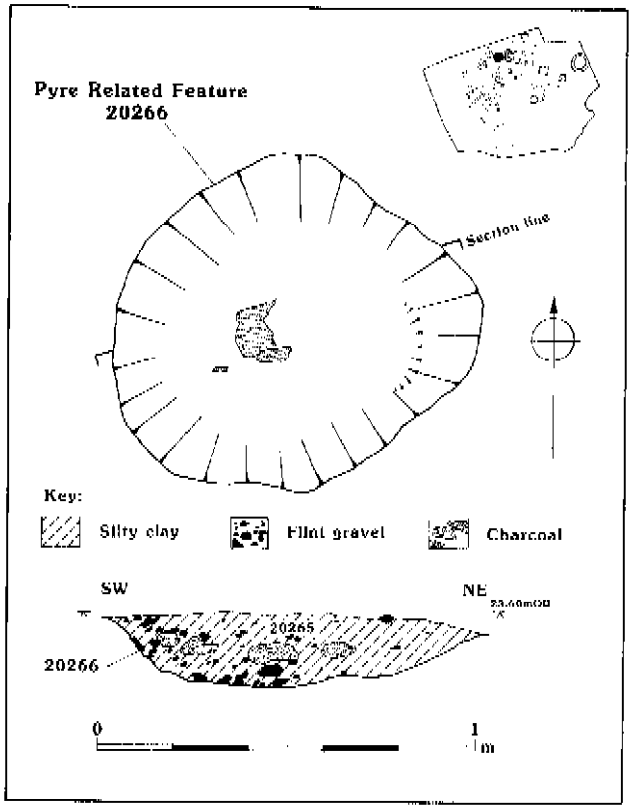


Figure 24 (left) Pyre-related feature 20266: plan and section

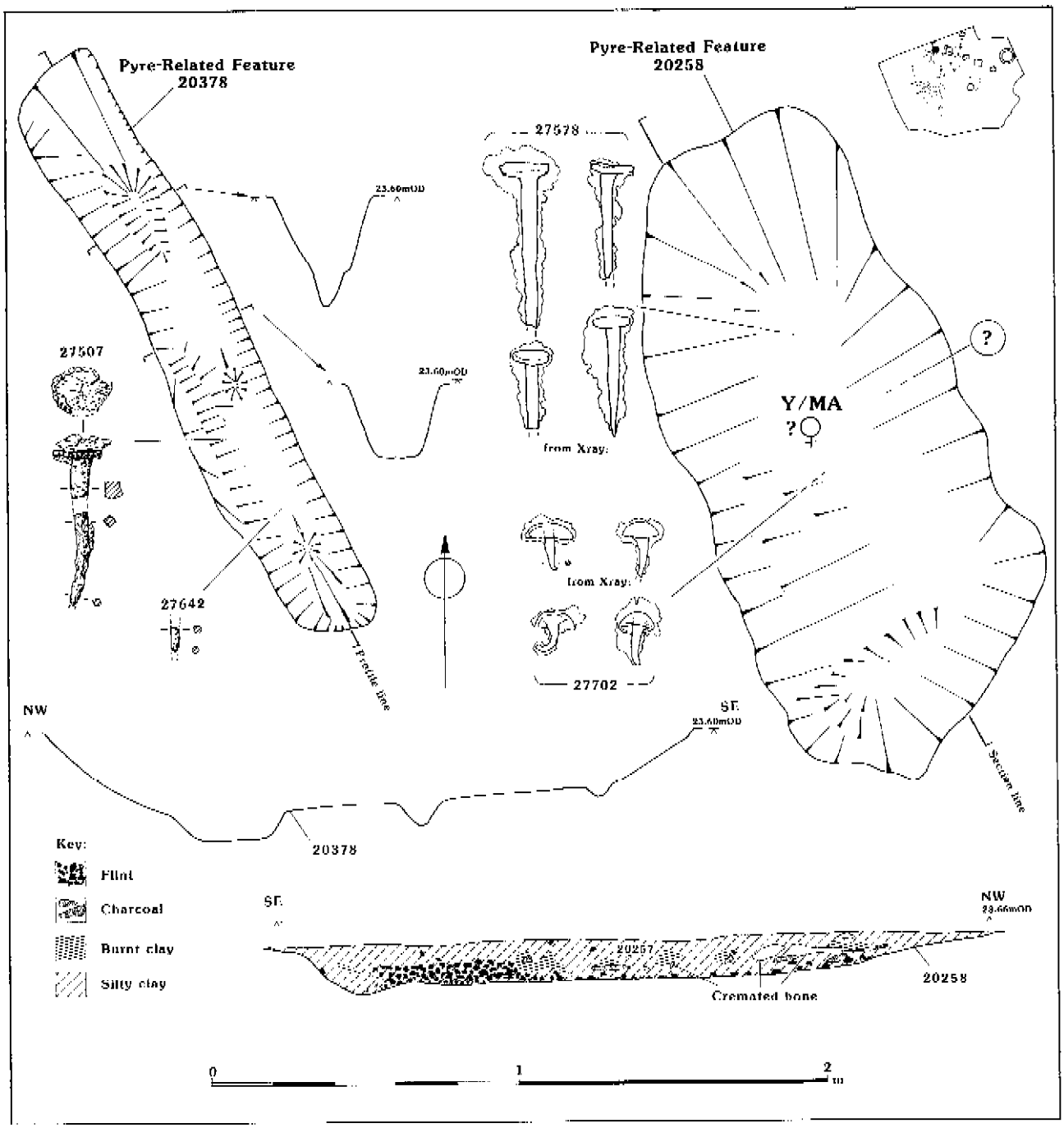


Figure 25 Pyre-related features (possible pyre sites) 20378 and 20258: plans, profile (20378), and section (20258), with iron brooch pin fragment (ON 27642) and nails (ON 27507, 27578, 27702)

truncated pyre site (Fig. 28). The small pyre-related feature (20747) in enclosure 20761 has already been described above.

20673, 20491, and 20643

Three other small pyre-related features were recorded to the north and east. Approximately 1m south of the unexcavated possible pyre site (20702), there was a small shallow oval cut (20673) (Fig. 36) containing in its fill (20674) a large amount of charcoal and burnt soil, as well as cremated human bone (28.8 g, subadult/adult) and nail shanks (Fig. 28). Two other small features, one (20491) to the east of the pyre site (Fig. 36) and one to the north-west (20643) (Fig. 35), contained similar materials (Fig. 28), including 5.4 g, and 61.8 g (subadult/adult) of cremated human bone respectively. Each of these features appear to have been severely truncated.

4 Postholes

There were some 50 postholes, of varying dimensions, recorded within and around the Iron Age cemetery and crematorium (Fig. 29). While none had a clear function, a number seem to have been associated with pyre sites, while others may represent boundary fences defining parts of the cemetery.

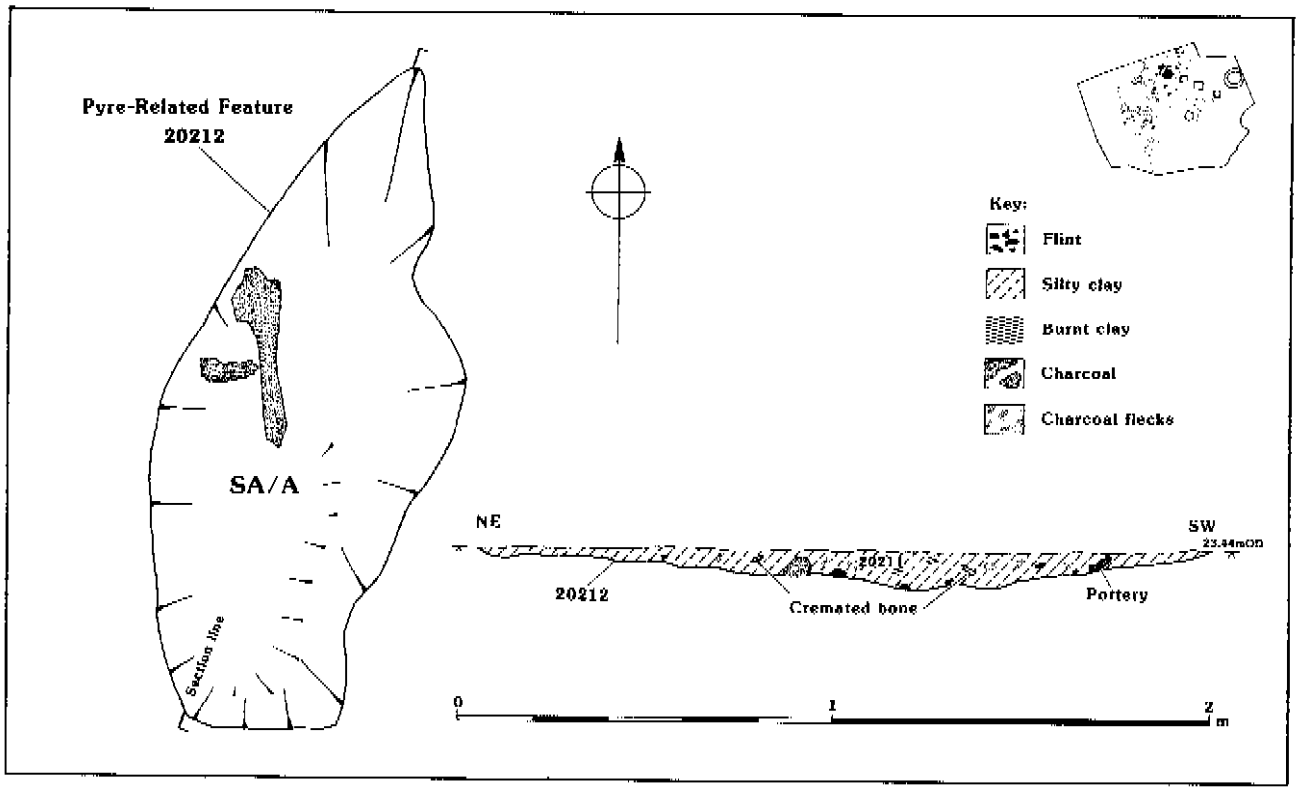


Figure 26 Pyre-related feature 20212: plan and profile

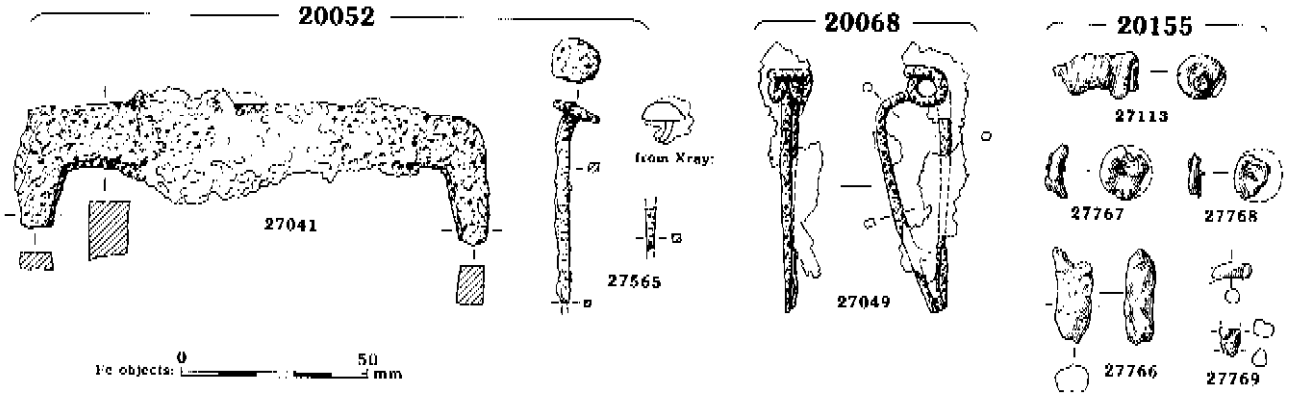


Figure 27 Finds from other pyre-sites and pyre-related features: 20052 (ON 27041, iron joiner's dog ON 27565, iron brooch pin, and nails); 20068 (ON 27049, iron Feugère type 2a brooch); 20155 (ON 27113, 27766–9, 'melted' copper alloy fragments)

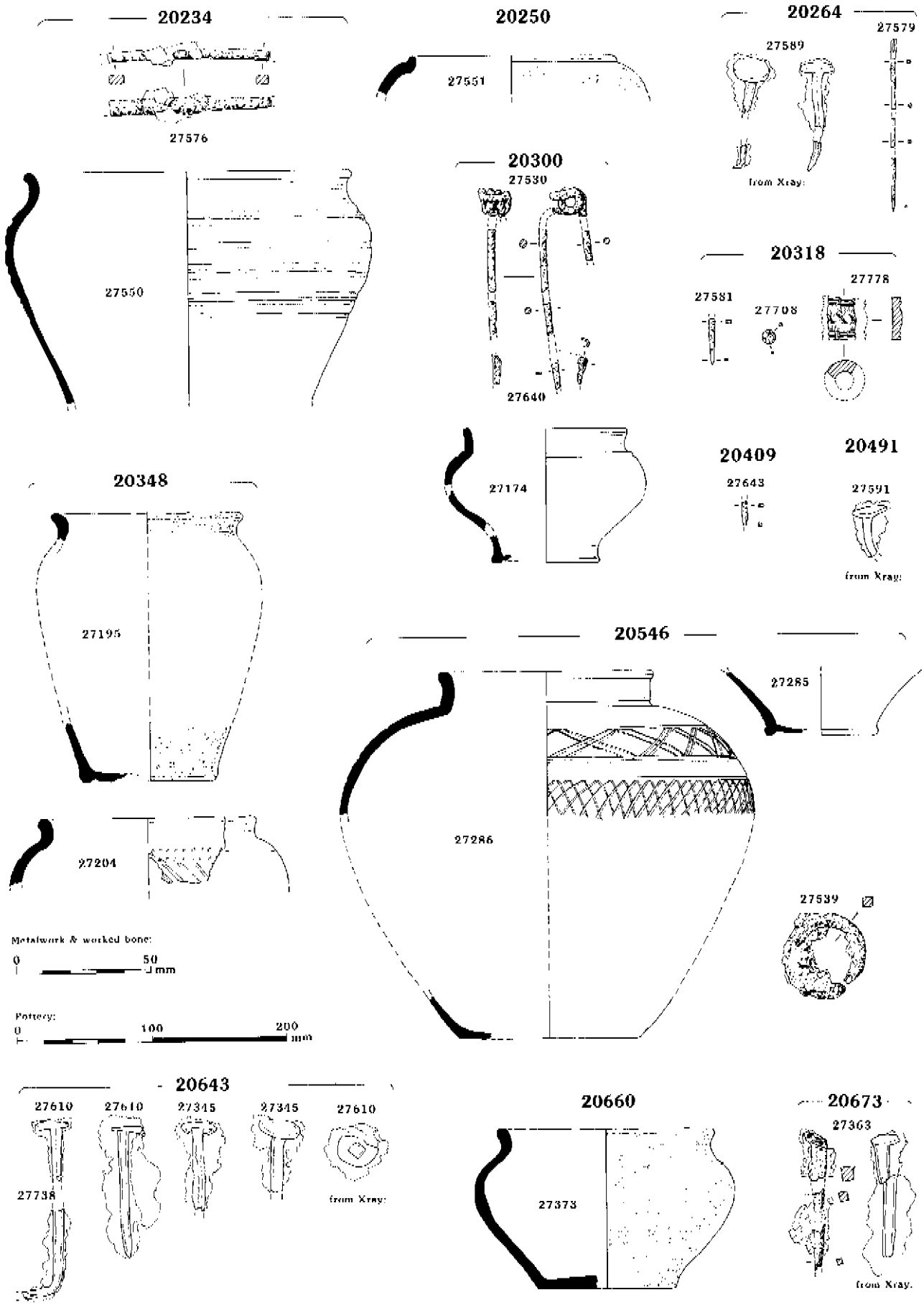

20234
27576
20250
27551
20264
27589
27579
from Xray:
20300
27530
27640
27550
20318
27581
27708
27778
27174
20409
27643
20491
27591
from Xray:
20348
27195
27204
20546
27286
27285
27539
Metalwork & worked bone:
0
50
mm
Pottery:
0
100
200
mm
20643
27610
27610
27345
27345
27610
27738
from Xray:
20660
27373
20673
27363
from Xray.

Figure 28 (opposite) Selected finds from other pyre sites and pyre-related features: 20234 (ON 27576, iron bar; ON 27550, high-shouldered jar, form J110, fabric F3, handmade, burnished exterior, horizontal tooling on neck and shoulder); 20250 (ON 27551, bead-rimmed jar or bowl, fabric F2, handmade, burnished exterior, partly burnt); 20264 (ON 27579, iron needle; ON 27589, nail); 20300 (ON 27530, Feugère type 2a brooch; ON 27174, shouldered bowl, form B112, fabric F6, handmade, neck cordon); 20318 (ON 27581, iron brooch pin; ON 27708, iron ring; ON 27778, bone toggle); 20348 (ON 27195, rim and base of jar of unknown form, fabric G7, handmade, burnished exterior; ON 27204, rim of shouldered jar or bowl, fabric F2, handmade, burnished exterior, tooled diagonal hatching in band on shoulder, burnt); 20409 (ON 27643, iron bar, ?brooch pin); 20491 (ON 27591, iron key); 20546 (ON 27539, iron ring; ON 27285, rim and base of jar of uncertain form, fabric Q7; ON 27286, base of vessel on unknown form, fabric Q7; 20643 (ON 27345, 27610, iron nails); 20660 (ON 27373, shouldered bowl, form B121, fabric F4, wheelthrown, burnt); 20673 (ON 27363, nail)

There was a large group of postholes on the western side of the cemetery, some of them inside the large empty area, the others immediately outside the western edge of the cemetery. Eighteen were located within the empty area, 12 of them arranged in two approximately parallel lines, 1.5 m apart, running east-south-east from the western edge of the area, with four (20642—a group of three, and 20423) in the northern line and eight (20502, 20504, 20506, 20508, 20425, 20427, 20429, and 20435) in the southern. Those at the western end of this group were evenly spaced c. 1.2 m apart and appeared to form three sets of pairs. The other postholes inside the empty area appeared to be arranged in two lines of three, the postholes being set approximately 2 m apart. One line in the north-east corner of the empty area ran north to south (20279, 20639, and 20617), the other in the south-west corner running north-west to south-east (20510, 20158, and 20205).

The group outside the western edge of the cemetery may also have consisted of pairs of postholes, set 2 m apart, possibly forming two parallel though curving lines running approximately north to south-east (20512, 20519, 20523, 20527, and 20529 to the east, and 20514, 20516, 20521, and 20525 to the west). In addition there was a loose cluster of five postholes (20411, 20370, 20362, 20433, and 20041) at the north-west of the cemetery.

Although five of the 14 postholes that were excavated in this part of the site produced Middle/Late or Late Iron Age pottery, their relationship to the development of the cemetery is not clear. All of them are sited to the north of an undated linear feature (20498), which was cut by Iron Age grave 20463, and some of the postholes, therefore, may be associated with the ditch, the line of the which appears to be unrelated to the structure of the cemetery (Fig. 37). Two of the postholes, however, produced metalwork probably Romano-British in date. Posthole 20362 contained a hobnail, which is probably Romano-British, and a large nail, and a similar large nail was also found in posthole 20158 (Fig. 145). Whether a single hobnail provides sufficient grounds to introduce a Romano-British element to these possible structures is debatable.

Many of these postholes were relatively small, averaging c. 0.3 m in diameter, and appeared to be set in roughly straight lines, suggesting that they did not form substantial built structures. However, the pairing, in parallel lines, of a number of the postholes within the empty area could have resulted in the construction of a narrow corridor, the posts possibly linked by cross-timbers. Most of the excavated postholes contained moderate quantities of charcoal, as well as occasional fragments of cremated human bone, which is unsurprising given their proximity to pyre sites and pyre-related features.

There were two further lines of postholes within the cemetery. On the eastern edge of the cemetery there were six (20798, 20765, 20800, 20136, 20291, and 20651) aligned approximately north to south between 0.5 and 1.5 m west of the pyre sites 20717 and 20776, and possibly associated with them. Although they had similar fills, containing occasional small fragments of charcoal, as well as, in some, fragments of cremated human bone, burnt flint, and pottery, they varied considerably in size. The largest (20765), which was cut by grave 20757, was c. 0.55 m in diameter and 0.75 m deep (Fig. 32), while those adjacent to it, 20798 to the south and 20800 to the north, were c. 0.25 m in diameter and at least 0.35 m deep. The three postholes to the north (20136 and 20291 intercutting, and 20651) averaged 0.55 m in diameter and c. 0.18 m deep. This line of postholes features may have formed a screen separating the pyre sites from the burial area or shielding some other feature. One further posthole (20808), measuring 0.16 m in diameter and 0.3 m deep, was situated immediately west of the southern arm of pyre site 20717.

The other line, centred on c. 674/454, consisted of four postholes aligned approximately north-west to south-east (20194, 20192, 20306, and 20694). The first two contained conjoining quern fragments used as packing, indicating that they were probably contemporaneous. This line lies within the cemetery, but appears to lie parallel to its south-west side, possibly delimiting the main concentration of burials. Both of these lines of postholes, therefore, may have had a role in defining at some time the boundary of the burial area, with the subsequent expansion of the cemetery being indicated by the presence of small numbers of graves outside them.

A single large posthole (20689) was immediately south of possible pyre site 20687 at the north-east of the cemetery. Six other features (20244, 20361, 20560, 20607, 20698, and 20711), interpreted as individual postholes and not visibly associated with any other features, were also recorded at various locations within and around the cemetery. A seventh, posthole 20262, was probably modern in date.

5 Cremation (and Other) Burials

A total of 161 burials was identified within the Iron Age cemetery (Fig. 30). As with other features in the cemetery, most of the graves had been truncated to some

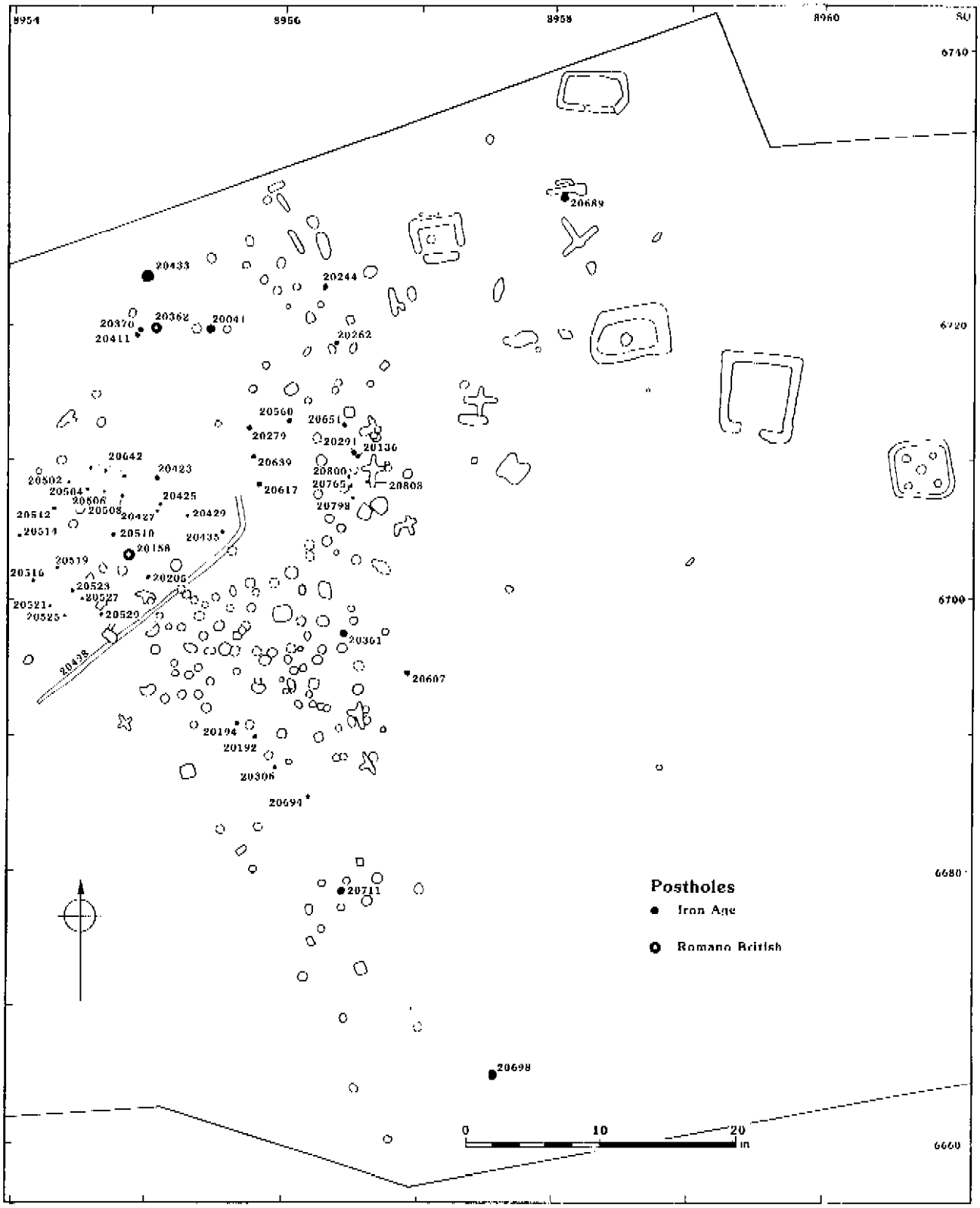


Figure 29 Distribution of postholes in Area 2

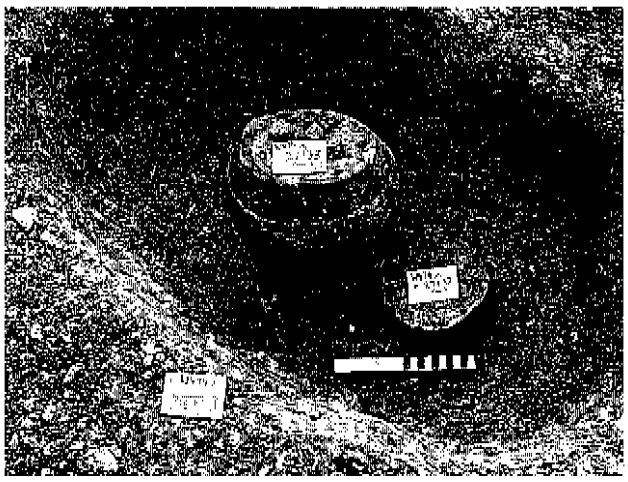


Plate 12 Iron Age grave 20199 during excavation, viewed from the north-east (Fig. 79). The oval grave contained c. 680 g of cremated bone of an unsexed older mature / older adult, most of it unurned and partly visible behind vessel ON 27133, but c. 40 g in the vessel itself. Note the wet conditions under which the grave was excavated

extent by cultivation which in a few cases resulted in all but the bases of the graves being lost. Damage to some other burials was caused by machine during the process of discovery and excavation, while the grave cuts of 33 burials could not be identified during excavation. Nonetheless, in most instances enough of the graves survived to give some indication as to their contents. In some cases features have been identified as graves even though no human bone was found in them.

The graves varied in their size, shape and orientation and in the nature and disposition of their contents (Pl. 12). These aspects are detailed in the catalogue of graves, and are summarised below.

In a number of cases where graves were evident by the presence of *in situ* pots, the grave fills were indistiguishable from the surrounding soil matrix. Because of the capping of a layer of brown loam over much of the cemetery area, possibly resulting from the extent to which the ground had been disturbed by the repeated grave digging and related actions, their edges could not be identified. In these cases, arbitrary cuts were made for what was considered on the basis of the other graves to be appropriate distances around the exposed vessels. It is possible therefore that the full contents of these graves were not excavated. It is not considered likely that separate graves were conflated in the assigning of arbitrary cuts (Pl. 13).

On excavation the graves varied considerably in their size, ranging from those approximately 0.2 m in diameter at the base which were only large enough for the deposit of cremated bone and a single pottery vessel, to those up to 1 m wide, which could accommodate a number of vessels. Most graves, however, were circular or subcircular, c. 0.5–0.6 m in diameter, with sloping or vertical sides which were rarely more than 0.4 m deep. Most if not all of the graves had been truncated and the

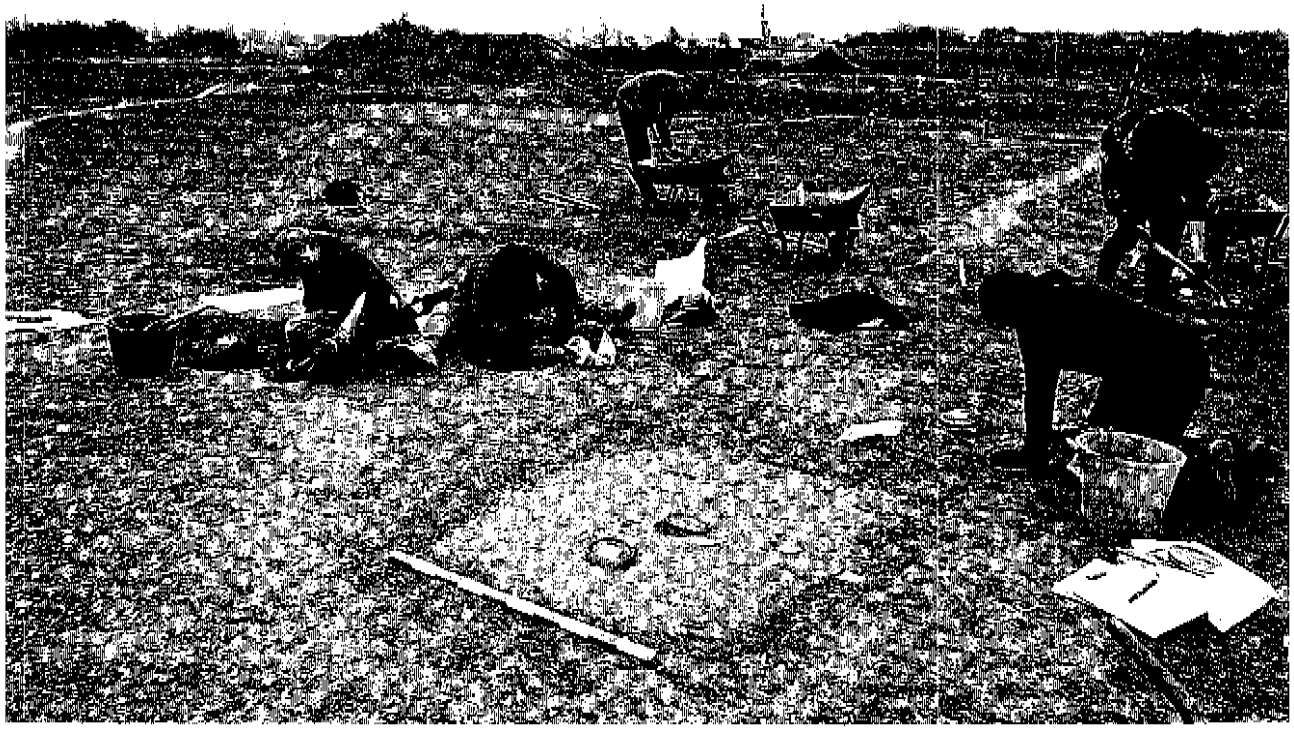


Plate 13 A view to the north-east with Iron Age grave 20095 (Fig. 71) in the foreground. The cut of this large, square grave, and two of the five vessels in it, were clearly exposed after initial cleaning. The cut of grave 20097, around the vessel immediately to the east, however, was not identified (Fig. 72)

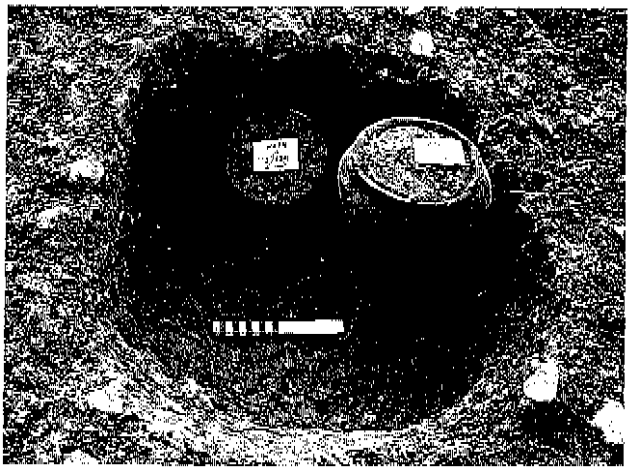


Plate 14 Iron Age grave 20196 from the north-east (Fig. 78). In front of the two vessels is visible some of the unurned cremated bone of an unsexed adult

Plate 15 Excavation of grave 20057, viewed from the south-east (Fig. 68). The oval grave contained the unurned cremated bone (some visible at the edge of the grave) of a possibly female older mature/older adult, accompanied by a single vessel and cremated but unidentified animal bone

original dimensions of those graves whose cuts could be identified cannot be determined precisely. For these reasons only a selection of grave profiles are presented (Figs 31; 32). However, as it was the base of each grave, as bounded by its sides, which formed the surface upon which the burial deposit was placed, the basal dimensions have been used in considering size and shape (Pl. 14). Grave shape was considered to potentially be an important factor in the mortuary rituals and the bases of the graves have been categorised as follows:

- *circular*: a curved edge with long axis less than 1.5 times the short axis
- *oval*: a curved edge with long axis over 1.5 times the short axis

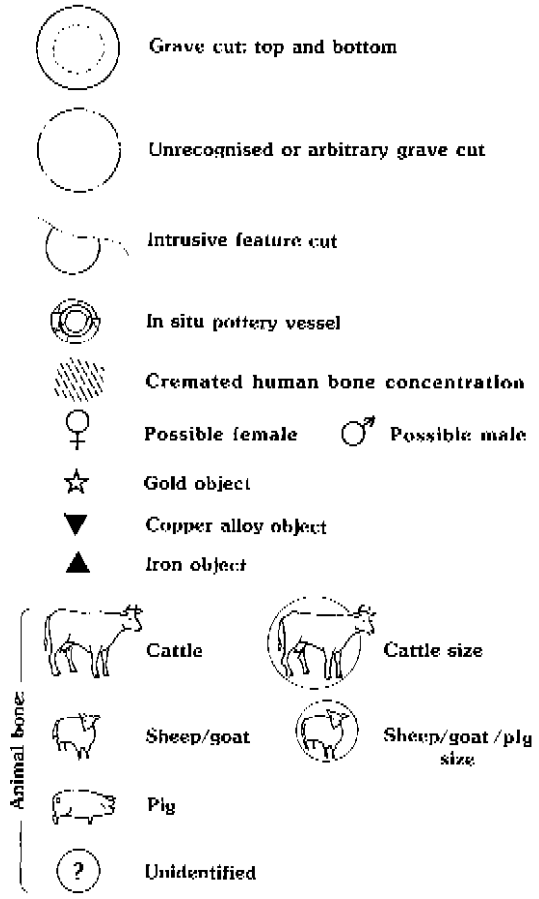


Figure 30 Key to figures. Metalwork at 1:2

- *square*: at least three straight sides approximately at right angles, with long axis less than 1.5 times the short axis
- *rectangular*: at least three straight sides approximate at right angles, with long axis over 1.5 times the short axis.

Inevitably such a simplification results in a number of graves of ambiguous shape being assigned to one category where they could fit equally well in another. The full dimensions, however, are given in the catalogue and the shapes can be judged from illustrations of the graves. As very few graves intercut it is likely that they were marked in some way but no traces of posts or other markers, such as covers or lids, were found.

Nearly all the burials were unurned. Many were found in concentrations on the base of the grave and on occasions it appeared that the bones had been wrapped or placed in an organic container (Pl. 15). There was considerable diversity though and as is shown below, the quantity of bone chosen for burial was often very small and in these instances no concentration could be discerned. In some cases bone was only recovered from the whole-earth samples raising the question whether it was a burial placed in the grave or was cremated bone which was accidentally incorporated in the grave fill. The deposit of cremated bone included animal bone and intermingled in it fragments of pyre goods, usually items associated with clothing such as brooches. Pots and other vessels appear to have been placed as grave goods.

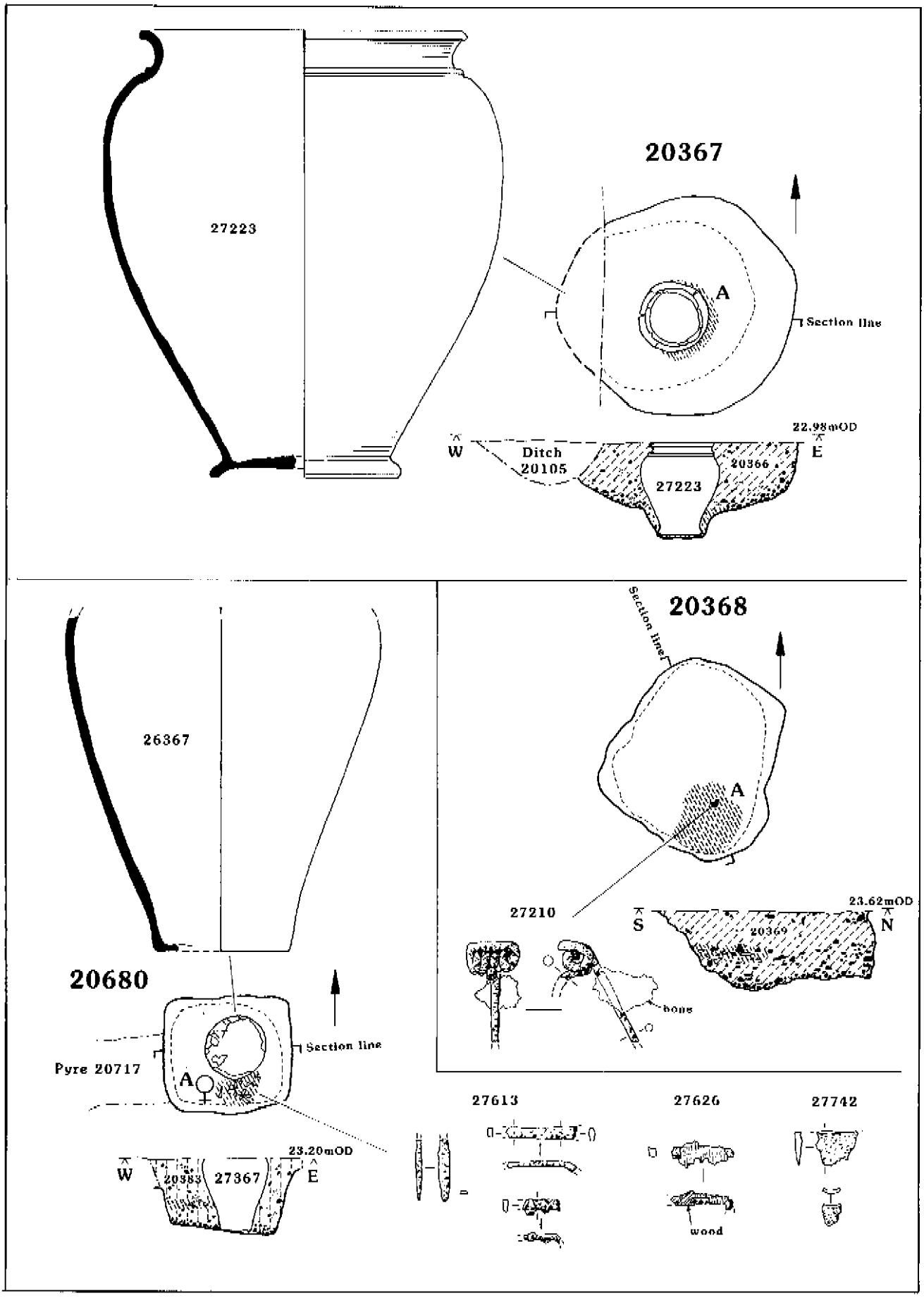


Figure 31 Profiles and plans of graves 20367, 20368, and 20680

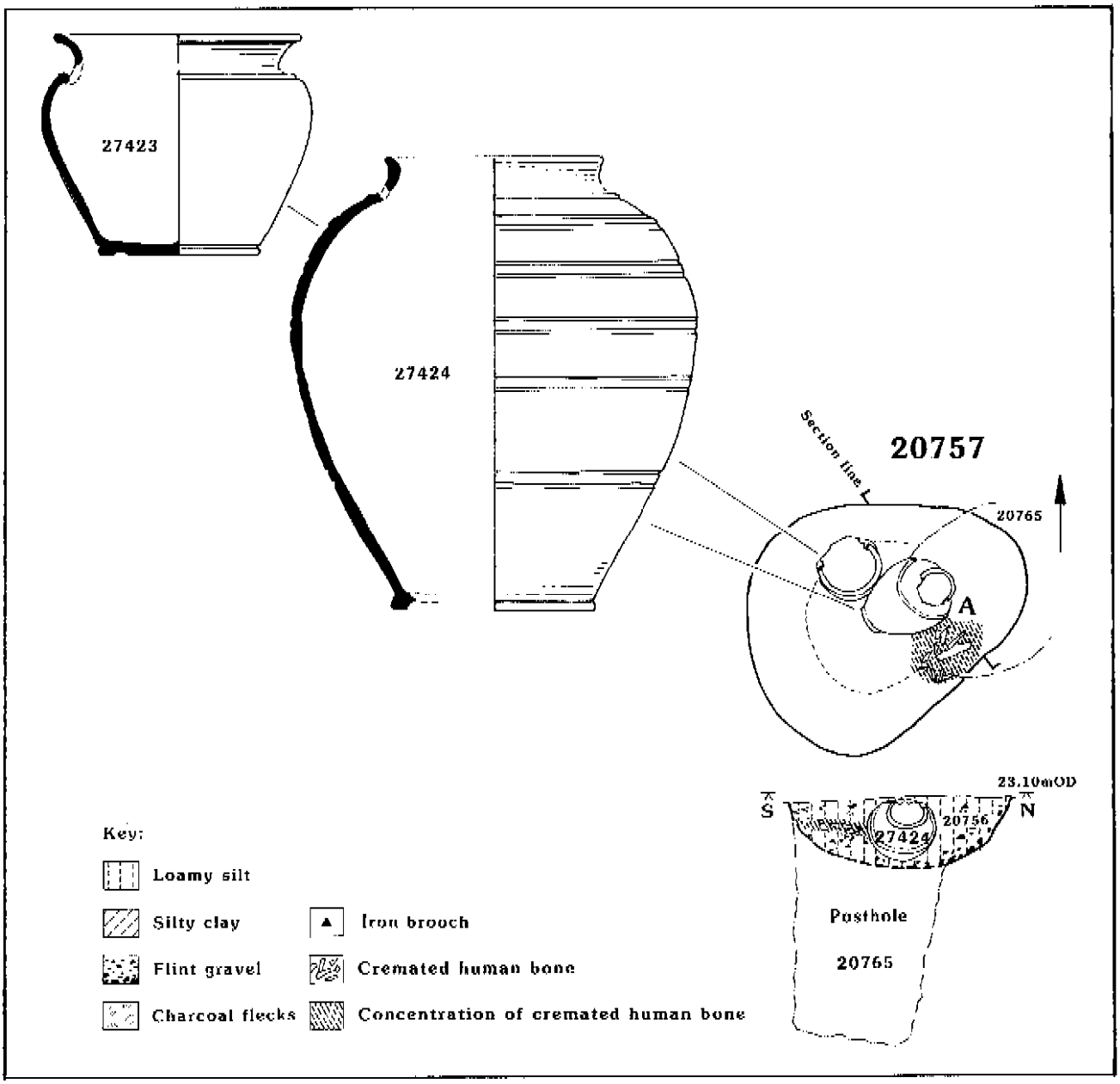


Figure 32 Profile of grave 20757

A few graves were distinguished by being square while a single burial was placed within an enclosure (20706).

Grave 20566 in Enclosure 20706

This grave was in the centre of the most easterly of the small enclosures to the east of the cemetery, and was centred on SU 89607 06708 (Fig. 33). The enclosure consisted of a square ditch with rounded corners, its sides aligned on the points of the modern compass, measuring c. 4.4 m square (Pl. 16). The ditch was between 0.4 m and 0.5 m wide and up to 0.15 m deep with shallow sloping sides. Inside the enclosure there were postholes in each of the four corners (20630, 20632, 20661, and 20663), averaging 0.6 m in diameter and 0.25 m deep. The grave in the centre was a severely truncated cremation burial (20566) of an older subadult/ adult male contained in a red-slipped pot (Figs 33; 98).

6 Other Features

In addition to those features reasonably identifiable as graves, there were a number of small features, of varying form and content, across the site whose function remains uncertain. These include isolated occurrences of cremation-related material, including human bone, sherds of pottery, items and fragments of metalwork, and charcoal, either alone or in combination, and often in contexts which were almost completely truncated.

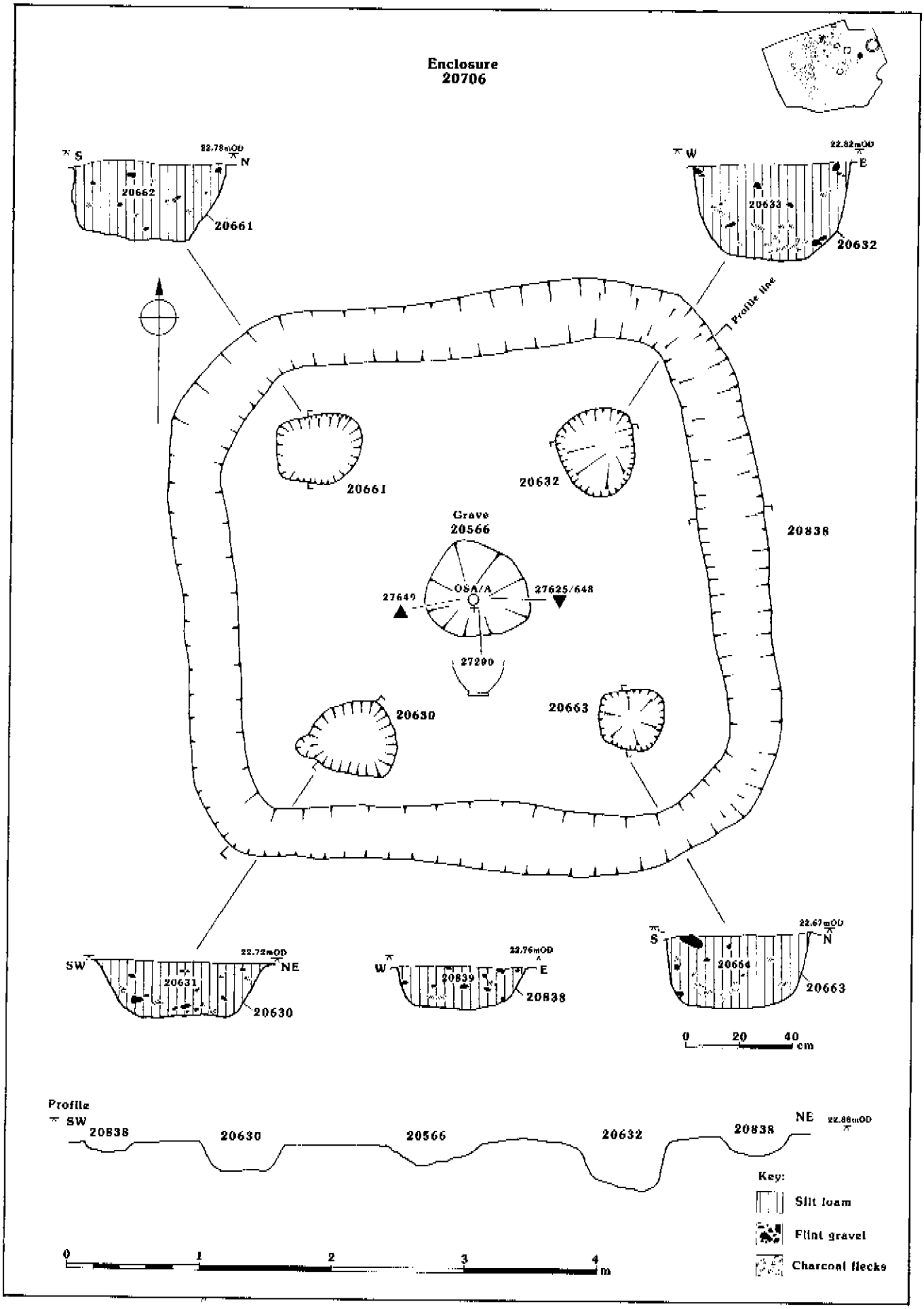


Figure 33 Enclosure 20706 and grave 20566

These are considered most likely to represent the traces of either additional graves or pyre-related features, but of which insufficient survives to make any reliable determination.

Feature 20186 (SU 89561 06696) was a small round cut, 0.35 m in diameter and 0.15 m deep, containing fragments of cremated bone and a few sherds of pottery, mixed in its fill (20187), possibly representing the deliberate reburial of material disturbed by the digging of subsequent graves (Fig. 38). Feature 20341 (SU 89542 06709) was a shallow sub-rectangular cut, 0.6 m by 0.45 m, containing a sherd of pot and fragments of an iron brooch (Fig. 54), as well as a few fragments of cremated bone (Fig. 37). Part of another iron brooch, also associated with a small quantity of cremated bone, was recorded (feature 20298, fill 20299) at SU 89558 06694 (Fig. 43).

Other contexts consist of unassociated fragments of pottery (20342, 20358, 20475, and 20530), two small concentrations of cremated bone (20580 and 20802) and two spreads of charcoal (20683) and (20720), the latter in the empty area within the cemetery. The spreads of material are unusual in so much as they survived at all on a heavily truncated site. Whether they indicate that there were once much more extensive surface deposits or are merely the residues of truncated negative features is unknown.

7 Horizontal Stratigraphy

Only ten of the 161 graves overlapped, indicating that graves are likely to have been marked in some way but no traces of barrows, posts or other markers, such as the covers or lids found at the Late Iron Age cemetery at King Harry Lane, Hertfordshire (Stead and Rigby 1989, 81–3, fig. 43–4) were found. All the graves that did overlap were within the area with the highest density of graves, where the build-up of redeposited soil would be more likely to have concealed the positions of a earlier graves. It is possible that the graves were marked by small barrows and the deposit of brown loam represents their destruction and smearing over the tops of the graves by cultivation.

In a few instances graves were dug through the sites of pyres indicating an eastward expansion of the cemetery. Grave 20680 cut through pyre site 20717 and grave 20729/20758 cut pyre site 20776. On the southern edge of the cemetery pyre site 20645 just cut the edge of grave 20647 (Pl. 10). All three of these examples are right on the edge of the cemetery, suggesting that this intercutting only occurred towards the end of the use of the cemetery.

Evidence from pyre and grave goods also indicates an expansion of the cemetery. Biconical bowls of Middle Iron Age tradition are clustered around the inner boundary of the cemetery (Fig. 113). Although the numbers are small, the typologically latest brooch type, the Almgen 65 generally occurs towards the outer boundary (Fig. 112). The distributions of other pot and brooch types are generally mixed, although of the two Nauheim brooches which should be the earliest in the cemetery, one occurs on the inner boundary and the other comparatively close to the boundary.

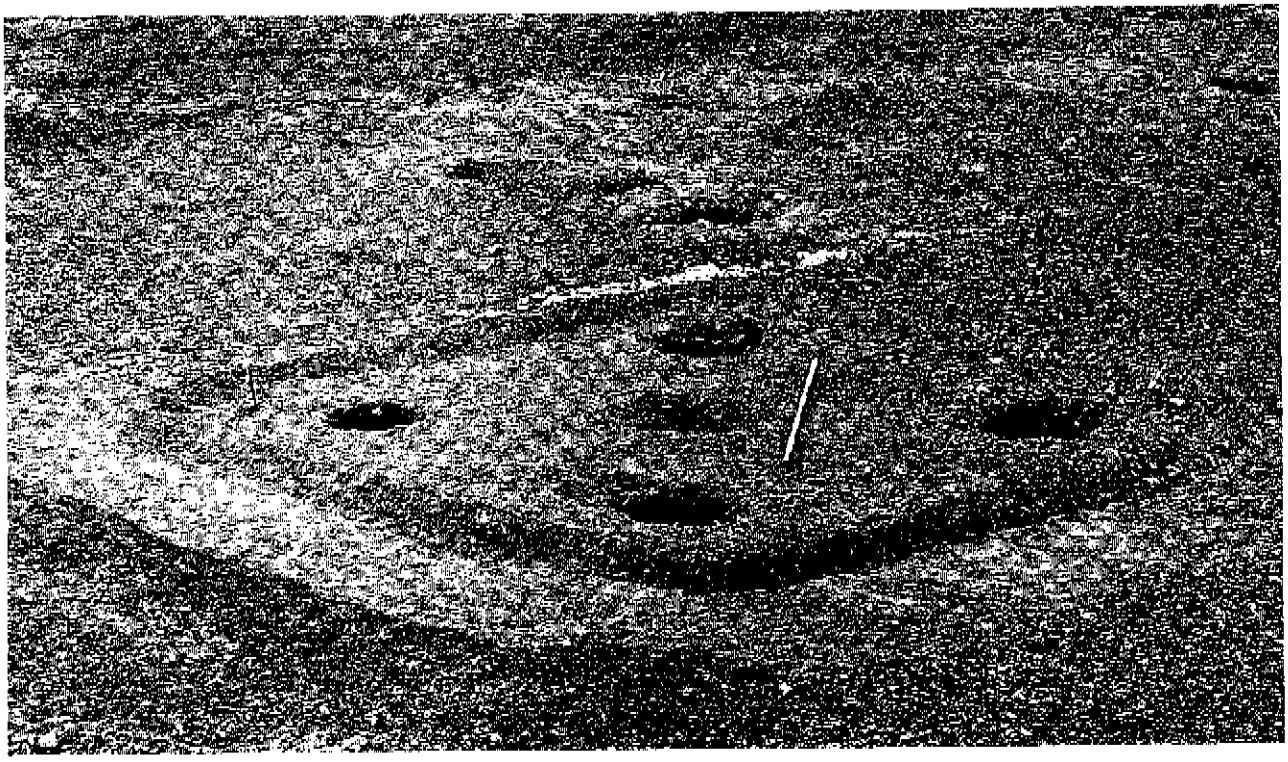


Plate 16 The square ditched enclosure (20706) and four-post structure surrounding Iron Age grave 20566 (Fig. 98), viewed from the north-east. Beyond the modern, chalk-filled land drain are visible a number of graves in the Romano-British cemetery

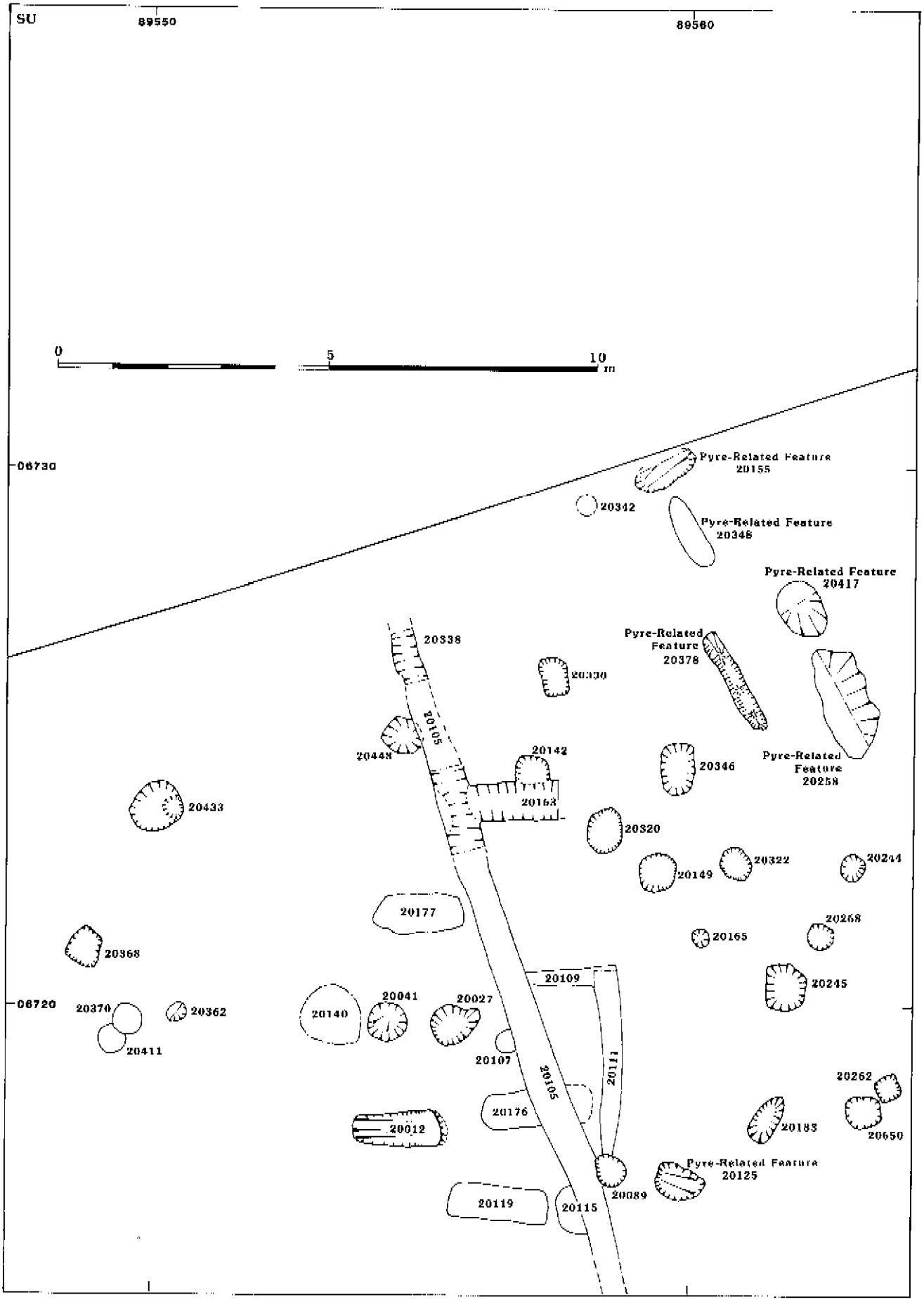


Figure 34 Area 2: Subdivision 1

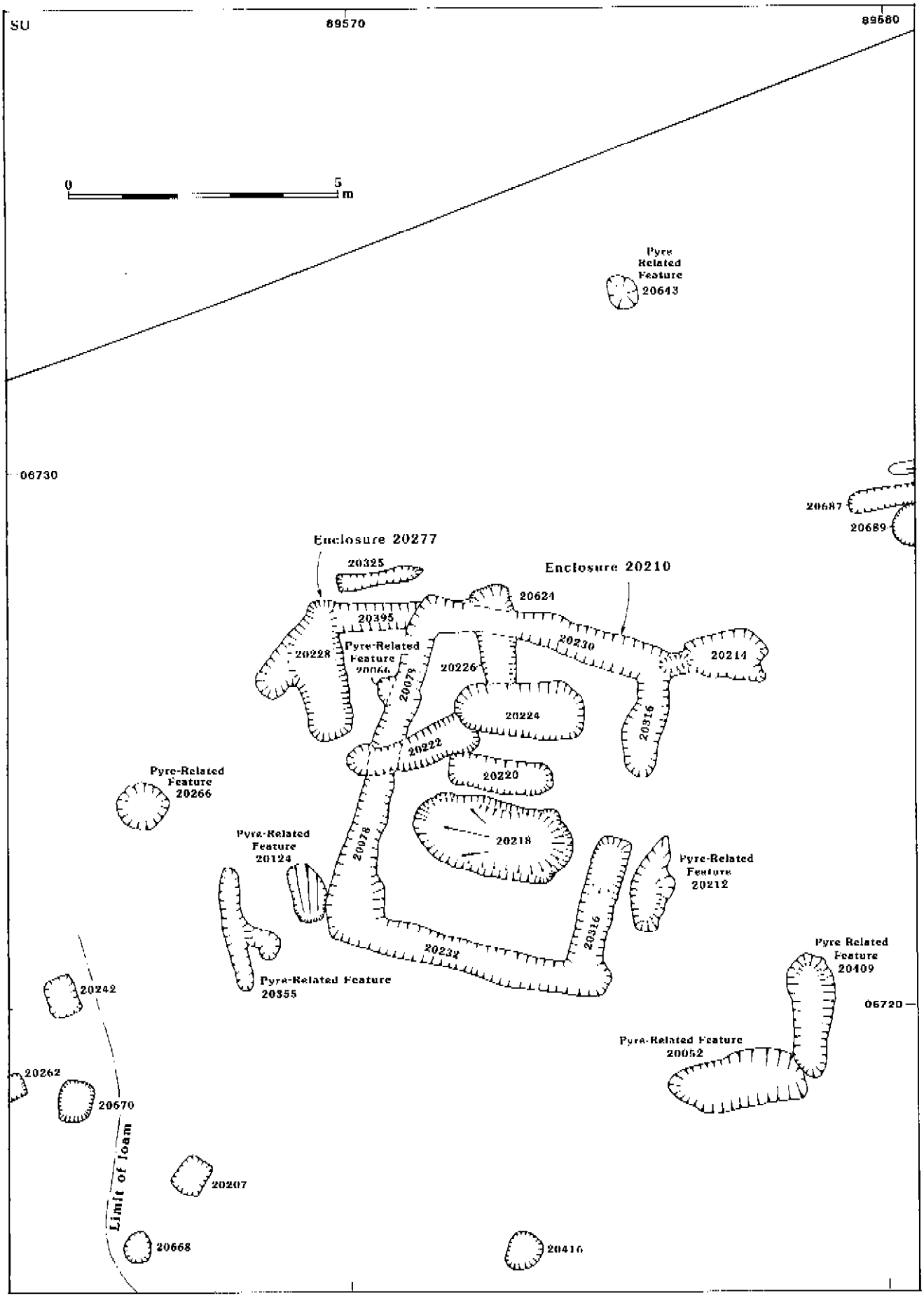


Figure 35 *Area 2: Subdivision 2*

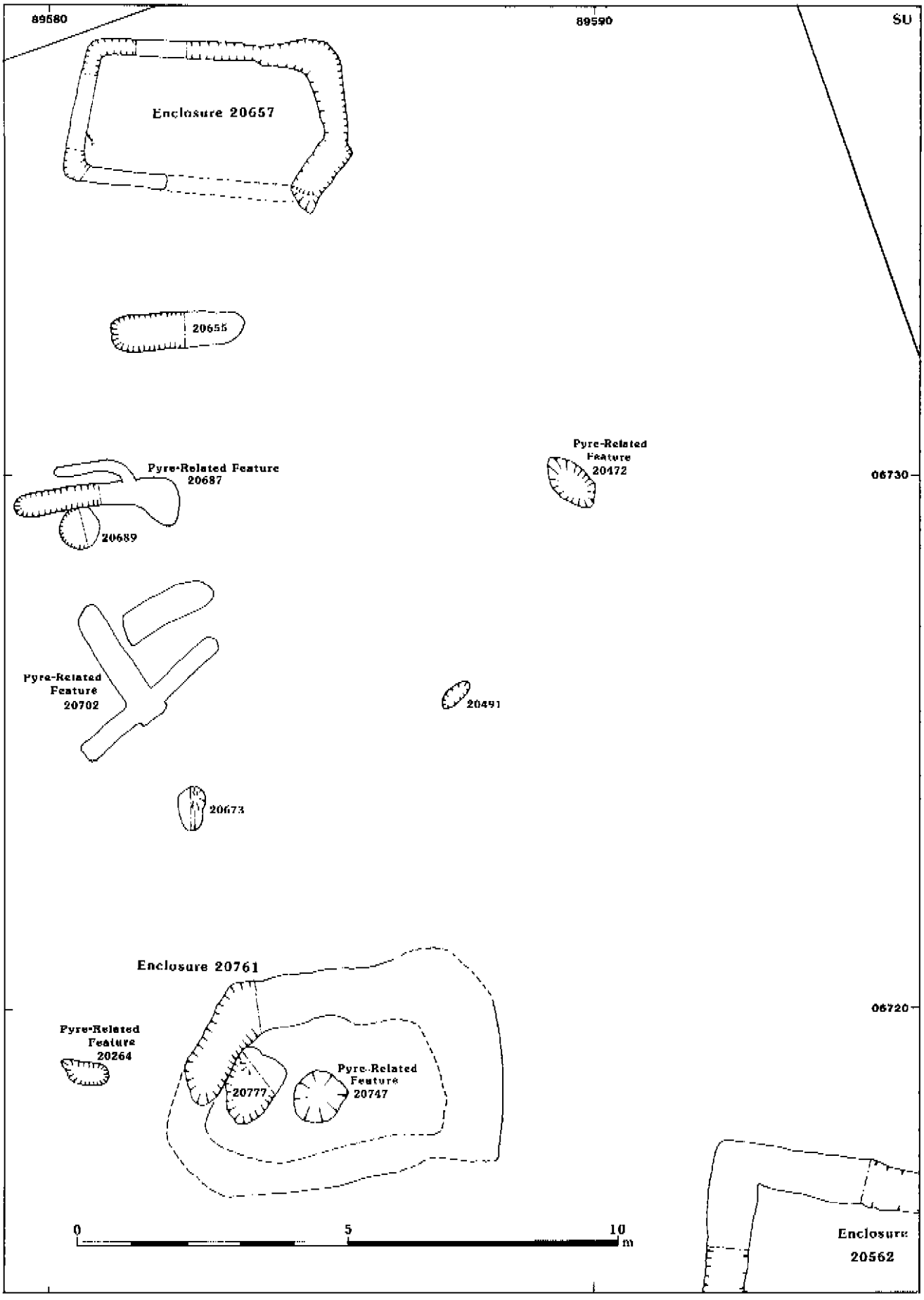


Figure 36 Area 2: Subdivision 3

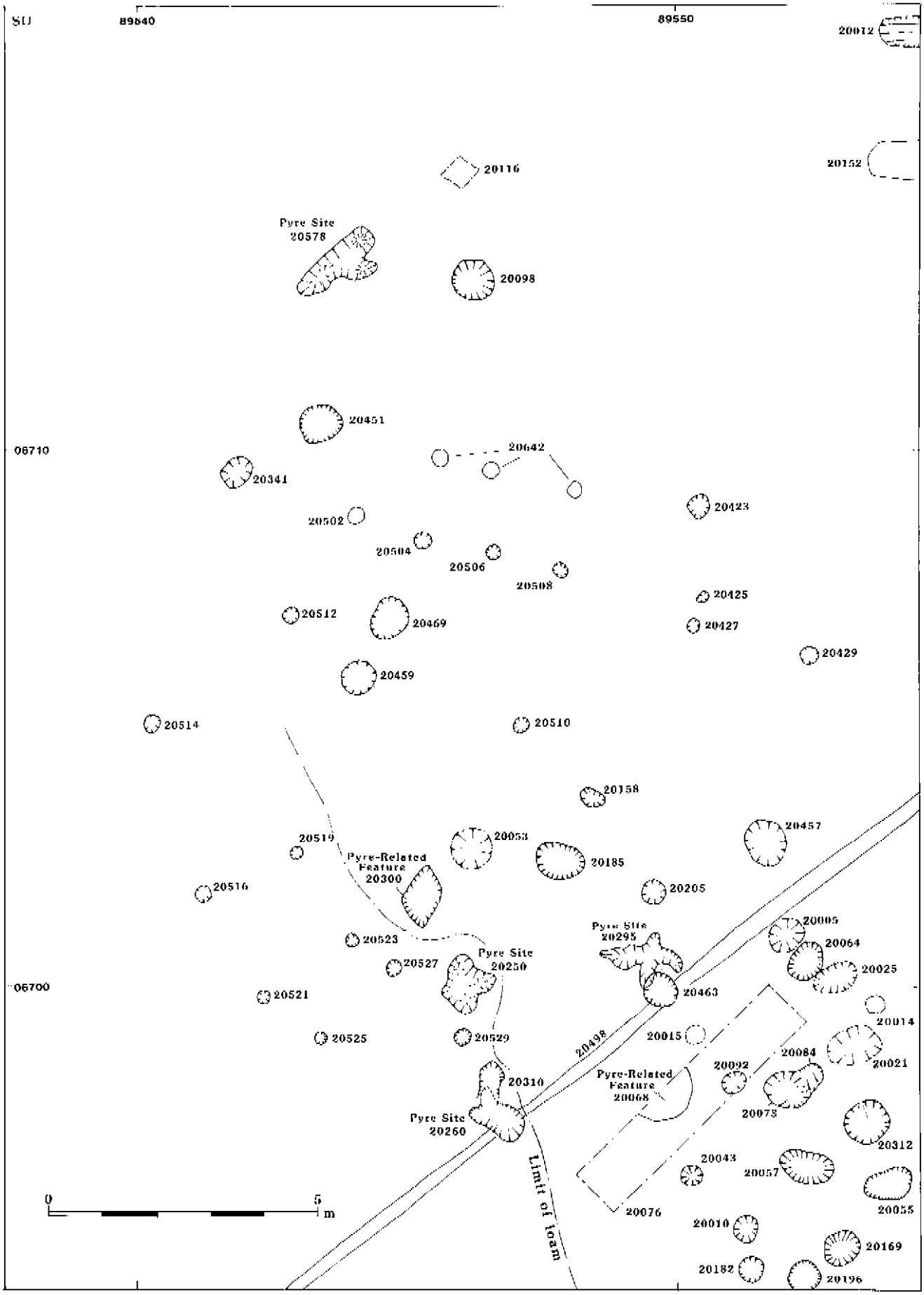


Figure 37 Area 2: Subdivision 4

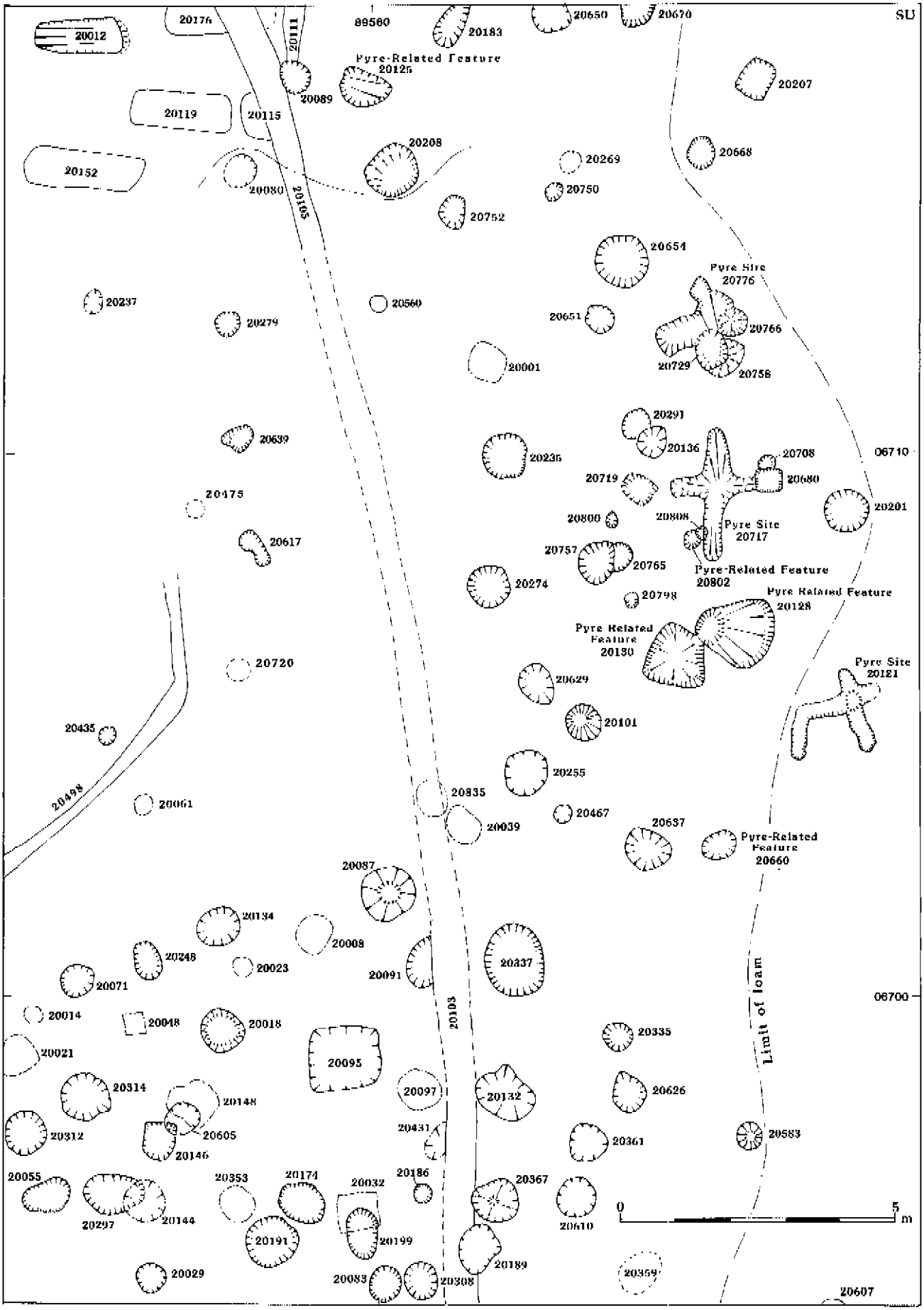


Figure 38 Area 2: Subdivision 5

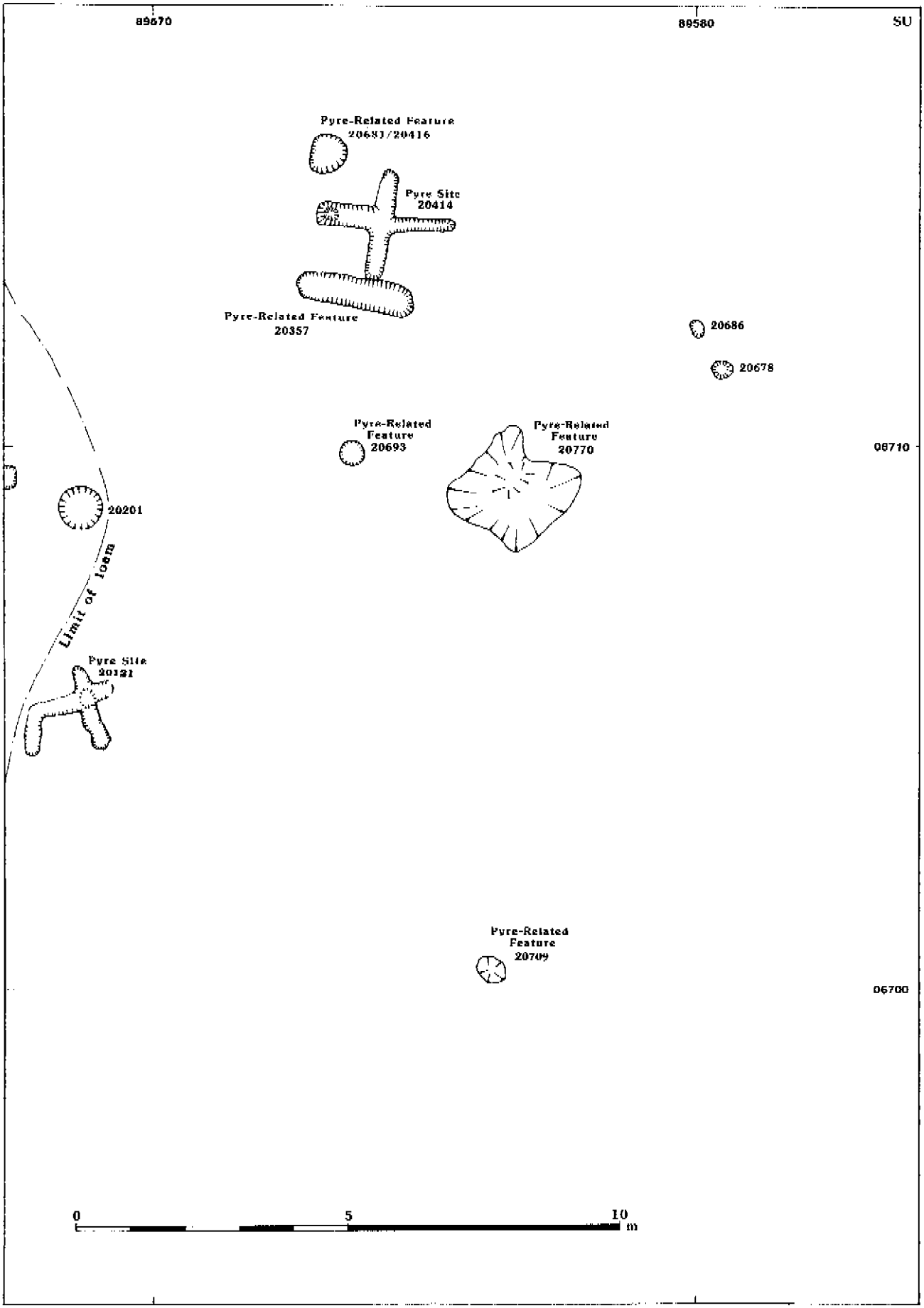


Figure 39 Area 2: Subdivision 6

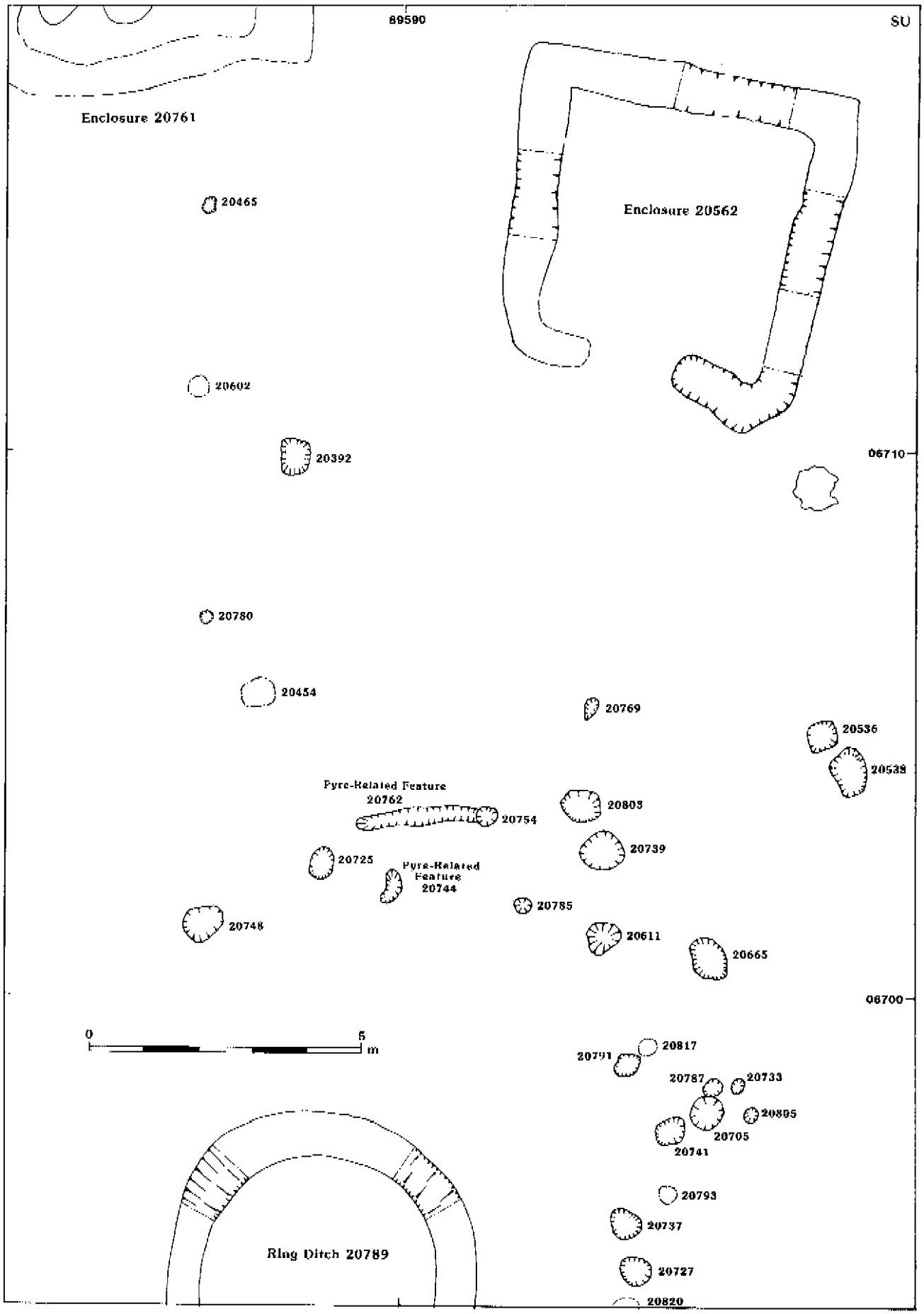


Figure 40 Area 2: Subdivision 7

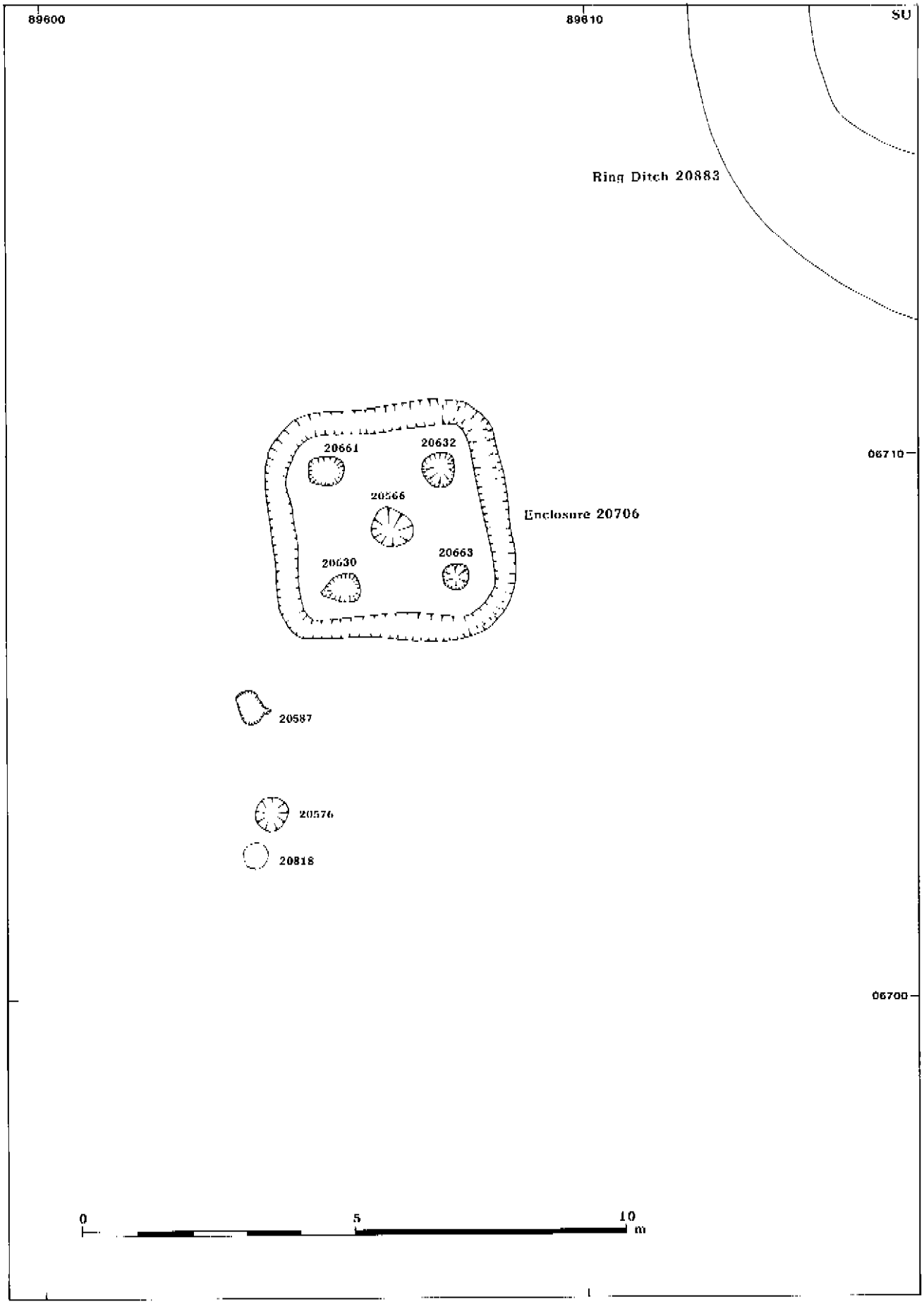


Figure 41 Area 2: Subdivision 8

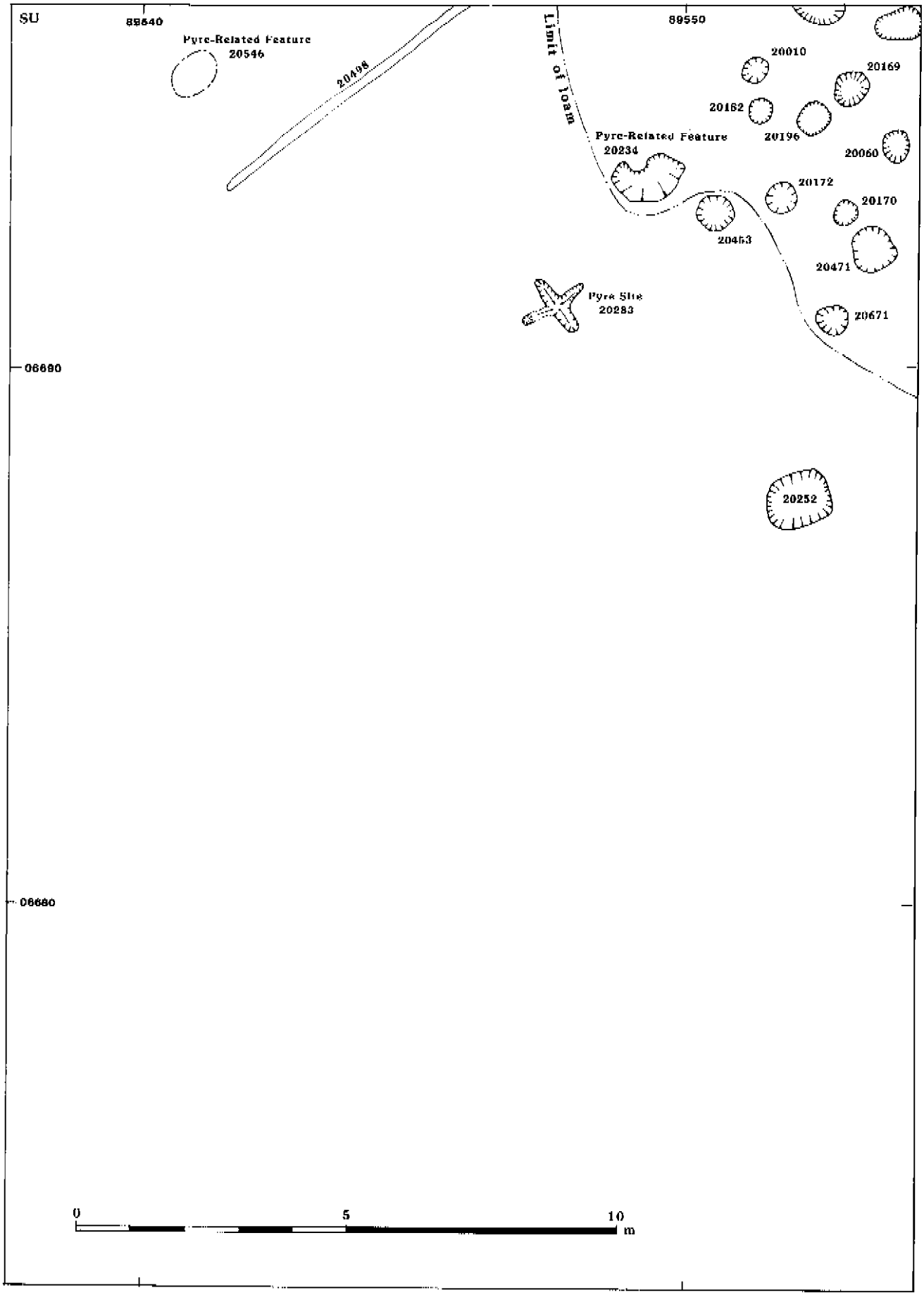


Figure 42 Area 2: Subdivision 9

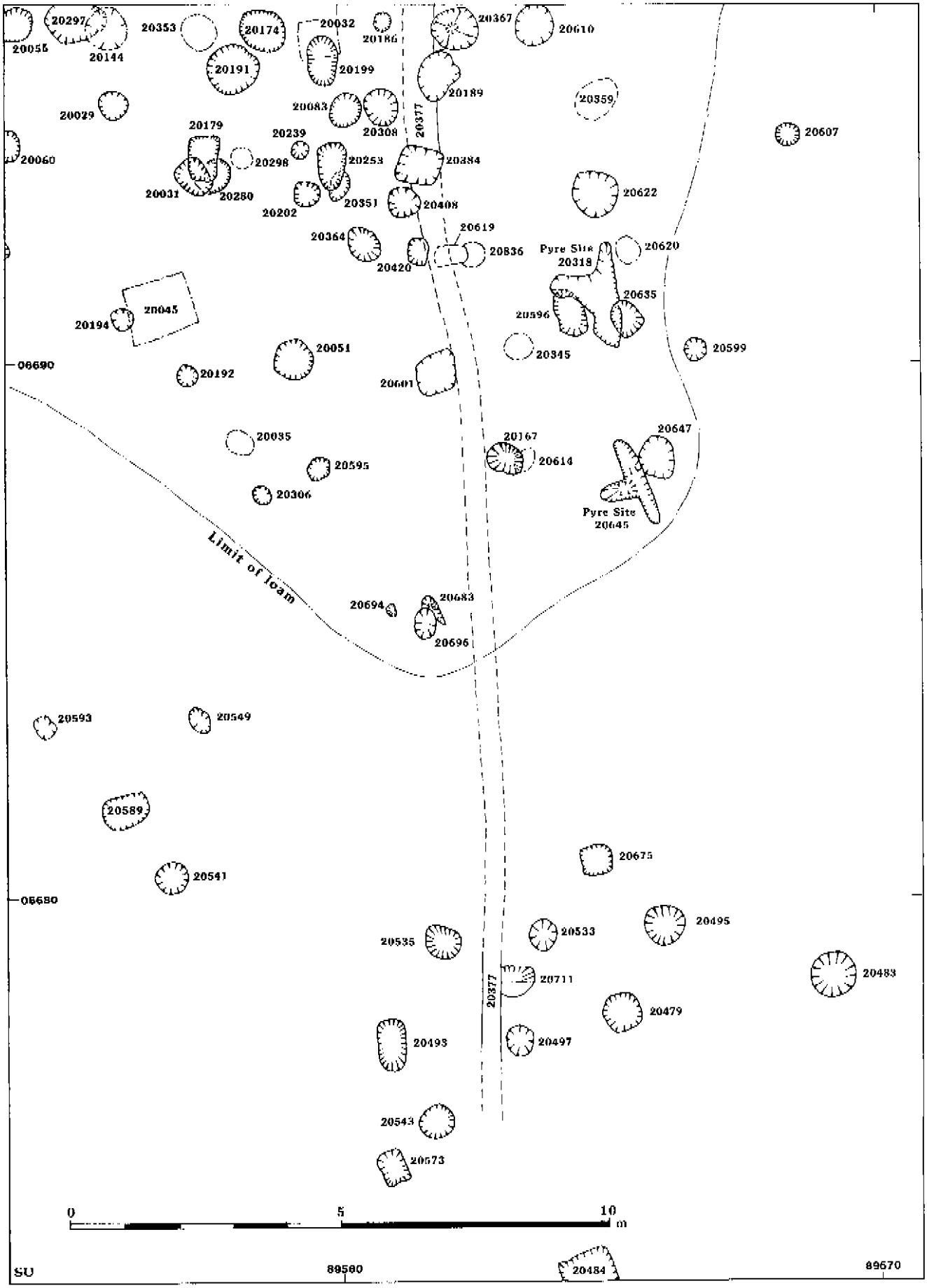


Figure 43 Area 2: Subdivision 10

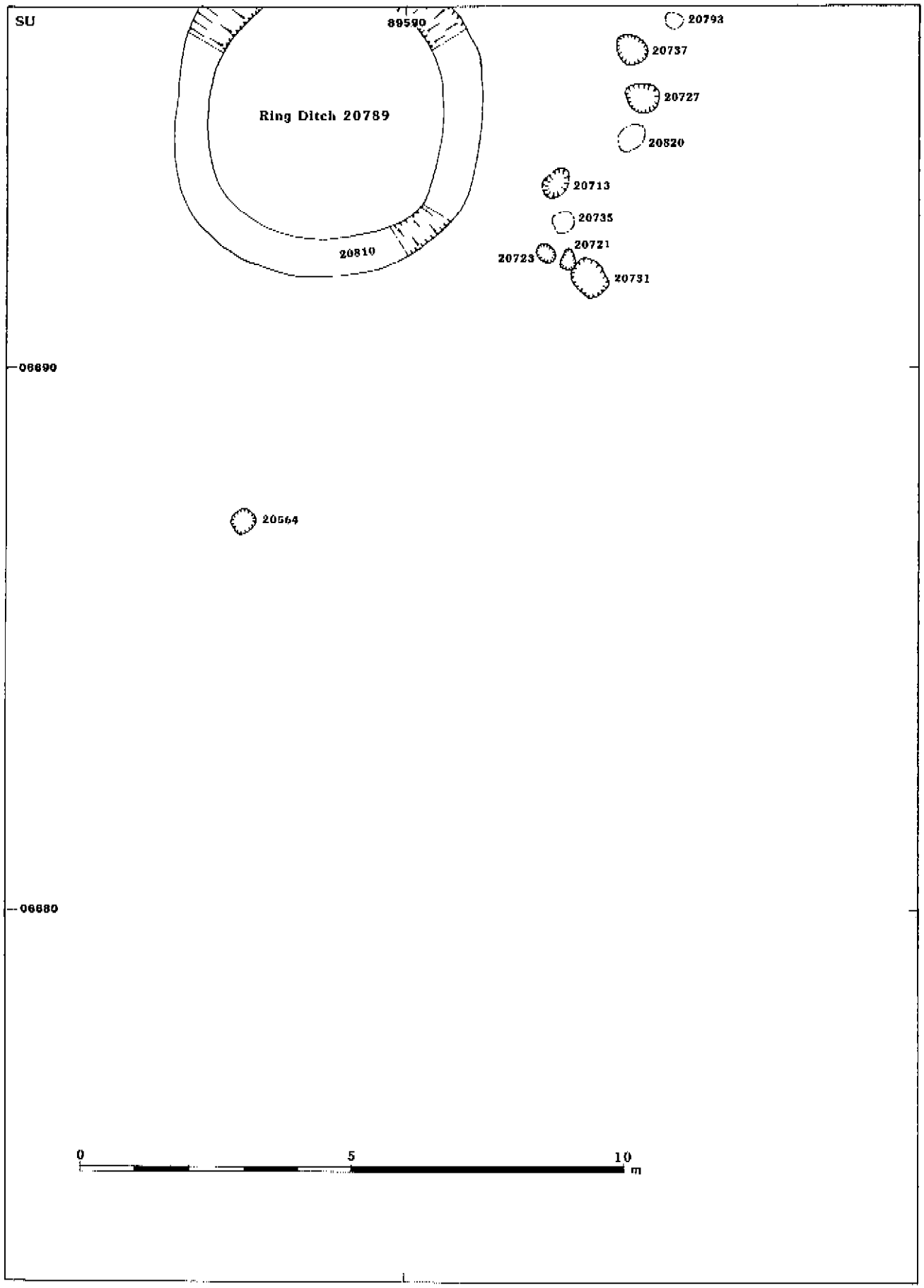


Figure 44 Area 2: Subdivision 11

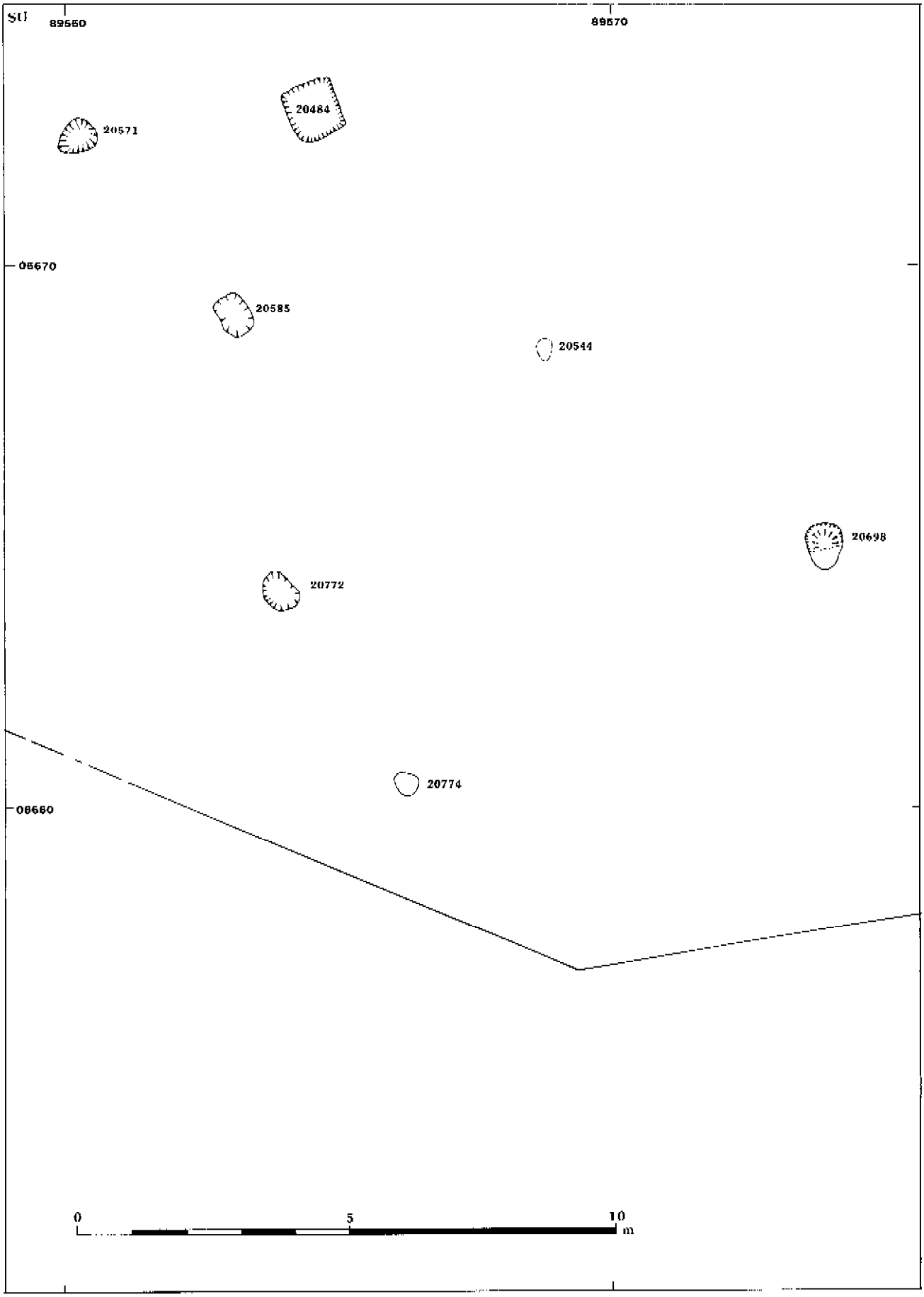


Figure 45 Area 2: Subdivision 12

8 The Cremated Human Bone from Burial and Cremation-related Contexts, by Jacqueline I. McKinley

Introduction

The word 'cremation' is commonly used in archaeological literature where what is expressly meant is 'cremation burial'. Cremation is a process of disposal of a dead body, involving the deliberate burning of the body with attendant rituals. The recovery of bone from the pyre site and the burial of remains are separate processes occurring after the cremation.

'Burial' within an area designated a 'cemetery' or in a feature designated a 'grave' involves, by implication, the ritual deposition of human remains — be they cremated or unburnt. The human bones are not there to accompany artefacts, but artefacts may be there to accompany the human element. Where very little or no human remains are present in a 'burial' and where that absence is not as a result of disturbance or loss of bone in consequence of adverse burial conditions, it may suggest that the feature may not be a 'burial' as such, but some other form of ritual deposit.

The contexts from which cremated bone was recovered at Iron Age and Romano-British cemeteries at Westhampnett represent a variety of cremation-related features including probable pyre sites, and dumps of pyre debris, some of which are referred to elsewhere in this volume as 'pyre-related features', cremation burials, and possible 'memorials'. To avoid any misunderstanding the word 'cremation' is used here in its proper sense; 'cremation burials' will be specifically referred to as such.

Cremated human bone was recovered from 222 contexts (from 159 features) in the Iron Age cremation cemetery, and from 30 contexts in the Romano-British cremation cemetery, and to avoid repetition the following description of methodology is applicable to both periods.

Methods

Recovery and presentation

In excavation, cremation burials and cremation-related contexts were subject to 100% recovery as whole-earth samples numbered in the environmental samples sequence. Sub-samples for artefacts were taken in post-excavation, comprising the fills of vessels from suspected burial contexts. All of the samples were wet sieved and bone from the >5 mm fractions was extracted for examination. The 1 mm and 2 mm fraction residues were retained *en masse*. As a result, one context may have two or more samples associated with it, and during examination of the bone these divisions were maintained. Following analysis, including consideration of the nature and integrity of the contexts, results from different samples of the same context may have been amalgamated in the absence of significant reason for maintaining the separation. The results are presented by contexts, with, in a few instances, divisions based on the position of the bone, e.g. concentration, scatter or associated vessel number (Table 1).

Residues

It was decided not to include extraction of cremated bone from the 1 mm and 2 mm fraction residues in the post-excavation analysis because of the inordinate amount of time it would have taken to undertake this. All the 1 mm and 2 mm fraction residues were scanned by the writer and fragments of identifiable skeletal elements (see below), together with fragments of artefacts, were removed for further examination. As it was impossible to give the weight of bone in these residues, which generally contained large quantities of pea-grits, etc, an observation of the relative quantity of bone in each 'sample' residue was made. Consequently, in consideration of the total weights of bone and weights of bone from the 2 mm fraction, it should be remembered that it has not been possible to present the full weight of bone in the 2 mm fraction, and no estimate has been possible for the 1 mm fraction.

Osteological procedure

Analysis followed the writer's standard procedure for the examination of cremated bone (McKinley 1989; 1994a). The cremated bone extracted from each context was passed through a sieve stack of 10, 5, and 2 mm mesh size. The relative weights of bone from each sieve and the maximum skull and long bone fragments, illustrates the degree of bone fragmentation in each context (Archive).

Identifiable bone was separated for further examination, being divided into skull, axial, upper, and lower limb categories. This may demonstrate any deliberate bias in the skeletal elements collected for burial. 'Identifiable' bone is defined as fragments which may be identified to a particular bone or group e.g. femur, proximal finger phalanx, thoracic vertebra. Where a fragment could only be identified as, for example, long bone shaft, upper limb, or as long bone articular surface, this was not considered detailed enough to include with the 'identifiable' bone. Some areas of the skeleton are, by their nature, easier to identify than others even as small fragments e.g. skull, a factor which must be considered in the analysis of the significance of skeletal elements included in a context.

Animal bone fragments were extracted (mostly cremated) and pyre and grave goods additional to those extracted during the initial processing of the whole-earth samples were also recovered.

Full details of all identified bone are presented in the archive report including:

- the number of identified bone fragments with descriptions of morphology and pathological lesions;
- bone measurements;
- variations in the colour of individual bone fragments from the buff/white of full oxidation;
- any coloured staining to bone fragments or adhering substances;
- a brief note on animal bone fragments recovered and pyre/grave goods removed during the osteological examination; and

- Skeleton Record Sheets and Data Sheets for unburnt human bone showing skeletal elements recovered, tooth wear patterns and measurements taken.

Number of individuals
The number of individuals represented in a context was ascertained either from obvious age-related differences in size and development of the bone as between immature and adult individuals, or by duplication of identifiable bone fragments — skull fragments are particularly useful in this respect as many areas of the skull are easily recognisable even as very small fragments and occur either singly or in pairs (see McKinley 1989; 1994a for further discussion).

Care must be exercised to ensure that duplicate bones are not intrusive, either as a result of post-depositional site disturbance, or in consequence of the accidental inclusion at time of burial of unrecovered debris from previous cremations.

Age
The age of immature individuals was assessed from the stage of tooth development (van Beek 1983) and ossification/epiphyseal bone fusion (Gray 1977; McMinn and Hutchings 1985). The age of adults was assessed from the stage of epiphyseal (McMinn and Hutchings 1985; Webb and Suchey 1985) and cranial suture fusion, and other age-related degenerative changes to the bone (Bass 1987). The age categories used are:

foetus/neonate	<6 months
infant	0–4 years
juvenile	5–12 years
subadult	13–18 years
young adult	19–25 years
mature adult	26–45 years
older adult	45 years +

Where insufficient evidence was present to aid age assessment there may be overlaps between categories.

Sex
Sex was ascertained from the sexually dimorphic traits of the skeleton (Bass 1987), including the maximum cranial vault thicknesses '1a' and '1b' according to Gejvall (1981). As with age assessment, a combination and scoring of traits were used in order to overcome any methodological bias (see McKinley 1993a; 1994a for further discussion) or variations in sexual dimorphology within the group. Levels of reliability reflect the quantity and quality of available traits on which to base the assessment; '??' denotes 'possible', '?' denotes 'probable'.

Summary of Results

A summary of the results is presented in Table 1. Contexts interpreted in excavation as graves but which were subsequently found not to contain any bone, contexts comprising only scatters of bone, small quantities of redeposited bone, or containing no identifiable bone fragments, have not been included in the table.

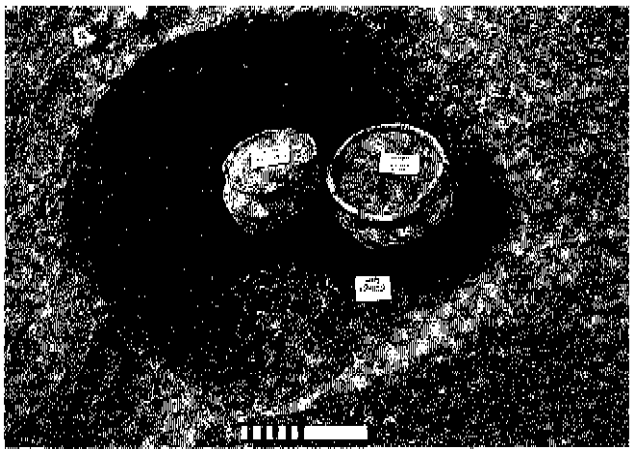


Plate 17 Iron Age grave 20051 viewed from the east. The unurned cremated bone of an unsexed subadult/adult was accompanied by two vessels and unidentified cremated animal bone

Weights of bone from all contexts containing bone and a note on the relative quantity of bone in the unsorted residues, is presented in the archive. Where applicable, this table also shows the inter-context distribution of bone. All weights are given in grammes (g) to one decimal place. All measurements are given in millimetres (mm). Unless stated otherwise, all the bone, both human and animal, is cremated/burnt.

Nature of the contexts containing cremated human bone
The definition of contexts, i.e. the fills of features containing cremated human bone, was based on the interpretation of the primary field records combined with osteological evidence and other archaeological components of the contexts (Table 2). The integrity of the interpretation is in some instances inconclusive, either as a result of disturbance to the context, or, in a very few instances, due to insufficiently detailed records being made in excavation.

Unurned burials
These are concentrations of cremated bone at the base of a burial pit, often with one or more accessory pottery vessels and sometimes other associated artefacts (Pl. 17). There may be some additional small quantities of bone scattered in the grave backfill together with other pyre debris (usually charcoal flecks). Some accessory vessels may contain very small (<10 g) quantities of bone in the upper fills, probably accidental inclusion from disturbance, soil action or bone not separated from pyre debris.

It is probable that at least some of these concentrations were originally placed within some form of organic container e.g. fabric, basket, or leather. There is evidence from broadly contemporary cremation burials in Greece for the use of cloth as a wrapping for cremated bone, both urned and unurned (Musgrave in prep.).

Urned burials
These are bones buried in a vessel. There may be small quantities of bone scattered in the grave fill with other pyre debris.

Combined unurned and urned burials
These are single burials where part of the cremated bone was deposited partly in an unurned concentration and partly in an urn. They should not be confused with urned burials where cremated bone mixed in with other pyre debris has been incorporated in the backfill of the grave. The majority of the bone in each was in the concentration.

Cremation burials
Further details of which are unknown.

'Memorials'
A number of pits containing one or more vessels, and interpreted at the time of excavation as graves subsequently proved to contain very little or no bone. The contexts were either undisturbed or only slightly disturbed. Where small amounts of bone were recorded in excavation, it appears to have been in 'a concentration' (as far as it is possible to concentrate 2–3 fragments). In other instances, a few small fragments of bone were noted only during the scanning of residues. The largest quantity of bone from one of these designated features is 29.3 g of subadult/adult bone, i.e. a maximum of 3% of the total expected weight of bone from a small adult (McKinley 1993b). In most instances <10 g of bone was recorded.

These features do not appear to represent 'burials' as is generally understood or in common with other cremation burials from the site. They have therefore been distinguished from the others. The possible existence of such features has been suggested elsewhere, for example in mid–Late Iron Age cremation burials in France by Flouest who defines them as *cenotaphes?* (Flouest 1993, 204). Only the features which contained bone are included here, but a further seven contained no bone at all.

Pyre debris dumps
These comprise either (i) apparently deliberate deposits of pyre debris in features excavated specifically for this purpose or in existing hollows and/or natural features, or (ii) redeposited pyre debris. It was not always possible to ascertain the exact nature of these cremation-related contexts and consequently they have been called 'pyre-related features' elsewhere in this volume. In this section the less specific term 'cremation-related feature' is preferred to avoid giving the impression that these features were necessarily pyre sites. The archaeological components comprised a mix of burnt material, including frequent charcoal with varying quantities (though sometimes none) of burnt clay, burnt flints, cremated bone, and pyre goods. The fills all appeared to be mixed with no discernible layering or ordered deposition. It should be noted that not all of these features contained cremated bone.

Pyre sites
A number of X, T, Y-shaped and linear features were excavated on the periphery of the cemetery. Several of the features had indications of *in situ* burning at the base with discoloration of the soil and burnt flints. They were generally fairly shallow and their fills comprised the same mixed pyre debris found in the features called 'pyre-related features'. The various 'arms' of the features may have acted as 'under-pyre' draught scoops, the variety in shape allowing the axis of the pyre to be directed in line with the prevailing wind. The fills in most cases appear to represent redeposited pyre debris. Again, not all these features contained cremated bone and they are not further considered here.

Condition of bone
The vast majority of the cremated bone appeared to be in good condition and showed no indication of changes resulting from detrimental burial conditions. However, bone from seven contexts was worn and chalky in appearance, suggestive of erosion from acid solution passing through the burial medium. There is nothing to indicate why these few contexts should have suffered where the others did not. Their distribution is spread across the cemetery area, they include urned and unurned burials, and one pyre debris dump or 'pyre-related feature', and most are undisturbed deposits. All the bone from all but one of these contexts was adult. The efficiency of cremation is not at variance with the general trend. It can only be supposed that minor differences in the micro-environments of these burials lead to the erosion of the bone.

It was noted whilst emptying two of the urned Romano-British burials (see below), that some spongy bone e.g. the femur head in grave 20803 (Fig. 142), noted as complete in the vessel, collapsed entirely on excavation. In both these burials, the rest of the bone appeared unworn. Were this to have been the pattern in all the other burials, it will have passed undetected, the spongy bone having crumbled to dust unobserved.

Disturbance
The cemetery had suffered from varying degrees of plough damage. Disturbance from intercutting features was minimal. Some very slight damage had resulted during machine stripping of parts of the site, and metal-detector users vandalised a few of the graves during the course of the excavation. As most of the burials contained structured deposits it was possible, in the majority of cases, to ascertain the level of disturbance to these contexts. With respect to the pyre sites and pyre debris dumps or 'pyre-related features', it was not feasible to make a realistic assessment of the extent of disturbance, though the contexts had undoubtedly suffered some truncation.

The level of disturbance is of importance when considering aspects of pyre technology and ritual. It may affect the integrity of the context, the quantity of observable bone within the burial, and the bone fragment size. If meaningful comment is to be made on these elements of the burial it can only be done so on the undisturbed deposits.

A measure of the disturbance to the bone in the burials is indicated in Table 1. Only where there was a total lack of any disturbance to the bone has the context been designated undisturbed (indicated as *). In a few contexts, although the bone was apparently unmoved, the positioning of accessory vessels over the bone, some of which were subsequently crushed or cracked, must have affected the condition of the bone (indicated as $). Unmarked contexts are those for which the integrity of

Table 1 cremated human bone from Iron Age contexts – summary of results

Feature	*Fill*	*D*	*Type*	*Total wt (g)*	*NI*	*Age*	*Sex*	*Pathology/Morphological variation*
Cleaning layer	20000		r	15.3		subadult/adult		
20001	20002	*	un	153.8	1	older mature/older adult	?? F	pitting - auricular surface: exo - femur
20005	20006	*	un	98.8	1	older mature/older adult	?	ddd: o.p. - acetabulum
20008	20007		un	182.2	1	adult	?	
20010	20009	*	un	1.1	1	older infant/young juvenile		
20018	20019	*	un	128.0	1	older mature/older adult	?	ddd - T
20021	20020	*	un	243.1	1	adult	?? M	d.l. - p.humerus
20023	20022	*	un	427.1	1	adult	?	
20025	20024		un	152.2	1	adult	?? F	cribra orbitalia
20031	20030		un	141.9	?1	adult	?? F	
20035	20034	*	un	413.6	1	adult	?	
20039	20038	*	un	290.7	1	mature/older adult	?	
20043	20042	*	un	381.6	1	adult	?? F	
20045	20044		un	184.3	1	young/mature adult	?	
20051	20050	*	un	44.8	1	subadult/adult	?	
20052	20047		prf	19.2		adult	?	
20053	20054		?u	541.3	1	older mature adult	? F	
20055	20056	*	un	167.3	1	older mature/older adult	?	o.p. - p.radius
20057	20058	*	un	605.1	1	older mature/older adult	?? F	o.p. - atlas
20060	20059		un	116.9	1	adult	?	
20061	20062		un	8.2	?1	subadult/adult		
20064	20063	?*	?un (?m)	4.3	?1	subadult/adult		
20068	20069		prf	22.1		older subadult/adult	?	
20071	20070	*	un	595.8	1	younger mature adult	? F	
20073	20074		un	154.8	1	older subadult/adult	?	
20080	20079		un	86.9	1	adult	?	
20083	20082	*	un	10.1	?	subadult/adult	?	
20087	20086		un	450.4	1	mature/older adult	?	p.d.
20089	20088	*	un	999.2	1	older mature adult	?? F	
20091	20090		un	140.3	1	adult	?	
20092	20081			3.3	?	adult	?	
"	20093		un	356.4	1	older mature/older adult	?? F	
20095	20094	*	un	252.5	2	1) older subadult 2) older infant/young juvenile	?	

Feature	*Fill*	*D*	*Type*	*Total wt (g)*	*NI*	*Age*	*Sex*	*Pathology/Morphological variation*
20097	20096	*	un (?m)	22.7	1	subadult/adult		
20098	20099		un	57.8	1	subadult/adult	?	m.v. - metopism
20101	20100	*	un (?m)	10.0	?	subadult/adult	?	
20116	20117		un	65.1	1	adult	?	
20121	20120		ps	422.7	1	older mature adult	?	Schmorl's - T/L
20125	20126		prf	2.6		?		
20128	20127		prf	99.0		adult	?	
20130	20129		prf	11.4		?		
20132	20131		un	262.0	1	older adult	?	?a.m.t.l.
20134	20133	*	un	564.9	1	older mature/older adult	?	o.p. - L: exo.- femur
20142	20141		un	118.5	1	subadult/adult	?	
20144	20143		?cb	0.7	?	subadult/adult	?	
20146	20145	*	un	174.0	1	adult	?	
20148	20147	*	un	30.9	1	subadult/adult	?	
20149	20150		?un	142.3	1	subadult/adult	?	
20169	20168	*	un	279.4	1	adult	?	
20170	20171	*	un	23.9	?1	subadult/adult	?	
20174	20175	*	un	133.5	1	adult	?	o.p. - atlas
20179	20178		un	121.0	1	adult	?	
20182	20181		?un	198.5	?1	adult	? F	
20183	20180	$	un	23.8	1	subadult/adult	?	
20185	20184	*	un	248.3	1	older mature/older adult	?	o.p. - vert.: exo.- femur
20186	20187		r	80.3		subadult/adult	?	
20191	20190	*	un	484.9	1	older adult	?	o.a. - atlas/axis: cysts - C: o.p. - T/L
20196	20197	*	un	271.3	1	adult	?	
20199	20198	*	un+?u	697.3	1	older mature/older adult	?	porosity - mandibular socket
20201	20200	*	un	49.3	1	older juvenile/young subadult		
20207	20206	*	un	159.2	2	1) infant 2) subadult/adult	?	
20208	20209	*	un	381.6	1	older mature/older adult	?? F	
20212	20211		prf	12.7		subadult/adult	?	
20234	20233		prf	66.6		subadult/adult	?	
20235	20236	*	un	316.3	1	older mature/older adult	?	o.p. - atlas: ddd - C
20237	20238		un	3.7	1	infant		
20239	20240	?	un	416.1	1	older mature/older adult	?	p.d.: o.p. - atlas: fracture - rib
20242	20241	*	un	40.5	1	subadult/adult	?	
20244	20243		ph	1.4		infant/juvenile		

Feature	*Fill*	*D*	*Type*	*Total wt (g)*	*NI*	*Age*	*Sex*	*Pathology/Morphological variation*
20245	20246	$	un	59.2	1	subadult/adult	?	
20248	20247	*	un	0.2	1	infant/?juvenile		
20250	20249		ps	2.3		infant		
20252	20251	*	un	740.7	1	adult	?? F	
20253	20254	*	un	406.2	1	young subadult	?? M	
20255	20256		un	13.1	1	adult	?	
20258	20257		prf	369.8		young/mature adult	?? F	
20260	20259		ps	0.1		juvenile		
20264	20263		prf	176.5		older mature/older adult	?	
20268	20267	*	un (?m)	29.3	?1	subadult/adult	?	
20274	20273	*	un	120.2	1	older mature/older adult	?	
20280	20281		?un	387.7	1	adult	?	
20295	20294		ps	94.6		subadult/adult		
20297	20296		un	161.8	1	adult	?	
20300	20301		prf	264.3		adult	?	
20312	20311	*	un	856.7	1	young/mature adult	?? F	
20314	20313		un	40.9	1	adult	?	
20318	20317		ps	368.2		older adult	?	o.p. - T, d.ulna: resorption & new bone - d.ulna
20320	20321		un	43.0	1	subadult/adult	?	
20335	20334	$	un	44.6	?1	subadult/adult	?	
20337	20336		un	15.6	1	subadult/adult	?	
20338	20339	*	un	234.7	1	adult	?	
20346	20347	*	un (?m)	4.5	1	adult	?	
20348	20349		prf	1.9				
20353	20352		cb	21.4	1	subadult/adult	?	
20364	20365	*	un	267.5	1	older mature adult	?	p.d.
20367	20366	*	un	154.6	1	adult	?	
20368	20369		un	18.1		subadult/adult		
"	20383		un	127.8	1	adult	?	
20384	20385		un	390.1	1	older mature adult	?	
20408	20407		un	145.0	1	adult	?	
20414	20413		ps	20.0		subadult/adult	?	
20420	20419		un	65.0	1	juvenile		
20451	20450	*	un	71.6	1	subadult/adult	?	
20453	20452	$	un	467.7	1	young/younger mature adult	?? F	
20457	20456	$	un	379.3	1	older mature adult	?	

Feature	*Fill*	*D*	*Type*	*Total wt (g)*	*NI*	*Age*	*Sex*	*Pathology/Morphological variation*
20459	20458	*	un	532.6	1/ ?2	1) older mature/older adult ?2) infant/juvenile	1) ?? F	o.p. - T/L: exo - patella
20463	20462		cb	144.0	1	adult	?	
20467	20466		un	12.2	?1	>infant		
20469	20468 scatter	*	un	133.2	?2	?2) older mature/ older adult	?	ddd - T/L: o.a.- T/L
"	20468 conc.	*	un	813.2	1	1) older mature adult	?	
20471	20470	*	un	251.9	1	adult	?	
20479	20478	$	un+?u	499.7	1	young/mature adult	?	
20483	20482		un	168.1	1	older mature/older adult	?	o.a. - C
20484	20485		un	286.7	1	older mature/older adult	?	
20493	20492		un	154.2	1	older mature/older adult	?? F	exo - femur
20495	20494		un	199.7	1	adult	?	
20497	20496	*	un	91.4	1	adult	?	
20535	20534	$	un	177.0	1	adult	?	
20541	20540		un	275.0	1	adult	?	
20543	20542	*	un	170.8	1	adult	?	
20544	20545	$	un	55.0	1	adult	?	
20546	20547		prf	59.9		subadult/adult	?	
20549	20548		un	121.8	1	adult	?? F	
20564	20565		cb	25.3	1	subadult/adult		
20566	20569		u	158.6	1	older subadult/adult	?F	
20571	20570	*	un	118.8	1	adult	?	
20573	20572		cb	45.7	1	juvenile/subadult		
20583	20582	*	un	50.9	1	juvenile/subadult		
20585	20584	$	un	26.4	1	adult	?	
20589	20588		un	117.1	1	adult	?	
20593	20592		un	31.9	1	older infant/juvenile		
20601	20600	*	un	183.8	1	young/mature adult	?? F	
20605	20604		un	362.8	1	older mature/older adult	?? F	
20610	20609	$	un	22.9	1	adult	?	
20614	20615		cb	24.7	1	subadult/adult	?	
20619	20618		un	11.0	?1	adult	?	
20620	20621	$	un	174.6	1	adult	?	
20622	20613	*	un	278.7	1	young/mature adult	?	
20626	20625		un	164.7	1	subadult/adult	?	
20629	20628	*	un	360.1	1	older mature/older adult	? M	exo-femur

Feature	*Fill*	*D*	*Type*	*Total wt (g)*	*NI*	*Age*	*Sex*	*Pathology/Morphological variation*
20635	20634	$	un	115.1	1	subadult/adult	?	
20637	20636	$	?u	16.3	1	young infant (c. 3-6 months)		
"		$	un	20.4	?1	adult	?? M	
20643	20644		prf	61.8		subadult/adult		
20650	20649	$	un	112.3	1	adult	?? F	
20654	20653	*	un	200.1	1	adult	?	
20668	20667	*	un	68.4	1	adult	?	
20670	20669	*	un	174.5	1	adult	?	
20673	20674		prf	28.8		subadult/adult	?	
20675	20676	*	un	411.2	1	young/mature adult	?	
20680	20679	*	un	160.8	1	adult	?? F	
20693	20692		prf	28.2		subadult/adult	?? F	
20717	20716		ps	61.1		adult	?? F	
20729/ 20758	20759	*	un (?m)	24.8	?1	subadult/adult	?	
20750	20751	*	u	102.0	1	mature/older adult	?? F	
20752	20753	*	un	491.6	1	older mature adult	?? M	a.m.t.l.
20757	20756	*	un	157.0	1	adult	?	
20770	20771		ps	359.9		adult	?? F	
20772	20773		un	129.3	1	adult	?	
20774	20775		un	118.6	1	adult	?? F	
20776	20779		ps	49.3		older subadult/adult	?	
20802	20801		prf	14.8	1	older infant/young juvenile		
-	20835		un	228.1	?1	adult		
20836	20837		un	647.3	1	older mature/older adult	?	

Key to Tables 1 and 31

Disturbance (Dist.)

	pertains only to the bone within a burial context
*	undisturbed
$	bone may be crushed but un-moved
?	disturbance level unknown
	disturbed

Type

u	urned cremation burial
un	unurned cremation burial
cb	cremation burial mode of deposition unknown
ps	pyre site
prf	"pyre-related feature" including pyre debris dump
m	"memorial"
r	redeposited
ph	posthole

NI = Number of individuals identified NB: numbers comprise counts taken from the burials, bone from other cremation-related contexts (pyre sites, "pyre-related feature", or pyre debris), represents material not collected for inclusion in a burial and cannot be taken to be indicative of individuals not already counted from the burials.

Pathology/Morphological variation

exo	exostoses	C	cervical
ddd	degenerative disc disease	T	thoracic
o.p.	osteophytes	L	lumbar
d.l.	destructive lesions	vert	vertebra
p.d.	periodontal disease	p.	proximal
m.v.	morphological variation	d.	distal
Schmorl's	Schmorl's nodes	o.a.	osteoarthritis
a.m.t.l.	*ante mortem* tooth loss		

the deposit cannot be adequately ascertained, or where the burial was disturbed. The level of disturbance in burial contexts is summarised in Table 2.

Comparative data

Some difficulty has been experienced in collating comparative data from other Iron Age cremation burials, though the problems themselves are universal in cremation studies. Many of the known Iron Age cremation burials and cemeteries were excavated before the 1960s (*cf.* Whimster 1981) when the cremated bone was often given cursory treatment by the excavators and rarely examined by an osteologist. Observations were often subjective and so are of limited use for comparative discussion. Publication of the analysis of the cremated remains is, as yet, incomplete for many of the Iron Age cemeteries elsewhere in continental Europe.

The most extensive comparisons have been drawn with the King Harry Lane burials (Stirland 1989) from St Albans, Hertfordshire which is the largest Late Iron Age–early Romano-British cremation cemetery excavated to date in Britain, and is closest in size to Westhampnett. Four phases were distinguished at King Harry Lane; phase 1 being Iron Age, phases 2 and 3 overlapping between Iron Age and Romano-British and phase 4 Romano-British (Stead and Rigby 1989). The data was considered by Stirland (1989) as a single entity, but for comparative purposes within this study the data has been split, where possible, into two groups, phase 1 (53 individuals identified), and phases 1–3 combined (345 individuals identified). The latter instance undoubtedly includes many Romano-British burials. In a very simplified assessment, assuming a constant death rate and taking an end-date of AD 43, only *c.* 54 of the individuals from phases 2 and 3 would be Iron Age giving a total number of *c.* 107. It is highly unlikely that there was a constant death rate, however, and in view of the changes taking place when the cemetery was in use (Millett 1993), there is no way of ascertaining the real division within phases 2 and 3.

Table 2 number of features containing cremated human bone, with levels of disturbance

Type	*Total*	*	$
Unurned burial	117	60	12
?Unurned burial	4	1	–
Urned burial	2	1	–
?Urned burial	1	–	–
Unurned & urned burial	3	1	2
?Double burial	1	–	1
Cremation burial	3	–	–
?Cremation burial	2	–	–
Redeposited	1	–	–
Pyre Site	7		–
Pyre-related feature	17		–
Posthole	1	–	–
Total	159	63	15

Demography

Individuals included in this discussion comprise counts taken from the burials (Table 1, and summarised in Table 3). Cremated bone from other cremation-related contexts, pyre sites, and pyre debris dumps or 'pyre-related features', represents material not collected for inclusion in a burial and cannot be taken to be indicative of individuals not already counted from the burials. Minimum numbers are given, with additional tentative identifications where the integrity of a context may be severely compromised and/or the interpretation of the context is under question.

A minimum of 121 individuals were positively identified from the cremation burials, with a possible further 14 individuals for whom the evidence was tentative. Two, probably four burials were of dual cremations (*c.* 2%), and one grave contained a possible double burial.

Age

Fourteen (11.6%), or a possible 16, individuals were immature; 20 (16.5%), or a possible 68 (19.3%), could not be aged any closer than subadult/adult; 87 (71.9%), possibly 95, were adults.

A similar distribution was noted by Stirland (1989) from phase 1 at King Harry Lane, with 13.2% immature (including two infants) and 83% adults (including five young adults; the remainder were denoted 'adult'). The distribution varied only slightly when considering phases 1–3 combined, with 11.9% immature (41 individuals — 9 infants, 12 juveniles, and 4 subadults) and 80.6% adults (including 18 young adults and 2 older adults). In both instances the percentage of infants is slightly lower than at Westhampnett, at 3.8% and 2.6% compared to 6.6% respectively. At Baldock–Icknield Way, Hertfordshire (McKinley 1990) 13 individuals were identified, all adult or subadult. At Owslebury, (Collis 1977a; Wells *et al.* 1986), 84.6% of the 13 individuals identified were adult (including two young

Table 3 number of individuals identified in each age and sex category from graves

Age category	*Total no.*	*?F*	*??F*	*Total F*	*?M*	*??M*	*Total M*
Young infant	1	–	–	–	–	–	–
Infant	2(?3)	–	–	–	–		–
Older infant/young juvenile	3	–	–	–		–	–
Older infant/juvenile	1	–	–		–	–	–
Infant/juvenile	1 (?')	–	–	–	–	–	–
Juvenile	1	–	–		–	–	–
Older juvenile/young subadult	1	–	–	–	–	–	–
Juvenile/subadult	2	–	–	–	–	–	–
Young subadult	1	–	–	–	–	1	1
Older subadult	1	–	–	–	–	–	–
Older subadult/adult	2	1	–	1	–	–	–
Subadult/adult	18(?24)	–	–	–	–	–	–
Young/younger mature adult	1	–	1	1	–	–	–
Younger mature adult	2	1	–	1	–	–	–
Young/mature adult	6	–	2	2	–	-	–
Older mature adult	7	1	1	2	–	1	1
Mature/older adult	3	–	1	1	–	–	–
Older mature/older adult	20(?21)	–	7	7	1	–	1
Older adult	2	–	–	–	–	–	–
Adult	47 (?52)	(?1)	7(?8)	7(?9)	–	1(?2)	1(?2)
Total	121(?135)	3(?4)	19(?20)	22(?24)	1	3(?4)	4(?5)

adults), with one infant and one juvenile. Four (46.1%) of the 13 individuals from Boxford, Suffolk (Wells 1968) were adults, with one infant, the rest were unaged.

Although the number of immature individuals identified differs very little from that noted in other Iron Age cremation cemeteries, or cremation cemeteries of other periods, it is perhaps not as high as might be expected. According to Brothwell (1971), in a 'normal' population the ratio of infants <1 years to the total number of individuals between 0–20 years should be between 4:1 and 4:3. Clearly here, as in many other cemeteries, this is not the case (1:15). The reasons for this apparent absence of young infants could be numerous and have been discussed in detail elsewhere by the writer (McKinley 1989; 1994a). The bone of such young infants does survive cremation (both in modern crematoria and on pyres) but is obviously very small and fragile.

That infants of less than one year may be subject to the same burials rites as other members of the 'population' is attested by grave 20637, a 3–6 month old infant. Three neonates were identified by Stirland (1989) from phases 2–3 at King Harry Lane.

Such fragile bone may be subject to preferential loss in aggressive burial conditions and it may be no coincidence that the one young infant identified also comprised one of the few urned burials from this period (all three from King Harry Lane were urned burials, the majority burial rite; Stead and Rigby 1989). However, in most of the 'burials' with very small quantities of bone and whose interpretation might be thought questionable, what little bone there was comprised subadult/adult-sized material, suggesting these contexts cannot account for the 'missing' young infants. It is not impossible that some of the features interpreted in excavation as 'burials' which subsequently proved to contain no bone may have been the graves of young infants, but such a suggestion must remain tentative.

Another possible area of loss may be in multiple cremations. Of the two or three noted from this period one included an infant and two an infant/juvenile, all were with an older individual. In all these instances, the quantity of bone in the burial represented a maximum of 16–53% of the expected total cremated bone weight of the adult alone (McKinley 1993b). Where the mourners felt incumbent to include only *c.* 50% or less of the adult remains in the burial, it is not impossible that they did not include any of the infant bone at all (the single young infant 20636 was represented by 16.3 g of bone). Here again, infant bone may also be subject to preferential destruction.

In any demographic consideration, it is important to remember that we have a limited view of the 'population' and some elements may be almost entirely absent (Ubelaker 1974).

Sex

Twenty-six (21.5%) of the individuals from burial contexts were sexed, with a further three identified tentatively. This includes 23.8% of the subadult–adult 'population'. This low level of sexing reflects the paucity of sexually dimorphic traits recognisable, resulting in part from the condition of the bone and the nature of the burials.

Of the total 'population' 22 (18.2%) were identified as female, 4 (3.3%) as male (i.e. respectively 20.2% and 3.7% of the subadult–adult individuals). The larger

number of females identified probably reflects a bias in the ease of identification of females and may indicate a general lack in robusticity within the group. The high percentage of unsexed individuals precludes any significant comment on this aspect of the demographic structure of the 'population'. In the female group, the greatest number and median figure occurs in the older mature/older age category. The number of males identified was too small to note any concentration within age categories.

By comparison Stirland (1989) sexed 39.6% of the phase 1 individuals from King Harry Lane (47.7% of adults), the figure dropping to 26.1% for phases 1–3 combined (32.4% of adults). Here there may have been a bias in the ease of sexing males with 13.2% of the phase 1 individuals being sexed as female (15.9% of adults) and 26.4% as males (47.7%). Combining phases 1–3 the figures again fall, with 6.4% females (7.9% of adults) and 19.7% males (24.5% adults). At Baldock–Icknield Way (McKinley 1990), 46.1% of individuals were sexed, with equal numbers of males and females. Wells sexed 53.8% of the individuals from Owslebury (Wells *et al.* 1986), 30.8% male, 23.1% female, and 46.1% of the individuals from Boxford (Wells 1968), 23.1% female and 23.1% male.

The age and sex structure of the cemetery 'population', whilst by no means providing a complete picture, does not suggest anything other than a domestic cemetery.

Estimated population size

Population size may be estimated using the Crude Mortality Rate (CMR; Ubelaker 1974). With cremation burials, since it is not possible to construct life tables (see McKinley 1994a for further discussion), the CMR may be derived from comparison with known life tables (Ubelaker 1974; Hooton 1920, 21).

The Iron Age cemetery was in use for 40–60 years *c.* 100–40 BC. Two estimates have therefore been made for the maximum and minimum figures. Both are based on the unlikely assumption that the death rate remained constant over time, whereas in reality it may have varied considerably. In addition, the figures do not take into account the elements of the 'population' which may be absent (see above; Ubelaker 1974). It should be stressed that this is an estimate and only provides an indication of the probable population size.

Assuming a time span of 40 years, the 'population' using the cemetery may be estimated at 127–142 individuals (depending on inclusion or exclusion of the tentatively identified individuals). The figure is reduced to 85–95 individuals assuming a time span of 60 years. This suggests a fairly sizeable community was using the cemetery, comprising several extended family groups or households, be they of a compact or dispersed nature.

Pyre Technology and Ritual

Pyre sites

Of the contexts designated as pyre sites, ten, all of which had Iron Age artefacts associated with them, contained some cremated bone. The distinguishing feature of these contexts was their shape; of varying size (maximum 3.0 x 2.2 m) and relatively shallow (0.1–0.22 m), they were either X, T, Y, or short and linear in form. There was limited evidence of *in situ* burning within the contexts, many having none. The fills comprised a mix of frequent charcoal and fragments of cremated bone, with, in some instances, fragments of charred logs, burnt flint and stone, burnt clay, and pyre goods including burnt sherds.

The quantity of bone ranged between 0.1 g (pyre site 20260, juvenile bone) to 422.7 g (pyre site 20121, mature adult bone), with a mean of 122.7 g — though the standard deviation is so large as to render this of no statistical significance. The percentage of bone in the 10 mm sieve also varied considerably from 0–51%, as does the maximum fragment size, 2–49 mm, and percentage of identifiable bone, 0–36%, again rendering no statistical significance.

Form

The form of the features suggests an under-pyre pit to aid draught. Evidence of such shallow pits below the pyre is provided by ethnographic parallels from 19–20th century India and 18th century Australia. Dubois and Beauchamp (1943) describe the pyre of a Brahmin as comprising 'a shallow pit ... about six feet in length and three in breadth [1.83 x 0.91 m]' over which the pyre was constructed. In 1798 Collins (Hiatt 1969) described a cremation in New South Wales where the ground was excavated to a 'depth of three or four inches' (0.07–0.10 m) prior to construction of the pyre.

The most obvious orientation for a under-pyre draught pit would be along the long axis of the pyre, set in the direction of the prevailing wind. The various forms of pit at Westhampnett may indicate that at least some of the sites were used on several occasions, the 'arms' of the pits being designed to catch the wind from different directions.

The paucity, or in some instances, total lack of conclusive evidence for *in situ* burning in these contexts presents an interpretative problem. Experimental pyre cremations conducted by Dr Alistair Marshall and the writer in 1993 and 1994, over a soil of silty clay composition, showed a very clear outline of the pyre after the site was cleared (Pl. 18), but also demonstrated the shallow depth to which the effects of the pyre had penetrated *c.* 0.1–0.12 m. If pyres were constructed directly on the ground surface and that surface subsequently truncated, it is possible that little or no evidence of *in situ* burning would remain. The surface geology in the area of the cemetery comprised gravels with a silty clay matrix, perhaps not the most heat-receptive of soils but one may have expected to see more evidence of discoloration to the sub-pyre ground surface. It is known that the old ground surface at Westhampnett was truncated, and the under-pyre draught pits probably represent only the very base of the pyre sites but the *in situ* effects are still very slight considering these pits would have had charcoal at temperatures of up to 700–900°C falling into them. It may be noteworthy, however, that in the pyre experiments (Marshall and McKinley in prep.), a 'hot' deposit of charcoal (500°C) was made into a covered pit which had no effect on the sides or base of the cut.

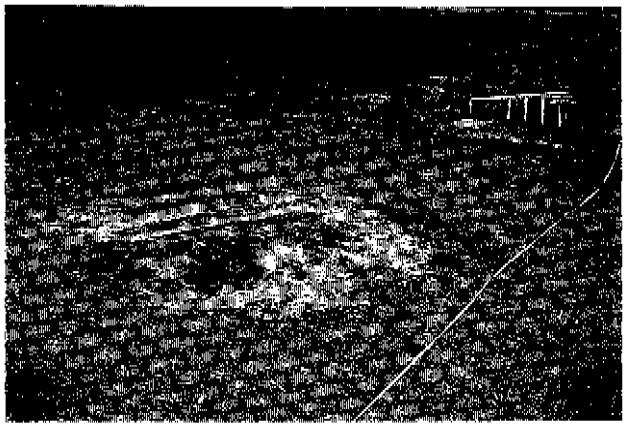


Plate 18 The burnt-out remains of an experimental pyre cremation conducted by Alistair Marshall and the writer in 1993

Fills

The fills, essentially pyre debris, were not consistent with what one would expect from either a *bustum* type deposit (i.e. pyre and burial as a single *in situ* event), in which the pyre had collapsed down into the sub-pyre burial pit, or from an uncleared, undisturbed pyre site. If either were the case, in view of the manner in which a pyre collapses on burning a layered deposition would be expected — burnt clay, flint and stone from the pyre base at the lowest level, charcoal and charred wood with a few fragments of cremated bone forming the major central deposit, with the cremated bone and pyre goods concentrated in the upper levels (Fig. 46). Therefore, the mixed nature of the various components within the fills at Westhampnett would suggest that they have been manipulated in some way.

If the fills were representative of a final cremation episode at a pyre site, the nature of the deposit would suggest deliberate mixing of the various components. After cremation most of the bone would be clearly visible on the surface of the pyre debris. Complete recovery of bone for burial is unusual, and certainly did not take place in the Iron Age at Westhampnett (see below).

It is not felt that any of the fills from features designated as pyre sites which contained cremated bone represented *in situ* deposits; the very mixed nature of the components suggest redeposited pyre debris. However, not all the fills from the pyre sites contained cremated bone and in these instances it might be conceivable that these fills indicate *in situ* deposits derived from the final use of the site. If this were the case one would expect the cremated bone to have been confined to the upper levels and may have been lost in the truncation of the ground surface. However, most of the fills have the appearance of redeposited pyre debris. If a pyre site were to be reused, to work efficiently it would first need to be cleared of debris from the previous cremation. The form of the pyre sites and presence of deposits of pyre debris suggest that sites were reused. The dumping or deposition of pyre debris appears to have been within the general vicinity of the pyre sites, either on the surface or in existing hollows, inclusion being incidental, accidental, and/or deliberate. It is not improbable that pyre sites no longer required for use in that capacity were subsequently used, either deliberately or accidentally, for debris from other pyres.

Position

The positioning of the pyre sites and pyre debris dumps or 'pyre-related features' around the periphery of the cemetery, as opposed to intermingled with the burials, corresponds with the positioning of pyre debris dumps (and perhaps by implication the pyre sites) in Romano-British cemeteries excavated at Baldock and East London. In this they differ from Roman *bustum* burials, and the few suggested, but not necessarily convincing, examples of Iron Age date which record the almost immediate proximity of burials to pyre sites e.g. Puddlehill, Bedfordshire, burial 7 and Sandown, Isle of Wight (Whimster 1981, 354, 378). The evidence presently available suggests that pyre sites were usually cleared after use rather than just before reuse.

Efficiency of Cremation

The vast majority of the cremated bone, from all contexts, appeared well cremated. The bone was almost uniformly buff–white in colour, indicative of full oxidation of the organic components of the bone (Shipman *et al.* 1984). Slight differential burning to individual bones was noted in six contexts (3%), all were adult burials. In each burial only a few bone fragments were affected and never the entire skeletal element. Blue or grey coloration was noted in fragments of skull vault, femur and humerus shaft, and a calcaneum, in all but one burial only one bone was affected.

Such variations are within the scope of what may be considered 'normal' and may have resulted from any slight problem with either time, temperature, or oxygen supply (McKinley 1989; 1994a). No specific difficulties with technology are indicated. The lower percentage of Iron Age burials than Romano-British burials (see below) demonstrating slightly less efficient cremation is worthy of note; this may suggest that either slightly greater care was exercised later, or that the perception of what was considered 'full/efficient cremation' may have varied (Barber 1990, 381; McKinley 1994a, 79–80), or simply that more wood was used.

The organic components of the body do not always completely oxidise on cremation, and fragments of the resultant light, very brittle, black soft tissue residue have been noted by the writer in a number of cremation burials (McKinley 1994a, 'slag'), particularly at the waterlogged Romano-British burial from Purton, Wiltshire (McKinley in prep.). A few small fragments of a brittle, black 'slag-like' material, similar in appearance to this soft tissue residue, were found in four contexts, grave 20165 (?unurned cremation burial/?memorial, very few bone fragments only in the residue), feature 20325 (part of enclosure 20277), grave 20484 (unurned burial), and grave 20668 (unurned burial).

During analysis of the charred seed remains, fragments of fuel ash slag recovered from flotation were noted in three graves (20021, 20089, and 20493), two 'pyre-related features' (20283 and 20414) and a posthole (20521). Fuel ash slag is a general hearth slag which may form when a fire is constructed over a highly

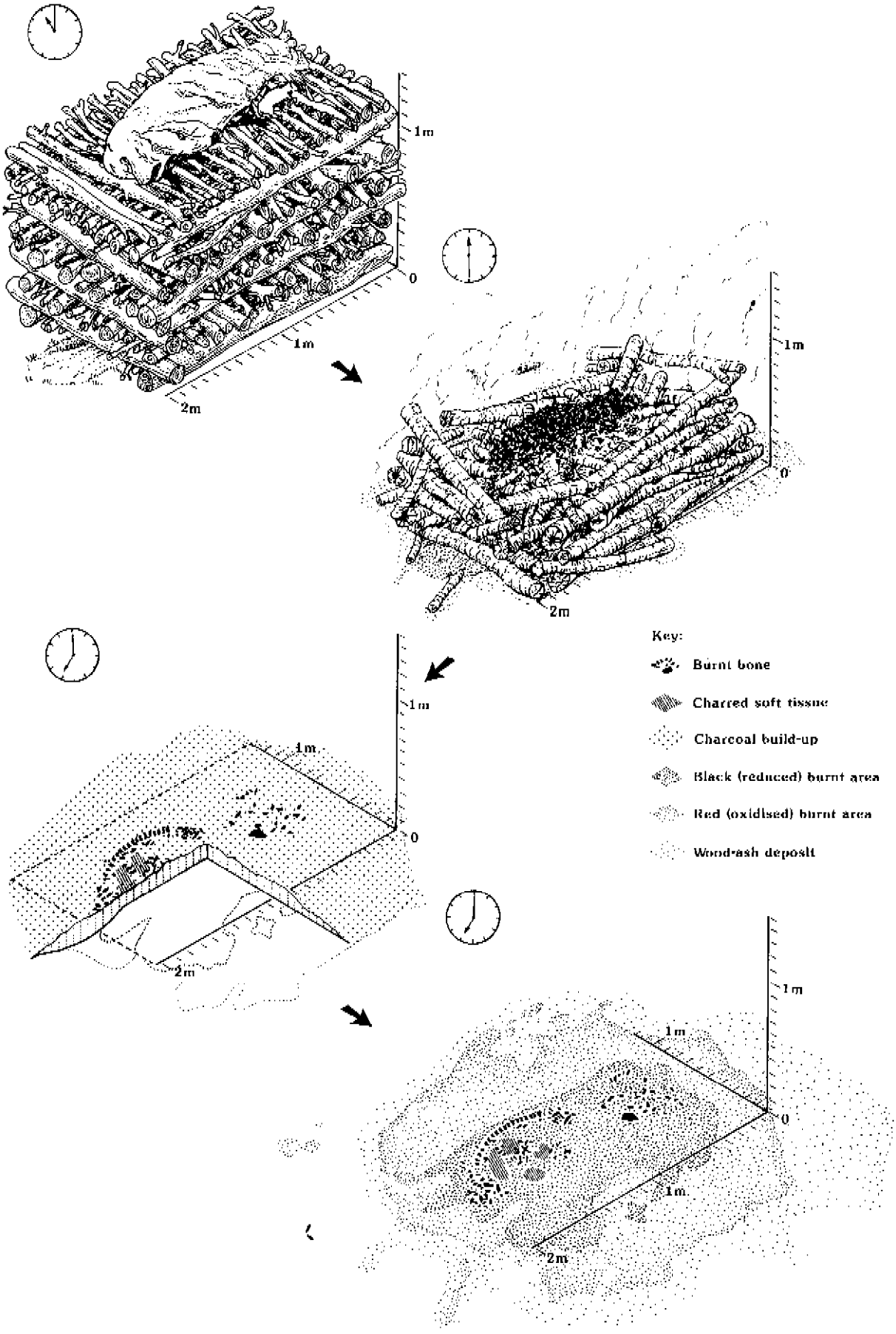


Figure 46 Schematic diagram showing the nature of pyre collapse through time at Guiting Power Experimental Pyre 1993. Note that the cremated bone remained in roughly correct anatomical order on top of the other debris

siliceous soil. The occurrence of fuel ash slag in these contexts demonstrates that at least some pyres were constructed over pockets of sandy soil and that a temperature of 1000–1200°C, that needed to melt the silica/iron in the soil, was attained by at least some of the pyres (McKinley 1994a).

Collection

From the viewpoint of achieving efficient cremation the most obvious position for the corpse is on top of the pyre, and such positioning of the body is supported by both ethnographic and anthropological evidence, and by osteoarchaeological evidence (McKinley 1989; 1994a; Barber 1990, 380). Experiments have shown that the body maintains its position in relation to the rest of the pyre throughout the cremation process, so that on completion the clean, buff/white bone rests in roughly correct anatomical position above the wood ash of the pyre (Pl. 18; Fig. 46; Marshall and McKinley in prep.).

In all cremation burials, urned or otherwise, the bone has obviously been collected separately for burial, even where other pyre debris has been incorporated into the grave fill. Recovery of the bone, if it were to be collected in full, would be a time consuming process (*c.* 4 hours for one person to collect the bone in experiment), but relatively simple. The bone would require no cleaning and could easily be picked off the bed of wood ash. It would, however, need to be cool enough to handle, and more importantly, the wood ash base would need to be cool enough to approach. Cremated bone cools fairly rapidly once removed from the pyre, *c.* 10–15 minutes, but charcoal may retain its heat for some hours. In one experiment, after 10 hours the pyre was still too hot to be able to hand-collect bone; in a second experiment, after 7 hours *c.* 12 gallons (*c.* 55 litres) of water was poured over the pyre effectively cooling the bone but the charcoal bed remained too hot to approach (Marshall and McKinley in prep.). Most ethnographic and anthropological observations tend to suggest pyres were, and are, left overnight before the collection of bone for burial (McKinley 1994a), even though reports of some modern Indian cremations indicate the entire pyre debris (including human remains) being consigned to the river *en masse* after about only 3–4 hours (*Sunday Times* 13.7.86). There is some evidence for deliberate cooling (which is not to be confused with the curtailing of the process) of the pyre in the *Aeneid* where Virgil refers to the Trojans having 'washed in wine the thirsty ashes of the remains' prior to the collection of cremated bone from the pyre. In the *Iliad*, Achilles instructs Agamemnon to 'first put out with gleaming wine the pyre [of Patroklos] that is still burning' (23: 237), but this was only after the pyre had burnt overnight and 'the fire had died down and the flames were over' (23: 228). An alternative mode of collection, were it considered necessary to recover the bone before the pyre was cool, would be to rake the bone fragments off the top of the pyre; once removed from the charcoal base they would cool rapidly.

Rarely, if ever, was it apparently deemed necessary to collect the entire cremated human remains for burial. A proportion of each skeletal area (skull, axial skeleton, upper and lower limb) was generally included, indicating the presence of the entire body, and there was no obvious preference for any particular skeletal element in the vast majority of cases. The level of recovery may vary considerably, but the reasons for such variation are unclear.

Weight of bone

Observations at modern crematoria (McKinley 1993b) have shown that the weight range of collectable (<2 mm fraction) bone expected from an adult cremation is *c.* 1000–2400 g (the minimum being a very elderly, gracile female), with an average of *c.* 1650 g. Elsewhere weights of 1600–3600 g have been noted (Evans 1963), but it is unclear whether this includes bone dust, as well as the archaeologically compatible bone of <2 mm fraction.

Of the 117 unurned burials, only 61 (52.1%) could be confirmed as undisturbed, a further 12 (10.3%) being undisturbed but probably crushed (Table 2). As an unknown quantity of bone may have been lost from the disturbed burials, and crushed bone may crumble to dust, only the undisturbed burials may be taken as containing quantities of bone representative of that originally deposited. From the undisturbed, unurned single adult burials, the range of bone weight was 30.9–999.2 g, with a mean of 301.1 g. That is, at the lower end of the scale, a maximum of 4% of the cremated bone was being buried, probably as little as 2%; at the upper end the quantity of bone may represent almost 100% recovery (although the identification showed this not to be the case), but probably *c.* 62%; with an average range of *c.* 19–30%. The one undisturbed, urned, single adult burial held 102 g of bone (*c.* 6.4%, maximum 10.2%), whilst the one undisturbed combined burial comprised 697 g of bone (*c.* 43.6%, maximum 69.75%). The three undisturbed dual cremation burials had a range of 159.2–946.4 g of bone, with a mean of 472.7 g, demonstrating that bone weight may not be taken as indicative of number of individuals in a burial.

The range and mean weights are similar to those noted in the Romano-British cemetery (see below), though in the latter the range is a little tighter and the mean just slightly lower.

At King Harry Lane (Stirland 1989), where the burials were considered as a whole (irrespective of phase, type of deposit, disturbance, and age), the largest number of burials were in the 0–249 g range (weights taken to 25 g), the median reading was within the 500–749 g range, with a maximum of 2249 g — the median and the maximum being substantially higher than at Westhampnett. At Baldock–Icknield Way (McKinley 1990), where all the burials were disturbed and 85% were urned, the range was 55.4–1490.6 g, more in common with King Harry Lane than Westhampnett. Other contemporary Late Iron Age sites for which bone weights are available tend towards the higher weight ranges — 1750 g (unurned) from Aston, Hertfordshire (Rook *et al.* 1982, 20), 662.7 g (urned) from Burial 3 at Maldon Hall Farm, Essex (Lavender 1991, 205). At the lower end of the scale are Dorton, Buckinghamshire (Farley, 1983, 294) where 125 g was recovered from a burial placed in a casket or box, and at the lowest extreme, Baldock–The Tene, Hertfordshire (Stead and Rigby 1986, 53) 10.5 g (mostly bear phalanges, and possibly no human bone at all?) and Hertford Heath, Hertfordshire (Hüssen 1983, 45) with 7.5 g (see below).

The Iron Age and Romano-British burials from Westhampnett have lower average and maximum bone weights than contemporaneous burials from elsewhere. This may indicate a genuine difference in the quantity of bone collected for burial, or it may be a question of bone survival.

During examination of the bone it was observed that there were comparatively few fragments of spongy bone, particularly articular surfaces of long bones, and of small bones e.g. tooth roots, and hand and foot bones. As described above, most of the bone was in good condition and did not appear to have been eroded by adverse acid soil conditions. Whilst the majority of the bone was received for osteological examination after excavation and post-excavation treatment (wet sieving), six Romano-British urned burials were emptied by the writer (see below, Figs 141–3). The bone from these vessels appeared in similar condition to that from the other contexts. As elsewhere, there were relatively few small bones; there were, however, many more fragments of spongy bone. These fragments often comprised whole articular surfaces within the vessels, but on excavation, despite great care, many crumbled to dust. This suggests that the paucity of spongy bone within the burials as a whole is the result of poor survival, probably contributing to the low bone weights. It should be noted that the Iron Age and Romano-British cemeteries in Area 2 were situated on a mainly gravel soil (acid) whilst the Bronze Age burial in Westhampnett Area 3 only 300 m away was on more calcareous and alkaline soil, which may explain the better survival of spongy bone in that burial.

Whilst the lower bone weights noted at Westhampnett may in part reflect cultural aspects, there still being an apparently genuine paucity of small bones, there is no doubt that at least some spongy bone has been lost from the burials. In view of the apparent good condition of the bone, this absence due to poor survival would have been overlooked had there not been the opportunity for some of the urned Romano-British burials to be emptied by the osteologist.

The variations in quantities of bone collected for burial remains unexplained, though there may be a variety of reasons (McKinley 1994a). Other than the obvious lower average weights for immature individuals, there is no apparent relation to the age or sex of the individual (the greatest weight from the Iron Age cemetery, 999.2 g, was a female, that from the Romano-British cemetery, 618.3 g, a male). In both periods the combined urned and unurned burials tended to contain greater quantities of bone.

Fragmentation

Numerous factors may lead to the fragmentation of cremated bone including cremation, collection, burial, excavation, and post-excavation treatment (McKinley 1994b), none of which involve deliberate breakage of the bone prior to burial. The size of bone fragments is an important factor in the ease with which bones may be identified, the larger the bone fragments the easier they are to identify. Hence, the percentage of identifiable bone often reflects the level of bone fragmentation (Archive).

Considering the burials as a whole, an average of 42.7% of bone was in the 10 mm fraction, and the average maximum fragment size was 41.1 mm. Assessing the undisturbed burials alone, the average figures are 43.9% of bone in the 10 mm fraction, and an average maximum fragment size of 43.5 mm. The one undisturbed urned burial had 68.4% of bone in the 10 mm fraction, a maximum fragment of 43 mm, and 50.2% of bone was identifiable. The one undisturbed combination burial had 59.8% of bone in the 10 mm fraction, a maximum fragment of 59 mm, and 48% of the bone was identifiable. The maximum percentage of bone in the 10 mm fraction was 86.1%, from a disturbed unurned burial, which also had the maximum percentage of identifiable bone at 69.5%. The maximum fragment size recorded was 109 mm, from an undisturbed, unurned burial.

The fragment sizes noted are within the normal range observed (e.g. Stirland 1989; McKinley 1994b). There is nothing to suggest any deliberate fragmentation of bone took place prior to burial.

Skeletal elements within the burial

As noted above, it is normal to observe a (apparently random) selection of bone from each skeletal area within a burial, irrespective (other than in extreme circumstances) of the overall quantity of bone included. The percentages of identified bone (Archive) in each area is rarely exactly equal for a variety of reasons including disturbance, ease of identifying different skeletal areas and bone survival (McKinley 1994a), but there is rarely any apparent deliberate bias in the elements included in the burial.

The generally low percentage of bones from the axial skeleton noted in the burials is to be expected in view of the observations made with regard to the poor survival of spongy bone. The ease with which even small fragments of skull may be identified (see above) usually results in there being a relatively high percentage identified within a burial, hence the total lack of any skull bone in two burials (20185 and 20654), both undisturbed, is unusual.

The total weight of bone in both of these burials is small, comprising a maximum of 25% of the total expected bone weight, probably closer to 10–15%. Since up to 90% of the human remains may not have been included in the burial it is not implausible that skull fragments were overlooked by accident. It would certainly suggest that the inclusion of some elements from each skeletal area generally noted in cremation burials was not considered of such importance in these instances. There is also a slight possibility that the lack of skull fragments may have been the consequence of a deliberate action.

Dual cremation burial

These are burials in which two individuals have been identified, and should not be confused with double burials, where cremated bone from two apparently separate cremations have been buried adjacent within the same grave. The various possible interpretations of these deposits have been discussed in detail elsewhere by the writer (McKinley 1994a), but it is felt that in most

instances the implication is for both individuals being cremated together on the same pyre. The retention of bone from one cremation until the bone from a second can be included before burial is supported by a passage in the *Iliad* where Patroclus' spirit speaks to Achilles 'do not have my bones laid apart from yours, Achilles, but with them, just as we grew up together in your house' (23, 83–84). That his instructions were followed is confirmed by a passage from the *Odyssey* (thanks to Dr. Jonathan Musgrave for drawing attention to the passage), in which the spirit of Agamemnon addresses that of Achilles.

> In this [golden amphora] your white bones lie, my lord Achilles, and mingled with them the bones of Menoetius' son Patroclus, dead before you, and separately those of Antilochus, who was your closest friend after Patroclus' death. (24, 73–76).

Burials comprising dual cremations most commonly include a subadult or adult, of either sex, with an immature individual, although two adults together are not unknown.

Two definite and one possible (2% of burials) dual cremations were identified from the Iron Age cemetery, all three a subadult or adult with an immature individual (graves 20095, 20207 and 20459). Only one adult, a female, was sexed (20459). The percentage identified corresponds closely with King Harry Lane (Stirland 1989) where 2.6% of the cremations were identified as dual, though this includes burials of all phases not just the Iron Age one. One (8.3%) dual cremation was identified from Owslebury (Wells *et al.* 1986). No dual cremations were identified at Baldock–Icknield Way (McKinley 1990) or Boxford (Wells 1968).

The figures presented should be viewed as a minimum. As discussed above, there is a reasonable supposition that immature individuals, particularly young infants, may be overlooked in dual cremation in consequence of non-recovery from the pyre for burial, or poor bone survival. In each case here, the probability of a family relationship of some kind between the individuals is compelling; to be placed so close in death would suggest a comparable closeness in life.

Pyre goods and staining to bone

The pyre and grave goods are discussed elsewhere and comment here is limited to a point of note with respect to recovery. Artefacts from the burials were extracted both during excavation, and in post-excavation sorting of the bone from the 10 mm and 5 mm wet sieve fractions. A few additional fragments were recovered during the osteological examination of the bone, including a few worked antler/bone objects which may easily have been overlooked by a non-specialist.

Included as part of the osteological examination was scanning of the unsorted 2 mm and 1 mm fraction residues — the latter of which particularly is rarely retained or seen by the specialist. From the residues numerous small fragments of glass, copper alloy including small melted globules, a few fragments of cremated worked antler/bone, a tiny glass bead, and a fragment of gold sheet, perhaps from a torque, were recovered. These objects would not have been found had the 1 mm fraction not been retained for scanning.

There are two additional points of note. The first is with respect to the artefacts recovered from residues. At least some of these fragments came from features whose fills included quantities of pyre debris. The residues themselves represent fills subject to 100% whole-earth sampling and subsequent sieving, and it would be impossible to deduce whether small fragments of artefacts were recovered with the burial or from the pyre debris incorporated in the backfill. There is some evidence to suggest that the pyre debris included in the backfill of a burial was from the relevant cremation pyre (e.g. grave 20252), but, conversely, there is also evidence in one instance that the pyre debris represented a different cremation episode to that of the individual buried in the grave (grave 20637). It is possible therefore, that some of the small fragments of artefacts in a grave fill derive from a different cremation to that represented by the burial and this factor should be considered in analyses of artefact associations.

The second point has already been made above, but must be stressed. The number of burials containing *pyre* goods should be viewed as a minimum. Since far from all the human remains were collected for burial it is probable that not all the pyre goods were either, in addition to which there would be organic pyre goods which did not survive cremation at all, including some materials such as amber, which is found as a grave good very occasionally in Late Iron Age cremation burials (Stead 1967, 17, A, fig. 10, A, frontspiece, b).

Blue and/or green spot staining was noted on bone from 44 contexts (including 40 burials). This staining is not to be confused with different bone colour resulting from variations in efficiency of cremation, but appears to have been caused by some external agency. The colours noted are similar to those generally attributed to copper alloy staining, but copper alloy objects were only present in five of the contexts where staining was noted to bone.

Such staining has been noted elsewhere, e.g. at Welwyn Garden City, where green spot staining was noted on the 'smaller long bones' (Stead 1967, 41), and at Baldock–Icknield Way (McKinley 1990) and St Albans–St Stephen's (McKinley 1992). In the latter, a distinct pattern was evident with the majority of staining being to fragments of vault, several fragments of radius shaft, and a few fragments of rib, humerus, and tibia shaft. As at Westhampnett, the majority of the contexts did not contain any copper alloy.

There is no apparent pattern in the distribution of staining at Westhampnett. The majority of bone fragments affected comprise vault (17 contexts), femur (16 contexts), and humerus (12 contexts) shaft. Smaller numbers of tibia, ulna and radius shaft, vertebrae, rib, and innominate are involved. Most of the copper alloy artefacts from the burials comprise fragments of brooches and necklaces which were pyre goods, with very occasionally other objects as grave goods.

It is possible these stains were the result of copper alloy being adjacent to bone fragments prior to burial, either on the pyre or after cremation in some pre-burial holding-place, for example in the Iron Age shrines (*cf.*

also the passage from the *Iliad* above), and that the copper alloy itself was never buried.

Researchers in Germany have suggested that this type of staining is not related to any external agency but is caused during cremation by the manganese in the bone apatite (mineral; Herrmann pers. comm.). However, observations at modern crematoria and experimental work by Dunlop (1975; 1978) has suggested instead that green staining results from the proximity of iron or steel to the bone during cremation, and that copper results in pink staining. Yellow staining was noted on rare occasions, and only where the body was cremated in a zinc coffin (Dunlop 1975; 1978).

Pyre debris

Deposits of pyre debris or pyre-related material were found in close proximity to the pyre sites along the margins of the cemetery, and in some instances pyre debris had apparently been deposited on pyre sites which had passed out of use. Varying quantities of material were also recovered from many of the grave fills, most frequently relatively small quantities seen as charcoal flecking. Five grave fills comprising high percentages of charcoal were noted, and they were distributed across the cemetery with only one being in the vicinity of a pyre site, implying that the inclusion of pyre debris was probably deliberate rather than being accidental from material dumped adjacent to a grave.

In the majority of cases where small quantities of bone were recovered from pyre debris within graves there was nothing to suggest that the debris was other than from the same cremation as the burial, e.g. grave 20252. In grave 20637, however, there is clear evidence for the debris being from a different cremation to the burial. An ?urned burial containing 16.3 g of bone from a young infant (c. 3–6 months), had 20.4 g of bone from an adult ??male mixed with charcoal in the backfill. The burial was within 2–3 m of three deposits of pyre debris or pyre-related features and one pyre site from which the adult bone may have been incorporated or redeposited accidentally with other pyre debris (Fig. 38). Alternatively, the pyre site used for cremation of the infant may have been inefficiently cleared from the previous cremation. The absence of any immature bone in the pyre debris from the grave fill and rarity of the occurrence would suggest the former theory as most likely.

There was no indication that any of the dumps of pyre debris contained the remains of more than one individual. This would suggest that the debris cleared from individual pyre sites was being deposited either into separate features each time or as an individual pile rather than there being one communal area. Such communal areas have been identified in cremation cemeteries, for example at the Bronze Age site of Twyford Down, Hampshire (McKinley forthcoming a) where the remains of approximately seven separate pyres were deposited in one area of the ditch, and from the Romano-British East London Cemeteries (McKinley forthcoming b), where the remains of a minimum of 21 individuals were identified from one large spread of pyre debris.

The quantity of bone from those deposits of pyre debris which contained cremated bone varies between 0.1–422.7 g, with a mean of 125.5 g. Remains of both immature individuals and adults were identified, as were fragments of cremated animal bone and other pyre goods. The efficiency of cremation did not vary from that seen in the burials, and in most instances there was no significant variation in the skeletal elements identified. One fill which did appear different was context 20120 (pyre site 20121), containing the largest weight of bone from a deposit of pyre debris. It was noted above that there was a general paucity of small hand and foot bones in the Iron Age and Romano-British burials. Most of the burials included 0–2 of these elements, with a smaller number containing between three and a maximum of 11. From context 20120, 21 skeletal elements from the hand or foot were recovered, closer in comparison with the 27 recovered from the Bronze Age burial in Westhampnett Area 3 than the maximum recovered from an Iron Age burial. This supports the contention that small bones were not being collected for burial but left with the pyre debris.

The quantity of wood ash which may remain after a cremation is surprisingly small. In one of the pyre experiments conducted by Alistair Marshall and the writer in 1993, 900 kg of wood left only 3.8 kg of charcoal at the pyre site (0.4% of the weight of wood or approximately 1.5–2 buckets-full). Left overnight, the finer wood-ash had been dispersed by the light wind.

The total weight of charcoal recovered from the various cremation-related features at Westhampnett was quantified by an assessment of its relative frequency rather than by count and weight, but it clearly does not represent the total amount of pyre debris remaining from the cremations. Where such dumps of debris have been recovered elsewhere at the Romano-British cemeteries at Baldock and East London (McKinley forthcoming a), not all the material was seen as fills of negative features, much appeared as surface spreads. The inclusion of at least some pyre debris at Westhampnett in non-burial features would suggest this was also the case here. Any such spreads of material would undoubtedly suffer in truncation of the ground surface, possibly disappearing completely from the archaeological record.

'Memorials'

A definition of these features was presented above and their identification and their level of disturbance are indicated in Tables 1–2. Where bone was present it was subadult/adult bone. In essence, almost all cremation burials are 'token' in that there was rarely any attempt to collect all the bone for burial, and to refer to any specific burial as 'token' is misleading. If the view of what comprised an acceptable quantity of bone for burial had remained consistent, say within periods or cemeteries, or was regularly associated with certain objects, the variations in bone weight may be more comprehensible, but the situation is not that simple and the reasons for such variability presently remain a mystery. Whilst cremation burial reports always show a wide range of bone weights recovered from individual burials (although in discussion not all reports distinguish between disturbed and undisturbed burials, or divide data in terms of immature and adult burials), it has not been possible, as yet, to identify why this should be so.

At Westhampnett, some of the features designated by the writer as possible 'memorials' were slightly disturbed and bone may have been lost, but since in the burials bone was concentrated on the base of the grave and in the ?memorials most disturbance was slight and in the upper levels, it is unlikely that large quantities of bone will be missing. The features designated as ?unurned/memorials, ?urned, or ?cremation burial are features from which such small quantities of bone were recovered as to render interpretation questionable. The, to an extent arbitrary, cut-off point was taken as 30 g, which represents a *maximum* of 3% of the total expected weight of bone from a small adult, probably closer to 2% (McKinley 1993b). There was no apparent bias in the very few skeletal elements identified from these features to suggest only specific areas of the skeleton were being included. Fragments of identifiable bone were present in only five contexts and included vault, humerus, femur, tibia, and fibula shaft.

If we are using the term 'burial' in its normal cemetery sense of a ritual deposit of human remains, we have to consider at what point a cremation burial becomes so small a 'token' as to not represent a 'burial' at all, particularly in deposits where other pyre debris is present and the inclusion of the bone may have been accidental. Can one classify the deliberate collection and deposition of human remains seen in the majority of burials, in the same way as a feature which contains either <2% of those remains, i.e. a tablespoon or even a teaspoon-full of fragments, or, as in 13 identified 'grave' cuts, no bone at all? These features do not appear to represent the same category of 'burial'.

Westhampnett is not alone amongst Late Iron Age cremation burials or cemeteries in having features of this type. Two of the well-furnished 'Welwyn'-type burials also had little or possibly no human bone, though they were still classified as 'cremation burials'. Baldock–The Tene contained only 10.5 g of cremated bone, most of which comprised bear phalanges, and the report gives no indication of any human bone having been identified (Stead and Rigby 1986, 53). Whilst in this instance it is possible that human remains were lost in the disturbance preceding the excavation, given that human remains in these burials are generally on the base of the grave, it would be coincidental if the bronze, wood, cremated, and unburnt animal bone were to remain, while all traces of human bone were lost. At Hertford Heath where the grave was also disturbed prior to excavation, a mere 7.5 g of bone was recovered, i.e. a maximum of 0.7% of the expected bone weight (Hüssen 1983, 45). Flouest does not elaborate on his comment with regard to *Les cenotaphes*, (1993, 204) but features devoid of human bone are clearly found in contemporaneous cemeteries in France. From the Iron Age cemetery at Lefkandi in Greece, Musgrave (1980) noted that 76.9% of the cremation burials contained <50 g of bone, though some were undoubtedly immature individuals and others were disturbed, this would still suggest a number of adult burials for which very little bone was recovered for 'burial'. At King Harry Lane, 29 burials were noted by Stirland (1989) as comprising only small fragments of <25 g (again these may include both immature burials and disturbed burials).

Whatever these features represent, it should not automatically be assumed that they are just 'burials' in the same way as any other. That they are related to the ritual deposition of the dead is not in question, it is their role in that ritual which needs to be considered more carefully. 'Graves' are often classified in different ways depending on the quantity and quality of their associated artefacts so should not the extreme paucity or total absence of human remains be considered of some consequence? The lack of consideration sometimes given to the human element may constitute a hang-over from the attitude expressed by Fox and Lethbridge (1924, 53) referring to urns which 'contained *nothing* but bone and charcoal' (emphasis added), that is to say that the bone was considered unimportant and to be of little use. In some reports the bone is barely considered, e.g. in Stead's compilation of 'Welwyn'-type burials (Stead 1967, table 1), 'cremation' (the cremated bone) is included with 'the grave-goods', and in three of the eight burials cited there was no record of the cremated bone.

What was the role of the human remains in the various features referred to as 'burials'? Was Stead correct in including the cremated bone amongst other 'grave-goods'? In some circumstances the human remains may not have been considered a necessary part of ritual deposit *to*, as opposed to *of*, the dead. Cremation is a process of transformation of the physical remains of the deceased, and beliefs held at different times and in different places frequently link it with the freeing of the spirit from its earthly bonds (Ibn Fadlan *Risala*, 92; Barber 1990; Gräslund 1994). If so, the physical remnants may have been viewed as 'empty' (?inert'; Barber 1990) once devoid of the spirit, though Gräslund (1994) has argued for 'dual spirits' being indicated by the presence of pyre *and* grave goods. Alternatively, in some instances a direct link, in the form of the physical remains of the individuals being remembered, may not have been seen as a necessary inclusion within a memorial or offering to the dead. Whatever the interpretation, the implication is for more than one type of ritual deposit, perhaps viewed as one *of* and one *to* the dead.

Spatial distribution

There was no apparent clustering within the cemeteries on the basis of age or sex of the individuals (Figs 120–3, 127). The distribution appears random, possibly being on the basis of 'family' groups.

Pathology and Morphological Variations

A summary of lesions is presented in Table 1. Incomplete recovery of skeletal remains places constraints on pathological diagnosis. As cremation burials are by their nature both incomplete and fragmentary, discussion of pathology is severely curtailed. The particular paucity of pathological lesions noted in this assemblage is associated with the nature of the burials and the post-excavation condition of the cremated bone. The majority of pathological lesions observed in archaeological cremated bone tend to affect the articular surfaces, i.e. the spongy bone, and it has been noted that the amount of spongy bone recovered was relatively low.

The number of lesions noted here must, therefore, be seen even more than usual as a minimum, and pathological discussion is limited to an observation of numbers.

Twenty-six individuals (*c.* 18–20%) had one or more pathological lesion in a minimum of one bone. All were adults (*c.* 26–28%) either older mature or older, including five females (17.9%) and three males (60%).

From King Harry Lane (Stirland 1989) pathological lesions were noted in 15% of individuals from phase 1 (Late Iron Age) and 13% from phases 1–3 (Late Iron Age–Romano British). In the Iron Age cremation burials from Baldock–Icknield Way (McKinley 1990) 61.5% of individuals had lesions. The significance of these comparisons is limited, however, and cannot be taken as a realistic reflection of variations in incidence of pathological conditions for the reasons outlined above relating to the condition of the bone and the burials.

The lesions observed were largely age-related changes (though there may have been other predisposing factors). Osteoarthritic lesions were noted in the cervical spine of two individuals. Osteophytes, new bone growth on the margins of articular surfaces, were observed in a maximum of two joints/joint groups of 11 individuals. Exostoses, new bone formation at tendon/ligament insertions in six individuals, were most commonly noted along the *linea aspera* of the femur. Degenerative disc disease, leading to pitting in vertebral body surfaces following breakdown in the intervertebral discs, was noted in four individuals.

A single, well-healed, minor fracture was observed in a rib shaft fragment from one burial. Cribra orbitalia, pitting in the orbital vault believed to be related to iron deficiency anaemia, was noted in one adult female. One subadult/adult had non-fusion of the frontal suture (morphological variation — metopism).

None of the lesions observed were severe. The significance of the apparent greater prevalence of lesions in the males identified is questionable. As it was possible to sex only *c.* 20–21% of individuals, there may be bias caused by more elderly males (i.e. those with greater potential to present with pathological lesions) being identified. In addition, as discussed above the lesions observed probably form only a very small part of the number which would originally have existed.

There are no significant differences apparent between the Iron Age and Romano-British 'populations' in the types or the distribution of lesions, either in terms of bones or individuals affected. The range and types of lesions would not extend beyond what would be considered 'normal' for a 'domestic population' of this date.

9 Animal Bone from Burials and Other Cremation-related Contexts, by Jacqueline I. McKinley, Pippa Smith, and A.P. Fitzpatrick

Fragments of burnt/cremated animal bone from 45 cremation-related contexts were received for examination.

Methods

During osteological examination by the human bone specialist bone identifiable as non-human was separated. However, it is possible that some small fragments of animal bone may not have been distinguishable within the mass of cremated bone (see McKinley, above). Therefore, all figures presented here should be viewed as a minimum. The total weight of all bone from the cremation-related contexts, human and animal, is presented in Table 1.

The bone was recorded to species where possible (by PS), but the nature of the assemblage precluded species identification in many cases. Where a fragment of long bone shaft could be distinguished it was assigned to either 'small ungulate' or 'large ungulate' groups, as were fragments of rib and vertebra. Where a bone could be identified to neither species nor element because of small fragment size and/or lack of distinguishable morphological features, it has been designated as 'animal unidentifiable'.

Species, element, side of the body, state of fusion, and zones present (following Serjeantson 1991) were recorded where possible. Where bone was obviously immature but showed no epiphyses or metaphyses to aid closer ageing, it has been recorded as 'immature'. Taphonomic detail and cut marks were looked for, but the nature of the assemblage made these very hard to observe.

Results

A summary of the results is presented in Tables 4 and 5. A total of 245 fragments of bone were examined from the Iron Age contexts (171.6 g), of which 40 could be identified to species and 65 to species-size. Thirty-six of the 44 contexts were graves, but material was also recovered from six pyre-related features and two postholes. As the sample is so small and there is no discernible variation between types of features, the bones are treated as an assemblage.

Pig and/or sheep/goat were each identified in 38.6% of the contexts and cattle in 4.5%; small ungulates were identified in 25% of contexts where neither pig nor sheep/goat had already been noted, and large ungulate in a single context (2.3%). In 34.1% of contexts the animal bone could not be identified. The majority of contexts contained a minimum of one species, five (12.5%) contained a minimum of two species of which four comprised pig and sheep/goat, and one pig and cattle. There was no evidence for more than one animal of a species being present in a context, including pyre-related features.

Age

The age distribution of the animal bone is summarised in Table 4. The nature of the material limits detailed discussion on the age of individuals. Fragments of epiphyses and metaphyses were recovered but it was not always possible to identify the species and/or the bone element represented. Therefore, while it was often apparent that bone fragments were from an immature

Table 4 age distribution of animal bone (%)

	Pig	*S/G*	*S.ung*	*Cattle*	*L. ung*	*Unid.*
Immature	20.0	55.6	50.0		–	37.1
Mature	10.0	–	5.6	–	–	8.6
Un-aged	70.0	44.4	44.4	100	100	54.3

Key: S/G = sheep/goat; S.ung = small ungulate; L.ung = large ungulate; Unid = unidentified

individual it was impossible to deduce any further detail.

In contexts where sufficient evidence was present to assist ageing the majority of the animals represented had not achieved adulthood. This would suggest that prime 'meat-age' animals were being used rather than elderly animals which may have been seen as having no other useful purpose. There was insufficient evidence to suggest the sex of any of the animals.

Skeletal elements

The skeletal elements identified may indicate which parts of the animal were present on the pyre. However, it is important to remember that, since on average of only c. 19–30% of the expected weight of human bone was present in the burials, a correspondingly low percentage of the animal remains may have been collected from the pyre for ultimate burial. The taphonomy of cremated bone has been discussed in detail elsewhere (Bond 1994; McKinley 1994a). Aspects specific to this site, including post-depositional bone survival, are discussed by McKinley (above) and may be assumed to be similarly reflected in the condition and survival of the cremated animal bone. It should be noted that in contrast with the unburnt animal bone from the settlements examined in other areas at Westhampnett where tooth fragments were frequently recovered, recovery of cremated tooth crowns is not common since the enamel shatters as it expands rapidly in the heat of the pyre (McKinley 1994a; Bond 1994). There may be a certain degree of bias in the survival (Bond 1994), or more pertinently, in the ease of identifying certain skeletal elements over others. Analysis of the human bone illustrated that spongy bone present in the burials often did not survive excavation (McKinley this volume). The predominance of foot bones may, in part, be a reflection of their relative robustness when compared to other elements of the skeleton, although their presence does suggest that the deposits were not all of prime meat bearing joints. Elements from the left front and back legs, and the right front leg of a pig are present in grave 20021, illustrating that more than a single joint of meat was represented. The same grave includes elements from both sides of the body and both front and back legs of a sheep/goat, indicating a substantial proportion of the animal must have been placed on the pyre. Several other contexts demonstrated a similar range of bone elements (Table 5).

All the animal bone was the buff/white colour indicative of full oxidation, which corresponds with observations on cremation efficiency made on the human bone. The quantity of bone from each context ranged from <0.1 g to 51.5 g (two species), with a mean of c. 4 g. The maximum weight of animal bone recovered represented 21.2% of the total weight of bone from grave 20021 (two species). This, however, was an exception, as in the majority of contexts the weight of identified animal bone represented a very small percentage of the whole, from <0.1–4.2%. The size of bone fragments corresponded relatively closely with those observed in the human bone, with a maximum fragment size of 60 mm. The factors affecting cremated bone fragment size have already been considered in relation to the human bone.

Unburnt animal bone

A single, tiny fragment was recovered in a Romano-British context, from a grave containing an urned cremation burial (20538) but in view of the very aggressive soil conditions which had destroyed all traces of the Anglo-Saxon inhumation burials, for reasons given below, even a single occurrence in the Area is likely to be significant for the Iron Age graves.

Discussion

As Méniel has shown there were quite specific choices in the Iron Age in the selection of animals for sacrifice, how butchery was done, and how and where the remains of carcasses were deposited (Méniel 1992).

The cremated animal bone from the slightly later Iron Age and Romano-British cemetery at King Harry Lane was dominated by pig with very few sheep or goat bones, and with no other mammalian species being identified. No foot bones were recorded and skull bones were noted in many burials. The unburnt animal bone was unfortunately lost and no record is given of in which graves it was present (Davis 1989).

Elsewhere in the Late Iron Age, pig also appears to be by far the most common species selected for cremation, both in England and in continental Europe (Méniel 1993; Table 6). At the late La Tène phase of the cemetery at Ménil–Annelles, Ardennes, France, Flouest (1993) records burials as most commonly containing a single animal species (pig), a few containing two species (pig + chicken, chicken + sheep), and one containing three species, and this is borne out by Méniel's survey (1993, table 1).

Even in a small sample the absence of domestic fowl bones from the Westhampnett cremation burials is notable in comparison with King Harry Lane (all phases) where birds were included in c. 25% of the total of burials with cremated animal and bird remains, and also in comparison with Late Iron Age cemeteries in France (Méniel 1993; Table 6). Chickens, rather than other species of fowl, seem to have been the preferred bird in continental Europe, so it is just possible that their absence from Westhampnett is chronological (Ashdown 1979), and while the possible effects of taphonomic processes cannot be ignored (see above), Méniel suggests that cremated bird bones may actually survive better than those of other animals (1993, 286).

Table 5 animal bone from Iron Age contexts

Feature	*Context*	*Wt (g)*	*MNI*	*Age*	*Pig*	*Sheep/goat*	*Small ung*	*Cattle*	*Large ung.*	*Unident.*
Graves										
20001	20002	2.1	1	imm.			tooth root (1); vert. u/f (1)			-9
20008	20007	1.5	1	imm.						vert. u/f (1) -6
20018	20019	0.5	1	imm.						u/f (1); -1
20021	20020	51.5	2	imm. pig	ast. (1); u/f l.femur (1); l.radius (1); r.ulna (1)	femur (1); l.humerus (1); meta. (1); r.pelvis (1); r.tibia (1)	long b. (6)			
20023	20022	2.2	1	mat.			vert.f. (8)			
20025	20024	1.9	1	imm.			vert. u/f (8)			-5
20035	20034	3.2	1			calc. (1)	long b. (1)			-3
20039	20038	0.1	1							-1
20045	20044	0.1	1	imm.						u/f (1)
20051	20050	0.4	1	imm.						-2
20053	20054	6.9	2	imm. small ung.	calc. (1)		vert. u/f (2)	r.pelvis		-7
20057	20058	1.1	1	imm.						u/f (1); (3)
20071	20070	0.2	1	mat.						vert. u/f (1); -1
20073	20074	1.9	1		1st phal.f.(1)					-1
20089	20088	0.5	1							-1
20091	20090	0.6	1	imm.						-1
20092	20093	0.4	1							-2
20132	20131	3.2	1	imm.		l.humerus head u/f				
20142	20141	3.2	1	imm.		femur u/f (1); vert. u/f (2)				
20202	20203	1.7	1	imm.			long b. (4); vert. u/f (2)			-4
20235	20236	0.1	1							-1
20252	20251	22.7	1	imm.		calc. u/f (1); l.radius (1); r.tibia (1)	long b. (1u/f,2); rib (1)			-20
20253	20254	7.8	2		1st phal.(?2)	1st phal.; r.calc.; r.ast.	long b.; rib (4)			-15
20274	20273	1.3	1							rib (1); -1
20280	20281	0.9	1							-3
20312	20311	0.4	1				rib (2)			
20337	20336	0.7	1	imm.			vert. u/f (2)			
20364	20365	1.4	1		l.ast					-1
20459	20458	1.2	1	imm.	d. humerus u/f					imm. (1)
20469	20468	2.4	1	mat.	prox. femur					-1
20471	20470	10.5	1	imm.		1st phal. r.ulna	vert. (5-1 u/f); u/f diaphyses (3)			-7
20479	20478	4.8	2		1st phal.; meta.	humerus				hc (2); -2
20484	20485	14	1	imm.			3 thoracic vert. (u/f-4); vert. (2)			-9

Table 5 (cont.)

Feature	*Context*	*Wt (g)*	*MNI*	*Age*	*Pig*	*Sheep/goat*	*Small ung.*	*Cattle*	*Large ung.*	*Unident.*
20493	20492	1.6	1	imm.			lumbar vert. (1); long b. (u/f-1)			vert. (2); -2
20599	20598	0.5	1				long b. (1)			-1
20601	20600	0.5	1				rib (2)			
Pyre sites and pyre-related features										
20128	20127	3.5	1		r.humerus (1)					
20052	20047	0.4	1	adult						f. (3)
20258	20257	1.8	1							hc (1); 2
20318	20317	9.1	1	imm. sheep/goat	maxilla	r.mandible; r.tibia (1); tibia (2-1 u/f)	vert.; molar root; vault			-4
20348	20349	0.1	1							-1
20546	20547	0.2	1							-1
Postholes										
20136	20135	1.0	1				rib (1)			-2
20194	20195	0.1	1							-1

Key: Small ung. = small ungulate; Large ung. = large ungulate; imm. = immature; u/b = unburnt; u/f = unfused; f = fused; l. = left; r. = right; ast. = astragalus; phal. = phalanx; meta. = metapodial; calc. = calcaneum; vert. = vertebra; long b. = long bone; hc = horncore; mat. = mature; imm. = immature. Single fragments unless otherwise stated

In Méniel's survey of the roles of animals in funerary practices in France, unburnt animal bone comprised *c.* 33% of the offerings of animals in Late Iron Age graves (Méniel 1993, fig. 3). In Britain, unburnt animal bone was present in graves with cremation burials at King Harry Lane (Davis 1989, 250, n.1), Snailwell, Cambridgeshire (Lethbridge 1953, 28, 37, fig. 1), and Baldock–The Tene, where the unburnt back and part of the side(s) of a pig were found alongside cremated animal bones (although the bear phalanges could represent an item of costume (Stead and Rigby 1986, 53)). Although this evidence is slight, the presence of just one unburnt animal bone (unless intrusive) in a single Romano-British burial at Westhampnett does suggest that the unburnt remains of animals sacrificed for burial could have been present at Westhampnett in the Iron Age.

Although the survival of unburnt bone at the settlements examined in other Areas at Westhampnett was poor (Smith and Serjeantson, vol. 1), what evidence did survive showed the usual predominance of cattle seen in contemporaneous settlements, followed by sheep/goat and substantially lower percentages of pig and domestic fowl. This is echoed at the nearby settlement at Copse Farm, Oving which is contemporary with the Westhampnett cemetery and some of whose inhabitants may well be buried in it. There, the proportions of the minimum number of individuals identified were sheep/goat 27.3%, cattle 24.2%, horse 15.1%, pig 15.1%, dog 12.1%, and bird 6.1% (carrion crow) (Bedwin and Holgate 1985, 234; *cf.* Table 30).

Few Iron Age shrines or temples have yielded large votive assemblages, but at the temple at Hayling Island, Hampshire, which is contemporary with the Westhampnett cemetery, a preliminary analysis of the number of bones indicated that the animal bones were dominated by sheep/goat (61%) and pig (39%). Cattle were conspicuously absent (Downey *et al.* 1980, 294). At the temple at Harlow, Essex, lambs, which were sacrificed in the autumn, dominated the assemblage (Legge and Dorrington 1985), and it is clear that these were the animals appropriate to the deities at those shrines.

Despite the differing quantitative methods used, on the basis of this comparative material, the range and relative proportions of the animals selected for sacrifice on the cremation pyres at Westhampnett are markedly different from the domesticates at the settlement at Copse Farm. Rather they are very similar to those from the temple at Hayling Island, in being dominated by sheep/goat (in all probability sheep) and pig in approximately equal quantities. Unlike at Hayling Island, cattle do seem to have been sacrificed occasionally at Westhampnett (Table 30).

Within Iron Age Britain parts of animals were regularly buried with the dead as grave goods, as distinct from the associations of people and animals in pits and ditches on settlements. In Mid–Late Iron Age Arras-type burials in East Yorkshire animal remains were placed in *c.* 23% of burials (Stead 1991a, 140–4, 176–7, 179). In the Late Iron Age–early Romano-British 'Durotrigian' tradition animal remains have been found

Table 6 relative frequency of cremated animal remains found in cremation burials in France

	Late Iron Age	*Roman*
Pig	60%	56%
Chicken	20%	c. 6%
Sheep/goat	c. 10%	c. 14%
Dog	c. 7%	c. 7%
Cattle	c. 3%	c. 17%

Source: Méniel 1993, figs 3–4

in 25% of burials (Chambers 1978, chap. 3, 8–9, fig. 20) and in the contemporaneous Aylesford-type cemetery of King Harry Lane, in 19% of burials (Davis 1989). Despite this approximately constant proportion, there is considerable diversity and strong patterning.

Amongst the Arras-type burials (Stead 1991a) animal bones with contracted burials whose heads were to the north and who lay facing east (Type A burials) were usually the left upper forelegs of sheep. The bone was often found in a pot. However, some east–west oriented burials (Type B burials) at Rudston contained pigs, usually half a head and a limb from a foreleg from the same side of the body as the head. In burials oriented to the east the left side of the animal was preferred, while in burials oriented to the west, the right side of the animal was preferred. It is possible that the bones had been defleshed. In some burials (Type C burials) the left half-head of the pig was near the person's head and the right half-head by their stomach, while the pig's left leg was on the person's left side and the right leg on the right hand side. With the exception of a very small number of burials of children (6) who appear to have been buried in a different manner, children and adolescents were not buried in these cemeteries.

The sample of 'Durotrigian' burials in Dorset is much smaller (Chambers 1978), but females and an adolescent male had parts of pigs buried near to their heads. Ox meat was restricted to older adult males. The remains of sheep were not clearly associated with individuals of particular ages or sex, and they were placed by the chest, waist or feet, but not the head. Over a third of the offerings were heads or jawbones, while the remainder were largely legs and ribs.

At King Harry Lane cremated animal remains were found in 19% of the burials (all phases) and there was a clear trend (c. 90%, all phases) for animals to be cremated with adults. Almost 100% of the animal bones were from pigs, usually of single elements of the carcass. All the bird bones were probably chicken, the whole bird having been sacrificed.

At Westhampnett the number of identifiable remains is small but animal bones, invariably of immature animals, were found only with the remains of adults. In one instance animal bone was found in a grave with a young person but this was a dual cremation with an older person.

In 12 graves animal remains were mixed with the remains of probable or possible females but only twice were they mixed with those of males (both possibles). Both of the possible male burials contained, pig, sheep, and unidentified small ungulates. This combination of animals was identified twice in graves, and once from a pyre site.

In such a small sample the high proportion of feet and leg bones might be due to taphonomic factors; but the examples from Arras-type burials considered above suggest that this is unlikely to be the case. There is also a clear correlation between the sacrifice of animals and the age of the deceased which, expressed as a percentage of graves in age groups in which animal bone was identified, rises steadily from 24.1% in 'adult' graves to 45.2% of 'elders' graves.

It is clear that lambs and piglets were specifically chosen for sacrifice, and the reservation of part of this sacrifice for transformation on the funeral pyre was appropriate only to adults. Other elements of the evidence are ambiguous, but certain elements, perhaps legs and feet, may have been reserved preferentially. No correlation with the sex of the deceased is apparent but there is a suspicion that the range of animals appropriate to the sexes was different.

10 **Charcoal**, by Rowena Gale

Introduction

The origins of charcoal layers or deposits occurring in ancient sediments may refer to natural causes or be the end product of human activities. When the latter, it may have resulted from *in situ* burning of trees for land clearance or, more usually in archaeological contexts, from the artefactual use of wood or timber. In most prehistoric societies wood will have been felled or gathered locally. Its conversion into charcoal may have been incidental, for instance from the conflagration of dwellings, or intended, for example from its use as wood or charcoal fuel. Waste materials, including charred debris, were frequently cleared from hearths, ovens, kilns, etc and redeposited elsewhere on settlement sites in middens, pits, postholes, or ditches; sometimes it was used to fertilise agricultural land or for ritual purposes.

Charcoal from archaeological sites is important since its identification can indicate the regional woody vegetation and contemporary forest technology. It can also provide artefactual information. Although the environmental implications will, inevitably, be strongly biased towards species considered to be useful, the evidence is, nonetheless, of significance in assessing the development and exploitation/depletion of woodland resources. It is particularly relevant to the Westhampnett sites since pollen was poorly preserved and seeds, although relatively abundant, frequently derived from contexts associated with crop-processing. In addition, evidence of the artefactual and ritual uses of wood or charcoal for cremation and burial customs was sought from the Iron Age and Romano-British cemeteries in Area 2. As this is the first time that such remains have been examined — there are no British comparanda — it is considered appropriate to publish them in some detail.

Materials and Methods

Charcoal was extracted from the bulk soil samples using standard flotation methods. Not all the samples were analysed, instead at the Assessment stage 53 samples were selected on the basis of the quantity and size of charcoal fragments and their perceived potential to yield relevant data. Priority was given to samples containing both charred seeds and wood and in some instances fruits from trees; hazel nuts, sloe stones, and oak buds were identified in the samples analysed by Hinton. Those occurrences are summarised in this report. Where charcoal was abundant as, for example, in some pyre sites, hand-picked fragments sometimes measured over 20 mm in the longest axis, and the shapes or dimensions of the poles/planks from which these originated was often evident. In some instances, however, fragments were too small to warrant examination, that is, with transverse surfaces measuring <2 mm^2.

Suitable fragments were prepared for identification (full details are available in archive) and matched to reference material. Where possible, the age and maturity of the wood from which the fragments had arisen were assessed. Narrow roundwood (diameter <25 mm, when charred) was categorised as stem, other fragments were noted as sapwood or heartwood, and growth ring width of fast- or slow-grown specimens were measured or noted.

During the process of carbonisation the weight and volume of wood is considerably reduced and measurements taken from charred wood do not represent those of the tissues when living. The rate of reduction is influenced by the density of the wood (size of cell and cell wall thickness) and the temperature of burning (Prior and Alvin 1983). These parameters are unknown in archaeological specimens and comparative assessment of such material can only be speculative. Under controlled carbonisation, the radial axis of thin-walled cells in taxa such as *Corylus* may be reduced to almost half their original dimensions (Gale and Cutler in prep.).

Results

Taxa, families, or subfamilies identified

Thirteen taxa, families and subfamilies (listed below) were identified from Area 2. Details of samples in which these occurred are summarised by type of feature in Tables 8–10 for the Iron Age cemetery (and Table 35 for the Romano-British cemetery). The samples examined are detailed in full in the archive. In samples where the material was too poorly preserved to verify an identification, names have been prefixed by '?'. In some instances, where closely related genera are anatomically similar or very difficult to distinguish securely, groups of names or family names have been given. For example, family Salicaceae, *Salix* (willow) and *Populus* (poplar); subfamily Pomoideae which includes *Crataegus* (hawthorn), *Malus* (apple), *Sorbus* (rowan, whitebeam, wild service); *Ulex* (gorse) and *Cytisus* (broom). In poorly preserved material, some unrelated taxa can be difficult to separate, e.g. *Cornus* (dogwood) and *Viburnum* (guelder rose, wayfaring tree).

The classification follows Tutin *et al.* 1964–80. Charcoal from most pre-Roman contexts can be generally attributed to native species but identification to species level, using anatomical wood features, is not usually possible. For taxa represented by a single British species the specific epithet has been given in parentheses in the following list:

Broad leaf trees and shrubs

Aceraceae: *Acer* sp., (*A. campestre* L., field maple)
Betulaceae: *Betula* sp., birch; *Corylus* sp., (*C. avellana* L., hazel)
Caprifoliaceae: *Viburnum* spp., guelder rose and wayfaring tree
Cornaceae: *Cornus* sp. (*C. sanguinea* L., dogwood)
Ericaceae: *Calluna vulgaris* (L.) Hull, heathers; *Erica* sp., heather
Fagaceae: *Quercus* sp., oak
Oleaceae: *Fraxinus* sp., (*F. excelsior* L., ash)
Leguminosae: *Cytisus* sp. (*C. scoparius* (L.) Link, broom); *Ulex* sp., gorse
Rosaceae: Pomoideae: *Crataegus* sp., hawthorn; *Malus* sp. (*M. sylvestris* Miller, crab apple); *Sorbus* sp., rowan, wild service and whitebeam;
Prunus sp., (*P. avium* (L.) L., cherry and *P. spinosa* L., blackthorn).
Salicaceae: *Populus* sp., poplar; *Salix* sp., willow

Taxads

Taxaceae: *Taxus* sp., (*T. baccata* L., yew)

Pyre sites and other pyre-related features

Traditional pyre construction has sometimes incorporated channels scraped out of the soil to provide ventilation flues (McKinley 1994a), and the pyre sites in the cemetery were identified by these channels which occurred in a variety of shapes. Iron nails were found in almost every pyre site or pyre-related feature. The comparative evidence compiled by McKinley does not suggest that pyres were nailed together, so the ironwork implies that wood was being reused, with the occasional finds of iron joiner's dogs and daub suggesting that at least some of the nails were from reused structural timbers. Charcoal from the pyre sites and pyre-related features is sumarised in Table 7.

In pyre site 20283 stout stems of willow or poplar were found aligned along the shallow arms of the cross. Assuming these grooves to be ventilation flues, this alignment may be fortuitous following the eventual collapse of the pyre. However, as pyres appear to have maintained their structure through burning (McKinley, above) it is perhaps more likely that the wood helped form the base of some type of structure used to secure or shape the upper layers of the pyre but the disposition as excavated may not be the original one. Oak roundwood and sapwood and hazel were also present.

Similarly, pyre site 20121 included charred oak stem, sapwood, and heartwood, maple, hazel, and ash which appeared to have either lain in, or to have dropped into, shallow slots. Large chunks of charcoal including cherry and maple were collected from cruciform pyre site 20295 and in pyre site 20250 large fragments of oak, ash, and Pomoideae were mainly confined to the base of the cut. Pyre site 20578 included twiggy material which was probably used as infill or kindling; charcoal from feature 20258 had been burnt *in situ*.

Fragments from large burnt timbers of hazel, oak, cherry, and maple were collected from pyre-related feature 20130, although the subsoil itself did not show any evidence of burning. The multiple pieces of cherry and hazel were more or less grouped according to type and therefore probably represented fractured sections of longer timbers.

Pyre-related feature 20212 included cremated bone, pot sherds, and charred oak and ash logs that appeared to have been placed on the base of the feature. The large fragments of oak trunk suggested a diameter of over 100 mm (when charred) that was at least 41 years old. The first eight growth rings were wide indicating rapid growth, after which a phase (8th–25th year) of very slow growth occurred, followed by moderately slow growth. Some heartwood had formed. The ash was probably from narrower fast-grown stems with growth rings of up to 5 mm wide.

A small, 0.1 x 0.15 m, spread of charcoal in the empty area in the centre of the cemetery, layer 20720 (sample 29285), included a large quantity of birch and some Pomoideae and may have arisen from debris from clearance or burning of brushwood.

Graves

Eight sampled graves included charcoal (Table 8); seeds were also present in these samples (Hinton, below). Oak (stem and heartwood), ash, hazel (including nut shell), Pomoideae and *Prunus* were present. The contents of four pots included similar species to those identified in the grave fills. Oak and ash were most frequent.

The major portion of the charcoal from grave 20719, collected from around pot 27386, included large fragments of ash roundwood and heartwood, and also oak roundwood. The roundwood was from fast-grown trees: growth rings in the ash measured up to 5 mm, and in the oak up to 3 mm. When living these may have measured up to 40% more. Stem diameters were difficult to assess but they may have been in excess of 50–60 mm (when charred).

A sizeable sample of charcoal (1150 g) including large pieces from wide stems of fast-grown ash was extracted from the fill of grave 20252. This grave is unusual in that quantities of the cremated bone were placed in each of the four corners of the square grave and pyre debris was then spread over the whole grave. The charcoal is notable not only for its quantity but also, in contrast to the other graves, for having only one species present.

Postholes

Charcoal was recorded from five postholes (Table 9). It consisted of oak (stem and heartwood), hazel (including nut shell), Pomoideae, ash, and *Prunus*.

Discussion

Environment

The charcoal, in most instances, probably derived from locally grown, indigenous trees or shrubs. Particular species were probably chosen for their characteristic properties and those identified here do not therefore necessarily represent the complete range growing in the area. This is particularly relevant since the geology of the area is varied, supporting a range of habitats.

Woodland trees included maple, birch, hazel, ash, Pomoideae, *Prunus*, oak, and yew. Although oak heartwood was often evident, a significantly high proportion of the material appeared to have originated from narrow round wood or fast–grown sapwood (Tables 7–9). Species characteristic of marginal woodland, woodland glades or more open areas included blackthorn, probably hawthorn, dogwood, heather, gorse and/or broom, and possibly *Viburnum*. Willow and/or poplar were also present, probably on damper ground. Charcoal from the nearby contemporaneous settlement at Copse Farm, Oving, 1 km to the south, was rather sparse but identified oak, hazel, hawthorn, and gorse (Bedwin and Holgate 1985, 232), suggesting that the woodland was comparable to that of Westhampnett.

Field maple grows on neutral or alkaline soils, often in ash and hazel woodland, and its absence from the earlier periods (represented in other excavation areas at Westhampnett) suggests that it may have been relatively uncommon here until the Iron Age. Field maple is thought to have been relatively slow to recolonise Britain after the Glacial period; there are no records pre-dating the Neolithic (Godwin 1956). Unable to compete in the closed woodland canopy of the earlier periods, it appears to have become more widespread following land clearances of the 4th millennium BC (Rackham 1990).

Charcoal from some pyre sites was almost certainly from the trunks of cherry trees. The diameters of these were difficult to assess but rough estimates suggested that some were in excess of 80 mm (when charred). The anatomical structure of cherry and blackthorn can sometimes be differentiated, as in this instance, by extremes of ray width. The large dimensions of the trunks indicated by the charcoal fragments support this identification. Cherry forms a tall woodland tree and grows on alkaline soils or clay horizons overlying chalk.

Dogwood was not identified at any of the pre-Iron Age sites excavated at Westhampnett. It is shrubby and characteristic of calcareous soils on open or cleared land, or in hedges and marginal woodland. The extensive clearance of woodland vegetation in favour of intensive farming may have provided a more ecologically suitable habitat by this time.

Woodland Resources and Management

Sited on a low hill, the cemetery was surrounded, in all probability, by intensively farmed cleared land, although Bedwin and Holgate do raise the possibility that occupation of the area may have been seasonal (1985, 235). The numerous pyre sites produced large fragments of well preserved charcoal and it was clear that poles or narrow tree trunks had been used to construct their framework. The cemetery itself was probably used for between 40 and 60 years and during this relatively short period in the region of 125–160 bodies were cremated. Various weights of fuel wood have been calculated as necessary to consume an adult human body but it is probable that something approaching one ton is fairly accurate (McKinley 1994a). A typical pyre structure involves the use of stout poles or narrow trunks to form the basic framework, probably measuring some 2 m by

Table 7 charcoal from Iron Age pyre sites and pyre-related features

Feature	*Sample*	*Ac*	*Be*	*Co*	*Cory*	*Er*	*Fra*	*Pom*	*Pru*	*Que*	*Ros*	*Sal*	*U/C*	*V/C*	*Ta*
20052	29028	–	.	–	1	–	69	–	–	7r	–	..	–	–	–
20066	29044	?3	–		–	..	–	-	–	13rsh	–	–	..	–	–
20121	29064	15	–	–	5	–	2	-	–	37rh	–	–	–	–	
20124	29065	–	1	–	1	–	–	–	.	78rs	–	–	–	..	–
	29083	–	-	–		–	–	–	–	1s	–	–	–	–	–
	29084	–	–	..	–	.	–	–	–	1s	–	–	–	–	–
	29085	–	.	–	–	–	–	–	–	1s	–	–	–	–	.
	29087	–	–	.	–	..	–	–	–	1s		–	–	–	–
	total	–	1	1	–	–	–	–	..	82rs	–	–	–	.	–
20125	29066	..	–	..	–	.	57r	–	2	2	–	–	.	–	–
20128	29069	54	–	–	.	–	14	–	–	8r	–	..	–	–	–
20130	29070	9	–	–	8rs	–	–	–	5	1s	–	–	–	–	..
20212	29173		–	-	–	–	21s		–	132s	..	–	–	–	–
20234	29110	..	–	..	49	–	–	–	–	3r	..	–	–	–	–
20250	29114	–	–	–	2	–	13	10	–	22	–	..	–	–	–
20258	29125	?1	..	–	?1	–	–	–	–	8	–	–	6	–	..
20264	29123	–	-	–	-	–	9	–	–	1	–	–	–	–	-
20266	29124	1	–	-	–	..	1	–	–	32rs	–	–	..	–	–
20283	29129	–	–	–	3	–	–	–	.	44rs	–	111s	–	–	–
20295	29134	44	–	–	3	–	17	–	133	1	–	–	–	.	–
20318	29143	–	–	–	4	–	2	-	–	38h	–	–	-	–	1
20355	29166	7	–		–	–	2	–	2	3sh	–	–	–	-	–
20357	29174	–	3	–	..	–	27	–	–	34sh	–	–	–	–	–
20414	29185	?1	–	–	?1	..	2	..	–	–	–	–	–	–	–
20491	29215	21	–	.		..	–	?	?	46rs	1	–	–	..	–
20578	29211	.	–	1	1	4	–	–	9	74r	–	–	1	–	–
20643	29256	9	–	–	–	–	–	..	–	11s	–	–	..	–	–
20645	29257	?2	–	–	–	–	–	-	?3	10s	–	–	–	–	–
20660	29281	..	–	–	1	–	10	6	..	17	–	-	–	–	–
	27373	–	–	–	–	–	1	–	10	11rh	–	.	–	–	–
20683	29273	–	–	–	1	.	–	3	–	21s	-	–	–	–	–
20720	29285	–	51	–	–	–	–	8	..	–	–	..	–	–	–
20717	29284	.	–	–	–	–	190	–	–	5	–	–	–	2	–
20744	29296	–	–	–	–	–	..	–	–	25r	–	–	–	–	..
20747	29295	10	.	–	1	–	9	–	–	6s	–	–	..	–	–
20770	29314	–	?1	–	-	–	46	–	–	..	–	–	–	–	–

Key: *Ac* = *Acer* sp., maple; *Be* = *Betula* sp., birch; *Co* = *Cornus* sp., dogwood; *Cory* = *Corylus* sp., hazel; Er = Ericaceae, heathers; *Fra* = *Fraxinus* sp., ash; Pom = Pomoideae, includes apple, hawthorns, pear, whitebeam, rowan, wild service; *Pru* = *Prunus* spp., blackthorn, cherry; *Que* = *Quercus* sp., oak; Ros = Rosaceae, *Prunus* sp., Pomoideae; Sal = *Salix* sp. willow/*Populus* sp., poplar; *U/C* = *Ulex* sp., gorse/*Cytisus* sp., broom; *V/C* = Viburnum sp., guelder rose, wayfaring tree/*Cornus* sp., dogwood; *Ta* = Taxus sp., *yew*.
s = sapwood; h = heartwood; r = narrow roundwood (diameter <20 mm)

1.5 m (Fig. 46). As it would have been extremely cumbersome to haul such a quantity of wood over any great distance, it would seem plausible that adequate woodland was conserved, perhaps specifically for funerary purposes, reasonably close to the cemetery. This may account for the colluvial deposits in Area 1.

The larger fragments of charcoal from pyre residues included sapwood and sometimes heartwood, some of which were from stems or narrow trunks measuring up to 80 mm in diameter (when charred). The growth rings in some larger fragments of oak and ash were wide and typical of fast grown specimens, e.g. sample 29127 (Grave 20252); some ash growth rings measured up to 7.5 mm (when charred). In the competitive environment of most natural woodlands individual specimens are unlikely to produce fast-grown timber: the average ring width in non-competitive surroundings is 4 mm (Richardson pers. comm.). Stem growth from the well

Table 8 charcoal from Iron Age graves and pots within graves

Grave	*Sample*	*Cory*	*Fra*	*Pom*	*Pru*	*Que*	*Ros*
20053	P27036	1	5	–	1	18rh	–
20089	29054	1	1	–	–	24r	–
20095	P27067	1	–	–	–	23h	–
20142	29073	?1	–	1	1	5rh	–
20169	P27115	3	18	?	?	3	3
20196	29102	3	78	–	1	3	–
	P27116	–	91	–	–	3	–
20252	29127	–	412	–	–	–	–
20719	29283	–	48rh	–	–	6r	–

P denotes sample from pot; for key, see Table 7

Table 9 charcoal from postholes

PH	*Sample*	*Ac*	*Cory*	*Fra*	*Pom*	*Pru*	*Que*
20136	29072	–	5	52r	1	–	4r
20423	29164	–	17	72	59	?1	35rh
20427	29190	–	90r	12r	15	14	21r
20429	29191	2	64r	3	21	6	3
20607	29240	–	–	4	1	1	63r

For key, see Table 7

developed root stock of coppiced stools usually produces wider rings, as seen here, and it seems likely that managed woodlands provided a source of coppiced or pollarded wood.

Trees including hazel, oak, ash, and maple regenerate rapidly when coppiced or pollarded and can produce hefty poles in 20 years or so. However, with some species, such as cherry and blackthorn, coppicing merely promotes suckering (Rackham 1990). Evidence of coppicing in Britain dates from at least the 4th millennium BC (Coles and Orme 1982) and the practice survived until the 20th century AD in some rural areas of Britain providing the main source of fuel, charcoal, and small wood requirements. At Westhampnett, coppiced or pollarded woodlands may have existed either in small pockets between blocks of agricultural fields on the Coastal Plain or in clefts or valleys on downland. These may have included standard trees to provide cordwood or larger timber. Heartwood included in the charcoal suggested the use of mature or semi-mature oak and ash trees. Areas of natural mixed woodland or woodland pasture (providing acorns for pigs) may have persisted, harbouring useful species such as cherry (for fruit).

Pioneer species including birch, gorse, and/or broom, and heathers may have flourished naturally on poorer soils unsuited to cultivation or have recolonised previously cultivated/cleared areas. Streams, ditches, or boggier sites would have supported willow. Shrubby and scrubby species such as dogwood, *Viburnum*, hawthorn, and blackthorn would have grown in open or marginal woodland sites (the first two are calcicoles). Spiny species, such as hawthorn and blackthorn, may have been used as hedging or barriers against stock.

During the Iron Age, when agricultural pressures increasingly fragmented natural woodlands, wooded areas would almost certainly have been protected and managed in order to sustain the demand for this valuable commodity. Wood was required for heating and cooking, for the construction of buildings and other structures, to make tools, and domestic and agricultural items, for cremations and, perhaps, for tanning (tanbark), and industrial activities. Traces of mineral replaced wood preserved on metalwork (Watson, below) give a glimpse of some artefactual uses. Wooden members from discarded structures and implements, etc, would have been recycled or used as fuel. Metal components, such as iron nails and joiner's dogs, recovered from pyre sites (Montague, below) indicate the secondary use of such materials and a few fragments of daub suggest that pieces of wattle and daub may also have been burnt. Wooden funerary artefacts may also have been consigned to the flames of the pyres.

Ritual and Ceremonial Practices

Since antiquity trees have been credited with ritual or supernatural attributes (Grigson 1958); the symmetrical morphology of the roots and crown united the underworld with the heavens (Cooper 1978). However, knowledge of ritual or ceremonial uses of plant materials in prehistoric Britain is sketchy. It is possible that tribal societies associated particular trees or woods with deities that portrayed similar characteristics, for example strength and vitality; more recent examples were noted in the 17th century in communities on Tahiti (Brown 1935) and Hawaii (Rock 1974). The oak was undoubtedly venerated in Europe from the earliest times for its longevity, size, and strength; its wood is one of the strongest and most durable of all European timbers. Roman sources indicate that the oak tree was dedicated to the Celtic god Taranis and the Roman god Jupiter (Green 1991), while mistletoe on oak trees was associated with some Druidic practices (Piggott 1968, 110), and writing in the 1st century AD Lucan described a sacred grove near Marseilles which was felled during Julius Caesar's Gallic War (Piggott 1968, 80).

In some cultures evergreen trees (particularly yew and pine) signify immortality and have strong associations with death. They were often grown in graveyards to protect the dead, while deciduous species have represented constant renewal (Cooper 1978). The custom of using evergreen fronds of box (*Buxus*) to line the coffins of Roman burials (Godwin 1956) may be indicative of similar beliefs. In the 1st century AD, Tacitus wrote of the Germans 'that the bodies of famous men are burned with particular kinds of wood' (*Germania*, 27) but, tantalisingly, did not name the wood.

Fuel for cremations

However desirable the use of certain trees or timbers may have been, the practicalities of pyre building probably took priority. Since antiquity pyres have been a basic rectangular structure *c.* 2 m in length and con-

structed of stout poles or narrow trunks (Fig. 46; McKinley 1994a). The spaces between the logs were filled with brushwood and other combustible material. A primary requisite was, therefore, timber from trees of sufficient size to produce planks or beams. At Westhampnett tree trunks mature enough to have developed heartwood (i.e. probably >20 years), and fast grown poles (?from managed woodland) were provided by oak and ash. Maple and cherry were also used.

Some features (and their contents) associated with the cremation pyres and graves were difficult to interpret; for example, *in situ* burning was not evident in some *prima facie* pyre site bases. This may be due, however, to the mixing apparent in the fills of many of the pyre sites and pyre-related features, which suggests that after they were burnt out the pyre sites were disturbed. As pyre sites may have been cleaned out and reused, perhaps many times, any evidence of any preferential use of wood at individual cremations may have been lost soon after the event. However, a few pyre sites do not appear to have been disturbed (e.g. 20121 and 20283). These had identifiable timbers in the fill and certain or possible evidence for the scorching of the subsoil. At these pyre sites three and two species of wood were identified, and although the timbers may have slumped into the flues, this does suggest that several species were used in pyres. The one case where pyre debris was attributable to a single species (grave 20252: ash) was unusual both in the treatment of the cremated bone and in having debris deliberately deposited in the grave. Nonetheless it is noteworthy that oak or ash were nearly always more abundant than other species, probably resulting from their use as supports for the main structure; the outer regions of the pyre were the coolest and the timber supports would have burnt more slowly and were less likely to have been totally reduced to ash (McKinley 1994a; and above).

The dense woods of oak and ash emit high temperatures when burning and ash has the advantage that it can be burnt green (unseasoned) without much loss of heat. Maple, hazel, beech, hawthorn, crab apple, wild service, whitebeam, blackthorn, and cherry are also moderately dense and even grained, and make good quality fuel; cherry wood is pleasantly aromatic when burnt — perhaps a bonus on such occasions! Birch burns fast and with intense heat. Gorse also burns fiercely and, since little ash remains, has been used to fuel kilns and ovens (Edlin 1949); heather and ling also have a traditional use as fuel.

Since yew, dogwood, and possibly *Viburnum* were only rarely identified, their presence here is rather enigmatic. Perhaps a few branches were included as brushwood, or could their presence have some artefactual or ritual significance? Basketry, matting, pegs, or pins made from these woods have been recorded from prehistoric sites in Britain (Earwood 1988, 90; 1993 *passim*) and such items are unlikely to have survived the pyre in any recognisable form. As structural timbers appear to have been reused on the pyres, it is possible that other objects were also.

Wood fuels such as elm (*Ulmus*) and alder (*Alnus*) are difficult to ignite, burn slowly, and produce comparatively little heat, and were not apparently used in the cremations. Some light-weight woods with high moisture contents, for instance willow and poplar, both of which occurred infrequently, are also considered to make poor fuel wood although some experiments have indicated otherwise (McKinley 1994a).

Apart from the obvious practicalities involved in supporting the pyre structure, it seems more likely that wood was used in preference to charcoal since the process of cremation requires an oxidising fire. Small quantities of charcoal may have been used, especially on pyres where large quantities of wood were to be ignited and sustained at high temperatures. Weight for weight the calorific value of charcoal is about twice that of wood (Horne 1982) and it is easier to ignite and to control when alight. Although small charcoal can be made quickly by burning bundles of faggots or brushwood and then dousing with water (Hughes 1954), the production of substantial billets is a lengthy, and therefore expensive, procedure.

Any type of dry combustible material can be used for kindling, such as leaves, grass, small pieces of dead wood, narrow brushwood, and crop-processing residues. The volatile oils present in birch bark are highly flammable and short lengths of rolled bark make an efficient torch (Edlin 1949; Lines 1984). Shrubby species probably used as brushwood infill included hazel, blackthorn, Pomoideae, gorse and/or broom, birch, and heather.

When such large quantities of fuel were required for pyre construction, the choice of wood must ultimately have fallen within the constraints set by the environment. By the Iron Age managed woodlands probably provided the chief source of fuel — the wide poles of oak and ash — and abundant brushwood. The apparent increase in the use of ash in the Iron Age may reflect its more widespread distribution by this period, or the convenience of good quality 'green' fuel, or ritual preferences.

Conclusion

The many types of wood identified from pyre sites and pyre-related features in the cemetery indicate that a range of timbers and brushwoods were used and that if there were preferences for particular timbers these corresponded to those from taxa most likely to have been growing commonly in the area, e.g. oak and ash which also make good fuels. If there were other preferences these were constrained by availability. Some of the more rarely used species such as yew, dogwood, and ?*Viburnum* may have derived from artefacts, or perhaps in the case of yew from deliberately placed fronds. In terms of pyre structure, the components (i.e. brushwood and large poles or planks) appear to conform with those used in both ancient and relatively recent cultures and, by inference, the methods of construction were probably similar. Many of the timbers are likely to have come from coppiced or pollarded woods, but the discovery of nails in almost every pyre site and pyre-related feature, and structural ironwork fittings at a few, suggests that seasoned timbers were also reused.

11 Charred Plant Remains, by Pat Hinton

Methods

The samples were processed by Wessex Archaeology's standard methods; flots were retained on a 0.5 mm mesh and residues on a 1 mm mesh. As with the charcoal, the flots were assessed, being graded as A*, A, B, or C according to the relative abundance of grain, chaff, and weed seeds. A* denotes more than 30 fragments; A more than 10; B, 6–10 and C 1–5. The criteria for selection for analysis were twofold; i) diversity of remains, especially the presence of chaff and ii), contextual, ensuring a representative range and distribution of feature types were analysed. A range of graves, pyre sites, and pots placed as grave goods and a smaller number of other contexts; two shrines, three postholes, and a surface deposit/layer were selected for analysis and the fractionated residues were totally extracted from all analysed samples.

Sorting and identification were carried out with stereo microscope at 7–40 x magnification. Identification presented few difficulties, but wheat species are recorded as probable (cf) as they can only be securely identified when there are also distinctive chaff parts. Only in two samples were *Triticum dicoccum* (emmer) glume bases found. All samples included some modern roots, mosses, seeds, insects, worm cocoons, etc, in addition to small fragments of cremated bone. Nomenclature and order, except for the cereals, accords with Stace (1991).

Pyre Sites and Pyre-related Features

In comparison with other types of features charred macrofossils were found relatively frequently in pyre sites and pyre-related features, but they were rarely abundant; no flot was assessed as A*. Some 55% of the assessed samples contained no charred materials or five or fewer fragments of weed seeds. Nine samples were analysed from pyre-related features and all contained unidentifiable cereal fragments, as well as, in three samples, a few wheat and/or barley grains (Table 10). Four samples also included a few fragments of hazel nut shell and *Prunus spinosa* (sloe) fruit stones were found in one feature. One sample was significantly different in that in addition to five cereal grains and fragments, it included 27 buds, of which at least ten can be identified as *Quercus* sp. (oak); the remaining 17 are probably oak also but they are more damaged and retain little form. The buds are no more than would occur on one short twig or shoot, which could have several clusters of closely grouped buds.

Graves

Charred plant remains were not frequent finds in graves. Thirty-three percent of all the assessed samples contained no charred macrofossils, and 40% contained

Table 10 charred plant remains from Iron Age pyre sites and pyre-related features

Pyre site and pyre-related features		*20068*	*20124*	*20128*	*20258*	*20283*	*20355*	*20414*	*20578*	*20747*
Context		*20069*	*20123*	*20127*	*20257*	*20282*	*20354*	*20413*	*20579*	*20746*
Sample		*29041*	*29065*	*29069*	*29125*	*29129*	*29166*	*29185*	*29211*	*29295*
Sample volume (litres)		*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*	*10*
Cultivated										
Triticum cf *spelta*, grains	spelt	–	–	–	9	–	–	–	1	–
Triticum sp. grains & frags	indet. wheats	–	–	–	–	1	–	–	4	–
Hordeum vulgare L. grains	hulled barley	–	–	–	2	3	–	–	–	–
Cerealia	indet. cereal frags	1	2	(2)	10+	11	9	30+	c. 50	9
Arable, waste, and grassland										
Silene cf *alba*	white campion	–	1	–	–	–	–	–	–	–
cf *Viola* sp.	violet/pansy	1	–	–	–	–	–	–	–	–
Vicia cf *tetrasperma/hirsuta*	tares	–	–	–	–	3(2)	1	1(2)	–	1
Poaceae	indet. grasses	1	–	–	–	–	–	–	–	–
Woodland, wood margins, clearings										
Quercus sp buds	oak	–	–	–	–	–	–	–	10(17)	–
Corylus avellana L. shell frags	hazel	–	1	1	2(1)	–	–	1	–	–
Prunus spinosa L.	sloe	3	–	–	–	–	–	–	–	–

( ) = identification uncertain

Table 11 charred plant remains from Iron Age graves

		Grave	*20018*	*20021*	*20023*	*20025*	*20027*	*20029*	*20031*	*20032*	*20035*
		Context	*20019*	*20020*	*20022*	*20024*	*20026*	*20028*	*20030*	*20033*	*20034*
		Sample	*29011*	*29013*	*29015*	*29014*	*29023*	*29017*	*29022*	*29026*	*29020 29021*
		Sample volume (litres)	*10*	*10*	*1*	*10*	*5*	*6*	*10*	*10*	*20*
Cultivated											
Triticum cf *dicoccum*, grains	emmer		–	–	–	–	–	–	–	–	–
T. cf *dicoccum*, glume base			–	–	–	–	–	1	–	–	–
Triticum cf *spelta*, grains	spelt		–	–	–	–	–	–	–	–	–
Triticum sp., grains & frags	indet. wheats		–	–	–	–	(1)	–	–	(1)	1
Hordeum vulgare L., grains	hulled barley		–	–	–	–	–	–	–	–	(1)
Cerealia	indet. cereal frags		10	3	4	14	c.30	2	3	5	4
Arable, waste and grassland											
cf *Ranunculus* sp.	buttercup		–	–	–	–	–	–	–	–	–
Stellaria media / neglecta	chickweeds		–	–	–	–	–	–	–	–	–
Vicia cf *tetrasperma*	smooth tare		–	–	–	1	–	–	–	–	–
cf *Trifolium* sp.	clover		1	–	–	–	–	–	–	–	–
Bromus cf *secalinus*	rye brome		–	–	–	–	–	–	–	–	–
Poaceae	indet. grasses		–	–	–	1	–	–	–	–	–
Woodland, wood margins, and clearings											
Corylus avellana L., shell	hazel		–	–	–	–	–	–	–	–	–
Stem fragments			–	–	1	–	–	–	–	–	–
Root fragments			–	–	–	1	–	1	–	–	–
Unidentified			–	–	–	–	–	–	–	–	–

		Grave	*20048*	*20061*	*20089*	*20140*	*20142*	*20170*	*20196*	*20245*	*20252*
		Context	*20049*	*20062*	*20088*	*20139*	*20141*	*20171*	*20197*	*20246*	*20251*
		Sample	*29027*	*29037*	*29054*	*29074*	*29073*	*29091*	*29102*	*2112*	*29127*
		Sample volume (litres)	*10*	*19*	*10*	*10*	*10*	*10*	*10*	*10*	*9*
Cultivated											
Triticum cf *dicoccum*, grains	emmer		–	–	1	–	–	–	–	–	–
T. cf *dicoccum*, glume base			–	–	–	–	–	–	–	–	–
Triticum cf *spelta*, grains	spelt		–	–	–	–	–	–	–	1	–
Triticum sp., grains & frags	indet. wheats		–	–	–	–	–	1	–	1	–
Hordeum vulgare L., grains	hulled barley		–	–	–	–	1	–	–	–	–
Cerealia	indet. cereal frags		5	3	9	c.50	c.50	3	4	c.20	c.20
Arable, waste and grassland											
cf *Ranunculus* sp.	buttercup		–	–	–	–	–	–	–	1	–
Stellaria media / neglecta	chickweeds		–	–	–	–	–	–	–	–	–
Vicia cf *tetrasperma*	smooth tare		–	–	–	–	–	–	–	–	–
cf *Trifolium* sp.	clover		–	–	–	–	–	–	–	–	–
Bromus cf *secalinus*	rye brome		–	–	–	–	–	–	–	–	–
Poaceae	indet. grasses		–	–	–	–	–	–	–	–	–
Woodland, wood margins, and clearings											
Corylus avellana L., shell	hazel		–	2	1	–	3	1	–	–	–
Stem fragments			–	–	–	–	1	–	–	4	–
Root fragments			–	–	2	–	–	–	–	–	–
Unidentified			–	–	1	1	–	–	–	–	–

Table 11 (cont.)

		Grave	*20253*	*20268*	*20384*	*20493*	*20544*	*20601*	*20752*
		Context	*20254*	*20267*	*20385*	*20492*	*20545*	*20600*	*20753*
		Sample	*29121*	*29132*	*29163*	*29216*	*29224*	*29236*	*29299*
	Sample volume (litres)		*10*	*10*	*6*	*10*	*2*	*10*	*10*
Cultivated									
Triticum cf *dicoccum*, grains	emmer		–	–	–	–	–	–	–
T. cf *dicoccum*, glume base			–	1	–	–	–	–	–
Triticum cf *spelta*, grains	spelt		–	–	–	–	–	–	–
Triticum sp., grains & frags	indet. wheats		–	–	–	–	–	–	–
Hordeum vulgare L., grains	hulled barley		–	–	–	–	–	–	–
Cerealia	indet. cereal frags		50+	c.10	3	2	1	15	5
Arable, waste and grassland									
cf *Ranunculus* sp.	buttercup		–	–	–	–	–	–	–
Stellaria media / neglecta	chickweeds		–	–	–	–	–	–	–
Vicia cf *tetrasperma*	smooth tare		–	–	–	–	–	–	–
cf *Trifolium* sp.	clover		–	–	–	–	–	–	–
Bromus cf *secalinus*	rye brome		1	–	–	–	–	–	–
Poaceae	indet. grasses		–	1	–	–	–	–	–
Woodland, wood margins, and clearings									
Corylus avellana L., shell	hazel		–	–	–	–	–	–	1
Stem fragments			(1)	1	–	–	–	–	–
Root fragments			–	–	–	–	–	–	–
Unidentified			–	–	–	–	–	–	–

only five or fewer fragments of weed seeds. Sub-samples of 10 litres were analysed from the whole-earth samples of 25 of the graves, and all of them contained small indeterminate cereal fragments, nine with no other items, and nine samples with more identifiable cereals (Table 11). Common weed seeds, and *Corylus avellana* (hazel) nut shell fragments occurred in ten and fragments of stems or roots in eight. It is possible that some of the hazel nuts could be residual from the Mesolithic activity on the hilltop, but this is not regarded as a significant consideration.

The cereals are comparable to those found in other contexts of this period at other Westhampnett sites and Copse Farm, Oving (Bedwin and Holgate 1985, 232–4).

Pots

The incidence of charred plant remains in pots was very similar to that in the fills of the graves. Forty-one percent of the pots did not contain any remains and 42% contained only <5 weed seeds (i.e. grade C). Eighteen samples from pots were examined (Table 12) of which three (graves 20035, 20097, and 20573) contained only charcoal. Four samples had indeterminate cereal fragments only, and nine included one, or at most three, grains of spelt and/or barley, and one a single fragment of hazel nut shell. One weed and three seeds of grasses are the only other plants represented.

Other Features

The samples from other features again contained cereal grains and fragments with a few weed seeds and fragments of hazel nut shell (Table 13). In these samples there seems little reason to suspect anything other than fortuitous deposition of material presumably deriving from pyres.

Discussion

The interpretation of the charred macrofossils is difficult. As the samples were selected for analysis by the presence of cereal and chaff, little importance should be attached to the fact 98% of the samples analysed included charred cereals. The same samples invariably yielded charcoal interpreted as deriving from the cremation pyres, and there seems no reason to propose different interpretations of the same archaeological observations.

There is, however, a scatter of charred cereal, seed, and wood fragments on most sites, and it is probable that a least a proportion of the charred macrofossils in the cemetery samples derive from this 'background noise', particularly in an area where there has been much farming activity.

The pyre sites, however, are the locations of fires and it must be considered whether some plant parts (other than charcoal) were deliberately burnt *in situ*. For this there could be two explanations: cereal processing waste

Table 12 charred plant remains from pots in Iron Age graves

		Grave	*20001*	*20055*	*20064*	*20132*	*20140*	*20199*	*20235*	*20320*	*20335*
		Pot	*27000*	*27038*	*27046*	*27082*	*27090*	*27133*	*27138*	*27182*	*27189*
		Sample volume (litres)	*5*	*3*	*2*	*6*	*1*	*9*	*9*	*1*	*10*
Cultivated											
Triticum cf *spelta*, grains	spelt		–	–	–	1	–	–	–	–	
T. cf aestivum s.l, grains	bread wheat		–	–	–		–		–	–	–
Triticum sp., grains & frags	indet. wheats		–	1	–	–	–	–	–	2	
Hordeum vulgare L. grains	hulled barley		–	–	1		–	2	1(1)		–
H. vulgare L., rachis frags				–	–	–	–	–	–	–	–
Cerealia	indet. cereal frags		–	–	–	–	12	20+	1	6	2
Arable, waste, and grassland											
Galium aparine L.	cleavers		–	–	–	–	–	–	–	–	
Poaceae	indet. grasses		–	–	–		–	2	–		–
Woodland, wood margins, and clearings											
Corylus avellana L., shell	hazel		1	–	–	–	–	–	–	–	–
Stem fragments			1	–	–	–	–	–	–	–	–
Root/rhizome fragments			–	–	–		–	c.50	–	1	–

		Grave	*20337*	*20338*	*20448*	*20605*	*20620*	*20654*
		Pot	*27190*	*27191*	*27245*	*27323*	*27332*	*27335*
		Sample volume (litres)	*8*	*8*	*5*	*1*	*10*	*2*
Cultivated								
Triticum cf *spelta*, grains	spelt		1	–	–	–	–	–
T. cf aestivum s.l, grains	bread wheat		(1)		–	–	–	
Triticum sp., grains & frags	indet. wheats		–	–	–	–	–	1
Hordeum vulgare L. grains	hulled barley		–	–	–	1	–	–
H. vulgare L., rachis frags			1	–	–	–	–	–
Cerealia	indet. cereal frags		3	8	6	–	3	1
Arable, waste, and grassland								
Galium aparine L.	cleavers		–	–	1	–	–	–
Poaceae	indet. grasses		1	–	–	–	–	–
Woodland, wood margins, and clearings								
Corylus avellana L., shell	hazel		–	–	–	–	–	–
Stem fragments			–	–	–	–	–	–
Root/rhizome fragments			–	–	–	–	–	–

and/or other plant material was used as kindling, or cereals and other plants were deliberately placed upon the pyre as part of the mortuary rituals.

The use of cereal waste (chaff, runt grains, and weed seeds) and grassland vegetation as kindling has been recognised in various contexts, including kilns, corn dryers, and Bronze Age cremations, and in the only comparable Late Iron Age pyre-related feature at Baldock, Hertfordshire, this was considered the probable explanation of cereals and grassland plants (Burleigh 1982, 7–14; Murphy 1990).

As parts of animals were placed on the pyres it is not unreasonable to suggest that cereals, whether as whole ears or spikelets, or fully prepared grains, may also have been sacrificed, but this is more difficult to support. The lack of chaff and few weeds might suggest that fully prepared grains (Hillman 1981) were offered but they are in very poor condition, being mostly degraded and

Table 13 charred plant remains from other Iron Age features

	Type	*Posthole*	*Posthole*	*Posthole*	*Enclosure*	*Enclosure*	*Layer*
	Feature	*20136*	*20427*	*20429*	*20761*	*20277*	
	Context	*20135*	*20426*	*20428*	*20760*	*20421*	*20076*
	Sample	*29072*	*29190*	*29191*	*29302*	*29188*	*29047*
Sample volume (litres)		*10*	*10*	*10*	7	6	10
Cultivated							
Triticum sp., grains & frags	indet. wheats	–	5	2	1	–	–
Cerealia, grains & frags	indet. cereal frags	5	c.50	8	5	9	2
Arable, waste, and grassland							
Stellaria media/neglecta	chickweeds	–	2	–	–	–	–
Bromus cf *secalinus*	rye brome	–	2	–	–	–	–
Vicia cf *tetrasperma/hirsuta*	tares	–	1	–	–	–	–
Woodland, wood margins, and clearings							
Corylus avellana L. shell	hazel	1	35	89	–	1	–
Stem fragments		3	–	–	–	–	–
Root/rhizome fragments		–	–	–	–	–	1

fragmentary, which would be the expected result of burning at high temperature and in oxidising conditions when chaff is rapidly destroyed and grains progressively deteriorate (Boardman and Jones 1990).

The seeds that accompany the cereal remains are of common arable weeds, ruderal, or grassland plants and their use in the mortuary ritual seems unlikely. The evidence of very few seeds, which would have ripened after most of the flowers had died (flowering time May–September), is very sparse, but perhaps their possible significance should be considered. The campion (cf white campion) and the violet or pansy (most likely the common field pansy rather than a woodland violet) would have been familiar and attractive flowers, but the more numerous weed seeds in these samples represent tares, straggling and entangling plants whose rampant growth has been reported as destroying whole crops (Salisbury 1961). Their usage as part of the fuel seems more appropriate than as funerary offerings.

Unfortunately there is little or no comparative evidence from charred plant remains for ceremonial plant use from Britain and even when found associated with ritual materials, such as Roman priestly regalia, it was not found possible to determine whether their presence was deliberate (Carruthers 1992; O'Connell and Bird 1994, 97–8).

Evidence for the season when some pyres were burnt may be looked for in the plant remnants. Hazel nuts, sloes, and oak buds would be available from autumn into winter, but weed or grassland plants may well have died back slightly earlier. Cereal grain, or processing waste could have been available at any time if, after harvesting, the grain was stored as spikelets and then processed piecemeal as required.

12 Celtic Coin, by A.P. Fitzpatrick

Identification

A Mack 44 gold quarter stater was found in grave 20493 (Pl. 19). The coin was discovered during the extraction of the cremated bone and shows no signs of having been on the pyre. This does not mean that it could *not* have been on the pyre, but it seems likely that it was placed as a grave good. Weight 1.54 g.

Allen classified Mack 44 as belonging to British O, one of the early uninscribed British gold series. British O also includes Mack types 40, 43 and 45 (Allen 1960, 111–3, 197, fig. 27, 3). British O are insular imitations of the Gallo–Belgic D quarter stater Scheers No. 13 (1977, 53–5, 297–307, pl. v, 114–25), called by her *quarts 'au bateau'* after the much transformed head on the obverse which is sometimes though to represent a boat. In Britain the coins are often called 'geometric' quarter staters after the design on the reverse and van Arsdell classifies British O as his 'early geometric type' (1989, types VA 1225–1, 1257–1, 1229–1).

Chronology

On the basis of the Le Câtillon, Jersey, hoard which was then thought to have been buried in 56 BC, Allen dated British O to around 60 BC (Allen 1960, 111–3; 1968a, 51). A rather later date of deposition for the Le Câtillon hoard in the mid–later 1st century BC, c. 50–20 BC, is now considered likely (Fitzpatrick and Megaw 1987; 1989; Haselgrove 1987, 317–21; Gruel 1990). Although

Plate 19 The Celtic coin, a Mack 4 gold stater (left = obverse; right = reverse), which was found in Iron Age grave 20493 with the unurned cremated bone of a possibly female older mature / older adult. Scale c. 2:1

a date relatively early in the British gold series is sure, van Arsdell's date of 65–58 BC for his 'early Geometric type' is unrealistically exact. Further dating evidence comes from the coins British O imitates, and also the coins it is associated with.

British O imitates Gallo-Belgic D, a type for which dates as early as the late 2nd century BC have been proposed (Nash 1987, 112), but while it has been found with coins of that date such as Gallo-Belgic A in hoards at Carn Brea, Cornwall, and Snettisham, Norfolk, coins dating to the 70–60s BC are also present in these hoards (Fitzpatrick 1992a, 12–5, tab. 2). A worn Gallo-Belgic D was found in the Le Câtillon hoard, providing Allen's date for British O.

The strong stylistic links between Scheers's last class of Gallo-Belgic D (class VI = Allen's Gallo-Belgic XC) and the last classes (VI–VII) of Gallo-Belgic E staters (both have the 'letter' A or V on the obverse) have suggested to Allen (1960, 113) and Scheers (1977, 53–5) that Gallo-Belgic D and E were contemporaneous. This has now been endorsed by metallurgical analyses (Cowell 1992, 217–9, tab. 2). Although the earliest classes of Gallo-Belgic E may date to the 60s BC (Haselgrove 1984, 84, fig. 2; 1987, 80–1; 1993, 39), the majority were issued by the Belgic confederacy to pay for their campaigns against Julius Caesar (Scheers 1987). These different categories of evidence combine to suggest that the Gallo-Belgic D coins which British O derives from was issued during the second quarter of the 1st century BC, *c.* 70–50 BC.

Typologically British O appears to derive from comparatively early classes of Gallo-Belgic D (Scheers classes II–III) and it can be very difficult to distinguish visually between them (Allen 1960, 111; Scheers 1977, 55, n. 154) which may suggest that they were contemporary. On this basis a date for British O during the 60–50s BC is plausible.

The coins which British O has been found with in hoards include early British issues in the comparatively well-recorded hoards from Corfe Common, Dorset (British B; Cowell *et al.* 1987, 8–9, pl. 5, 33–6) and Cheriton, Hampshire (British D; Haselgrove 1987, 276; 1989, 15, 25).

The date of the earliest Durotrigian staters (British B) with which British O was associated in the Corfe Common hoard is important. British B staters are thought to date to the 70s–60s BC (Haselgrove 1987, 80–92; 1993, 39–41; Fitzpatrick 1992a, 14–5; Cowell *et al.* 1987, 12; Burnett and Cowell 1988, 8–10). In this case, the British O quarter staters may have been the accompanying fractional unit. Although a comparatively small and localised issue from southern Hampshire, the British D staters found in the Cheriton hoard may not be much later in date than British B, perhaps dating to the 60s–50s BC, and some of the thin silver units found in Hampshire (e.g. Mack 321; Allen 1965), could be an accompanying fraction (*cf.* Haselgrove 1993, 42–3; Briggs *et al.* 1992, 6). Dates in the mid-1st century BC would be appropriate for the excavated site finds of British O from Hayling Island (Briggs *et al.* 1992, 12, 38) and Hengistbury Head, Dorset (Mays 1987, 140).

Standing back from these intricacies of association and chronology a date for British O in the 60s or 50s BC is very probable. The deposition of a barely worn example in the Westhampnett burial need not have been more than a decade or so later, if at all later.

Attribution

Perhaps surprisingly the attribution of British O remains uncertain. The great majority of finds known to Allen came from along the Sussex coast and he considered them to have been issued there (1960, 112, 197; 1968a, 51). In contrast some recent opinions have regarded them as Durotrigian issues (e.g. Mays 1987, 140; van Arsdell 1989, 292–7). There are two points at issue here. One is the undoubted inspiration which British O provided to the Durotrigian series. The second is the origin of British O and here their widespread distribution, particularly the number known from Sussex and southern Hampshire, suggests that it was struck in that area. In view of the fact that the earliest stater issued in Dorset, British B, imitates a coin struck in or near Hampshire (British A), it may well be that some varieties of British O represent a similar copying of more eastern types in Dorset (*cf.* Haselgrove 1993, 39). A less likely alternative (Nash 1987, 126–7) is that British O had a very wide circulation. Whatever the case, the coin from grave 20493 is likely to be a comparatively local issue struck between *c.* 70–50 BC.

Coins in Iron Age Graves

Britain

The discovery of a coin in a British Iron Age grave is rare: the Westhampnett find is only the third certain example. The double cremation burial 317 (one adult, one immature individual) from the King Harry Lane cemetery adjacent to the '*oppidum*' at St Albans contained 10 coins issued by Rues (Mack 190). On the basis of the associated finds rather than the coins themselves, the grave may be dated to c. AD 10–30 (Allen 1968b, 4–5, fig. 1; Stead and Rigby 1989, 87, 354, fig. 154, 317). The second grave is burial 30 at Mill Hill, Deal, Kent, where an early 1st century AD coin of Eppillus (Mack 310) was placed by the right pelvis of a possible female, aged 20–25 in an inhumation burial (Parfitt 1995, 112–3, 161, fig. 57, pl. xi).

Two other possible examples from Hertfordshire are mentioned by Haselgrove (1987, 122–6). However, in the case of a grave from St Albans the funerary context is not certain and the date appears to be early Romano-British (*op. cit.*, 124, 440–1). At Baldock–Upper Walls Common, Hertfordshire, Haselgrove suggested that there was some ambiguity as whether a coin from burial 3 came from the top of the grave fill rather than from the fill of the vessel which contained the burial (*op. cit.*, 124, 416), but the report is specific that the coin comes from the top of the grave fill (Stead and Rigby 1986, 61; I.M. Stead pers. comm.).

Continental Europe

The placing of coins in Iron Age graves in central Europe has been surveyed by Polenz (1982) and recent finds from Iron Age cemetery sites in northern France such as Acy–Romance La Croizette grave 104, Ardennes (Lambot *et al.* 1994, 38, fig. 24), and older discoveries either apparently in Late Iron Age graves such as Armentières-sur-Ourcq, Aisne ('near a cremation burial'; Scheers 1977, 379), Normée, Marne (Polenz 1982, 31), or from cemeteries which have Iron Age origins, such as Arcy-Sainte-Restitute, Aisne (Haselgrove 1987, 126), suggest that this practice was also followed in northern France. The coins found in *puits funéraires* of southern France (Vidal 1986, 63) may also be related, while Celtic coins were amongst the coins deposited in the Ornavasso cemeteries in nothern Italy, although the placing of coins in burials there is much more frequent (Graue 1974, 18–21).

The 23 graves considered by Polenz range widely in place and time, spanning *c.* 250 years. Despite the small sample, it was clear that coins were almost always found in the graves of women, often young adults (1982, 163–8), and this is borne out by now finds such as Westhampnett and Acy–Romance (above).

Polenz argued that the burials were of women of high social status, and also suggested that the character of the grave goods, often with numerous amulets, indicated that the women were foreigners to the group with whom they were buried. Polenz interprets this evidence as showing that the women were foreign wives. In inhumation burials there is a trend for coins to be have been placed at the head and as Polenz (1982, 197–217) argues this may well be related to the idea of an obol being buried with the dead to pay the fare to Charon for ferrying them across the Styx.

On this basis the coins could be interpreted as helping the women return to their natal settlement or birthplace. If the graves do signify exogamy and a post-marital residence pattern which was virilocal, it is possible that the coins represent part of a dowry, an idea which would be compatible with the suggestion that much coin use was restricted to males (Fitzpatrick 1984, 186; 1992a, 18–9, 31–2). However, if this were to be the case then the ages at death of the women might be expected to be distributed more evenly. It would seem that the age of the women was the most important factor in determining whether coins were buried with them and this could signify a different set of social or familial relationships, such as motherhood, and not necessarily the definition of women in relation to men.

13 Metalwork, by R. Montague

with contributions from M. Brooks, A.P. Fitzpatrick, C. Mortimer, D. de Moulins, J.P. Northover, Penelope Walton Rogers and Jaqui Watson

Introduction

With the exception of a possible La Tène I brooch, metalwork from the Romano-British burials and related features and two postholes possibly of Romano-British date, the Anglo-Saxon burials, and modern features, it has been assumed that the metalwork from all features, including subsoil layers, is of Late Iron Age date. The conservation and analysis methods were applied to the metalwork as described below. The material is presented below by context type with the burials first as these provided the largest number of finds, including the brooches which are particularly important to the chronology and interpretation of the site.

Methods

Where recognised in the field, all metal objects except nails were given a unique Object Number. Nails were treated as bulk context finds, although each discrete group of nails was given an Object Number. During the processing of the whole-earth samples through 5 mm, 2 mm, and 1 mm sieves, it became apparent that there were many fragments of metal in the residues. All of the fragments or groups of fragments extracted were given Object Numbers, resulting in some objects having several Object Numbers. An overall 'group' number was assigned to these objects.

All iron objects and most of the non-ferrous objects were X-radiographed by Margaret Brooks. Objects were then selected for conservation on the basis of context and intrinsic interest. Where specific questions were raised during conservation work, such as the presence of tinning or the composition of alloys, objects were submitted for analysis by X-ray fluorescence undertaken by Catherine Mortimer. The conservation also identified the need for further analyses, such as the identification of the mineral-preserved wood and plant remains (undertaken by Jacqui Watson and Dominique de Moulins); and of the weave and type of textiles and fibres also present in mineral-preserved form on the metalwork (undertaken by Penelope Walton Rogers). Their detailed comments have been incorporated into this report and catalogue where they are indicated by the initials *MB*, *CM*, *DdM*, *PWR*, and *JW*, and summaries of the different analyses are also presented. The mineral-preserved organic remains present on the metalwork are summarised in Table 21.

All the fragments were recorded and entered on a database recording context and sample numbers (where relevant), material type, object type, completeness, evidence for burning, and description. The very fragmentary condition of the metalwork meant that it was often possible to ascertain only the 'minimum number' of objects present as, for example, fragments of brooches from the same contexts often did not conjoin. This was also true of the nails which were also often so heavily corroded that identification was only possible with the aid of the X-radiographs. The nails were recorded as 'nails' if the head was present, otherwise as nail shanks, and a minimum number of individuals (MNI) could be estimated by the number of heads present. For these reasons the illustrations do not always show all the fragments from an object and an example of the degree of fragmentation is illustrated in Plate 20.

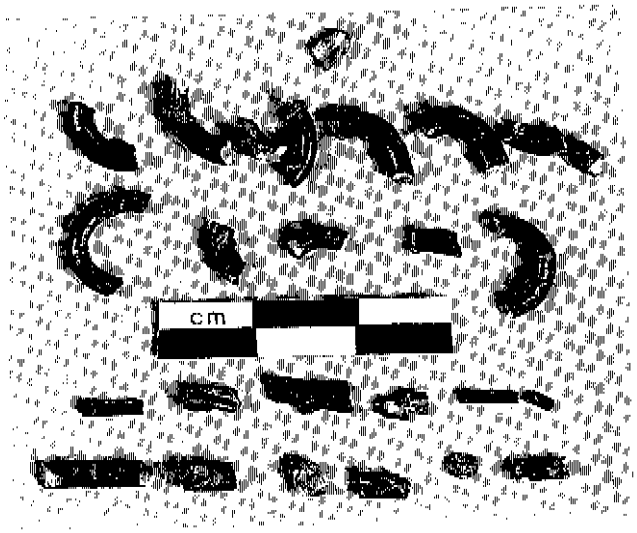


Plate 20 Fragments (conserved) of at least two copper alloy brooches (ON 27770 and 27774–7) from Iron Age grave 20479, of an unsexed young mature adult. The fragments were recovered during wet sieving of the whole-earth sample from the grave

Distribution of metalwork

The distribution of the Iron Age metalwork was recovered from Area 2 by context type is given in Table 14. A total of 913 fragments and objects of metalwork was recovered, either of diagnostic Late Iron Age forms, or from features dated to the Late Iron Age by artefactual, stratigraphic, or morphological evidence. These fragments come from a much smaller minimum number of objects. Of these 635 (69.6%) are iron, 265 (29.0%) copper alloy, and the remainder consist of all the silver, tin/tinned and gold/gold alloy objects. The distribution of Late Iron Age metal fragments by context type is shown in Table 14. All but one of the 45 brooches (97.8%) were recovered from pyre sites, pyre-related features, and graves.

Table 14 overall distribution of metalwork by feature/context type (no. of fragments)

Feature / context type	*All frags*	*LIA frags*
Late Iron Age graves	235	235
Late Iron Age pyres & pyre-related features	663	663
Possible grave/pyre-related features	5	5
Probable Late Iron Age postholes	1	1
Late Iron Age features	5	5
Probable Late Iron Age layers	3	4
Probable Late Iron Age layers with residual La Tène 1 brooch	1	–
Total	914	913

Heat-altered metal, by J P Northover and R. Montague

It has not proved possible to determine by visual inspection alone whether some of the brooches from the graves and pyre-related features are burnt—i.e. whether they were pyre goods, but their fragmentary state strongly suggests this. There were also quantities of material, particularly of copper alloy, which appeared to have been distorted and even melted. The surface of these fragments and globules was generally porous and pitted, sometimes with fine crazing, and the original form of these objects was usually impossible to ascertain. It is suggested that these too are the remains of pyre goods.

Copper alloy

Alloys in general and copper alloys in particular do not melt at a fixed temperature but over a temperature range during which the proportion of liquid increases as temperature increases; in bronzes this range can be very wide, and in high-zinc brasses it can be very narrow. The lower and upper boundaries of this range are respectively labelled the *solidus* and *liquidus*, and these terms will be used here. Below the solidus, and to a limited extent above it, the effects of heating on a copper alloy will depend on the initial structure (e.g. cast, or wrought and annealed), the composition, the temperature attained, the time spent at that temperature, and the atmosphere in which it was heated.

In a neutral or reducing atmosphere a 10% tin bronze alloy starts to melt at around 850°C and is fully liquid around 1010°C. Below the solidus temperature a cast structure will be fully homogenised at around 700°C, while a cold worked and annealed recrystallised structure will begin to show excessive grain growth. In an oxidising atmosphere the surface will be seriously discoloured by 400°C, and a recognisable oxide scale begins to form by 700°C. Above this temperature diffusion of oxygen into the metal initially forms a zone of copper and tin oxide crystals, and after two hours at 900°C the oxygen uptake will be so extensive that the bronze is almost completely oxidised.

Recording of metal placed by Northover and McDonnell in an experimental pyre firing in 1993 showed that temperatures in excess of 1000°C could be reached. The samples used comprised chill and sand cast 12% tin bronzes with melting ranges of the order of 830–980°C. After the firing the condition of the samples varied from those on the ground surface, which showed no observable alteration, through those which had a microstructure simply modified through heat to those which were partially or fully melted with varying degrees of oxidation, shown by fused metal found in the wood ash bed. The samples which were placed on the body and in the hottest zones were all melted. The extent of oxidation varied but could be related to the analysis of the atmosphere at different locations within the pyre.

At the large cremation cemetery at King Harry Lane, St Albans, Hertfordshire where the main period of use dated from *c.* AD 1–60, 19 graves contained fragments from copper alloy objects distorted by heat, and were described as 'molten' copper alloy. Of these, 12 date from phase 1 of activity on the site (pre-Conquest; AD 1–40), two from phase 2 graves (AD 30–55), three from phase 3 graves (AD 40–60), and two from unphased graves. Possible explanations for the greater occurrence of these fragments in pre-Conquest graves include the possibility of a different rite involving fewer objects, or their different placing on and around the body, a different construction of the pyre inducing different combustion conditions and temperatures, or that fewer pieces were collected after the cremation. For the alloys themselves there was probably relatively little variation in liquidus temperature and maximum temper-

atures in the pyre would almost certainly have been sufficient to melt at least a proportion of metal placed on or close to the body.

The 'molten' copper alloy globules from Westhampnett have been identified as such and described on the basis of visual inspection only. Some of the identifiable copper objects have also been subjected to heat, as suggested by factors such as discoloration and distortion. The full range of effects would only be revealed by metallographic examination of the microstructures. This was not pursued further here for two reasons. First, the contextual information made it clear that the material had been on the pyre and secondly, the corrosion of the iron objects meant that the metallographic examination of them was not possible.

Iron

The melting point of pure iron is in excess of 1500°C and the solidus temperature of what would have been for the time a high carbon steel is of the order of 1350°C. It is therefore virtually impossible for any iron to have become molten in the pyre. Globules which look like cooled 'molten' droplets, often with tiny vesicles visible, will derive from the oxidation of iron, as indicated by the presence of haematite (*MB*). The droplets will either be pure iron oxides, or a slag formed from the slag inclusions in the iron or the reaction of the iron oxides with any siliceous material associated with the cremation. The composition of a 'slaggy' droplet will also be affected by the wood ash from the pyre. Depending on the atmosphere and temperature the iron will produce an oxide scale in the same way that the copper alloys do. The best way to identify this and any other effects of heat on the metal after two millennia of corrosion is by a metallographic examination but the corrosion of the iron objects meant that this was not possible. Identification of burnt iron from visual clues alone is difficult but unusual corrosion appearances, such as the grey exterior surface and white powdery cores of some nails, may be one example. Otherwise the iron objects generally appeared little altered on the surface or internally, and so apart from those objects which had been recovered from pyre sites or pyre-related features, which were almost certainly burnt, determining whether or not they had been in the pyre was largely a subjective decision based on such factors as the degree of fragmentation and the presence of mineral-preserved wood.

Silver

The fragments of the silver brooch from grave 20622 have a glassy crystalline surface appearance with numerous small pinholes. The melting point of pure silver is 963°C and the alloy used for the brooch should contain some copper and, perhaps, gold, with a liquidus temperature as low as 900°C. Thus if placed on the body it would have stood a very good chance of being melted, as happened to much of the silver in the well-furnished cremation burial at Folly Lane, St Albans (Niblett 1992). Heating to a lower temperature in an oxidising atmosphere would oxidise any copper close to the surface of the brooch and discolour it. Even so, the present surface appearance of the silver must be primarily the result of corrosion.

Natural iron

Quantities of small fragments of natural iron and manganese were recovered from various features in Area 2. A sample was identified by Catherine Mortimer and Justine Bayley, and other fragments were then identified on the basis of similarity, both in physical appearance and X-radiograph image, between this sample and other fragments. These fragments occur as natural iron and manganese nodules in the locally-occurring mixed ?Hoxnian marine gravels as mapped by Mottershead (1976) and discussed by Scaife and Allen (in prep.). The slight possibility exists that a few of these fragments in fact represent the heavily corroded remains of iron objects, which now do not retain any metal in the core.

Sampling

One result of the metalwork analysis has been to underline the importance of whole-earth sampling on sites of this nature. Sampling was essential given the fragmented state of the metal objects, resulting from either burning on the pyre and/or post-depositional processes. Taking the Late Iron Age brooches as an example (excluding chains and other accessories), only 21 of the minimum number of 45 brooches were recovered completely in the field, parts of six were recovered both during excavation and analysis; and 18 were not noted in the field at all, only being recognised during the analysis. Without the whole-earth sampling and processing, 40% of the brooches would not have been identified.

Brooches

Introduction

Only three complete brooches were recovered. All the others are represented by fragments, which often do not join, and may form only a very small part of the original object. It is not possible to suggest an exact number of brooches as the fragments from pyre sites and pyre-related features may belong to a brooch represented in a grave. As only *c.* 19–30% of the cremated human bone was usually selected for burial, a similar selection of metal objects might be anticipated if they were damaged during the cremation. It is possible, however, that the incorporation of pyre goods within graves was deliberate. Brooch springs, which are the bulkiest part of the brooch, are the fragments found most frequently in the graves, but the possibility must be borne in mind that, if the pyre site was not thoroughly cleaned after each cremation, some of the fragments collected may have derived from an earlier cremation.

Because of the extreme fragmentation of the brooches, it was only practicable to ascertain a MNI in each context based on the occurrence of individual elements of the brooch or on factors such as size; for example, the presence of two brooch pin tips indicates an MNI of two, similarly a large pin fragment occurring with a very gracile bow. The brooches are mostly in a very fragmentary condition, and only three, from graves 20132 (Pl. 21; Fig. 73) and 20169 (Fig. 76), and pyre-related feature 20068 (Fig. 27) are complete. Where the absence of any duplicated parts of a brooch suggests that there is only one fragmentary brooch in the context, it has been assumed that all the pieces come from the same artefact and are shown as such in the illustrations. Where there are two brooches present in the same context, it was usually not possible to certainly reassign the fragments to either and so the fragments are illustrated in the relevant positions forming one brooch, with duplicated fragments shown separately. This represents a reconstruction of the *form* of brooches, and not necessarily each brooch as it was originally.

Table 15 minimum number of individuals of Late Iron Age brooches by type and feature

Brooch type	*No.*	*Graves*	*No.*	*Pyre sites and pyre-related features*	*No.*	*Redeposited burial material*	*Gravel layer 20076*	*Total*
Feugère 2a	8	20089, 20132, 20134, 20252 (x2), 20541 (x2), 20571	1	20068	–		1	10
?Feugère 2a	10	20021, 20179, 20191, 20338, 20368, 20408 (x2), 20543, 20610	1	20300	1	20341	–	12
Feugère 2b	2	20484 (x2)	–		–		–	2
Feugère 4/5b1	1	20170	–		–		–	1
Neuheim/ Feugère 5a	2	20169, 20235	–		–		–	2
Almgren 65/Feugère 8b	7	20601 (x2), 20622, 20629 (x2), 20675 (x2)	–		–			7
Indet.	9	20043, 20087, 20149, 20253, 20453, 20479 (x2), 20484, 20605	1	20378	1	20298	–	11
Total	39		3		2		1	45

A minimum number of 45 and a further five 'possible' Late Iron Age brooches were recovered during the excavation of Area 2 (Tables 15–18). One brooch is tentatively identified as a La Tène 1 type and the others are thought to be of Late Iron Age type. The possible brooches, from features 20155 (x 2), 20471, and 20583, are discussed in the relevant classification entries but are not included in the totals.

Iron is the dominant metal: 34 are of iron, 10 of copper alloy, and one of silver. Thirty of the 50 graves (60%) which produced metalwork contained an MNI of 39 brooches, comprising 23 single brooches and eight pairs (with a further two graves with 'possible' brooches). One grave contained an MNI of three brooches, a pair and a single brooch, and one of the other pairs may be non-matching (from grave 20479; Fig. 94). Six individual brooches are from non-grave features.

Brooch pairs

There are eight pairs of brooches, four of iron and four of copper alloy (Table 16). In some cases, such as the iron brooches from grave 20541 (Fig. 97), the presence of a pairing brooch was suggested by a small duplicated fragment only, as was that from grave 20601 (Fig. 100), but in this case it was also suggested by the presence of a chain. One grave (20484) produced evidence for three

Plate 21 The Feugère 2a iron brooch (ON 27085) from Iron Age grave 20132. The brooch was found on top of the cremated bone of an unsexed older adult, fragments of which have adhered to the brooch

brooches, comprising a pair and a single brooch (Fig. 95). The highly fragmented copper alloy brooches from grave 20479 are unlikely to be a matching pair, as the spring coils are of differing sizes (Fig. 94).

Three pairs, from graves 20252 (Fig. 82), 20601 (Fig. 100), and 20629 (Fig. 103) probably belong to a larger set, comprising a linking chain which was suspended between the two brooches and small rings, some of which will have served to attach the chain to the brooches, but others may be decorative and/or amulets. The other pairs may well have been similarly linked, but no evidence survives.

Classification of the Iron Age brooches

With the possible exception of a La Tène 1 brooch described below, all the brooches are of La Tène 3 type. This Late Iron Age assemblage represents one of, if not the, largest assemblages of brooches from a 1st century BC site in Britain and existing British typologies do not adequately encompass its small range of closely related types. In part this is due to the rarity of excavated sites with Late Iron Age activity which have more than a few comparable examples. At some of these sites the activity is either partly contemporaneous (e.g. Glastonbury Lake Village, Somerset; Bulleid and Gray 1911, 190–4, fig. 43, E239, E252, pl. xl, E93, E128, E142, E185–7, all of copper alloy; Coles and Minnitt 1995, 174–9) or largely so (e.g. Hengistbury Head; Mackreth 1987, 142–7, ill. 108, 1–8). Part of the reason for this may also be geographical and cultural and it may not be accidental that, with the exception of the overlap with the last phases of activity at Glastonbury Lake Village, the most comparable assemblage comes from the Late Iron Age phase at the nearby temple site of Hayling Island, although there all the brooches are of copper alloy. Although parallels can be found within Britain, the brooches are all of types which are widely distributed in continental Europe. For these reasons the most wide-ranging and relevant western European typology, that formalised by Feugère (1985), has been followed and comparanda within Britain have not been pursued exhaustively (Fig. 47). All figures given are based on the MNI of 45. The distribution of the brooches by type and feature is shown in Table 15.

Possible La Tène 1 brooch

A single fragment of a possible La Tène 1 brooch was recovered from brown gravelly subsoil, 20153 (Fig. 54; O.N. 27178). The fragment is tentatively identified as the highly arched bow of a small copper alloy brooch, with the spring and pin missing, and only a small part of the foot present. It is possibly of Hull and Hawkes' s (1987) Type T(A or B)+', a group designated for damaged brooches of La Tène 1 type, and may be compared with a brooch recovered from Wylye Camp, Wiltshire (*ibid.*, 105, pl. 31, 5918). Hull and Hawkes suggest a date of 5th–4th centuries BC (*ibid.*, 72 and 112). There is no other evidence for activity of this date in Area 2.

Feugère 2a and 2b

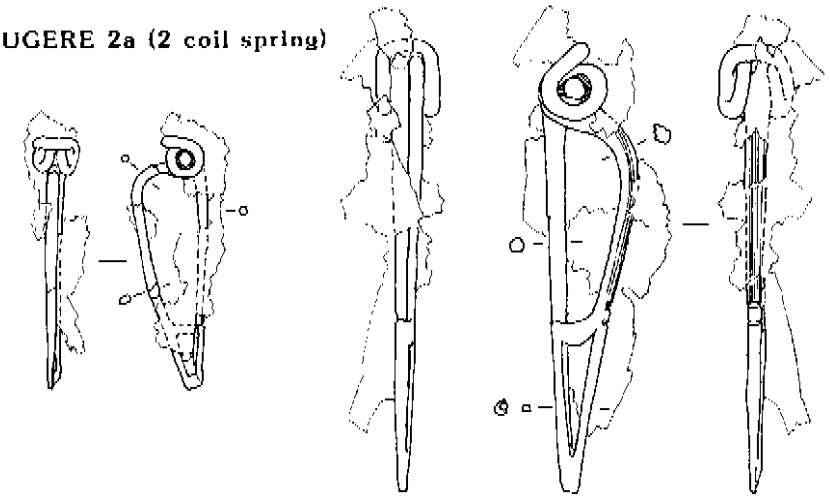
These are classified by Feugère (1985, 188) as having a bilateral spring with four coils and an external chord, with a very flat bow. The section of the bow is filiform (thread or wirelike) and generally circular, sometimes square, terminating in a triangular or trapezoidal catchplate, which is generally open. His type 2a covers iron brooches, whilst type 2b are of copper alloy with various subdivisions based on the shape of the

Table 16 brooches from Late Iron Age contexts

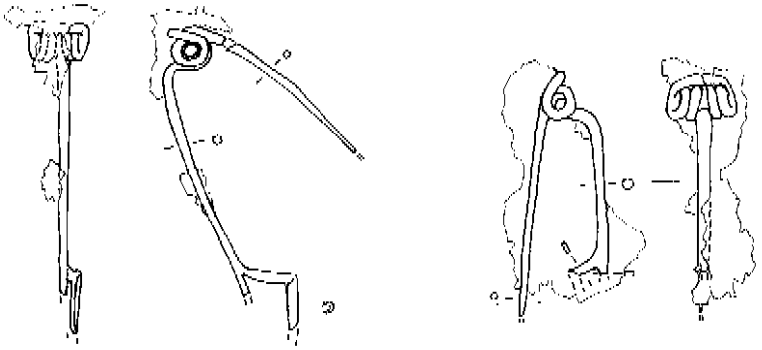
Feature	*Type*	*MNI*	*Material*
	Graves		
20021	?2a	1	Iron
20043	Indet.	1	Iron
20087	Indet.	1	Iron
20089	2a	1	Iron
20132	2a	1	Iron
20134	2a	1	Iron
20149	Indet.	1	Copper alloy
20169	N/5a12	1	Iron
20170	4/5b1	1	Iron
20179	?2a	1	Iron
20191	?2a	1	Iron
20235	N/5aO	1	Iron
20252	2a, 2a	2	Iron
20253	Indet.	1	Iron
20338	?2a	1	Iron
20368	?2a	1	Iron
20408	?2a, ?2a	2	Iron
20453	Indet.	1	Iron
20479	Indet., Indet.	2	Copper alloy
20484	Indet., 2b, 2b	3 (2+1)	Copper alloy
20541	2a, 2a	2	Iron
20543	?2a	1	Iron
20571	2a	1	Iron
20573	?2a	1	Iron
20601	A65/8b, A65/8b	2	Iron
20605	Indet.	1	Iron
20610	?2a	1	Iron
20622	A65/8b	1	Silver
20629	A65/8b, A65/8b	2	Copper alloy
20675	A65/8b, A65/8b	2	Copper alloy
Total (30 graves)		39	Silver x1 Copper alloy x 10 Iron x28
	Other features		
20068	Pyre-related feature	1	Iron
20076	Gravel layer in box section	1	Iron
20298	Thin lens with burnt bone	1	Iron
20300	Pyre-related feature	1	Iron
20341	?Redeposited burial material	1	Iron
20378	Pyre-related feature	1	Iron
Total (6 features)		6	6 x iron

Key: 2a = Feugère 2a; ?2a = possible Feugère 2a; 4/5b1 = Feugère 4 or 5b1; N/5aO = Nauheim/Feugère 5aO; N/5a12 = Nauheim/Feugère 5a12; A65/8b = Almgren 65/Feugère 8b; Indet. = indeterminate

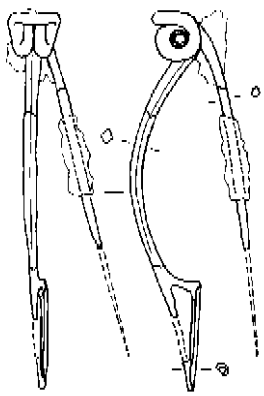
FEUGERE 2a (2 coil spring)



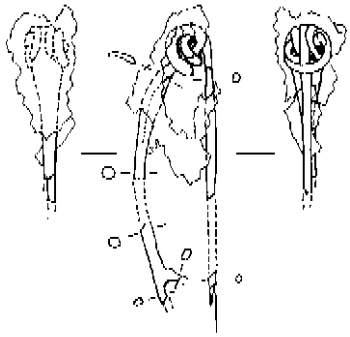
FEUGERE 2a (4 coil spring)



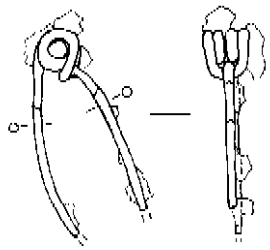
FEUGERE 2b

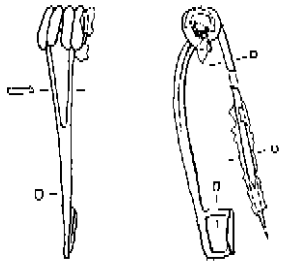


NAUHEIM/FEUGERE 5a



FEUGERE 4 or 5b1





ALMGREN 65/FEUGERE 8b

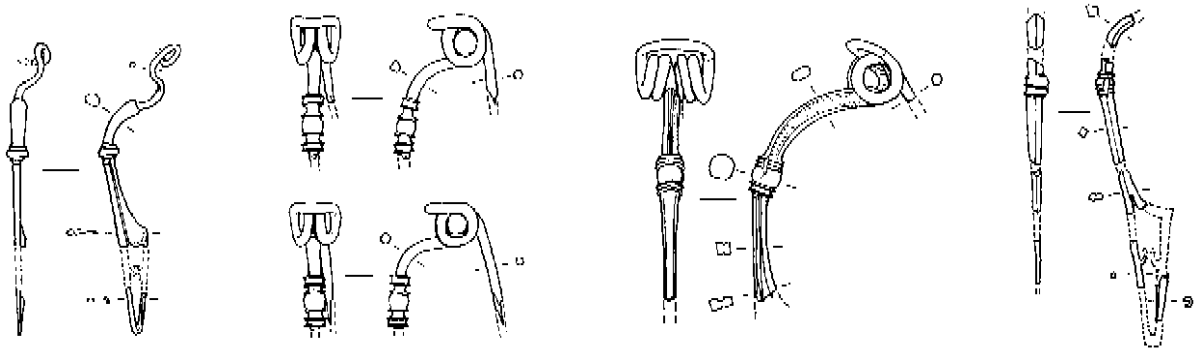


Figure 47 Classification of the Iron Age brooches. Scale 1:2

catchplate, which are not used in this analysis. All of the examples considered by Feugère have four coils but both four and two coil examples occur at Westhampnett and the distribution of the brooches (Fig. 111) suggests that the examples with four coils are slightly earlier. There are 13 certain or probable brooches with two coils and 11 with four (Table 17). Feugère dates the type within southern France to 75–25 BC (Feugère 1985, 189), but it seems likely it appeared in La Tène D1b, possibly as early as the later 2nd century BC, and passed out of use somewhat earlier than 25 BC (Miron 1991).

It has been possible to positively identify ten brooches as type 2a and two as type 2b and another 12 fragmentary examples (often the spring alone survives) as probably belonging to type 2a. The sections of the bows are predominantly circular, with D-shaped and diamond-shaped sections also present. The catchplates are either trapezoidal or, less frequently, an elongated triangle. The majority of the brooches (24 = 53.3%) are certainly or probably of Feugère's type 2.

Of the pair of copper alloy brooches (ON 27263 and 27677 from grave 20484; Fig. 95), only the pin survives of 27677, but its similarity to 27263 strongly suggests that these were originally a pair. The decoration on 27263 is similar to an example from St-Rome-de-Cernon, France (Feugère 1985, 189, pl. 6.92). Iron brooch 27085 from grave 20132 (Fig. 73) is decorated with lines parallel to the edges of the bow, and is similar in shape and size to an undecorated iron example, possibly from Vaucluse, France (*ibid.*, 188, pl. 4.68).

Twenty of these brooches were recovered from graves, one came from small sub-rectangular cut containing possible redeposited pyre debris, two from pyre-related features, and one from a gravel layer (Table 14) — i.e. 23 of the 24 are from funerary contexts. There were mineralised fibres, possibly originally textile, on the tip of the pin of the iron brooch from grave 20541 (ON 27646) but they were too poorly preserved to allow further comment (*PWR*).

Table 17 Feugère type 2 brooches

Type	*2 coils*		*4 coils*		*Total*
	No.	*Feature*	*No.*	*Feature*	
Type 2a	8	20067, 20068, 20132, 20252 (x2), 20541 (x2), 20571	2	20089, 20134	10
?Type 2a	3	20300, 20541 (x2), 20610	9	20021, 20179, 20191, 20338, 20341, 20368, 20408 (x2), 20573	12
Type 2b	2	20484 (x2)	–		2
Total	13		11		24

Numbers in brackets indicate a brooch fragment not determinable to type which is a probable pair to a brooch of identifiable type

Feugère 4 / 5b1

A single brooch with a four-coil spring and internal chord (Fig. 76) was recovered from grave 20170, that of an unsexed subadult/adult. Both the tip of the pin and the catchplate are missing, and both the bow and the pin have circular sections. As the brooch is incomplete, it could be classified as Feugère's type 4 or type 5b1. Feugère's type 4, which has several subdivisions, is typified by a spring with four coils and an internal chord or a hinge, and is always of iron. The bow is filiform or flat or thickened with a rectangular section. The catchplate can be triangular or trapezoidal, and plain or open. Feugère illustrates similarly broken brooches (*ibid*, pl. 29.382; 31.414), to which it compares well.

Feugère's type 5b1 is a sub-division of the Nauheim brooch (type 5), described as having a spring with four coils and an internal chord, a very flat bow and an open, trapezoidal, catchplate. The b1 sub-type has a filiform bow with a circular section. As the catchplate is missing on the Westhampnett example it cannot certainly be identified as an example of the type.

Feugère dates type 4 brooches to 80/60–20/10 BC (*ibid.*, 203), and type 5 to 70/60–30/20 BC, with the possibility of the Nauheim having originated in the late 2nd century BC (*ibid.*, 223–6). Again it seems likely that the type appeared in La Tène D1b, possibly as early as the later 2nd century BC and it may have passed out of use by 40/30 BC (Miron 1991). Parallels from England include an iron brooch from a phase 3 context at Gussage All Saints, Dorset, dated by the excavator to the 1st centuries BC/AD (Wainwright 1979, 108, fig. 82.1038).

Nauheim / Feugère 5a

Feugère's type 5a is also a sub-division of the Nauheim brooch, with a four coil spring and an internal chord, a flattened triangular bow with a rectangular section and an open, trapezoidal, catchplate. The bow has straight or slightly concave edges, and incised or stamped decoration, of which one of the Westhampnett examples (grave 20169; Fig. 76) is closest to variety 12 (Feugère 1985, 203, fig 10). The majority of the type 5a brooches illustrated by Feugère are of copper alloy. Two brooches of this type were recovered, both from graves.

Object Number 27123, from grave 20169 (Fig. 76) of an unsexed adult, is iron with a four-coil spring and internal chord. The decoration on the bow appears to comprise a single incised line on either side and parallel to the edge of the bow, terminating nearly half way down the bow. There is a hint of a line running across the bow where the longitudinal lines end, but this may be the result of corrosion. There are mineral-preserved plant stems on the pin of the brooch (*MB* and *DdM*). This brooch appears to be of Feugère 's type 5a12.

The other brooch, ON 27157, from grave 20235 (Fig. 80) of an unsexed older mature/older adult, is also of iron and is covered in corrosion products, obscuring any decoration, so the specimen has been recorded as Feugère's type 5a0. It appears to be an atypical Nauheim type in that it has two coils. It also seems to have been mended by passing a short length of iron wire or a nail through the spring and clenching the end over, slightly distorting the coils in the process. This does not appear to be a mock spring, although the wire could be related to a chain.

Feugère dates the 5a brooches, which are usually of copper alloy, as generally belonging to the period between 70–60 and 30–20 BC with the possibility of earlier origins (Feugère 1985, 226), and an earlier date, in the later 2nd century BC, now seems certain (Miron 1986; 1991; Lambot *et al.* 1994, 164). Parallels from England include an unstratified example in copper alloy with similar decoration from Maiden Castle, Dorset (Wheeler 1943, 258, fig 83.12; Stead 1984, 54–9).

Almgren 65 / Feugère 8b

Almgren published his typology in 1923, but his type 65 has never been satisfactorily defined since and its present usage includes a great variety of forms encompassing much of ?Europe (Fitzpatrick and Megaw 1987, 437). However, one of the generally agreed characteristics of the type is a boss or other mouldings on the bow, and this is the defining characteristic used here.

Table 18 possible La Tène 1 brooch and possible Late Iron Age brooches

Feature	*Type*	*MNI*	*Description*	*Material*
20153	Subsoil layer	1	?La Tène 1 brooch	Copper alloy
20155	Pyre-related feature	2	Possible melted brooches	Copper alloy
20471	Late Iron Age grave	1*	Silver chain alone: ?from a pair of brooches * the MNI is calculated at 1, as 1 of the pair maybe represented by the silver brooch in grave 20622	Silver
20583	Late Iron Age grave	1	Identified from photograph, object does not survive	Iron

Feugère describes his type 8 brooches having incipient wings or lugs, with an almost elbow-like return of the bow at the head. The apex of the bow has a series of protuberances/mouldings, some well developed and others not. His sub-type 8b has a spring with four or six coils and an external chord, and corresponds to the Almgren 65 type (Feugère 1985, 237).

In his article on the earliest burials of the Aylesford 'culture' Stead (1976) stated 'for the purposes of this enquiry, all La Tène III brooches with a boss on the bow are treated as one type', which could then be sub-divided into three groups. One of these groups, that with the head of the bow above the boss expanded into a trumpet-like shape, was equated with Almgren 65 (Stead 1976, 402–3, 409–10).

Seven (15.6%) Almgren 65 brooches are present in the assemblage consisting of pairs of brooches from graves 20629 (Fig. 103) and 20675 (Fig. 107), and an iron pair from 20601 (Fig. 100), and a silver brooch (identification confirmed by qualitative X-ray fluorescence (*CM*)) from grave 20622 (Fig. 102). It is unsurprising that this relatively elaborate type is predominantly made of copper alloy. The silver chain from grave 20471 (ON 27544) (Fig. 49) is likely to have linked a pair of silver Almgren 65 type brooches (*cf.* Krämer 1971). It is possible that both the silver brooch and the chain derive from the same pair, so the MNI of silver brooches is calculated at two rather than three or four.

Of the seven brooches found, the springs are broken or missing on three. The remaining four are two pairs of copper alloy brooches. The pair from grave 20629 have two coils and an external chord, whilst those from grave 20675 have four coils and an external chord. The silver brooch ON 27773 from grave 20622 is broken, with the spring unravelled, and the springs from iron brooches ON 27730 and 27731 from grave 20601 are missing.

The large copper alloy brooches from grave 20675 (ON 27366 and 27369) were both broken just above the catchplates, which were presumably open. The catchplate of iron brooch 27730 from grave 20601 appears to have a simple step-pattern bridge running across the open catch-plate, and may be paralleled by the similar bridge across the catchplates on the pair of silver brooches from Great Chesterford, Essex (Krämer 1971, 124–7, Taf. 24–5; Stead 1976, 406, fig 3.3). The catchplate on silver brooch ON 27773 is broken, but its upper part is formed by the bow flaring out. The silver brooch with its catchplate still extant from the Le Câtillon hoard, one of a pair, also shows a similar flaring, as well as similar decoration, comprising a boss with a reel above and below (Fitzpatrick and Megaw 1987, 436–8, pl. 16, 16).

The seven brooches were all recovered from graves. The iron pair from grave 20601 were interred with the cremated remains of a young/mature adult, possibly female, the copper alloy pair from grave 20629 with an older mature/older adult, probably male. The copper alloy pair from grave 20675 and the silver brooch from grave 20622 both came from the graves of unsexed young/ mature adults. The silver chain from grave 20471 was associated with an unsexed adult.

Feugère does not suggest a specific date range for the 8b type brooches, but places the appearance of the form in the third quarter of the 1st century BC, with the date range generally falling in the period 50–10 BC (1985, 238). Hull and Hawkes suggested, on rather tenuous historical grounds, that the type appeared c. 75 BC (Hull and Hawkes 1987, 200–3) but there is now rather more convincing evidence from southern Germany (Gebhard 1991, 94). The type certainly passed out of manufacture before the end of the century, by 20 BC (Fitzpatrick and Megaw 1987, 436–8), if not slightly earlier (Gebhard 1991, 94).

Indeterminate

Several contexts produced fragments of brooch so small and fragmentary that it has proved impossible to assign them to type. The fragments include coils, bows, catchplates and pins. The MNI of brooches represented by indeterminate fragments is 11, constituting 24.5% of the overall MNI of brooches.

Numerous small pieces of copper alloy coil, bow, foot, and pin fragments from grave 20479 (48 fragments before conservation, joining to form 26 fragments) are all of indeterminate type but the differing coil sizes suggest an MNI of two, representing a non-matching pair (Pl. 20 photographed after conservation; Fig. 94). One small fragment of bow bears incised decoration, similar to that on the Feugère 2a type iron brooch 27085 from grave 20132. Consequently the brooches are likely to have been Feugère 2b or Almgren 65. Indeterminate copper alloy coil and ?bow fragments from grave 20149 (Fig. 75) are again the only indicators of a brooch from this grave.

Five catchplate fragments were recovered, one each from graves 20043 (Fig. 66), 20253 (Fig. 83), 20453, (Fig. 91) and 20605 (Fig. 100), and one from a possible dump of redeposited pyre debris, feature 20298 (Fig. 54). All were also accompanied by a pin fragment, which was still in the catchplate in the cases of graves 20453 and 20605. In all cases, this was the only evidence for a brooch in those contexts. The catchplates are trapezoidal, with squared ends, a feature which could place them as Nauheim types. However, in view of the predominance of Feugère type 2a brooches with such catchplates, it is more likely that they are mostly from this type.

Two iron pin fragments were recovered from features which did not produce any other evidence of brooches; from grave 20087 (Fig. 70) and pyre-related feature 20378 (Fig. 25). Of interest are the two copper alloy pin fragments from grave 20484, which also produced a pair of copper alloy brooches, with much slimmer pins of Feugère type 2b (Fig. 95). It seems that these larger pin fragments would have belonged to a more robust brooch, and thus there is evidence for three brooches. This is the only instance of three or more brooches in a grave; unless some of the fragments collected derived from an earlier cremation carried out on the pyre site.

Possible brooches

Four possible Late Iron Age brooches have also been identified (Table 18). The possibility exists that a brooch was present in grave 20583 (Fig. 99). The excavator's notes for ON 27295 read: 'Iron brooch placed on cremated bone ... brooch badly corroded

and broke into fragments on removal from cremated bone'. The object record sheet for this object was later amended to 'turned out to be just iron staining', and the fragments were discarded on site. However, as the object was thought to be a brooch by the excavator, was positioned immediately to the south of the concentration of cremated bone, and appears brooch-like in the photographic record, it may well have been one. No other metal objects were recovered from this grave. The silver chain which may have linked two brooches of Almgren 65/Feugère 8b type is considered above. Lastly, several melted copper alloy objects were recovered from pyre-related feature 20155 (Fig. 51), two of which may represent melted springs, whilst two other fragments may represent individual melted spring coils. It is suggested that these represent a MNI of two brooches.

Pairs of chain-linked brooches

There is evidence that four pairs of brooches were originally linked by suspension chains (graves 20252, 20471, 20601, and 20629). This is suggested when either the chain itself survives, or pairs of small rings are present. These are likely to have attached the chains to the brooches, either around the bows or through the spring coils (Krämer 1971).

The pair of iron brooches from grave 20252 was originally linked by an oval-link iron chain, remnants of which are still attached to the spring of either brooch by a larger iron ring (Figs 49; 82), with another unattached length of chain also present. A small iron ring (ON 27532) from the same context may have been associated with this group.

Iron brooch 27730 from grave 20601 (Fig. 100) had a pairing brooch, represented by a very small fragment of the junction between the bow and the top of the catchplate. Also recovered from the grave was a fragment of iron ring with a length of simple oval-linked iron chain, a small copper alloy ring, two larger iron rings and a larger copper alloy ring. The three larger rings may have been suspended from a belt or necklace, and are discussed below, but it is possible that the smaller copper alloy ring was part of the brooch assembly.

Copper alloy brooches 27344 and 27674 from grave 20629 (Fig. 103) were accompanied by two small copper alloy rings, which may represent either rings for the attachment of a chain, or beads to be suspended from a chain which has not survived. The possibility that they are eyelets from a purse made from organic materials should not be overlooked, however (Lambot *et al.* 1985, 38, 166, fig. 24, 8), but it is difficult to see how they would hold the purse material.

In addition, a short length of silver chain of a 'link-in-link' construction, which gives a plaited appearance, was recovered from grave 20471 (Fig. 93) and probably originally linked two silver brooches, possibly that from grave 20622 with another. This would demand either the pair having been separated at some stage in their daily use, or the material from one pyre site being incorporated in two graves. Alternatively the silver chain and brooch may have derived from separate pairs of chain-linked brooches.

Two fragments of a small copper alloy ring were recovered from grave 20179 (Fig. 77), along with an iron brooch. Despite being of a different metal, it is possible that the ring was associated with the brooch, perhaps as a pendant. Lastly, a very small iron ring was recovered from pyre site 20318 (Fig. 28), and it is possible that this is a link from a chain, possibly a brooch chain, although no other brooch elements were recovered from the context.

Table 19 age and number of individuals in graves with brooches

Age	*No.*
Juvenile/subadult	1
Young subadult	1
Subadult/adult	3
Young/younger mature adult	1
Young/mature adult	4
Older adult	1
?Older adult	1
Mature/older adult	1
Older mature adult	1
Older mature/older adult	5
Adult	12

Sex and ageing information

Brooches were found with 31 individuals from 30 graves, and in two pyre-related features. Another two individuals may have worn brooches but these 'possible' brooches are not included in the figures below — an unsexed adult with the silver chain in grave 20471 and an unsexed juvenile/subadult with the possible brooch from grave 20583.

Of the 31 individuals who wore brooches, it has only proved possible to assign a sex to nine: six are probably female, one is probably male and two are possibly male. It was possible to provide ageing information for all 31, and the categories are shown in Table 19. The distribution by age suggests that brooches were either jewellery or part of a particular style of clothing or costumes generally only worn by adults. There is little apparent differentiation by sex but on this evidence they are twice as frequent in the burials of females.

Other Finds from Graves

Gold foil fragment, by A P Fitzpatrick and J P Northover
(Grave 20095, ON 27633)

The fragment is roughly rectangular in shape and measures approximately 1 mm wide by 10 mm long and is wafer thin. Weight 0.0009 g. At one end, the foil is folded back twice upon itself. The foil is not smooth or flat but quite crumpled or crinkled (Pl. 22). The crinkled width is c. 1mm but the edges are irregular, so the width is not uniform.

It is important to recognise how limited is the variety of objects made of gold in the Late Iron Age. The objects found most frequently are gold coins, followed by torques, with other objects known only occasionally. Many of these objects have been found in a widely distributed series of hoards which often contain torques and gold coins and which are known as 'Saint-Louis' type hoards. These date to the later 2nd and 1st centuries BC. The possibility that the fragment from Westhampnett

derives from a coin, even a gold-plated 'forgery' may be discounted on technological grounds.

The other objects found in the 'Saint-Louis' type hoards include what is probably an arm/footring of sheet gold over an iron core from the Le Câtillon, Jersey, hoard (Fitzpatrick and Megaw 1987, 434, pl. 16, 15), small beads made from twisted wire are known from the Brech, Morbihan, hoard (Clement and Galliou 1985, 67, fig 3, 25), and solid wire rings, perhaps purse rings, and armlets (as well as coins and torques) were found in the mid-1st century BC hoard thought to be from near Saint-Louis/Basle in Switzerland (Furger-Gunti 1982, 7–10, 20–1, Abb. 2,5,7; Debn 1994). Other finds include the wide range of objects from the Broighter, Co. Derry, hoard: torques, loop-in-loop necklaces, a bowl beaten from sheet metal, and the famous miniature boat complete with fittings (Raftery 1984, 181 92, fig 95–7, pl. 61–3). Lastly there are fragments of gold thread from the Lexden Tumulus, Essex (Laver 1927, 251, pl. lxii, fig. 1; Foster 1986, 92–5, pl. 21). The fragment was examined initially to see if it derived from a textile, and subsequently subjected to detailed compositional analyses to assess its relationship with other objects of gold of Later Iron Age date.

Possible textile uses, by Jane Batcheller

The foil is not clearly ribbon-like, and its width is large for a textile application. While metal ribbons as wide as 2 mm have been used for brocading weft on tablet woven bands (Crowfoot and Hawkes 1967), the typical width for gold ribbon is in the range 0.25–0.33 mm or about a quarter to one third of the width of the Westhampnett fragment. The gold ribbon from the Lexden tumulus is 0.30 -0.32 mm wide (Laver 1927, 251, pl. lxii, fig. 1; Foster 1986, 92–5, pl. 21). The foil is almost too thin and fragile for use as a flat yarn or for spinning around a core. The crumpled appearance of the foil suggests that it is easily distorted and it has become crushed, but the marks are not characteristic of fibre or yarn impressions. As the fragment does not twist or form a spiral there is no indication that it was ever spun or wound around a core yarn, and since it is only about a centimetre in length it could not have formed a very useful weft yarn.

Tubular torques

In fact, the use of gold foil is restricted to tubular torques and bracelets (Furger-Gunti 1982, 21–34). The tubular bracelet from hoard E at Snettisham, Norfolk is almost unparalleled but its manufacture is closely linked to those of the torques amongst the deposits there (Clarke 1954; Stead 1991b; Fitzpatrick 1992b) and the possible arm/footring from the Le Câtillon hoard may be of a similar construction (Fitzpatrick and Megaw 1987, 434). The wafer thin torques were sometimes supported by an iron core and/or backing materials which included resin, beeswax, and sand, and perhaps textiles (Eluère 1987; Furger-Gunti 1982, 22; Clarke 1954, 38). Visually the appearance of the fragment from Westhampnett is similar to the crumpled and crushed appearance of tubular torques from Saint-Louis/Basle (Furger-Gunti 1982, Abb. 2) and Mailly-le-Camp, Aube, France (Joffroy 1969, 45, fig. 1). The use of gilding cannot be excluded, but again this technique is only known on torques, and consequently it seems probable that the Westhampnett fragment derives from a tubular torque or, just possibly, a bracelet. The only examples of this sort of torque known from the British Isles are the Snettisham and Broighter examples. It has been regularly suggested that the Snettisham torques may be imports (e.g. Northover 1992, 272; Beswick *et al.* 1990, 27 8), but the decoration on the Broighter torque is characteristically insular (Raftery 1984, 186–90) and if the Westhampnett piece is from a torque or bracelet or arm/footring, which metallurgical analyses would suggest, there is no reason to assume that it was not manufactured in Britain along with the finds from Snettisham and Hertfordshire (see below).

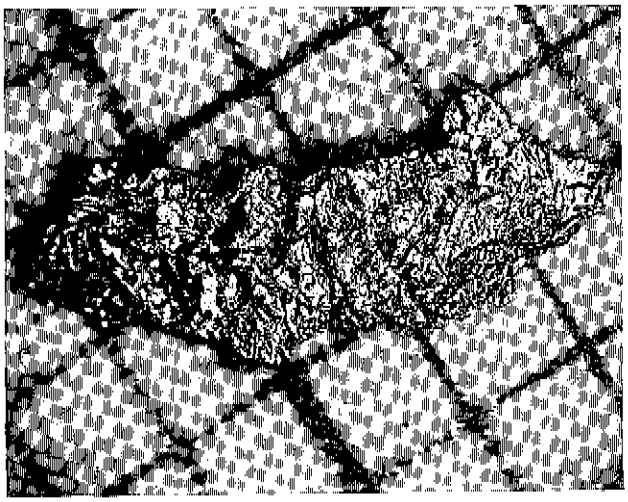


Plate 22 The fragment of gold foil (ON 27633) recovered from the whole-earth sample taken from grave 20095 (length c. 10 mm). The large, square grave contained the unurned cremated bone of two individuals (an unsexed older infant / young juvenile and an unsexed older subadult)

Metallurgical analysis

To assist in the identification of the fragment, a compositional analysis was made. The foil was attached to a metal stub with silver paint and then analysed by electron probe microanalysis with wavelength dispersive spectrometry. Operating conditions were an accelerating voltage of 25 kV, a beam current at the sample of 30 nA and an X-ray take-off angle of 62°; counting was for 10 seconds per element and pure element or mineral standards were used. Twelve elements could be analysed; detection limits for most elements were 100–200 ppm, except for 300 ppm for gold and 0.10% for arsenic. This last is because of the compromise necessary to avoid the well-known interference between the strongest lines in the lead and arsenic spectra, the lead Lα and arsenic Kα. In this instance, the relatively strong lead Mα line was used, wavelength dispersive spectometry clearly separating this from the sulphur Kα line and the rather weak arsenic Kβ line, hence the degradation in performance. Other spectral interferences have to be borne in mind. The most relevant here is between parts of the tin and silver spectra which result in a small zero error for the detection of tin in silver of the order of 400 ppm, however, in this piece tin was almost all certainly below this level. The element bismuth has to be omitted from the element set because of an interference between the Mα line and the gold Mγ line.

Seven areas, each 30 x 50μm, were analysed on the unprepared surface of the foil. The alloy composition at the surface was 0.83% copper; 10.29% silver; 88.80% gold, apart from 0.04% iron, a common impurity in ancient gold. It is probable that there is some enrichment of gold in the surface through leaching of copper and silver via chloride ions in the ground water, but comparison with samples from the Snettisham tubular torques suggests that such enrichment is not large and that the measured composition is a reasonable reflection of the alloy of the foil. Given the Late Iron Age context of the foil, two groups of gold or gold alloy material are available for comparison: the tubular torques from Snettisham, Norfolk, and other sites from the north of Ireland to Switzerland, including a new find of a torque fragment from Hertfordshire (I.M. Stead,

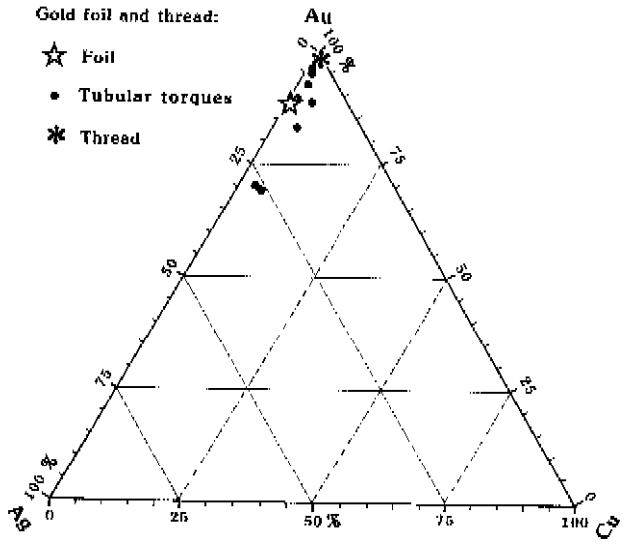


Figure 48 Composition of the gold sheet fragment compared with tubular torques

pers. comm.), and the threads from the Lexden Tumulus (Laver 1927, 251, pl. lxii, fig.1; Foster 1986, 92–5, pl. 21). The composition of the foil is plotted on the accompanying ternary diagram together with the compositions of tubular torques from Snettisham, Saint-Louis/Basle, Switzerland and Mailly-le-Camp (Stone 1987), and the Lexden thread (Northover, unpublished) (Fig. 48).

The Lexden thread at once stands out as very different to the foil and torques with 98.8% gold and low silver content of 0.26%. This identifies the thread as being made of refined gold, presumably originating in the classical world, and which is practically unknown either in the tubular torques or other sorts of object in the Snettisham hoards. The deposition of the Snettisham Treasure must be earlier in date than that of the Lexden threads, and the tubular torques themselves may well be relatively early within the Snettisham collection, perhaps as early as the beginning of the 1st century BC. It is these torques, mainly made of unalloyed natural gold with a substantial silver content, which provide the best match for the analysis of the Westhampnett foil. Of course, we cannot with such a small sample, state definitively that the fragment came from the body of a torque, as it is possibly part of the foil gilding of some other object. (One example of foil gilding in 1st century BC Britain is around the terminal of the iron core of one of the Snettisham tubular torques.)

The best match for the Westhampnett fragment is one torque terminal from Snettisham with 9.13% silver and 1.28% copper. Otherwise the gold sheet at Snettisham tends to have both higher silver and higher copper content; we should remember, though, the possibility of surface depletion of copper and silver affecting the analysis. Other torques with low copper contents are those from Mailly-le-Camp and Saint-Louis/Basle, but these have lower silver contents. We can also point to the gold foil band on the iron core of a Snettisham torque with 4.4% copper and 5.75% silver as representative of an alloy used for foil gilding. The match with the torque, in particular, encourages us to identify the foil as a fragment of a tubular sheet gold torque or, possibly, foil gilding.

Bracelet

(Grave 20039, ON 27030)

A large circular iron ring which may have been used as a bracelet (Figs 49; 66), was recovered from grave 20039. The ring is plain, with a circular section, and appears to be broken, although it may simply have come adrift at the join (the type of which is not apparent). Iron bracelets of Iron Age date are not particularly frequent finds. Comparable pieces from burials include a plain iron oval bracelet with a flattened oval cross-section and a butt-join which was recovered from Maiden Castle (Wheeler 1943, 281, fig 92.9a) in a burial in the 1st century AD 'War Cemetery' (Sharples 1991a, 100–1; 1991b, 119–25). A more ornate example, with a circular cross-section and with the terminals wrapped around the body of the bracelet, was recovered from grave 150 at King Harry Lane, St Albans (Stead and Rigby 1989, 102–3, fig 114). This was a phase 2 burial, dating from AD 30–55. Although the ring is similar in size to the rein-rings on iron bridle-bits (e.g. Palk 1984, 38, fig. C22), most Iron Age bridle-bits were of bronze or bronze-plated iron. This factor, the absence of a pairing ring or any other part of a bit, and the general absence from the pyre and grave goods of anything other than personal effects, suggests that a bracelet is the more likely use for this ring. The person buried in the grave was an unsexed mature/older adult.

Winged belt hook

(Grave 20252, ON 27538)

A single iron winged belt hook came from grave 20252 (Figs 49; 82), which also contained a pair of iron brooches with a linking iron chain, and a small iron ring. It is the grave of an adult, possibly female. The find is paralleled by an example of silvered or tinned bronze from a male burial with weapons at Owslebury, of early–mid 1st century BC date (Collis 1973, 126–7, 130, fig. 4, 5; 1994, 107, fig. 30. 2). The Owslebury find was associated with two iron rings which presumably attached a baldrick to the belt. A further winged belt hook is known from the Hayling Island temple (Downey *et al.* 1980, 293; King and Soffe 1994). These objects are rare finds in Britain (Collis 1973, 130) but there seems no obvious reason to regard them as imports (*pace* Downey *et al.* 1980) particularly as slightly earlier belt hooks without wings are known (e.g. from Hengistbury Head, Cunliffe 1987, 153, ill. 111, 41–2) as well as later examples (e.g. from Whitcombe, Dorset, Stead 1990, 73, fig. 10, 5). The relatively restricted distribution of belt hooks within central-southern England may, however, be noted. The addition of wings to belt hooks appears to be a typologically late feature, succeeding the well-defined plain La Tène D1 types, so a date for all the British winged belt hooks around the middle third of the 1st century BC seems likely (Collis 1973, 130; Lambot 1989; *cf.* Brunaux 1990, fig. 2).

Rings

(Grave 20179, ON 27637; grave 20252, ON 27532; grave 20601, ON 27319, 27672, 27529, 27653, 27540; grave 20629, ON 27547, 27675, 27326)

Ten rings of differing sizes and of both copper alloy and iron (Fig. 49) were recovered from the graves. Some of these, such as the small copper alloy rings from grave 20629 (Fig. 103), may well be from a pair of chain-linked brooches (although a purse is also a possibility, see above), and where rings or links attaching the chain to brooches are still *in situ* they have not been counted. For others, however, the function of these rings is less clear although they seem likely to have been associated with costume or jewellery.

Grave 20179 (Figs 49, 77), the grave of an unsexed adult, produced fragments of a small copper alloy ring (ON 27637) which are so small and gracile that they are unlikely to be from a brooch spring coil. An iron brooch was also recovered from this grave. The diameter of the ring is *c.* 6 mm, and its precise function is uncertain beyond the likelihood that it was associated with jewellery or clothing (*cf.* Clement and Galliou 1985, 67, fig. 3, 26).

A small 'barrel'-shaped iron ring (ON 27532) was recovered from grave 20252 (Figs 49; 82). This grave also produced a pair of iron brooches, with a fragment of broken oval-link iron chain attached by larger circular links or rings to the springs of both

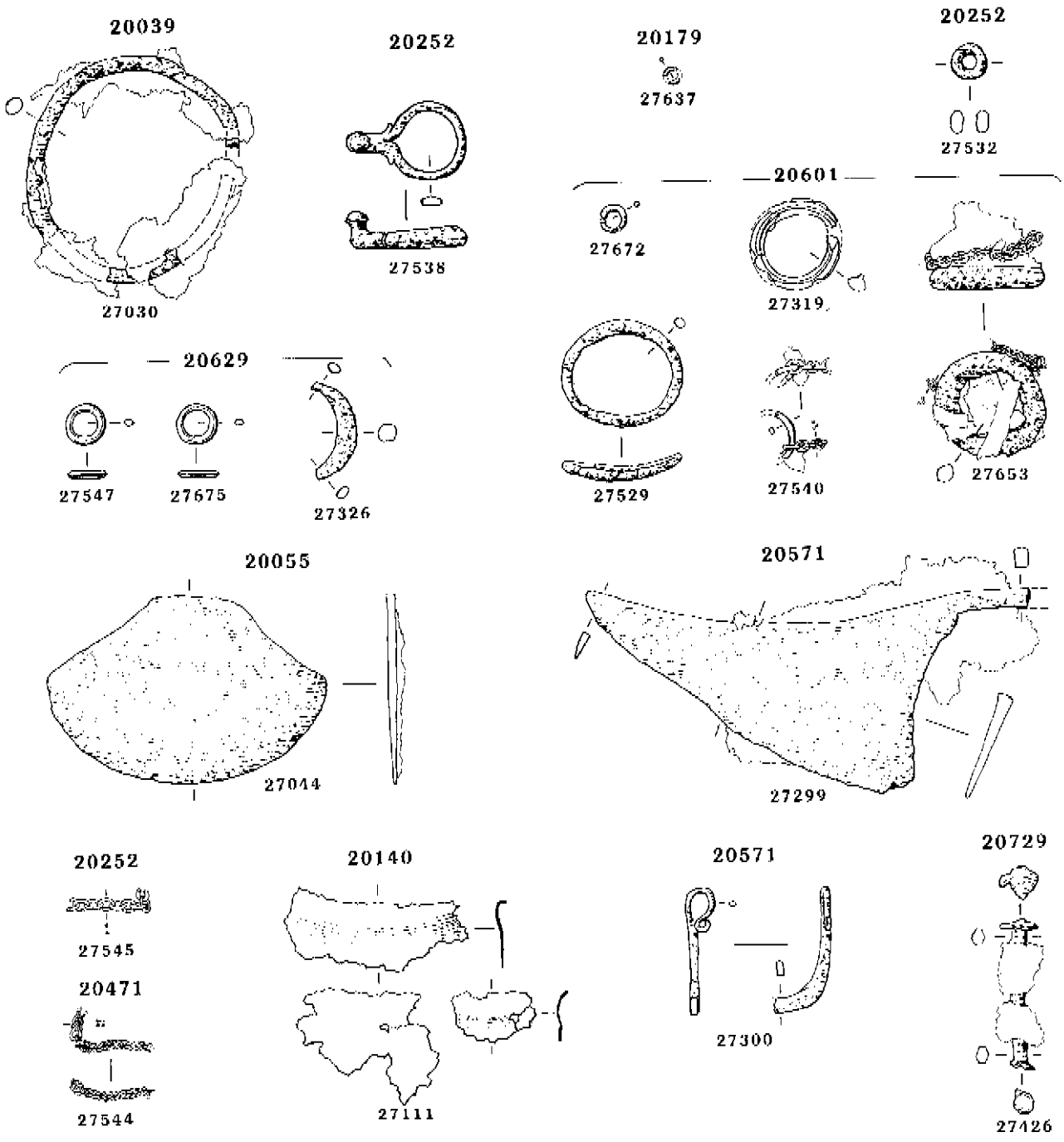


Figure 49 Metalwork from Iron Age graves. Scale 1:2

brooches. The ring seems unlikely to have fitted onto the chain itself as a bead or amulet, although as the objects are corroded this is not certain, but it could have been suspended from the chain by, for example, thread. The individual in the grave was an adult, possibly female.

Grave 20601 produced a diamond-sectioned copper alloy ring (ON 27319) and two oval/sub-circular shaped iron rings (ON 27529 and 27653), the latter associated with but not attached to a broken length of iron chain, as well as the small iron ring with chain attached (ON 27540) and an even smaller copper alloy ring (ON 27672; Figs 49; 100). This grave contained the cremated bones of a young/mature adult, possibly a female. Ring fragment 27540 may have been part of the brooch chord, with the chain linking the pair of brooches 27730–1.

A fragment of iron chain is corroded to ring 27653 but this association appears fortuitous as the chain is not linked to the ring. Rings 27529 and 27563 may have formed a non-matching pair — they are of similar size, and the slightly dished profile of 27259 is possibly due to distortion after it was made (*MB*). These iron rings may also be part of the possible chain-linked pair of brooches, although it is not certain. There are casts of fibres, possibly the remains of textile, on ring 27653 (*PWR*). The size of the larger iron rings precludes them from being finger or toe rings, and while they could have served as suspension rings from a belt (*cf.* Collis 1973, 126, fig. 4, 3–4), it may be that the rings are from a necklace. In continental Europe metal rings are sometimes associated with glass, and occasionally bone beads on necklaces (*cf.* Loisson *et al.* 1991).

This might account for their association at Westhampnett with a pair of brooches and the traces of mineral-preserved textile. The larger copper alloy ring can be paralleled by copper alloy rings from King Harry Lane grave 261 where a single bead was associated with five glass beads (Stead and Rigby 1989, 104, 338, fig. 139). Other British parallels come from Hengistbury Head (Cunliffe 1987, 156, ill. 112, 74), and there is also an iron ring of similar size and section from Westhampnett pyre-related feature 20546 (Fig. 27; see below).

Grave 20629, the grave of an older mature/older adult, probably male, produced a pair of copper alloy brooches (ON 27344 and 27674), and two small copper alloy rings (ON 27547 and 27675; Figs 49; 103). These are almost certainly from a pair of chain-linked brooches. Also recovered from this grave was a fragment of what may have been an iron ring (ON 27326). This may represent part of an iron ring which has worn unevenly due to hard wear or suspension. A similarly sized iron ring with comparable wear was recovered from Danebury, Hampshire (Sellwood 1984a, 366, fig 7.22/2.145).

Although this evidence would suggest that all of the rings can certainly or plausibly be ascribed to brooches or necklaces, the possibility that some are toe or finger rings cannot be excluded. A toe or finger ring was found at the nearby Copse Farm, Oving settlement (Bedwin and Holgate 1985, 229, fig. 9, 3).

Knives

(Grave 20055, ON 27044; grave 20571, ON 27299)

Two iron knives were recovered (Fig. 49). The knife from grave 20055 has a crescent-shaped blade, with no evidence for a handle (Fig. 68). There were mineral-preserved traces of what is probably leather on one side of the blade (*JW*), perhaps from a case. The knife may be a razor or a knife with a specialised use.

A number of triangular iron knives, usually with a small handle at one corner, were excavated from the cemetery at King Harry Lane, St Albans (Stead and Rigby 1989, 104–6), and the crescent-shaped knife from Romano-British grave 316 most closely resembles the Westhampnett version, although it has a handle. Triangular iron knives with crescent-shaped blades were recovered from a Late Iron Age burial at Welwyn Garden City (Stead 1967, 38, fig. 23.1), and from a burial in the 'War Cemetery' at Maiden Castle (Wheeler 1943, 281, fig. 92.8). The Maiden Castle knife, recorded as an 'axe' by Wheeler, was associated with a longer iron whittle tang knife and a bronze ear-scoop. It is of similar proportions to the Westhampnett example, although with a handle, and its association with another type of knife would suggest that it served some specific function. As the handles on objects such as these seem too small for them to be used as knives, Boon suggests that they are razors (Boon 1991, 28). In continental Europe such knives are sometimes found in graves with swords and first appear around the mid-1st century BC (Stead and Rigby 1989, 105; Boon 1991 *passim*). The Westhampnett example came from the grave of a older mature/older adult, sex uncertain.

The other knife, ON 27299 from grave 20571 (Fig. 98), is a broad-bladed knife with a slightly concave back and a convex blade edge, with a rectangular-sectioned tang. This type of knife compares well with Manning's Romano-British knife types 23–4, both of which have Iron Age origins (Manning 1985, 118–9, fig 29, 23–4, pl. 56, Q66–84) and Danebury type 2c (Sellwood 1984a, 349–51, fig. 7.10, 2.31–2). Parallels for this type of knife are known at a number of sites with Late Iron Age occupation such as Glastonbury Lake Village and Hod Hill, Dorset (Manning 1985, 118–19), Cadbury Castle hillfort, Somerset (Alcock 1972, 153–4, pl. 62) and Maiden Castle where a small knife came from a context dated to the latter part of the 1st century BC (Wheeler 1943, 272, fig 88, 7). At Danebury type 2 knives were the most common type and their frequency increases in the later Iron Age (Sellwood 1984a, 349). The deceased was an adult, sex uncertain.

Latch lifter or key

(Grave 20571, ON 27300)

A broken iron object with a rectangular section and an ornately scrolled terminal set in the opposite plane (Fig. 49) was recovered from grave 20571, along with a single iron brooch, an iron knife, and a few globules of ?melted copper alloy (Fig. 98). It is suggested that the object is the terminal of a small iron latch lifter or key. Latch lifters are not frequent finds on Iron Age settlements (Sellwood 1984a, 357), and this is the first time one has been found in a certain Iron Age burial in Britain, though two were found in an unphased burial (no. 375) at King Harry Lane (Stead and Rigby 1989, 107, 370, fig. 166, 375, 4–5). In continental Europe latch lifters were sometimes placed in Late Iron Age burials, for example with cremation burial 2, an unsexed adult, at Acy–Romance, La Noue Mauroy, Ardennes (Lambot *et al.* 1994, 85, fig. 50, 11–2, 15). There is a suspicion that latch lifters are found with the burials of females (*ibid.*, 166–7). It is possible that the remains of another latch lifter were found in pyre-related feature 20234 (Fig. 28; see below).

Wooden vessels with metal fittings

A number of wooden vessels are represented by metal fittings which often bear traces of mineralised wood. In some cases these traces allow the plausible identification of the type of vessel. In other cases the interpretation as vessel fittings is highly tentative. The metal fittings, which also have evidence for the presence of hide and other organic materials, are the only evidence for wooden vessels from the graves.

Wooden tub with iron binding

(Grave 20622, ON 27733)

Fragments of a curving iron binding (Figs 50; 102) were recovered from grave 20622. The binding varies in width between 22–5 mm, and is simply decorated by narrow grooves parallel and close to either edge. Although found in two separate lengths the pieces appear to come from a single strip representing *c.* 67% of an object with a diameter of *c.* 360 mm and one edge of the binding is slightly rolled over, suggesting that it is a rim. On the inner face of the band there is mineral-preserved wood (oak) indicating that the tub was constructed of staves with the grain running vertically across the band (*JW*). Mineralised animal pelt, perhaps cattle hide (*PWR*), survives on the outer face of the band, with some straw (*DdM*) between the hide and the band (*MB*). One small fragment of the binding bears what appears to be a nail or rivet (ON 27603). Associated with the binding were two pieces of mineral preserved organic material (ON 27734–5; not illustrated) perhaps decayed antler or horn (*PWR*), one of which (ON 27734) bears a small stud-like object. Both pieces have patches of a shiny laminating material which superficially resembles the polished surface of bone or a resin but qualitative X-ray fluorescence analysis (*CM*) showed these fragments to be tin-rich with only traces of copper detected and tin alone was detected on the 'stud'. They may represent solder of some sort, however, no metal handles or escutcheons were present. Several fragments of a band 13–16 mm wide were recovered from the Late Iron Age cremation burial at Welwyn Garden City. These were interpreted as fittings for wooden vessel(s), and an estimate of diameters varied from 10–15 inches (254–381 mm), with an average of 12 inches (305 mm) (Stead 1967, 36, fig. 22, 1–2). The vessel(s) was associated with two iron ring handles.

There is little doubt that the Westhampnett piece is from a bucket or tub and if the traces of tin do represent solder it

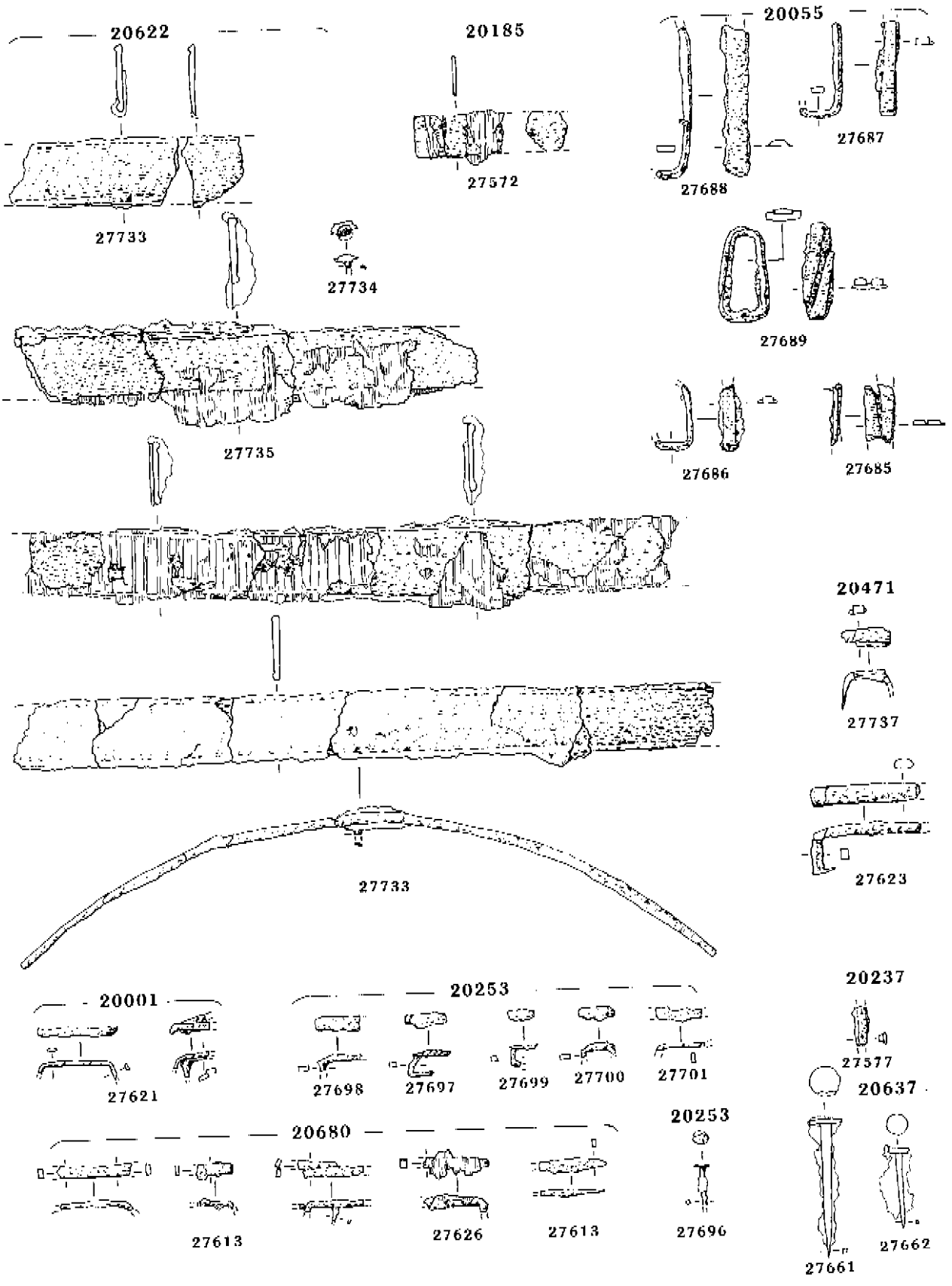


Figure 50 Metalwork from Iron Age graves (continued). Scale 1:2

may be that the handle and parts of the escutcheons were missing when the bucket was buried. Alternatively the tinning may be decorative. A copper alloy rim fragment from a Late Iron Age vessel, perhaps a metal one, from Braughing–Station Road, Hertfordshire, was apparently tinned (Partridge 1979, 40, fig. 7, 5). The possible cattle hide may have been a cover, while the straw may have been part of the filling of the grave or from a lining or a separate vessel (*cf.* Stead 1967, 40, fig. 25, pl. vii, b).

The presence of the mineral-preserved organic materials might suggest that the objects were grave goods rather than pyre goods, but it is possible that they were not destroyed completely during the cremation.

The Westhampnett find came from the grave of an unsexed young/mature adult, which also contained a silver brooch.

Wooden vessels with rectangular iron repair staples

(Grave 20001, ON 27621; grave 20253, ON 27697, 27698, 27699, 27700, 27701)

Two Late Iron Age graves produced rectangular iron staples (similar to small joiners' dogs; Fig. 50), all with mineral-preserved wood remains on the underside of the head and along the shanks. Jacqui Watson writes: Three possible vessels are represented by groups of iron staples. The wood grain preserved on the staples from grave 20001 (possibly ash) and grave 20253 suggests that they were lathe-turned bowls that had been repaired.

The presence of mineral-preserved wood suggests that they are likely to have been deposited in the graves as grave goods. Grave 20001 (Fig. 62), that of a older mature/older adult, possibly female, produced four fragments of small rectangular staples, representing a minimum number of two objects. No other metal objects were recovered from this grave. Jacqui Watson describes the material thus: iron staple fragments with mineral-preserved wood, possibly ash. The preserved grain suggests at least one of these was mounted on the cross section, so could possibly be a vessel repair.

Grave 20253 (Fig. 83) produced fragments of five rectangular staples and a small tack-like nail (ON 27696). The staples bore traces of mineral-preserved wood, described by Jacqui Watson as: five iron staples with mineral-preserved wood — not enough to identify species. The grain preserved on these staples suggests that they are repairs to a lathe-turned vessel, joining the two halves from the rim and through the base. The vessel was 6.1 mm thick at the rim, and 8.5 mm at the base.

Mineralised textile was present on the outside faces of two of iron staples (27697 and 27700). This proved to have been a medium-weight wool textile, possibly woven in twill (*PWR*), pp. 111–12).

This grave also produced a few small fragments of a brooch. The grave is that of a young subadult, possibly male. As with the tub or bucket from grave 20622, the cloth may have been a covering.

Parallels for these staples may be found at the Welwyn Garden City burial but the type of object they were from there was not clear (Stead 1967, 38–40, fig. 24). However, in view of the evidence for at least three wooden vessels in that burial their origin as repairs is possible and would be compatible with the evidence from graves 20001 and 20253.

?Sheet object, from a wooden vessel

(Grave 20140, ON 27111)

A broken and fragmentary sheet copper alloy object (Figs 49; 74) was the only metal object recovered from grave 20140. The object appears to have a simple everted rim, and may represent fragments of a either a Late Iron Age copper alloy or wooden vessel. Metal bowls or a cups like those from Keshcarrigan, Co. Leitrim or Colchester-Lexden (Raftery 1984, fig. 107; 110) generally have well defined rims, but that on the cup from Snowden, Gwynedd is poorly defined (Savory 1976, 62, fig. 38a). The everted rim is less likely to have been present on the copper alloy sheathing of a wooden tankard (e.g. Earwood 1993, 73–5) but metal repair patches are known on wooden vessels (e.g. Ardgour Moss, Inverness; Earwood 1993, 64–5, fig. 38, 3a). If the fragments are from a metal vessel rather than sheathing or a repair it is not clear why so little of it was found, assuming that it was buried complete as a grave good rather than being the remains of a pyre good.

Grave 20140 contained a small amount (2.3 g) of cremated human bone.

Wooden ?box with iron strip binding

(Grave 20185, ON 27572)

Grave 20185 produced four small fragments of a heavily corroded iron band with mineral-preserved wood (possibly ash (*JW*)) on one side (Pl. 23; Figs 50; 77). The band is *c.* 15 mm wide, with the edge of one fragment curving slightly, suggesting that this fitting was wrapped around a wooden object. Jacqui Watson comments on it thus: the strip was mounted on a tangential surface piece of wood, with the grain perpendicular to the axis of the binding. The wooden object itself is more likely to have been a box or flat-sided item rather than a lathe-turned vessel. One piece has remains of three parallel lines cut into the wood surface with a V-shaped chisel, *c.* 1.8 mm wide and 1 mm deep, and *c.* 2 mm apart. This single fitting is not complete enough to give a clear indication of the form of this container, but it may have been similar to the bentwood boxes with incised decoration from Glastonbury Lake Village (Earwood 1988; 1993, 42–5, fig. 20).

One fragment bears the traces of a small nail or rivet. Grave 20185 contained the remains of an unsexed older mature/older adult.

Wooden and horn object with rectangular iron collars

(Grave 20055, ON 27685, 27686, 27687, 27688, 27689)

Fragments of five rectangular collars (Figs 50; 68) which bore traces of mineral-preserved wood and horn on the inner surfaces, were recovered from grave 20055. Only one collar is complete, and appears to surround a slightly trapezoidal internal area of *c.* 7–15 mm by 25 mm. The others are broken, but are likely to be parts of similar collars. The presence of mineral-preserved wood on the inner surfaces, but not the arms, shows that the more fragmentary pieces (i.e. 27686, 27687, and 27688) are not fragments of joiners' dogs. A crude approximation of the internal areas represented suggests that two of the fragments may enclose an area of *c.* 9 by 15 mm, and that another fragment encloses an area similar to that of the complete collar, and that the fifth fragment encloses an internal area of greater than 8 mm by greater than 48 mm. Not enough remains to tell if these four fragments are also trapezoidal.

Jacqui Watson comments that: closer examination of the organic material preserved on the collars indicates the use of horn on top of wood, and there is no indication of a joint. There is no indication of the actual size of the complete object, but if a single piece of flattened horn was used it would not be much larger than 250 mm. The grain of the horn is always along the axis of the collars (Pl. 24) which fits with them being mounted across the circumference of the horn. Horn when heated becomes very plastic in nature, and can be flattened under pressure or formed into a new shape (MacGregor 1985). The horn for the main part is mounted onto the cross-section of a diffuse porous wood, which could also be limited in its length by the width of the tree which could be around 350 mm. Unfortunately none of this helps in identifying what was the original object, except to say that the iron collars were mounted

on a horn-inlaid piece of wood c. 10 mm thick. The object is not unique as there are similar collars from grave 20471.

The grave is that of an unsexed older mature/older adult.

Wooden and horn object with iron rectangular collars

(Grave 20471, ON 27623, 27737)

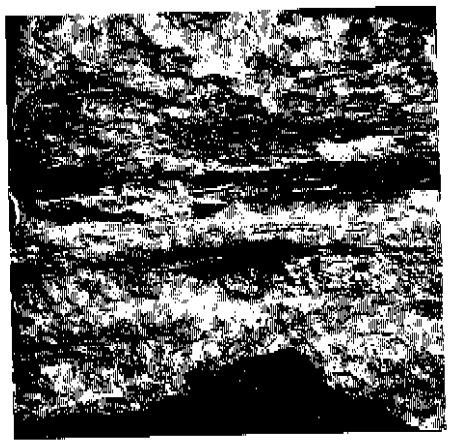
Grave 20471 produced fragments of two rectangular collars (Figs 50; 93), with heads of very different lengths (c. 40 mm and c. 15 mm). Both collars bear mineral-preserved wood remains (willow or poplar), and pierce a cross-section 11.4 mm thick. The larger of the collars (ON 27623) also bears traces of mineral-preserved horn. As with the object(s) from grave 20055, the original form of this composite wood/horn object is uncertain. Also from this grave was a short length of silver chain, probably originally part of a chain-linked pair of brooches. This is the grave of an unsexed adult.

Discussion of wood and horn objects

The objects which were fixed by these collars are not known. Although it is possible that the pieces from 20055 were arranged in descending order of size on a sword scabbard, this would be unparalleled in later Iron Age examples. The presence of horn could suggest that they derive from a composite object such as a bow, but the iron bindings would offer little flexibility and bows certainly dating to the Late Iron Age are unknown in Britain (though see Coles 1987, 88, 104, fig. 3.33, H 131 for an antler fitting from Meare Village East, Somerset, tentatively suggested to be from a composite bow; and also Gray and Cotton 1966, fig. 86, H32, from Meare Village West, Somerset). Middle–Late Iron Age arrows are equally rare in Britain (Sellwood 1984a, 366), though they are not unknown in continental Europe. Pairs of similar collars are not uncommon finds in Late Iron Age burials at, for instance, Horath (Mahr and Miron 1981, 102–3, h, Taf. 50, h) and Thür, Germany (Metzler *et al.* 1991, fig. 77, 7) and Celles, Cantal, France (Guillaumet 1983, 205, fig. 13, 41 (who suggests that the material is from a domestic not funerary context)). None of these finds have contained any indications about the types of objects from which the collars came, but in conjunction with the related pieces from 20471 they hint that more than one object might be represented by the pieces from 20055.

Groups of collars or staples from three Late Iron Age burials in Hertfordshire provide some clues. The knife from the Hertford Heath burial was found with a bracket or staple across the blade. Hüssen suggests that this could have served to reinforce a knife sheath of skin or leather, traces of which were found on the blade (1983, 127, fig. 4; 15, 128 and 130). However, this explanation does not account for at least another two similar staples or collars found close by and also a copper alloy handle which is very similar to that from a wooden vessel in the Welwyn Garden City grave (Hüssen 1983, 16–17, no. 115–20, 131-2). It may be instead that the Hertford Heath fittings are from a box.

The Welwyn Garden City grave also contained a number of iron staples and other fittings which were reconstructed as being from a wooden board for board games (Stead 1967, 30–6, fig. 19–21). As Stead noted, that interpretation was not without some difficulties, notably in their being a 'hinge' which could not open, and it remains possible that the fittings were from a box although a game board has been found subsequently in an early Romano-British burial enclosure 3 at Colchester-Stanway, Essex (Anon. 1993, 2–4). Lastly a single, broken staple with traces of wood on the underside was recovered from grave 457 at King Harry Lane and it is suggested that this may have come from a wooden cover over the grave (Stead and Rigby 1989, 107, 390, fig. 179). This possibility must not be overlooked at Westhampnett, but no evidence for covers comparable to that noted in the excavation of King Harry Lane (*ibid.*, 81–3, fig. 43–4) was observed in the field.



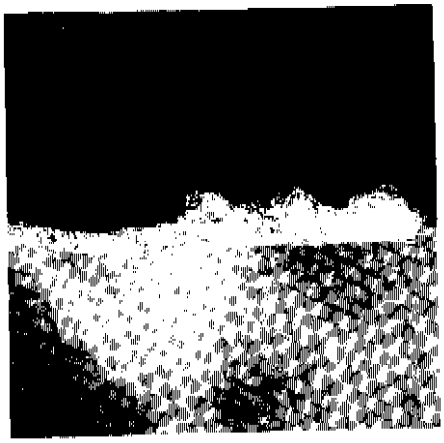


Plate 23 Iron binding, ON 27572, with chiselled decoration in the mineral-preserved wood traces, possibly ash, from Iron Age grave 20185, which contained an unsexed older mature/older adult (Micrographs WILD 85.7 and 85.5, magnification c. 4x)

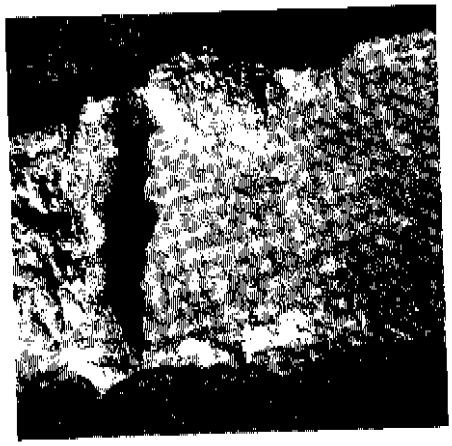


Plate 24 Mineral-preserved horn on one of the five iron collars from the wooden and horn object from Iron Age grave 20055 (see Plate 3) (Micrographs WILD 85.3, magnification c. 4x)

The possibility that the Westhampnett collars come from a small box or other wooden vessel or perhaps a board, is consistent with the thickness of the material they enclose, c. 10 mm. The fact that two species of wood were identified in 20680 would appear to exclude lathe-turned vessels. The bucket from grave 20622 may have had bone or antler elements in its handles. Although highly tentative, the interpretation of these collars as coming from wooden vessels would be consistent with the evidence from the other wooden objects in the graves which seem likely to be from a variety of vessels. The only other types of objects placed as grave goods are also containers: the pottery.

Nails and structural fittings
(Grave 20237, ON 27577; grave 20253, ON 27696; grave 20599, ON 27602, 27652; grave 20637, ON 27661, 27662, grave 20729, ON 27426)
Grave 20237 (Figs 50; 79) produced a fragment of a nail shank, with mineral-preserved wood (possibly willow or poplar, Jacqui Watson, pers comm.) with the grain running horizontally across it. This was the only metal object recovered from the grave, which contained the cremated bones of an unsexed infant. The small tack-like nail from grave 20253 (Figs 50; 83) may have belonged to the wooden object, perhaps a vessel, which bore the five rectangular staples, although unlike the staples it did not have traces of mineral-preserved wood.

Two small nail shanks were recovered from grave 20599. Both shanks are square sectioned. Grave 20637 produced two nails (Figs 50; 104), but both of these appear to have been burnt and may therefore represent either part of some wooden pyre good(s) or, more likely, they represent nails which were already in the timbers used to build the pyre. It does not seem likely that they were used to secure the pyre structure. This grave contained the urned remains of an infant and the unurned remains of an adult, possibly male.

Grave 20729 produced an iron holdfast, essentially a long rivet with a rove at one end, with a sub-hexagonal sectioned shank (Figs 49; 108) (related Iron Age examples include three from a ceramic phase 7 pit at Danebury (Cunliffe and Poole 1991, 353, fig. 7.25, 2.347–9). An almost identical object (Figs 19; 51) was recovered from the fill of pyre site 20776, which is cut by grave 20729, although this example has a shallow groove down one side of the shank (ON 27546). The holdfasts are so similar as to suggest that they represent a paired structural fitting. It seems very likely, given the presence of one of these objects in a pyre-related feature, that these represent structural ironwork present in the timbers used for the pyre, with the one in the burial being redeposited when the grave was dug. This supposition is strengthened by the observation that virtually all the other metalwork grave goods from the site are items of a personal nature. Grave 20729 contained the cremated remains of an unsexed subadult/adult.

Possible container/or structural fittings
(Grave 20680, ON 27613, 27626)
Grave 20680 produced nine fragments of rectangular staples, all with traces of mineral-preserved wood (Figs 50; 107). Eight of these (ON 27613) probably bear willow or poplar remains, and the ninth with traces of possibly beech. Jacqui Watson comments that: the staples may be the remains of a vessel. The grain and thickness of the object make it unlikely to be a lathe-turned object but maybe some other form of container. ON 27613 represents eight staple fragments used to join boards at least 19 mm thick and probably with a radial surface. These are unlikely to be part of a vessel, but it is not impossible.

This grave also produced two fragments of an unidentified iron sheet object, and contained the cremated bones of an adult, possibly female. However, the grave cuts the eastern arm of pyre site 20717 and it may be that the staples from grave 20680 are structural fittings from timbers used in the pyre.

Unidentifiable fragments
A quantity of unidentifiable objects, particularly of copper alloy, was recovered from the graves. These fragments are usually small and very fragmentary, and generally have a porous, pitted, and flaking surface and no readily identifiable form, although some are somewhat sheet-like. It is suggested that these fragments derive from objects placed on the pyre which have completely distorted due to the heat (see above).

Discussion
It can be seen that the objects of metal placed on the pyre were almost exclusively personal in nature, comprising jewellery, dress fittings, razors, knives, and keys. The wooden vessels represented by fittings or repair patches appear to be grave goods. The only objects from the graves which are unlikely to be pyre or grave goods are a few nails and the holdfast. The original form of the unidentifiable and probably melted copper alloy objects is not known, but would seem likely to be personal objects, especially if they were pyre goods.

Metalwork from the Pyre Sites and Pyre-related Features

A total of 663 pieces of metalwork was recovered from 26 pyre sites and pyre-related features. The distribution of metalwork from these features is shown in Table 20.

Brooches
Iron brooches were recovered from three features, and in addition, melted and misshapen fragments of what may be two copper alloy brooches were recovered from feature 20155 (Fig. 27; see above).

A complete iron Feugère type 2a brooch with the pin closed was recovered from pyre-related feature 20068 (Fig. 27). Six fragments, which are all likely to belong to another brooch, probably a Feugère type 2a with a two-coil spring, were recovered from pyre-related feature 20300 (Fig. 28). A very small fragment of iron brooch pin of indeterminate type (ON 27642) was recovered from possible pyre-related feature 20378 (Fig. 25). Several fragments of porous and pitted copper alloy, greatly misshapen so that the original form of the object(s) was hard to discern, were recovered from pyre-related feature 20155 (Fig. 27). Four of these may represent the melted remains of brooch springs and individual brooch coils. In addition, a further two fragments, also of copper alloy may be melted pin fragments.

Penannular objects
(Pyre site 20121, ON 27077, 27079)
Two penannular copper alloy objects (Figs 16; 51), one incomplete, were recovered from pyre site 20121. The condition of the objects is poor, but they have roughly triangular cross-sections, with flat backs, and appear to have slightly splayed terminals. The two objects appear very similar and may have originally formed a pair. Their function is not known.

'Melted' copper alloy fragments
(Pyre site 20121, ON 27078, 27080, 27175, 27186, 27187, 27571; pyre site 20318, ON 27580; pyre site 20645, ON 27655; pyre site 20776, ON 27372, 27620, 27659; pyre-related feature

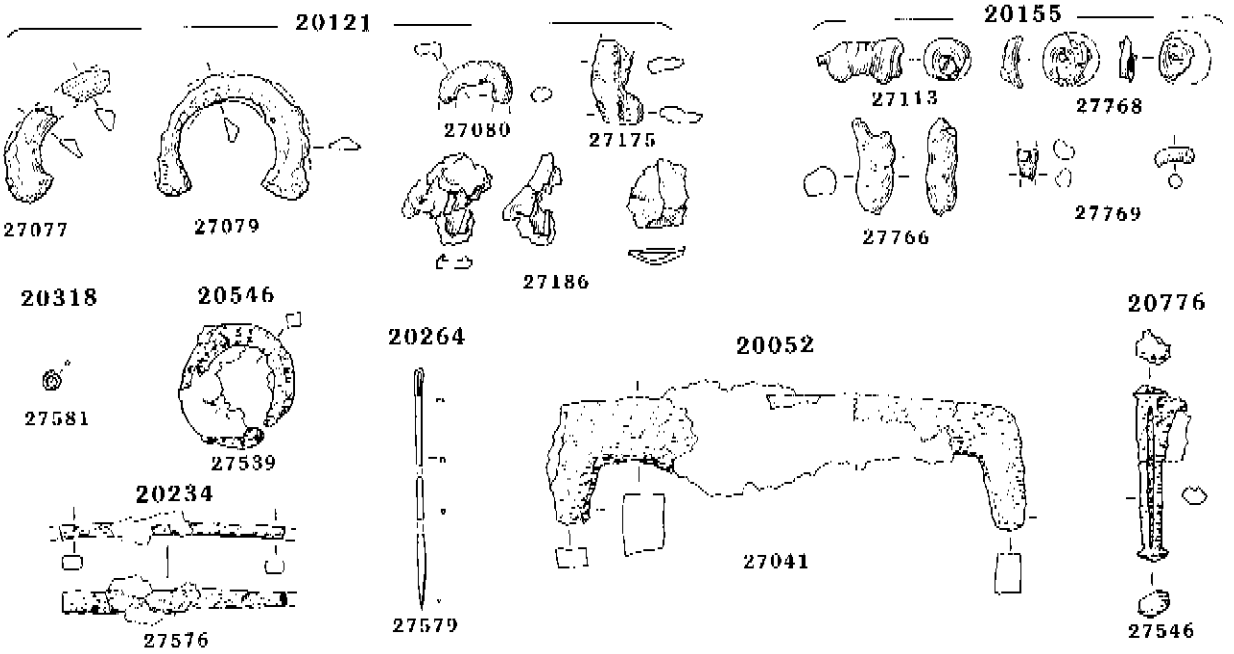


Figure 51 Metalwork from pyre sites and pyre-related features. Scale 1:2

20155, ON 27112, 27113, 27766, 27767, 27768, 27769, 27636; pyre-related feature 20546, ON 27284, 27597, 27647)
Six of the pyre sites and pyre-related features produced quantities of small fragments and globules of copper alloy. In some cases it seemed that these were 'melted' objects as some sort of form was visible; in others the original form was completely unknown as the copper alloy was in globules. It is uncertain what these represent. Experimental pyre firings have shown that temperatures sufficiently high to distort and melt copper alloy can be achieved (see above).

Rings

(Pyre site 20318, ON 27708; pyre-related feature 20546, ON 27539)
A small circular iron ring was recovered from pyre site 20318 (Figs 28; 51). It has a slightly elliptical inner area, suggesting uneven wear and it is possible that this is a link from a brooch chain, although both the examples from Westhampnett have oval links.

The iron ring with a diamond cross-section from pyre-related feature 20546 (Figs 28; 51) was associated with some indeterminate fragments of copper alloy which appeared to have been subjected to great heat. The original form of the copper alloy object(s) was not determinable. The iron ring is similar in size and shape to the copper alloy example from grave 20601 which may have been part of a necklace (see above).

Needles

(Pyre-related feature 20264, ON 27579)
A broken iron needle was recovered from pyre-related feature 20264 (Figs 28; 51). Iron needles occur in contexts dating from the mid-La Tène in continental Europe (*cf.* Manning 1985, 35) and in Britain they have been found in graves 270 (phase 1, i.e. pre-Conquest) and 134 (phase 3, i.e. probably post-Conquest) at King Harry Lane (Stead and Rigby 1989, 107, fig. 112; 141); and also from a phase 3 context at Gussage All Saints dating to the 1st centuries BC/AD, according to the excavator (Wainwright 1979, 108, fig 82.1039).

Bar

(Pyre-related feature 20234, ON 27576; pyre-related feature 20409, ON 27643)
A curving iron bar, slightly tapering at one end and broken at both ends, was recovered from pyre-related feature 20234 (Figs 28; 51). This may be part of a latch lifter or key, with the tapering end being the tang for a wooden handle (see above). A very small broken tapering iron bar (Fig. 28), possibly a brooch fragment, was recovered from pyre-related feature 20409, a north–south aligned linear cut with possible postholes at either end.

Sheet

(Pyre-related feature 20417, ON 27644)
A tiny fragment of sheet iron was recovered from pyre-related feature 20417 (not illustrated).

Structural ironwork

(Pyre site 20776, ON 27546; pyre-related feature 20052, ON 27041)
A large joiner's dog (Figs 27; 51) was recovered from pyre-related feature 20052. There appear to be two grooves on one of the shanks. A holdfast, which may be a pair with a similar object recovered from grave 20729, was also recovered from 20776 (Figs 19; 51).

Nails

The overwhelming majority of the objects recovered from the pyre sites and pyre-related features are nails and nail shanks, and these were found in almost every example. A total of 479 nails and fragments (MNI 181) was recovered from 17 of the 26 pyre sites and pyre-related features which produced metal objects (Table 20). This is unsurprising, given that the pyres may well have used old timbers, with structural nails and other fittings remaining in place along with timbers specially collected for the cremation. The nails generally have square-sectioned, tapering shanks with round, flat heads comparable to type 1B in Manning's Romano-British typology (1985, 134,

Table 20 distribution of all metalwork from pyre sites and pyre-related features

Feature	*Context*	*A*	*B*	*C*	*D*	*E*	*F*	*G*	*H*	*I*	*J*	*K*	*L*	*M*	*N*	*Total$*
Pyre sites																
20121	20120	–	2	40	–	–	–	–	–	–	–	–	–	1	1	43
20318	20317	–	–	52	–	1	–	–	–	–	–	–	–	1	1	54
20414	20413	–	–	–	–	–	–	–	–	–	–	–	6	10	7	16
20578	20579	–	–	–	–	–	–	–	–	–	–	–	–	1	1	1
20645	20646	–	–	1	–	–	–	–	–	–	–	–	–	1	1	2
20776	20779	–	–	2	–	–	–	–	–	–	1	–	–	–	–	13
Pyre-related features																
20052	20047	–	–	–	–	–	–	–	–	1	–	–	2	6	4	9
20066	20065	–	–	–	–	–	–	–	–	–	–	–	–	2	1	2
20068	20069	–	–	–	1*	–	–	–	–	–	–	–	–	–	–	1
20124	20123	–	–	–	–	–	–	–	–	–	–	–	1	–	1	1
20155	20156	4	–	47	–	–	–	–	–	–	–	–	–	–	–	51
20212	20211	–	–	–	–	–	–	–	–	–	–	–	–	4	1	4
20234	20233	–	–	–	–	–	–	1	–	–	–	–	–	–	–	1
20258	20257	–	–	–	–	–	–	–	–	–	–	–	34	45	34	79
20264	20263	–	–	–	–	–	1	–	–	–	–	–	4	2	4	7
20300	20301	–	–	–	6**	–	–	–	–	–	–	–	–	–	–	6
20378	20379	–	–	–	1#	–	–	–	–	–	–	–	1	–	1	2
20409	20410	–	–	–	–	–	–	1	–	–	–	–	–	–	–	1
20681/ 20416	20415	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
20417	20418	–	–	–	–	–	–	–	1	–	–	2	–	–	–	1
20491	20490	–	–	–	–	–	–	–	–	–	–	–	1	6	2	7
20546	20547	–	–	8	–	1	–	–	–	–	–	–	–	–	–	9
20643	20644	–	–	–	–	–	–	–	–	–	–	–	11	16	11	27
20673	20674	–	–	–	–	–	–	–	–	–	–	–	–	8	3	8
20747	20746	–	–	–	–	–	–	–	–	–	–	–	1	4	3	5
20770	20771	–	–	–	–	–	–	–	–	–	–	–	106	205	106	311
Total		4	2	160	8	2	1	2	1	1	1	2	167	312	181	663

Key:

A = Copper alloy ?brooch fragments
B = Penannular copper alloy objects
C = Unidentified copper alloy fragments
D = Iron brooch fragments
E = Iron ring
F = Iron needle
G = Iron bar
H = Iron sheet
I = Iron joiner's dog
J = Iron ?holdfast
K = iron lumps
L = Iron nails
M = Iron nail shanks
N = MNI nails

* = complete; ** = MNI; # = pin fragment, $ Total excludes category N

fig. 32). A MNI of 25 smaller, 'dome' headed nails also occur, but only at possible pyre site 20258 (Fig. 52). These have short shanks, and given the shape of the heads, may have been decorative. The MNI of nails from features varies from 1 to 34 with the exception of possible pyre site 20770 (MNI = 106).

Miscellaneous

(Pyre-related feature 20681 (20416), ON 27587)
Pyre-related 20681 produced two featureless lumps of iron (not illustrated).

Discussion

It appears that the metalwork recovered from the pyre sites can be split into two broad categories: those objects, usually of a personal nature, worn on or placed with the body which were not collected, and those items of structural ironwork which were most likely to have been in the timbers which fuelled the pyre. In the former category can be placed the brooches and ?melted copper alloy fragments, the rings, and needle, and in the latter the joiner's dog, the holdfast, and nails.

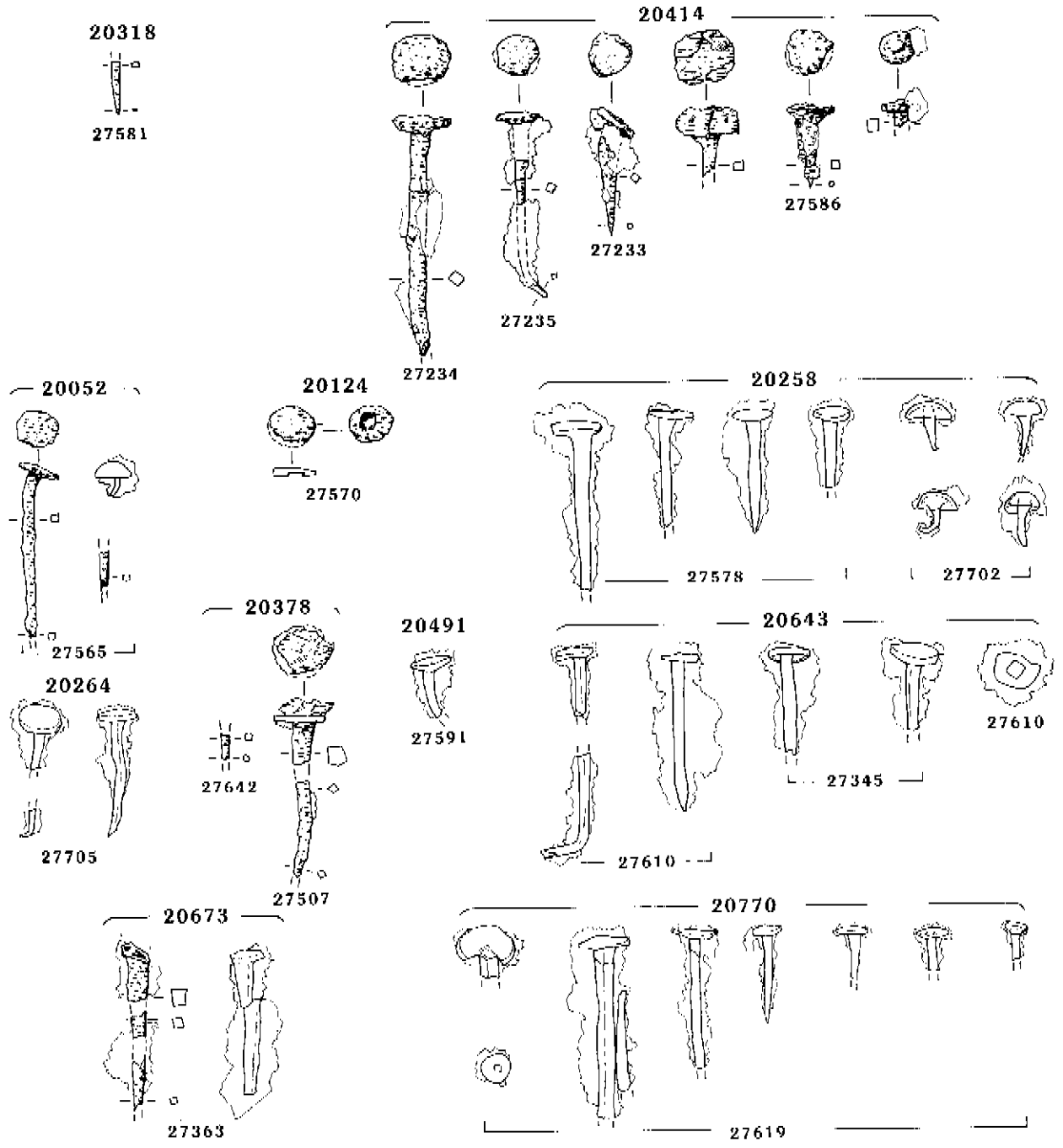


Figure 52 Metalwork from pyre sites and pyre-related features (continued). Scale 1:2

Metalwork from Other Contexts

Enclosures

(Enclosure 20562, ON 27333; enclosure 20761, ON 27425, 27618; enclosure 20277, ON 27583, 27511)

A small tabular copper alloy object (Fig. 53), broken but with two edges intact and with shallow ribbing on either side, was recovered from enclosure 20562 (Fig. 9). It is of unknown function. Two nails with square-sectioned shanks and flat, round heads were recovered from enclosure 20761 (Fig. 8), an iron nail shank from fill 20324 of section 20325, part of enclosure 20277, and another iron nail (Fig. 53) from fill 20394 of section 20395, part of the northern side (Fig. 7).

Other features

(Feature 20298, ON 27170; feature 20341, ON 27196, 27585)

Two fragments, possibly from the same iron brooch, were recovered from feature 20298, a thin lens containing burnt bone with the brooch fragments lying on top (Fig. 54). The brooch fragments are of indeterminate type (see above). Feature 20341, a sub-rectangular cut containing possible pyre debris, produced three fragments, all likely to be part of the same brooch (Fig. 54), probably a Feugère type 2a (see above).

Postholes

(Posthole 20361, ON 27474)

Posthole 20361 produced a single item of metalwork, a 'trough' formed from a piece of sheet iron (Fig. 53). Its function is

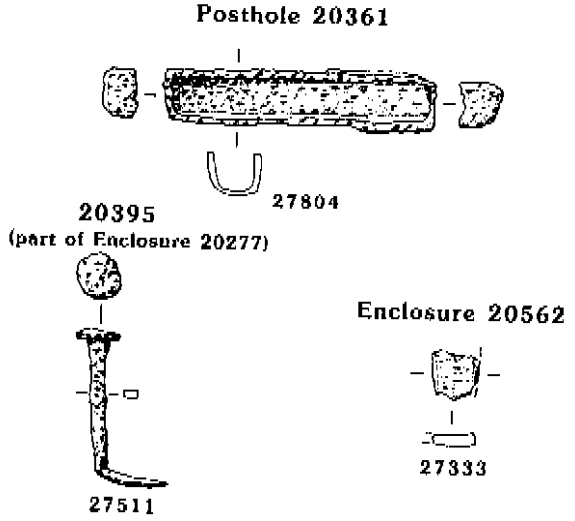


Figure 53 Metalwork from other contexts. Scale 1:2

unknown, although it has some similarities with shield bindings.

Layers of disturbed gravels

A single fragment of a possible La Tène I brooch was recovered from brown gravelly subsoil 20153 within Area 2 (Fig. 54). Layer 20076 within box section 20067, dug to ascertain the extent and nature of the gravel layers in Area 2, produced some small unidentifiable fragments and globules of copper alloy, and a nearly complete iron brooch, of Feugère type 2a (see above; Fig. 54). It is of interest that another iron brooch was recovered from nearby (within c. 3 m) from pyre-related feature 20068 (Fig. 28). This brooch is also a Feugère type 2a although the arches of the bows are quite different so they are unlikely to have ever formed a matching pair.

Costume, by A.P. Fitzpatrick

The brooches indicate that the deceased were cremated either wearing or adorned with costume. In Britain the best evidence for the wearing of brooches in the Iron Age comes from Arras-type inhumation burials in east Yorkshire. Here c. 25% of the graves (64 out of 240) contained brooches, which were always found singly, usually in the vicinity of the head or shoulder, but in two instances (Rudston 140 and Burton Fleming 4) they were over the leg bones. As all the other costume fittings and jewellery from the burials were found as if they were being worn it seem likely that the brooches pinned a garment (Stead 1991a, 90). The mineralised wool textile on one brooch (Burton Fleming grave 20) suggest that the garment was a cloak, which in this instance had a striped border with mineralised inserts. In one case (Kirkburn grave 5, with chain mail, which was placed, not worn), there also appears to be have been an undergarment, either a tunic or gown which reached to or below the knees (Crowfoot 1991).

A similar pattern of single brooches occurs in the 'south-west cemetery' at Mill Hill, Deal, Kent, where brooches were found in six of the 27 human inhumation burials (c. 22%). Five of these were found on the right

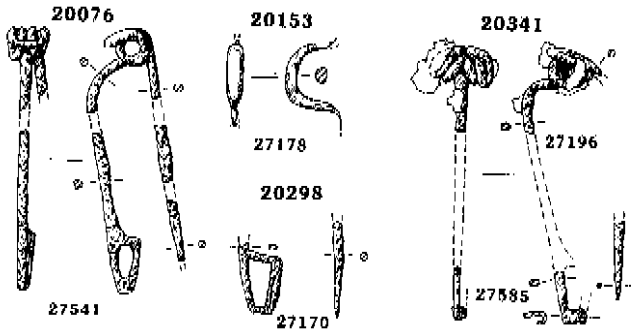


Figure 54 Brooches from other contexts. Scale 1:2

side of the body, with four at the elbow or wrist. The brooch from an isolated burial, grave 112, was found near to the lower left leg, recalling the two Yorkshire burials (Parfitt 1995, 87–8, 156). The preservation of bone in the Trethellan Farm cemetery was very poor but five of the six brooches which were probably *in situ* appear to have been at the neck, with the sixth example on the chest (Nowakowski 1991, 221, tab. 23). Very few brooches have been found with 'Durotrigian' inhumation burials (Chambers 1978) but such evidence as there is would be consistent with them fastening a cloak or outer garment at the neck (Stead 1990).

At Westhampnett the brooches were worn in a rather different fashion, often in pairs which were linked with chains, some of which may also have had rings or pendants threaded onto them. These brooches were probably worn on either shoulder. In one instance three brooches may be present in a grave, a not uncommon occurrence in continental Europe in the Roman period where it is seen as an item of female costume (e.g. Lambot *et al.* 1994, 167). All of these brooches are likely to have pinned an outer garment such as a cloak and in common with the evidence from most other British burials it appears that they were worn by both sexes and all ages.

Posidonios (cited by Diodorus Siculus 5.30 and Strabo 4.4.3) describes male costume in southern France in the late 2nd or early 1st centuries BC as including loose and baggy trousers, coloured and patterned short tunics with long-sleeves, and striped and chequered cloaks, for winter and summer, which were fastened with a brooch. Essentially similar clothing is shown on an early 3rd century AD representation of a male Briton on a piece of statuary, probably from the Arch of Caracalla and Julia Domna at Volubilis in Morocco (Piggott 1966; Hawkes 1982, 67–9). It seems likely that at Westhampnett the dead were cremated either wearing or adorned by similar costumes.

Almost all the other pyre goods can be shown to be either certainly or probably costume fittings or jewellery (rings, a belthook, bone toggles, a bracelet, a gold torque/bracelet) or personal possessions (razor, knives, and a key) all of which could be carried at the waist. No clear association with sex can be determined, but in continental Europe bracelets, rings, beads, and keys were often buried with females (Lambot *et al.* 1994, 167) while razors were often buried with males.

14 Late Iron Age Mineral-Preserved Wood and other Organic Material, by Jacqui Watson

Introduction

Approximately 30 metal objects were selected by the conservator (*MB*) and finds specialist (*RM*) after conservation and study for the examination of organic remains (Table 21). All the objects were examined using a low-powered binocular microscope which made it possible to distinguish between different materials and record the grain orientation of wood and horn. In two instances samples had to be examined on the scanning electron microscope (SEM) to confirm the wood species (Watson 1988), and their sample numbers are indicated in the grave catalogue.

The organic material preserved on these objects included wood, horn, leather and various plant materials. The wood species represented include ash, beech, oak, willow, and poplar; the last two woods are usually considered as one species as they cannot easily be distinguished microscopically. The plant material was identified by Dominique de Moulins and is represented in the catalogue as (*DdM*). All these materials would have been readily available throughout the periods represented in Area 2.

Results

Most of the finds come from the Late Iron Age cemetery including containers, brooches, and two enigmatic items made from wood and horn with iron collars.

One object that was particularly interesting is an iron mount from grave 20185 (ON 27572) for an ash box or container that originally had engraved decoration. All that is represented on this fitting are three lines cut with a V-shaped chisel (Pl. 23). This single fitting is not complete enough to give a clear indication of the form of this container, but it may have been similar to the bentwood boxes with incised decoration from Glastonbury Lake Village (Earwood, 1993, 42–4). The other container is an iron-bound bucket or tub with oak staves from grave 20622 (ON 27733). In addition to the wood, other materials such as hide and straw and two pieces of possible bone or antler with patches of tin on them, are preserved on the ironwork. As this object was a grave good rather than a pyre good, these materials were probably deliberately placed with the burial and may represent a covering.

Three possible vessels are represented by groups of iron staples from graves 20001, 20253, and 20680. The wood grain, which is ash, preserved on the staples from graves 20001 (ON 27621) and 20253 (ON 27697–701) suggests that they were lathe-turned bowls that had been repaired. The staples found in grave 20680 (willow or poplar) may also be the remains of a vessel, although the grain and thickness of the object (ON 27613, 27626) make it unlikely to be a lathe-turned vessel but maybe some other form of container.

Some of the brooches have organic materials preserved on them, but this is mainly cremated bone, and some plant stems, which may derive from the timber or tinder used for the pyre.

In grave 20055 a group of collars was found that was thought to have joined two pieces of wood. Closer examination of the organic material preserved on the collars indicated the use of horn on top of wood, and there was no indication of a joint. Also there was no indication of the actual size of the complete object, but if a single piece of flattened horn was used it would be not much larger than 250 mm in length. The grain of the horn is always along the axis of the collars (Pl. 24) which would fit with them being mounted across the circumference of the horn. Horn when heated becomes very plastic in nature, and can be flattened under pressure or formed into a new shape (MacGregor 1985, 66–7). The horn for the main part is mounted onto the cross-section of a diffuse porous wood, which could also be limited in its length by the width of the tree which could be around 350 mm. Unfortunately none of this helps in identifying what was the original object, except to say that the iron collars were mounted on a horn inlaid piece of wood *c.* 10 mm thick. The object does not appear to be unique within the cemetery as there are similar objects from grave 20471, where the horn is mounted on a piece of cross-section willow or poplar *c.* 11.5 mm thick.

15 Late Iron Age Textile and Fibre Remains, by Penelope Walton Rogers

Traces of textile and fibre were noted during conservation (*MB*) on artefacts from Late Iron Age graves 20253, 20541, 20601, 20622 (and from Anglo-Saxon graves, 20012, 20220, see below). None of the remains has proved to be well preserved and in each case the fibre has been replaced by iron salts, giving a 'fossil' of the original. Nevertheless, in several instances weave and yarn structure could be recognised and fibres could be tentatively identified (details are given in the catalogue entries for the individual finds).

Remains of a textile, possibly twill, were preserved on the outer face of two iron staples (ON 27697, 27700), from grave 20253. This seems to have been a medium-weight fabric with 10–12 x 10 threads per cm. Too little has survived to allow fibre identification, but the fact that warp and weft have been spun in different directions (Z x S) suggests that it is wool, since linens were rarely made this way. Wool twills were a standard fabric in the British Iron Age and ZS spinning occurs in a proportion of them (Bender Jørgensen 1992, 40). Similar textiles have been found in the Arras burials of Yorkshire, where they seem to have been used for outer garments, cloaks, and covers (Crowfoot 1991).

The remains of an animal pelt can be seen very clearly on the outside face of the iron binding of a wooden bucket from grave 20622 (ON 27329, 27330, 27603). The tufts of fibre are smooth and relatively straight. Individual fibres are round or oval in cross-section and the range of diameters 28–110 microns. Diameter-range is not an entirely reliable guide, since the fibres may have expanded or shrunk during mineralisation, but the general appearance and characteristics are unlike sheep's wool. Cattle hide seems a likely candidate.

Cattle hides were used to wrap bodies for inhumation burial in the Danish Bronze Age (Hald 1980, 313); in the Finnish Iron Age animal skins were placed

Table 21 metalwork with mineral-preserved organic materials

Grave	*Context*	*ON*	*Type of object (iron)*	*Wood*	*Plant*	*Horn / bone / antler*	*?Leather*	*Fibre: fleece or pelt*	*Textile*
20001	20002	27621	rectangular collar frags	??ash	–	–	–	–	–
20055	20056	27044	knife ('razor')	–	–	–	?leather	–	–
		27685	rectangular collar	dps	–	horn	–	–	–
		27686	rectangular collar	dps	–	horn	–	–	–
		27687	rectangular collar	dps	–	horn	–	–	–
		27688	rectangular collar	dps	–	horn	–	–	–
		27689	rectangular collar	dps	–	horn	–	–	–
20169	20168	27123	brooch	–	plant stems**	–	–	–	–
20185	20184	27572	binding strip	??ash	–	–	–	–	–
20237	20238	27577	nail shank	??willow/ poplar	–	–	–	–	–
20253	20254	27697	rectangular collar	unid.	–	–	–	–	??twill+
		27698	rectangular collar	unid.	–	–	–	–	–
		27699	rectangular collar	unid.	–	–	–	–	–
		27700	rectangular collar	unid.	–	–	–	–	??twill+
		27701	rectangular collar	unid.	–	–	–	–	–
20471	20470	27623	rectangular collar	#	–	horn	–	–	–
		27737	rectangular collar	willow/ poplar	–	–	–	–	–
20541	20540	27646	brooch catchplate frag.	–	–	–	–	–	??textile+
20601	20600	27653	ring and chain	–	–	–	–	–	??textile+
20622	20613	27733	bucket binding (27329, 27330)	oak	grassy material**	–	–	pelt, perhaps cattle+	–
		27603	bucket binding frags	(oak)	straw*	–	–	pelt, perhaps cattle+	–
		27734	tinned frags	–	plant material or resin*	bone/ antler	–	–	–
		27735	tinned frags	–	plant material or resin*	bone/ antler	–	–	–
20680	20679	27613	rectangular collar frags (x8)	?willow/ poplar	–	–	–	–	–
		27626	rectangular collar	??beech	–	–	–	–	–

Identifications by Jacqui Watson except for: * Dominique de Moulins; ** Margaret Brooks; + Penelope Walton Rogers
? = probably; ?? = possibly; dps = diffuse porous species; unid. = unidentified species; (oak) not mentioned specifically to species, but likely to be oak (see text); # = species not mentioned

under the body (*ibid.* 380); and in the Early Iron Age prince's burial at Hochdorf, Germany, badger skins had been laid on the bier (Körber-Grohne 1985, 141–2, 146–8). It is difficult to say how common was the practice in Iron Age Britain, but there was a cattle hide in association with a ZS wool diamond twill in an Arras burial at Skipwith Common, Yorkshire (Bender Jørgensen and Walton 1985); and the pelt of a small mammal with fine black fur in a Late Iron Age cremation burial at Welwyn Garden City, Hertfordshire (Ryder in Stead 1967, 34).

Traces of mineralised fibres have also been recorded on the catchplate of a brooch from grave 20541 (ON 27646) and the iron ring from grave 20601 (ON 27653), but they are too poorly preserved to allow further comment.

16 Straw

Mineral replaced plant remains were certainly identified (*DdM*) on two objects; plant stems on a brooch (grave 20169, ON27123) and straw on a bucket (grave 20622;

ON 27603 from bucket group number ON 27733), and possibly on a third object, another brooch (grave 20251, ON 27171), where the very degraded material could be either plant or mineral-preserved bone.

Although it is possible that these fragments were tinder for pyres accidentally incorporated within the grave, loose fragments of charcoal were not identified on the metal grave goods and it may be that they represent the placing of plant material in the graves. One of the certain identifications is of straw, the other of plant stems, perhaps also representing straw, and there are some contemporary parallels for this.

Grass or straw was preserved next to a copper alloy pedestal base in the late 1st century BC Lexden Tumulus, presumably by the corroding copper. The grass was broad-blade grass and all the fragments were of leaf. The absence of stem fragments suggests that the grass was gathered as hay and Foster proposes that at least part of the grave may have been lined with hay (1986, 67, 144, 153, pl. 14; 23). A related feature is known from the well-furnished 2nd century BC cremation burial at Mailleraye-sur-Seine, Seine-Maritime, France. Here a layer of grasses, probably also straw, was placed on top of the grave goods and the mineral replaced remains were abundant on the uppermost grave goods which were swords in their scabbards (Lequoy 1993, 125, fig. 11, 20–1).

Clearly the number of fragments from Westhampnett is small, but they do raise the possibility that at least some graves had a layer or filling of straw placed over the burial and the grave goods.

17 Glass Fragments

During the scanning of the 2 mm and 1 mm fractionated residues from the whole-earth samples of the graves, a number of fragments of glass-like materials were recovered. These fragments were submitted for scientific analysis, the results of which are compatible with some of them being deliberately formed glasses. With the exception of the fragments from the two Romano-British graves which have glass vessels placed in them and a small Romano-British or Anglo-Saxon bead, none of the fragments can be shown by their form to derive from glass artefacts of Iron Age type, nor are their compositions compatible with those obtained for contemporaneous Iron Age glasses. The analyses and some of the difficulties in their interpretation are set out below.

Analyses, by C. Mortimer

Objects of glass of Iron Age date are relatively rare so these samples, although small, merited further investigation. More than half the samples were discovered to be natural quartz, in the form of large grains, usually rounded and sometimes slightly tinted (pink or brown). Of the remaining samples, two major types of material were noted, one, a black shiny substance without any visible porosity (found in 24 contexts), and the other, translucent glasses either green, blue, or near-colourless (22 contexts). One dark blue glass bead (thought to be Romano-British or Anglo-Saxon) was identified (Iron Age grave 20245) and one of the pieces of glass was said to show tooling marks (grave 20322). Fragments of fuel ash slag were noted in seven contexts.

Glassy material may be formed accidentally, in any high-temperature environment where silica can react with alkalis. This obviously includes cremation pyres, where silicate matter (from the soil and the ashes) and alkaline materials (from the wood ash) are together at a high temperature. Elevated levels of iron are also likely to be present and could cause dark glassy slags. It was considered that the only way that it might be possible to distinguish between accidentally formed glasses and deliberately formed glasses was by their chemical composition and for this reason quantitative analysis was carried out on 13 samples from Iron Age and Romano-British contexts, using SEM-EDX (scanning electron microscopy-energy dispersive X-ray analysis). The results of this analysis are in archive.

Four of the translucent coloured samples (1 to 4) have compositions which conform closely with known Roman soda-glass compositions (e.g. Heyworth *et al.* 1995; Turner 1956, tab. IV) but which can be contrasted with known medieval soda glasses, for example, by virtue of the high magnesium contents in medieval soda glasses (e.g. Barrera and Velde 1989; Mortimer 1991). Despite these comments, it should be noted that glass cannot be unequivocally dated by its composition; a very large range of compositions are known to have been used during the medieval period.

The compositions of samples 1 and 2, from Romano-British graves, are very similar and they are almost certainly fragments from the single glass vessels found in these graves (20739 and 20791). Similarly, the compositions of samples 3 and 4 are very similar to each other and may be from another vessel. Another sample (5) is also comparable to these soda-glass compositions except it has lower sodium levels and rather high lime levels.

Five samples of green or dark green glass (6–10) have compositions which closely resemble late medieval and early post-medieval 'forest' glass of the high-lime, low-alkali type (e.g. Mortimer 1991; 1993). This glass type was used to make windows and vessels during these periods but was not known in the Iron Age or Roman periods.

The soda glasses are likely to be deliberately formed glasses. The 'forest' glass compositions could have been accidentally formed in a pyre, but their very close agreement with medieval glass compositions means that the possibility that they are also deliberately formed glasses should be considered seriously. Their presence in Iron Age and Romano-British contexts therefore requires explanation.

Three samples have compositions which are not paralleled in deliberately made ancient glasses. One of these (11) was identified visually as being fuel ash slag (grey-green and vesicular) and this has an aluminosilicate composition, with traces of iron. The other two samples are dark green or 'black' (12 and 13) and are rather more glasslike in appearance than the fuel ash slag, but they have very high manganese, iron and aluminium contents and low alkali contents. These are likely to be accidentally formed glasses and certainly do

Table 22 contexts containing examined glass and glassy material

Material	*Context type*	*Context*
'Black glassy' material (accidentally formed glass)	Iron Age graves	20071, 20095, 20097, 20101, 20149, 20165, 20183, 20191, 20237, 20248, 20280 (large amount), 20342, 20346, 20368, 20463, 20620, 20757
	Pyre sites and pyre-related features	20155, 20448, 20784
	Postholes	20244
	Ditches	20105 (fills 20390, 20391)
Glass		
Translucent pale blue	Iron Age graves	20149[4], 20242[3]
	Romano-British graves	20791, 20739
Translucent pale green	Iron Age graves	20073[6], 20080[7], 20322, 20680[10]
	Pyre-related features	20130[8], 20770
	Postholes	20370
Translucent dark green	Iron Age graves	20242[9] (with irridescence)
	Romano-British graves	20725[13]
Near colourless	Iron Age graves	20057, 20140, 20165, 20207[5], 20237, 20337, 20280, 20459, 20595
	Ditches	20105
Fuel ash slag	Iron Age graves	20071[11], 20353, 20484, 20650, 20774[12]
	pyre-related features	20130, 20744

Sample numbers shown in superscript

not conform to what is known about coloured glass bead compositions of the Iron Age (e.g. Julian Henderson 1987).

These analyses were carried out on a small selection from the material available at the site. It is thought likely that the other glassy material retrieved by sieving is of a comparable nature, but without quantitative analysis, it is difficult to be sure. A listing of identifications is provided in Table 22, on the basis of the work carried out here.

Commentary, by A.P. Fitzpatrick

The small fragments of glass provide a number of difficulties in interpretation. Obviously all the fragments are very small, 2 mm or less, and weigh only a few grams, but no larger fragments were recovered during the manual excavation of the Iron Age graves and pyre sites. The two samples from Romano-British graves almost certainly derive from the glass vessels which were complete when they were placed in the grave. The single Romano-British pyre site 20472 yielded a relatively large lump of molten glass measuring c. 20 x 50 x 10 mm and weighing 5 g. There is no evidence for any medieval activity on Area 2, although some is known nearby in Area 6 (Fig. 2).

This absence of diagnostic Iron Age objects; bracelets, beads, and ring-beads (Fitzpatrick 1985; Guido 1978; Feugère 1989 *passim*), or even imported glass vessels, (Hüssen 1983, 9–11; Venclová 1990, 160–2; Lequoy 1993, 126), is striking. Molten fragments from such objects which have been on the funeral pyre are recovered and are identifiable as such elsewhere in western Europe (e.g. Wederath-Belginum, Cordie-Hackenberg and Haffner 1991, 49, no. 1493, f, Taf. 391, 1494, f; Farbtaf. D, 3, f). The material seems unlikely to derive from 'enamel' decoration on metal objects either. The chemical composition of the objects from the Iron Age contexts is also noteworthy in so far that none compare with the extensive series of analyses of British and continental European glasses undertaken by Julian Henderson (e.g. 1987; 1991). The cobalt blues and purples characteristic of glass of the late La Tène are absent from the Westhampnett material and in fact samples 3 and 9, both from Iron Age grave 20242 have compositions which might indicate Romano-British and medieval/early post-medieval dates respectively.

The samples from Iron Age contexts which have soda glass compositions similar to glasses of Romano-British date (samples 3–5) all come from a comparatively restricted area in the north of the Iron Age cemetery. A further three finds also come from this area; *i*) a very small bead from grave 20245 (not. illus), which is close

to Romano-British (Guido 1978, fig 37, 4–7) and, especially, 6th century Anglo-Saxon forms (Down and Welch 1990, 37, 99, 166, pl. 41, 45), ii) a fragment probably from a Romano-British melon bead (ON 27137) from posthole 20204, and iii), a small fragment which appears to have tooling marks on it. Fragments which might derive from sheet/vessel glass were found in only three graves 20237 and 20595, and ditch 20105 (fill 20390). The first two of these contexts are relatively close to the graves with probable or possible Roman glass. Two postholes within the area of the Late Iron Age cemetery have been dated to the Romano-British period on the basis of a single hobnail.

Conclusion, by C. Mortimer and A.P. Fitzpatrick

There is no simple, single, explanation for the presence of the glass found in Iron Age contexts. No glasses with definite Iron Age forms or compositions have been found. Soda glasses with compositions which could be Romano-British or later have been found in Iron Age and Romano-British contexts. It is unlikely that such compositions would have been formed accidentally during cremation as most plants are potash-rich. These glass fragments may be intrusive in the Iron Age contexts from which they were recovered.

'Forest' glass with compositions comparable with medieval and later material has also been found in Iron Age contexts. Their presence may be due to contamination but it is also possible that these glasses were formed accidentally during cremation. There is no reason why a range of 'forest' compositions should not be produced during a cremation as a range of temperatures, oxidisation states and compounds would exist. Such glasses would include the dark green/black samples from Westhampnett with their high iron and manganese contents which clearly are 'accidentally formed glasses', through to the 'forest' glass compositions. Only further work on comparable samples from other sites will elucidate the matter.

18 Objects of Antler and Bone

Pieces of antler and bone representing five objects were found in three contexts. All are likely to have fastened either costumes or accessories. A description of the toggle from a pyre site is given below, and the finds from graves are described in the grave catalogue.

Small bone toggle
(Pyre site 20318, ON 27778)
A single small toggle was found whose terminals are decorated with a ridge and groove, and the body with simple diagonal lines. Length 116 mm; thickness of wall 4 mm; external diam. 15 mm; internal diam. 7 mm (Fig. 28). At Danebury, 86% of the toggles had been burnt to some degree and it was suggested that this may have been done to change the colour of the bone (Sellwood 1984b) but at Westhampnett the burning of the toggle on the pyre has removed any evidence for this practice. In comparison to the finds from Danebury the piece is quite small, suggesting that it was possibly made from a sheep bone. At Danebury toggles became increasingly frequent in the later Iron Age (and especially in ceramic phases 7–8 (Cunliffe and Poole 1991, 358)) and the wear patterns observed there confirmed the suggestion that the pieces were fasteners. The Westhampnett piece was found in a pyre site, suggesting that it fastened either clothing or an accessory such as a purse. Two bone toggles were found at the waist of a male burial in a Mid–Late Iron Age Arras-type burial at Rudston (no. 174, Stead 1991a, 94, 206–8, fig. 114, 12–13). As these were the only examples in 250 graves, and many of the individuals were buried with brooches fastening outer garments, this might support the idea of the toggles being from a clothing accessory.

Pairs of large toggles
(Grave 20043, ON 27561; Grave 20484, ON 27780)
Two pairs of larger toggles, one pair of bone (Grave 20043; Fig. 66), the other possibly antler (Grave 20484; Fig. 95), were discovered. The pair from Grave 20484 are decorated with simple ring-and-dot motifs, a technique used commonly on antler and antler objects (Sellwood 1984b, 379). These toggles have often been considered to be cheekpieces used in horse harness, and there are strong similarities with antler cheekpieces of Late Bronze Age date (Britnell 1976). However, in considering the two pairs (possibly even five objects), both of which are more elaborately decorated, found amongst the cremated bones at Snailwell, Lethbridge pointed out the difficulties in their having been used as cheekpieces in a horse harness (Lethbridge 1953, 28, 31–2, fig. 2, 1–8). In the Polden Hill, Somerset, hoard where very similar copper alloy objects were found, there were also metal bridle bits (Brailsford 1975, 224–7, 230, fig. 2–3, pl. xx, xxi, a–d). The function of these objects, whether of bone or metal is really not certain (MacGregor 1976, 38, 60, map 4), but as Coles observes (1987, 51, 88, fig. 3.26) there seems no reason why they should not have been used as toggles. Again, as the Westhampnett finds were pyre goods they may well have been costume fittings, perhaps for fastening cloaks.

19 Pottery, by L.N. Mepham

Introduction

This section discusses the complete and partial vessels recovered from 150 grave contexts within the Iron Age cemetery (Pl. 25), a maximum of 251 vessels, together with pottery from other contexts and features associated with the cemetery, e.g. pyre-related contexts (1086 sherds, 9229 g). This total includes three cemetery vessels which were not available for analysis (as they were stolen from site during the excavation).

As the largest known Late Iron Age cemetery assemblage in England, and the only such assemblage from West Sussex, this group of vessels is obviously of prime importance, not just to an elucidation of the Late Iron Age ceramic sequence in southern central England, but to a broader understanding of the production, distribution, and use of ceramics during this period, as well as contributing information on social organisation.

The overall size of the assemblage provides an invaluable database for the investigation of patterns of ceramic production and distribution obtaining at this time. The chronological range of the assemblage places it in a crucial position in a period which saw important advances in ceramic technology such as the introduction of the potter's wheel and the first use of more permanent kiln structures. The appearance of an increasing number of vessels imported from continental Europe

also provided the stimulus for the production of a much greater variety of ceramic forms to widen the indigenous potting traditions of southern England. Such innovations might be expected to be reflected in some way at Westhampnett.

The placing of vessels in graves, coupled with the occurrence of ceramics in pyre sites and pyre-related features, raises questions concerning the activities associated with the burials, and the uses of the vessels as pyre goods and grave goods.

It is apparent, therefore, that the potential of the Westhampnett assemblage to address a number of aspects of Late Iron Age ceramics is considerable. The various strands of investigation which were considered appropriate to the Westhampnett assemblage were distilled into a series of five questions:

- are there significant differences between the cemetery assemblage and contemporaneous domestic assemblages from nearby sites, both within the Westhampnett excavations and further afield?
- can analysis of fabrics and vessel forms, in conjunction with the domestic component, be used to elucidate the pattern of ceramic production and distribution at this period?
- can any chronological sequence be discerned within the cemetery assemblage?
- can any significant patterning be discerned within the grave goods, in terms of associations between particular types of pots (or groups of pots) and age, sex, or other social groups?
- can anything be said about the events and processes surrounding the deposition of vessels in graves, and the relationship of these vessels to pottery from other features within the cemetery?

The Ceramic Background

In terms of Middle and Late Iron Age ceramics, Sussex lay within a style defined by Cunliffe as the St Catharine's Hill/Worthy Down style and which extended over much of central southern England (Cunliffe 1991, 81, fig. 4.6; 7.15). Middle Iron Age 'saucepan pots', accompanied by round-shouldered, bead-rimmed jars, mark the beginnings of the emergence of this style in the 4th or 3rd century BC, replacing an earlier, spatially less well-defined tradition of coarseware jars accompanied by shouldered bowls in fineware fabrics, and there is evidence for typological development within the style (Cunliffe 1976, 46–7). These Middle Iron Age vessels, characterised by an increasing standardisation of vessel form and size, and a growing refinement of clay preparation, suggest that over large parts of Hampshire, Berkshire, and Sussex, such wares were manufactured for exchange rather than for local consumption (Morris 1994, 28).

Following the decline of the 'saucepan pot' tradition, pottery in West Sussex lies towards the eastern edge of a style centred on Hampshire and defined by Cunliffe as 'Southern Atrebatic' (1991, 151–2, fig. 7.15; A:31). Widespread use of the potter's wheel is attested within this zone, resulting in the production of high-shouldered jars and bowls, and necked jars, some with pedestal bases. Imports and copies of Gallo-Belgic wares appear in the years preceding the Roman Conquest. These developments can be seen as a direct contrast to the situation in East Sussex, where a widespread, hand-made potting tradition producing a distinctive, grog-tempered 'East Sussex Ware' dominated assemblages from the 1st century BC throughout the Roman period (Green 1980, 69–78). The division between the two traditions apparently lay between the rivers Arun and Adur (Cunliffe 1991, 151, fig. 7.15).

Plate 25 Removing the bandage wrapping from around a jar from the Iron Age cemetery

While an overall framework for Late Iron Age ceramic studies in West Sussex has been established, analysis at a more local level is hampered by the comparative scarcity of contemporaneous assemblages. Middle Iron Age 'saucepan pots' have been identified on a number of sites and Romano-British pottery industries are known from Chichester and Fishbourne from the mid 1st century AD. As yet the intervening period is little understood, for although a number of old or isolated finds are known (Fig. 4, above; Bedwin and Pitts 1978, 344–5), the only sizeable, securely stratified assemblages analysed and published to modern standards are from Copse Farm, Oving, which represents the largest collection of Late Iron Age pottery from West Sussex (Hamilton 1985), and North Bersted (Morris 1978). This rarity of deposits dating to the latest pre-Roman Iron Age in West Sussex has been contrasted with the situation in East Sussex, where a number of sites have produced evidence to indicate that Late Iron Age pottery manufacture in this area was apparently standardised and substantial (Green 1980, 69–78; Hamilton 1977, 94; 1985, 220). Contemporary ceramic developments in West Sussex should be viewed against

Table 23 Iron Age vessel forms by fabric

Fabric	*F2*	*F3*	*F4*	*F6*	*F7*	*F10*	*F14*	*F19*	*G4*	*G5*	*G6*	*G7*	*G8*	*Q3*	*Q5*	*Q7*	*Q10*	*Q11*	*Q13*	*Q14*	*Total*
High-shouldered jars																					
Necked	13	5	1	1	–	–	–	–	–	12	–	8	–	–	–	1	–	–	1	–	42
Everted rim	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
Bead rim	–	–	–	1	1	–	–	–	–	–	–	1	–	–	–	–	–	1	–	–	4
Pedestal base	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	1
No rim	2	4	1	1	–	–	–	–	–	8	–	1	–	–	–	–	–	–	–	–	18
Ovoid jars																					
Necked	1	–	1	1	–	–	–	–	–	5	–	–	–	–	–	1	–	–	–	1	10
Everted rim	6	–	1	–	–	–	–	–	–	6	–	–	–	–	–	–	–	–	–	–	13
Bead rim	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	1
No rim	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Rounded jars																					
Necked	–	–	–	1	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	3
Everted rim	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	1
No rim	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	1
Biconical jars																					
Necked	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	2
Everted rim	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Bead rim	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
No rim	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Miscellaneous jars																					
Two-tier	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	1
Jars, unknown form																					
Bases only	5	4	2	–	–	–	–	–	–	5	2	–	–	–	–	–	–	–	–	–	18
Necked	–	1	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	2
Everted rim	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
High-shouldered bowls																					
Necked	2	1	1	–	–	–	–	–	–	5	2	8	2	2	2	1	–	–	–	–	26
Pedestal base	–	–	–	–	–	–	–	–	–	3	–	–	2	–	–	–	–	–	–	–	5
Everted rim	1	–	2	2	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	6
Bead rim	1	–	–	–	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	3
No rim	1	–	–	–	–	–	–	–	1	–	1	2	–	–	–	1	–	–	–	–	7

Table 23 (continued)

Fabric	*F2*	*F3*	*F4*	*F6*	*F7*	*F10*	*F14*	*F19*	*G4*	*G5*	*G6*	*G7*	*G8*	*Q3*	*Q5*	*Q7*	*Q10*	*Q11*	*Q13*	*Q14*	*Total*
Ovoid bowls																					
Everted rim	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Bead rim	2	–	–	–	–	–	–	–	–	–	–	2	–	–	1	–	–	–	–	–	7
No rim	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	1
Rounded bowls																					
Necked	–	–	–	1	–	–	–	–	–	1	–	–	–	–	1	–	–	–	–	–	3
Everted rim	2	–	1	2	–	–	–	–	–	1	–	1	–	–	–	–	–	–	–	–	7
Bead rim	1	3	1	1	–	–	–	–	–	2	–	–	–	–	–	–	–	–	–	–	8
No rim	–	1	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	2
Biconical bowls																					
Necked	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Everted rim	2	2	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	5
Bead rim	3	3	2	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–	–	–	10
Corrugated/cordoned bowls																					
Corrugated	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	2
Cordons	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Bowls, unknown form																					
Bases only	–	2	–	–	–	–	–	1	–	2	–	–	–	2	–	–	–	–	–	–	7
Necked	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1
Vessels, unknown form																					
Rim/base	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	1
Rim only	1	3	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	5
Base only	1	3	1	–	–	1	–	–	–	–	–	–	–	–	1	–	–	–	–	–	9
Body only	2	1	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	5
Total	50	42	20	12	1	1	1	1	1	54	8	28	5	5	6	6	1	2	2	1	247

the background of the increasing standardisation in ceramic industries seen elsewhere in southern England (Cunliffe 1991, 462), involving innovations such as wheel technology, for which there is now evidence from a growing number of sites on the West Sussex Coastal Plain in the form of vessels of 'Aylesford-Swarling' type.

Late Iron Age assemblages from settlements in the immediate area of Westhampnett have been published (Fig. 4) from North Bersted, 7 km miles to the south (Bedwin and Pitts 1978), from Copse Farm, Oving just 1 km to the south (Bedwin and Holgate 1985), and Carne's Seat, Goodwood, 3 km to the north (Hamilton 1986). The Copse Farm, Oving settlement was occupied from the 3rd–1st centuries BC, overlapping with the use of the Westhampnett cemetery and also the settlement in Westhampnett Area 5, and produced an important assemblage including both 'saucepan' elements and what was at the time the largest collection of wheel-thrown 'Aylesford-Swarling' type in Sussex (Hamilton 1985).

This overlap between saucepan and 'Aylesford-Swarling' traditions is also found at Carne's Seat, Goodwood (Hamilton 1986) and at North Bersted, although at the latter there is a smaller proportion of 'Aylesford-Swarling' material than at either Copse Farm or Westhampnett Area 2, which may suggest that it predates the latter two sites. Older collections suggested by Morris (1978, 339) to display this overlap or to have 'mixed' assemblages are Selsey, *c.* 15 km to the south-west (White 1934), the Trundle, 5 km to the north (Curwen 1929; 1931), and the Caburn, 55 km to the east (Curwen and Curwen 1927), to which Tote Copse, Aldingbourne, *c.* 3 km to the south-east, may be added (Bedwin and Pitts 1978, 344, no. 14; Pitts 1979a, 259, fig. 25b). In all of these older assemblages, however, saucepan pottery appears to predominate. Other finds of saucepan pottery known in the vicinity of Westhampnett include Chalcroft Lane, Bersted, *c.* 7 km to the south (Bedwin and Pitts 1978, 344, no. 13; Pitts 1979a, 250). The presence of Dressel 1B amphorae at Boxgrove–Ounce's Barn (Drewett *et al.* 1988, 177) suggests some activity there in this period even though most of the evidence is early Roman in date (Bedwin 1983b, 87; Bedwin and Orton 1984, 63–5).

Immediately pre-Conquest groups (Fig. 4) are published from Boxgrove–The Devil's Ditch (Bedwin and Orton 1984) but very little Late Iron Age material is known either from Chichester itself (Down 1989, 178–9), or from Fishbourne, even though the quantity of Roman pottery datable to before the Conquest suggests Iron Age activity there (Rodwell 1976, 305–7; Down 1978, 178–9, 200–1, 225–6; 1989, 181–2). Isolated or poorly recorded finds in the immediate vicinity of what may be immediately pre-Conquest date material are known from Broyle Road, Chichester (Heron-Allen 1911, 83; Bedwin and Pitts 1978, 345, no. 47) and Portfield Gravel Pit *c.* 2 km to the south-west (Curwen and Frere 1947, 138), although the latter could be exclusively Romano-British in date.

Methods

The pottery has been analysed in accordance with the principles set out for the study of later prehistoric pottery (PCRG 1992). This has focused primarily on a detailed fabric and form analysis.

The Iron Age cemetery vessels were examined using a binocular microscope (x20 magnification), and 20 separate fabric types were defined on the basis of the range and size of inclusions. These fabric types were then grouped according to the dominant inclusion type into three broad fabric groups: Group F (flint-gritted and flint-tempered fabrics); Group G (grog-tempered fabrics); and Group Q (sandy fabrics). Fabric types have been coded within the overall fabric type series defined for all the Westhampnett sites, which employs an alpha-numerical coding system combining the letter denoting fabric group (F, G, Q, etc.) with a chronologically-significant number up to three digits (1–99 for all prehistoric fabrics).

A type series was created for the vessel forms, using both complete and partial profiles. As far as possible all the cemetery vessels, and the more complete of the vessels from other features, have been fitted into this type series, although this proved impossible for a small number of vessels which survived only as abraded body sherds. A type series for decorative motifs was also created, with motifs grouped by decorative technique, e.g. burnished, incised, etc. Where decoration on one vessel combined two or more different techniques or motifs, each element was considered separately. The position of the decoration on the vessel was also recorded.

For each vessel, fabric type, vessel form, and decoration have been recorded, together with details of rim and base diameter, vessel height, surface treatment, manufacturing technique, and evidence for use-wear, e.g. residues, post-firing perforations, refiring, etc. Data were coded for entry onto a database (dBase IV), full records of which are held in archive. Vessels are listed by grave in the cemetery catalogue (below) and all, with the exception of a small number for which no profile could be reconstructed, are illustrated. Each vessel has been identified in the archive, in the cemetery catalogue, and throughout this report, by the five-figure Object Number (ON) allocated on site.

Fabrics

Fabrics are described below within their broad fabric groups, i.e. flint-gritted and flint-tempered; grog-tempered; and sandy fabrics. In the fabric descriptions below, and throughout this report, the following terms are used to define the frequency of inclusions, based on the density charts devised by Terry and Chilingar (1955): rare (1–3%); sparse (3–10%); moderate (10–20%); common (20–30%); very common (30–40%).

Flint-gritted and flint-tempered fabrics

Within the group of fabrics containing flint (Group F), a distinction has been made between 'flint-gritted' and 'flint-tempered' fabrics. The term 'flint-gritted' is here used to describe fabrics in which flint occurs naturally within the clay matrix; whereas 'flint-tempered' defines fabrics to which flint, generally in a calcined and crushed form, has been added in order to strengthen the clay during forming and firing. Within this group, then,

fabrics F2, F3, F4, and F14 contain sufficient quantities of subangular flint to indicate that this was deliberately added as tempering material ('flint-tempered'). Quantities of flint in fabrics F7, F10, and F19, while still including subangular fragments, are so negligible as to suggest that these were not deliberate additions ('flint-gritted'). Fabric F6 contains a mixture: some fragments of flint are more rounded and patinated, indicating a natural occurrence within the clay, but also present are a higher proportion of subangular fragments.

F2. Soft, moderately fine, slightly micaceous clay matrix; moderate, fairly poorly-sorted, subangular flint <1.5 mm; rare iron oxides <2 mm; handmade; generally unoxidised with some patchy surface oxidisation.

F3 Soft, moderately fine, micaceous clay matrix; sparse to moderate, poorly-sorted subangular flint <2 mm; sparse iron particles <2 mm; rare carbonaceous material <2 mm; handmade; irregular firing.

F4 Soft, moderately fine, slightly micaceous clay matrix; moderate to common, poorly-sorted subangular flint <2 mm; sparse iron particles <1mm; handmade; irregular firing.

F6 Soft, fine, slightly micaceous clay matrix; sparse, well-sorted, subangular flint <1 mm; rare carbonaceous material <1 mm; rare iron particles <0.5 mm; wheelthrown, surfaces smoothed to disguise inclusions; oxidised with unoxidised core.

F7 Soft, fine, slightly micaceous clay matrix with a powdery feel; rare subangular flint <1 mm; rare iron particles <0.5 mm; handmade; unoxidised with oxidised core.

F10 Soft, moderately fine clay matrix; sparse, well-sorted subangular flint <1 mm; sparse carbonaceous material <1 mm; rare fine mica; rare iron particles <1 mm; handmade; unoxidised with oxidised margins.

F14 Soft, moderately fine clay matrix; moderate, well-sorted, subangular flint <0.5 mm; moderate, well-sorted, subrounded quartz <0.5 mm; rare iron particles <0.5 mm; sparse carbonaceous material <0.5 mm visible in unoxidised core only; wheelthrown; unoxidised with oxidised margins.

F19 Soft, moderately coarse-textured matrix; moderate, well-sorted, subrounded quartz <0.125 mm; rare subangular flint <1 mm; rare strands of vegetable material <1 mm; rare iron oxides <0.25 mm; wheelthrown; oxidised; red-finished exterior.

Grog-tempered fabrics

The term 'grog' is here used specifically to describe crushed pottery or fired clay which has been re-used as a tempering agent, as opposed to naturally-occurring clay pellets.

G4 Soft, coarse-textured clay matrix; moderate, fairly well-sorted, subangular grog <1 mm; sparse subrounded quartz <0.5 mm; rare iron oxides <1.5 mm; handmade; unoxidised with oxidised surfaces.

G5 Soft, moderately fine, micaceous clay matrix with a slightly soapy feel; moderate, well-sorted grog <0.5 mm; moderate carbonaceous material <2 mm; rare iron oxides; handmade; unoxidised with oxidised margins.

G6 Soft, coarse-textured clay matrix with a soapy feel; common, poorly-sorted grog <2 mm; rare carbonaceous material <2 mm; rare fine mica; handmade; unoxidised with oxidised margins.

G7 Soft, moderately fine clay matrix with a soapy feel; moderate, fairly well-sorted grog <1 mm; rare subangular flint <1 mm; rare carbonaceous material <1 mm; rare iron particles <0.5 mm; handmade; unoxidised with oxidised margins.

G8 Hard, moderately fine clay matrix; moderate, well-sorted grog <0.5 mm; rare subrounded quartz <0.25 mm; rare fine mica; handmade; unoxidised with oxidised margins.

Sandy fabrics

Q3 Hard, moderately fine clay matrix; common, fairly well-sorted, subrounded quartz <0.25 mm; rare subangular flint <1 mm; rare carbonaceous material <5 mm; handmade; unoxidised with oxidised core.

Q5 Hard, moderately fine clay matrix; common, poorly-sorted, subrounded quartz <0.5 mm; handmade; unoxidised with oxidised margins.

Q7 Hard, moderately fine, slightly micaceous clay matrix; common, fairly well-sorted, subrounded quartz <1 mm; rare subangular flint/chert <1 mm; sparse iron oxides <2 mm; handmade; oxidised with irregularly unoxidised surfaces.

Q10 Soft, moderately fine clay matrix; moderate, fairly well-sorted, subrounded quartz <1 mm; sparse, fairly well-sorted subangular flint <1.5 mm; handmade; unoxidised with oxidised core.

Q11 Soft, moderately coarse-textured clay matrix; common, well-sorted, subrounded quartz <0.25 mm; handmade; unoxidised.

Q13 Hard, fine sandy clay matrix; rare, fine black iron particles; rare fine mica; wheelthrown; oxidised with unoxidised surfaces.

Q14 Soft, fine sandy clay matrix; sparse iron oxides <0.5 mm; sparse carbonaceous material <1 mm; rare fine mica; wheelthrown; oxidised with unoxidised core.

Discussion of the fabrics

Distinctions between certain fabric types as described above are not always clear-cut, and in some cases it might be argued that two or more fabric types within the same inclusion group are merely variations of the same fabric. This may be the case, for example, with the two flint-tempered fabrics F2 and F4, and the two grog-tempered fabrics G5 and G6; in both instances the two fabrics contain the same range of inclusions, and have been distinguished because of the coarseness of those inclusions.

Table 23 shows that the vast majority of the cemetery assemblage occurs in a limited range of fabric types: the flint-tempered fabrics F2, F3, and F4, and the grog-tempered fabrics G5, G6, and G7. All other fabric types occur in much smaller quantities, sometimes representing merely a single vessel, as for fabrics F14, F19, and Q14. The flint-gritted/flint-tempered fabric group represent 51.5% of the vessels, grog 39.5%, and quartz 9%. The homogeneity of the assemblage might be considered to have implications for the interpretation of the chronological range of the cemetery, and also for any consideration of the production and distribution of contemporary ceramics in the region, as evidenced by the range of potential sources represented here. Both these points are discussed in more detail below.

Any attempt to pinpoint potential source areas for the cemetery vessels must start from a consideration of the availability of the necessary resources. Clays suitable for potting would have been available in the near

vicinity of the site, from the outcrops of the Woolwich and Reading beds. Other outcrops of clay, such as the Gault and Wealden deposits, are located to the north of the Downs. All the inclusion types represented (flint, quartz sand, and grog) would have been widely available materials in the Late Iron Age, and their use has resulted in a range of relatively non-distinctive fabrics for which it would be difficult to pinpoint sources, or even source areas. Exceptions to this might be found in the use of the more distinctive and less commonly-occurring fabrics: F7, F10, F14, F19, G4, Q10, Q11, Q13, and Q14 are each represented by just one or two vessels (Table 23), and of these F7, F14, F19, Q10, Q13, and Q14 do not occur on any other site within the Westhampnett complex. The supposition is that these fabrics may represent products of different (and possibly more distant) sources than the rest of the cemetery assemblage.

Petrological analysis

A large-scale programme of thin-sectioning for petrological analysis was not felt to be appropriate for this assemblage, given the preponderance of non-distinctive inclusion types. Instead, a targeted approach was followed, in which samples of flint-tempered (F2), grog-tempered (G5), and sandy (Q7) fabrics were analysed in order to determine whether it was possible to discern differences or similarities in the clay matrices used for each type. In addition, samples of fabrics Q10, Q14, and F14 were analysed to determine whether either the inclusion types or the clay matrices were distinctive.

The petrological work was undertaken by D.F. Williams (English Heritage Ceramic and Lithic Petrology Project) and his full report is held in archive, with the results summarised here. The clay matrices of the samples of the three fabrics F2, G5, and Q7 are sufficiently different to infer that different clays were being exploited in each case. It is impossible to conclude, however, how distant might be these clay sources, either from the site or from each other. In the case of Q7, it is confirmed that the visible quartz and flint/chert inclusions were deliberately added to the clay as temper. Samples of the uncommon fabrics Q10 and Q14 share sufficient traits with the samples of fabrics Q7 and G5 respectively to suggest that they may be been made from similar materials. Hamilton suggests that the quartz sand-tempered fabric 3 at Copse Farm, Oving may originate from the Lower Greensand rather than the quartz sands of the West Sussex Coastal Plain. Here, however, a wider range of quartz sand-tempered fabrics has been identified and in view of the complex geological sequence in the immediate vicinity of Westhampnett, including the unsorted coarse marine gravels of the Hoxnian storm beach which also contain pockets of sand (Scaife and Allen in prep.), a more local source is possible. Fabric F14 matches most closely a sample of fabric F4, which was chosen to answer questions about the visual similarities between fabrics from Westhampnett Areas 2 and 5 (see below and volume 1).

Forms

The vessel forms have been organised into a type series which is based primarily on the overall vessel shape, subdivided by details of rim and/or base forms (Fig. 55). Decoration in the form of cordoning, so often used to define Late Iron Age vessel forms (e.g. Thompson 1982), is not used here in the same manner, but is considered to be subsidiary to the classification by shape, since it is apparent that the same basic forms were produced both with and without cordoning, or other decorative motifs. Nevertheless, the use of decoration, as described below, is taken into consideration when discussing the overall chronological implications of the cemetery assemblage.

Two basic forms dominate the assemblage, occurring in approximately equal quantities: jars and bowls. The distinction between the two forms is not always clear-cut, but is here based on a combination of the height: girth ratio and the perceived constriction of the rim/neck zone. *Jars* are defined as vessels with a height greater than the girth and with a marked constriction at the rim or neck, while *bowls* have a girth greater than the height and show no such rim/neck constriction (for pedestal vessels this ratio ignores the pedestal).

The basic jar shapes are:
- J1 High-shouldered (inverted pear shape)
- J2 Ovoid
- J3 Rounded
- J4 Biconical
- J5 Two-tier

The basic bowl shapes are:
- B1 High-shouldered
- B2 Ovoid or 'baggy'
- B3 Rounded
- B4 Biconical
- B5 Miscellaneous cordoned and corrugated forms

Vessels for which the overall type could not be ascertained were coded as 'U' (Uncertain Form), 'R1' (Uncertain Form, Rim) or, in the case of body sherds only, 'P1' (Plain Body). This basic classification by shape is further refined by a consideration of the rim/neck form, and the base form.

Rim/neck forms:
1. Necked, upright or slightly everted rim
2. Everted rim, no neck
3. Bead rim, no neck

Base forms:
1. Flat base
2. Splayed flat or slightly dished base
3. Moulded base
4. Hollow pedestal, closed base
5. Hollow pedestal, open base
6. Very concave base
7. Solid pedestal base
8. Sagging base

Vessels have, therefore, been classified using a combination of a maximum of three variables, and have been coded accordingly, e.g. J122 (a high-shouldered jar (=J1) with everted rim (= 2) and splayed base (= 2)); B203 (ovoid bowl (= B2) with rim missing (= 0) and moulded base (= 3)). Of the 251 vessels from graves, 225 could be classified as to overall vessel shape, one appeared to be a standard Romano-British vessel form in a fabric usually found in Romano-British contexts, and the remainder were classified as to rim and/or base form (with the exception of the three missing vessels). The vessels are discussed by type below, and the breakdown of vessel form to fabric type is given in Table 23.

High-shouldered jars

These jars have a well-defined neck with an upright or slightly everted rim, a distinct shoulder immediately

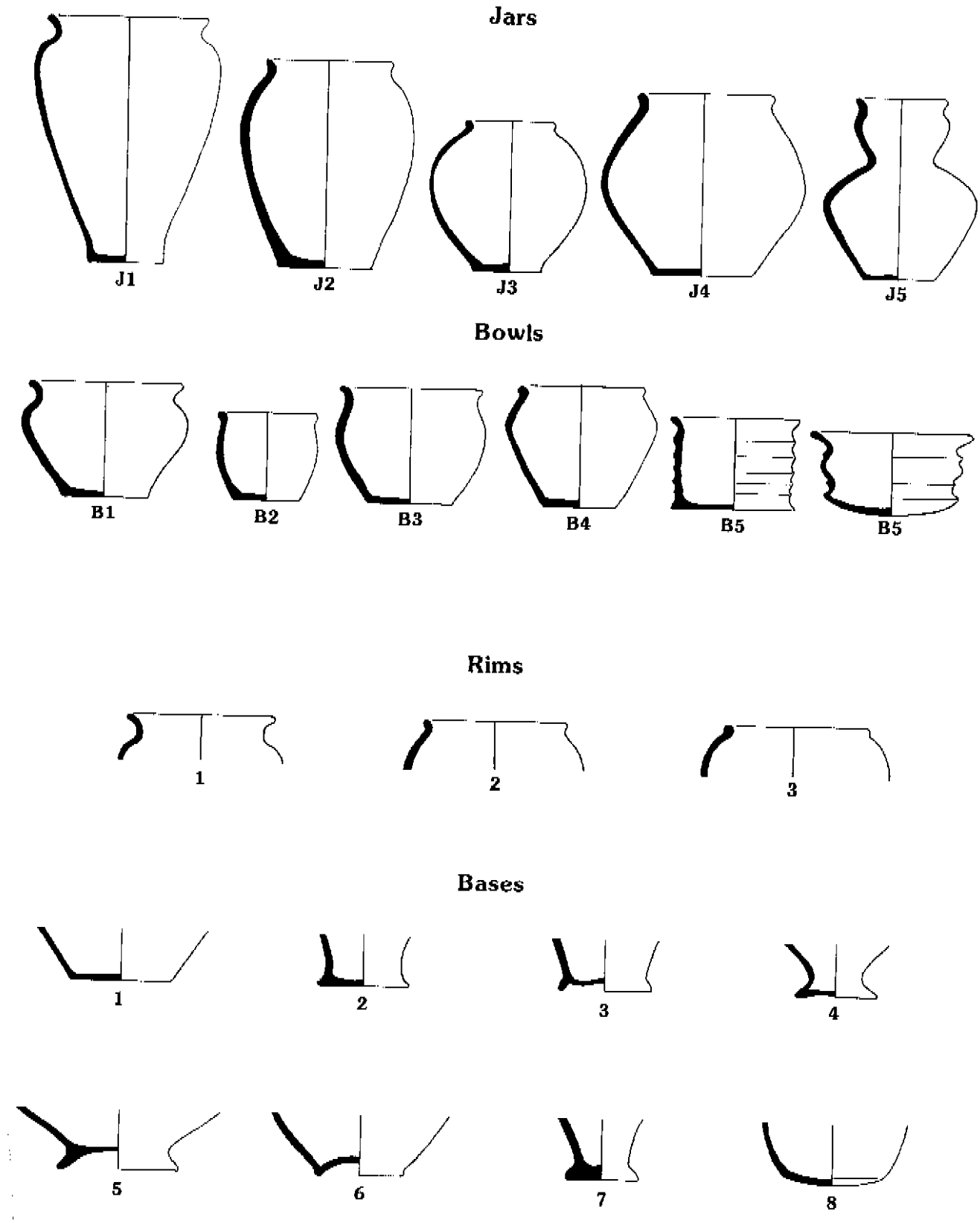


Figure 55 Vessel form type series

below the neck zone, and a profile ranging from a smooth, slightly convex curve with a distinct junction between body and base to an elegant, S-shaped profile merging into a splayed base. This form was the most commonly occurring within the cemetery, found in a variety of flint-gritted/flint-tempered, grog-tempered, and sandy fabric types (see Table 23). All three rim/neck forms and three base forms were noted amongst the group, but the most frequently represented combinations are the necked jars with splayed bases (J112) and with moulded bases (J113).

Necked jars (J110, J111, J112, J113)
These make up more than half the total of high-shouldered jars (42 examples), the most common types having splayed or moulded bases (9 and 28 examples respectively). Five examples are possibly wheelthrown; four of these are in common fabrics (F2 and G5), and one in an uncommon fabric (Q7). Practically all vessels are burnished at least on the exterior surface, and a few are also burnished on the interior surface. Those vessels where burnishing was not detected generally have surfaces which have been heavily abraded, thus removing any such evidence.

All but four vessels were decorated in some way, generally by cordoning or by horizontal shallow tooling or burnishing. The commonest motifs are neck cordons, single or paired; cordons also occur above the base, and in multiples down the body of the pot. Tooled lines are used in the same manner, to define neck/shoulder junctions, and base/body junctions, and as multiples down the body. A combination of the two techniques has been used in seven cases to produce a 'corrugated' effect on the shoulder of the vessel (e.g. grave 20297, ON 27168). Burnished lines are also employed in the same manner as tooled lines, and the two techniques are not always easily distinguished. Other burnished or tooled motifs are used, but are far less common; these include lattice (four: e.g. grave 20051, ON 27047), cross-hatching (two: e.g. grave 20497, ON 27270), and complex linear/curvilinear band motifs (five; e.g. grave 20484; ON 27261, 27262). Two examples have multiple, narrow-spaced, horizontal incised or combed lines, created a 'rilled' effect (e.g. grave 20253, ON 27141), and one further example employs random combed bands (grave 20457, ON 27471). Two vessels have very similar design of zig-zag vertical lines of impressed dots, probably executed using a square-toothed comb or similar instrument (grave 20027, ON 27023; grave 20095, ON 27072).

Pedestal jars (J107)
There is only one example of a high-shouldered pedestal jar (grave 20650, ON 27351), which stands out amongst this group as anomalous by reason of manufacture (wheelthrown), fabric type (the only example of fabric F14), and decoration (multiple cordons on the body and a band of burnished crosses and vertical lines). The vessel has an elegant, inverted pear-shaped profile ending in a solid, splayed pedestal, and is noticeably well-burnished on the exterior.

Ovoid jars
This group is less easy to define, but in general includes vessels which could be attributed neither to the high-shouldered nor to the rounded jar groups, but which seemed to fall midway between the two. These vessels have no clearly defined shoulder, the point of maximum girth is approximately in the middle of the vessel, and they have a fairly slack, 'baggy' profile. The range of fabric types in which these vessels occur is far more restricted than for the high-shouldered jars, comprising only six fabrics (Table 23). Again, all three rim forms are represented, although there is only one example of a bead rim jar; the remainder are fairly evenly divided between necked and unnecked forms (10 and 13 examples respectively).

Necked ovoid jars (J212, J213)
The necked ovoid jars are similar to the high-shouldered forms in both fabric and decoration. There are examples in flint-tempered, grog-tempered, and sandy fabrics, and decoration, occurring on all but two vessels, is generally in the form of cordons or horizontal tooling, often on the neck. All but two vessels are burnished. Four vessels in this group are probably wheelthrown; two stand out by reason of uncommon fabric type (Q7 and Q14 respectively), while the third is in a common fabric type (G5), but is markedly well-burnished on both exterior and interior surfaces. All vessels but one are decorated, and decoration includes neck and shoulder cordons, shoulder corrugation, and other simple horizontal linear motifs.

Everted rim ovoid jars (J221, J222, J223)
With the exception of a single vessel in fabric F4, all vessels of this type are in either fabric F2 or fabric G5. All but three are burnished, and two examples are burnished on the interior surface as well as the exterior. Two vessels, both in fabric G5, are possibly wheelthrown. Decoration on these vessels includes more complex motifs, such as burnished cross-hatching (one: grave 20101, ON 27068), lattice (two: e.g. grave 20191, ON 27127), chevrons (one: grave 20146, ON 27094), curvilinear motifs (one: grave 20191, ON 27127) and combination horizontal and vertical linear/curvilinear band motifs (one: grave 20083, ON 27058); as well as the simpler linear motifs such as corrugation on the shoulder (three), neck cordons (three), multiple body cordons (one), and a variety of tooled and burnished horizontal linear motifs (five).

Bead-rimmed ovoid jar (J231)
There is a single example of this type, in an uncommon fabric type (G8), burnished externally, with a double shoulder cordon and a wide band of horizontal combing below (grave 20245, ON 27148).

Rounded jars (J303, J311, J313, J321)
The rounded jars have a maximum girth in the middle of the vessel, but have a far more bulbous profile than the ovoid jars, and are noticeably squatter, with a height:diameter ratio of around 1:1. This group comprised only five vessels, in four different fabrics (Table 23), and in three recognisable forms: necked with flat base, necked with moulded base, and unnecked with everted rim and flat base. All are handmade, and decoration is simple. Three vessels are decorated: two necked vessels in fabric G5, both burnished on the exterior, and both with double neck cordons; one also has multiple tooled horizontal lines down the body and corrugation on the shoulder. The third vessel, lacking a rim, has a neck cordon and single grooves on the shoulder and above the base.

Biconical jars (J401, J411, J421, J431)
This group comprises only a small number of vessels, defined on the basis of a pronounced angle, although not sharp enough to be defined as a carination, in the centre or upper third of the vessel. Like the rounded jars, they are noticeably squat in profile, with a height:diameter ratio of around 1:1. All three rim/neck forms are present, but all examples have flat bases. With the exception of a single example in fabric Q11, all are in flint-gritted

fabrics (three in fabric F3 and one in fabric F4). All are handmade and burnished; the example in Q11 is burnished both inside and out, and this vessel also stands out by reason of the decoration, diagonal slashes on the shoulder (grave 20585, ON 27296), a motif not observed elsewhere in the cemetery assemblage. Three other vessels are decorated, one with a single shoulder groove, one with bands of burnished lattice (grave 20208, ON 27136), and one with narrow-spaced tooled lines.

Two-tiered jar

Two jars do not fall into any of the categories as defined above. The first of these is a unique two-tier vessel in fabric Q5 (grave 20729, ON 27414), handmade and burnished on the exterior. The two elements which are combined to comprise this form may be defined as a lower biconical jar with a neck cordon (J411), surmounted by a smaller ovoid jar or bowl with everted rim (J/B220). No parallels have been found for this vessel.

Romano-British jar form

The second vessel is completely anomalous within the Late Iron Age cemetery assemblage as it is of Romano-British type, a rounded jar (Romano-British Form 112) in the Rowlands Castle-type fabric Q100, with a narrow band of vertical incisions around the girth (grave 20457, ON 27472). This vessel was associated with a high-shouldered jar of Late Iron Age form. The Rowlands Castle-type wares are generally assumed to begin production after the Conquest, although more recent work has suggested that a pre-Conquest origin for the industry is likely (M. Lyne pers. comm.). Even so, this cannot as yet be pushed back beyond the first half of the 1st century AD, which still leaves this grave with a potential date far later than the rest of the Late Iron Age cemetery.

High-shouldered bowls

As for the jars, the high-shouldered forms make up the bulk of the classifiable bowls, occurring in a range of 12 fabrics. All three rim forms, and six of the eight base forms are represented, although the concentration on one particular combination, necked bowls with moulded bases, is very marked (Table 23). This group includes the only examples of pedestal bases within the overall bowl classification, including both closed and open pedestals. One bowl with a markedly concave moulded base (grave 20543, ON 27278) could also fall within the 'pedestal base' category.

Necked bowls (B110, B111, B112, B113, B116)

This category includes examples with flat, splayed, or moulded bases, the latter being the most commonly occurring type (18 examples). All but four examples are burnished externally, and two are also burnished internally. Decoration is also frequent, occurring on all but nine examples; the most frequently occurring type being neck cordons, either single or double. Bands of burnished motifs were noted on four vessels below the shoulder (lattice or chevrons: e.g. grave 20650, ON 27350).

Everted rim bowls (B121, B122)

These bowls are similar in form to the necked bowls, but lack a distinct neck zone, the rim everting directly above the mouth constriction. Apart from one example in a grog-tempered fabric, all are flint-tempered. All but one are burnished, but only two are decorated, both with two-directional burnished hatching below the shoulder, one combining this with a row of burnished dots around the neck (grave 20451, ON 27239; grave 20708, ON 27368).

Bead-rimmed bowls (B131, B133)

This is a fairly disparate group of three vessels, united only by the presence of a bead rim. Three distinct shapes are represented, ranging from a small, crudely formed example (grave 20308, ON 27182) to a large, elegant, vessel which might almost be described as a wide-mouthed jar (grave 20001, ON 27000). All three are in different fabrics, two are burnished, and two have simple linear tooled decoration.

Pedestal bowls (B114, B115, B116)

These are essentially necked bowls with an added pedestal; in one instance (grave 20335, ON 27189) the junction between original bowl shape and the added pedestal is particularly marked. Three vessels (grave 20001, ON 27002; grave 20335, ON 27189; grave 20647, ON 27358) have hollow pedestals closed at the base; two more have open pedestals (grave 20001, ON 27001; grave 20637, ON 27343). One further vessel may be included within this category: a necked bowl with a markedly concave base (grave 20543, ON 27278).

This small group of vessels stands out as being particularly well-made and carefully finished, with simple but well-executed decoration. Three of the bowls are wheel-thrown, and all, except for the concave-based bowl, are in grog-tempered fabrics (G5 or G8), well-burnished. Four have neck cordons; two also have a cordon above the base, and one has multiple horizontal grooves on the body (ON 27343).

Two further closed pedestal bases (defined in the vessel type series as U004), probably derive from similar bowls in fine, well-finished fabrics. Both have closed pedestals; one is handmade in fabric F10 (grave 20619, ON 27554), the second wheelthrown in fabric Q13 (grave 20353, ON 27202).

Ovoid bowls (B221, B230, B231)

The ovoid bowls, like the ovoid jars, are not an easily defined group, but comprise a small number of slack-profiled bowls of small to medium size, all handmade, all but one with flat bases, and with simple everted or beaded rims. A range of grog-tempered, flint-tempered, and sandy fabrics is represented. All but one are burnished on the exterior, and two are decorated, one with a single tooled horizontal line below the rim, and the second with a shoulder cordon and burnished cross-hatching below (grave 20095, ON 27073).

Rounded bowls (B303, B308, B311, B312, B313, B321, B323, B331)

These vessels can be difficult to distinguish from the rounded jars, given the squat profile of both forms, but the bowls are defined on the basis of a rim or neck diameter greater than that of the base. The height is generally, although not invariably, less than the diameter. Again, this is a fairly disparate group, in a range of grog-tempered, flint-gritted/flint-tempered, and sandy fabrics, all handmade. All three rim forms are present, and bases may be flat, splayed, moulded or sagging. Most common are the everted rim and bead rim varieties, both with only flat bases (seven and eight examples respectively). All but six of the rounded bowls are burnished, and five are burnished on the interior as well as the exterior. Decoration, found on most vessels, is either shallow tooled or burnished, and consists most-

ly of horizontal lines or cordons, generally on the neck. Seven examples have more complex burnished motifs below the shoulder (curvilinear, lattice, cross-hatching, vertical lines: e.g. grave 20338, ON 27199).

Biconical bowls (B411, B421, B431)

These vessels have a pronounced angle in the vessel wall in either the upper or central third of the vessel. With the exception of one necked example, all have either everted or bead rims, and all are flat-based. A range of flint-gritted/flint-tempered and grog-tempered fabrics is represented. All but two bowls are burnished, and four are burnished both inside and out. Decoration is also common, frequently occurring as bands of burnished diagonal hatching on the shoulder, in two cases defined by rows of shallow-tooled or burnished dots (e.g. grave 20027, ON 27024). One example has lattice decoration on the shoulder (grave 20654, ON 27356). Three examples have burnished motifs below the shoulder, one cross-hatching (grave 20459, ON 27249), and two lattice (e.g. grave 20610, ON 27328).

Corrugated or cordoned bowls (B523, B528)

This group of three vessels comprises a pair of corrugated bowls from grave 20484 (ON 27259, 27260), and one unusual bowl with a widely flaring rim, a squat rounded profile, cordoned top and bottom, and a sagging base with very shallow footring (grave 20629, ON 27356). All three bowls are in the flint-tempered fabric F2, and are burnished. Given the undulating nature of the profiles, it is difficult to determine whether the bowls were wheelthrown or handmade; the corrugated bowls, although well-made, are not entirely regular, and are more likely to be handmade, while the regularity and profile of the cordoned bowl suggests either wheelthrowing, or the use of a template, or even a combination of techniques.

Miscellaneous bowls

One further bowl, although of uncertain form, merits discussion. This is a vessel which appears to be anomalous within the Late Iron Age cemetery assemblage, in terms of both vessel form and provenance on site. The vessel (ON 27290) was recovered from a severely truncated cremation burial (20566) in the centre of a small enclosure (20706). Only the lower part survives, and comprises an open, approximately hemispherical profile with a shallow footring base. Although the upper part of the vessel could not be reconstructed, existing sherds hint at a slight shoulder below the rim (this is a purely tentative reconstruction and is not illustrated). The vessel is well-made and appears to be wheelthrown. Surfaces are well-finished; the interior is highly-burnished which has had the effect of darkening the colour of the oxidised fabric. The exterior is red-finished, although whether this represents the application of a red slip (clay in suspension) or an alternative red pigment is uncertain. The fabric (F19) is comparable to

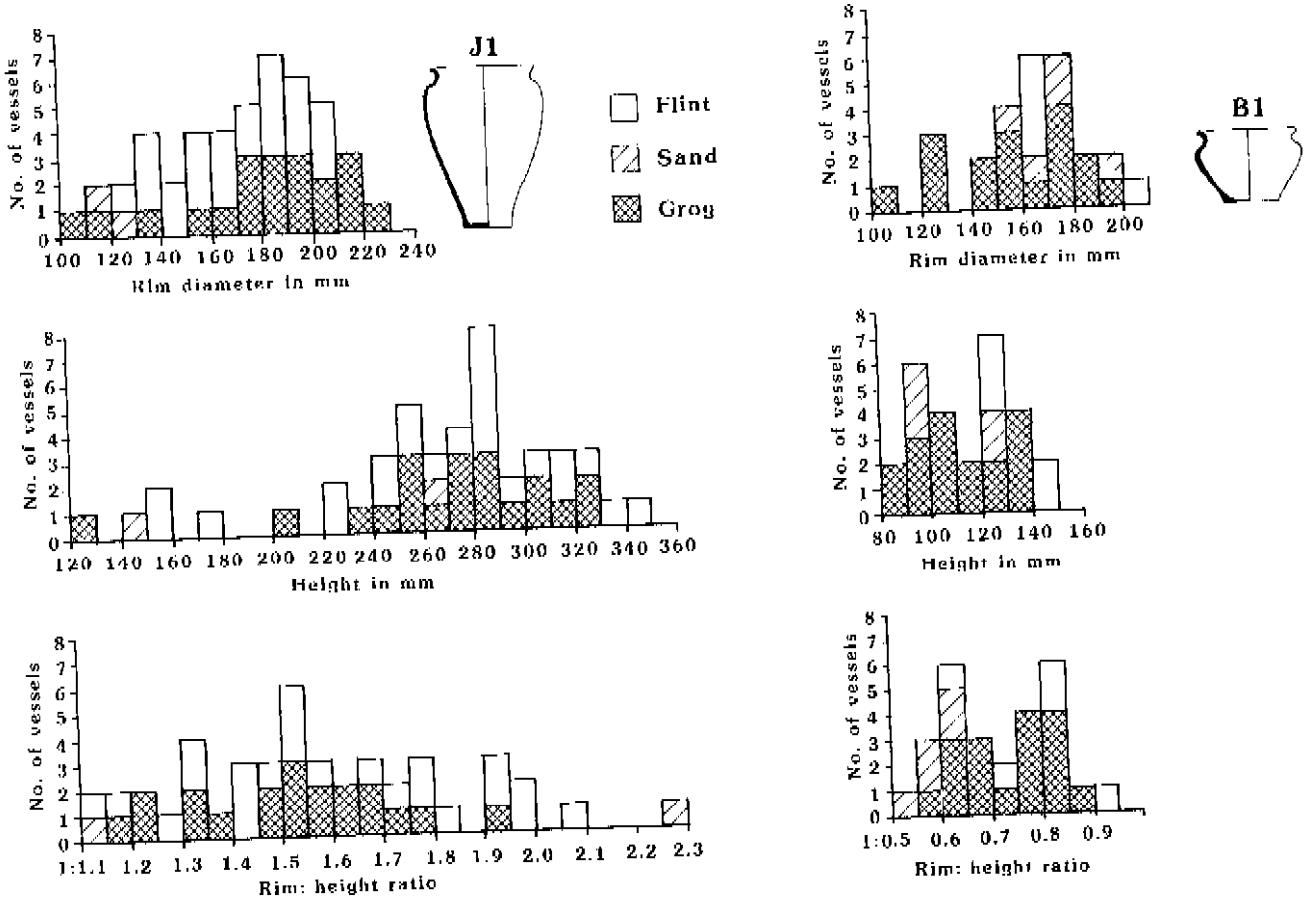


Figure 56 Rim diameters, heights, and rim/height ratios for high-shouldered jars and high-shouldered bowls, by fabric

fabric F10, but the surface finish is unmatched within the cemetery assemblage, or any of the other Westhampnett sites.

While the surface appearance of this vessel is reminiscent of the red-finished (or 'haematite-coated') wares of the Early Iron Age in central-southern England, and indeed the vessel form would not be out of place in such a context, such an identification seems extremely unlikely in this instance.

Westhampnett falls well outside the known distribution area of these red-finished wares, and in any case a date range within the Early Iron Age would be quite anomalous within the cemetery; there is no other identified Early Iron Age component here. An alternative parallel should perhaps be sought amongst the continental European red-painted wares of the Late Iron Age, of which there are examples from Normandy (Hawkes and Dunning 1930, 201, 203).

Vessel Size

The large size of the cemetery assemblage, and the high proportion of vessels with reconstructable profiles, provide an ideal opportunity to investigate vessel size, primarily as a means of identifying potential standardisation within the assemblage, although of course size also has a bearing on vessel function.

A similar approach to that used for the Danebury assemblage was employed (Brown 1995, 55–8), with the addition of the use of vessel heights. The external rim diameter and height measurements for two vessel forms were used: high-shouldered jars (J1: 45 examples) and high-shouldered bowls (B1: 27 examples). Other vessel forms were considered to have too few examples for any potential indications of standardisation to be discernible. High-pedestalled examples (B114, B115) were omitted from the high-shouldered bowls since these would have biased the height range and rim:height ratio. The reasons for the use of external rather than internal measurements are as stated by Brown (*ibid.*, 56–7).

Figure 56 shows the range of rim diameters, heights, and rim:height ratios for, respectively, high-shouldered jars and high-shouldered bowls, broken down into the three major fabric groups (flint, grog, sand). For high-shouldered jars, the range of rim diameters is relatively tight (100–230 mm), with a clear peak towards the top end of that range. The heights show a wider range (120–340 mm); concentrated towards the top end of the range with a peak at 280–90 mm, and with 'outliers' at the bottom end of the scale (<220 mm). The rim:height ratio ranges from 1:1.1 to 1:2.3, a fairly diverse range. High-shouldered bowls show a similarly tight range for rim diameters (100–220 mm), but the heights (80–150 mm) show a far greater consistency than the jars, and this consistency may also be seen in the rim:height ratio (1:0.50–1:0.95). Within each rim form, there is no appreciable difference between the three major fabric groups.

The evidence from Westhampnett, then, demonstrates that a certain degree of standardisation of vessel size may have been inherent within pottery production at this period or, at least, within the production of vessels selected for deposition within the cemetery. Data from the adjacent settlements, e.g. Copse Farm and Westhampnett Area 5, are insufficient for comparative purposes. This degree of standardisation, arguably more apparent within the bowls examined than the jars, may have been influenced by a variety of factors, including vessel function and the constraints of technology, i.e. the limits within which manufacture and firing are most successfully achieved.

Ideally, this exploration of vessel size should include some consideration of vessel capacity. The resources within this particular programme of analysis did not allow for the detailed calculation of capacity, but future research programmes should bear this in mind.

Manufacture

Perhaps surprisingly, given the nature of the vessel forms and decoration, the vast majority of the cemetery vessels are obviously handmade, and the fracturing of these vessels frequently displays the horizontal breaks characteristic of the coil building technique (Rice 1987, fig. 5.6). There are, however, a small number of examples which show potential signs of wheel-throwing or wheel-finishing. Signs of these techniques include a marked evenness in the vessel walls, sometimes combined with horizontal rilling on the inner surface, and concentric cutting-off marks on the underside of the base (Rye 1981, figs. 62–64). Some rims on handmade vessels may have been finished-off on a wheel, or on a slow turntable, and the regularity of some, particularly the very well-made, cordoned vessels, could have resulted from the use of a template. Evidence of manufacturing technique does not always appear in an unambiguous manner, and in some cases it is possible that horizontal coil marks could have been mistaken for the horizontal internal rilling characteristic of wheel-throwing. Moreover, in some instances subsequent smoothing and/or burnishing of the interior surface has removed any such marks, and the evenness of vessel walls may simply result from the very careful finishing of handmade vessels.

Bearing these facts in mind, however, it is apparent that the cemetery vessels reflect varying amounts of time and care in forming and finishing. At one end of the spectrum there are fairly crudely formed, handmade vessels in less carefully prepared fabrics (e.g. the poorly-sorted, flint-tempered fabric F3), generally at the smaller end of the size range, with roughly smoothed surfaces. At the other end of the spectrum there are well-made vessels in better-sorted fabrics (e.g. fabrics F2 and G5), with walls of even thickness and well-smoothed and burnished surfaces, and carefully finished rims and bases.

Surface Treatment

The frequency and quality of surface treatments and decoration on the cemetery vessels indicates that a large proportion were finished to a relatively high standard in comparison to, for example, the broadly contemporaneous assemblage from Westhampnett Area 5. At one level this can be seen from a comparison of the fabric

types from the two areas; while many fabrics are comparable in terms of the size and range of inclusions, and on this basis have been assigned fabric codes which are common to both areas, there is a marked difference in the finishing techniques between the two areas. Those from the cemetery area are more carefully finished, with slipped or slurried surface coatings disguising the inclusions within the fabric, although post-depositional processes such as soil conditions have in many cases partially or completely removed vessel surfaces. There is a single example of a red finish, of slip or some other red pigment, on the vessel from grave 20566.

Nearly all the cemetery vessels are at least partially burnished on the exterior surface, and burnishing also occurs on interior surfaces, even on closed jar forms. While this technique is generally well-executed, surfaces are rarely evenly burnished to the obliteration of individual strokes, which are often clearly visible, both as horizontal and vertical bands. Such an effect could have been achieved with any smooth, hard object, such as a beach pebble. On the grog-tempered vessels in particular, the burnishing has the effect of darkening the surface.

Decoration

Decoration is similarly common. Table 24 gives the numbers and proportions of decorated vessels of each known type. From this it appears that jars are more frequently decorated than bowls, with all but the rounded jars including more than 75% decorated vessels (numbers of rounded jars are too small for significant comment here). Proportions of vessels combining more than one decorative motif (but not necessarily more than one decorative technique) are likewise higher for jars than for bowls.

Four separate decorative techniques were identified:

1. Burnishing or shallow-tooling
2. Cordoning
3. Incision/combing
4. Impression

Within each technique, a number of different motifs, or combinations of motifs, were recognised, and these are frequently repeated in different techniques. Stylistic representations of the motifs identified are illustrated in Figures 57 and 58, and the correlation of decorative motif to vessel form is given in Table 25.

The most frequently used techniques were burnishing and cordoning. A series of *burnished* or *shallow-tooled* motifs have been identified, ranging from simple horizontal line decoration, through variations of diagonal lines, two-directional hatching, chevrons and lattice, to complex combination motifs. Two or more different motifs may be used in separate bands on the same vessel. Grave 20384, ON 27205 has three separate bands (cross-hatching, lattice, and combination lattice and arcs), separated by horizontally-tooled burnishing.

Most types of burnished or tooled motifs are common to both jars and bowls, but some observations may be made by reference to Table 25. Simple linear motifs are far more common on jars than on bowls, particularly the high-shouldered jars, but jars also dominate the more complex motifs, such as combination horizonal and vertical bands (e.g. grave 20670, ON 27361). Diagonal hatching and cross-hatching are nearly always found on bowls, although it may be noted that whereas single bands of diagonal hatching are confined to bowls, where they generally occur on the shoulder, multiple bands of hatching are found only on jars, where they occur on the body below the shoulder. Likewise lattice motifs are more frequently found on bowls, as single bands, but multiple bands occur only on jars. Bowls rarely combine more than one motif, except in the cases of bands of hatching delineated by rows of dots (e.g. grave 20027, ON 27024); this may be governed by lack of space as much as any other factor.

Cordons may be single or double, generally at the base of the neck or at the junction of neck and shoulder, sometimes just above the base, or multiple down the body. Neck cordons, and in fact all forms of cordoning, are most frequently found on the high-shouldered forms, both jars and bowls, although neck cordons are also found on all other jar and most bowl forms. Multiple cordons are restricted to high-shouldered and ovoid jars, and one bowl (grave 20629, ON 27336). Although this is a technique which is generally associated with the introduction of wheel technology, the effect relying on an even and perfectly horizontal cordon (e.g. Thompson 1982, 21), it is apparent from the Westhampnett assemblage that this effect could be achieved successfully on handmade vessels, possibly with the aid of a template.

A variant of the cordoning technique uses simple horizontal tooling with a blunt instrument, either close-spaced to produce a rilled effect, or wide-spaced to give a corrugated appearance. The most striking examples of the latter technique occur on the two straight-sided bowls (grave 20484, ON 27259, 27260); it is also used on the shoulders of high-shouldered, ovoid and rounded jars. Shallow corrugation is found on both jars and bowls.

Evidence for other decorative techniques is scarce. *Incised* decoration, executed with a sharp instrument which cuts (but does not penetrate) the body wall, occurs on nine vessels, consisting of closed-spaced horizontal lines, or rilling, and diagonal slashes. A variant of this technique employs multiple parallel incisions, perhaps using a comb or multiple-toothed instrument, to produce horizontal rilling; the use of this technique is difficult to distinguish from multiple incised lines. Both are found only on high-shouldered or ovoid jars. In addition, one high-shouldered jar has diagonal bands of combing (grave 20457, ON 27471).

Impression is even scarcer. Two high-shouldered jars are decorated with repeated vertical zig-zag lines of impressed dots produced using a multiple-toothed instrument or comb (grave 20027, ON 27023; grave 20095, ON 27072). One vessel has a horizontal row of fingertip impressions on the interior surface just above the base (grave 20463, ON 27246), this has been included here although it seems unlikely that it has a decorative purpose.

Table 24 proportions of vessel types decorated

	Jars				*Bowls*				
	HSJ	*OJ*	*RJ*	*BJ*	*HSB*	*OB*	*RB*	*BB*	*CB*
Total no. vessels	67	25	5	5	47	9	20	16	3
Total no. decorated	53	21	2	4	31	2	12	11	3
% decorated	79.1	84.0	40.0	80.0	66.0	22.2	60.0	68.8	100
No. with >1 motifs	25	14	1	–	8	1	7	3	–
% >1 motif	37.3	56.0	20.0	–	17.0	11.1	35.0	18.8	–

Table 25 decoration by vessel form

	Jars				*Bowls*					
	HSJ	*OJ*	*RJ*	*BJ*	*HSB*	*OB*	*RB*	*BB*	*CB*	*Total*
Burnished/tooled										
Linear horizontal	15	12	1	1	12	1	7	–	–	49
Diagonal hatching	–	–	–	–	–	–	2	6	–	8
Cross-hatching	3	–	–	–	3	1	2	1	–	10
Linear vertical	–	–	–	–	–	–	1	–	–	1
Lattice	4	–	–	–	3	–	–	3	–	10
Bands of lattice	1	2	–	1	1	–	1	–	–	6
Chevrons	–	1	–	–	2	–	1	–	–	4
Crosses	1	–	–	–	–	–	–	–	–	1
Horiz. and vert. bands	2	1	–	–	–	–	–	–	–	3
Curvilinear	4	2	–	–	1	–	4	–	–	11
Rows of dots	–	–	–	–	1	–	1	3	–	5
Cordoned/corrugated										
Shallow corrugation	5	1	–	–	–	1	–	–	–	7
Deep corrugation	6	8	–	1	–	–	1	–	2	18
Neck cordon(s)	30	11	2	–	18	1	3	1	–	66
Single cordon (not neck)	1	–	–	–	2	–	–	–	–	3
Multiple cordon	3	1	–	–	–	–	–	–	1	5
Incised/combed										
Linear/rilling	3	3	–	–	–	–	–	–	–	6
Random combing	1	–	–	–	–	–	–	–	–	1
Diagonal slashes	–	–	–	1	–	–	–	–	–	1
Impressed										
Zigzag dots	2	–	–	–	–	–	–	–	–	2
Fingertip	1	–	–	–	–	–	–	–	–	1
Total	82	42	3	4	43	4	23	14	3	218

Key to Tables 24 and 25

HSJ = high-shouldered jars; OJ = ovoid jars; RJ = rounded jars; BJ = biconical jars; HSB = high-shouldered bowls; OB = ovoid bowls; RB = rounded bowls; BB = biconical bowls; CB = corrugated bowls

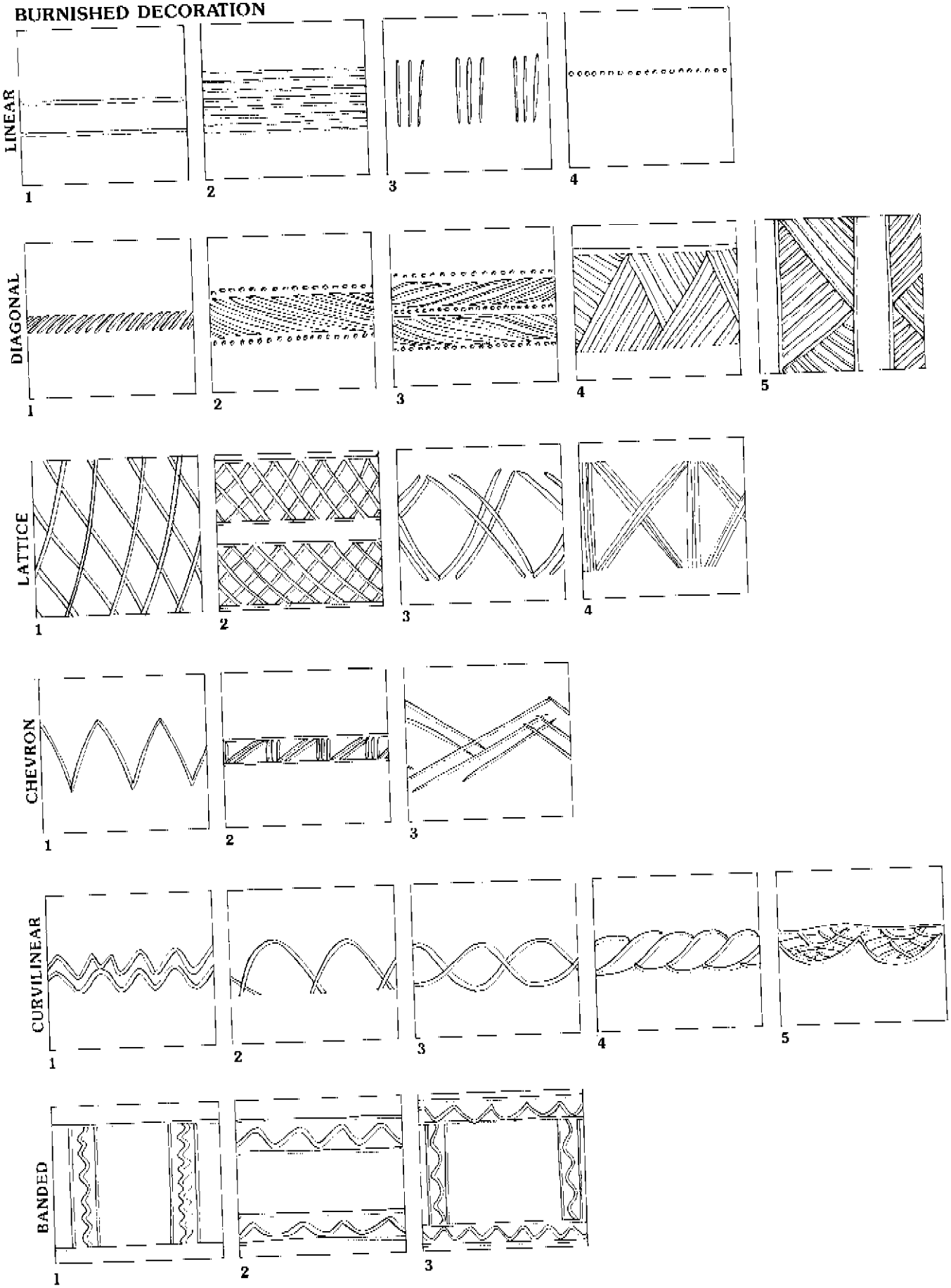


Figure 57 Stylistic representations of the decorative motifs on pottery

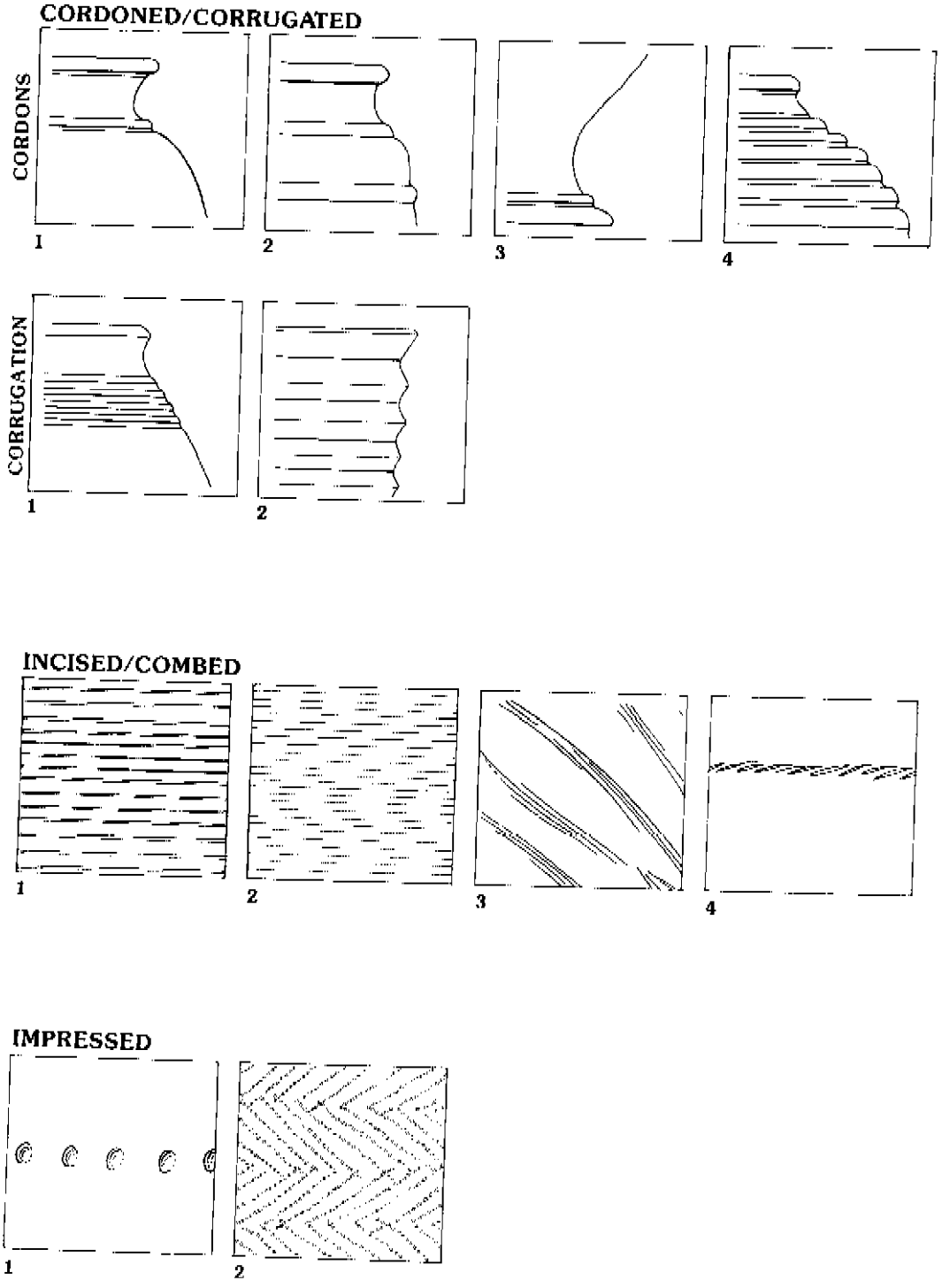


Figure 58 Stylistic representations of the decorative motifs on pottery (continued)

Firing

The majority of fabrics exhibit signs of a similar firing technique; sherds are either unoxidised throughout, with perhaps some patchy oxidisation of surfaces, or are unoxidised with oxidised cores or margins, giving a 'sandwich' effect. This indicates that some control was exercised over air circulation during firing. The coarser fabric F3, however, is generally oxidised with an unoxidised exterior surface.

Evidence for the firing of pottery during the Late Iron Age is scarce, and it is generally assumed that vessels were fired in temporary bonfire or clamp kilns, which would have left little if any trace in the archaeological record (Swan 1984, 53). It is apparent, however, that the period immediately preceding the Roman conquest saw the introduction of more permanent, if primitive, kiln structures (*ibid.*, 56–8). While the cemetery vessels do exhibit evidence for a certain amount of control over the circulation of air during firing, there is no reason to

suggest on this basis that the vessels were fired in a formal kiln structure rather than in a clamp or bonfire kiln, where the pots were covered with fuel and the whole pile covered with a sealing layer of, for example, turves. The patchiness of the surfaces could have been caused by varying circulation of air, due to a lack of complete sealing of the bonfire, and proximity to other vessels during firing. It should also be pointed out that the observed softness of the fabrics and the overall friable condition of many of the vessels, indicates that, with a few exceptions, the vessels were not fired to any great temperature. Interior surfaces are frequently noticeably more abraded than exteriors, although it is uncertain whether this has resulted from use-wear (see below) or from post-depositional factors such as the acidic soil conditions acting on the less well-fired interior surfaces of vessels.

A number of vessels exhibit firing faults such as spalling, resulting in the detaching of lens-shaped flakes from the vessel wall, and one vessel (grave 20384, ON 27205) has a dunting crack running down from the rim, the result of over-rapid cooling after firing (Rye 1981, fig. 46), which was apparently repaired by binding through two post-firing perforations drilled through the rim.

Evidence of Use and Reuse

One of the questions to be asked of the cemetery assemblage concerns the function of the vessels themselves, and whether these were manufactured especially for funerary deposition, or whether they were chosen as grave goods only after prior use in a domestic or other capacity.

Evidence for either alternative is scarce and ambiguous, but a few vessels can be picked out as showing possible signs of use prior to their deposition in the cemetery. The repair of a dunting crack in the rim of one vessel has already been noted, but this need not have occurred at any great length of time prior to deposition. One other vessel (grave 20029, ON 27017) has a row of repair holes along an abraded diagonal fracture. Such a fracture on a newly-fired vessel would surely have necessitated its discard; some period of use, resulting in fracture and subsequent repair before deposition in the cemetery, can therefore be postulated. Post-firing perforations were also observed on a third vessel, a high-shouldered bowl (grave 20451, ON 27238), but in this case the perforations do not appear to have been used as repair holes, and their function is uncertain.

One grave group provides a good example of the reuse of one vessel in a different function. This is grave 20089, where one jar (ON 27060/27063) was broken in half crosswise, either deliberately or accidentally, and the base inverted as a lid over another jar.

The frequent heavy erosion of interior surfaces has been noted. This was observed on both jars and bowls, in both grog-tempered and flint-gritted fabrics, although grog-tempered jars are most likely to be affected. Interpretation of this condition is ambiguous. Possible causes include use-wear, such as scraping or stirring the contents of the pot, or use for storing some acidic liquid; or post-depositional processes such as acidic soil conditions, although it is uncertain why the latter would have affected the inside and not the outside of the vessels. Alternatively, this could have resulted simply because the exterior surfaces were better finished than the interiors (more frequently burnished) and have therefore survived better.

Finally, a small number of vessels appear to retain traces of sooting or blackening on exterior surfaces, often on one side of the upper part of the body (grave 20087, ON 27069; grave 20083, ON 27058; pyre-related feature 20125, ON 27081; grave 20132, ON 27084; grave 20346, ON 27194; grave 20571, ON 27291; grave 20635, ON 27340), but this might have resulted from the original firing, or even from standing near the funeral pyre during cremation, rather than from cooking. The possibility that some vessels which were not selected for burial in graves may have been deliberately burnt on the funeral pyre is discussed further below.

Affinities and Chronology of the Assemblage

Affinities

The affinities of the Westhampnett assemblage lie firmly in the Middle to Late Iron Age ceramic styles of central-southern England. The framework for ceramics of this period in West Sussex has already been outlined above following the styles outlined by Cunliffe (1991). The Middle Iron Age St Catharine's Hill/Worthy Down style of the saucepan pot tradition was succeeded around the middle of the 1st century BC by southern Atrebatic types, in a distribution centred on Hampshire and extending into West Sussex. Other influences, from the 'Aylesford-Swarling' wheelthrown tradition, which is known at a small number of sites, have also been observed (Hamilton 1985, 225).

The Westhampnett assemblage appears to occupy a transitional position between these Middle and Late Iron Age traditions, including elements of both. Vessel forms such as the small biconical bowls with tooled decoration on the shoulder (e.g. ON 27024), derive from the 'saucepan pot' tradition, particularly the later varieties (compare, for example, Cunliffe 1991, fig. A:15, no. 11; 1976, 47), although the assemblage is dominated by high-shouldered, rounded, and ovoid jars and bowls, frequently cordoned, and with a range of complex burnished, tooled, and incised decorative motifs, all of which are Late Iron Age innovations. Decorative motifs from the 'saucepan pot' tradition also occur on forms introduced later: one high-shouldered jar (grave 20453, ON 27247) carries on the shoulder a developed form of the characteristic burnished diagonal hatching and rows of dots. Cross-hatching, intersecting arcs (both motifs on ON 27199 from grave 20338), crosses (e.g. grave 20654, ON 27353) and wavy lines (e.g. grave 20719, ON 27386) are all elements found within the 'saucepan' pot tradition, while Late Iron Age innovations are represented by horizontal motifs: cordoned, combed/incised, and tooled.

Parallels for vessel forms and decorative motifs are widely distributed, although scarce in West Sussex, and the paucity of comparable material from this area is highlighted by the fact that Sussex falls outside the scope of Thompson's otherwise wide-ranging type series

(1982). Parallels must therefore be sought more widely, both in southern England and, ultimately, continental Europe. The high-shouldered, cordoned jars with splayed or moulded feet, the jars of various shapes with shoulder corrugation and the biconical jars have all been identified within the so-called 'Aylesford-Swarling' tradition in south-east England from the earlier 1st century BC where the shouldered jars are often called pedestal urns (Birchall 1965; Cunliffe 1991, fig. A:29). All the forms listed above are relatively common (the high-shouldered, cordoned jars are in particular regarded as a 'type-fossil' of this period), and Thompson illustrates a large number of comparable examples from south-east England, although avoiding the use of the term 'Aylesford-Swarling', considering it too restrictive but nonetheless using the term 'Belgic' (1982).

The high-shouldered, cordoned bowls, are on the other hand, best paralleled within the southern Atrebatic style, along with the pedestalled bowls. One open-pedestalled bowl in particular (grave 20637, ON 27343) finds a very close parallel at Hengistbury Head, where the form occurs in Black Cordoned Ware imported from Armorica (Cunliffe 1987, ill. 218; Daire 1992) as well as being widely imitated amongst the native assemblage (Cunliffe 1987, ill. 162). The frequent occurrence of cordons and/or deep grooves on the shoulders of small bowls at Westhampnett is also a characteristic of the Armorican pottery, not just Black Cordoned Ware, found at Hengistbury Head. A bracelet of Kimmeridge shale from Dorset was found at Copse Farm, Oving, and may hint at the route by which imported pottery or its indigenous imitations which were then copied by the potters who made the Westhampnett vessels, arrived in the area (Bedwin and Holgate 1985, 232).

While parallels for various forms and elements may be found elsewhere in southern England, it is likely that direct contact with continental Europe in the early part of the 1st century BC accounts for at least some, and perhaps a very large part, of the parallels within England. For example, some of less common vessel forms, such as the corrugated bowls from grave 20484 (ON 27059, 27060), could be considered to derive from Aylesford-Swarling type vessels. Thompson illustrates six examples, all from Kent (1982, 347); these are all conical rather than straight-sided as the Westhampnett examples. However, continental European examples are also straight-sided (Hawkes and Dunning 1930, fig. 15, 43 from Brémontier-Merval 'Bellozane', Seine-Maritime; also La Motte du Vent, Wissant, Pas-de-Calais) and the Westhampnett examples can be seen as belonging to a widely distributed style. Interestingly, one other very similar vessel, slightly sagging-based with a light foot-ring, was found in a pipe trench at nearby Aldingbourne in 1974; the description of the flint-tempered fabric of this vessel, and the faint traces of surface slip, matches the Westhampnett examples almost exactly (Pitts 1979a, fig. 25a). Although the third corrugated bowl (grave 20629, ON 27356) has affinities with carinated, cordoned cups from south-east England which have a generally late date range according to Thompson (late 1st century BC into 1st century AD), the Westhampnett example has an unusually squat profile (compare Thompson 1982, 377, no. 7) better paralleled in continental Europe and at a slightly earlier date.

Comparison with material from the northern coastal regions of France and Belgium indicates that while some parallels may be found in both Armorica (Daire 1992) and Picardy (Tyers 1980), the parallels with continental Europe are with pottery from Normandy. Unfortunately the bulk of relevant material from there still derives from old excavations of cemeteries particularly from the lower reaches of the Seine, in the region of Rouen (Duval 1975), and Hawkes and Dunning's summary remains the most useful guide (1930; Cunliffe 1984b). That work explicitly concentrated on pedestal urns and so does not necessarily reflect the true range of contemporaneous types. As recent excavations on settlements provide a better framework (Lepert 1993) they have raised questions about the extent to which material from funerary and settlement contexts will be similar.

Nonetheless, there are clear parallels both in form and decorative motifs between Westhampnett and assemblages from Normandy dating from the later 2nd century BC onwards (e.g. Hawkes and Dunning 1930, figs. 8, 10, 12–16). Notable amongst these are the overall shape and flat-bases of the shouldered jars which are characteristic of the Normandy material (Hawkes and Dunning 1930, 201), as is the extensive use of cordoning. Individual elements, such as the chequerboard-like fields of decoration (e.g. grave 20083, ON 27058) which may well be a skeuomorph of painted decoration, are also found amongst this material (Hawkes and Dunning 1930, 218–22, fig. 18, 3). If the pot from grave 20566 is red-painted or red-slipped this would find parallels across much of western Europe in the Late Iron Age (Guichard 1987; Duval 1993), including Normandy (Hawkes and Dunning 1930, 201, 203). There is also a local parallel for painted decoration in the form of simple lines on a jar from Copse Farm, Oving (Hamilton 1985, 225, fig. 6, 12) but such linear decoration in lines or swags may essentially be an East Sussex tradition (Green 1980, 74; Chown 1946; Stevens 1987, 78), if this vessel is not an import.

These continental European affinities are also found at Hayling Island temple, Hampshire, where a pattern has been observed which is similar to that at Westhampnett. Middle Iron Age features are combined with wheel-turned forms which show continental European influences and which are dated to the earlier–mid 1st century BC on numismatic evidence (Downey *et al.* 1980; Briggs *et al.* 1992). There are some indications at Hayling Island that actual imported wares are present, in fabric types containing rock fragments of possible non-British origin (Downey *et al.* 1979; A.C. King pers. comm.).

Chronology

Largely as a result of the dearth of any number of well-dated assemblages from West Sussex dating from the 1st century BC and early 1st century AD, the dating of the Westhampnett cemetery assemblage is not without problems, which may be exacerbated by its identification as 'transitional', in the sense that it

incorporates a diverse range of forms which reflect influences from more than one well established chronological horizon.

On the evidence from sites such as Chalton site 15, in eastern Hampshire and Copse Farm, Oving it seems clear that saucepan pottery in the St Catharine's Hill/Worthy Down style continued well into the 1st century BC (Cunliffe 1976, 24, 46–7; Hamilton 1985, 225). At North Bersted a La Tène III brooch was associated with saucepan pottery (Bedwin and Pitts 1978, 339, fig. 23, 222) and at both Copse Farm, Oving and Carne's Seat, Goodwood Dressel 1, probably Dressel 1B were found. These associations would be consistent with a dating for the saucepan pottery down to the middle of the 1st century or even later.

The parallels with Hengistbury Head are important here, as this is a well-dated assemblage. Here the 'contact period' or Late Iron Age 1 phase (dated c.100–50 BC by Cunliffe) is characterised by the association of wheelthrown Armorican vessels and some local wheelthrown copies of these vessels, Italian amphorae of Dressel 1A type, handmade vessels in the local Middle Iron Age tradition, i.e. 'saucepan' pots, and also later forms (Cunliffe and Brown 1987, 309). The evidence for the association of Middle Iron Age forms with Armorican imports is in fact slight (Fitzpatrick forthcoming), but a date in the first half of the 1st century BC for the Hengistbury Head Late Iron Age 1 phase is still likely, suggesting that at least some elements of the Westhampnett assemblage, such as the small biconical bowls and the wide-mouthed cordoned bowls may be dated within the first half of the 1st century BC.

The late dating proposed by Thompson for Aylesford–Swarling or 'Belgic' pottery has generally been set quite late in the 1st century BC. In suggesting this Thompson followed Birchall who, on the basis of the eponymous sites, divided Aylesford-Swarling pottery into four groups; i) earliest, ii) early, iii) middle and, iv) late. The earliest well dated graves contained pottery belonging to the 'middle' group and, on the basis of the imported Roman bronze vessels found in some graves she suggested that a date range of *c.* 50/30–10 BC for this group, concluding that the 'earliest' and 'early' material should date to the first half of the 1st century BC (Birchall 1965, 290). This dating has been generally followed by Thompson, who tends to date most material after *c.* 30 BC (e.g. Thompson 1982, 16).

The dating ascribed to the Roman Republican metalwork requires revision (e.g. Boube 1991) but as Birchall's chronology was based largely on funerary assemblages it only dates the adoption of the cremation rite, not necessarily the development of a pottery style. The grave at Baldock-The Tene, Hertfordshire, suggests that cremation burial had been adopted in some parts of southern England by the middle of the 1st century BC (Stead and Rigby 1986, 51–61), and probably slightly earlier. A chronology for the Late Iron Age in south-east England based on find associations — brooches, coins, imported amphorae, etc, — from settlement contexts supports a longer chronology for the style (Haselgrove 1987, 94–101). Consequently there is no reason to date the Westhampnett assemblage to after 30 BC or even 50 BC on the basis of the general parallels with Aylesford-Swarling type material.

This is supported by the internal dating provided by the Westhampnett brooches, which span a comparatively short period. Identifiable brooches were recovered from 30 graves, all falling within the period 100–40 BC, and most within the range 90–50 BC. In general the profile of the brooch assemblage compares well with those from Hengistbury Head and Hayling Island.

There are, of course, many graves at Westhampnett which did not contain brooches and many of the vessel forms represented within the cemetery could be dated to the first half of the 1st century AD. For example, a similar range of vessel types occurs at the King Harry Lane cemetery, St Albans, Hertfordshire dated mainly to the period AD 1–60 (Stead and Rigby 1989). One argument against such a late dating at Westhampnett is the absence of any Gallo-Belgic imports, such as butt beakers and platters, or native copies of such vessels. The complete disparity between the Late Iron Age and Romano-British cemetery assemblages in terms of fabrics and vessel forms should also be considered as evidence of a gap in the use of the cemetery in the area excavated. The Romano-British cemetery has a suggested date range of AD 70–150 (see below), although many of the types represented could have been in circulation as early as the middle of the 1st century AD. One piece of evidence for the continuation in use of the Late Iron Age cemetery into the 1st century AD does exist, in the form of grave 20457, which contains what appears to be a standard Late Iron Age high-shouldered, cordoned jar in a grog-tempered fabric, together with a medium-sized jar of a distinctively Romano-British fabric (Q100) and form. It is noticeable, however, that this grave is sited within the circular space defined by the earliest burials and which was respected throughout the 1st century BC uses of the cemetery. Ultimately the even distribution of brooches throughout the cemetery (Fig. 112) and the slight evidence for the expansion eastwards of the cemetery suggests that brooches were being buried as pyre goods throughout the use of the cemetery.

The discernment of a chronological sequence within the cemetery assemblage is problematic, but there are hints that some chronological distinctions may be made. The presence of the small biconical bowls with shoulder decoration, of Middle Iron Age type, has been noted. While it could be argued that these represent a continuation of the Middle Iron Age ceramic traditions of the area into the Late Iron Age, and are therefore contemporary with the rest of the cemetery assemblage, the distribution of these vessels is striking (Fig. 113). Five occur in graves on the inner edge of the distribution, adjacent to the inner 'blank area', and four more are just behind this inner line. If the gradual spread of the cemetery from the central area outwards is accepted, a significant proportion of these vessels do fall within the 'earliest' band. The distribution of wheelthrown vessels, on the other hand, which might be expected to fall later in the sequence if there was a clear distinction between manufacturing techniques, tend to occur outside the inner band.

The local context

Having considered the overall ceramic traditions in which these vessel forms may be paralleled, it is

necessary to return to a closer scrutiny of the local ceramic framework, and examine the extent to which the Westhampnett funerary assemblage can be paralleled within domestic assemblages from the area. The linking of fabric types with other Westhampnett sites (*Volume 1*) has already been discussed, and it can be seen that there is some, but not a great deal of overlap. Area 5 provides the largest potentially contemporaneous assemblage for comparison, and here several fabrics can be matched, particularly the flint-tempered fabrics F2, F3, and F4, although in this case these fabric types appear to have a much longer currency, from at least the Middle Iron Age through to the Late Iron Age. This may also be the case for Area 4, where these three fabrics are matched again. It is interesting to note that grog-tempered fabrics are almost entirely absent from Area 4, and are scarce from Area 5. There is a general dearth of diagnostic vessel forms from either Areas 4 or 5, and those which are present are generally fairly nondescript. There is one shouldered bowl from Area 5 which is almost exactly paralleled within the Area 2 cemetery assemblage (compare grave 20148, ON 27095), but since this form has a well-attested Middle Iron Age origin (see above), in the absence of corroborative evidence it cannot be conclusively considered as demonstrating contemporaneity with the cemetery. Copse Farm, Oving, just 1 km to the south provides the closest parallels with the cemetery assemblage, in the form of jars with corrugated shoulders, cordoned jars and bowls, and splay-footed jar bases (Hamilton 1985, 225, figs 5–7). The associated amphorae and brooch suggest that the site is almost exactly contemporaneous. Further examples of corrugated sherds and splayed ('quoit') bases are known from North Bersted, where there is also earlier material (Morris 1978), and a similar composition is evident in the smaller group at Carne's Seat, Goodwood (Hamilton 1986).

While individual forms find parallels at these sites, however, the very different character of the assemblage from the cemetery should be emphasised. At Copse Farm 'Aylesford-Swarling' related pots of essentially similar form were found in different sizes (Hamilton 1985, 227). The larger storage vessels are absent from the cemetery, as are less common specialised vessels such as the colanders/cheese-making vessels (*ibid.*). The absence of amphorae from the cemetery is almost certainly through choice, and it is possible that Armorican imports were also excluded, though their imitations were chosen. In comparison with Copse Farm an extremely high proportion of the vessels from the cemetery are decorated and, as is considered below, there are clearly selected associations of vessels which may be correlated with the age of the deceased.

There is also a clear distinction between the proportions of fabrics found on settlements in the vicinity and at the cemetery. As with the Iron Age settlements at Westhampnett Areas 4 and 5 (see above), the proportion of grog-tempered vessels at Copse Farm, Oving is very small, only 2.4% of the number of sherds (Hamilton 1985, fabric 6). Grog-tempered vessels comprise an even smaller proportion at North Bersted (Morris 1978, 315) and Carne's Seat, Goodwood (Hamilton 1986, 43). At the cemetery grog-tempered fabrics comprise nearly 40% of the assemblage.

This variation seems unlikely to be chronological in origin. At North Bersted, a settlement which may be slightly earlier, flint-tempered fabrics accounted for 72% of the assemblage by sherd count, and quartz sand fabrics almost all of the remainder. At Copse Farm, which appears to continue slightly later than Westhampnett, flint-tempered fabrics comprise 55% and quartz sand-tempered 28% of the assemblage by sherd count. It may also be relevant that many of the vessel forms in the cemetery might be expected to have been wheelthrown but are obviously handmade.

This evidence suggests that traditional potting methods were being used and in many cases a particular fabric, grog, was being selected for the manufacture of pots. As a whole, the assemblage is distinguished by the high proportion of decorated vessels. If many of these pots were not specifically made for use and/or burial in the mortuary rituals, then at least they were carefully selected.

Vessels as Containers for Cremated Bone

In contrast to other documented instances of Late Iron Age cremation burials in south-east England (Whimster 1981, 157), the use of ceramic containers as receptacles for the cremated bone is a practice which is very poorly represented at Westhampnett, where it appears that the vast majority of the cremation burials were unurned. The bone may have been buried in cloth or leather bags. Further to the east and north, Aylesford type cremation burials are frequently contained within pottery vessels, in particular pedestal urns and wide-mouthed bowls (*ibid.*, 157; Birchall 1965). Although the evidence is slight, Westhampnett appears to have far more in common with burials outside this south-eastern zone, which are more frequently unurned, such as Owslebury, where only one of the 15 Iron Age cremation burials was urned (Collis 1977a; Whimster 1981, 158).

Only two certain urned burials were identified, from graves 20566 and 20750, with the addition of two possible urned cremation burials, one from grave 20053, the other being one component of a possible double burial in 20637 (the other burial in this grave was unurned). The burials in a further two graves (20199 and 20479) were combined ?urned and unurned. All four of the definite cinerary containers are of different types: one high-shouldered jar with multiple shoulder and body cordons, and horizontal combing on body (ON 27133), one bowl of uncertain form, highly burnished inside and red-finished outside (ON 27290), one wheelthrown, pedestalled bowl with multiple cordons (ON 27343), and a high-shouldered bowl with burnished lattice decoration (ON 27420). There are some cases where a few fragments of bone were found in the tops of vessels; this is most likely to result from the soil which filled the graves having contained scattered pyre debris, rather than the deliberate placement of the bones.

Vessels as Grave Goods

Nearly every Late Iron Age grave within the cemetery contained at least one pottery vessel, and this is a well-documented pattern in cemeteries of this period in southern England and beyond (Whimster 1981, 158–9).

The vast majority of graves (150 = 90%) were accompanied by pottery vessels. Of these, 56% included a single vessel. Much smaller numbers of graves contained two (27%), three (11%), or four (5%) vessels, up to a maximum of five (1%) (note that these totals include the very small number of vessels used as cinerary containers). With the exception of one burial (grave 20252), which contained fragments of two vessels, both of which appeared to have been subjected to burning, none the vessels accompanying burials showed any signs of having been either deliberately or accidentally burnt. Grave 20252 is atypical in that cremated bone was placed in each corner of the square grave and what appears to be pyre debris was then deliberately placed in the grave, including the remains of the two pots.

When the associations of the various vessels types within graves is considered a number of broad trends may be distinguished. Nearly all vessel forms can occur as single vessels, although the forms most commonly used in this way are high-shouldered jars (23 examples), ovoid jars (13 examples), and high-shouldered bowls (10 examples). Only pedestal bowls and ovoid bowls do not occur as single vessels. For graves containing two vessels, jars and bowls are often paired, with high-shouldered jars and high-shouldered bowls the most common association (7 examples). Although jars are generally paired with bowls, this is not always the case and two jars or two bowls of the same or different type, may occur together. The much smaller number of groups of three vessels always consist of either two jars and a bowl, or one jar and two bowls, never three jars or three bowls. Within trios both jars and bowls may be of the same or different types. This implies that the pairing of jars and bowls was maintained and the pairing of high-shouldered jars and bowls is found in five of the three vessel groups. Where two or more vessels of the same type occur within one grave, there rarely appears to have been a conscious effort to provide exact 'pairs'. The only example where deliberate pairing of two types has taken place is grave 20484, where two ovoid jars, with identical burnished decoration, and two corrugated bowls, were placed together.

It is clear that the pairing of jars with bowls is related to the analytical age group of the deceased (as defined below). This pairing is absent from 'children's' graves, but appeares in 24.1% of the graves of 'youths', becoming progressively more frequent in the graves of 'adults' (33.9%) and 'elders' (51.9%; Fig. 131). In contrast, single bowls were found in 62.5% of children's graves.

The same applies to decoration: decorative motifs, with the exception of neck cordons, rarely appear more than once within the same grave, even when vessels of the same type are present, although the techniques, and even the general motif type used may be duplicated. Ambiguous examples include grave 20092, with two vessels bearing curvilinear motifs, and grave 20654, with three forms of lattice decoration.

There is no clear association between form and fabrics (Table 23) but fabric types do appear to respect the 'pairing' of vessels within graves; for example, the high-shouldered bowl/high-shouldered jar pairings are frequently in the same fabric, usually either fabric G5 or F2. However, groups of three vessels or more always include more than one fabric type.

Despite the unusually high proportion of grog-tempered vessels found in the cemetery there is no clear association with age or sex categories. Although c. 60% of occurrences are in the graves of 'adults' or 'elders', this is in proportion to the age at death profile of the cemetery and the pattern for the burials of these age groups to contain more grave goods (Figs 119, 128). There seems little doubt, however, that grog-tempered vessels, frequently highly burnished and so darkened, were either made for, or specifically selected for burial. What may be a similar choice of grog-tempered pots for placing in graves is apparent at North Shoebury in southern Essex (Wymer and Brown 1995, 91).

The question of whether these vessels fulfilled a normal domestic function before their deposition in burials, or were specially manufactured for the funerary process, has been considered above. One further point which should be stressed is the relatively high quality of many of the cemetery vessels in comparison with nearby domestic assemblages. The surface treatments and decoration of these vessels required an amount of time and care, which is not apparent amongst the Middle/Late Iron Age material from either Westhampnett Area 5 or from Copse Farm, Oving, although obviously quantities at these sites are much smaller. The high quality of the cemetery vessels might indicate that they were either chosen from new, or specially made, for burial. They were certainly carefully selected for this purpose.

Pottery from Pyre-related Features

Fabric totals for all pyre-related features are given in Table 26 and it is apparent that there is a close correlation between the types of pottery found in the graves and the types found in pyre-related features. However, while some of the fabric types overlap, there are several fabric types from pyre-related features which are not represented amongst the grave assemblage. The 'new' fabrics, of which five were identified, are described below.

F1 Soft, moderately fine, slightly micaceous matrix; sparse, very poorly-sorted, subangular flint <4 mm; rare iron oxides <1 mm; handmade; irregularly fired.

F8 Soft, moderately fine sandy matrix; moderate, poorly-sorted subangular flint (some calcined) <3 mm; sparse iron oxides <2 mm; rare subrounded quartz <0.25 mm; firing as F1.

F11 Hard, moderately coarse matrix; sparse, poorly-sorted, subangular, calcined flint <1 mm; sparse, fairly well-sorted quartz <0.5 mm; rare iron oxides; rare fine mica; handmade; unoxidised with oxidised exterior surface.

G1 Soft, moderately fine, poorly-wedged matrix with a slightly soapy feel; moderate, poorly-sorted, subrounded quartz <1 mm; sparse, poorly-sorted grog <1 mm; rare iron oxides; uncertain manufacture; unoxidised with oxidised (pale orange-pink) margins.

G2 Hard, moderately fine matrix with a slightly soapy feel; sparse, poorly-sorted grog <1 mm; moderate, fairly well-sorted subrounded quartz <0.5 mm; possibly wheelthrown; unoxidised.

Table 26 Iron Age pottery fabrics from pyre-related features (no. sherds/weight in grammes)

	?Redeposited fabrics					*Fabrics paralleled within grave assemblage*											
Feature	*F1*	*F5*	*F8*	*F11*	*G1*	*F2*	*F3*	*F4*	*F6*	*G5*	*G7*	*Q5*	*Q7*	*Q10*	*Q11*	*RB*	*Total*
20121	–	–	2/70	–	–	5/10	16/64	5/26	28/218	12/160	2/15	2/7	–	–	1/13	2/3	75/586
20125	–	–	–	–	–	–	–	–	–	–	–	–	–	26/628	–	–	26/628
20128	–	–	–	–	–	1/24	1/3	5/27	–	1/5	–	21/129	1/3	–	6/128	–	36/319
20130	–	–	–	–	–	–	–	41/688	–	4/29	–	1/9	–	–	–	–	46/726
20212	–	–	–	–	–	–	–	–	–	–	–	37/108	–	–	–	–	37/108
20234	–	–	–	–	–	–	31/474	4/36	–	–	–	–	–	–	–	–	35/510
20250	–	–	–	–	–	11/264	2/19	–	–	–	–	–	–	–	–	1/6	14/289
20260	–	–	–	–	–	–	1/336	–	–	–	–	–	–	–	–	–	1/336
20266	–	–	–	–	18/45	–	–	–	–	–	5/15	–	–	–	15/64	–	38/124
20295	–	–	–	–	–	–	–	–	–	–	38/198	–	–	–	–	–	38/198
20300	–	–	–	–	–	–	–	–	42/182	–	–	–	–	–	–	–	42/182
20310	–	–	–	–	–	–	–	–	–	27/74	–	–	–	–	–	–	27/74
20318	–	–	–	–	–	5/30	–	–	–	1/3	–	–	–	–	–	–	6/33
20348	–	–	–	–	–	133/754	–	–	–	–	57/186	–	–	–	–	–	190/940
20357	1/4	–	–	–	–	–	–	–	–	2/8	–	–	–	–	–	1/9	4/21
20491	–	–	–	–	–	–	–	–	–	–	–	–	2/6	–	–	–	2/6
20546	–	–	–	–	–	–	–	–	–	–	–	–	113/868	–	–	–	113/868
20578	–	–	–	–	–	–	–	66/788	–	27/104	–	–	–	–	–	–	93/892
20599	–	–	–	–	–	–	–	64/604	–	–	–	–	–	–	–	–	64/604
20660	–	–	–	–	–	–	–	23/640	–	–	–	–	–	–	–	–	23/640
20717	–	1/5	–	1/18	–	–	1/7	–	–	1/4	–	–	35/202	–	–	–	39/236
Total	1/4	1/5	2/70	1/18	18/45	155/1082	52/903	208/2809	70/400	75/387	102/414	61/253	151/1079	26/628	22/205	4/18	949/8320

Table 27 Iron Age vessel forms from pyre-related features

Fabric	*F2*	*F3*	*F4*	*F6*	*F7*	*G5*	*G7*	*Q5*	*Q7*	*Q10*	*Q11*	*Total*
Jars												
High-shouldered	–	1	–	–	–	–	–	–	–	–	–	1
Rounded		–	–	–	–	–	–	–	–	1	–	1
Unknown form	–	–	2	–	–	–	–	1	1	–	–	4
Bowls												
Shouldered	–	–	1	1	–	–	–	–	–	–	–	2
Ovoid	–	–		–	–	–	1	–	–	–	1	2
Rounded	–	1	–	–	–	–	–	–	–	–	–	1
Unknown form	1	–	–	–	1	–	–	–	–	–	–	2
Unknown forms												
Rim/base	1	–	–	–	–	–	–	–	1	–	–	2
Rim only	1	–	–	–	–	1	–	–	–	–	1	3
Base only	–	–	–	–	–	1	–	–	1	–	–	2
Body only	–	–	1	–	–	–	1	–	–	–	–	2
Total	3	2	4	1	1	2	2	1	3	1	2	22

Table 28 Iron Age pottery from other features (no. sherds/weight in grammes)

Fabric	*F1*	*F2*	*F3*	*F4*	*F7*	*F9*	*F11*	*G5*	*Q5*	*Q7*	*Q11*	*Total*
Postholes												
20041	–	–	1/5	–	–	–	–	–	–	–	–	1/5
20411	–	–	1/2	–	–	–	–	–	–	–	–	1/2
20427	–	2/18	–	–	–	–	–	–	–	–	–	2/18
20429	–	5/10	12/46	–	–	–	–	–	–	–	–	17/56
20435	8/118	–	3/9	–	–	–	–	–	–	–	–	11/127
20508	–	1/23	–	–	–	–	–	–	–	–	–	1/23
20607	–	–	–	1/8	–	–	–	–	–	–	–	1/8
20639	–	–	1/3	–	–	–	–	–	–	–	–	1/3
20765	–	2/21	1/5	–	–	–	–	1/4	–	–	2/4	6/34
Pit 20681	–	–	–	–	–	–	–	–	–	3/10	–	3/10
Stakehole 20694	–	–	–	1/13	–	–	–	–	–	–	–	1/13
Ditch 20498	1/2	2/5	1/5	–	–	–	–	–	–	–	–	4/12
Enclosure 20562	–	5/39	2/8	–	–	–	–	–	–	–	–	7/47
Other features												
20163	–	–	–	–	–	–	1/18	6/126	–	–	–	7/144
20214	–	–	–	–	–	–	–	–	1/5	–	–	1/5
20341	–	–	1/1	–	–	–	–	–	–	–	–	1/1
20359	–	–	26/128	20/164	–	–	–	–	–	–	–	46/292
20474	–	–	–	–	–	–	–	19/56	–	–	–	19/56
20499	–	–	–	–	–	–	–	–	3/18	–	–	3/18
20530	–	–	1/2	–	1/15	2/18	–	–	–	–	–	4/35
Total	9/120	17/116	50/214	22/185	1/15	2/18	1/18	26/186	4/23	3/10	2/4	137/909

Of these five fabrics, four have been identified within other Iron Age assemblages from the Westhampnett sites; Fabric F11 is the only fabric which is restricted to Area 2 alone. Fabrics F1 and G2 have been identified within the Middle to Late Iron Age assemblage from Area 5; neither fabric can be closely dated within that date range due to the lack of diagnostic forms. Fabric F8 is likely to be of a similar Middle to Late Iron Age date range, occurring within the largely undiagnostic later prehistoric assemblage from Area 4. The small later prehistoric assemblage from Area 7, adjacent to Area 2, included a handful of sherds in Fabrics G1 and G2; again the dating of this assemblage is hampered by lack of diagnostic material, but is likely to be of Late Iron Age date.

The dating of these five fabric types, then, is somewhat ambiguous, but on general grounds is likely to fall within the Middle to Late Iron Age range, while their association with the graves means that they must be almost exactly contemporary. It may be noted that the 'new' fabrics are generally represented only by small quantities of undiagnostic body sherds, in each case occurring in only a single feature, while identifiable vessel forms, i.e. reconstructable profiles, from pyre-related contexts occur, with one exception, in fabric types matched within the grave assemblage. These individual sherds could therefore be residual or redeposited, as is likely to be the case for a single sherd in a coarsely flint-tempered fabric which is paralleled within the Middle Bronze Age assemblage from Area 4.

The vessel forms show a definite correlation with the cemetery assemblage. The forms identified are correlated by fabric type in Table 27. Only a restricted range of forms is represented, consisting of high-shouldered jars, both plain (Fig. 28, 20234) and cordoned (Fig. 17, 20128, ON 27559; Fig. 18, 20717), one rounded jar with tooled decoration on the shoulder (Fig. 22, 20125), high-shouldered, necked bowls (Fig. 28, 20300; 20660), ovoid, bead-rimmed bowls (Fig. 17, 20128, ON 27558, Fig. 12, 20295), rounded, everted rim bowls (Fig. 13, 20260, ON 27158), and bead-rimmed jars or bowls of uncertain form (Fig. 17, 20128, ON 27559; Fig. 28, 20250). There is one pedestal base (Fig. 13, 20310, ON 27176), which could derive from either a jar or bowl, and a few rim and base sherds which cannot be assigned to vessel type (Fig. 11, 20578; Fig. 28, 20546, ON 27285 and 27286; 20348, ON 27195 and 27204). All these forms may be paralleled within the range described for the cemetery assemblage, and the decoration, comprising shallow-tooled diagonal hatching and horizontal lines, and cordoning, can be likewise matched.

The main contrast between the pottery from the pyre-related features and the assemblage from the graves lies in the condition of the former. A very large proportion of the pyre-related pottery (40% by number of sherds) shows signs of leaching of inclusions, blistering, and warping, indicating their subjection to high temperatures, although the sherds are not all evenly affected. This is consistent with burning, and the supposition is that these vessels were burnt on the pyre, where the variation in temperature at various points within the pyre would account for the uneven burning of the sherds. Some of the vessels were apparently left at the pyre sites, perhaps being deliberately smashed, while others were subsequently redeposited in pyre-related features.

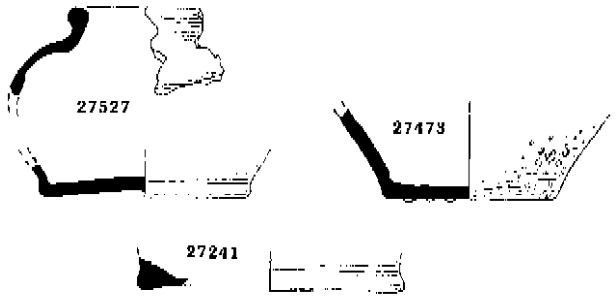


Figure 59 Iron Age pottery from miscellaneous contexts: 20359 ON 27257, rim and base of jar of unknown form, fabric F3, handmade; ON 27473, base of jar of unknown form), and clearance layer 20122 (ON 27241, base of jar of unknown form). Scale 1:4

These vessels, then, indicate part of the mortuary rituals not usually represented in the graves, which contain vessels which appear to have been deposited whole and unburnt. There are a few exceptions, such as the anomalous grave 20252 (see above), but otherwise a clear distinction may be seen between the 'grave goods', in the form of vessels placed in the graves, and 'pyre goods' which included vessels burnt on the pyre and which were disposed of in other ways. The quantities of pottery in the pyre-related features, however, is relatively small, and would not suggest that this process took place for every burial, although these vessels may also have been disposed of in other ways which were not recovered during the excavation.

Pottery from Other Contexts

Pottery from all other Iron Age features is quantified by fabric type in Table 28. Few of these features produced any quantity of pottery. Eleven fabric types are represented, of which eight are paralleled within the grave assemblage. Of the other three (F1, F9, F11), two are described above, the third below:

F9 Soft, moderately fine, slightly micaceous matrix; sparse, very poorly-sorted, subangular flint <5 mm; sparse to moderate carbonaceous material <5 mm; handmade; irregularly fired.

The parallels for fabrics F1 and F11 from the pyre-related features are discussed above. Fabric F9 was identified amongst the Iron Age assemblage from Westhampnett Area 5 but could not be closely dated there due to the absence of diagnostic material.

Diagnostic material within this group of pottery is likewise scarce. Sherds from clearance layer 20122 (not included in Table 28) and from pottery find spot 20359 (Fig. 59) included sufficient diagnostic sherds to be assigned to broad vessel form, in these cases jars of unknown form. All other pottery occurred as small quantities of plain, undiagnostic body sherds.

This group of pottery from miscellaneous features is really too small to draw any significant conclusions. Certainly the three more complete vessels may be

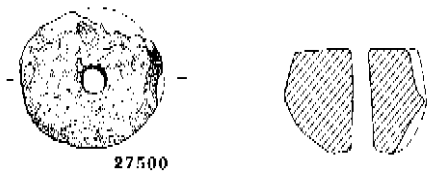


Figure 60 Fired clay biconical spindlewhorl in a flint-gritted fabric (ON 27500), unstratified. Scale 1:2

paralleled within the grave assemblage, and could be related to funerary activity on the site, perhaps deriving fom disturbed grave contexts, or from cremation-related activities. The very small quantities of other sherds, mainly from postholes and ditches, could be contemporary or, given the rather ambiguous dating evidence, could relate to slightly earlier activity on the site. It may be noted that a number of the Late Iron Age graves did include odd sherds of apparently redeposited pottery in a similar range of fabrics (not quantified or discussed here).

20 Fired Clay

A total of 48 fragments of fired clay (307 g) was recovered from contexts of Iron Age date, including graves, pyre-related features, and the foundation trenches of, and other features within, the shrines. The majority (38 fragments) comprised featureless fragments, possibly of structural derivation. Two pieces exhibited possible surface finishes, and one fragment with a wattle impression has been classed as daub; these three fragments all derived from pyre-related feature 20128. The presence of structural ironwork in some pyre sites and pyre-related features suggests that structural timbers were reused, and it may be that many of the undiagnostic fragments of fired clay derive from wattle and daub associated with the timbers. Similarly in the case of the small number of pieces from the shrines (20267 = 3 fragments; 20562 = 2; 20761 = 1) it may be that they derive from the superstructures of the buildings.

Four graves contained very small fragments (20002, 20071, 20268, 20729/20758), but these seem likely to have been incorporated fortuitously rather than have been deposited deliberately. However, one fragment from grave 20268 (ON 27521) was identified as possibly deriving from a portable object; this comprised what appeared to be a quarter-section of a roughly-shaped disc of c. 80 mm diameter in a soft, coarse, grog-tempered fabric (Fig. 83). The identification of the outer edge of the object is somewhat ambiguous, and its function is unknown. It could conceivably represent a large spindlewhorl, or an oven plate of the type that has been found on other Iron Age sites such as Danebury (Poole 1984). The context of the object, a grave, is interesting given the general dearth of similar items relating to domestic activities in graves and, indeed, throughout the Iron Age cemetery. It should, however, be noted that a biconical spindlewhorl in a coarse flint-tempered fabric (Fig. 60), probably of Iron Age date, was recovered from

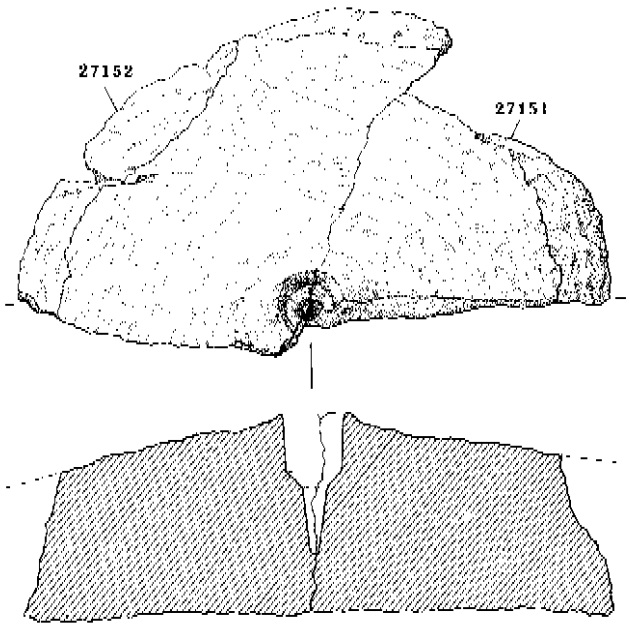


Figure 61 Conjoining quern fragments from postholes 20192 (ON 27151) and 20194 (ON 27152). Scale 1:4

the topsoil (not included in the total quantity given above).

Although virtually all the contexts lie in the northern half of the site, the quantities involved are very small. The only feature to produce more than five fragments was the pyre-related feature 20357 (21 fragments). It may be that the distribution is to be accounted for by a combination of the reuse, perhaps accidental, of wattle and daub as fuel on a few pyres and its subsequent dispersal, and the use of clay in the superstructure of the shrines.

21 Worked Stone

A total of 30 pieces of worked stone was identified, comprising 29 fragments from querns and a possible whetstone or rubber. The latter and three of the quern fragments were found in cleaning layers (20000, 20122), the remainder of the quern fragments were found in three Late Iron Age contexts.

Querns

Quern fragments were identified on the basis of form and lithology. Most fragments exhibited obvious indications of use such as abraded and smoothed surfaces. All the pieces from Iron Age contexts, and probably the unstratified material also, are made from the Lodsworth Greensand, which is a 'hard, medium-grained, greenish–grey or brownish–grey, silicified, glauconitic, quartz sandstone with characteristic swirls and stringers of dark cherty material, rich in glauconite'

(Peacock 1987, 62). Westhampnett lies well within the known distribution area of Lodsworth querns, and the quarry identified by Peacock lies only 17 km to the north.

Four joining fragments were recovered from pyre site 20318, while 21 fragments were used as packing stones in two adjacent postholes 20192 (ON 27151) and 20194 (ON 27152) on the south-west side of the cemetery. Three of the fragments from 20192 joined with one from 20194 to form c. 40% of a lower rotary stone in which the spindle-hole has not penetrated fully (Fig. 61). Two other joining fragments from 20194 appear to represent part of an oval feed-pipe from an upper stone. Both of these traits are characteristic of the 'Sussex' querns quarried from Lodsworth in the Iron Age (Peacock 1987, 69).

Whetstone

One fragment which may be from a whetstone was recovered from cleaning layer 20122, in the vicinity of the Iron Age cemetery. The stone is a grey/brown, quartzitic sandstone, which has the appearance of an elongated water worn pebble. It is not obviously worked but may have been deliberately broken to produce a flat surface. As it was unstratified the stone has not been thin-sectioned but it may derive from Pleistocene gravels (F. Roe pers. comm.). The stone itself may be compared with the whetstones, sometimes in the form of unworked pebbles, of Lower Devonian Staddon Grit from south Devon which occur frequently in Iron Age contexts at Danebury and Maiden Castle (e.g. Roe 1991).

22 Burnt Flint

A total of 344 (8231 g) fragments of burnt flint was recovered from stratified contexts, 14 of which produced above average quantities. Thirteen of these contexts were loosely clustered around the sites of pyres and pyre-related features but there is also a correlation between burnt flint and worked flint in that 11 of these contexts also included finds of worked flint of Mesolithic–Neolithic date which is assumed to be have been redeposited (*Volume 1*). This suggests that some of the burnt flint is also residual, but some of it may also have been burnt by the funeral pyres. The small quantities involved suggest that any burning of flint in the Late Iron Age was accidental.

23 Catalogue of Iron Age Graves

On Figs 62–107 pyre/grave goods are shown at scale 1:2, pottery at 1:4. * denotes vessel containing cremated bone.

Grave 20001 (Fill 20002)

(Figs 38; 62)
SU 89562.0/06711.6; grave cut not recognised.
Unurned cremation burial; location of cremated bone (153.8 g) not recorded; older mature/older adult; possible female. Sheep/goat or pig, and unidentified animal bone. Blue/green staining.

ON 27621: Iron, rectangular staple fragments, MNI = 2; mineral-preserved wood present (ash, *Fraxinus* sp.); possible vessel repair staples (*JW*); length of largest fragment 28 mm.
ON 27000: High-shouldered, bead-rimmed bowl (Form B133), fabric F2; single horizontal groove under rim; handmade.
ON 27001: High-shouldered, necked pedestal bowl (Form B115), fabric G5; double neck cordons; single cordon above base; burnished; handmade.
ON 27002: High-shouldered, necked pedestal bowl (Form B114), fabric G5; neck cordon; burnished; handmade.

Grave 20005 (Fill 20006)

(Figs 37; 62)
SU 89552.0/06701.0; grave cut not recognised.
Unurned cremation burial; 98.8 g of cremated bone; older mature/older adult. Blue/green staining.

Vessel to NW of cremated bone.
ON 27003: Lower two-thirds of high-shouldered jar (Form J101), fabric F3; multiple burnished horizontal lines on girth; burnished lattice on lower half; handmade.

Grave 20008 (Fill 20007)

(Figs 38; 63)
SU 89558.8/06701.0; grave cut not recognised.
Unurned cremation burial; location of cremated bone (182.2 g) not recorded; adult. Unidentified animal bone. Blue/green staining.

ON 27008: Lower two-thirds of high-shouldered bowl (Form B101), fabric F2; burnished cross-hatching on lower half; handmade.
ON 27009: Rim and base of jar of unknown form (Form R1), fabric F3; multiple burnished horizontal lines; burnished; possibly the same vessel as 27010 (below) but no adjoining sherds; handmade.
ON 27010: Body and base sherds of jar of unknown form (Form J012), fabric F3; multiple burnished horizontal lines; burnished lattice decoration, burnished; possibly the same vessel as 27009 (above) but no adjoining sherds; handmade.

Grave 20010 (Fill 20009)

(Figs 37; 62)
SU 89551.4/06695.5; circular, length: 0.3 m, width 0.25 m, depth 0.15 m.
Unurned cremation burial; location of cremated bone (1.1 g) not recorded; older infant/juvenile.

Vessel in centre of cut.
ON 27007: Biconical, bead-rimmed bowl (Form B431), fabric F4; burnished diagonal lines on shoulder; handmade.

Grave 20014 (Fill 20013)

(Figs 37; 62)
SU 89553.5/06699.7; grave cut not recognised.
No cremated bone recovered.

ON 27005: Flat base of bowl of unknown form (Form B001), fabric F3; burnished; handmade.

Grave 20015 (Fill 20016)

(Figs 37; 63)
SU 89550.3/06699.0; grave cut not recognised.
No cremated bone recovered.

ON 27011: High-shouldered, necked bowl (Form B110), fabric F3; burnished lattice decoration on girth; handmade.

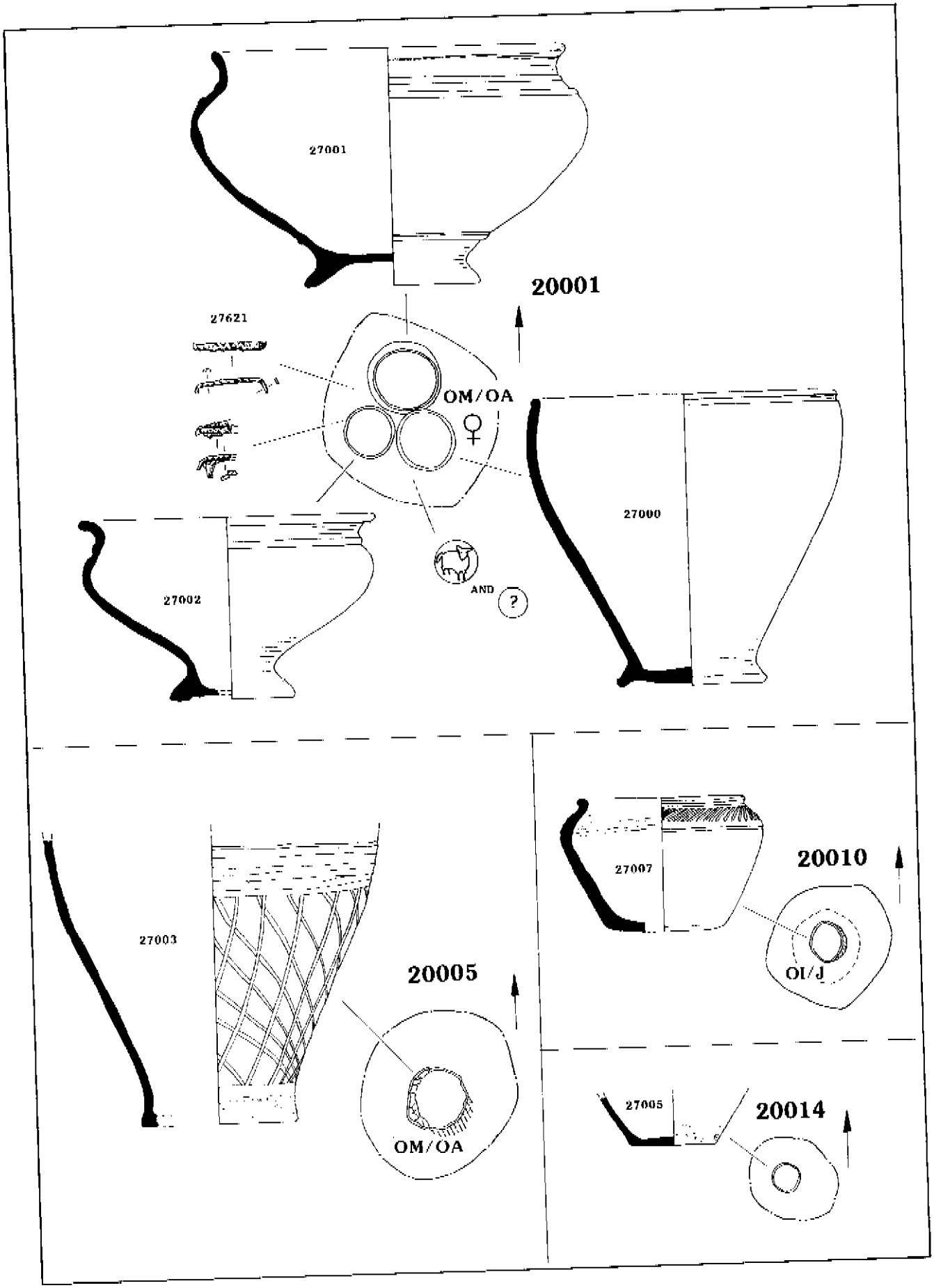


Figure 62 Graves 20001, 20005, 20010, 20014

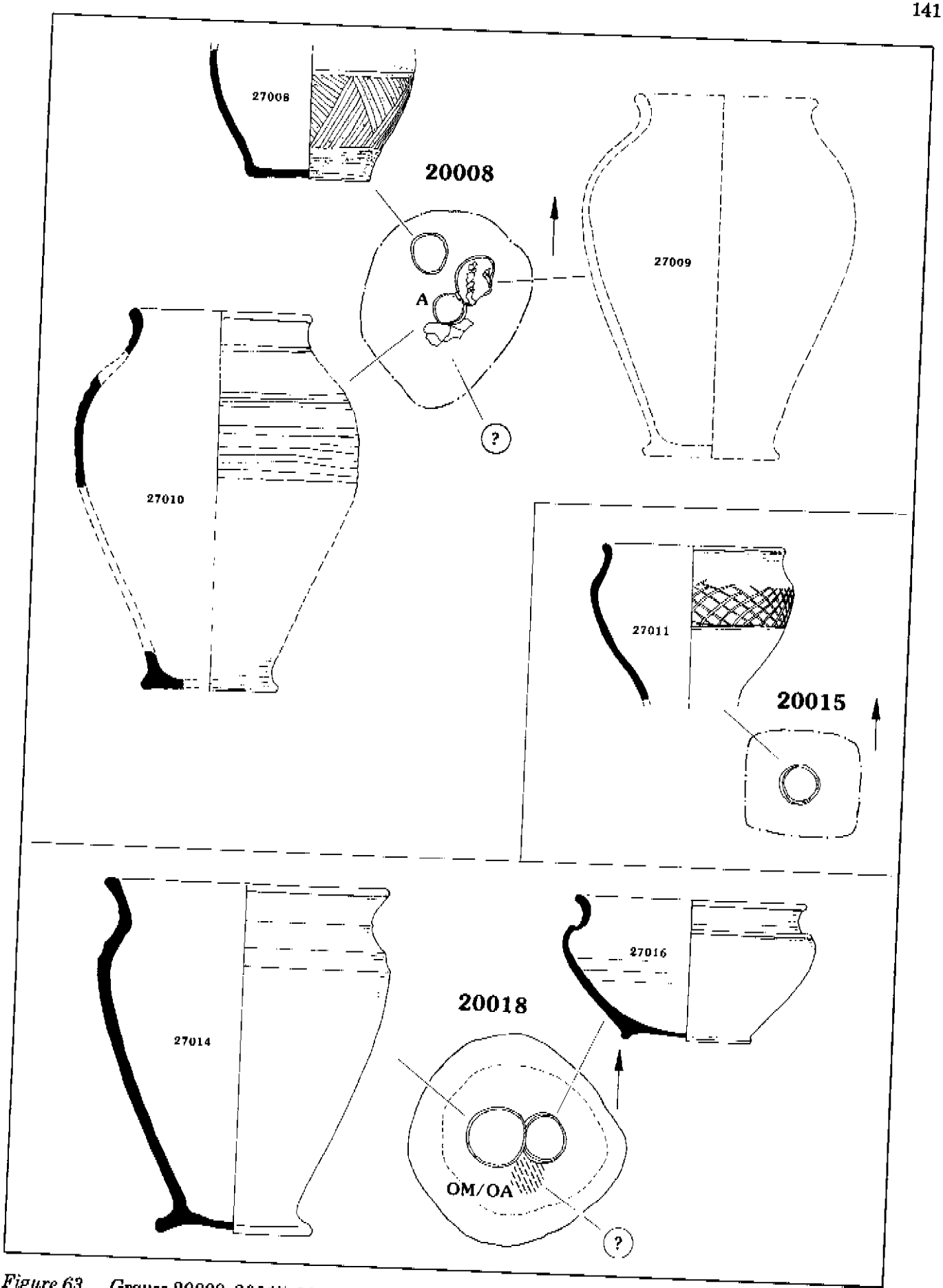


Figure 63 *Graves 20008, 20015, 20018*

Grave 20018 (Fill 20019)

(Figs 38; 63)
SU 89557.0/06699.4; circular, length 0.64 m, width 0.6 m, depth 0.28 m.
Unurned cremation burial; cremated bone (128 g) in S of cut; older mature/older adult. Unidentified animal bone

Vessels to NE and NW of cremated bone.
ON 27014: High-shouldered, necked jar (Form J113), fabric G5; shallow corrugation on shoulder; handmade.
ON 27016: High-shouldered, necked bowl (Form B113), fabric G5; neck cordon; badly laminating; handmade.

Grave 20021 (Fill 20020)

(Figs 37; 64)
SU 89553.5/06699.0; grave cut not recognised.
Unurned cremation burial; 243.1 g of cremated bone; adult; possible male. Pig and sheep/goat bone.

Vessel to W of cremated bone.
ON 27502: Iron, brooch; type: probably Feugère 2a; width of spring 13 mm.
ON 27004: High-shouldered jar (Form J101), fabric G5; paired horizontal grooves on girth; burnished; hand made.

Grave 20023 (Fill 20022)

(Figs 38; 63)
SU 89557.5/06700.5; grave cut not recognised.
Unurned cremation burial; 427.1 g of cremated bone; adult. Sheep/goat or pig bone.

Vessel to SE of cremated bone.
ON 27015: Flat base of vessel of unknown form (Form U001), fabric F3; burnished; handmade.

Grave 20025 (Fill 20024)

(Figs 37; 64)
SU 89553.0/06700.0; grave cut not recognised.
Unurned cremation burial; 152.2 g of cremated bone; adult; possible female. Sheep/goat or pig, and unidentified animal bone.

Vessel to E of cremated bone.
ON 27006: High-shouldered, necked jar (Form J113), fabric F2; neck cordon; handmade.

Grave 20027 (Fill 20026)

(Figs 34; 64)
SU 89555.7/06719.5; circular, length 0.5 m, width 0.52 m, depth 0.35 m.
No cremated bone recovered.

Vessels in SW of cut.
ON 27023: High-shouldered, necked jar (Form J111), fabric G7; ?comb-tooth impressions in vertical zigzag lines; burnished; handmade.
ON 27024: Biconical, bead-rimmed bowl (Form B431), fabric F2; burnished diagonal lines in band on shoulder, bounded by two rows of burnished dots; burnished; handmade.

Grave 20029 (Fill 20028)

(Figs 38; 65)
SU 89555.8/06694.8; circular, length 0.37 m, width 0.35 m, depth 0.17 m.
No cremated bone recovered.

Vessel in centre of cut.
ON 27629: Cu alloy globules; weight <1 g; not illustrated.
ON 27017: High-shouldered jar (Form J103), fabric F2; multiple paired horizontal grooves; burnished; post-firing repair holes along ancient break; handmade.

Grave 20031 (Fill 20030)

(Figs 43; 65)
SU 89557.2/06693.5; irregular, length 0.63 m, width 0.40 m, depth 0.14 m (SU 89/06).
Unurned cremation burial; cremated bone (141.9 g) in W of cut; adult; possible female.

Vessel to east of cremated bone.
ON 27019: Flat base of jar of unknown form (Form J001), fabric F3; single horizontal groove above base; burnished; handmade.

Grave 20032 (Fill 20033)

(Figs 38; 65)
SU 89559.5/06696.0; grave cut not recognised.
0.1 g of cremated bone.

ON 27018/27029: Ovoid, everted rim jar (Form J223), fabric G5; corrugated shoulder; multiple burnished, wide-spaced horizontal lines below shoulder; hand made.

Grave 20035 (Fill 20034)

(Figs 43; 65)
SU 89558.0/06688.5; grave cut not recognised.
Unurned cremation burial; 413.6 g of cremated bone; adult. Sheep/goat and possibly pig, and unidentified animal bone. Blue/green staining.

Vessel to NW of cremated bone.
ON 27021: Lower half of high-shouldered jar (Form J102), fabric F4; burnished, handmade.

Grave 20039 (Fill 20038)

(Figs 38; 66)
SU 89561.7/06703.0; grave cut not recognised.
Unurned cremation burial; 290.7 g of cremated bone; mature/older adult. Unidentified animal bone. Blue/green staining.

Vessel to SE of cremated bone.
ON 27030: Iron, bracelet; diam. c. 73 mm.
ON 27022: Moulded base of jar of unknown form (Form J003), fabric G5; double horizontal groove above base; poor condition — leached and friable; burnished; handmade.

Grave 20043 (Fill 20042)

(Figs 37; 66)
SU 89550.0/06696.5; circular, length 0.47 m, width 0.38 m, depth 0.33 m.
Unurned cremation burial; cremated bone (381.6 g) in N of cut; adult; possible female.

Vessels situated to S of the cremated bone.
ON 27564: Iron, brooch; type: indeterminate; length of largest fragment 19 mm.
ON 27630: Iron, melted globule; weight 1 g; not illustrated.
ON 27020: High-shouldered, necked jar (Form J112), fabric F2; neck and shoulder cordons; burnished; handmade.
ON 27025: Rounded, necked bowl (Form B313), fabric F6; horizontal groove around neck; handmade.
ON 27026: Ovoid, bead-rimmed bowl (Form B231), fabric G7; single horizontal groove below rim; burnished; handmade.
ON 27561/27779: Bone, pair of cheek pieces with oval perforations located centrally along the longitudinal axis. Blue/green staining. Two terminals are simply decorated with incised lines; length of more complete example 95 mm;

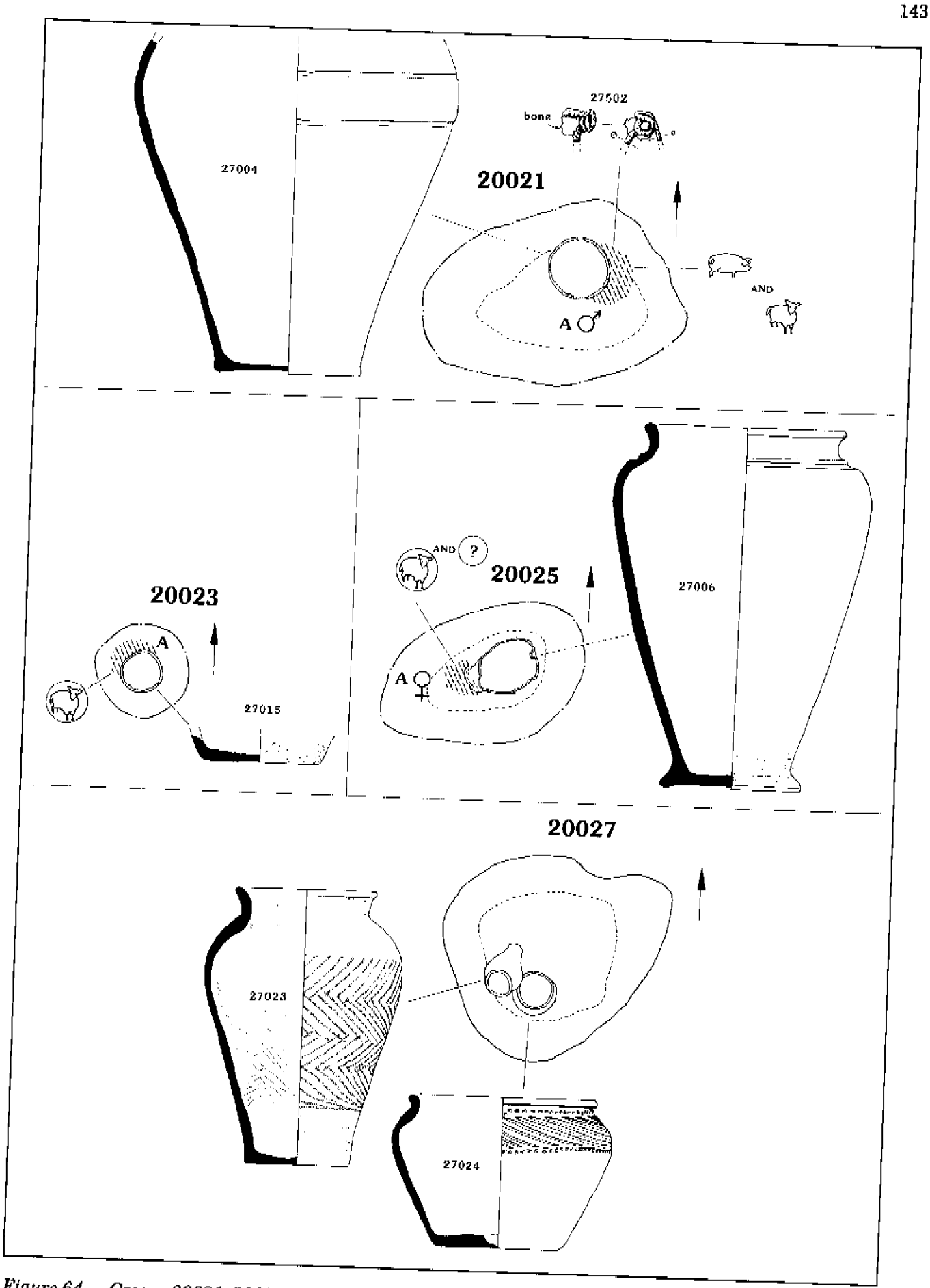


Figure 64 *Graves 20021, 20023, 20025, 20027*

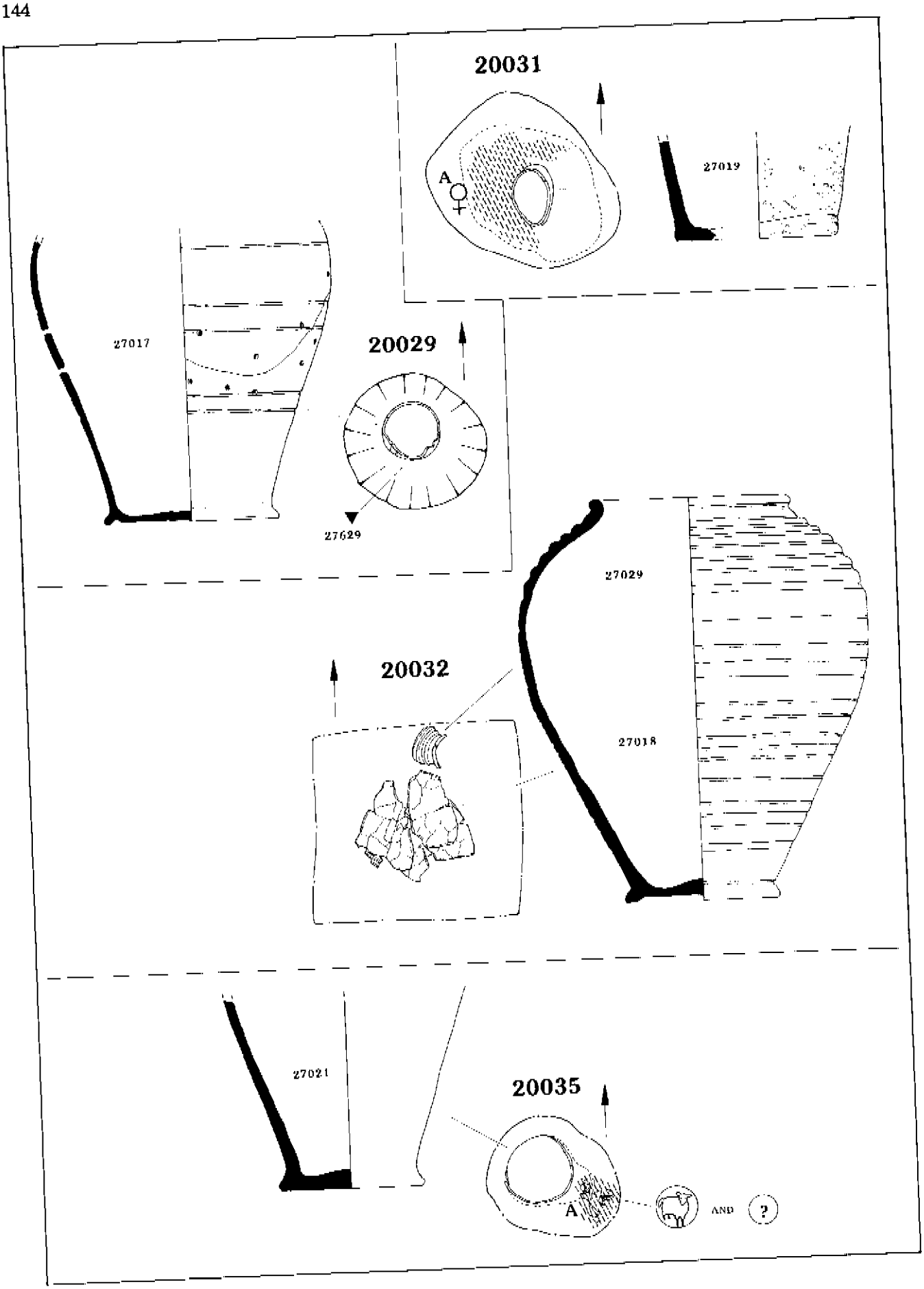


Figure 65 *Graves 20029, 20031, 20032, 20035*

thickness of wall 4 mm; external diam. 17 mm; internal diam. 7 mm.

Grave 20045 (Fill 20044)

(Figs 43; 67)
SU 89557.5/06691.0; grave cut not recognised, but at least 0.90 m wide.
Unurned cremation burial; 184.3 g of cremated bone; young/mature adult. Unidentified animal bone. Blue/green staining.

Vessels to E and W of cremated bone.
ON 27027: Flat base of vessel of unknown form (Form U001), fabric F3; burnished; handmade.
ON 27032: Splayed base of jar of unknown form (Form J002), fabric G5; burnished; handmade.
ON 27033: Splayed base of vessel of unknown form (Form U002), fabric F3, handmade.
ON 27034: Splayed base of jar of unknown form (Form J002), fabric G5; burnished; handmade.

Grave 20048 (Fill 20049)

(Figs 38; 66)
SU 89555.5/06699.5; grave cut not recognised.
No cremated bone recovered.

ON 27031: Rounded, bead-rimmed bowl (Form B321), fabric G7; burnished; handmade.
ON 27035: Base of high-shouldered jar (Form J103), fabric G5; burnished; horizontal tooling at base; handmade.

Grave 20051 (Fill 20050)

(Figs 43; 67)
SU 89559.0/06690.0; circular, length 0.70 m, width 0.66 m, depth 0.25 m.
Unurned cremation burial; cremated bone (44.8 g) in E of cut; subadult/adult. Unidentified animal bone.

Vessels to W and NW of cremated bone.
ON 27047: High-shouldered, necked jar (Form J113), fabric G5; band of burnished lattice below shoulder; horizontal combed rilling on lower half; neck and shoulder cordons; burnished; handmade.
ON 27048: High-shouldered, necked jar (Form J112), fabric F6; burnished; handmade.

Grave 20053 (Fill 20054)

(Figs 37; 67)
SU 89546.2/06702.5; grave cut not recognised.
?Urned cremation burial; 541.3 g of cremated bone; older mature adult; probable female. Cattle, pig, possibly sheep/goat, and unidentified animal bone.

*ON 27036: Ovoid, everted rim jar (Form J222), fabric G5; neck cordon; corrugated from shoulder to girth; burnished; leached (?burnt) on one side; handmade.

Grave 20055 (Fill 20056)

(Figs 37; 68)
SU 89554.0/06696.2; oval, orientation ENE–WSW, length 0.72 m, width 0.38 m, depth 0.18 m.
Unurned cremation burial; cremated bone (167.3 g) in SE of cut; older mature/older adult. Blue/green staining.

Vessels to N and W of cremated bone.
ON 27044: Iron, crescent-shaped knife; mineral-preserved ?leather (*JW*) on one side; length 89 mm.
ON 27045, subdivided into 27685–9: Iron, five rectangular collars; mineral-preserved horn and wood (species unidentified, but probably a diffuse porous species); length of largest fragment 53 mm.
ON 27038: High-shouldered jar (Form J103), fabric F2; multiple burnished horizontal lines, wide spaced on lower half; single cordon on girth; burnished; wheelthrown?
ON 27042: High-shouldered, necked bowl (Form B113), fabric F2; burnished; handmade.

Grave 20057 (Fill 20058)

(Figs 37; 68)
SU 89552.5/06696.6; oval, orientation ESE–WNW, length 0.51 m, width 0.30 m, depth 0.28 m.
Unurned cremation burial; cremated bone (605.1 g) in centre of cut; older mature/older adult; possible female. Unidentified animal bone.

Vessel to N of cremated bone.
ON 27039: Ovoid, everted rim jar (Form J223), fabric G5; neck and shoulder cordon; multiple burnished horizontal lines, wide spaced on body; wheelthrown.

Grave 20060 (Fill 20059)

(Figs 42; 69)
SU 89554.0/06693.0; circular, length 0.37 m, width 0.32 m, depth 0.18 m.
Unurned cremation burial; cremated bone (116.9 g) in SE of cut; adult.
Vessel to NW of cremated bone.

ON 27043: Biconical, everted rim jar (Form J421), fabric F3; shallow corrugation (multiple cordons) on shoulder; spalled surface ; burnished; handmade.

Grave 20061 (Fill 20062)

(Figs 38; 68)
SU 89555.5/06683.5; grave cut not recognised.
Unurned cremation burial; 8.2 g of cremated bone; subadult/adult.

ON 27040: Rim of vessel of unknown form (Form R1), fabric F2; handmade.

Grave 20064 (Fill 20063)

(Figs 37; 69)
SU 89552.5/06700.5; circular, length 0.49 m, width 0.39 m, depth 0.23 m.
?Unurned cremation burial; location of cremated bone (4.3 g) not recorded; subadult/adult.

Vessel in N of cut.
ON 27046: Biconical, bead-rimmed bowl (Form B431), fabric F3; burnished diagonal lines on shoulder; burnished; handmade.

Grave 20071 (Fill 20070)

(Figs 38; 68)
SU 89554.4/06700.3; circular, length 0.38 m, width 0.33 m, depth 0.26 m.
Unurned cremation burial; cremated bone (595.8 g) in W of cut; younger mature adult; probable female. Unidentified animal bone. Blue/green staining.

Vessel to E of cremated bone.
ON 27050: High-shouldered jar (Form J103), fabric G5; neck and shoulder cordons; band of multiple tooled horizontal lines, narrow spaced, on lower half; burnished; handmade.
ON 27052: Clinker.

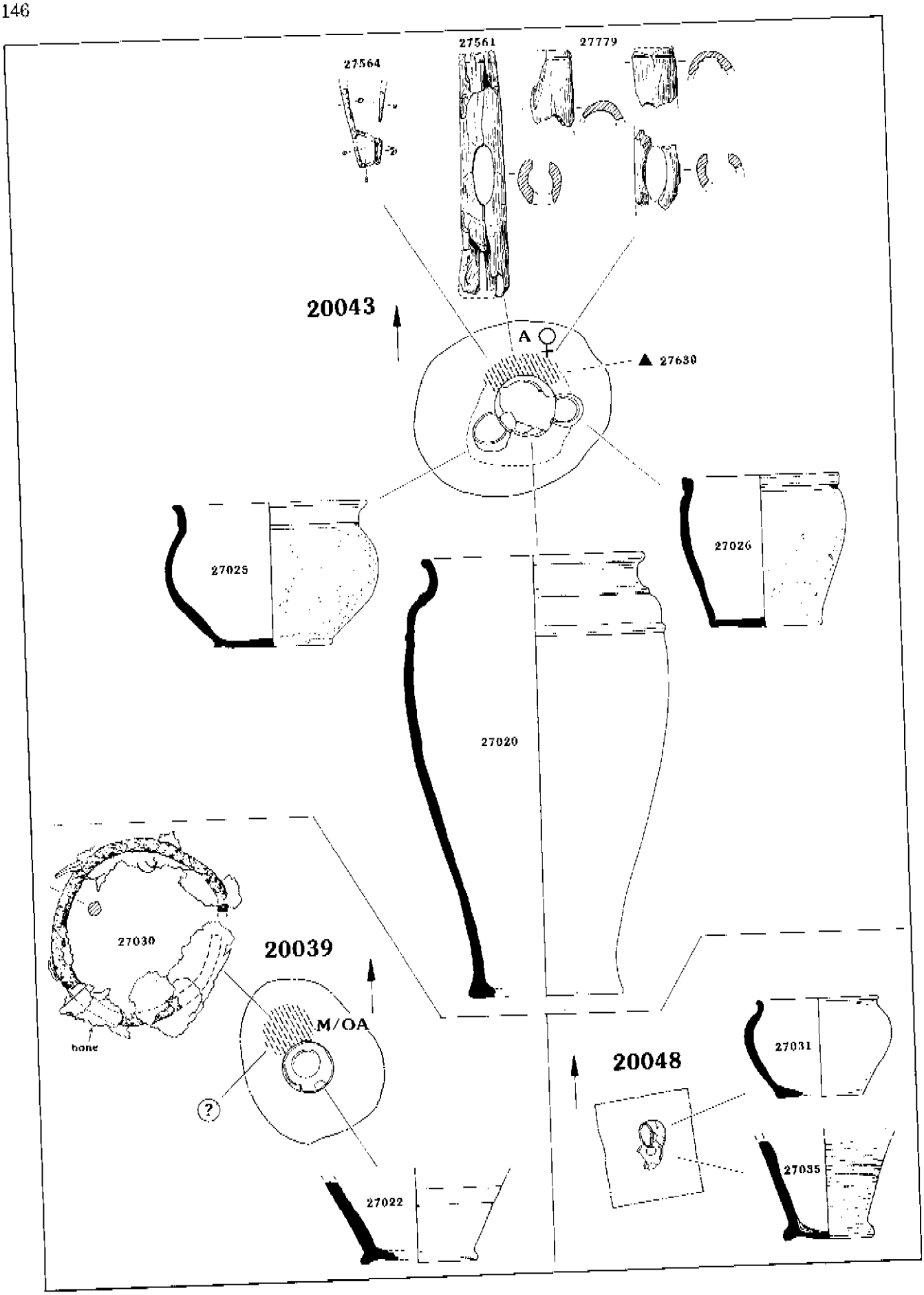


Figure 66 Graves 20039, 20043, 20048

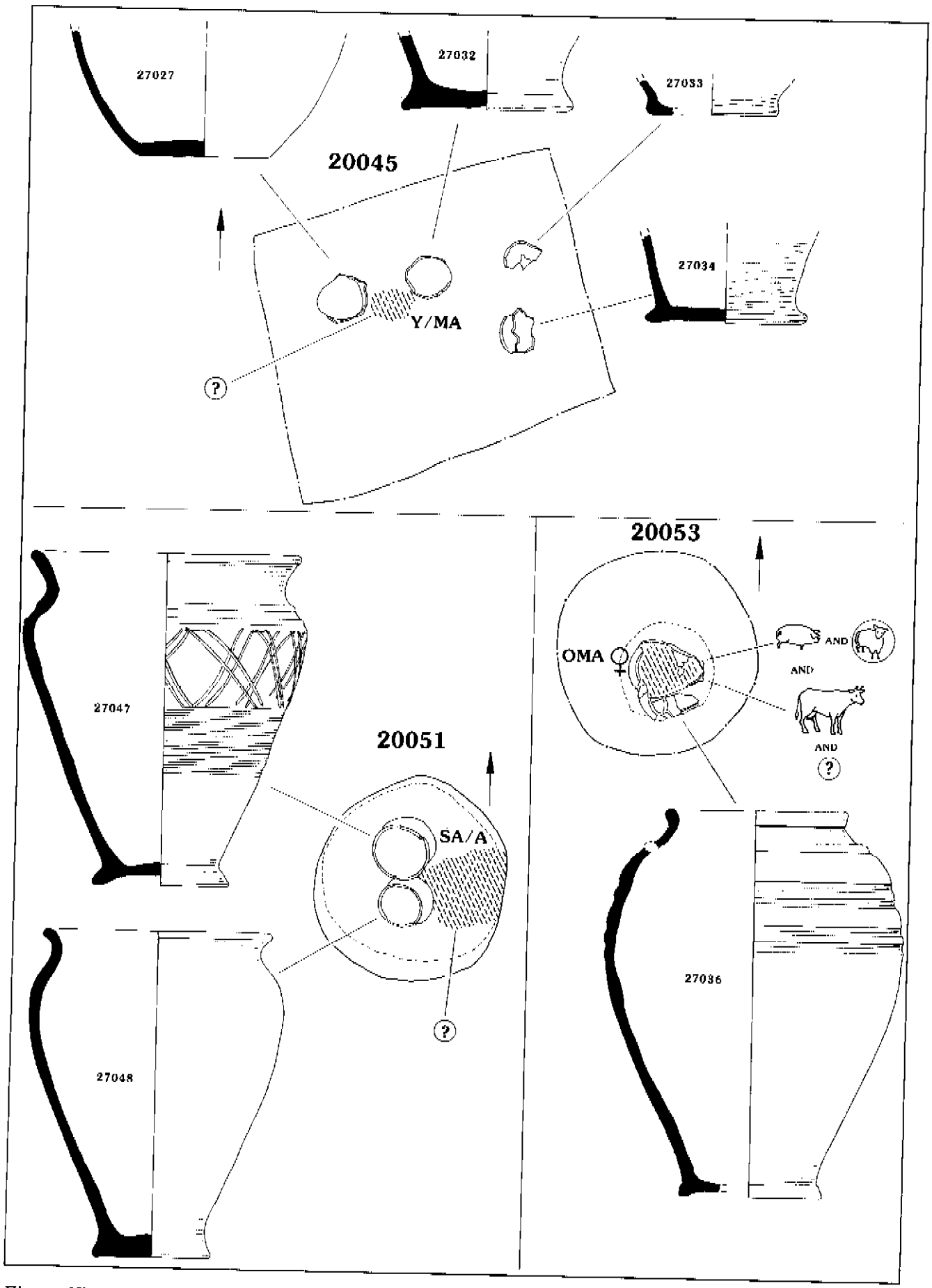


Figure 67 *Graves 20045, 20051, 20053*

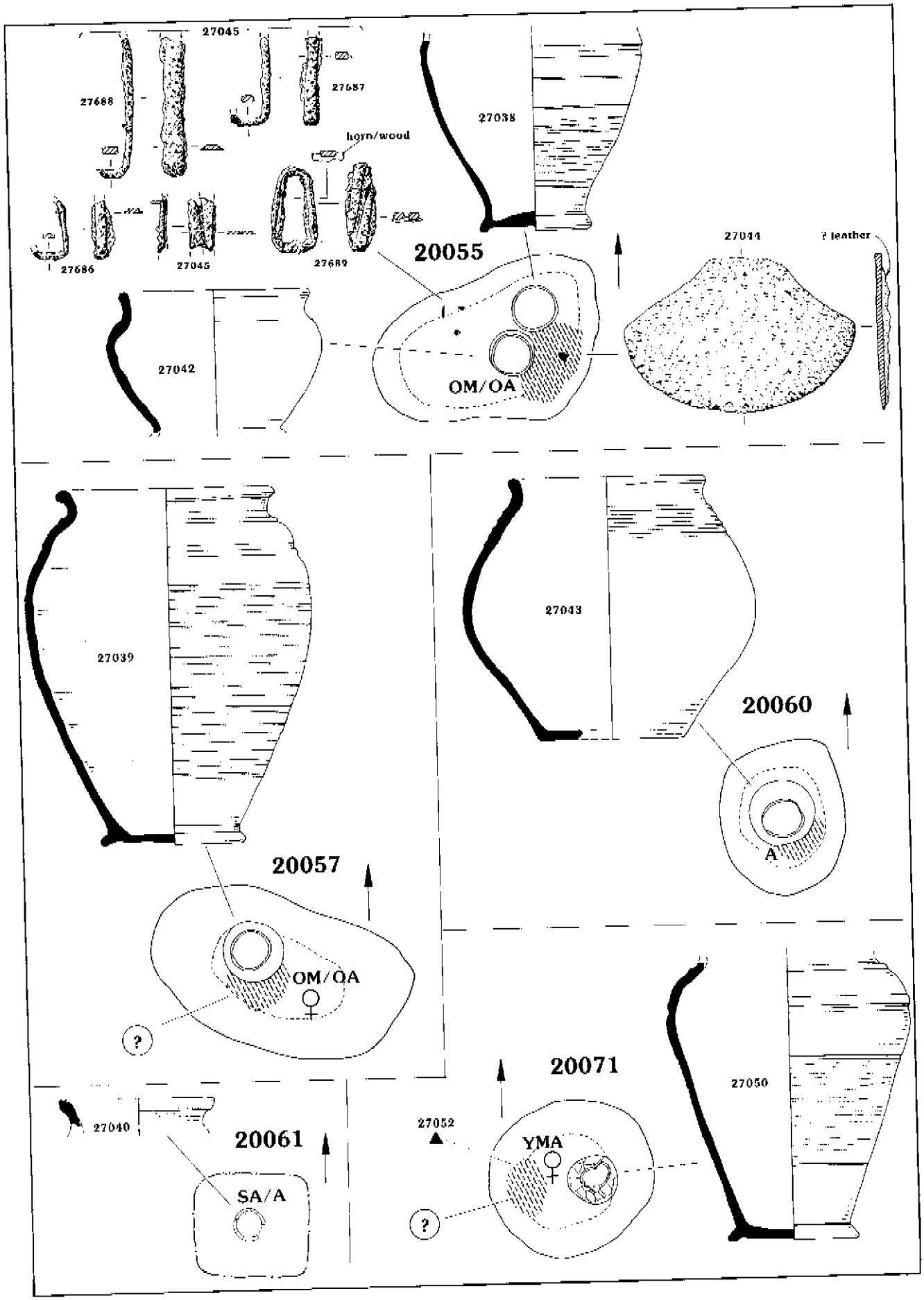


Figure 68 Graves 20055, 20057, 20060, 20061, 20071

Grave 20073 (Fill 20074)
(Figs 37; 69)
SU 89552.2/06698.0; circular, length 0.79 m, width 0.61 m, depth 0.19 m.
Unurned cremation burial; location of cremated bone (154.8 g) not recorded; older subadult/adult. Pig and unidentified animal bone. Blue/green staining.

Vessel in centre of cut.
ON 27053: High-shouldered, bead-rimmed jar (Form J131), fabric F7, burnished; handmade.

Grave 20080 (Fill 20079)
(Figs 38; 69)
SU 89558.5/06715.2; circular, length 0.56 m, width uncertain, depth 0.05 m.
Unurned cremation burial; cremated bone (86.9 g) in centre of cut; adult.

Vessel to SE of cremated bone.
ON 27076: no vessel details.

Grave 20083 (Fill 20082)
(Figs 38; 69)
SU 89560.0/06694.6; circular, length 0.53 m, width 0.49 m, depth 0.23 m.
Unurned cremation burial; cremated bone (10.1 g) in SE of cut; subadult/adult.

Vessel to NW of cremated bone.
ON 27631: Cu alloy, globule, weight <1g, not illustrated.
ON 27058: Ovoid, everted rim jar (Form J222), fabric F2; neck cordon; burnished wavy lines in vertical and horizontal bands; double groove above base; burnished; handmade.

Grave 20084 (Fill 20085)
(Figs 37; 69)
SU 89552.7/06698.4; shape not known, as west edge cut by Grave 20073.
No cremated bone recovered.

Vessel in NW of cut.
ON 27054: Splayed base of vessel of unknown form (Form U002), fabric Q10; burnished; handmade.

Grave 20087 (Fill 20086)
(Figs 38; 70).
SU 89560.0/06702.0; circular, length 0.40 m, width 0.30 m, depth 0.29 m.
Unurned cremation burial; cremated bone (450.4 g) against shallow NE side of cut; mature/older adult.

Vessels to S of cremated bone.
ON 27632: Iron, brooch pin fragment; type: indeterminate; length 9 mm.
ON 27059: High-shouldered, necked jar (Form J113), fabric G7; neck cordon; burnished; handmade.
ON 27069: Rounded, everted rim bowl (Form B321), fabric F2; single horizontal groove on shoulder; sooted; burnished; handmade.
ON 27070: Lower half of high-shouldered bowl (Form B101), fabric G6; burnished wavy lines on lower half; handmade.

Grave 20089 (Fill 20088)
(Figs 34; 70)
SU 89558.5/06717.0; circular, length 0.60 m, width 0.57 m, depth 0.37 m.
Unurned cremation burial; cremated bone (999.2 g) in centre of cut; older mature adult; possible female. Unidentified animal bone. Blue/green staining.

Vessels to NE and SW of cremated bone.
ON 27534: Iron, brooch; type: Feugère 2a; length 86 mm.
ON 27060/27063: Ovoid, necked jar (Form J212), fabric F6; multiple paired horizontal grooves; burnished; lower half (27060) used as a lid on 27062; handmade.
ON 27062: High-shouldered, necked jar (Form J113), fabric G7; single neck cordon; burnished; handmade.

Grave 20091 (Fill 20090)
(Figs 38; 69)
SU 89561.0/06700.5; probably circular (but cut on east by Ditch 20105); length 0.54 m, depth 0.20 m.
Unurned cremation burial; cremated bone (140.3 g) in SE of cut; adult. Unidentified animal bone.

Vessel to east of cremated bone.
ON 27061: Everted rim and base of jar of unknown form (Form J021), fabric F4; handmade.

Grave 20092 (Fills 20081 and 20093)
(Figs 37; 72)
SU 89551.0/06698.2; circular, length 0.30 m, width 0.30 m, depth 0.12 m.
Unurned cremated burial; cremated bone (356.4 g in 20093) in W of cut (location of 3.3 g in 20081 not recorded); older mature/older adult, possible female. Unidentified animal bone. Blue/green staining.

Vessels to E of the cremated bone.
ON 27056: Rounded, everted rim bowl (Form B321), fabric F6; horizontal grooves on neck and shoulder; burnished intersecting wavy lines on lower half; burnished; handmade.
ON 27057: High-shouldered, everted rim jar (Form J121), fabric F3; double burnished wavy line around girth, double horizontal groove on neck/shoulder; burnished; handmade.
ON 27524: Splayed base of jar of unknown form (Form J002), fabric F4; burnished; handmade (single sherd recovered from fill).

Grave 20095 (Fill 20094)
(Figs 38; 71)
SU 89559.0/06699.0; square, orientation: E–W, length 1.02 m, width 0.92 m, depth 0.25 m.
Unurned dual cremation burial; cremated bone (252.5 g) in SE of cut; older infant/young juvenile and older subadult.

Vessels to N and NW of cremated bone.
ON 27633: Gold, foil fragment; length 4 mm.
ON 27064: Ovoid, everted rim jar (Form J223), fabric G5; corrugated shoulder; multiple tooled horizontal lines, narrow spaced, in three bands on lower half; single groove above base; burnished; handmade.
ON 27067: High-shouldered, bead-rimmed jar (Form J131), fabric G7; three horizontal burnished lines on shoulder; burnished; handmade.
ON 27072: High-shouldered, necked jar (Form J110), fabric G7; furrowed neck cordon (single); ?comb-tooth impressions in vertical zigzag lines; burnished; handmade.
ON 27073: Ovoid, bead-rimmed bowl (Form B231), fabric F2; shoulder cordon; burnished cross-hatching on lower half; burnished; handmade.
ON 27074: High-shouldered, everted rim bowl (Form B121), fabric G7; burnished; handmade.

Grave 20097 (Fill 20096)
(Figs 38; 72)
SU 89560.8/06698.0; grave cut not recognised.
Unurned cremation burial; 22.7 g of cremated bone; subadult/adult.

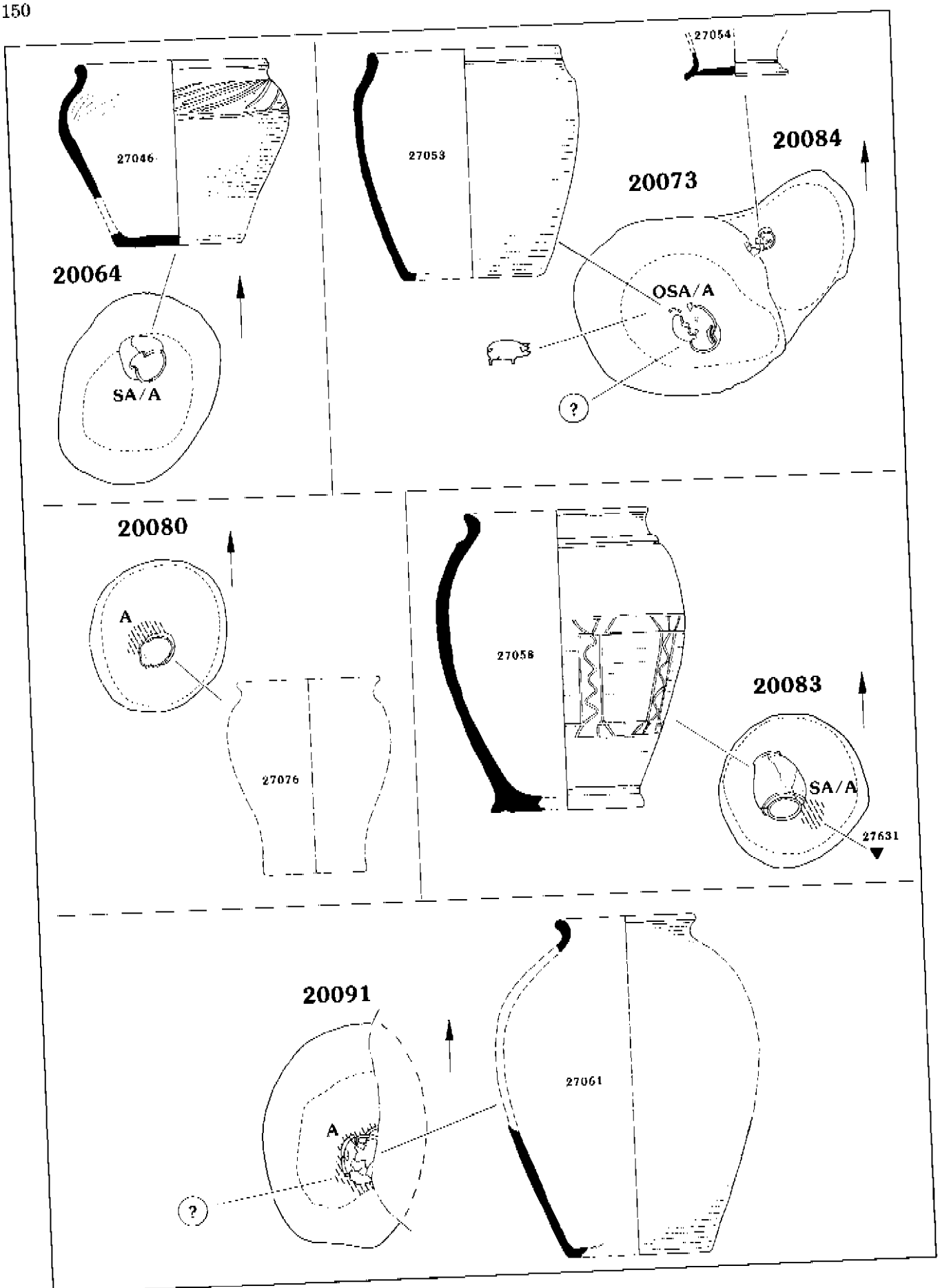


Figure 69 *Graves 20064, 20073, 20080, 20083, 20084, 20091*

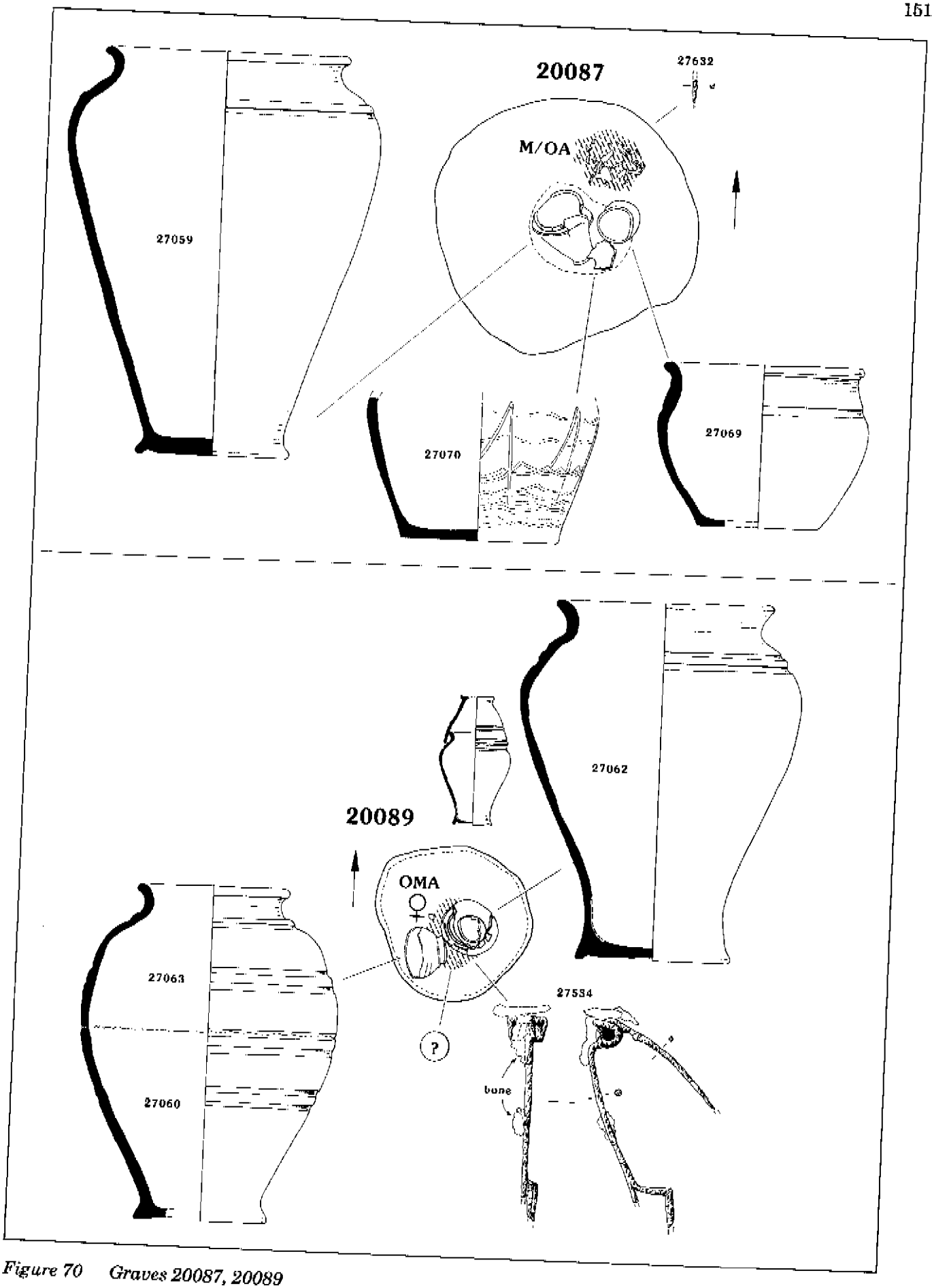


Figure 70 *Graves 20087, 20089*

Vessel to SE of cremated bone
ON 27634: Iron, sheet fragment; length 3 mm; not illustrated.
ON 27065: High-shouldered, necked bowl (Form B113), fabric G8; double groove on shoulder; burnished; wheelthrown.

Grave 20098 (Fill 20099)

(Figs 37; 72)
SU 89546.3/06713.0; circular, length 0.54 m, width 0.40 m, depth 0.12 m.
Unurned cremation burial; cremated bone (57.8 g) in centre of cut, subadult/adult.

Vessel at SW of cremated bone.
ON 27066: Rounded, necked bowl (Form B312), fabric G5; double neck cordon; burnished; handmade.
ON 27548: Rim of vessel of unknown form (Form R1), fabric F3; burnished; handmade; (sherds recovered from fill).

Grave 20101 (Fill 20100)

(Figs 38; 72)
SU 89563.8/06705.0; circular, length 0.20 m, width 0.20 m, depth 0.34 m.
Cremation burial; location of cremated bone (10.0 g) not recorded; subadult/adult.

Vessel at NW of cut.
ON 27068: Ovoid, everted rim jar (Form J222), fabric F2; neck and shoulder cordons; two horizontal bands of burnished lattice on upper half; vertical panels of burnished cross-hatching on lower half; burnished; handmade.

Grave 20116 (Fill 20117)

(Figs 37; 72)
SU 89546.0/06715.0; grave robbed during course of excavation.
Unurned cremation burial; 65.1 g of cremated bone; adult.

Grave 20132 (Fill 20131)

(Figs 38; 73)
SU 89562.5/06698.0; irregular, length 0.65 m, width 0.43 m, depth 0.22 m.
Unurned cremation burial; cremated bone (262.0 g) in centre of cut; ?older adult. Sheep/goat bone.

Vessels to NW and SE of cremated bone.
ON 27085: Iron, brooch; type: Feugère 2a; length 117 mm.
ON 27082: High-shouldered, necked jar (Form J113), fabric G5; neck cordon; multiple cordons on lower half; horizontal incised rilling on lower half; burnished; handmade.
ON 27084: High-shouldered, everted rim bowl (Form B121), fabric F6; burnished; sooted ?exterior; handmade.

Grave 20134 (Fill 20133)

(Figs 38; 72)
SU 89557.0/06701.3; circular, length 0.53 m, width 0.42 m, depth 0.16 m.
Unurned cremation burial; cremated bone (564.9 g) in west of cut; older mature/older adult.

ON 27083: Iron, brooch; type: Feugère 2a; length 64 mm.

Grave 20140 (Fill 20139)

(Figs 34; 74)
SU 89558.5/06720.0; grave cut not recognised.
2.3 g of cremated bone.

ON 27111: Cu alloy, sheet object; length of largest fragment 59 mm.
ON 27090: Moulded base of jar of unknown form (Form J003), fabric F2; handmade.
ON 27091: Rounded, everted rim bowl (Form B323), fabric F2; double neck cordon; burnished vertical lines on lower half; handmade.
ON 27092: Rounded, bead-rimmed bowl (Form B331), fabric F3; shallow corrugation on shoulder; burnished; handmade.
ON 27100: Moulded base of jar of unknown form (Form J003), fabric F3; interior surface in poor condition; burnished; handmade.

Grave 20142 (Fill 20141)

(Figs 34; 74)
SU 89557.0/06724.3; shape unknown as cut to south by Feature 20163, length 0.58 m, depth 0.19 m.
Unurned cremation burial; cremated bone (118.5 g) in N of cut; subadult/adult. Sheep/goat bone.

Vessels to SE and SW of cremated bone.
ON 27099: Cu alloy, unidentified 'molten' object; length 13 mm.
ON 27088: High-shouldered, necked jar (Form J113), fabric G5; burnished; handmade.
ON 27089: High-shouldered, necked jar (Form J113), fabric C5; neck cordon; multiple horizontal burnished lines, wide spaced, on lower half; burnished; interior abraded; handmade.

Grave 20144 (Fill 20143)

(Figs 38; 73)
SU 89555.5/06696.0; grave cut not recognised.
?Cremation burial; 0.7 g of cremated bone; ?subadult/adult.

ON 27093: Small, crudely made, ovoid, bead-rimmed bowl (Form B231), fabric F2; burnished; handmade.
ON 27097/27098: Small, crudely made, ovoid, everted rim bowl (Form B221), fabric F2; burnished; handmade.

Grave 20146 (Fill 20145)

(Figs 38; 75)
SU 89556.0/06697.2; square, orientation N–S, length 0.68 m, width 0.58 m, depth 0.25 m.
Unurned cremation burial; cremated bone (174.0 g) in NE of cut; adult.

Vessels to S and SW of cremated bone.
ON 27094: Ovoid, everted rim jar (Form J221), fabric F2; burnished chevrons on shoulder; burnished; handmade.
ON 27096: Rounded, bead-rimmed bowl (Form B331), fabric F3; burnished; handmade.

Grave 20148 (Fill 20147)

(Figs 38; 75)
SU 89556.5/06698.0; grave cut not recognised.
Unurned cremation burial; 30.9 g of cremated bone; subadult/adult.

Vessel to SW of cremated bone.
ON 27095: Biconical, bead-rimmed bowl (Form B431), fabric F3; two bands of burnished diagonal lines on shoulder, defined by rows of burnished dots; burnished; handmade.
ON 27549: Plain body sherds from unknown vessel form (Form P1), fabric F4; handmade; (single sherd recovered from fill, not illustrated).

Grave 20149 (Fill 20150)

(Figs 34; 75)
SU 89559.5/06722.5; circular, length 0.66 m, width 0.58 m, depth 0.22 m.
?Unurned cremation burial; cremated bone (142.3 g) and vessel distributed throughout fill; subadult/adult.

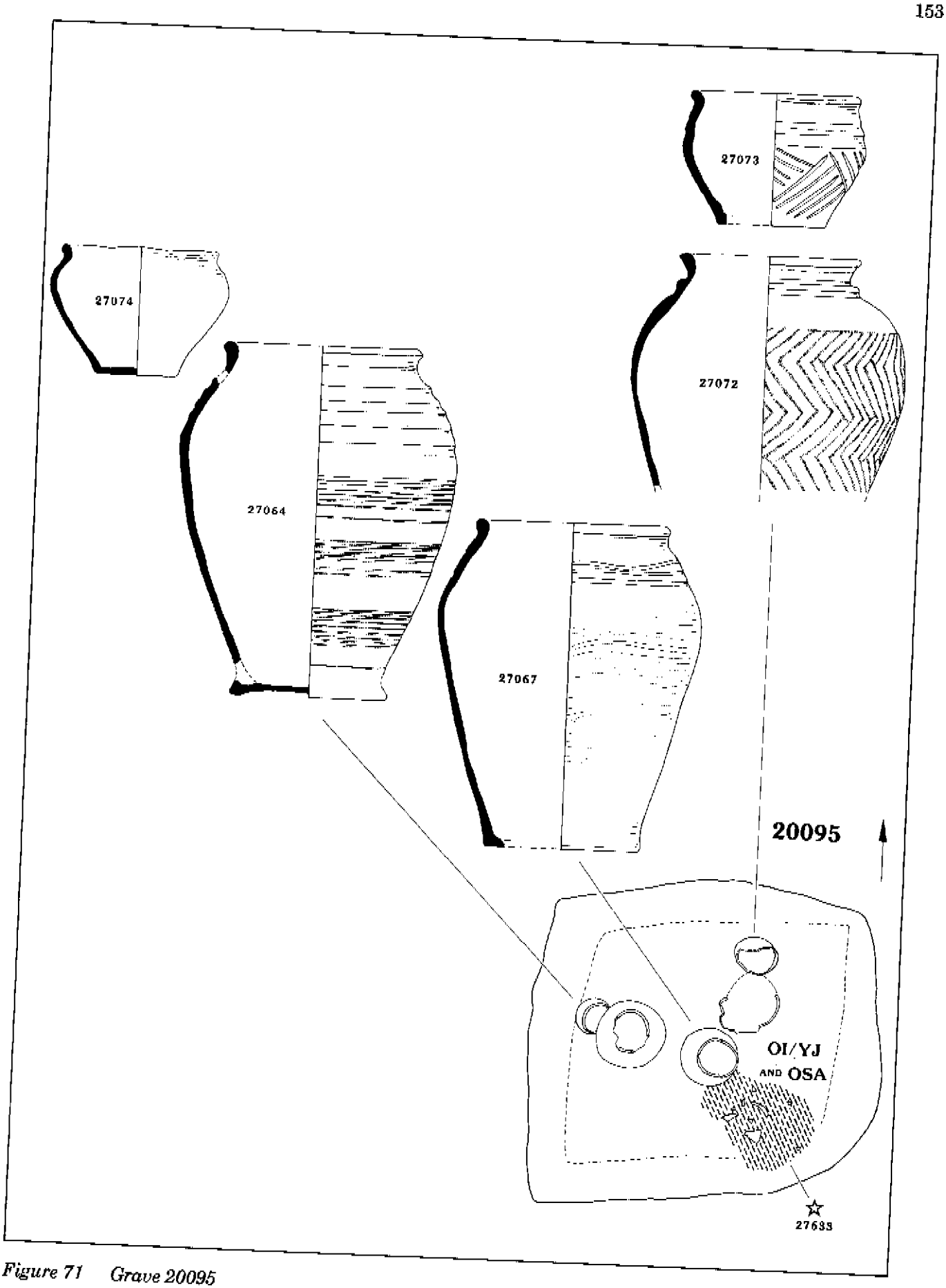


Figure 71 *Grave 20095*

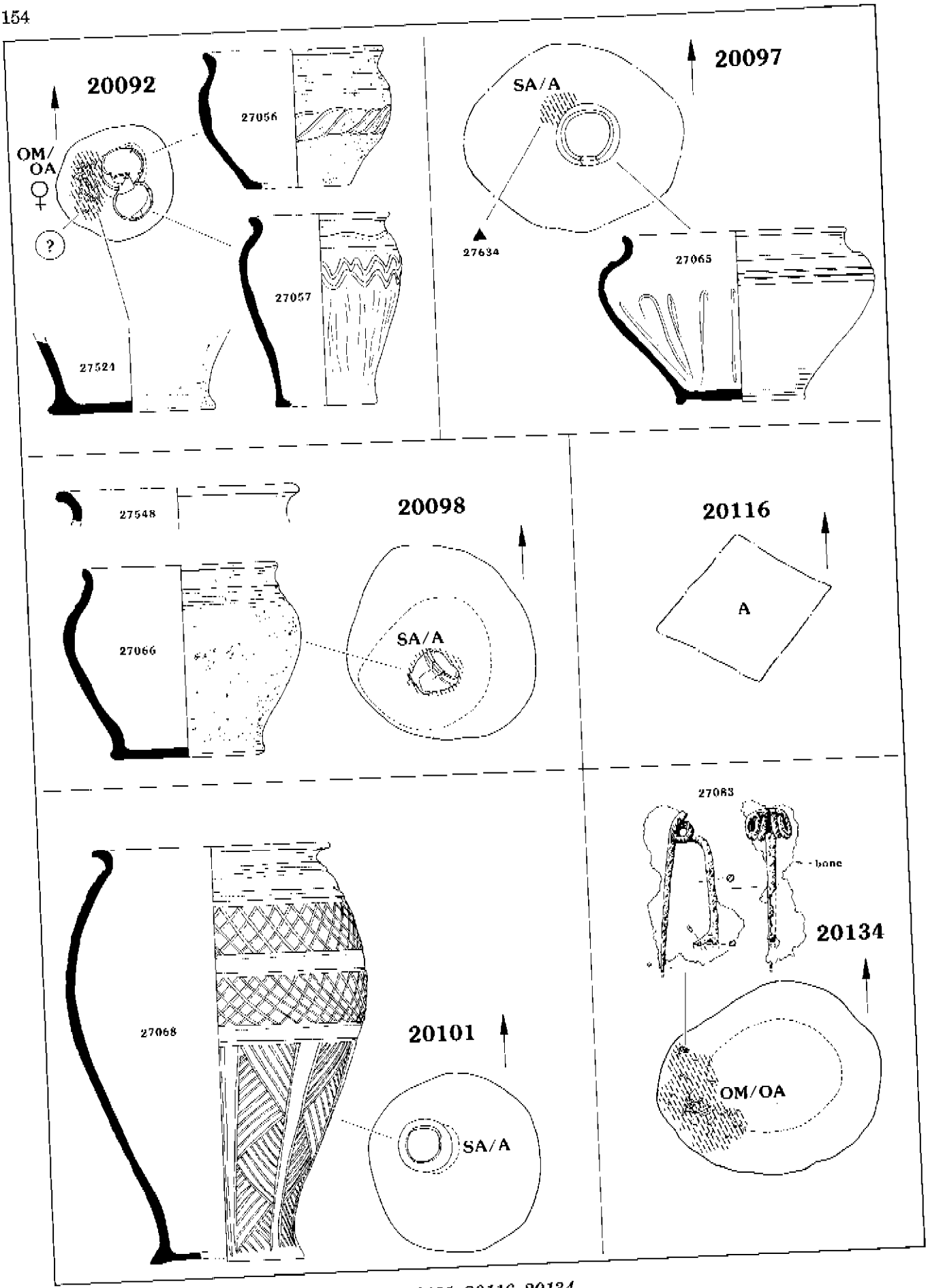


Figure 72 *Graves 20092, 20097, 20098, 20101, 20116, 20134*

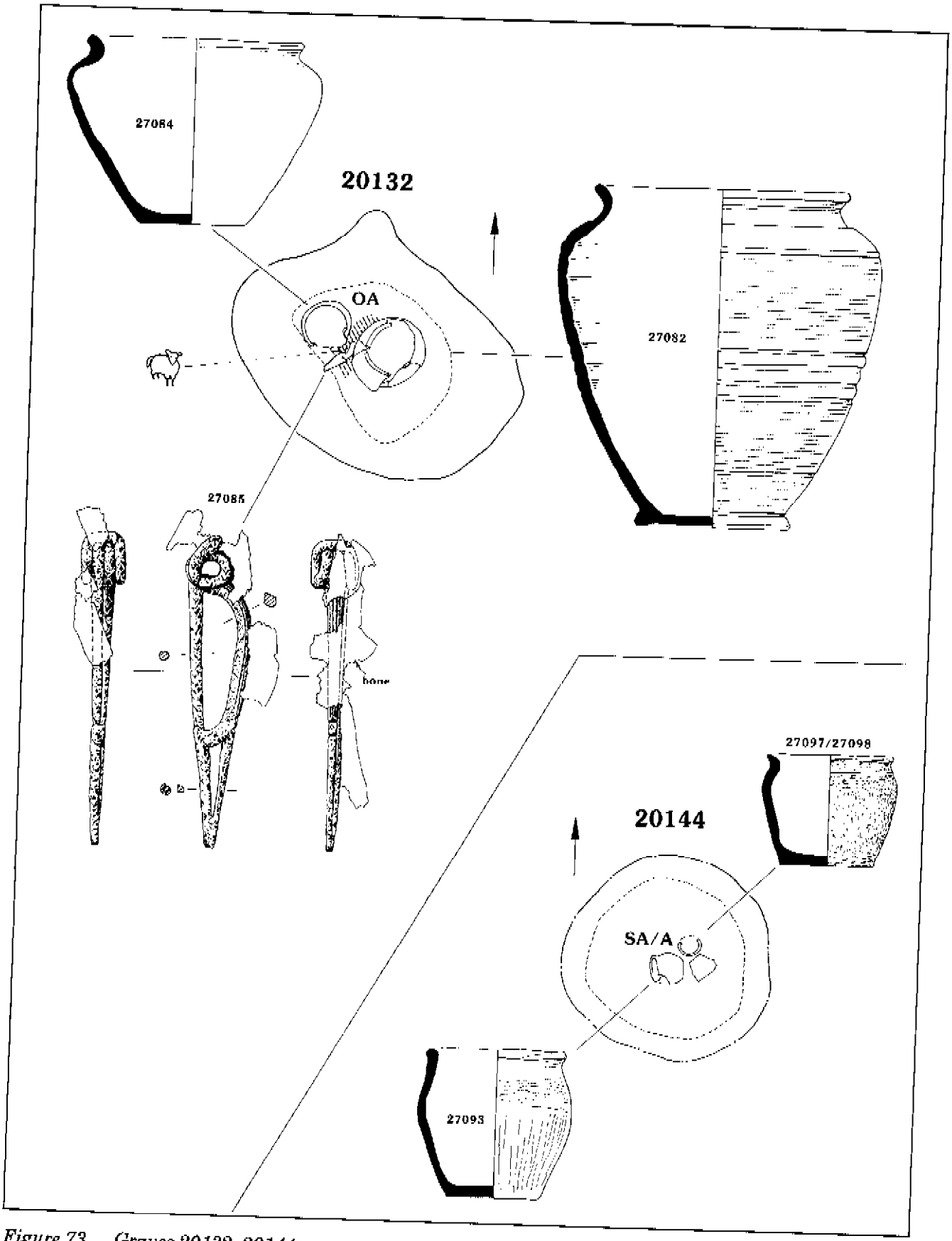


Figure 73 *Graves 20132, 20144*

ON 27635: Cu alloy, brooch fragments; type: indeterminate; length of largest fragment 7 mm.
ON 27086: High-shouldered, necked jar (Form J110), fabric F2; double neck/shoulder cordon; burnished; handmade.

Grave 20165 (Fill 20164)

(Figs 34; 75)
SU 89560.2/06721.2; circular, length 0.15 m, width 0.15 m, depth 0.08 m.
No cremated bone recovered.

Vessel (stolen during course of excavation) in centre of cut.
ON 27114: general form details from photograph.

Grave 20167 (Fill 20166)

(Figs 43; 75)
SU 89563.0/06688.2; circular, length 0.30 m, width 0.20 m, depth 0.26 m.
0.2 g of cremated bone.

Vessel inverted in centre of cut.
ON 27120: Rounded, bead-rimmed bowl (Form B330), fabric F4; double groove on neck; burnished diagonal lines on shoulder; burnished lattice on lower half; very poor condition; handmade.

Grave 20169 (Fill 20168)

(Figs 37; 76)
SU 89553.2/06696.0; circular, length 0.43 m, width 0.40 m, depth 0.32 m.
Unurned cremation burial; cremated bone (279.4 g) in centre of cut; adult. Blue/green staining.

Vessel to SW of cremated bone.
ON 27123: Iron, brooch; type: Nauheim/Feugère 5a12; mineral-preserved plant stems on pin (*DdM*); length 66 mm.
ON 27115: High-shouldered, necked jar (Form J113), fabric G7; double neck cordons; spalled exterior surface; burnished; handmade.

Grave 20170 (Fill 20171)

(Figs 42; 76)
SU 89555.0/06693.0; circular, length 0.45 m, width 0.43 m, depth 0.21 m.
Unurned dual cremation burial; location of cremated bone (23.9 g) not recorded; subadult/adult and subadult/adult.

ON 27508: Iron, brooch; type: Feugère 4 or Feugère 5b1; length 54 mm.

Grave 20172 (Fill 20173)

(Figs 42; 76)
SU 89551.8/06693.0; circular, length 0.40 m, width 0.33 m, depth 0.17 m.
No cremated bone recovered.
Vessel in W of cut.
ON 27117: Small biconical, bead-rimmed bowl (Form B431), fabric F3; burnished; handmade.

Grave 20174 (Fill 20175)

(Figs 38; 76)
SU 89558.5/06696.0; circular, length 0.74 m, width 0.48, depth 0.22 m.
Unurned cremation burial; cremated bone (133.5 g) in centre of cut; adult. Blue/green staining.

Vessel to E of cremated bone.
ON 27118: High-shouldered, necked jar (Form J113), fabric G7; neck cordon; multiple horizontal grooves above base; burnished; handmade.

Grave 20179 (Fill 20178)

(Figs 43; 77)
SU 89557.5/06694.0; rectangular, orientation N–S, length 0.82 m, width 0.44 m, depth 0.14 m.
Unurned cremation burial; cremated bone (121.0 g) in centre of cut; adult. Blue/green staining.

Vessels to NE and SE of cremated bone.
ON 27637: Cu alloy, ring; diam. *c.* 5mm
ON 27122: Iron, brooch; type: probably Feugère 2a; length 42 mm.
ON 27119: High-shouldered, bead-rimmed jar (Form J131), fabric Q5; burnished; handmade.
ON 27121: Ovoid, bead-rimmed jar (Form B231), fabric Q5; burnished; handmade.

Grave 20182 (Fill 20181)

(Figs 37; 77)
SU 89551.5/06695.8; circular, length 0.43 m, width 0.40 m, depth 0.13 m.
?Unurned cremation burial; location of cremated bone (198.5 g) not recorded; subadult/adult; possible female.

Grave 20183 (Fill 20180)

(Figs 34; 77)
SU 895671.5/06718.0; oval, orientation: NE–SW, length 0.67 m, width 0.28 m, depth 0.36 m.
Unurned cremation burial; cremated bone (23.8 g) in NE of cut; subadult/adult.

Vessel to SW of cremated bone.
ON 27109: Ovoid, necked jar (Form J212), fabric F4; single horizontal groove on neck; burnished; handmade.

Grave 20185 (Fill 20184)

(Figs 37; 77)
SU 89548.0/06702.2; circular, length 0.67 m, width 0.52 m, depth 0.24 m.
Unurned cremation burial; cremated bone (248.5 g) in centre of cut; older mature/older adult.

Vessel to E of cremated bone.
ON 27572: Iron, binding strip mounted tangentially to mineral-preserved wood (possibly ash, *Fraxinus* sp.) with the grain perpendicular to the axis of the binding; object bound likely to have been a box or flat-sided item. One piece has three parallel lines cut with a V-shaped chisel, *c.* 1.8 mm wide, 1 mm deep, and *c.* 2 mm apart (*JW*). Length of largest fragment 32 mm.
ON 27124: Ovoid, everted rim jar (Form J221), fabric F2; burnished; handmade.

Grave 20189 (Fill 20188)

(Figs 38; 78)
SU 89562.0/06695.4; circular, length 0.85 m, width 0.80 m, depth 0.09 m.
0.5 g of cremated bone.

Vessel in centre of cut.
ON 27126: Splayed base of jar of unknown form (Form J002); fabric F3; burnished; handmade.

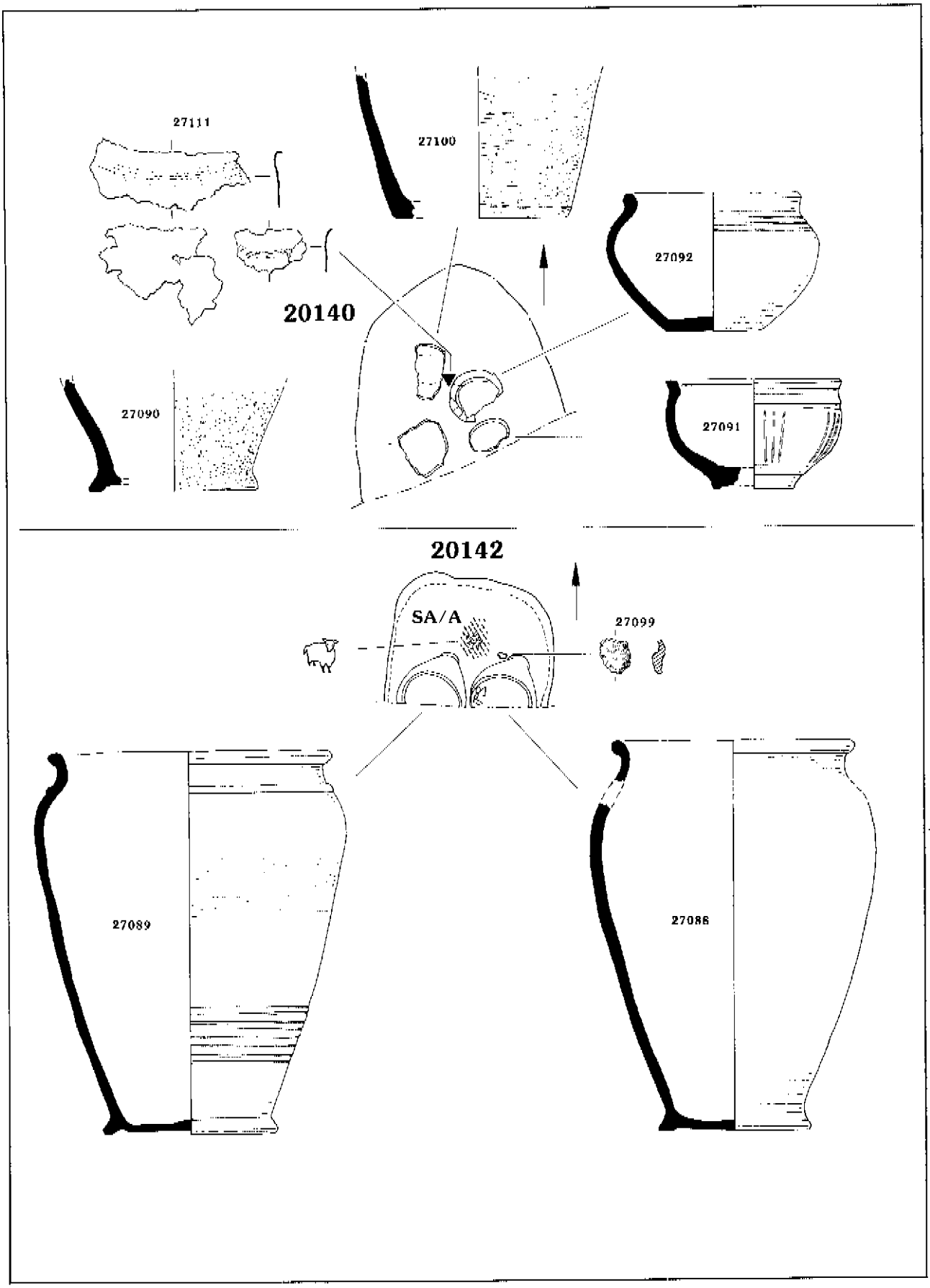


Figure 74 Graves 20140, 20142

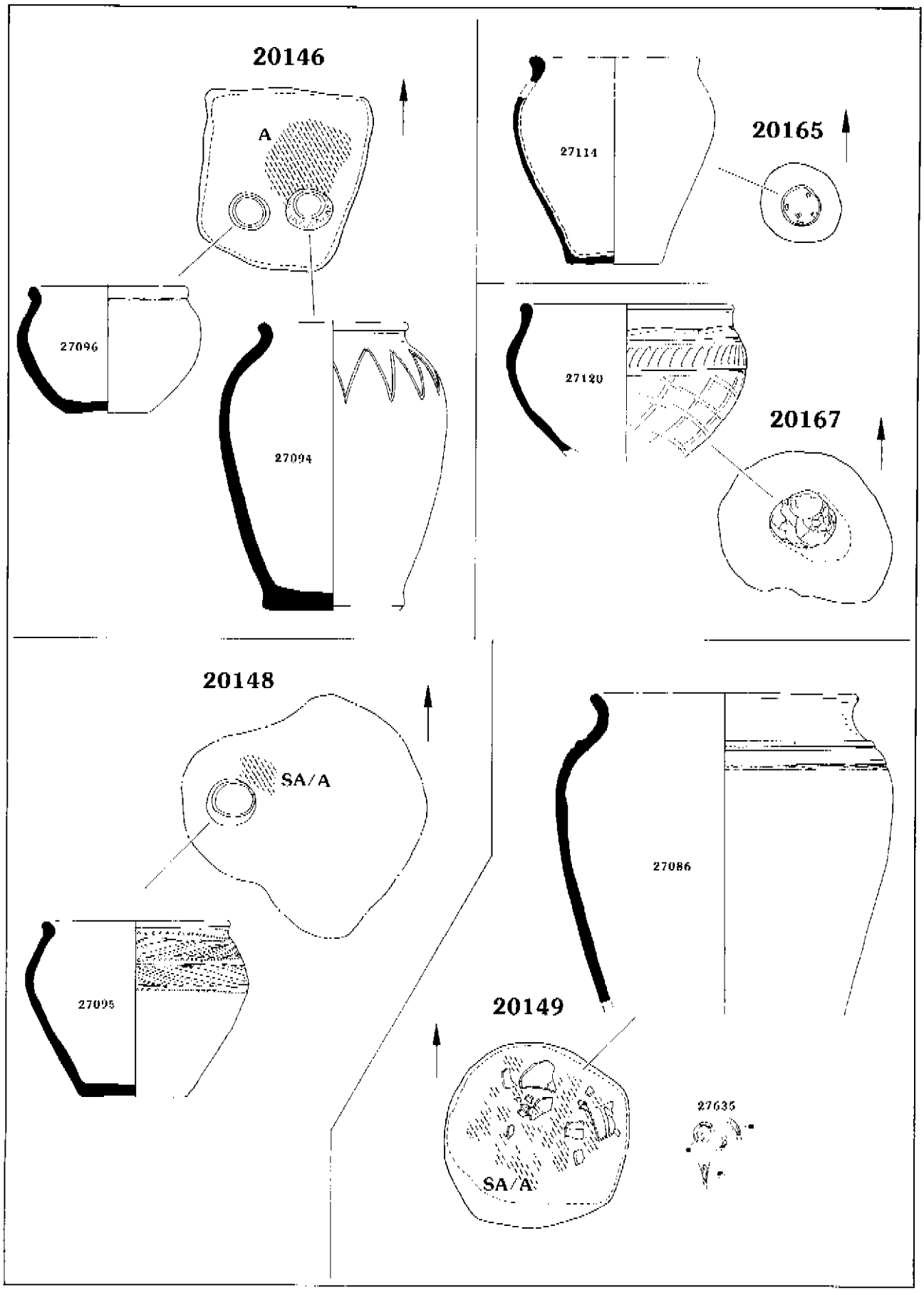


Figure 75 Graves 20146, 20148, 20149, 20165, 20167

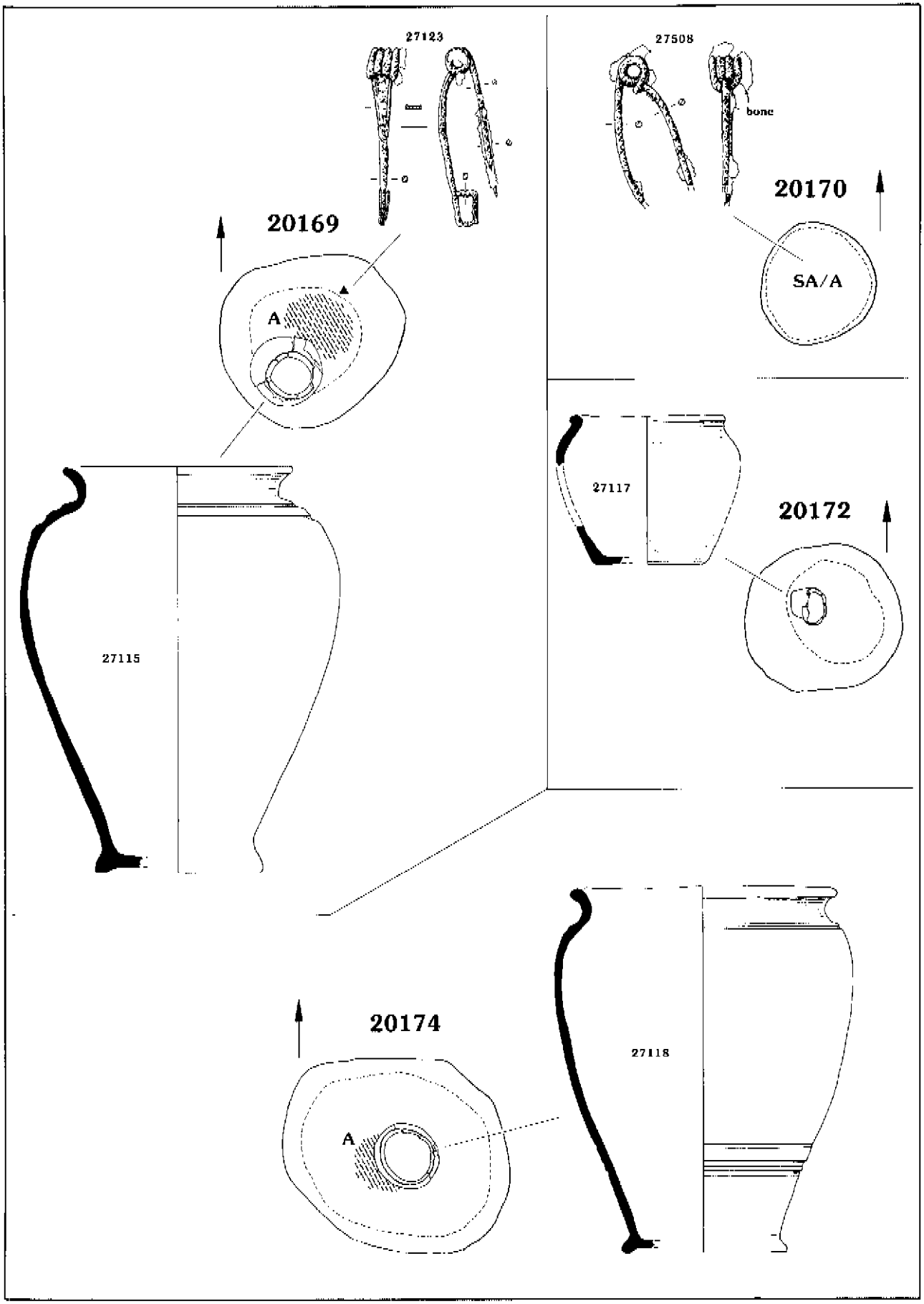


Figure 76 Graves 20169, 20170, 20172, 20174

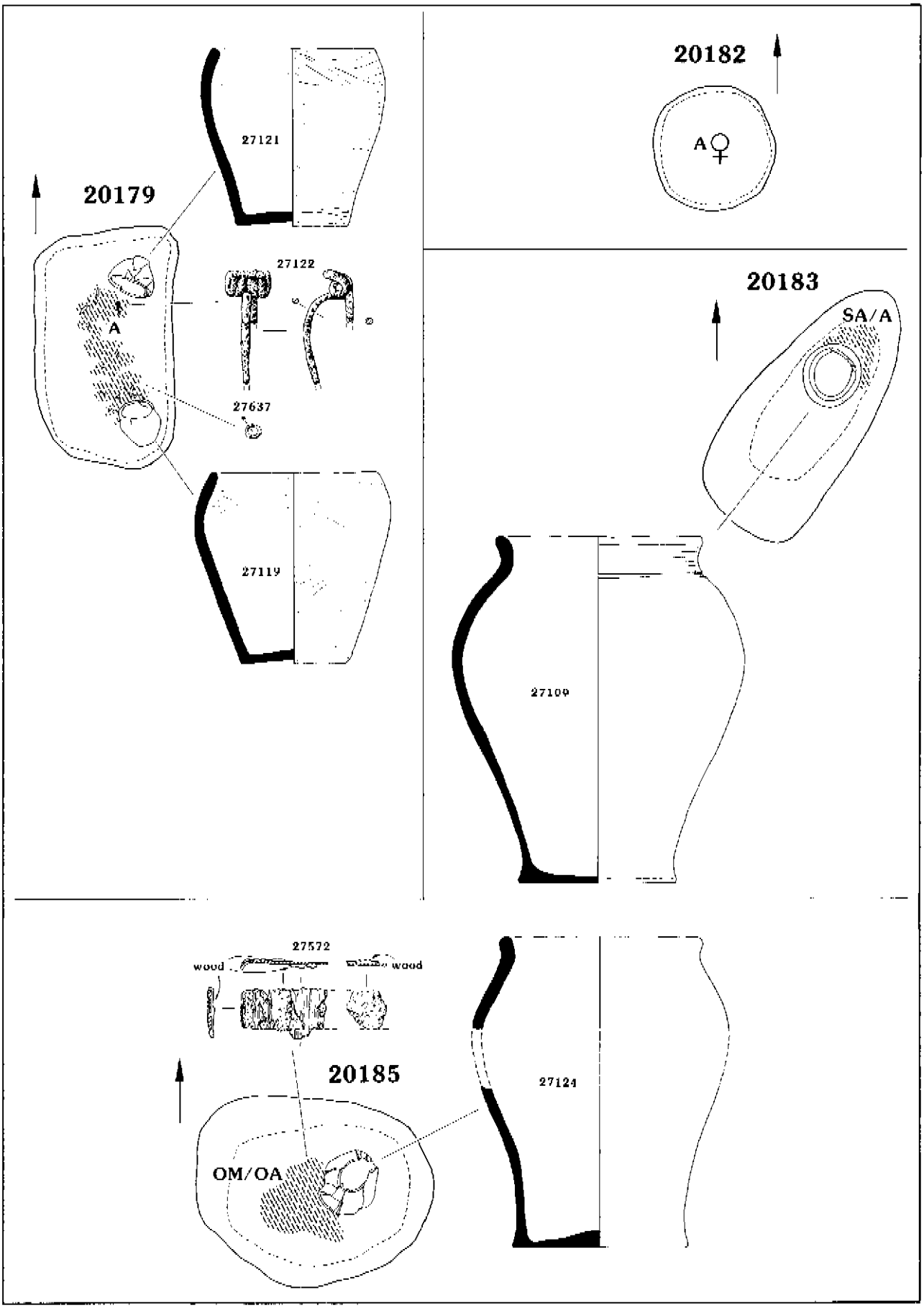


Figure 77 Graves 20179, 20182, 20183, 20185

Grave 20191 (Fill 20190)
(Figs 38; 78)
SU 89558.0/06695.5; circular, length 0.88 m, width 0.75 m, depth 0.27 m.
Unurned cremation burial; cremated bone (484.9 g) in SE of cut; older adult. Blue staining.

Vessels to W of cremated bone.
ON 27131: Iron, brooch; type: probably Feugère 2a; length 19 mm.
ON 27127: Ovoid, everted rim jar (Form J221), fabric F2; two horizontal bands of burnished lattice on upper half; burnished wavy lines on lower half; burnished; handmade.
ON 27129: Biconical, bead-rimmed jar (Form J431), fabric F3; burnished.
ON 27130: High-shouldered bowl (Form B101), fabric G7; double groove on shoulder; handmade.

Grave 20196 (Fill 20197)
(Figs 37; 78)
SU 89552.5/06695.7; circular, length 0.53 m, width 0.52 m, depth 0.41 m.
Unurned cremation burial; cremated bone (271.3 g) in centre of cut; adult. Blue/green staining.

Vessels to SW and NW of cremated bone.
ON 27116: High-shouldered, necked jar (Form J113), fabric F2; neck cordon, burnished; handmade.
ON 27134: High-shouldered, necked bowl (Form B113), fabric G5; neck cordon; single horizontal groove on shoulder; burnished lattice on lower half; single horizontal groove above base; burnished; ?burnt exterior; ?wheelthrown.

Grave 20199 (Fill 20198)
(Figs 38; 79)
SU 89559.7/06695.5; oval, orientation: N–S, length 0.62 m, width 0.34 m, depth unknown.
Unurned and ?urned cremation burial; 697.3 g of cremated bone — 657.4 g unurned in S of cut, and 39.9 g in vessel ON 27133 at north of cut; older mature/older adult. Blue staining.

Vessels to N of unurned cremated bone.
ON 27132: Rounded, bead-rimmed bowl (Form B331), fabric F2; burnished curvilinear design on shoulder; double horizontal groove above base; burnished; handmade.
*ON 27133: Ovoid, necked jar (Form J213), fabric G6; neck cordon; band of multiple cordons in lower half, dividing two zones of horizontal combed rilling; leached; handmade.

Grave 20201 (Fill 20200)
(Figs 38; 79)
SU 89568.7/06709.0; circular, length 0.54 m, width 0.56 m, depth 0.16 m.
Unurned cremation burial; location of cremated bone (49.3 g) not recorded; older juvenile/young subadult.

Vessel in centre of cut.
ON 27128: High-shouldered, necked bowl (Form B113); fabric G6; neck cordon, burnished; abraded inside; handmade.

Grave 20202 (Fill 20203)
(Figs 43; 79)
SU 89559.3/06692.0; circular, length 0.20 m, width 0.18 m, depth 0.18 m.
2.9 g of cremated bone. Sheep/goat or pig and unidentified animal bone.

ON 27154: Small, high-shouldered, necked jar (Form J113); neck cordon; burnished; handmade

Grave 20207 (Fill 20206)
(Figs 36; 79)
SU 89567.0/06717.0; square, orientation: NE–SW, length 0.54 m, width 0.44 m, depth 0.24 m.
Unurned dual cremation burial; cremated bone (159.2 g) in N of cut; infant and subadult/adult. Blue/green staining.

Vessel ON 27145 to S of cremated bone, vessel ON 27135 broken over base of cut to SW of cremated bone.
ON 27135: High-shouldered, necked jar (Form J113), fabric G5; neck cordon; multiple horizontal grooves, narrow spaced, below shoulder; burnished; handmade.
ON 27145: Biconical, everted rim bowl (Form B421), fabric F3; burnished; handmade.

Grave 20208 (Fill 20209)
(Figs 38; 80)
SU 89560.4/06715.2; circular, length 0.82 m, width 0.68 m, depth 0.35 m.
Unurned cremation burial; cremated bone (381.6 g) in NW of cut; older mature/older adult; possible female.

Vessels to SE of cremated bone.
ON 27136: Biconical, necked jar (Form J411), fabric F4; three horizontal bands of burnished lattice; burnished; handmade.
ON 27147: High-shouldered, everted rim bowl (Form B122), fabric F6; burnished; handmade.

Grave 20235 (Fill 20236)
(Figs 38; 80)
SU 89562.5/06710.0; circular, length 0.62 m, width 0.55 m, depth 0.30 m.
Unurned cremation burial; cremated bone (316.3 g) in SW of cut; older mature/older adult. Unidentified animal bone. Blue/green staining.

Vessels to N and E of cremated bone.
ON 27157/27638: Iron, brooch; type: Nauheim/Feugère 5a0; length of largest fragment 43 mm.
ON 27138: High-shouldered, necked jar (Form J112), fabric F3; burnished wavy lines in vertical bands around girth; interior very abraded; burnished; handmade.
ON 27139: High-shouldered, necked jar (Form J113), fabric G7; corrugated shoulder; burnished; handmade.
ON 27150: Rounded, everted rim bowl (Form B321), fabric F6; row of burnished dots on neck; burnished cross-hatching below shoulder; burnished; handmade.

Grave 20237 (Fill 20238)
(Figs 38; 79)
SU 89554.8/06692.8; grave cut not recognised.
Unurned cremation burial; location of cremated bone (3.7 g) not recorded; infant.

ON 27577: Iron, nail shank; mineral-preserved wood, possibly willow (*Salix* sp.) or poplar (*Populus* sp.) (*JW*); length 14 mm.
ON 27144: Ovoid bowl (Form B203), fabric G6; burnished; handmade.
ON 27146: Rounded, bead-rimmed bowl (Form B331), fabric F6; burnished; handmade.

Grave 20239 (Fill 20240)
(Figs 43; 81)
SU 89559.2/06714.0; circular, length 0.10 m, width 0.10 m, depth 0.18 m.
Unurned cremation burial; location of cremated bone (416.1 g) not recorded; older mature/older adult.

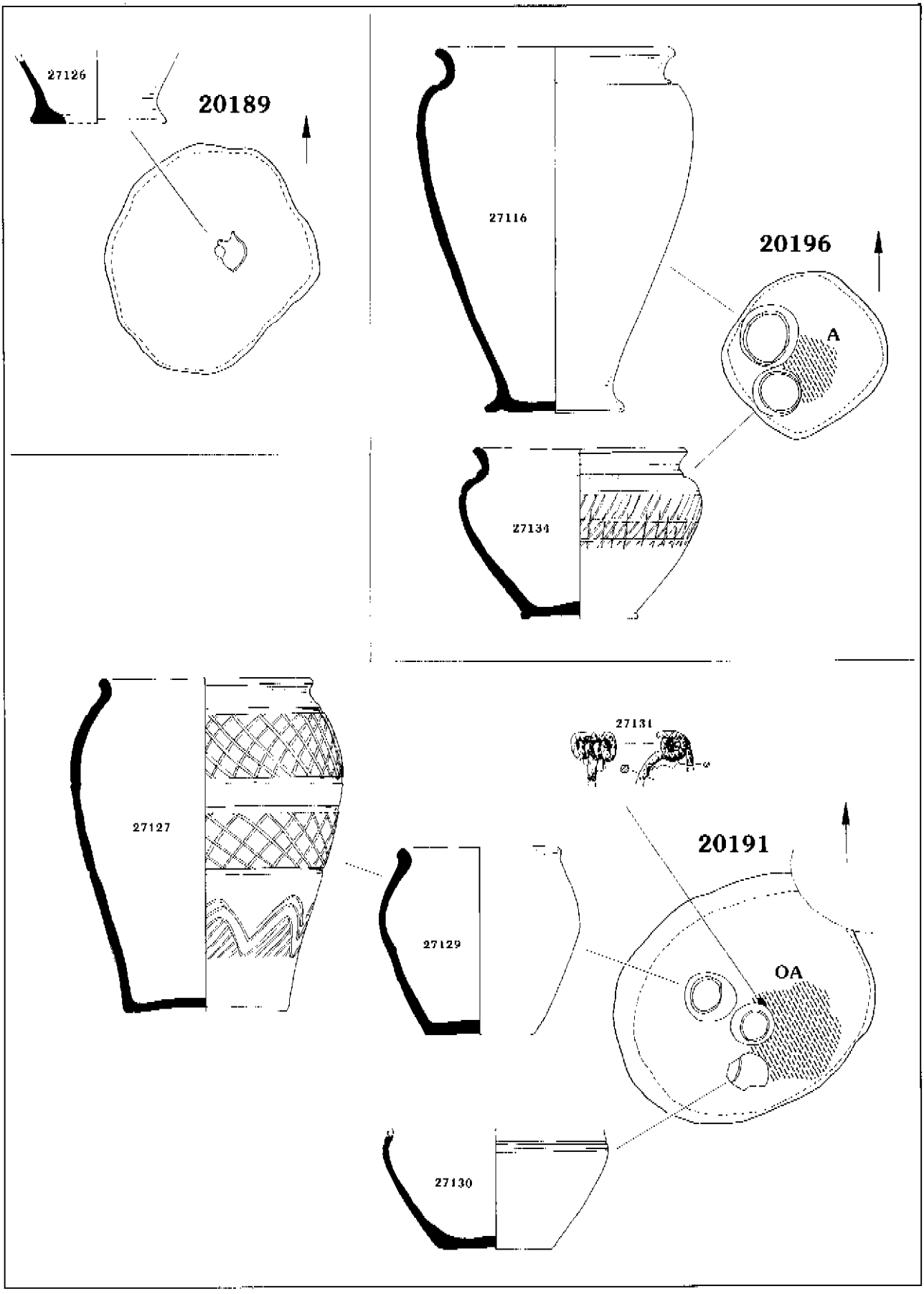


Figure 78 Graves 20189, 20191, 20196

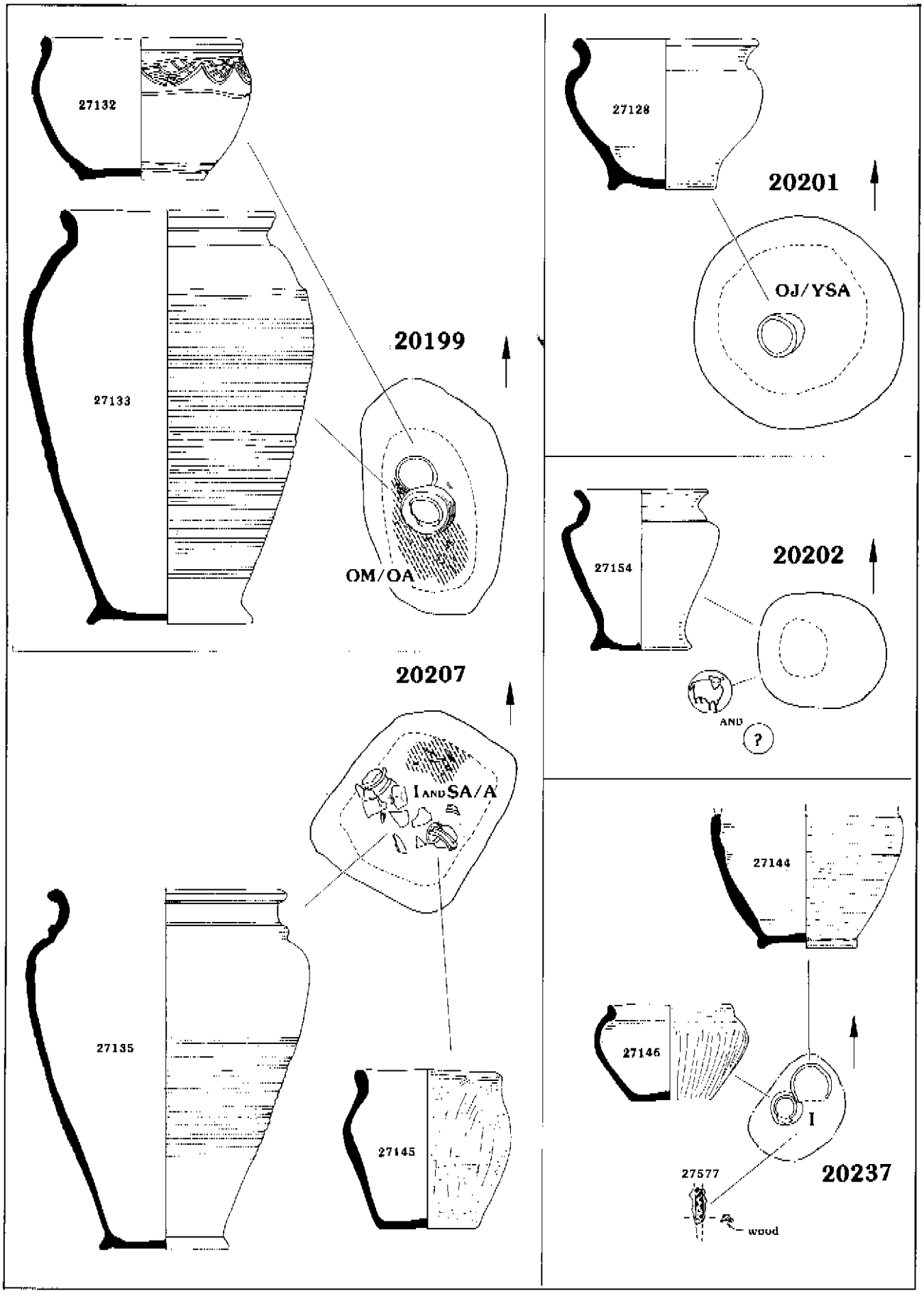


Figure 79 *Graves 20199, 20201, 20202, 20207, 20237*

Grave 20242 (Fill 20241)

(Figs 35; 81)
SU 89564.5/06720.2; rectanghular, orientation: NNW–SSE, length 0.70 m, width 0.45, depth 0.38 m.
Unurned cremated burial; cremated bone (40.5 g) in centre of cut; subadult/adult.

Vessel to NW of cremated bone.
ON 27153: High-shouldered, necked jar with finely moulded base (Form J113), fabric F2; neck cordon; burnished; wheel-thrown.

Grave 20245 (Fill 20246)

(Figs 34; 81)
SU 89561.8/06720.3; square, orientation: N–S, length 0.65 m, width 0.50 m, depth 0.32 m.
Unurned cremation burial; cremated bone (59.2 g) in SW of cut; subadult/adult.

Vessels to E and SW of cremated bone.
ON 27156: Cu alloy, globule; weight 1g.
ON 27142: High-shouldered, necked jar (Form J112), fabric Q13; burnished; handmade.
ON 27148: Ovoid, bead-rimmed jar (Form J231), fabric G8; double shoulder cordon; horizontal combed rilling below shoulder; burnished; wheelthrown.
ON 27149: Rounded, necked bowl (Form B311), fabric Q5; neck and shoulder cordons; handmade.
ON 27155: High-shouldered, necked bowl (Form B113), fabric Q5; double cordon below shoulder; burnished; wheel-thrown.
Glass bead, ?Anglo-Saxon, in fill.

Grave 20248 (Fill 20247)

(Figs 38; 82)
SU 89555.7/06700.6; oval, orientation: NNW–SSE, length 0.53 m, width 0.31 m, depth 0.20 m.
Unurned cremation burial; location of cremated bone (0.2 g) not recorded; infant/juvenile.

Vessels in N of cut.
ON 27143: Small, crudely made, biconical, bead-rimmed bowl (Form B431), fabric G7; handmade.
ON 27518: High-shouldered, necked bowl (Form B113), fabric G7; neck cordon; burnished; spalled exterior surface; hand-made.

Grave 20252 (Fill 20251)

(Figs 42; 82)
SU 89552.0/06687.5; square, orientation: ENE–WSW, length 0.95 m, width 0.80 m, depth 0.28 m.
Unurned cremation burial; cremated bone (740.7 g) in each corner of the grave; adult; possible female. Sheep/goat, and possibly pig, and unidentified animal bone. Fe staining. Pyre debris.

ON 27531/27694: Iron, brooch and iron, chain fragment (attached); type Feugère 2a; length of largest fragment 61 mm.
ON 27171/27695: Iron, brooch and iron, chain fragment (attached); type Feugère 2a; mineral-preserved organic material, either plant material or mineral preserved bone; length of largest fragment 54 mm.
ON 27639: Iron, brooch pin fragment, probably part of ON 27531/27694 or ON 27171/27695; length 11 mm; not illustrated.
ON 27532: Iron, ring; diam. 12 mm.
ON 27538: Iron, winged belt hook; length 37 mm.
ON 27545: Iron, chain fragment; length 26 mm.
ON 27166: Rim and base of jar of unknown form (Form U023), fabric Q7; incised multiple horizontal lines, wide spaced; multiple cordons; ?burnt/overfired; very poor condition; burnished; handmade.
ON 27773: Rim of second vessel of unknown form (R1), fabric Q7; ?burnt/ overfired; ?wheelthrown.

Grave 20253 (Fill 20254)

(Figs 43; 83)
SU 89560.0/06693.6; oval, orientation: N–S, length 0.59 m, width 0.40 m, depth 0.27 m.
Unurned cremation burial; cremated bone (406.2 g) in S of cut; young subadult; possible male. Pig, sheep/goat and un-identified animal bone. Blue/green staining.

Vessels to NW and N of cremated bone.
ON 27543: Iron, brooch; type: indeterminate; length of largest fragment 13 mm.
ON 27696: Iron, nail; length 14 mm.
ON 27697, 27698, 27699, 27700, and 27701: Iron, five rectangular staples with mineral-preserved wood (species unidentified); probably repairs to a lathe-turned vessel (*JW*); mineralised textile, possibly a wool twill, on outside faces of ON 27697 and 27700. Yarn Z-spun in one direction and S-spun in the other (ZS), *c.* 10–12 Z x 10 S threads per cm (*PWR*); length of largest fragment 16 mm.
ON 27141: High-shouldered, necked jar with maximum girth in upper third (Form J113), fabric G5; neck cordon; multiple burnished horizontal lines, narrow spaced, below shoulder; horizontal combed rilling above base; handmade.
ON 27163: High-shouldered, bead-rimmed bowl (Form B133), fabric G5; multiple burnished horizontal lines on lower half; burnished; handmade.

Grave 20255 (Fill 20256)

(Figs 38; 83)
SU 89563.0/06704.0; circular, length 0.85 m, width 0.68 m, depth 0.17 m.
Unurned cremation burial; cremated bone (13.1 g) in E of cut; adult.

Vessel to NW of cremated bone.
ON 27160: Biconical, necked bowl (Form B411), fabric F3; burnished diagonal lines on shoulder; burnished; handmade.

Grave 20268 (Fill 20267)

(Figs 34; 83)
SU 89562.5/06721.3; circular, length 0.44 m, width 0.40 m, depth 0.28 m.
Unurned cremation burial; cremated bone (29.3 g) in centre of cut; subadult/adult.

Vessel to W of cremated bone.
ON 27164: Rounded, necked jar (Form J313), fabric G5; neck and shoulder cordons; burnished; handmade.
ON 27521: Fired clay; part of possible disc-shaped object, coarse grog-tempered fabric.

Grave 20269 (Fill 20270)

(Figs 38; 84)
SU 89563.6/06715.4; grave cut not recognised.
No cremated bone recovered.

ON 27161: Biconical, bead-rimmed bowl (Form B431), fabric G7; burnished diagonal lines on shoulder; burnished; hand-made.

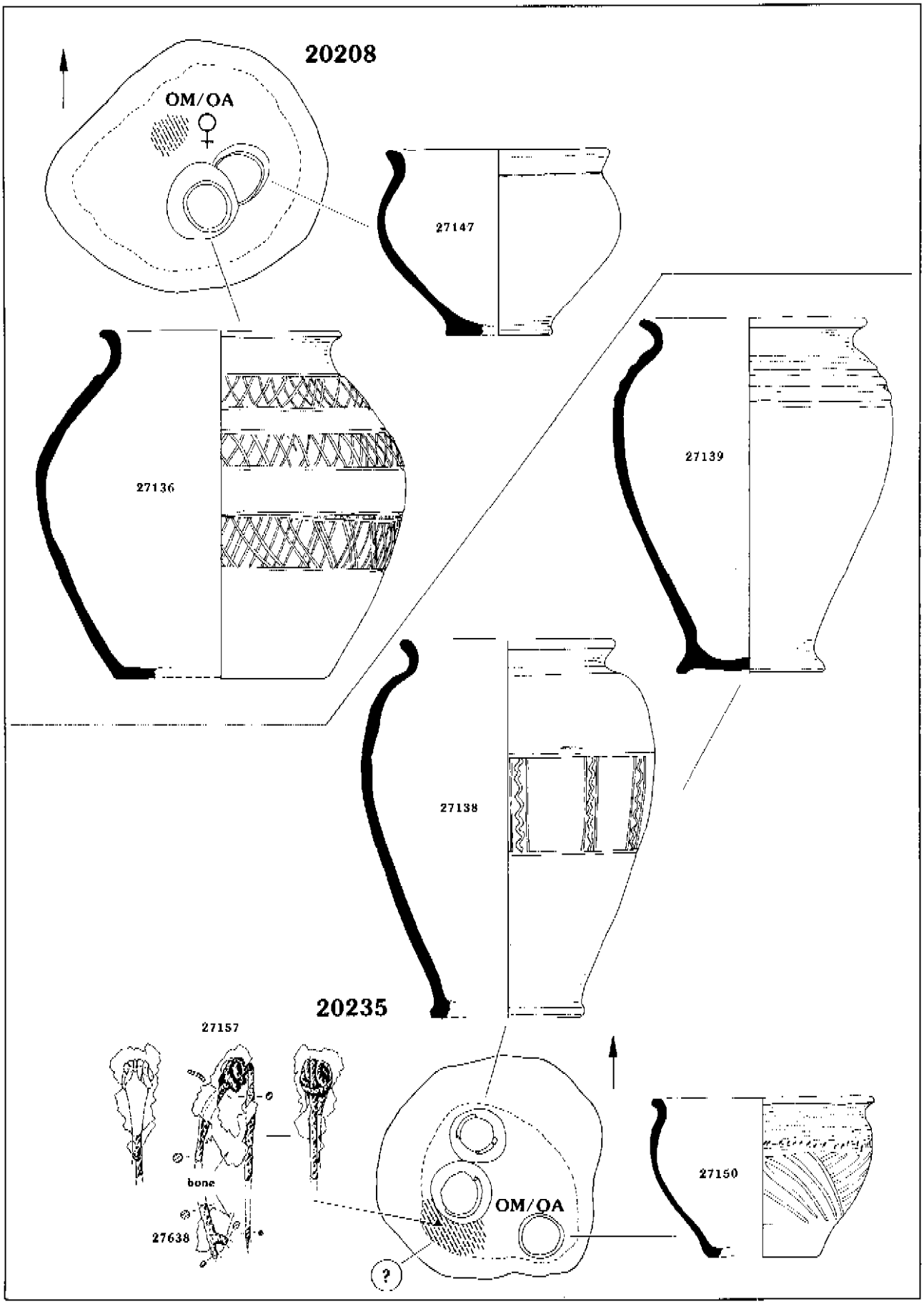


Figure 80 Graves 20208, 20235

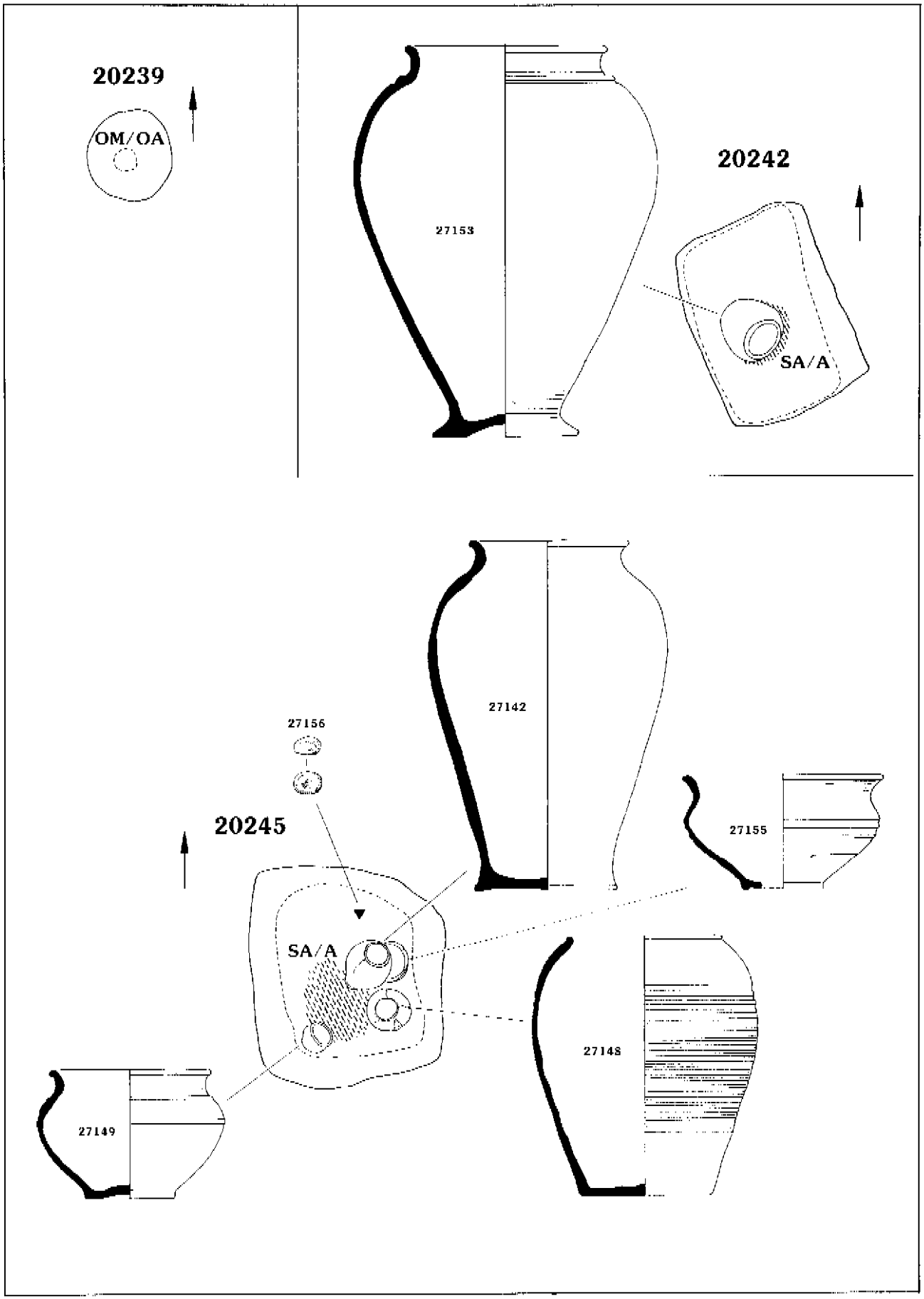


Figure 81 Graves 20239, 20242, 20245

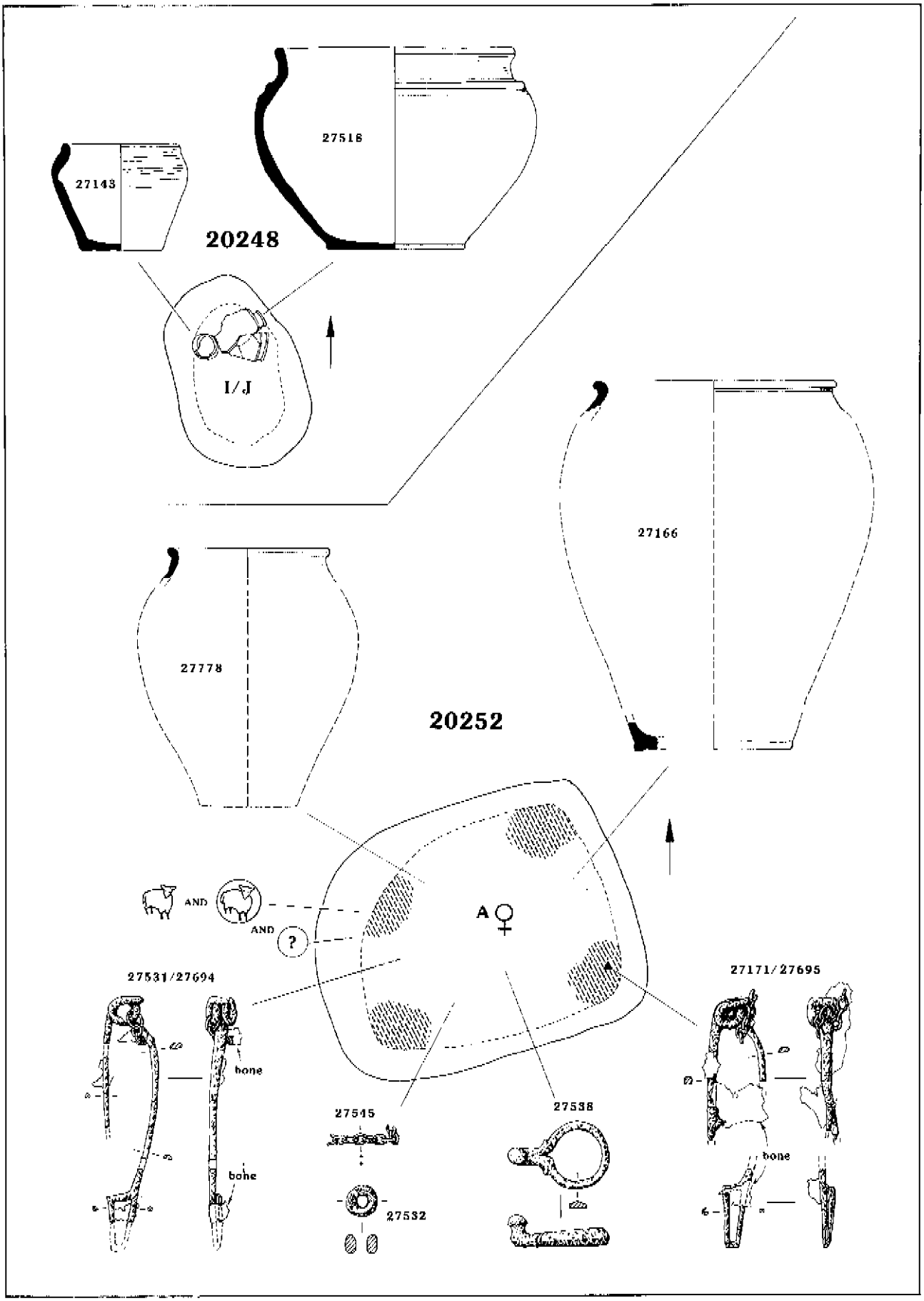


Figure 82 Graves 20248, 20252

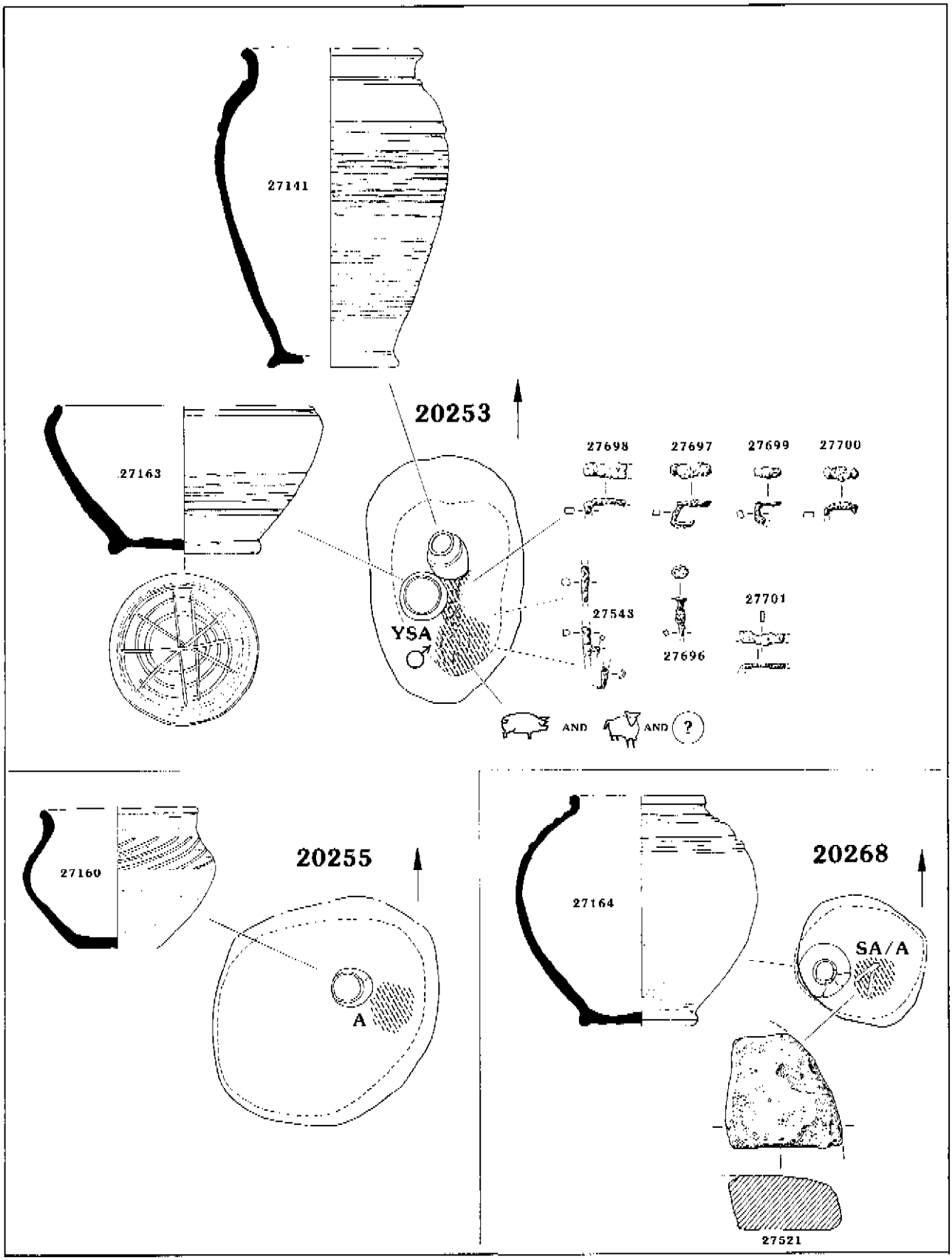


Figure 83 Graves 20253, 20255, 20268

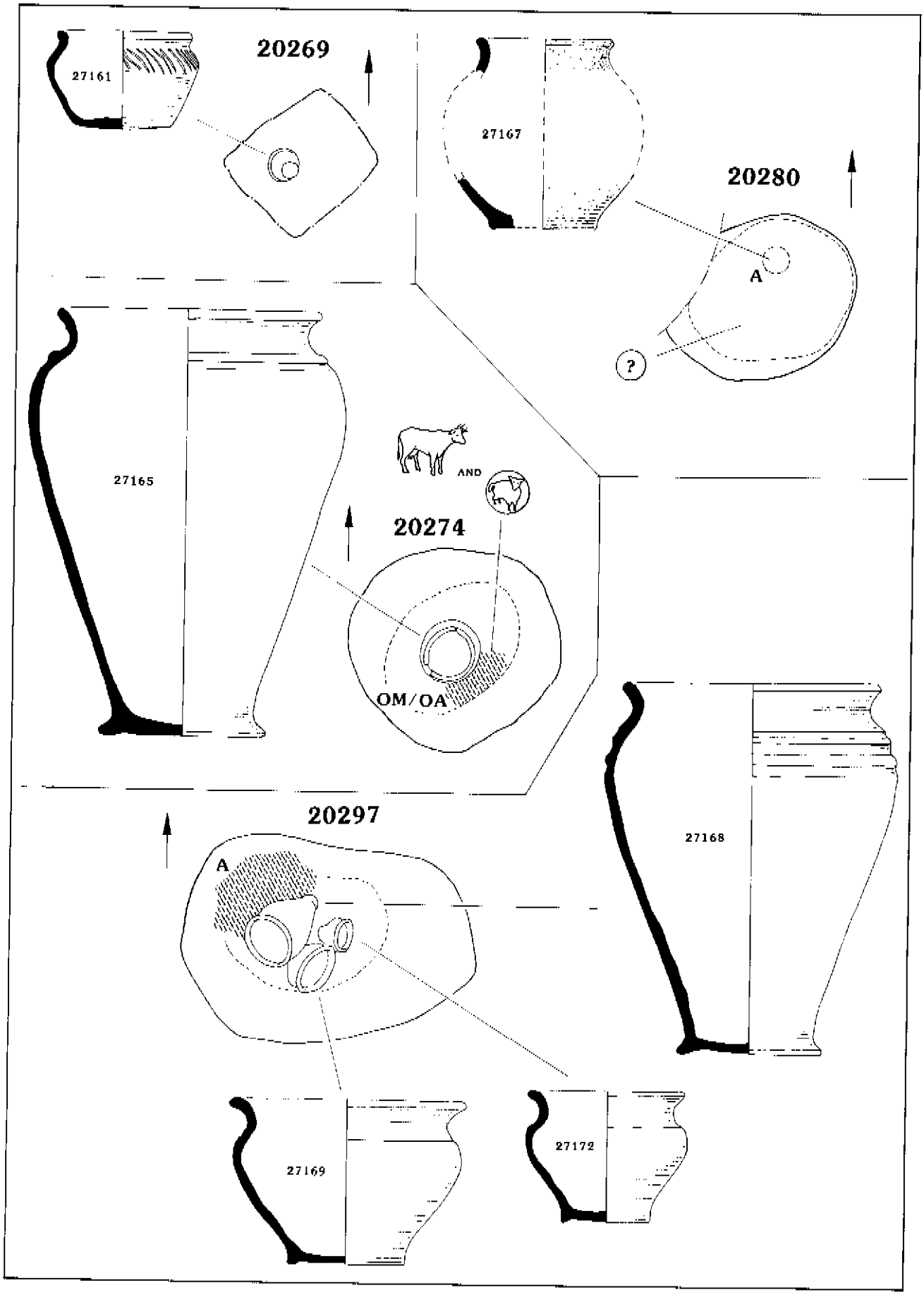


Figure 84 *Graves 20274, 20280, 20297*

Grave 20274 (Fill 20273)
(Figs 38; 84)
SU 89562.0/06707.5; circular, length 0.57 m, width 0.40 m, depth 0.34 m.
Unurned cremation burial; cremated bone (120.2 g) in SE of cut; older mature/older adult. Cattle and cattle size animal bone.

Vessel to NW of cremated bone.
ON 27165: High-shouldered, necked jar (Form J113), fabric G7; neck cordon; burnished; handmade.

Grave 20280 (Fill 20281)
(Figs 43; 84)
SU 89557.7/06693.5; circular, length 0.63 m, width 0.52 m, depth 0.16 m.
?Unurned cremation burial. Location of cremated bone (387.7 g) not recorded; adult. Unidentified animal bone.

Vessel in N of cut.
ON 27167: Rim and base of bowl of unknown form (Form B012), fabric F3; handmade.

Grave 20297 (Fill 20296)
(Figs 43; 84)
SU 89555.0/06696.4; circular, length 0.62 m, width 0.45 m, depth 0.23 m.
Unurned cremation burial; cremated bone (161.8 g) in NW of cut; adult.

Vessels to SE of the cremated bone.
ON 27168: High-shouldered, necked jar (Form J113), fabric F2; corrugated shoulder; burnished; handmade.
ON 27169: High-shouldered, necked bowl (Form B113), fabric G7; burnished; handmade.
ON 27172: High-shouldered, necked bowl (Form B113) fabric G7; burnished; handmade.

Grave 20308 (Fill 20307)
(Figs 38; 85)
SU 89560.8/06694.7; circular, length 0.36 m, width 0.26 m, depth 0.11 m.
No cremated bone recovered.
ON 27182: Crudely made, high-shouldered, bead-rimmed bowl (Form B131), fabric G7; burnished; handmade.

Grave 20312 (Fill 20311)
(Figs 37; 85)
SU 89553.7/06697.5; circular, length 0.75 m, width 0.70 m, depth 0.23 m.
Unurned cremation burial; cremated bone (856.7 g) in centre of cut; young/mature adult; possible female. Sheep/goat or pig bone. Blue/green staining.

Vessels to E, SE, and N of cremated bone.
ON 27177: Small, high-shouldered, necked jar (Form J111), fabric F3; burnished; handmade.
ON 27183: High-shouldered, necked bowl (Form B113), fabric G7; burnished lattice on lower half; handmade.
ON 27184: Base of jar of unknown form (Form J001), fabric F2; burnished; handmade.

Grave 20314 (Fill 20313)
(Figs 38; 85)
SU 89554.5/06698.0; circular, length 0.67 m, width 0.60 m, depth 0.11 m.
Unurned cremation burial; cremated bone (40.9 g) in centre of cut; adult.

Grave 20320 (Fill 20321)
(Figs 34; 86)
SU 89658.5/06732.2; circular, length 0.80 m, width 0.60 m, depth 0.25.
Unurned cremation burial; cremated bone (43.0 g) in N of cut; subadult/adult.

Vessels to SE and S of cremated bone.
ON 27179: High-shouldered, everted rim jar (Form J122), fabric F3; neck cordon; multiple horizontal grooves over shoulder; burnished; very friable; handmade.
ON 27180: High-shouldered, necked bowl (Form B113), fabric Q5; burnished; ?wheelthrown. Cut by modern borehole.
ON 27181: Biconical, everted rim bowl (Form B421), fabric F3; neck cordon; burnished; handmade.

Grave 20322 (Fill 20323)
(Figs 34; 86)
SU 89560.8/06722.5; circular, length 0.55 m, width 0.48 m, depth 0.21 m.
No cremated bone recovered.

Vessel in S of cut.
ON 27185: Ovoid, everted rim jar (Form J223), fabric G5; corrugated shoulder; multiple burnished horizontal lines, wide-spaced, on lower half; burnished; handmade.

Grave 20335 (Fill 20334)
(Figs 38; 86)
SU 89564.4/06699.2; circular, length 0.25 m, width 0.25 m, depth 0.37 m.
Unurned cremation burial; cremated bone (44.6 g) in centre of cut; subadult/adult.

Vessel in centre of cremated bone.
ON 27189: Large, high-shouldered, pedestal bowl (Form B114), fabric G8; neck cordon; single horizontal groove at girth; multiple horizontal burnished lines above pedestal; burnished; wheelthrown.

Grave 20337 (Fill 20336)
(Figs 38; 87)
SU 89562.5/06700.5; rectangular, orientation N–S, length 1.05 m, width 0.75 m, depth 0.31 m.
Unurned cremation burial; cremated bone (15.6 g) in SE of cut; subadult/adult. Sheep/goat or pig bone.

Vessels to W of cremated bone.
ON 27190: Ovoid, necked jar (Form J213), fabric G5; corrugated shoulder; multiple horizontal grooves, wide spaced, on lower half; burnished; leached and abraded; wheel thrown?
ON 27201: Ovoid, necked jar (form J213), fabric Q14; burnished; badly laminating; wheelthrown.

Grave 20338 (Fill 20339)
(Figs 34; 87)
SU 89557.5/06726.0; square, orientation NNW–SSE, length 0.55 m, width 0.44 m, depth 0.17 m.
Unurned cremation burial; cremated bone (234.7 g) in centre of cut; adult.

Vessels NW and S of cremated bone.
ON 27200/27584: Iron, brooch; type: probably Feugère 2a; length of largest fragment 24 mm.
ON 27641: Iron, molten globules; not illustrated.
ON 27191: Ovoid, everted rim jar (Form J222), fabric G5; corrugated shoulder; leached and abraded inside; handmade.
ON 27199: Rounded, bead-rimmed bowl (Form B330), fabric F6; horizontal band of burnished intersecting wavy lines,

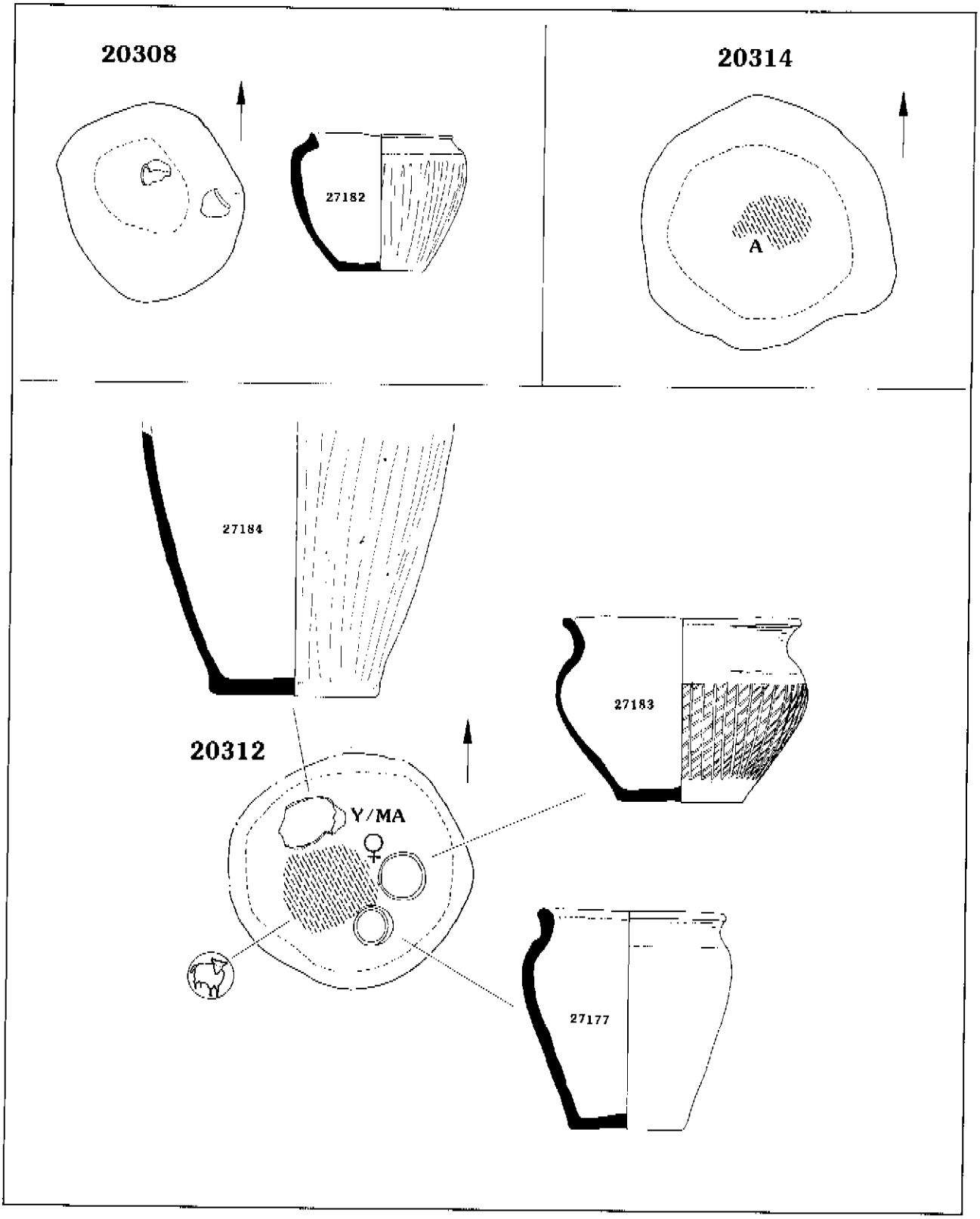


Figure 85 *Graves 20308, 20312, 20314*

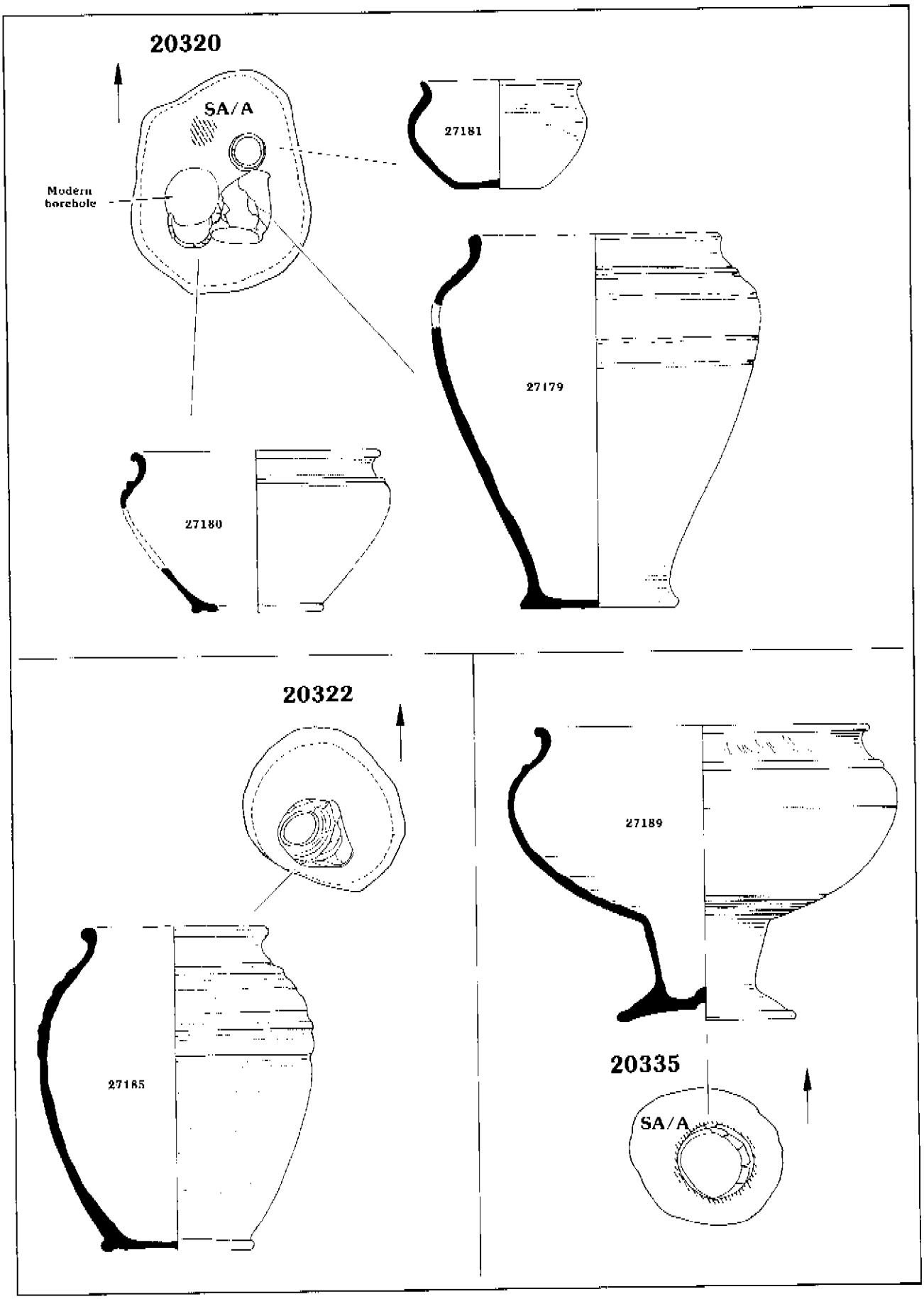


Figure 86 Graves 20320, 20322, 20335

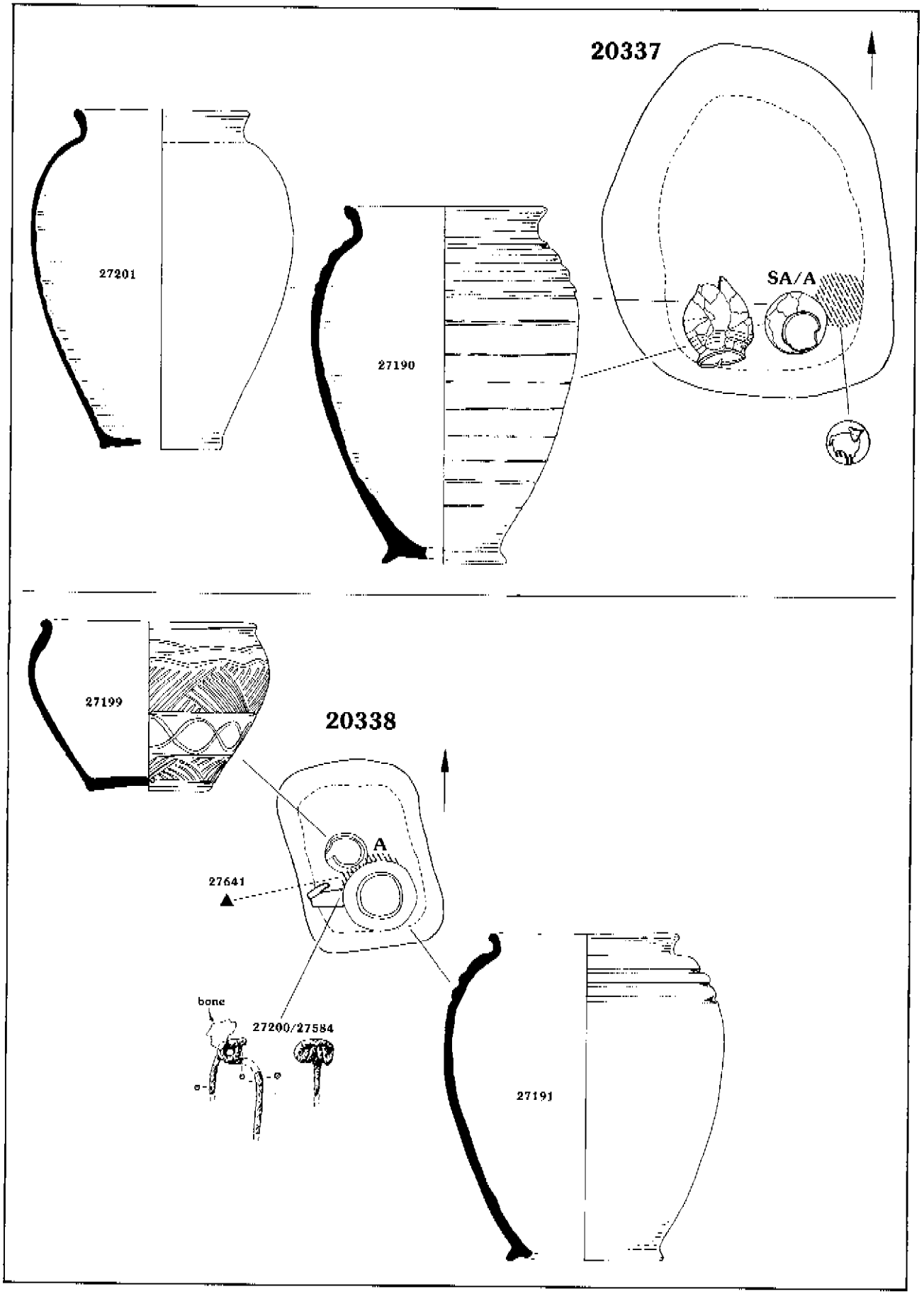


Figure 87 Graves 20337, 20338

between two bands of burnished cross-hatching, each bounded by horizontal burnished lines; burnished; handmade.

Grave 20345 (Fill 20344)
(Figs 43; 88)
SU 89563.4/06691.3; grave cut not recognised.
No cremated bone recovered.

ON 27193: High-shouldered, necked jar (Form J112), fabric Q7; neck cordon; burnished; handmade.
ON 27525: Rounded, everted rim bowl (Form B323), fabric G5; burnished; handmade.
ON 27526: Moulded base of bowl of unknown form (Form B003), fabric G5; burnished; handmade.

Grave 20346 (Fill 20347)
(Figs 34; 88)
SU 89559.8/06724.5; rectangular, orientation N–S, length 0.75 m, width 0.47 m, depth 0.19 m.
Unurned cremation burial; cremated bone (4.6 g) in W of cut; adult.

Vessels to NE and E of cremated bone.
ON 27194: High-shouldered, necked jar (Form J113), fabric F2; neck cordon; burnished; blackening on shoulder; ?wheelthrown.
ON 27197: High-shouldered, necked bowl (Form B111), fabric G6; burnished; handmade.

Grave 20351 (Fill 20350)
(Figs 43; 88)
SU 89560.0/06693.2; oval, orientation NNE–SSW, length 0.28 m, width 0.12 m, depth 0.10 m.
0.1 g of cremated bone.

Vessel in NW of cut.
ON 27198: Small, crudely made, ovoid, head-rimmed bowl (Form B231), fabric F3; burnished; handmade.

Grave 20353 (Fill 20352)
(Figs 38; 89)
SU 89557.2/06696.0; grave cut not recognised.
Cremation burial. 21.4 g of cremated bone; subadult/adult.

Vessel to SW of the cremated bone.
ON 27202: Pedestal base from bowl or jar (Form U004), fabric Q13; base cordon; multiple horizontal grooves above pedestal; wheelthrown.

Grave 20364 (Fill 20365)
(Figs 43; 89)
SU 89560.5/06692.0; oval, orientation NW–SE, length 0.37 m, width 0.20 m, depth 0.15.
Unurned cremation burial; cremated bone (267.5 g) in centre of cut; older mature adult. Pig and unidentified animal bone. Blue/green staining.

Vessel to W of cremated bone.
ON 27207: Lower two-thirds of high-shouldered jar (Form J103), fabric G5; double horizontal groove above base, and one below girth; burnished; handmade.

Grave 20367 (Fill 20366)
(Figs 38; 89)
SU 89562.0/06696.0; circular, length 0.67 m, width 0.64 m, depth 0.33 m.
Unurned cremation burial; cremated bone (154.6 g) in centre of cut; adult. Blue/green staining.

Vessel to W of cremated bone.
ON 27223: Ovoid, necked jar (Form J213), fabric G5; neck cordon; burnished; wheelthrown.

Grave 20368 (Fills 20369 and 20383)
(Figs 34; 89)
SU 89548.7/06721.0; square, orientation NNE–SSW, length 0.65 m, width 0.55 m, depth 0.25 m.
Unurned cremation burial; cremated bone in lower fill 20383 (127.8 g) in S of cut; adult; (plus 18.1 g in upper fill 20369; subadult/adult from same individual). Blue/green staining.

ON 27210: Iron, brooch; type: probably Feugère 2a; length of largest fragment 29 mm.

Grave 20384 (Fill 20385)
(Figs 43; 90)
SU 89561.5/06693.5; square, orientation E–W, length 0.51 m, width 0.44 m, depth 0.37 m.
Unurned cremation burial; cremated bone (390.1 g) in NE of cut; older mature adult. Blue/green staining.

Vessel to SW of cremated bone.
ON 27205: High-shouldered, necked jar (Form J111), fabric F3; horizontal bands of cross-hatching, lattice and intersecting arcs; two post-firing perforations (repair holes) at rim, on either side of dunting crack; burnished; handmade.

Grave 20408 (Fill 20407)
(Figs 43; 90)
SU 89561.0/06693.0; circular, length 0.30 m, width 0.27 m, depth 0.26 m.
Unurned cremation burial; cremated bone (145.0 g) in NW of cut; adult.

Vessel to SE of cremated bone.
ON 27225: Iron, brooch; type, probably Feugère 2a; length of largest fragment 28 mm.
ON 27226: Iron, brooch; type: probably Feugère 2a; length 37 mm.
ON 27224: High-shouldered, necked jar (Form J113), fabric G5; neck and shoulder cordons; burnished; wheelthrown.

Grave 20420 (Fill 20419)
(Figs 43; 90)
SU 89561.5/06692.0; circular, length 0.41 m, width 0.37 m, depth 0.18 m.
Unurned cremation burial; cremated bone (65.0 g) in NE of cut; juvenile. Blue/green staining.

Vessel to SW of cremated bone.
ON 27232: High-shouldered jar (Form J102), fabric F3; burnished (horizontal and vertical tooling); handmade.

Grave 20431 (Fill 20430)
(Figs 38; 90)
SU 89561.0/06697.2; shape uncertain as cut by ditch 20105.
No cremated bone recovered.

ON 27236: Body sherds of vessel of unknown form (Form P1), fabric F4; handmade.

Grave 20448 (Fill 20449)
(Figs 34; 91)
SU 89554.7/06725.0; circular, length 0.50 m, width 0.35 m, depth 0.19 m.
No cremated bone recovered.

Vessels in centre of cut.

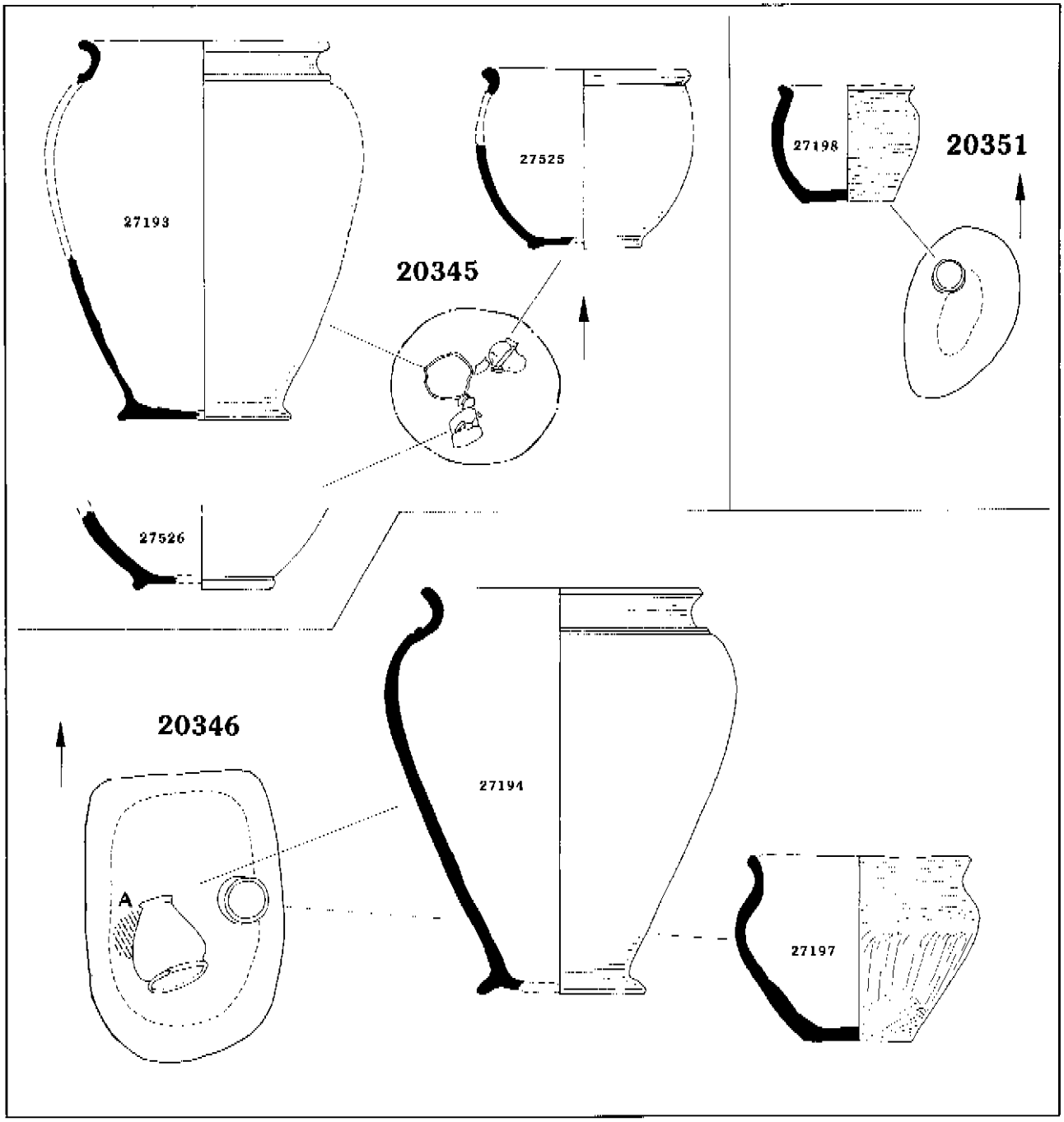


Figure 88 Graves 20345, 20346, 20351

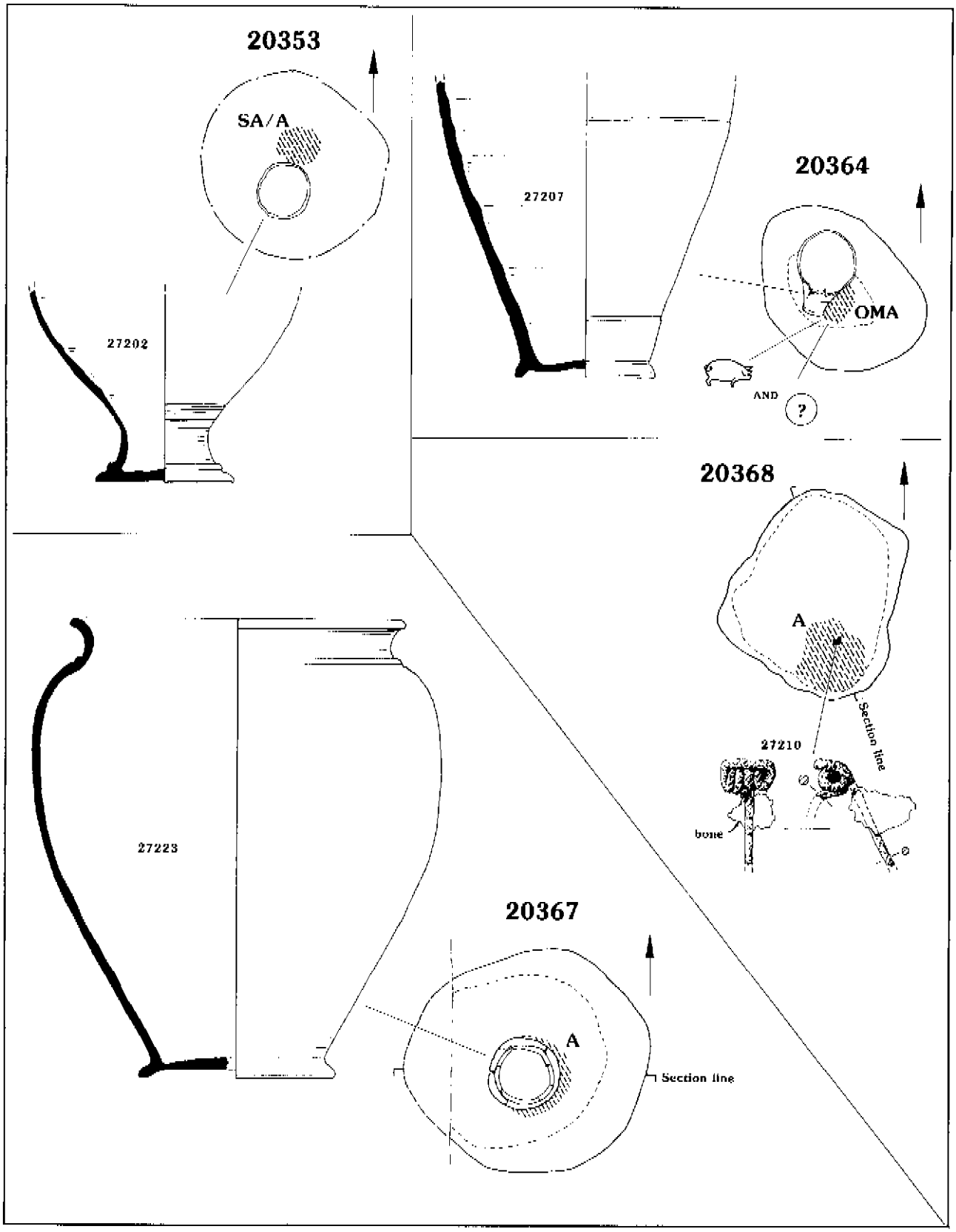


Figure 89 Graves 20353, 20364, 20367, 20368 (see Fig. 31 for profiles of 20367 and 20368)

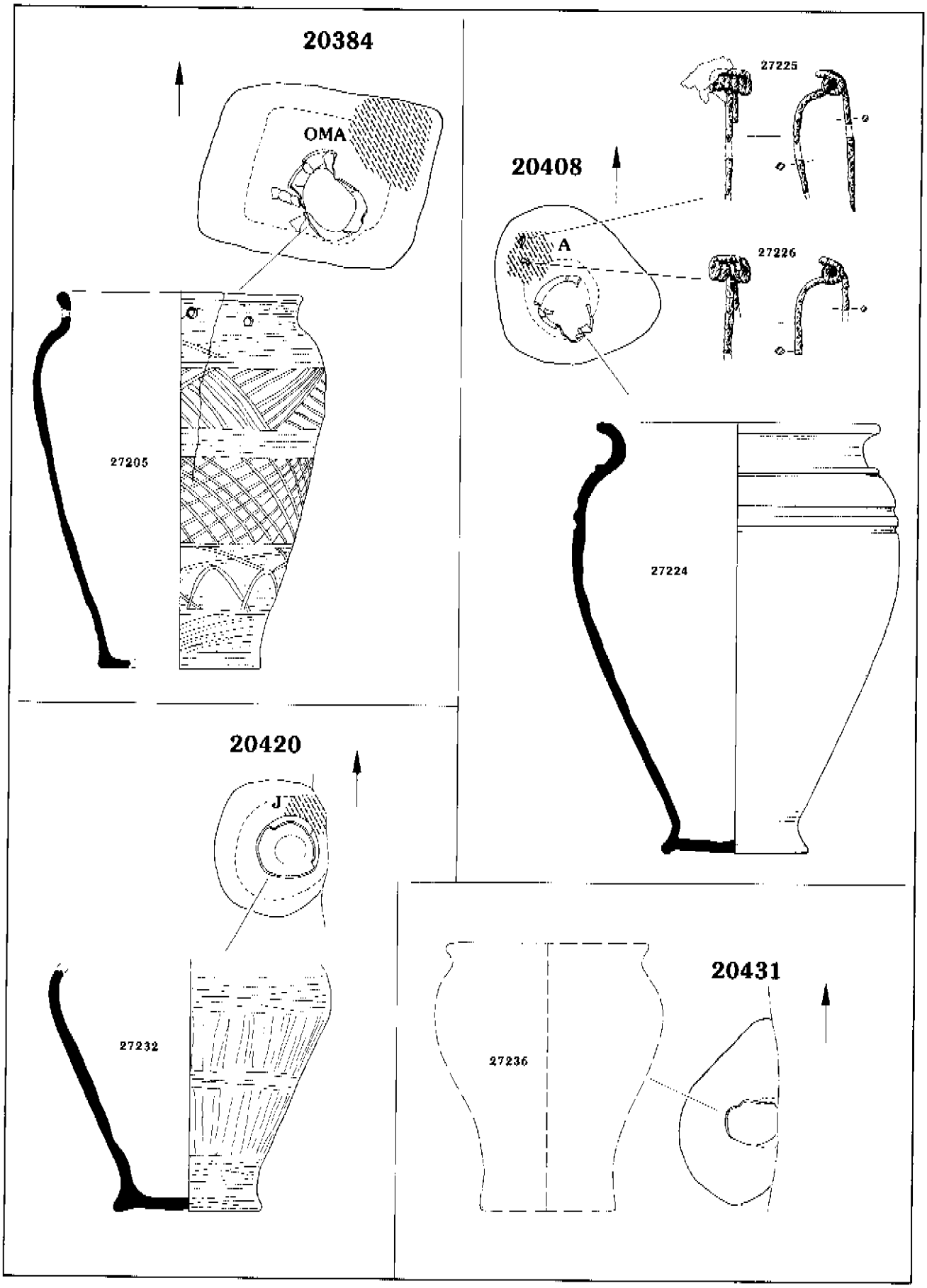


Figure 90 *Graves 20384, 20420, 20408, 20431*

ON 27208: High-shouldered, necked bowl (Form B111), fabric G7; burnished; handmade.
ON 27245: High-shouldered jar with maximum girth in upper third (Form J103), fabric F6; corrugated shoulder; wheelthrown.

Grave 20451 (Fill 20450)

(Figs 37; 91)
SU 89543.5/06710.5; circular, length 0.66 m, width 0.57 m, depth 0.15 m.
Unurned cremation burial; cremated bone (71.6 g) in centre of cut; subadult/adult.

Vessels to SW,W, and NW of cremated bone.
ON 27237: High-shouldered jar (Form J102), fabric F3; double horizontal groove at girth; burnished; handmade.
ON 27238: Squat, high-shouldered, necked bowl (Form B113), fabric G5; neck cordon; burnished chevrons on lower half, bounded by two horizontal grooves; burnished; post-firing perforations; wheelthrown.
ON 27239: High-shouldered bowl, everted rim (Form B121), fabric F2; double horizontal groove on shoulder; burnished cross-hatching on lower half; burnished; handmade.

Grave 20453 (Fill 20452)

(Figs 42; 91)
SU 89550.5/06693.0; circular, length 0.40 m, width 0.46 m, depth 0.17 m.
Unurned cremation burial; cremated bone (467.7 g) in NW of cut; young/younger mature adult; possible female. Blue/green staining.

Vessel to SE of cremated bone.
ON 27713: Iron, brooch; type: indeterminate; length of largest fragment 53 mm.
ON 27247: High-shouldered jar (Form J101), fabric F3; burnished cross-hatching and horizontal rows of dots on shoulder; burnished; handmade.

Grave 20457 (Fill 20456)

(Figs 37; 92)
SU 89551.7/06702.7; circular, length 0.52 m, width 0.39 m, depth 0.20 m.
Unurned cremation burial; cremated bone (379.3 g) in centre of cut; older mature adult. Unidentified animal bone. Blue/green staining.

Vessel to SE of cremated bone.
ON 27471: High-shouldered, necked jar (Form J113), fabric G5, double neck cordon; combed random diagonal lines; burnished; ?wheelthrown.
ON 27472: Rounded jar (Romano-British Form 112), fabric QJ00; horizontal band of incised vertical lines around girth; burnished; handmade.

Grave 20459 (Fill 20458)

(Figs 37; 92)
SU 89544.2/06705.7; circular, length 0.56 m, width 0.46 m, depth 0.21 m.
Unurned dual cremation burial; cremated bone (532.6 g) in NE of cut; older mature/older adult, possibly female, and infant/juvenile. Pig and unidentified animal bone.

Vessel to W of cremated bone.
ON 27248: High-shouldered jar (Form J102), fabric F4; burnished; handmade.
ON 27249: Biconical, everted rim bowl (Form B421). fabric F2; horizontal line of impressed dots on shoulder; burnished irregular cross-hatching; burnished; handmade.

Grave 20463 (Fill 20462)

(Figs 37; 93)
SU 89549.7/06700.0; circular, length 0.56 m, width 0.51 m, depth 0.10 m.
Cremation burial; location of cremated bone (144.0 g) not recorded; adult.

Vessel in S of cut;
ON 27246: High-shouldered, necked jar (Form J112), fabric G5, single horizontal groove on shoulder; horizontal row of finger impressions on interior surface above base; handmade.

Grave 20465 (Fill 20464)

(Figs 40; 93)
SU 89586.4/06714.5; circular, length 0.23 m, width 0.20 m, depth 0.10 m.
No cremated bone recovered.

Vessel in centre of cut.
ON 27244: High-shouldered, necked bowl (Form B111), fabric G5; double neck cordon; horizontal tooling on body; leached, ?wheelthrown.

Grave 20467 (Fill 20466)

(Figs 38; 93)
SU 89563.4/06703.3; circular, length 0.15 m, width 0.15 m, depth 0.04 m.
Unurned cremation burial; location of cremated bone (12.2 g) not recorded; infant.

Vessel in centre of cut.
ON 27251: High-shouldered bowl (form B103), fabric G7; neck cordon; burnished; wheelthrown.

Grave 20469 (Fill 20468)

(Figs 37; 94)
SU 89544.8/06707.0; circular, length 0.65 m, width 0.55 m, depth 0.18 m.
Unurned dual cremation burial; 946.4 g of cremated bone in two concentrations and from fill: 601.7 g at S of cut — older mature adult; 211.5 g at N of cut — older mature/older adult; plus 133 g from rest of fill — older mature/older adult. Pig and unidentified animal bone. Blue/green staining in all three samples.

Vessel to W of northern concentration of cremated bone
ON 27250: Rounded, everted rim jar (Form J321), fabric Q3; roughly burnished; handmade.

Grave 20471 (Fill 20470)

(Figs 42; 93)
SU 89553.5/06692.0; circular, length 0.70 m, width 0.60 m, depth 0.14 m.
Unurned cremation burial; cremated bone (251.9 g) in SE of cut; adult. Sheep/goat, and possibly pig, and unidentified animal bone.

Vessels to W, NW and N of cremated bone.
ON 27544: Silver, chain fragment; length 27 mm.
ON 27623: Iron, rectangular collar; mineral-preserved wood (species unidentified) (JW) and ?horn; length 32 mm.
ON 27737: Iron, rectangular collar; mineral-preserved wood, willow (*Salix* sp.) or poplar (*Populus* sp.) (JW); length 17 mm.
ON 27252: Rounded, necked jar (Form J311), fabric F6; random tooling on exterior; burnished; handmade.
ON 27253: Squat, rounded, necked jar (Form J313), fabric G5; double neck/shoulder cordon; multiple wide-spaced tooled horizontal lines on body; burnished; handmade.

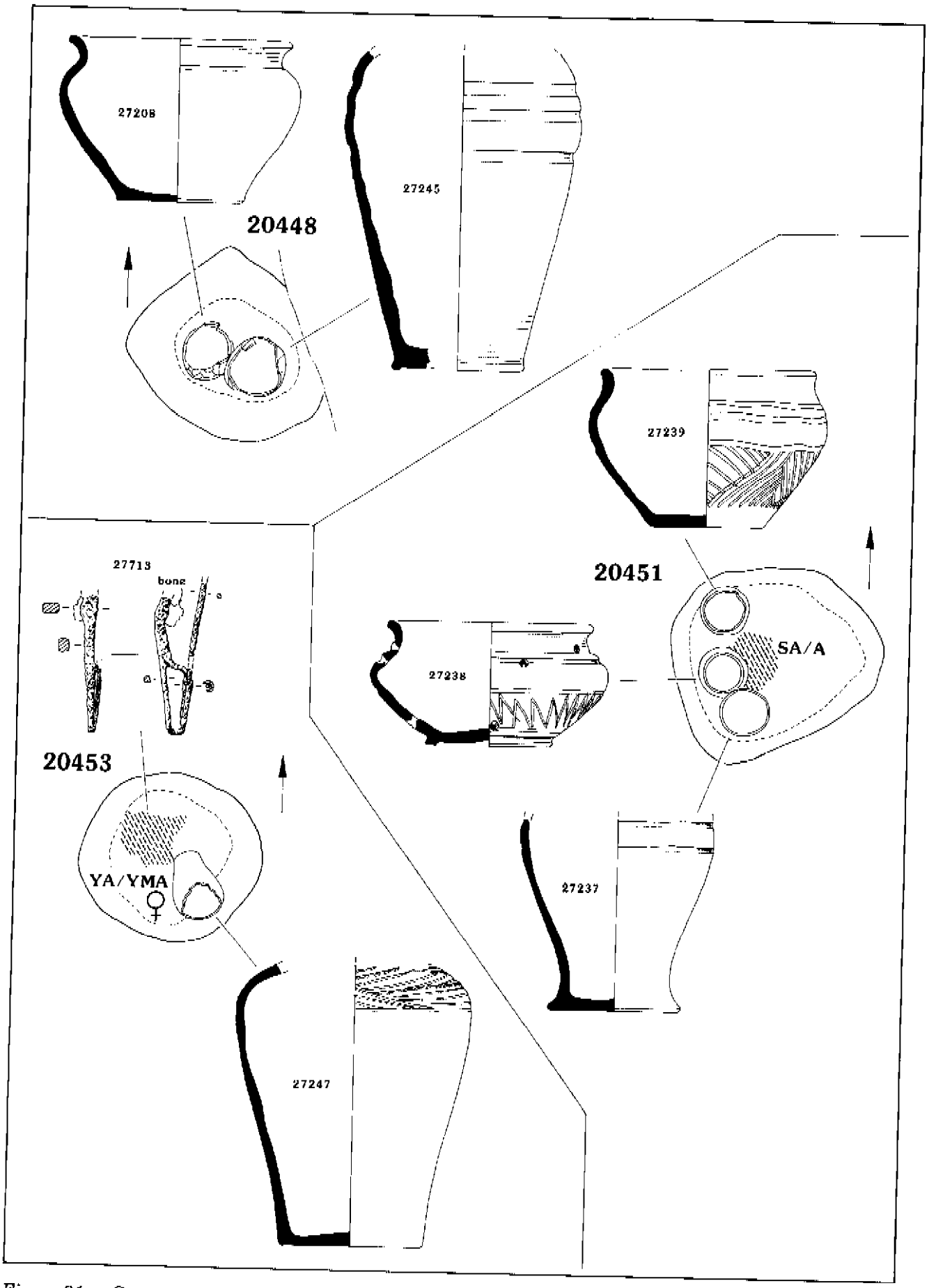


Figure 91 *Graves 20448, 20451, 20453*

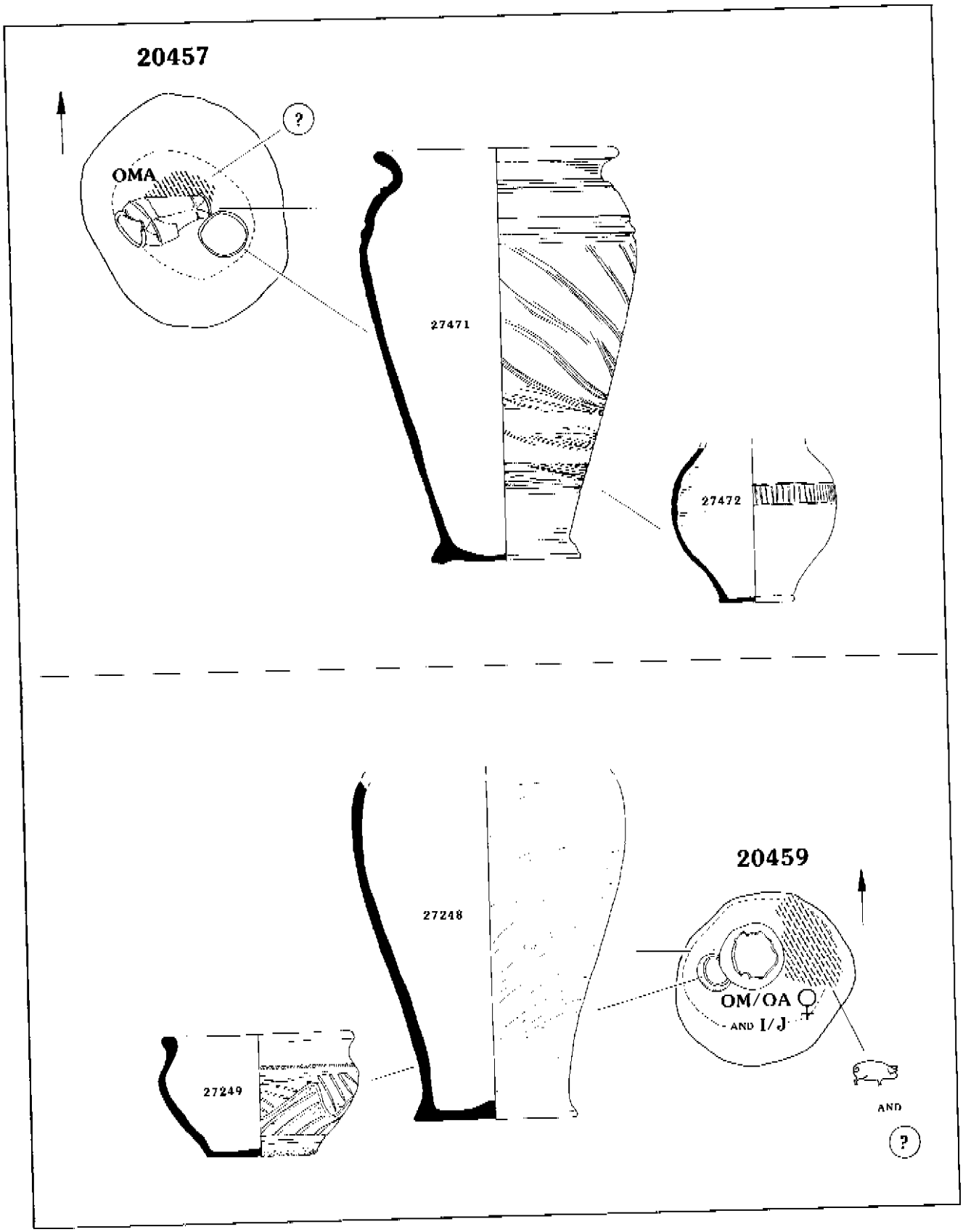


Figure 92 Graves 20457, 20459

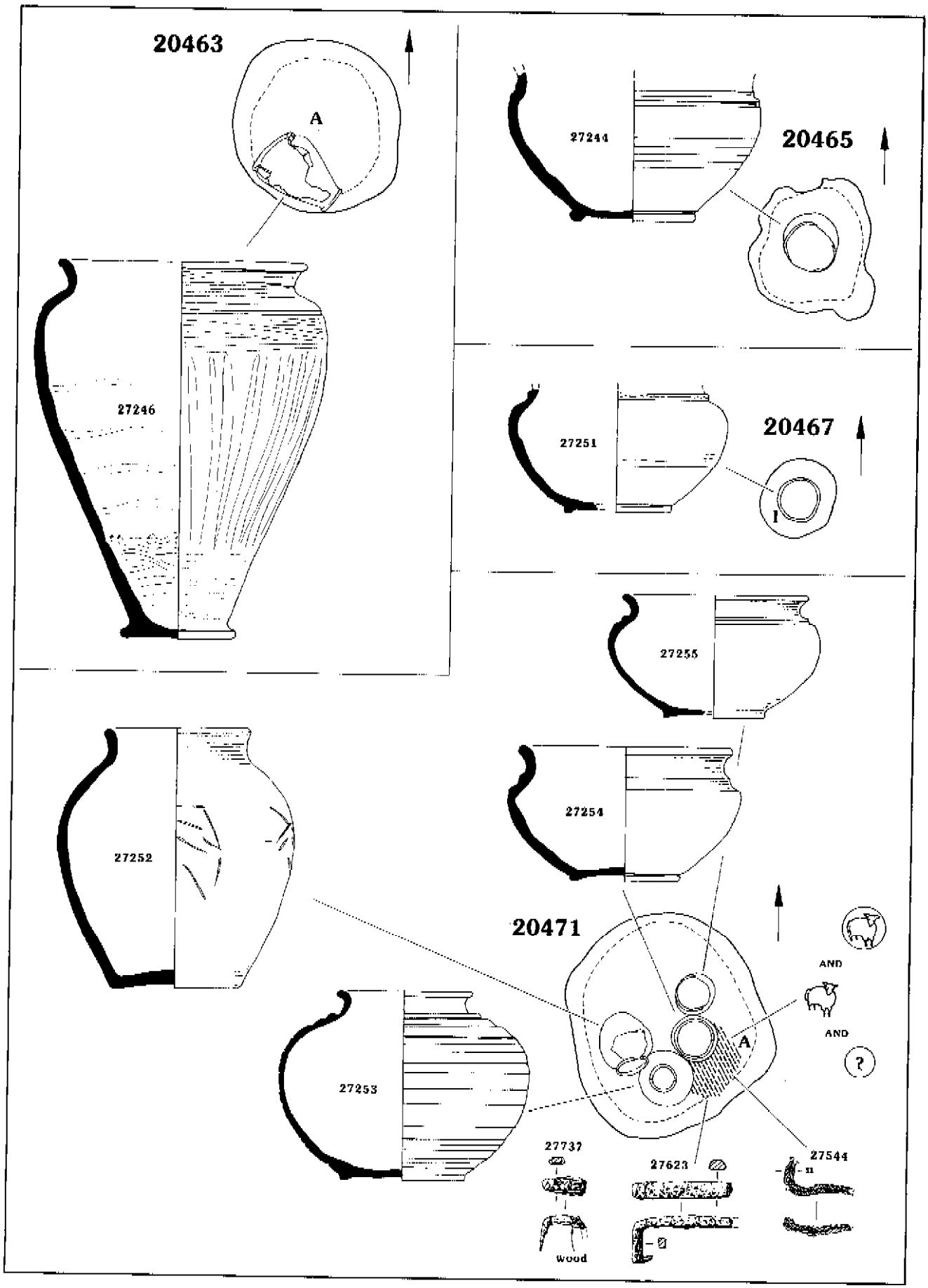


Figure 93 *Graves 20463, 20465, 20467, 20471*

ON 27254: High-shouldered, necked bowl (Form B113), fabric G7; neck cordon; burnished; spalled exterior surface; handmade.
ON 27255: High-shouldered, necked bowl (Form B113), fabric F2; neck cordon; burnished;wheelthrown.

Grave 20479 (Fill 20478)

(Figs 43; 94)
SU 89563.0/06678.0; square, orientation NNW–SSE, length 0.50 m, width 0.40 m, depth 0.20 m.
Unurned and ?urned cremation burial; 499.7 g of cremated bone — 460.7 g in S of cut, plus 39.0 g possibly in vessel 27267; young mature adult. Pig, sheep/goat, and unidentified animal bone. Blue/green staining.

Vessels to N and NW of cremated bone.
ONs 27770, 27774, 27775, 27776, 27777: Cu alloy, brooch fragments; MNI 2 brooches represented: type indeterminate; length of largest fragment 14 mm.
ON 27257: High-shouldered, necked jar (Form J113), fabric F3; shoulder cordon; single horizontal groove below shoulder; burnished; handmade.
*ON 27267: Body sherds from vessel of unknown form (Form P1), fabric F2; burnished; handmade.

Grave 20483 (Fill 20482)

(Figs 43; 94)
SU 89569.0/06678.5; circular, length 0.35 m, width 0.30 m, depth 0.26 m.
Unurned cremation burial; 168.1 g of cremated bone in E of cut; older mature/older adult. Green staining.

Grave 20484 (Fill 20485)

(Figs 45; 95)
SU 89565.7/06673.0; square, orientation NNW–SSE, length 0.93 m, width 0.80 m, depth 0.15 m.
Unurned cremation burial; cremated bone (286.7 g) in W of cut; older mature/older adult. Sheep/goat or pig, and unidentified animal bone.

Vessels to NE, E and SE of cremated bone.
ON 27263: Cu alloy, brooch; type: Feugère 2b; length of largest fragment 65 mm.
ON 27677: Cu alloy, brooch pin; type: probably a pair to ON 27263 (i.e. Feugère 2b); length of largest fragment 39 mm.
ON 27678: Cu alloy, brooch pin; type: indeterminate; length of largest fragment 14 mm.
ON 27645: Cu alloy, tiny fragments; length of largest fragment 3mm; not illustrated.
ON 27259: Corrugated bowl (Form B523), fabric F2; burnished; handmade.
ON 27260: Corrugated bowl (Form B523), fabric F2; burnished; handmade.
ON 27261: High-shouldered, necked jar (Form J113), fabric F2; neck cordon; burnished wavy lines in two horizontal bands; single horizontal groove above base; handmade.
ON 27262: High-shouldered, necked jar (Form J113), fabric F2; neck cordon; burnished wavy lines in two horizontal bands; handmade.
ON 27780: Antler, fragments from two toggles, decorated with simple ring-and-dot motifs; length uncertain; thickness of wall 5 mm; external diam. c. 16 mm; internal diam. c. 7 mm.

Grave 20493 (Fill 20492)

(Figs 43; 96)
SU 89561.0/06677.0; oval, orientation N–S, length 0.68 m, width 0.37 m, depth 0.15 m.
Unurned cremation burial; cremated bone (154.2 g) in W of cut; older mature/older adult; possible female. Sheep/goat or pig, and unidentified animal bone.

Vessels to N, NE, and E of cremated bone.
ON 27592/27718: Cu alloy, globules; weight 5 g; not illustrated.
ON 27668: Coin; Mack 44 gold quarter stater. Weight 1.54 g. Grave good.
ON 27264: High-shouldered, necked bowl (Form B111), fabric F4; burnished; handmade.
ON 27265: Moulded base of jar of unknown form (Form J003), fabric G5; single horizontal groove above base; burnished; handmade.
ON 27266: High-shouldered, everted rim bowl (Form B121), fabric F4; burnished; handmade.

Grave 20495 (Fill 20494)

(Figs 43; 96)
SU 89566.0/06679.5; circular, length 0.40 m, width 0.40 m, depth 0.20 m.
Unurned cremation burial; location of cremated bone (199.7 g) not recorded; adult.

Vessels in centre and S of cut.
ON 27268: Lower half of ?high-shouldered jar (Form J103), fabric G5; multiple, narrow spaced, tooled horizontal lines in bands; very abraded inside; burnished; handmade.
ON 27269: Biconical jar (Form J401), fabric F3; double groove on shoulder; burnished; handmade.

Grave 20497 (Fill 20496)

(Figs 43; 96)
SU 89563.4/06677.3; circular, length 0.44 m, width 0.33 m, depth 0.28 m.
Unurned cremation burial; cremated bone (91.4 g) in centre of cut; adult.

Vessel to SE of cremated bone.
ON 27270: High-shouldered, necked jar (Form J112), fabric F4; neck cordon; two bands of burnished cross-hatching on upper part of body, bounded by horizonal lines; burnished; handmade.

Grave 20533 (Fill 20532)

(Figs 43; 97)
SU 89563.8/06679.3; circular, length 0.27 m, width 0.30 m, depth 0.08 m.
No cremated bone recovered.

Vessel in centre of cut.
ON 27272: Small, crudely made biconical, bead-rimmed bowl (Form B431), fabric F4; burnished; handmade.

Grave 20535 (Fill 20534)

(Figs 43; 97)
SU 89562.0/06679.0; circular, length 0.30 m, width 0.30 m, depth 0.26 m.
Unurned cremation burial; cremated bone (177.0 g) in W of cut; adult.

Vessels to N and E of cremated bone.
ON 27273: High-shouldered, necked jar (Form J113), fabric F2; corrugation (multiple cordons) on upper half of body; burnished; handmade.
ON 27298: Rim of vessel of unknown form (Form R1), fabric F3; very friable; handmade.

Grave 20541 (Fill 20540)

(Figs 43; 97)
SU 89556.7/06680.4; circular, length 0.42 m, width 0.32 m, depth 0.11 m.
Unurned cremation burial; cremated bone (275.0 g) in centre of cut; adult.

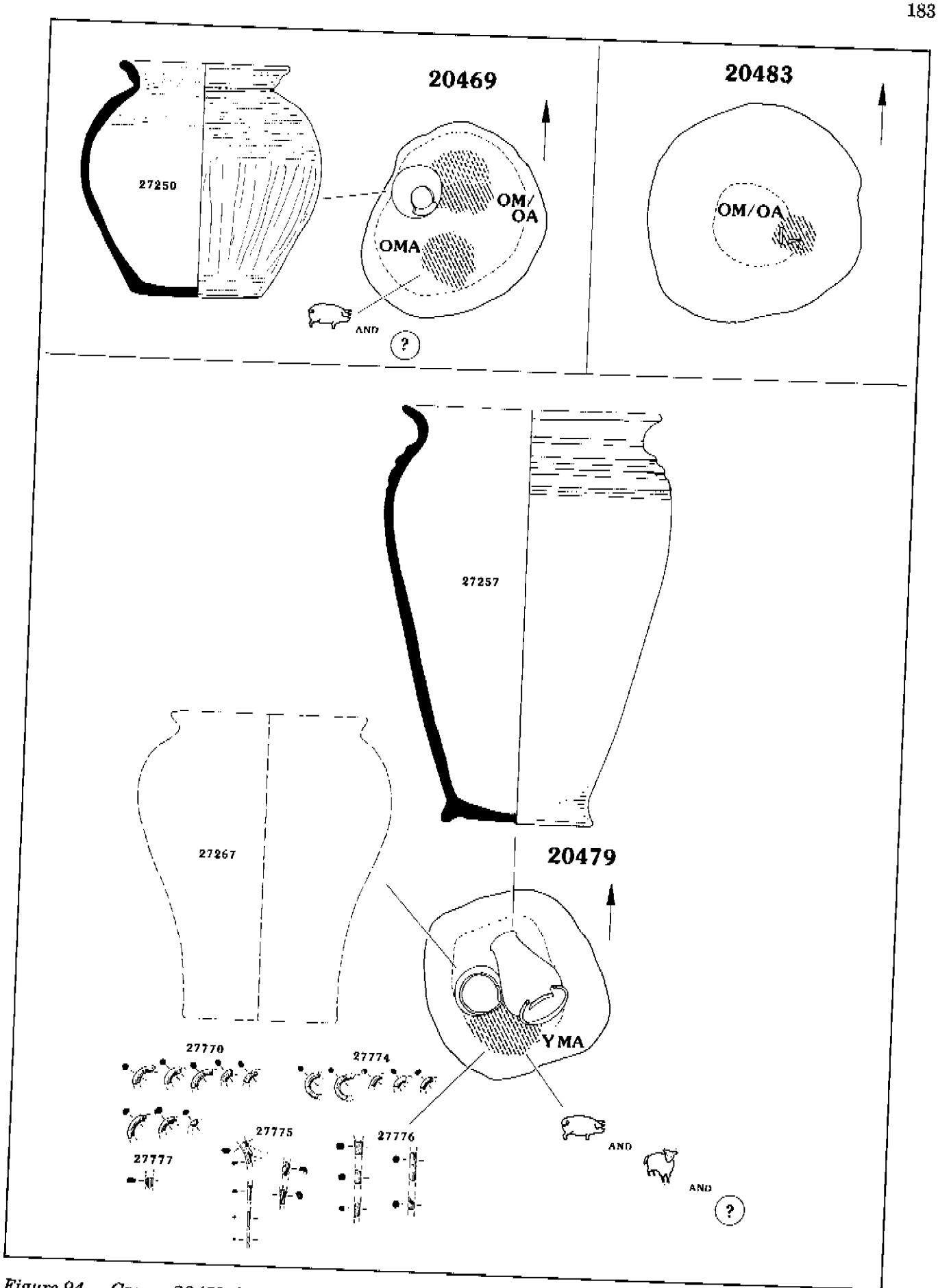


Figure 94 *Graves 20469, 20479, 20483*

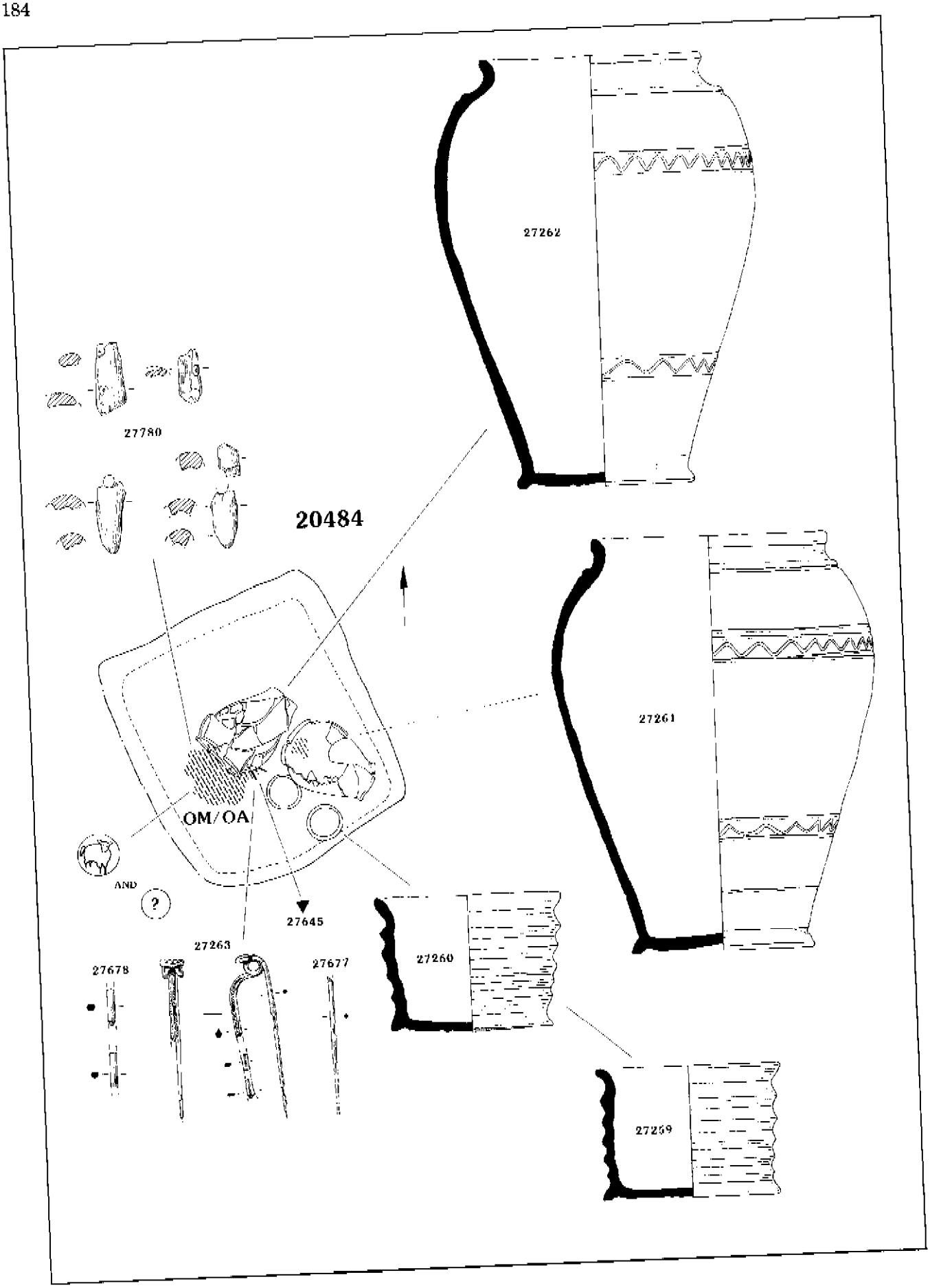


Figure 95 Grave 20484

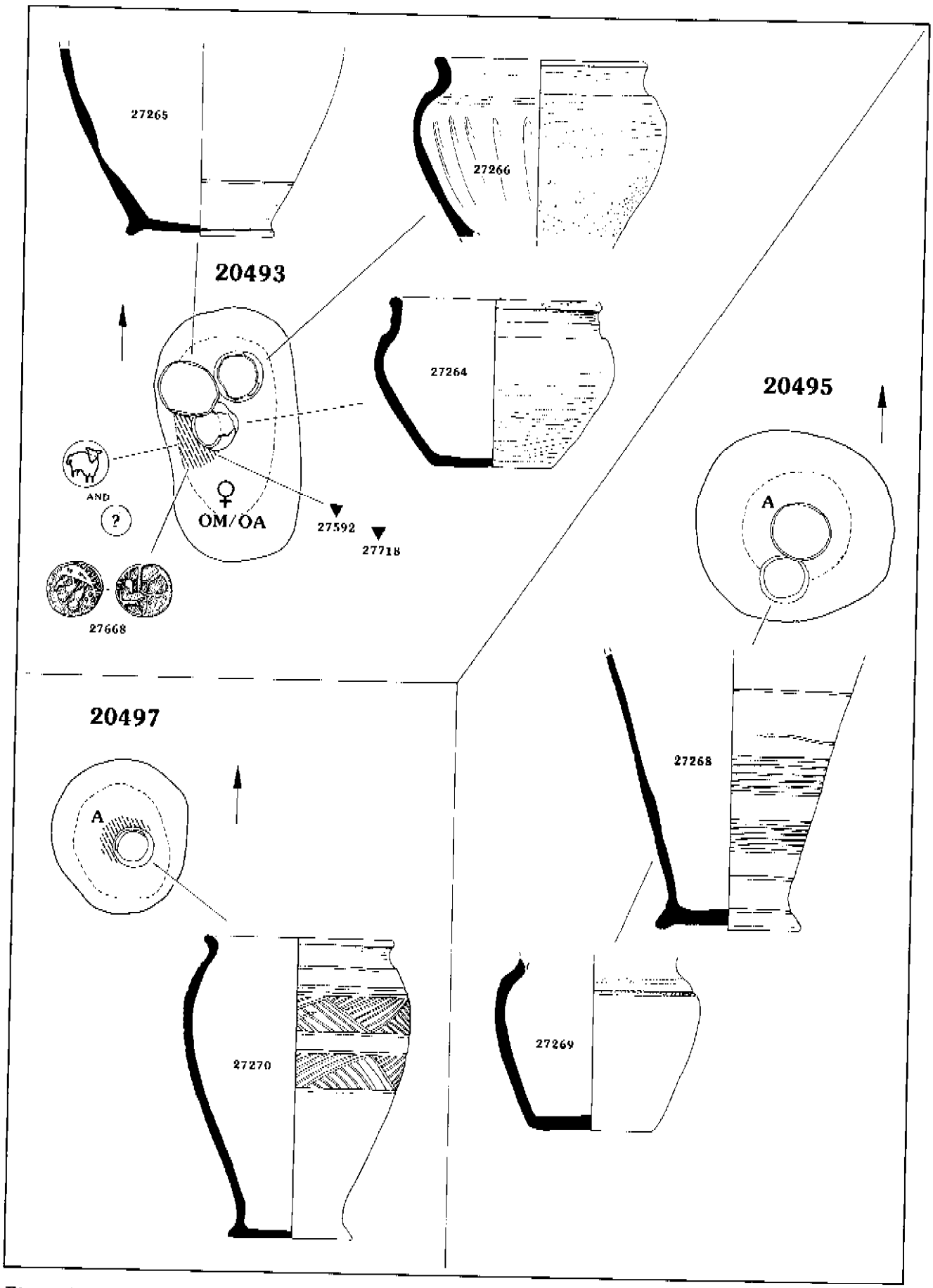


Figure 96 *Graves 20493, 20495, 20497*

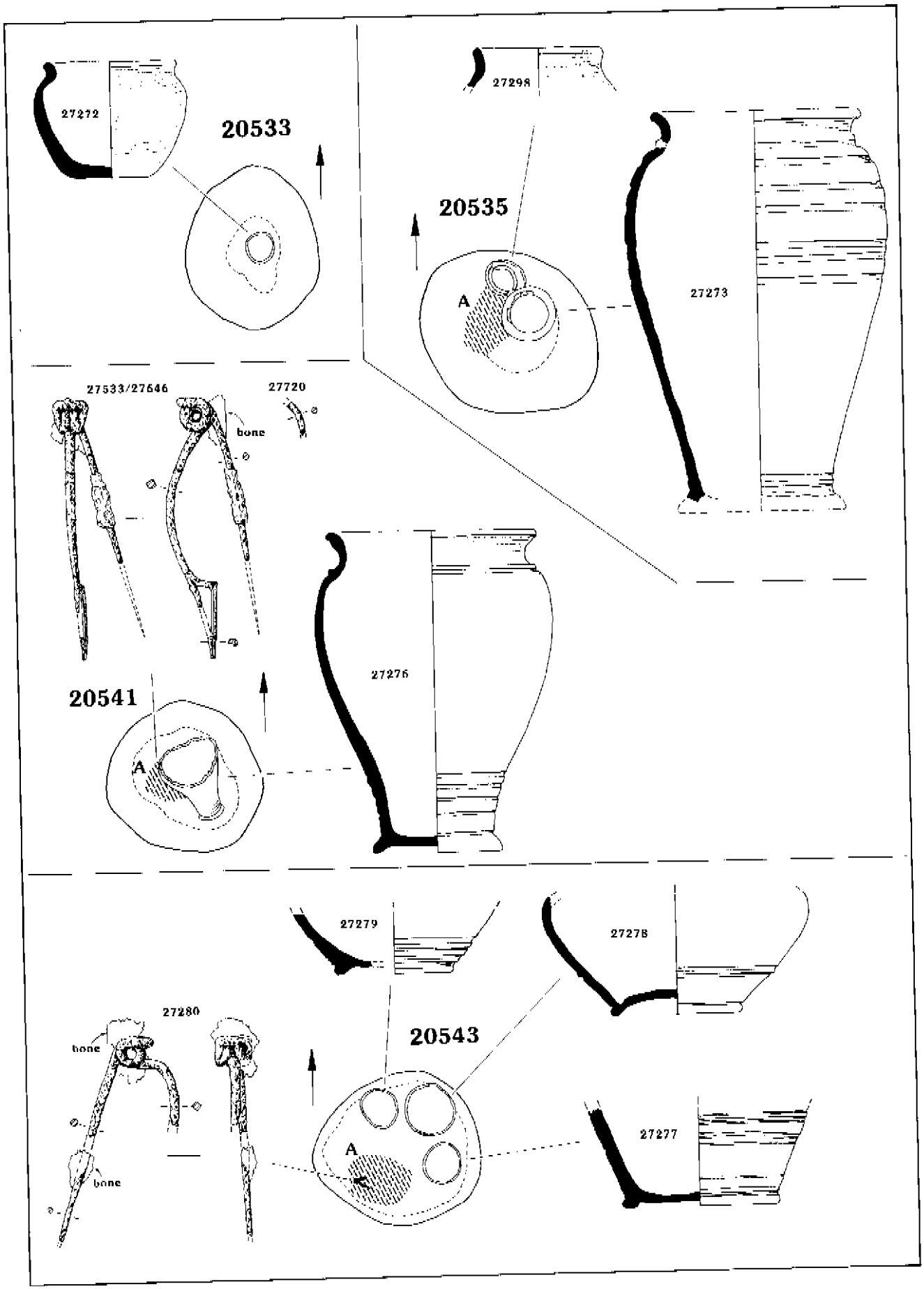


Figure 97 Graves 20533, 20535, 20541, 20543

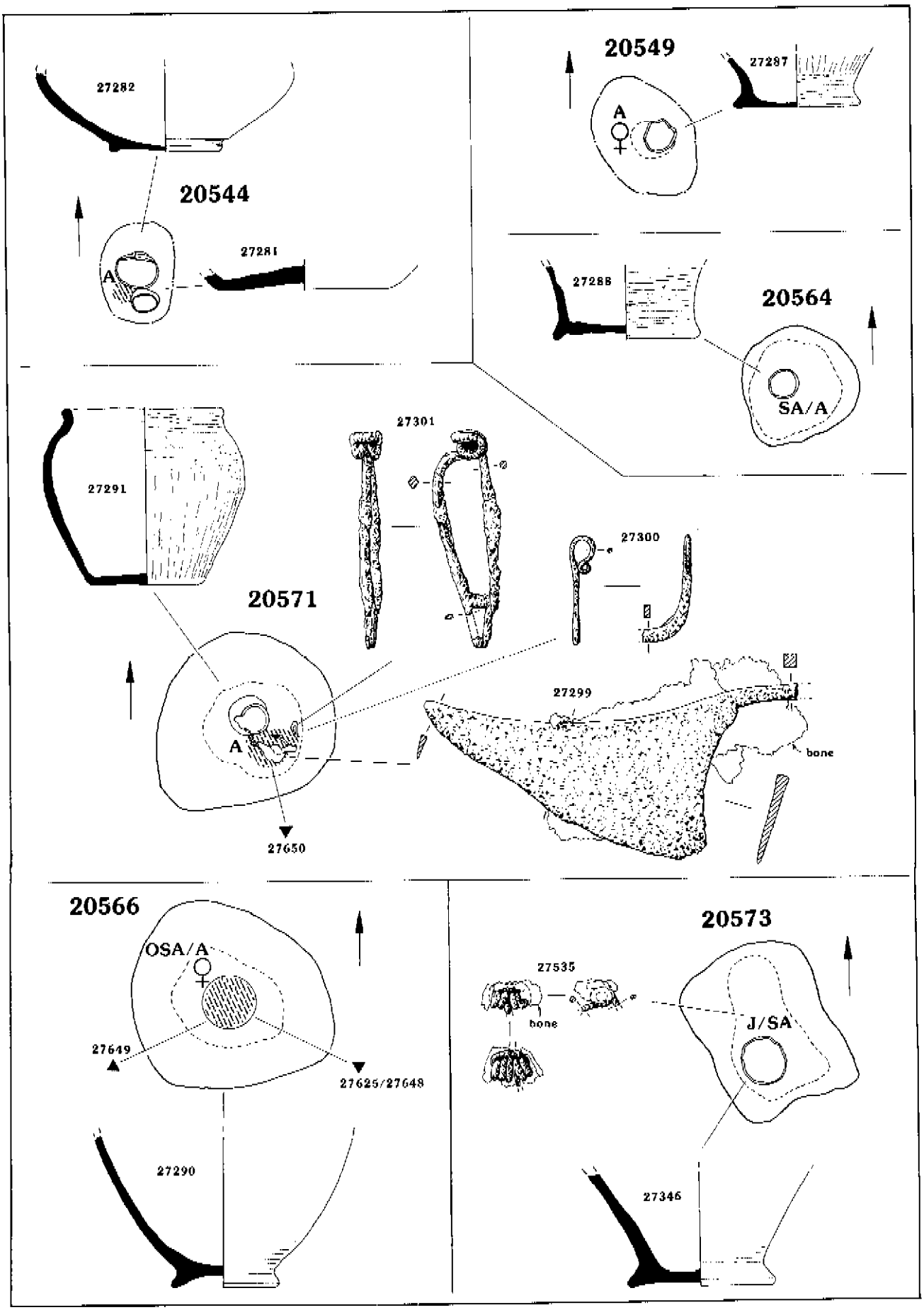


Figure 98 Graves 20544, 20549, 20564, 20566 (see Fig. 33), 20571, 20573

Vessel to SE of cremated bone.
ON 27533/27646: Iron, brooch; type: Feugère 2a; on catchplate ON 27646 (over area of 9 x 3 mm) mineralised fibres, possibly originally textile (*PWR*); length 100 mm.
ON 27720: Iron, brooch fragment; type: probably a pair to ON 27533/27646 (i.e. Feugère 2a); length 13 mm.
ON 27276: High-shouldered, necked jar (Form J113), fabric G5; neck cordon; multiple, wide-spaced horizontal grooves above base; abraded inside. burnished; handmade.

Grave 20543 (Fill 20542)
(Figs 43; 97)
SU 89561.8/06676.7; circular, length 0.55 m, width 0.48 m, depth 0.06 m.
Unurned cremation burial; cremated bone (170.8 g) in SW of cut; adult.

Vessels to N, NE, and E of cremated bone.
ON 27280: Iron, brooch; type: probably Feugère 2a; length of largest fragment 38 mm.
ON 27277: Moulded base of jar of unknown form (Form J003), fabric G6; horizontal combed rilling; burnished; handmade.
ON 27278: High-shouldered, necked bowl with markedly concave base (Form B116), fabric F2; double horizontal groove above base; burnished; handmade.
ON 27279: Moulded base of bowl of unknown form (Form B003), fabric G5; multiple horizontal, narrow-spaced grooves above base; burnished; partly leached or burnt; wheel thrown.

Grave 20544 (Fill 20545)
(Figs 45; 98)
SU 89568.8/06688.5; grave cut not recognised.
Unurned cremation burial. 55.0 g of cremated bone; adult.

Vessels to N and SE of cremated bone.
ON 27281: Flat base of vessel of unknown form (Form U001), fabric F4; burnished; handmade.
ON 27282: Moulded base of ?high-shouldered bowl (Form B103), fabric G4; burnished, abraded inside; ?wheelthrown.

Grave 20549 (Fill 20548)
(Figs 43; 98)
SU 89557.2/06683.2; grave cut not recognised.
Unurned cremation burial; location of cremated bone (121.8 g) not recorded; adult; possible female.

ON 27287: Splayed base of jar of unknown form (Form J002), fabric F2; burnished; handmade.

Grave 20564 (Fill 20565)
(Figs 44; 98)
SU 89587.0/06687.0; circular, length 0.38 m, width 0.33 m, depth 0.10 m.
Cremation burial; location of cremated bone (25.3 g) not recorded; subadult/adult.
Vessel in centre of cut.

ON 27288: Moulded base of jar of unknown form (Form J003), fabric G5; burnished; handmade.

Grave 20566 (Fill 20567)
(Figs 41; 98)
SU 89606.4/06708.5; circular, length 0.53 m, width 0.40 m, depth 0.11 m.
Urned cremation burial in centre of square four-post enclosure 20706; 158.6 g of cremated bone in urn in centre of cut; older subadult/adult; probable female.

ONs 27625/27648: Cu alloy globules; weight 1 g; not illustrated
ON 27649: Iron, tiny sheet fragments; weight <1 g; not illustrated
*ON 27290: Footring base of bowl of unknown form (Form B005), fabric F19; highly burnished inside; red-finished outside; handmade.

Grave 20571 (Fill 20570)
(Figs 45; 98)
SU 89560.0/06672.3; circular, length 0.36 m, width 0.36 m, depth 0.15 m.
Unurned cremation burial; cremated bone (118.8 g) in SE of cut; adult. Blue/green staining.

Vessel to NW of cremated bone.
ON 27650: Cu alloy 'molten' fragments; weight <1 g; not illustrated.
ON 27299: Iron, knife; length 141 mm.
ON 27300: Iron, key; length 41 mm.
ON 27301: Iron, brooch; type: Feugère 2a; length 81 mm.
ON 27291: Rounded, everted rim jar (Form B321), fabric F4; burnished; handmade.

Grave 20573 (Fill 20572)
(Figs 43; 98)
SU 89561.0/06675.0; rectangular, orientation NNW–SSE, length 0.43 m, width 0.24 m, depth 0.15 m.
Cremation burial; location of cremated bone (45.7 g) not recorded; juvenile/subadult.

Vessel in S of cut.
ON 27535: Iron, brooch; type: probably Feugère 2a; width of spring 16 mm.
ON 27346: Splayed base of jar of unknown form (Form J002), fabric F2; burnished; handmade.

Grave 20583 (Fill 20582)
(Figs 38; 99)
SU 89566.8/06697.3; circular, length 0.10 m, width 0.10 m, depth 0.29 m.
Unurned cremation burial; cremated bone (50.9 g) in centre of cut; juvenile/subadult.

Vessel to N of cremated bone.
ON 27295: Iron, ?brooch, represented by corrosion products and staining; disintegrated on lifting; length (taken from photograph) c. 80 mm (not illustrated).
ON 27294: Rounded, bead-rimmed jar (Form B331), fabric F3; burnished; handmade.

Grave 20585 (Fill 20584)
(Figs 45; 99)
SU 89563.2/06669.0; circular, length 0.59 m, width 0.46 m, depth 0.14 m.
Unurned cremation burial; cremated bone (26.4 g) in E of cut; adult.

Vessels to S and W of cremated bone.
ON 27296: Biconical, necked jar (Form J411), fabric Q11; two horizontal bands of short diagonal slashes on neck, divided by horizontal tooled lines; burnished; handmade.
ON 27297: Splayed base of jar of unknown form (Form J002), fabric F4; burnished; handmade.

Grave 20589 (Fill 20588)
(Figs 43; 99)
SU 89556.0/06681.5; rectangular, orientation ENE–WSW, length 0.75 m, width 0.51 m, depth 0.18 m.
Unurned cremation burial; cremated bone (117.1 g) in W of cut; adult. Blue/green staining.

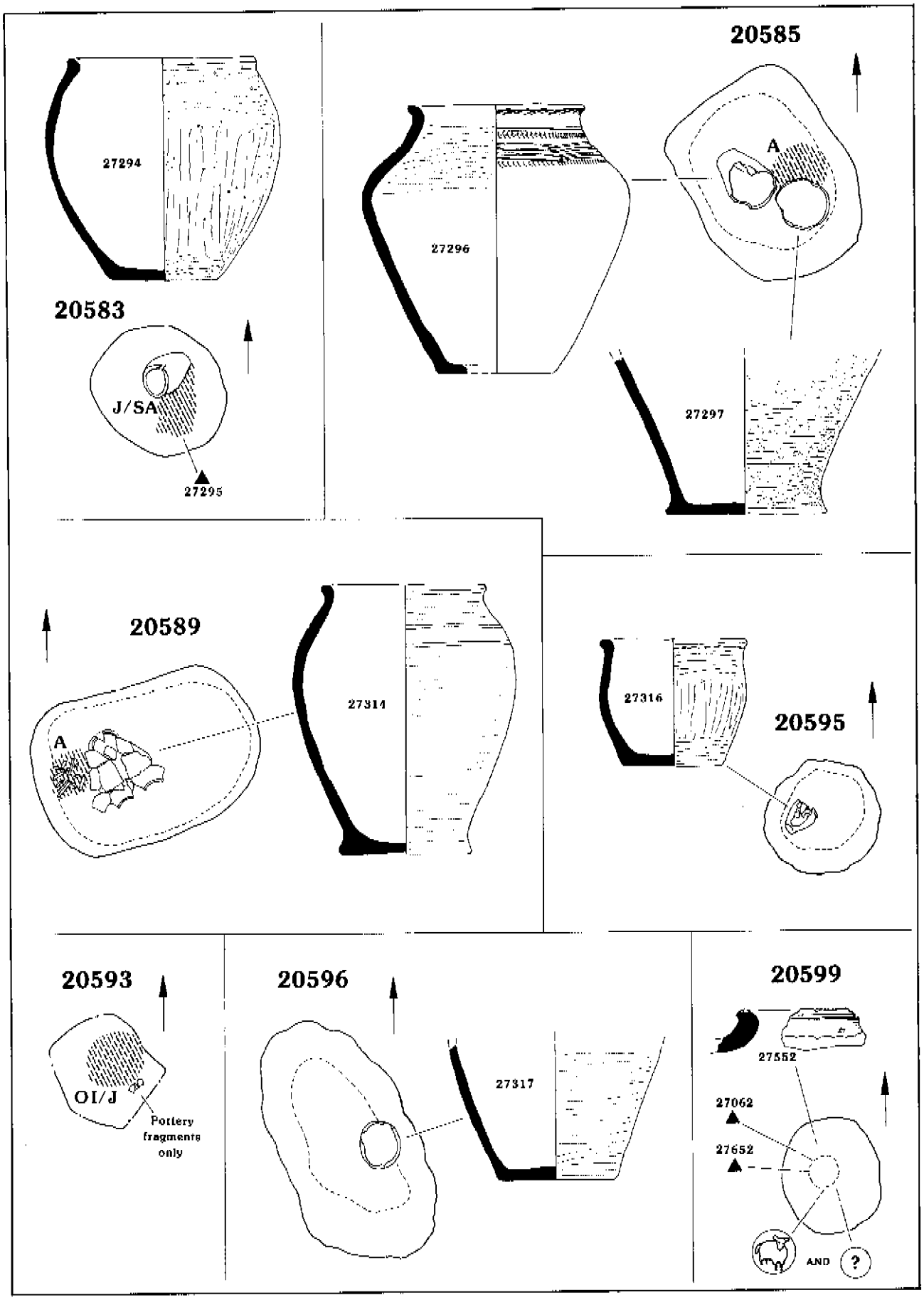


Figure 99 *Graves 20583, 20589, 20593, 20595, 20596, 20599*

Vessel to E of cremated bone.
ON 27314: Ovoid, everted rim jar (Form J222), fabric F4; double horizontal groove on shoulder; handmade.

Grave 20593 (Fill 20592)
(Figs 43; 99)
SU 89554.5/06683.2; grave cut not recognised.
Unurned cremation burial; 31.9 g of cremated bone; older infant/juvenile.

Grave 20595 (Fill 20594)
(Figs 43; 99)
SU 89559.6/06688.0; circular, length 0.33 m, width 0.28 m, depth 0.05 m.
No cremated bone recovered.

Vessel in W of cut.
ON 27316: Small, crudely made, ovoid, bead-rimmed bowl (Form B231), fabric G7; spalled exterior; handmade.

Grave 20596 (Fill 20597)
(Figs 43; 99)
SU 89564.3/06691.0; oval, orientation NNW–SSE, length 0.64 m, width 0.31 m, depth 0.14 m.
No cremated bone recovered.

Vessel in E of cut.
ON 27317: Flat base of jar of unknown form (Form J001), fabric F3; burnished; handmade.

Grave 20599 (Fill 20598)
(Figs 43; 99)
SU 89566.6/06690.2; circular, length 0.44 m, width 0.36 m, depth 0.20 m.
0.7 g of cremated bone. Sheep/goat or pig, and unidentified animal bone.

Fragments of one vessel.
ON 27602: Iron, nail shank; length 16 mm; not illustrated.
ON 27652: Iron, nail shank; length 10 mm; not illustrated.
ON 27652: Rim and body sherds of vessel of unknown form (Form J020); fabric F4; burnished; handmade.

Grave 20601 (Fill 20600)
(Figs 43; 100)
SU 89562.0/06690.0; square, orientation ENE–WSW, length 0.75 m, width 0.68 m, depth 0.16 m.
Unurned cremation burial; cremated bone (183.8 g) in S of cut; young/mature adult, possible female. Sheep/goat or pig bone.

Vessel to N of cremated bone.
ON 27319: Cu alloy, ring; diam. c. 29 mm.
ON 27672: Cu alloy, ring; diam. c .9 mm.
ON 27730: Iron, brooch; type: Almgren 65/Feugère 8b; length of largest fragment 28 mm.
ON 27731: Iron, brooch fragment; type: probably a pair to 27730 (i.e. Almgren 65/Feugère 8b); length 12 mm.
ON 27529: Iron, ring; max. diam. 39 mm; min. diam. 35 mm.
ON 27653: Iron, ring and iron chain fragment (not attached); on ring, over area of 15 x 10 mm, casts of fibres, possibly remains of textile (*PWR*); ring max. diam. 38 mm; min. diam. 34 mm; chain length 39 mm.
ON 27540: Iron, ring and iron chain fragment (attached); ring diam. c. 18 mm; chain length 14 mm.
ON 27318: High-shouldered, necked bowl (Form B113), fabric G5; double neck cordon; single groove above base; burnished; wheelthrown rim on ?handmade body.

Grave 20605 (Fill 20604)
(Figs 38; 100)
SU 89556.2/06697.7; circular, length 0.60 m, width 0.58 m, depth 0.05 m.
Unurned cremation burial; cremated bone (362.8 g) in S of cut; older mature/older adult; possible female.

Vessels to N and NE of cremated bone.
ON 27542: Iron, brooch; type: indeterminate; length 22 mm.
ON 27321: Convex base of ?rounded bowl (Form B308), fabric F3; single horizontal groove above base; burnished chevrons; burnished intersecting arcs over horizontal lines; burnished; spalled exterior; handmade.
ON 27322: Rim and base of jar of unknown form (Form J013), fabric G5; neck cordon; very leached; handmade.
ON 27323: Biconical, everted rim bowl (Form B421), fabric F3; burnished; handmade.

Grave 20610 (Fill 20609)
(Figs 38; 101)
SU 89563.6/06696.2; circular, length 0.55 m, width 0.52 m, depth 0.09 m.
Unurned cremation burial; cremated bone (22.9 g) in centre of cut; adult.

Vessels to N and NW of cremated bone.
ON 27515/27536: Iron, brooch; type: probably Feugère 2a; length of largest fragment 31 mm.
ON 27327: Squat, ovoid, everted rim jar (Form J223), fabric F2; burnished; handmade.
ON 27328: Biconical, bead-rimmed bowl (Form B431), fabric F2; burnished lattice on matt central zone; burnished at rim and base; handmade.

Grave 20614 (Fill 20615)
(Figs 43; 101)
SU 89553.8/06699.7; grave cut not recognised.
Cremation burial. 24.7 g of cremated bone; subadult/adult.

Vessel to SE of cremated bone.
ON 27283: Moulded base of jar of unknown form (Form J003), fabric G6; horizontal tooled rilling; single groove above base; burnished; handmade.

Grave 20619 (Fill 20618)
(Figs 43; 101)
SU 89562.0/06692.0; oval, orientation E–W, length unknown as cut by ditch 20105, width 0.30 m, depth 0.18 m.
Unurned cremation burial; location of cremated bone (11.0 g) not recorded; adult.

Vessels in W of cut.
ON 27554: Pedestal base from bowl or jar (Form U004), fabric F10; two horizontal grooves on body; multiple tooled horizontal lines above base; handmade (single sherd recovered from fill).
ON 27555: Moulded base of bowl of unknown form (Form B003), fabric Q3; handmade (single sherd recovered from fill).

Grave 20620 (Fill 20621)
(Figs 43; 101)
SU 89565.4/06692.0; circular, length 0.38 m, width 0.38 m, depth 0.35 m.
Unurned cremation burial; cremated bone (174.6 g) in centre of cut; adult.

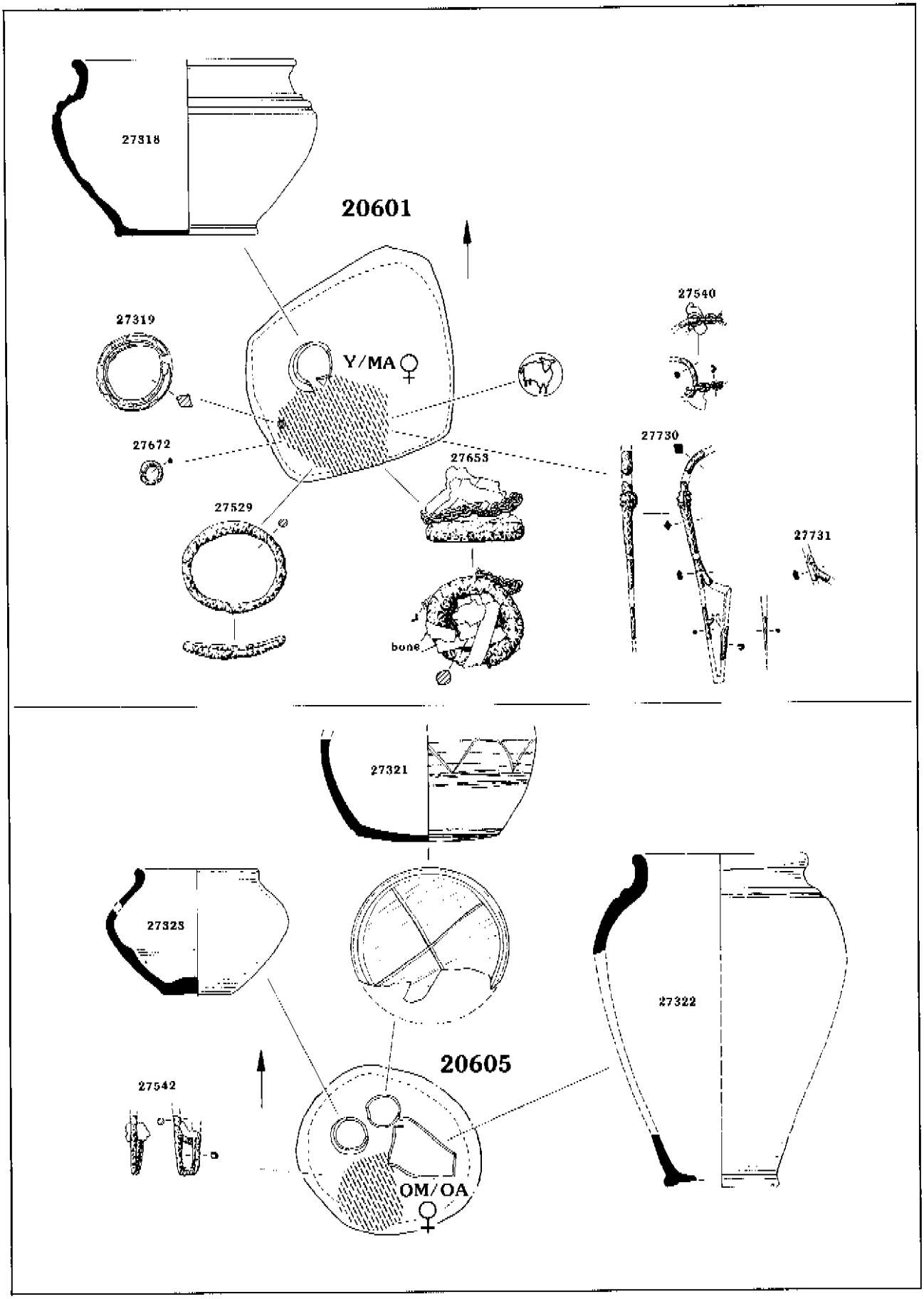


Figure 100 Graves 20601, 20605

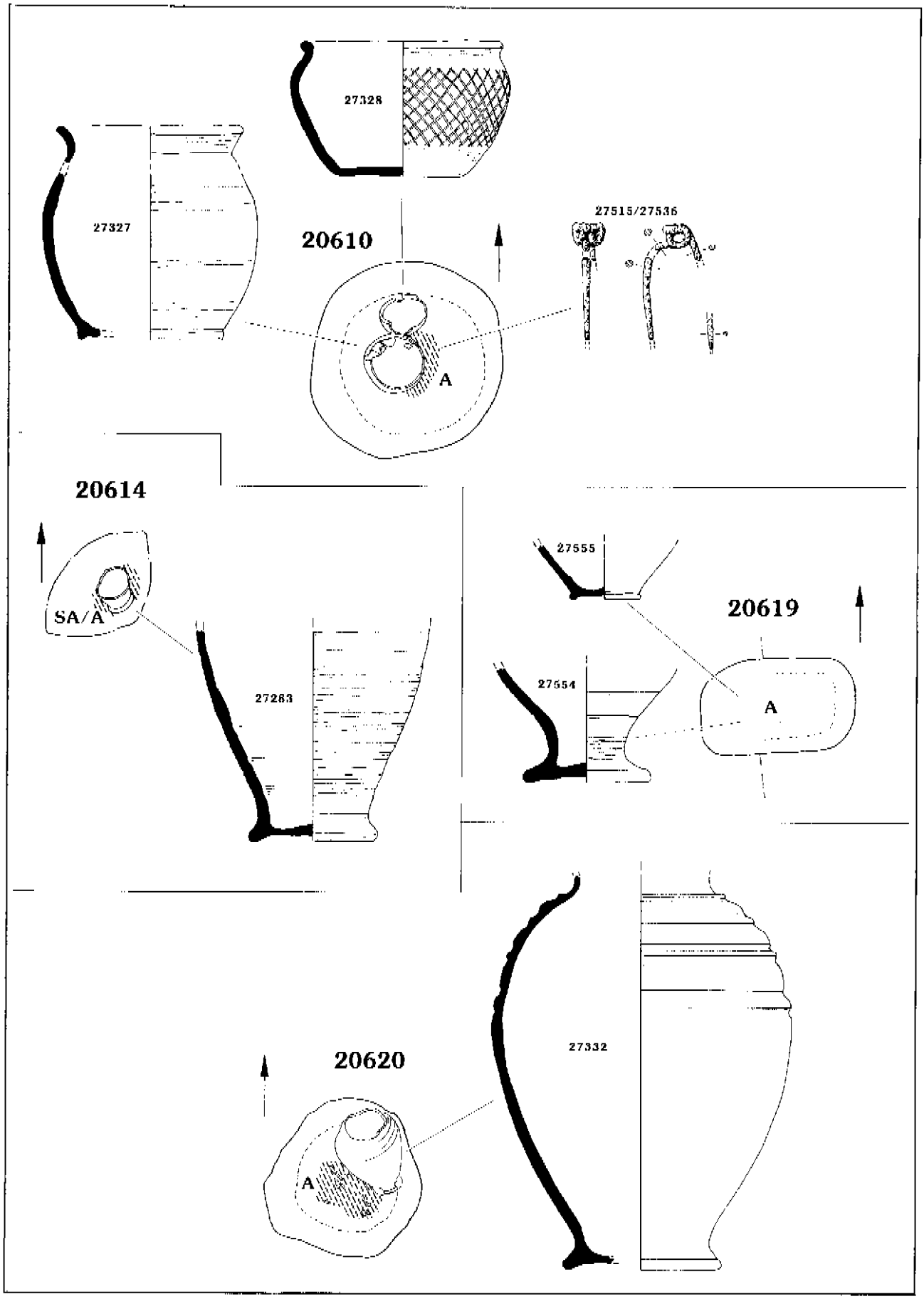


Figure 101 Graves 20610, 20614, 20619, 20620

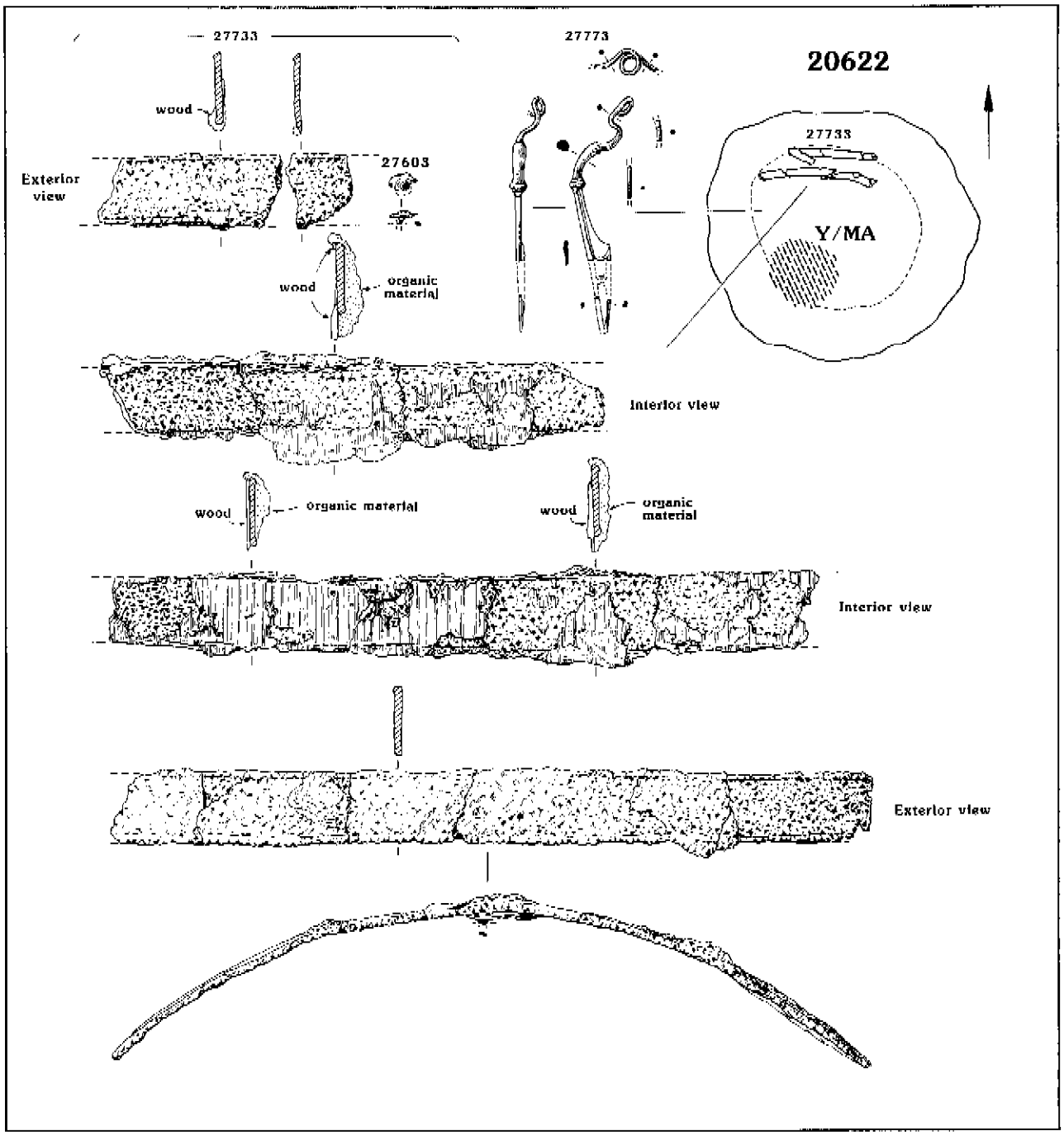


Figure 102 Grave 20622

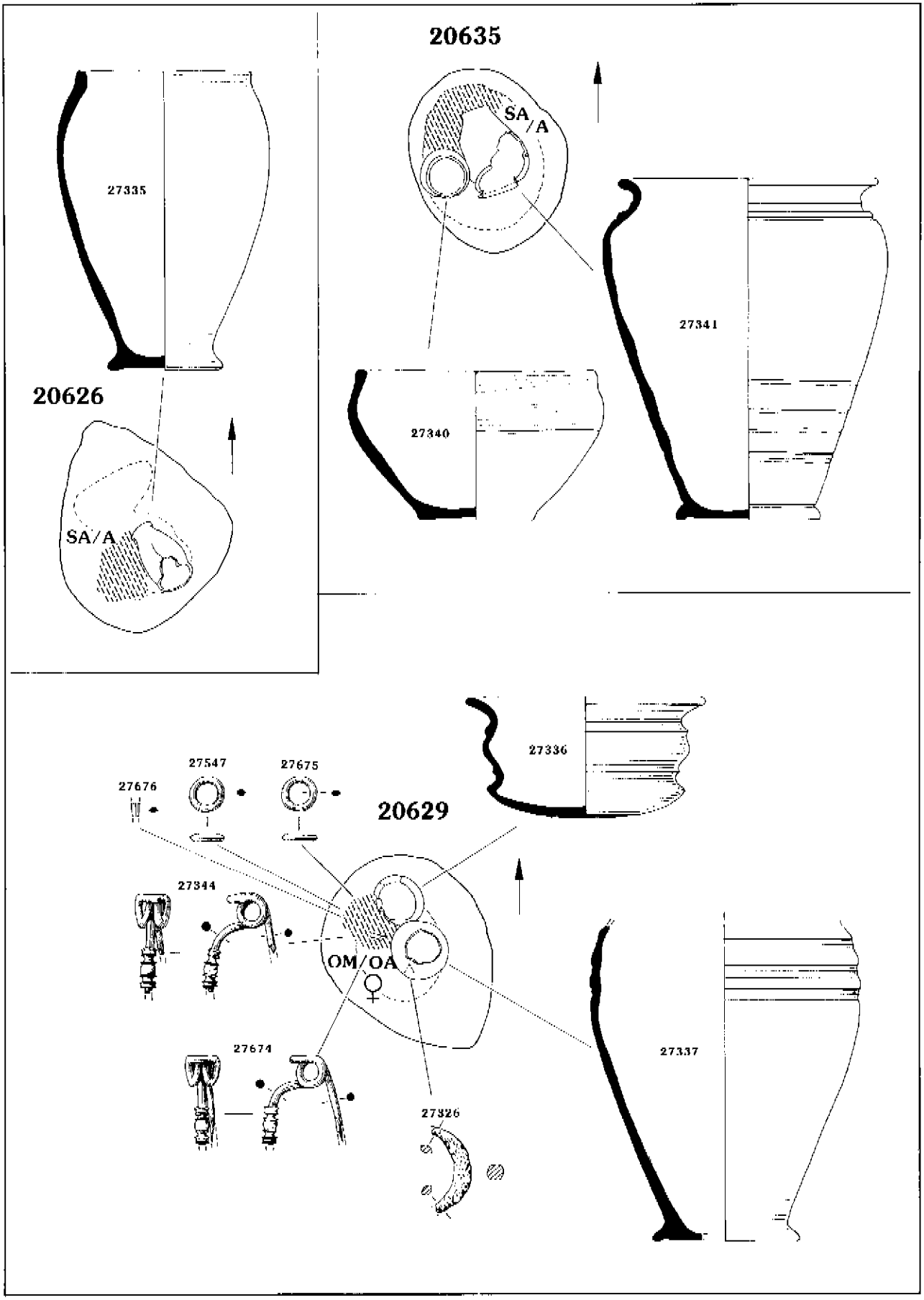


Figure 103 Graves 20626, 20629, 20635

Vessel to E of cremated bone.
ON 27332: Ovoid, necked jar (Form J212), fabric F2; corrugation (multiple cordons) from neck to girth; burnished; handmade.

Grave 20622 (Fill 20613)

(Figs 43; 102)
SU 89565.0/06693.0; circular, length 0.56 m, width 0.50 m, depth 0.19 m.
Unurned cremation burial; cremated bone (278.7 g) in SW of cut; young/mature adult. Blue/green staining.

ON 27773: Silver, brooch; type: Almgren 65/Feugère 8b; length of largest fragment 54 mm.
ON 27733: Iron, bucket binding; mineral-preserved oak (*Quercus* sp.) staves with a radial surface on the inner face. The visible lines in the wood are the large earlywood vessels and the distance between two sets of vessels is one year's growth, but not suitable for dendrochronology (*JW*); mineralised animal pelt (*PWR*) and straw remains (*DdM*) on the outer face. Three fragments have remains of pelt 27330 (90 x 32 mm), 27329 (60 x 40 mm), and 27603 (14 x 8 mm). The tufts of fibre are smooth and straight with no sign of crimp; individual fibres are circular or oval in section and 28–110 microns in diameter; scale pattern poor. Not likely to be wool, perhaps cattle hide or similar (*PWR*); diam. of bucket c. 360 mm; not all fragments illustrated.
ON 27734: Organic material associated with the binding, perhaps decayed horn/antler (*JW*), with a stud in it and patches of a shiny material elsewhere. XRF indicates that the stud and other material are tin or tinning (*CM*) (not illustrated).
ON 27735: As 27734 but without the stud (not illustrated).

Grave 20626 (Fill 20625)

(Figs 38; 103)
SU 89564.5/06698.2; irregular, length 0.30 m, width 0.25 m, depth 0.12 m.
Unurned cremation burial; cremated bone (164.7 g) in S of cut; subadult/adult.

Vessel to NE of cremated bone.
ON 27335: High-shouldered, bead-rimmed jar (Form J132), fabric F6; burnished; handmade.

Grave 20629 (Fill 20628)

(Figs 38; 103)
SU 89563.0/06705.7; circular, length 0.30 m, width 0.27 m, depth 0.20 m.
Unurned cremation burial; cremated bone (360.1 g) in NW of cut; older mature/older adult; probable male.

Vessels situated to NE and SE of cremated bone.
ON 27344: Cu alloy, brooch; type: Almgren 65/Feugère 8b; length 37 mm.
ON 27674: Cu alloy, brooch; type: Almgren 65/Feugère 8b; length 33 mm.
ON 27676: Cu alloy brooch fragment; almost certainly part of ON 27344 or ON 27674; length 5 mm.
ON 27547: Cu alloy, ring; diam. 13 mm.
ON 27675: Cu alloy, ring; diam. 13 mm.
ON 27326: Iron, ?ring fragment; length 32 mm (diam. c. 35 mm).
ON 27336: Cordoned bowl with flaring rim and shallow footring (Form B528), fabric F2; double cordon defining central swelling at girth; burnished; ?wheelthrown.
ON 27337: High-shouldered jar (Form J103), fabric G7; corrugated shoulder (multiple cordons); burnished; handmade.

Grave 20635 (Fill 20634)

(Figs 43; 103)
SU 89565.3/06691.0; circular, length 0.55 m, width 0.44 m, depth 0.27 m.
Unurned cremation burial; cremated bone (115.1 g) in NW of cut; subadult/adult.

Vessels to SE and S of cremated bone.
ON 27340: Rounded, bead-rimmed bowl (Form B331), fabric F6; burnished; handmade.
ON 27341: High-shouldered, necked jar (Form J113), fabric F2; neck cordon, multiple, wide-spaced, horizontal tooled lines on lower half of body; burnished; handmade.

Grave 20637 (Fill 20636)

(Figs 38; 104)
SU 89565.0/06702.7; circular, length 0.48 m, width 0.38 m, depth 0.19 m.
Unurned and ?urned double cremation burial: 16.3 g of cremated bone in vessel 27343, young infant; plus 20.4 g within fill, adult, possible male. Blue/green staining.

Vessels in SE (urn) and S of cut.
ON 27661: Iron, nail; length 47 mm.
ON 27662: Iron, nail; length 28 mm.
ON 27342: High-shouldered, necked bowl (Form B113), fabric Q7; neck cordon; ?wheelthrown.
*ON 27343: Large high-shouldered, necked, pedestal bowl (Form B115), fabric G5; neck cordon; multiple, wide-spaced, horizontal grooves on body; base cordon; burnished; wheelthrown.

Grave 20647 (Fill 20648)

(Figs 43; 104)
SU 89566.0/06688.0; circular, length 0.50 m, width 0.45 m, depth 0.17 m.
Cremation burial; location of cremated bone (12.5 g) not recorded.

Vessels in centre of cut.
ON 27348: Ovoid, necked jar (Form J213), fabric G5; neck cordon; corrugation (multiple cordons) on upper half; multiple, wide-spaced, horizontal grooves on lower half; burnished; handmade.
ON 27358: High-shouldered, necked, pedestal bowl (Form B114), fabric G8; neck cordon; burnished; ?wheelthrown.
ON 27359: Moulded base of rounded bowl (Form B303), fabric Q7; wheel thrown.

Grave 20650 (Fill 20649)

(Figs 34; 105)
SU 89563.3/06718.0; circular, length 0.55 m, width 0.50 m, depth 0.10 m.
Unurned cremation burial; cremated bone (112.3 g) in centre of cut; adult; possible female.

Vessels to N, S, E, and W of cremated bone.
ON 27340: Rounded jar (Form J303), fabric G6; shoulder cordon and single horizontal groove below; double horizontal groove above base; very abraded inside; burnished; handmade.
ON 27349: High-shouldered, necked bowl (Form B112), fabric Q3; multiple, wide-spaced, burnished horizontal lines; burnished; wheelthrown.
ON 27350: High-shouldered, necked bowl (Form B112), fabric Q3; burnished vertical and diagonal hatching in horizontal band on shoulder; burnished; handmade.
ON 27351: High-shouldered, pedestal jar (Form J107), fabric F14; three cordons above base; band of burnished crosses and vertical lines below girth; burnished; wheelthrown.

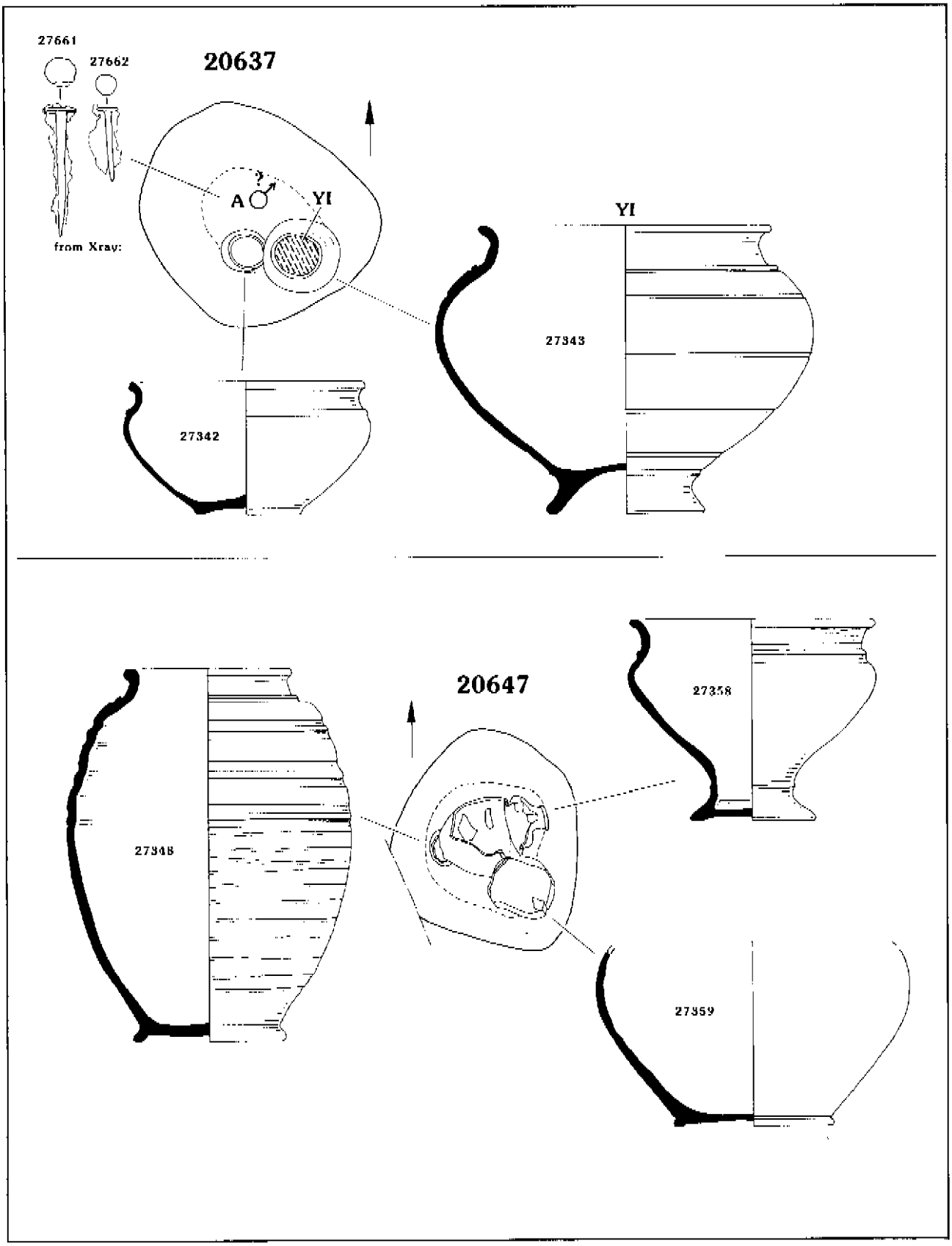


Figure 104 Graves 20637, 20647

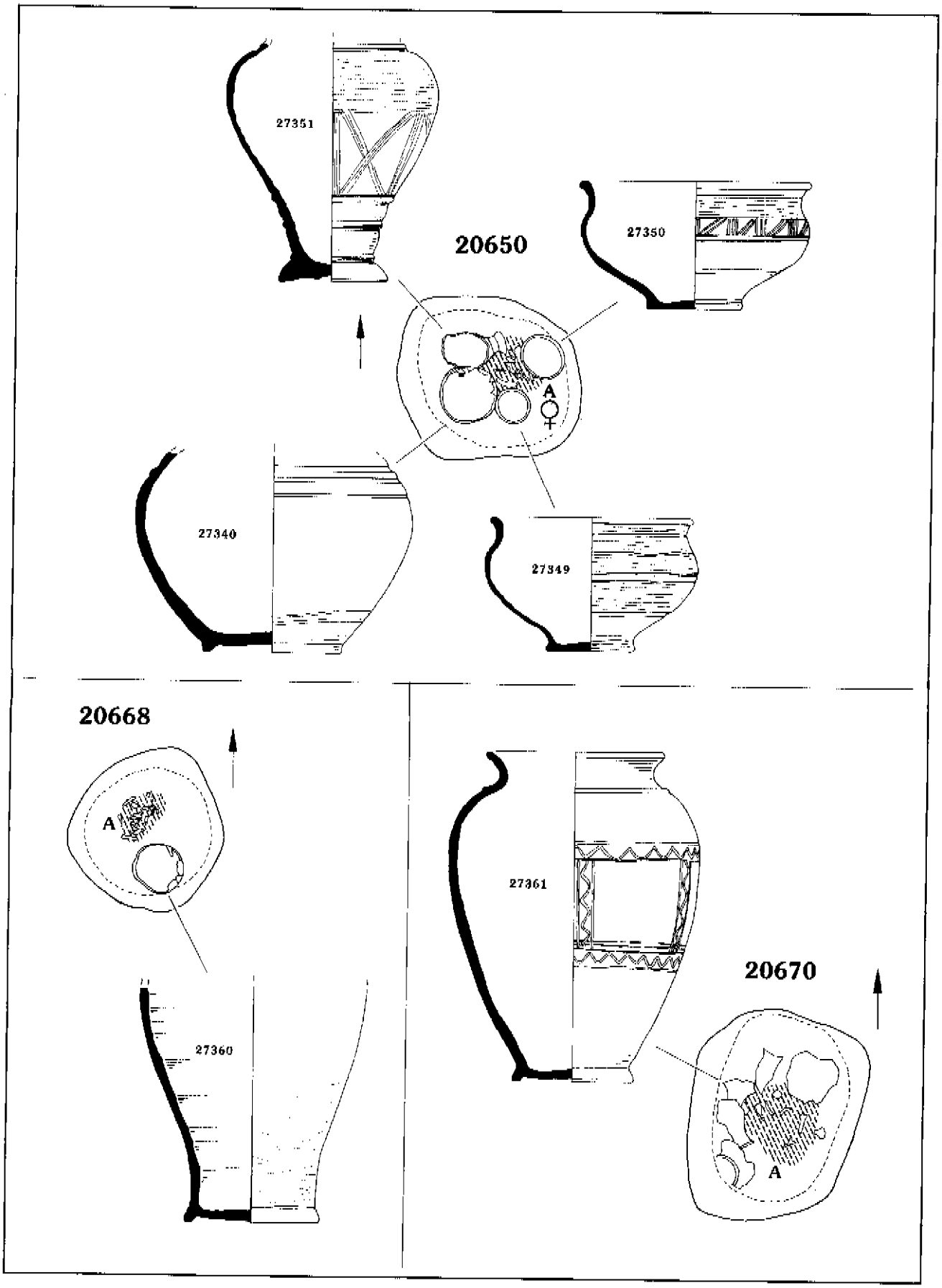


Figure 105 *Graves 20650, 20668, 20670*

Grave 20654 (Fill 20653)
(Figs 38; 106)
SU 89564.5/06713.5; square, orientation N–S, length 0.64 m, width 0.58 m, depth 0.27 m.
Unurned cremation burial; cremated bone (200.1 g) in N of cut; adult. Blue/green staining.

Vessels to E, S, and W of cremated bone.
ON 27352: Ovoid, necked jar (Form J213), fabric Q7; neck and shoulder cordons; combed rilling; ?wheelthrown.
ON 27353: High-shouldered, necked jar (Form J112), fabric F3; burnished lattice in horizontal band around girth; burnished; spalled exterior; handmade.
ON 27355: Biconical, bead-rimmed bowl (Form B431), fabric F2; double groove on neck; burnished lattice on lower half of body; burnished; handmade.
ON 27356: Biconical, everted rim bowl (Form B421), fabric F2; burnished lattice on shoulder; burnished; handmade.
ON 27357: High-shouldered, necked bowl (Form B113), fabric G7; burnished; handmade.

Grave 20668 (Fill 20667)
(Figs 35; 105)
SU 89556.6/06715.5; circular, length 0.46 m, width 0.46 m, depth 0.19 m.
Unurned cremation burial; cremated bone (68.4 g) in centre of cut; adult

Vessel to SE of cremated bone.
ON 27360: Lower half of ?high-shouldered jar (Form J103), fabric G5; handmade.

Grave 20670 (Fill 20669)
(Figs 35; 105)
SU 89564.7/06718.3; oval, orientation N–S, length 0.68 m, width 0.47 m, depth 0.30 m.
Unurned cremation burial; cremated bone (174.5 g) in centre of cut; adult

Vessel broken over base of cut.
ON 27361: High-shouldered, necked jar (Form J113), fabric F2; neck cordon; burnished wavy lines in vertical and horizontal bands; burnished; handmade.

Grave 20671 (Fill 20672)
(Figs 42; 106)
SU 89522.8/06691.0; circular, length 0.40 m, width 0.30 m, depth 0.15 m.
No cremated bone recovered.

Vessel in N of cut.
ON 27347: Ovoid, bead-rimmed bowl (Form B231), fabric F3; burnished; handmade.

Grave 20675 (Fill 20676)
(Figs 43; 107)
SU 89564.8/06680.7; square, orientation NNW–SSE, length 0.55 m, width 0.55 m, depth 0.22 m.
Unurned cremation burial; cremated bone (411.2 g) in centre of cut; young/mature adult.

ON 27366: Cu alloy, brooch; type: Almgren 65/Feugère 8b; length 68 mm.
ON 27369: Cu alloy, brooch; type: Almgren 65/Feugère 8b; length 67 mm.
ON 27679: Cu alloy, brooch fragments, almost certainly part of ON 27366 or ON 27369; length of largest fragment 11 mm.

Grave 20680 (Fill 20679)
(Figs 38; 107)
SU 89567.2/06709.5; square, orientation N–S, length 0.40 m, width 0.38 m, depth 0.26 m.
Unurned cremation burial; cremated bone (160.8 g) in S of cut; adult; possible female.

Vessel to N of cremated bone.
ON 27613: Iron, eight fragments of rectangular staples; mineral-preserved wood, probably willow (*Salix* sp.) or poplar (*Populus* sp.) at least 19 mm thick and probably with a radial surface. They are unlikely to be from a wooden vessel (*JW*) and the grave cuts a pyre site; length of largest fragment 26 mm.
ON 27626; Iron, rectangular staple fragment; mineral-preserved wood, possibly beech (*Fagus* sp.) (*JW*); length 22 mm.
ON 27742: Iron, sheet fragments; length of largest fragment 13 mm.
ON 27367: Lower part of ?high-shouldered jar (Form J101), fabric G5; burnished; handmade.

Grave 20708 (Fill 20707)
(Figs 38; 107)
SU 89567.2/06709.8; circular, length 0.20 m, width 0.20m (but cut to south by grave 20680), depth 0.07 m.
No cremated bone recovered.

Vessel in centre of cut.
ON 27368: High-shouldered, everted rim bowl (Form B121), fabric F4; horizontal row of burnished dots around neck; burnished irregular cross-hatching on lower half; burnished; handmade.

Grave 20719 (Fill 20718)
(Figs 38; 107)
SU 89564.8/06709.3; grave cut not recognised.
0.2 g of cremated bone.

ON 27386: Lower part of ovoid jar (Form J201), fabric F4; two burnished wavy lines, bounded by three horizontal lines, around girth; handmade.

Grave 20729/20758 (Fill 20730/20759)
(Figs 38; 108)
SU 89566.5/06711.7; irregular, length 0.60 m, width 0.45 m, depth 0.21 m.
Unurned cremation burial; cremated bone (24.8 g) in centre of cut; subadult/adult.

Vessel to NW of cremated bone.
ON 27426: Iron, holdfast; length 48 mm.
ON 27404: Flat base of vessel of unknown form (U001), fabric Q5; burnished lattice; ?wheelthrown
ON 27414: Two-tier jar (J521), fabric Q5; 'neck' cordon on lower half; handmade.

Grave 20750 (Fill 20751)
(Figs 38; 108)
SU 89563.3/06714.8; circular, length 0.25 m, width 0.18 m, depth 0.16 m.
Urned cremation burial; cremated bone (102.0 g) in NE of cut; mature/older adult; possible female.

Vessel to SW of cremated bone.
ON 27657: Iron, globule; weight <1 g; not illustrated.
*ON 27420: Lower part of high-shouldered bowl (Form B102), fabric F6; horizontal band of burnished lattice below shoulder; burnished; spalled surfaces; handmade.

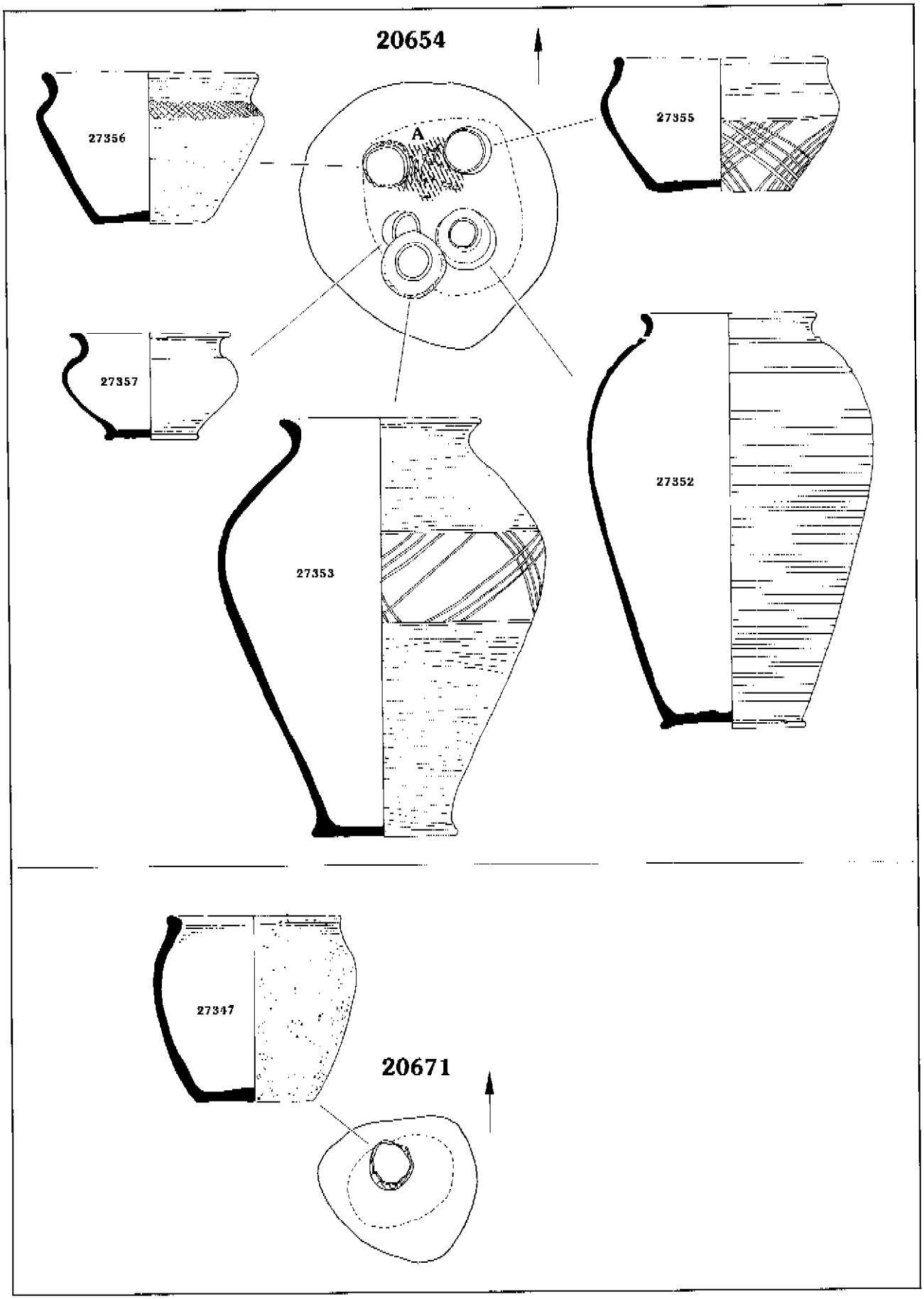


Figure 106 Graves 20654, 20671

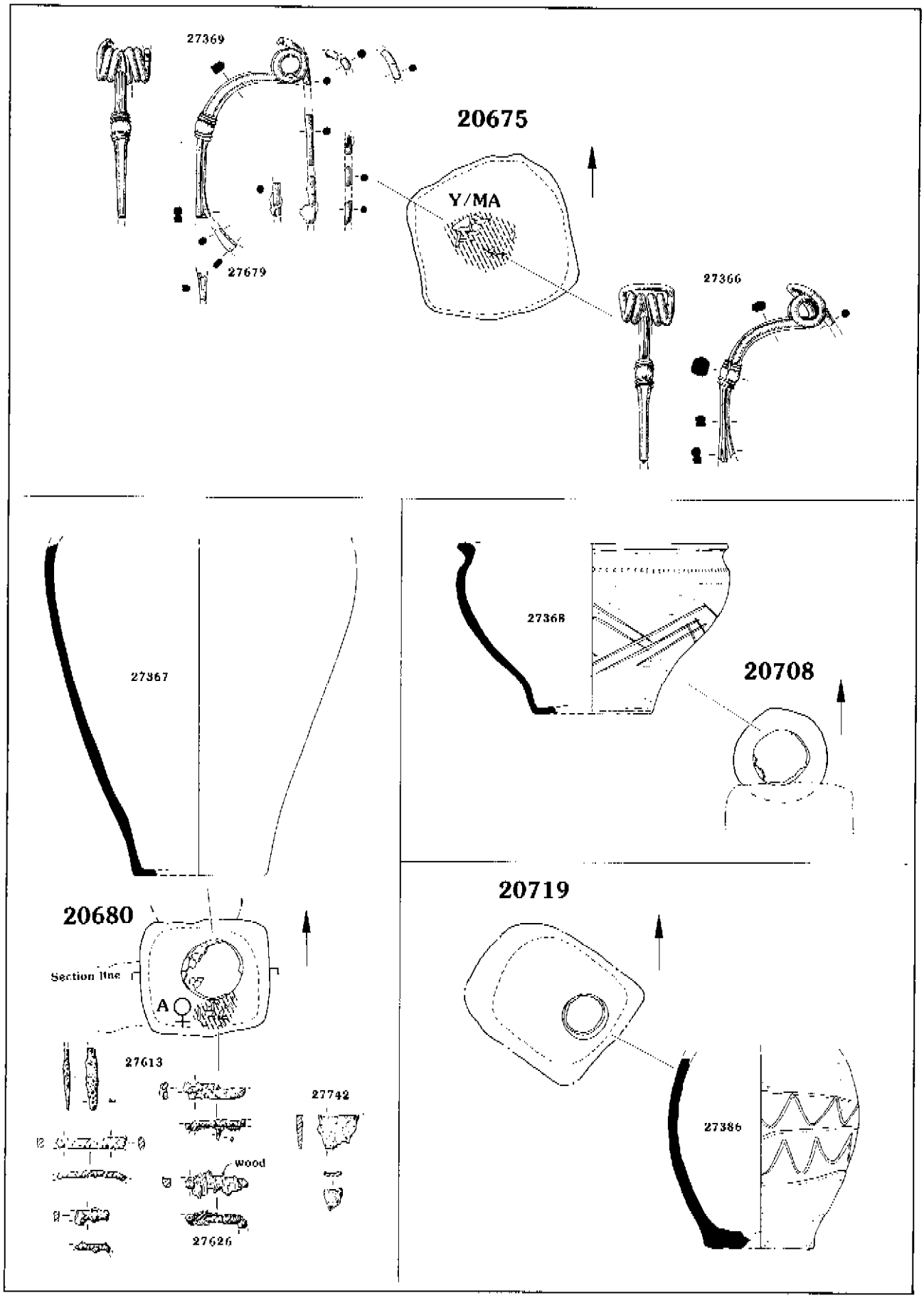


Figure 107 Graves 20675, 20680, 20708, 20719 (see Fig. 31 for profile of 20680)

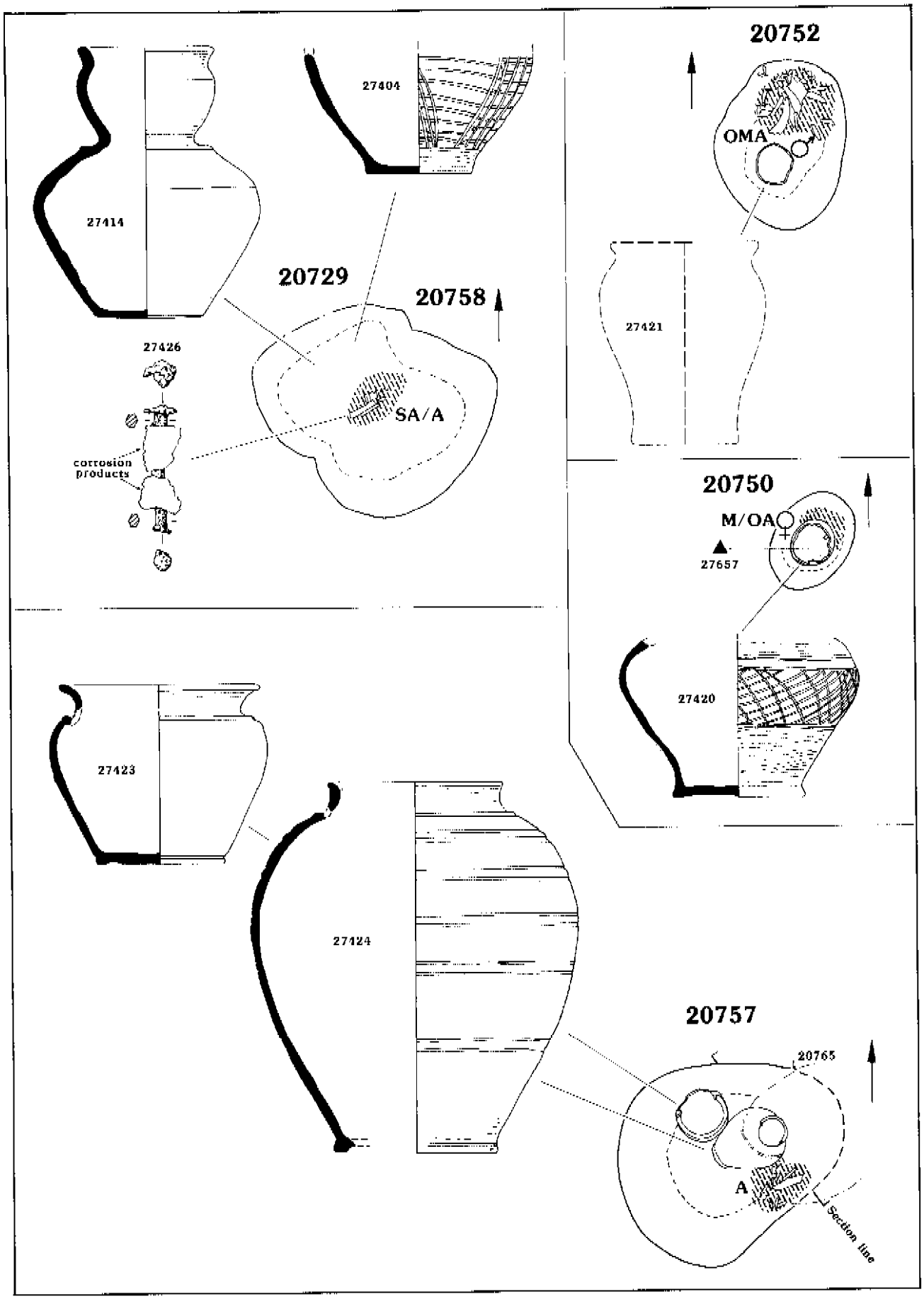


Figure 108 *Graves 20729, 20758, 20750, 20752, 20757 (see Fig. 32 for profile of 20757)*

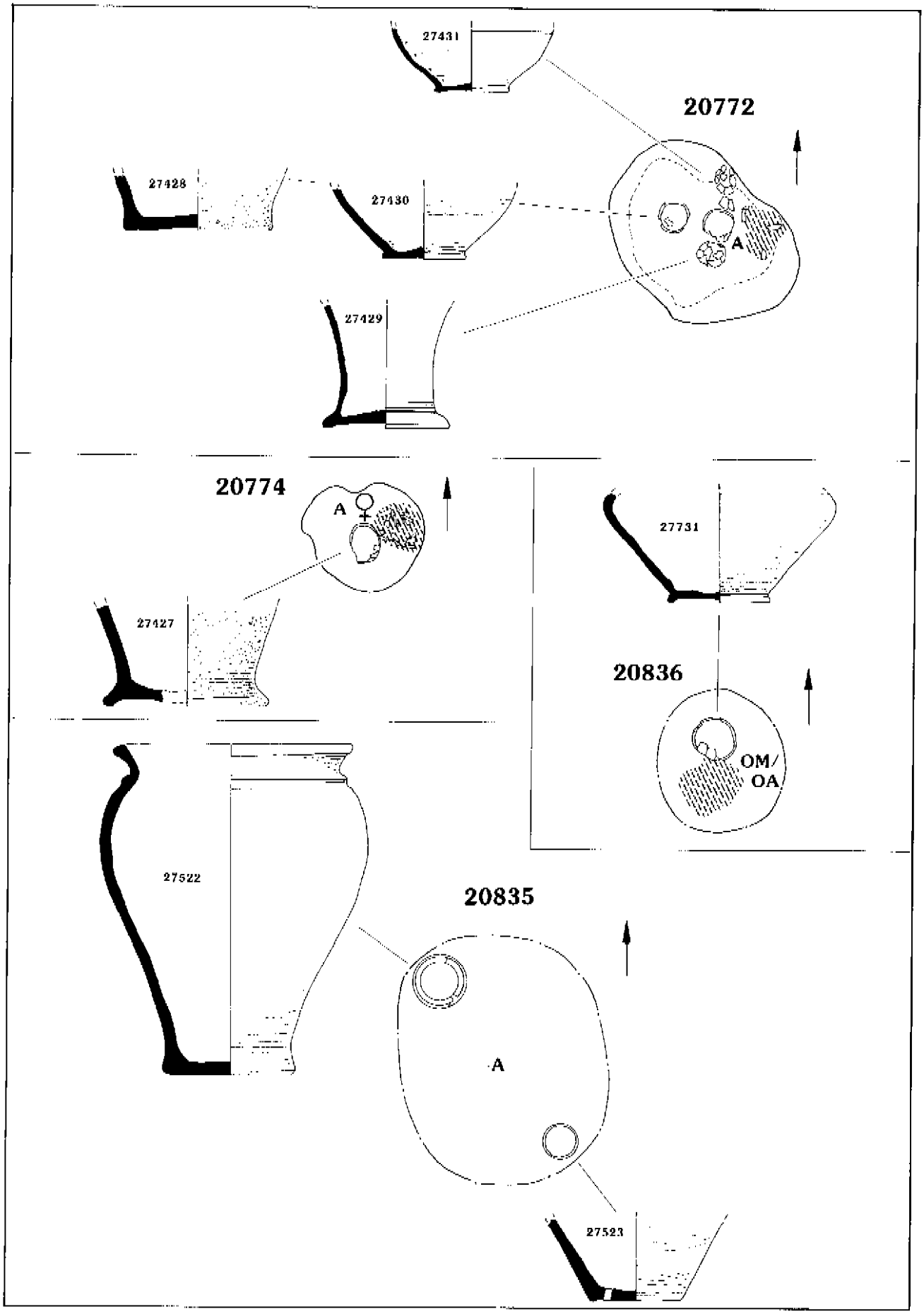


Figure 109 Graves 20772, 20774, 20835, 20836

Grave 20752 (Fill 20753)
(Figs 38; 108)
SU 89561.5/06714.5; circular, length 0.50 m, width 0.28 m, depth 0.17 m.
Unurned cremation burial; cremated bone (491.6 g) in N of cut; older mature adult; possible male.

Vessel to S of cremated bone.
ON 27421: Plain body sherds from vessel of unknown form (Form P1), fabric F3; burnished; handmade.

Grave 20757 (Fill 20756)
(Figs 38; 108)
SU 89564.0/06708.0; circular, length 0.50 m, width 0.40 m, depth 0.22 m.
Unurned cremation burial; cremated bone (157.0 g) in SE of cut; adult.

Vessels to NW of cremated bone.
ON 27423: High-shouldered, necked bowl (Form B113), fabric G5; neck cordon, burnished; handmade.
ON 27424: Ovoid, necked jar (Form J213), fabric G5; neck cordon; neck and shoulder cordons; multiple paired horizontal grooves on body; burnished; ?wheelthrown.

Grave 20772 (Fill 20773)
(Figs 45; 109)
SU 89564.0/06664.0; circular, length 0.58 m, width 0.45 m, depth 0.12 m.
Unurned cremation burial; cremated bone (129.3 g) in E of cut; adult. Fe staining.

Vessels to W and NW of cremated bone.
ON 27428: Flat base of vessel of unknown form (Form U001), fabric F2; burnished; handmade.
ON 27429: Pedestal base of ?high-shouldered jar (Form J102), fabric G5; burnished; ?wheelthrown
ON 27430: Splayed base of bowl of unknown form (Form B002), fabric Q3; wheelthrown.
ON 27431: Splayed base of bowl of unknown form (Form B002), fabric F3; single horizontal groove above base; handmade.

Grave 20774 (Fill 20775)
(Figs 45; 109)
SU 89566.2/06660.5; circular, length 0.45 m, width 0.40 m, depth 0.10 m.
Unurned cremation burial; cremated bone (118.6 g) in E of cut; adult; possible female.

Vessel to W of cremated bone.
ON 27427: Moulded base of jar of unknown form (Form J003), fabric F2; burnished; handmade.

Context 20835
Grave(s) recorded during evaluation (Figs 38; 109)
SU 89561.0/06703.5; grave cut not recognised.
Unurned cremation burial; location of cremated bone (228.1 g) not recorded; adult.

ON 27522: High-shouldered, necked jar (Form J112), fabric F2; neck cordon; burnished; handmade.
ON 27523: Body sherds of vessel of unknown form (Form P1), fabric F2; handmade.

Grave 20836 (Fill 20837)
(Figs 43; 109)
SU 89562.5/06692.0; grave cut not recognised.
Unurned cremation burial; 647.3 g of cremated bone; older mature/older adult. Blue/green staining.

Vessel to N of cremated bone.
ON 27331: Lower part of high-shouldered bowl (Form B103), fabric Q7; handmade.

24 Discussion, by A.P. Fitzpatrick

Chronology

It is appropriate to begin by stressing the evidence for the short use of the cemetery, perhaps only 40 years representing a single archaeological phase, and to set out the reasons why a date of *c.* 90–50 BC is preferred. This dating has been arrived at from several strands of evidence, of which the metalwork, and especially the brooches (Table 29; Fig. 110), is the most important.

The earliest brooch is the Nauheim. Although Feugère dated the introduction of the Nauheim to *c.* 70 BC he recognised the likelihood that it was made at an earlier date, perhaps into the 2nd century BC and this is now certain (Feugère 1985, 226; 1994, 146–7; Miron 1986; 1991; Lambot *et al.* 1994, 164). The latest type is the Almgren 65 which had passed out of fashion by *c.* 30/20 BC and types which were introduced in the Augustan period, from *c.* 30 BC onwards, such as the simple Gallic type, are absent. Perhaps the most important dating evidence derives from the most common type, the simple filiform brooch, Feugère's type 2 (10 certain and 10 probable examples), which seems to appear at about the same time as the Nauheim. While there are some important typological distinctions between the type in southern France and as represented at Westhampnett these may be geographical rather than chronological in origin. There also appears to be some difference in the distribution at the cemetery of examples with four and two-coils, and which is probably chronological in origin, the four-coil examples being the earlier (Fig. 111).

The most recent detailed consideration of brooch chronology from north-western Europe is by Miron (1986, 151–9; 1991). The most important aspect of Miron's work for our present purposes is that it is based on *associations* and while the absolute dates may very well be refined, the relative sequence appears secure. The association of Nauheim and filiform brooches is characteristic of Miron's La Tène D1b and D2a phases, which may be dated to *c.* 120–85 BC and 85–55 BC respectively. The essential distinction between these two phases is that the bow of the La Tène D1b brooches is relatively flat, and in the La Tène D2a brooches it is much more curved. Unfortunately the high degree of fragmentation of the Westhampnett brooches makes this characteristic difficult to assess but the tendency is to place many of them, but not all, in La Tène D2a. The attribution to a period straddling La Tène D1b–D2a would also be consistent with the presence of the Alm-

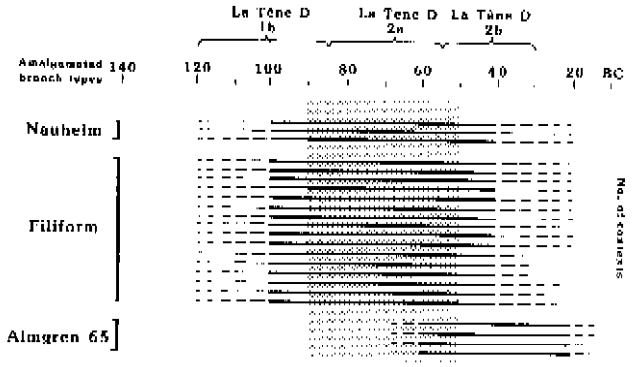


Figure 110 Dating of La Tène 2 brooches

gren 65 which now seems likely to have been introduced towards the beginning of La Tène D2a, perhaps c. 70/60 BC (Gebhard 1991, 94; *cf.* Hawkes, in Hull and Hawkes 1987, 197–205). The 2:1 ratio of individual Almgren 65 to Nauheim types should be disregarded as six of the seven Almgren 65 occur as pairs. The number of contexts in which these types were found is more or less even (Table 29).

In view of the location of a number of the graves in which Almgren 65 were found towards the outer perimeter of the cemetery (Fig. 112), the type may provide the best evidence for the date at which the cemetery passed out of use. Obviously this distribution might reflect other social or religious factors; for example, it is clear that 'elders' were buried towards the inner perimeter of the cemetery, but it is consistent with other chronological indicators. The Almgren 65 has been found in contexts suggested to date to 40–20 BC (Fitzpatrick and Megaw 1987, 436–8) and, while this dating has subsequently been suggested to receive additional support from the revised dating of the Armorican *petit billons* coins associated with these brooches in the Le Câtillon hoard (Gruel 1990), this additional evidence is based on a circular argument. However, as only a small number of graves contained Almgren 65 and there are no types which were introduced in La Tène D2b present at Westhampnett, a date of c. 70/60–40/30 might be suggested for the introduction of the Almgren 65 (Gebhard 1991, 94).

Standing back from these intricacies a *date range of 100–40 BC* may suggested for the brooches, with a *preferred date of 90–50 BC*. When the horizontal stratigraphy is also considered it may be concluded that the larger part of the use of the cemetery was in the first half of the 1st century BC.

Only two other metal objects are from well-defined groups for which relatively secure typologies and chronologies have been established, the winged belthook from grave 20252 and the razor from grave 20055.

The belthook is of a type for which the majority of the dating evidence available in 1973 suggested a date in the mid–later 1st century BC (Collis 1973) but which is now regarded as dating to La Tène D1 (Collis 1994, 107), i.e. before c. 80 BC. A suggested sequence for the evolution of belthooks has been put forward by Brunaux (1990, fig. 2) and the winged belthook falls late within

Table 29 certain and probably identified brooch types from graves

Brooch type	*No. brooches*	*%*	*No. graves*	*%*
Neuheim	3	10	3	13
Feugère 2	20	67	16	70
Almgren 65	7	23	4	17
Total	30	100	23	100

it. Some of the differences which Brunaux defines may be geographical as much as chronological in origin but his suggestion that the absence of the winged belthook from the sanctuary at Gournay-sur-Aronde indicates that the type dates to after c. 60 BC is not supported by the evidence of the swords and scabbards from the site (Lejars 1994, 59–62) which suggest that the sanctuary went out of use towards the middle of the 2nd century BC. The addition of wings to belthooks distinguishes this variety from the well-defined plain La Tène D1 types (Collis 1973, 130; 1994, 107; Lambot 1989; Brunaux 1990, fig. 2) so a date in La Tène D1b seems likely, i.e. in the earlier–mid-1st century BC.

The razor is not closely paralleled amongst British examples but the dating evidence summarised by Stead (Stead and Rigby 1989, 105) suggests that razors were first placed as grave goods around the middle of the 1st century BC.

A similar date is provided by the British O coin. The typology and associations of the type suggest a date in the 60s or 50s BC is very probable and the deposition of a barely worn example in the grave 20493 need not have been more than a decade or so later, if at all later.

The contribution of the other categories of pyre goods, such as the objects of antler and bone, to the dating of the cemetery is limited as they are of types whose use spans much of the Late Iron Age. Perhaps because much of the pottery appears to have either been made or deliberately selected for burial, the assemblage finds few close parallels but it is clear that it occupies a transitional date between the St Catharine's Hill/ Worthy Down style of saucepan pottery and the 'Aylesford–Swarling' traditions. The danger of circular argument must be recognised here, but where comparanda or associations can be established (often with metalwork) these are consistent with the preferred date range for the brooches of 90–50 BC. The typologically oldest pots, the biconical bowls of Middle Iron Age tradition are found nearest to the inner perimeter of the cemetery (Fig. 113).

In summary the *preferred date range* for the brooches is 90–50 BC and the evidence of the other metal objects, coins and pottery is consistent with this date range. Very few features of any sort are dug into other ones, suggesting that the organisational principles of the site were established at the outset. Consequently the religious site is regarded as having only a single phase, which arrived unheralded and departed without a whisper.

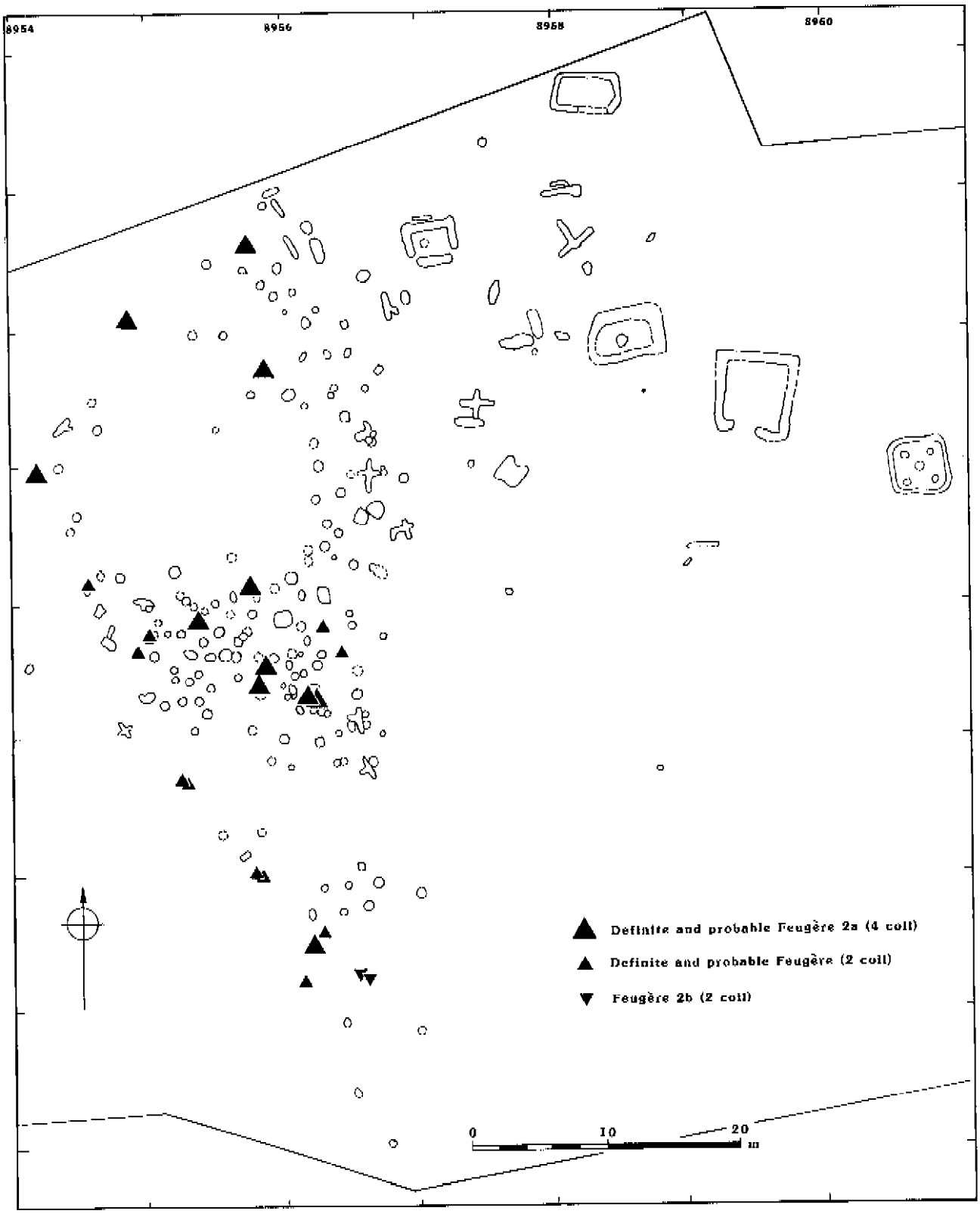


Figure 111 Distribution of Feugère 2 brooches

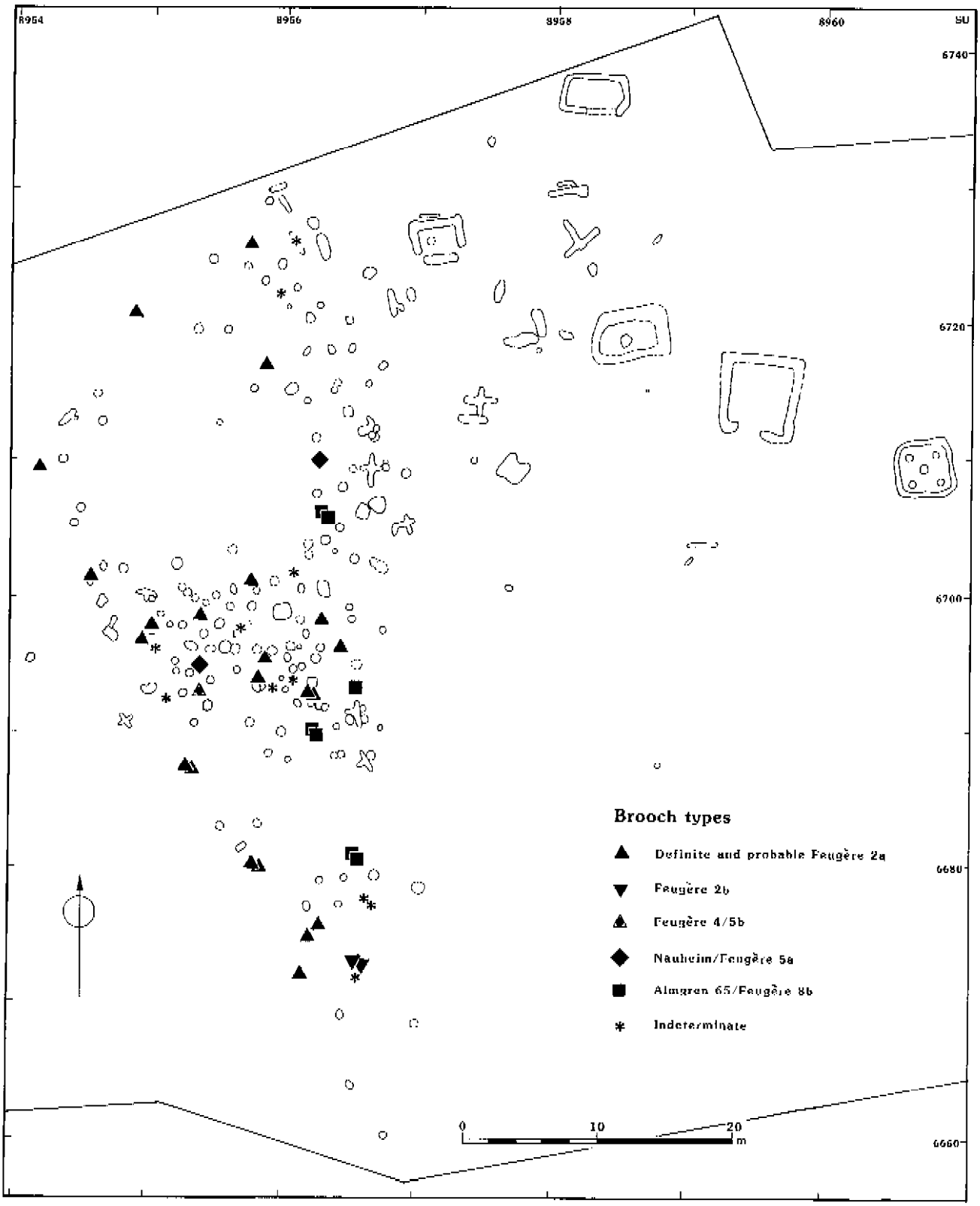


Figure 112 Distribution of brooch types in graves

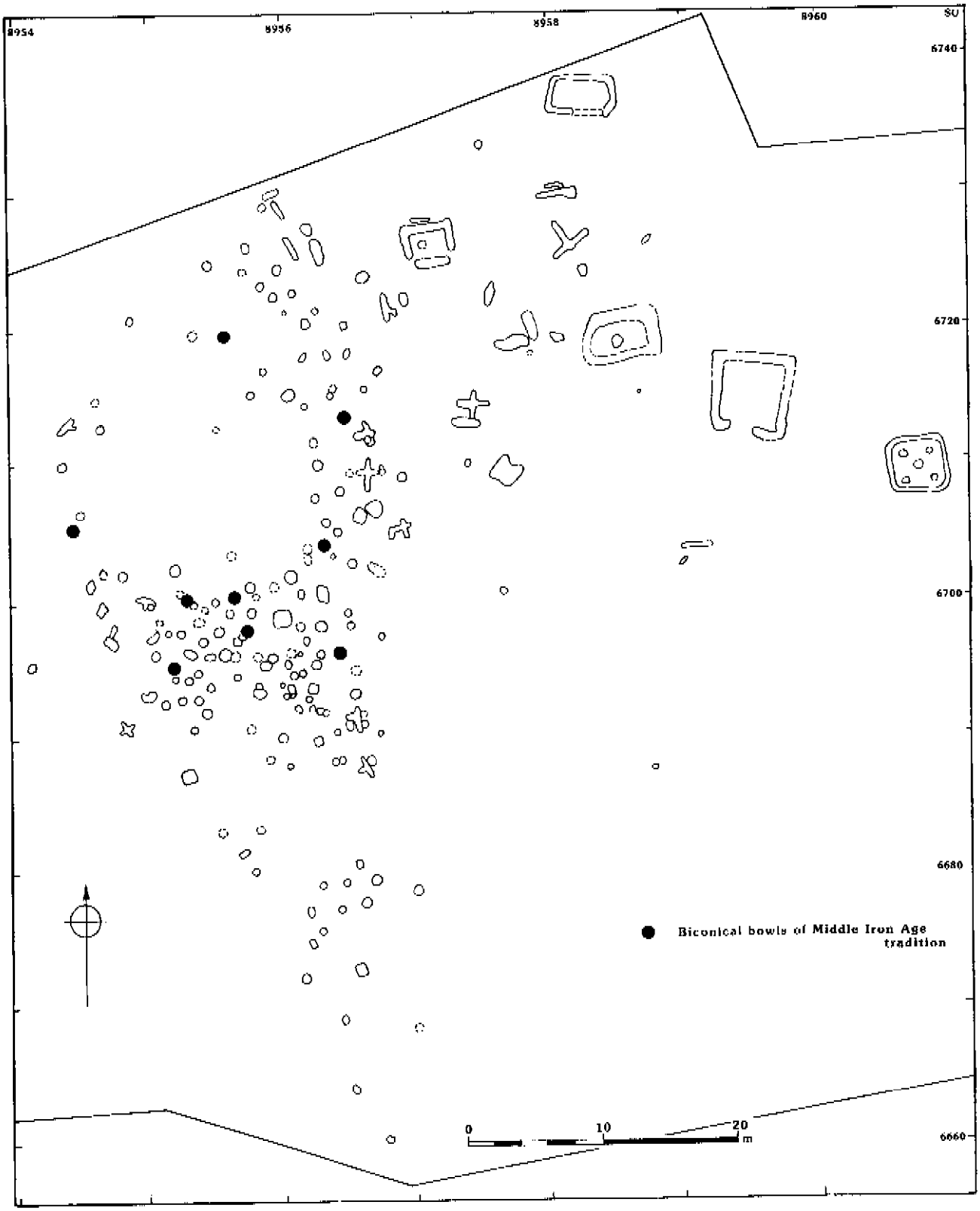


Figure 113 Distribution of biconical bowls of Middle Iron Age tradition

Late Iron Age Cremation Burial in Southern England

Westhampnett and Aylesford type burials

Having established its date, the religious site at Westhampnett must be seen in the wider context of Late Iron Age cremation burial in southern England. Previously called 'Aylesford–Swarling' burials, it is now increasingly common to call them simply 'Aylesford' type burials. The currently recorded distribution of this rite (Fig. 114–5) is largely restricted to south-east England, with only a few isolated cremation burials being known to the west (Whimster 1981, 149–53, fig. 52; Foster 1986, 178–84, fig. 44). In itself the discovery of the cemetery at Westhampnett does little to alter this overall distribution which is in some ways typical of the discontinuous distribution in continental Europe (Fig. 116), but its discovery, coupled with that of the small cemetery at Owslebury, Hampshire (Collis 1977a), suggests that such burials may be more frequent in central–southern England than previously thought.

Aylesford burials in south-east England were first characterised by Evans at the end of the 19th century (Evans 1890), and were reviewed fully by Birchall in 1965. These burials are characteristically urned cremation burials in small graves with accompanying grave goods and are often found as isolated burials or in small flat cemeteries, although a single large cemetery is known. Within this rite a small group of well-furnished burials can be distinguished as 'Welwyn' burials after the eponymous site. The definition of this 'Welwyn' group is rather poor, but it is usually involves a cremation burial which is often unurned (in contrast to other Aylesford burials), in a large pit or chamber and with a range of artefacts including at least one amphora. In practice some burials with an amphora but none of the other traits have been called a 'Welwyn-type' burial.

Chronology of Aylesford burials

On the basis of imported Roman copper alloy jugs and pans Birchall argued that Aylesford burials did not appear until the second half of the 1st century BC. This was emphasised by Stead's study of the earliest brooches from burials, most — but not all — of which date to the second half of the 1st century BC. On this basis Stead distinguished two chronological phases, the 'Welwyn' and 'Lexden' phases suggested to date from *c.* 50–1 BC and *c.* AD 1–50 respectively (Stead 1976, 412). This dating has been widely assumed to have been endorsed by the relatively frequent discovery of Dressel 1B amphorae in graves but a slightly longer chronology now seems probable.

Brooches closely related to the Nauheim type have been found with cremation burials at Aylesford (Stead 1984, 59, fig. 20, 6; Hull and Hawkes 1987, 197, pl. S6, 2) and at Folkestone (Stead 1976, 410–11, fig. 4, 2) in Kent, which suggests a date in the first half of the 1st century BC or earlier. The discovery of transitional Dressel 1A/1B amphorae in the Welwyn-type burial from Baldock–The Tene, Hertfordshire also supports this longer chronology (Stead and Rigby 1986, 53, 60–1). The typology and chronology of the imported Roman copper alloy vessels have also been reviewed (Ulbert 1985, 79–100; Feugère and Rolley 1991) which has generally indicated an earlier dating. In the cases of the vessels from graves in Britain (Aylesford 'Y', Welwyn 'A' and 'B'), which were probably used for the washing of hands at the table and not as part of a wine service, it still remains likely that they date to the second half of the 1st century BC, *pace* Hawkes (in Hull and Hawkes 1987, 201–2), but it is no longer axiomatic.

The main result of the revisions to the chronology is to free Aylesford type burials from the assumption that they must date to the second half of the 1st century. Thus the early phase of Aylesford burials, the 'Welwyn phase' may start in the 70s BC or earlier, and the start of the 'Lexden phase' defined by the presence of imported Gallo-Belgic pottery, may be set in the 20s BC.

The Adoption of Cremation Burial in Southern England in the Late Iron Age

Although many parallels for aspects of the cemetery can be found within southern Britain, it should not be assumed that the rite of cremation burial as practised at Westhampnett was necessarily closely related to the religious beliefs which guided the rituals of Aylesford cremation burial in south-east England. On the evidence presently available, the Westhampnett cemetery represents some of the, if not *the*, earliest evidence for cremation burial in the British Iron Age. The burial from Baldock–The Tene (Stead and Rigby 1986, 60–1) is probably as early but there seems little reason to doubt that the rite was introduced directly to central–southern England from France in the course of cross-Channel contact in the later Iron Age, perhaps from Normandy or adjacent regions of France (Fig. 116).

Other innovations adopted on the south coast in the earlier–mid-1st century BC include the issuing of coinage (Fitzpatrick 1992a), the importation of Roman wines, Armorican pottery and its contents, raw glass for reworking (Cunliffe 1984b; 1987) and, in southern Hampshire and West Sussex, the extensive use of silver coins (Allen 1965; Briggs *et al.* 1993) and an increasing range of early, Gaulish, derived bronze ones (Burnett 1992). The pottery from Westhampnett finds clear analogies with Normandy but unfortunately most of the relevant material comes from old excavations of cemeteries, particularly from the lower reaches of the Seine in the region of Rouen (Duval 1975; Hawkes and Dunning 1930), and little is known of the mortuary rituals. The presently recorded distribution of cremation burials in northern France is also very uneven and not necessarily representative (Roymans 1990, 239, fig. 9.12) but the evidence presently available suggests that Normandy is the closest region where the rite of cremation burial was being practised at an earlier date, not later than the mid-2nd century BC.

There are broad similarities between the mortuary rituals practised at Westhampnett and those documented in other regions of northern France, notably the Champagne but this may reflect only the distribution of recent work. The parallels include the presence of funerary monuments and perhaps the shrines at a cemetery (Lambot *et al.* 1994), but there are also differences. These differences include an absence of pyre sites comparable to those at Westhampnett and elements of

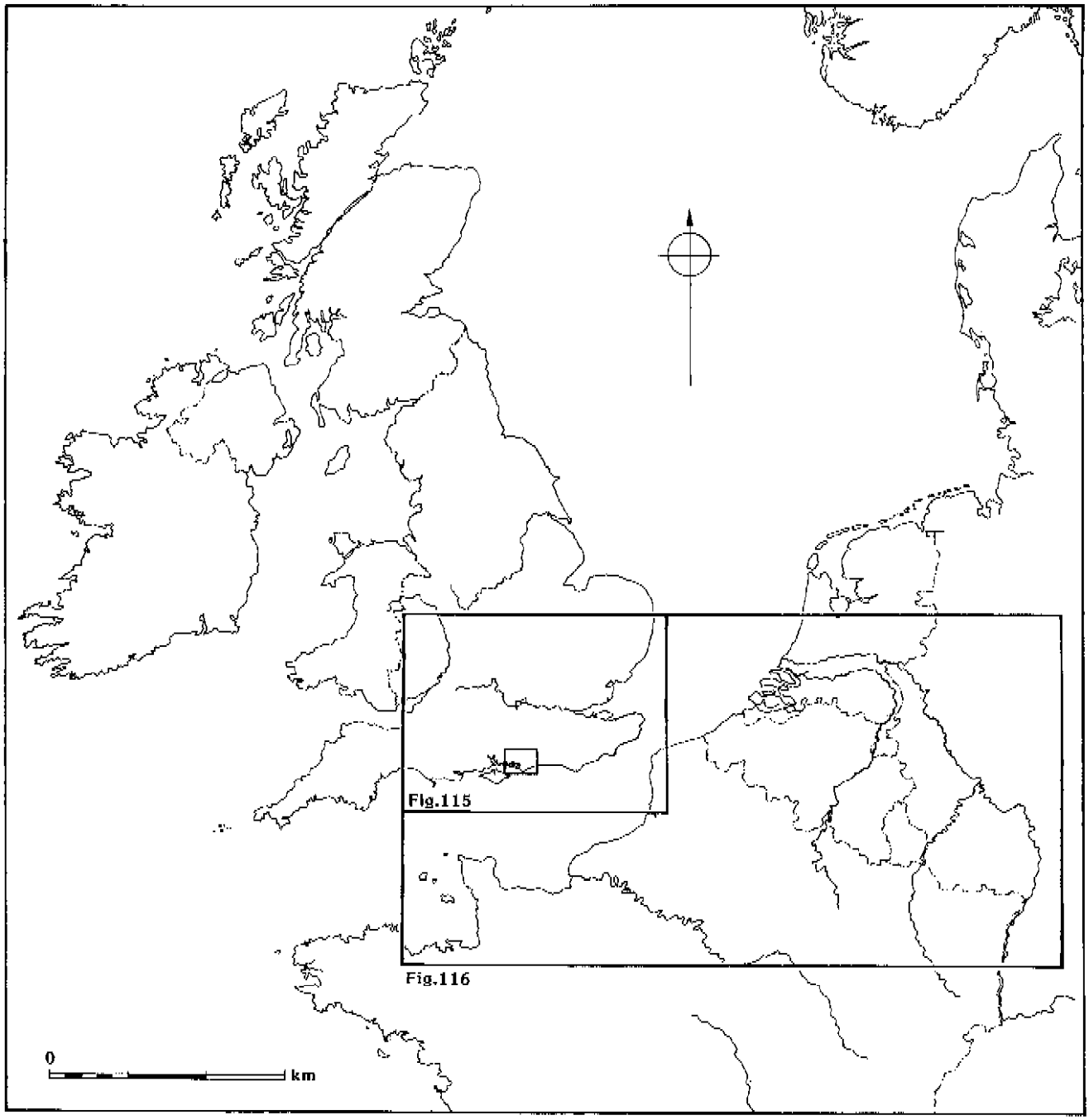


Figure 114 Location map of Westhampnett in relation to Figures 4, 115, and 116

mortuary rituals which are not found at Westhampnett. Pots were also burnt on pyres but, sometimes distorted by the heat, they were often placed in graves (Maire 1983, 159–62); at Acy–Romance *c.* 75% of the pots showed signs of having been on the pyre (Lambot *et al.* 1994, 149–50, tab. 5, fig. 80). In contrast to many continental European burials the cremated bones are not scattered through the grave but, where concentrations can be discerned, appear to have been placed, perhaps in bags or other organic containers.

Assuming that the rite of cremation burial was also introduced to the south-east of England from continental Europe, it is not known from which region. Although the recorded distribution of such burials is not necessarily representative, the strong links between Picardy and south-east England attested by numismatic evidence (Fitzpatrick 1992a) might suggest that it is the most likely area from which the rite was introduced to south-east England.

Social Persona

In recent years it has been widely assumed that social categories to which individuals belonged in life are displayed in mortuary rituals in ways which can be recovered archaeologically. Yet many interpretations of Late Iron Age cremation burials in southern England

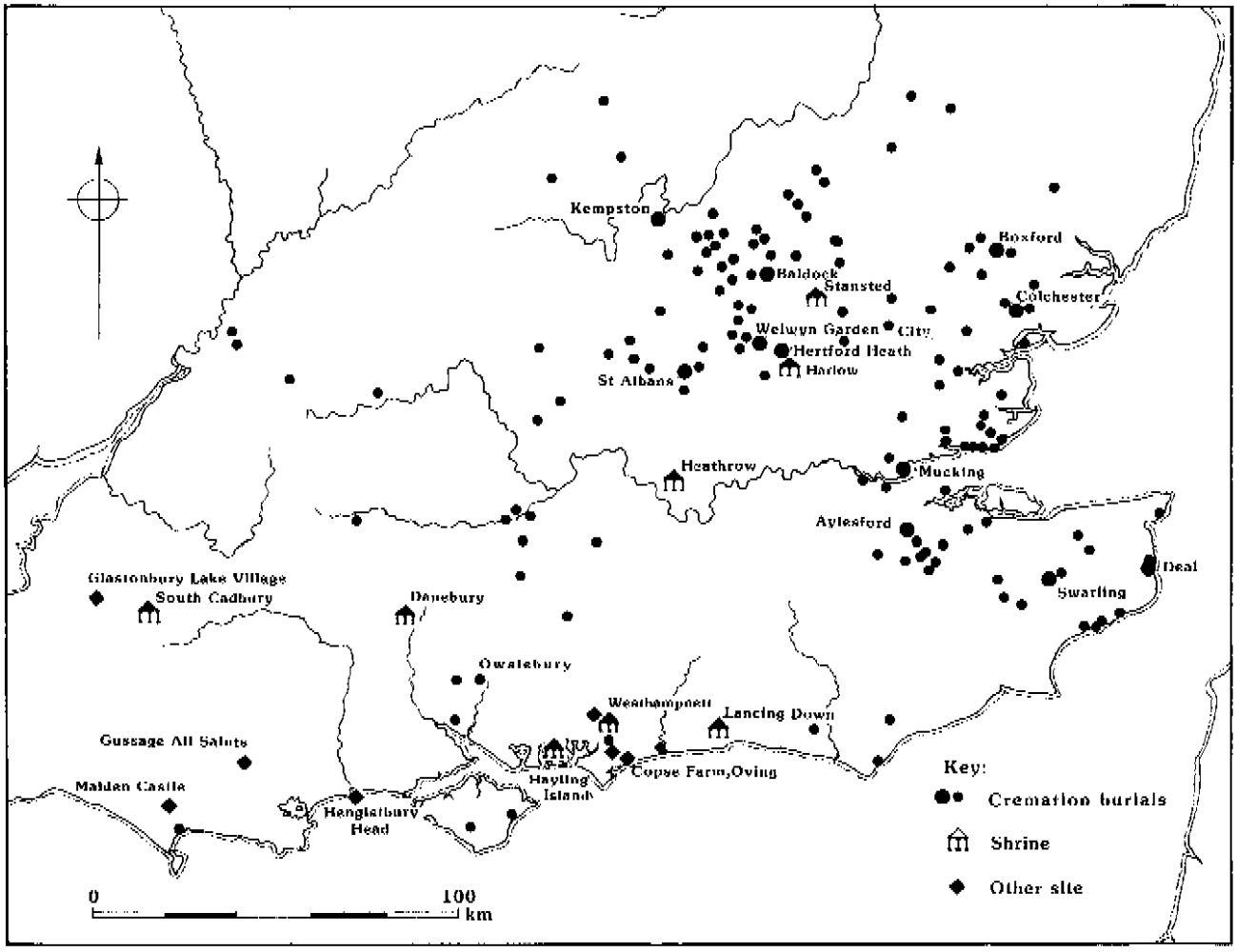


Figure 115 Distribution of Late Iron Age cremation burials and selected shrines and settlements in southern England (see Fig. 4 for local sites)

have pursued a different thesis, and the interpretation of the Westhampnett cemetery must be seen against these traditions.

Interpretations of Aylesford burials

The interpretation of Aylesford burials was long entwined with the so-called problem of the *Belgae*, an attempt to correlate one comment in Julius Caesar's ethnographic excursus on Britain (that maritime Britain was settled by people out of Belgic Gaul (*BG* V, 12)) with the archaeological evidence. Originally taken alongside the evidence of the gold Gallo-Belgic coins issued in France as evidence for settlers from Belgic Gaul, the wished-for correlation of burials, coins, and history unravelled in the early 1960s. Allen demonstrated that the issuing of Gallo-Belgic gold coinage spanned at least 75 years (Allen 1960). Birchall then used work on the imported Roman copper alloy vessels to argue that the great majority, if not all, of Aylesford burials post-dated dated Julius Caesar's invasions of 55 and 54 BC (Birchall 1965). Considerable ingenuity was subsequently expended in trying to maintain the linkage with Belgic Gaul (e.g. Hawkes 1968; Rodwell 1976, 181–237), but with little success. None the less, while cautious, Whimster still preferred to see a linkage with continental Europe in interpreting the origins of the rite of cremation burial (Whimster 1981, 163–6).

Two key beliefs sustain much of these earlier studies:

- that the cremation burials were evidence of 'Belgic settlers', and their essential importance lay in this culture-historical interpretation, and
- that it is impossible to tell much, if anything, useful from the study of cremated bones;

The latter point is emphasised by the fact that at least some of the cremated bones from Aylesford, Kent, excavated in 1886 were not emptied from the burial urns until 1981: almost a century later (Stead 1984, 59).

Following Birchall's work and the endorsement of its chronology by Stead (1976), attention concerning the Aylesford burials has largely been directed to the Roman imports placed as grave goods. Initially this was focused on the 'Welwyn-type' burials but was later extended to encompass all burials. These analyses draw on a different key belief:

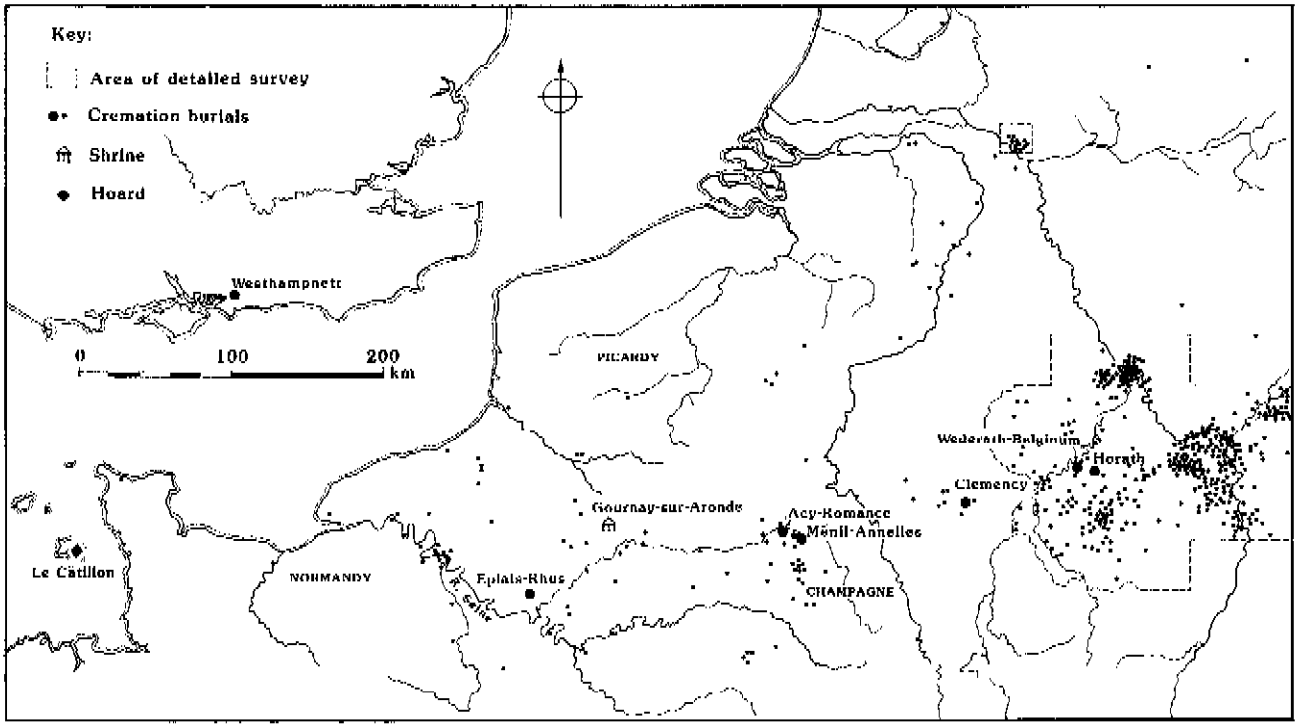


Figure 116 Distribution of Iron Age cremation burials and selected sites in north-west continental Europe

- that the finds in burials reflect the social status or *social persona* of the deceased.

In this situation the absence of physical anthropological evidence about the age and sex of the deceased seems to become less important; the material goods speak for the dead. This assumption has directed much of the analysis and interpretation of the burial rite, together with two more widely held assumptions about Late Iron Age society:

- that family groups might be expected, and
- that power and wealth lay in the hands of males.

The first assumption, that burials may reflect family groups, derives from funerary evidence and was advanced by Evans in his publication of the Aylesford cemetery over 100 years ago when he suggested that the circular arrangement of graves might reflect a 'family circle'. The assumptions that power and status are male concerns are more general ones of modern western society and are embodied in the assumption that 'Welwyn-type' burials are those of chieftains. The limited evidence available neither confirms nor refutes this presumption. In contrast burials with mirrors are usually taken to be those of females, but again the evidence is ambiguous, and in one case (Dorton) a 'Welwyn-type' burial (unsexed) had a mirror placed as a grave good (Farley 1983).

Such assumptions draw on the idea that the social categories to which individuals belonged in life are displayed in mortuary rituals in ways which can be recovered archaeologically. Some of the most sophisticated and influential expositions of this thesis are in works by Binford, Brown, Saxe, and Tainter. Yet such a view, largely formulated in the analysis of inhumation burials and their associated grave goods, contrives to separate the social from the material, conceiving the material as secondary to, and a passive reflection of, the social which itself is determined by the 'economic'. It is such a view which is propounded by O'Shea who when writing of 'funerary remains as archaeological evidence' (1984, 32–49), identifies the linkage between the two as the major difficulty to be overcome, and as one which can be achieved through the development of a middle range theory. The ultimate goal appears to be the linking of general principles to particular cases, and the description of particular cases in terms of the general.

Surprisingly few such analyses of Aylesford burials have been undertaken, and they have taken a slightly different route. By quantifying the number of artefact types placed as grave goods in Aylesford burials, in an elegant, Structural-Marxist, analysis Haselgrove was able to demonstrate clearly for the first time the recurrent association of imported Roman goods with a large number of other objects in 'Welwyn-type' burials (Haselgrove 1982). However, such analyses of grave goods, which are largely directed to identifying vertical differentiation (which is effectively considered to be synonymous with social status), have been used in the few other interpretations of Aylesford burials. This was particularly marked in the report on the large cemetery at King Harry Lane (Stead and Rigby 1989) and the assumptions behind such interpretations have been commented upon elsewhere (Fitzpatrick 1991). Many of those comments have been followed by Millett in an analysis of the cemetery where simple numerical methods were used to explore the aggregate patterns of the cemetery through its Iron Age and Romano-British phases (Millett 1993).

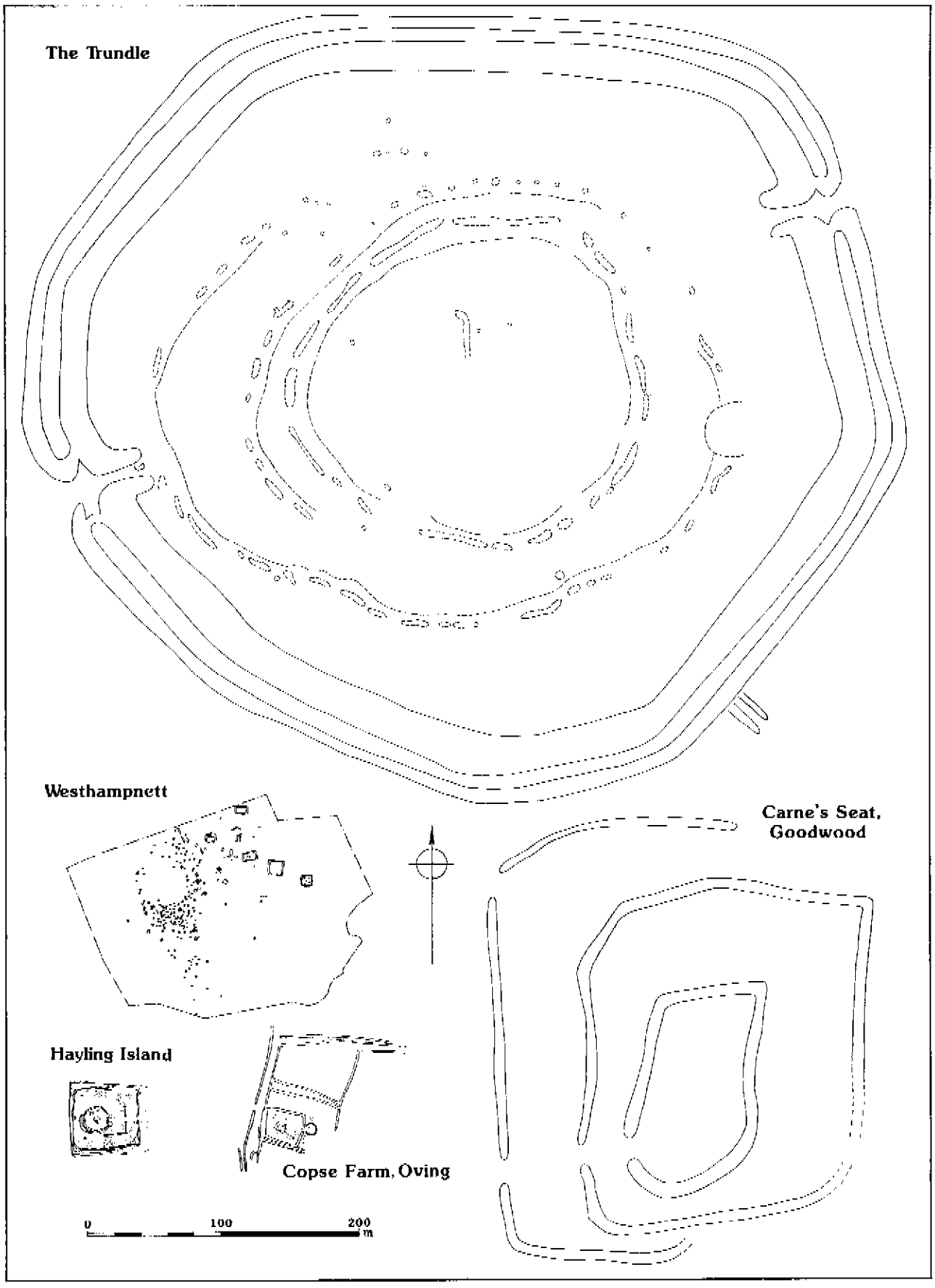


Figure 117 The Trundle, Westhampnett, Hayling Island, Copse Farm, and Carne's Seat

The quantitative analyses undertaken of the Westhampnett cemetery have taken the individual or individuals buried there as their point of departure. The limitations of some aspects of the physical anthropological evidence have the effect of curtailing some analyses, but the emphasis has been placed on context not object.

The methods and techniques of excavation and analysis employed by earlier excavators have meant that none of the studies on Aylesford burials have been able to explore the sequence of mortuary rituals. The association of shrines, pyre sites and burials, and the distinction between *pyre goods* and *grave goods* at Westhampnett does, however, present an opportunity to explore something of the mortuary rituals practised at the site and these are considered after the presentation of the quantified analyses.

Quantitative Patterning in the Burials, by Andrew B. Powell and A.P. Fitzpatrick

Introduction

It has been shown that the cemetery was used between 100–40 BC and the preferred date range is 90–50 BC. On this basis the population burying their dead at the cemetery has been estimated at between 85–95. The only presently known type of settlement which might have housed such a population is a hillfort. However, the nearest hillfort, the Trundle c. 6 km to the north, seems to have been abandoned around the time that the religious site was set out. Consequently the cemetery is regarded as one used communally either by families living on several farmsteads, followers of a religious sect, or some other corporate group. The slightly later evidence from inscribed coins suggest that familial groups in the Late Iron Age were patrilineal and it may be suspected that marriage was exogamous, perhaps with virilocal post-marital residence (Fitzpatrick 1992b, see above).

For the purposes of analysis the cemetery has been regarded as a single group from a single phase and it seems possible that the organisational principles of the whole site were established at the outset, while its short use may, perhaps, free the analyses from the difficulties faced in the study of cemeteries resulting from the changing values ascribed to materials chosen for placement in graves (Bradley 1988). The analyses are considered in relation to a selection of broadly contemporaneous sites, the hillfort at the Trundle; settlements such as Copse Farm, Oving; North Bersted; Carne's Seat, Goodwood; and the temple at Hayling Island (Fig. 117).

A number of simple quantitative analyses of the human remains, grave form, and pyre and grave goods were undertaken manually. These analyses revolved around the age and sex of the individuals and in view of what is, in statistical terms, a very small sample, categories of evidence were frequently aggregated into larger groupings. The data was also entered into a data base (dBase IV) and assessed by a Kruskal–Wallis one-way analysis of variance by ranks to assess the recurring patterns of association identified. The results of these analyses (available in archive) were in general agreement, providing some additional support for the associations identified.

Cremated human bone

Because the grave cuts of 36 burials were not fully identified during excavation, the quantities of bone recovered from them may not represent the full quantity deposited, and these graves are therefore excluded from the following discussion. Almost all the remaining 125 identified graves contained some cremated human bone, although generally in small quantities. However, 33 of these features, comparable in form, location, and content to those containing cremated human bone, contained either no surviving bone or only small quantities of it (under 25 g). Despite being truncated, enough of these features survived to indicate that this dearth of bone cannot be wholly explained by subsequent disturbance, and it is argued by McKinley (above) that some of these represent a form of activity essentially different in character and meaning to the majority of burials, and that graves containing less than 30 g of cremated bone should therefore be distinguished from them, as *memorials*. It is also quite possible that graves which appear to have been so truncated as to appear destroyed may have been cenotaphs.

The general lack of pyre debris mixed with the cremated bone in the burials contexts reflects the relative ease with which cremated bone can be retrieved from the bed of ashes of the pyre. Despite this, and allowing for some of loss of bone due to the aggressive burial environment, it is clear that most of the human bone was not selected for burial in these graves. When assessed by weight there were two peaks in the quantities of bone deposited in the graves (excluding those graves where the grave cuts could not be identified) (Fig. 118). One peak consisted of the 44 graves (35.2%) containing under 50 g (including those from which no bone at all was recovered). These quantities represent a maximum of *c.* 5% of the remains of a subadult/adult, and no more than a single handful or sprinkling of bone. Within this group there is no clear distinction between those features considered by McKinley to be deposits *of* the dead and those considered to be *to* the dead, the distinction relying in part on her admittedly arbitrary 30 g limit. There are only eight graves (6.4%) with 50–100 g of bone, then a second peak of 35 graves (28%)

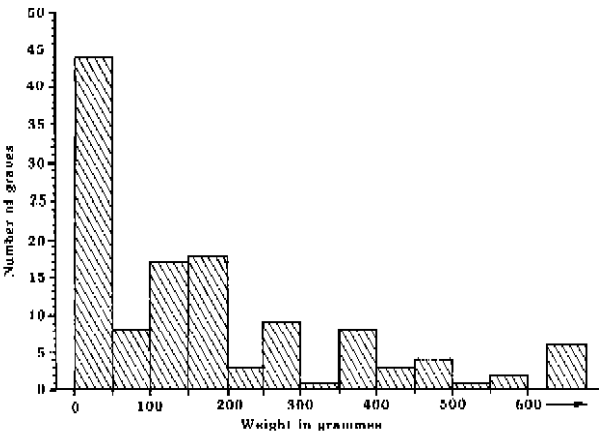


Figure 118 Weight of cremated bone in identifiable Iron Age graves

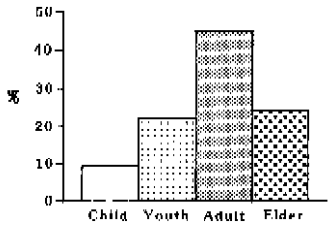


Figure 119 Possible 'social age' structure of the buried Iron Age population

with 100–200 g. This quantity possibly represents the deposition of the equivalent of two handfuls, or possibly that amount of bone that could be carried in a small container. These two peaks in the distribution may only indicate the ways in which *some* of the bone was collected from the pyre or, if all or most of the bones were collected from the pyre, what was chosen for burial, with the remainder being distributed elsewhere. Of the remainder, 12 graves (9.6%) have 200–300 g of bone, with the remaining 26 graves (20.8%) evenly spread with up to 1000 g.

There is no immediate correlation between the weights of bone and the age and sex of the deceased, the shape of the grave, or pyre and grave goods. As it is relatively easy to recover most of the cremated bone from the pyre all the graves were to some extent 'memorials', in so far as the inclusion of anything more than a token quantity of bone, if any bone at all, was a matter of choice or custom. This begs the question, given the fact that some graves contained no artefacts and little or no bone, how these features should be understood. Some may be cenotaphs. Here, quite simply, all the burial features are referred to as graves in the catalogue and are considered as having equivalent functions, with the quantity of bone buried reflecting one choice amongst many others in the mortuary rituals, such as the sacrifice of animals or the placing of pyre and/or grave goods.

In order to provide a more robust sample for the purposes of analysis the six biological age categories described by McKinley (above) have been amalgamated into four mutually exclusive 'age groupings' (Fig. 119). The first grouping ('Children') consists of those individuals which were identified on osteological grounds as being aged definitely 0–12 years, but includes also those potentially within that age range. The second grouping ('Youths') consists of all of those individuals, within the remaining sample, which were identified as aged 13–18 years, plus those potentially within that range. The third grouping ('Adults') includes all remaining adults over 19 years, except for those which were identified as being either certainly of possibly over 45 years, this latter category of individuals comprising the final grouping ('Elders').

It should be borne in mind that these are arbitrary categories selected solely for the purpose of analysis, but possibly reflecting broad social categories. They do not represent a sequence of discrete biological age groups, as the ages of the individuals in each group may overlap, but no individual is included in more than one group.

Analytical age grouping	*Osteological age categories*
'Child'	foetus/ neonate infant: 0–4 years juvenile: 5–12 years (plus juvenile/subadult)
'Youth'	subadult: 13–18 years (plus subadult/adult)
'Adult'	young adult: 19–25 years mature adult: 26–45 years (plus adult)
'Elder'	older adult: 45+ years (plus older mature/older adult)

The graves of the different age groups are distributed differentially within the cemetery. The graves of 'children' (Fig. 120) were widely dispersed throughout the cemetery but tended to be located at or near its margins, whereas the graves of 'youths' (Fig. 121) were concentrated in two main groups, one in the main concentration south-south-east of the empty area, the other north-north-east of the empty area. Graves of 'youths' were absent from the subgroup of graves at the southern end of the cemetery. 'Adult' graves appear to be distributed evenly across the cemetery (Fig. 122), but those of 'elders' display a clear spatial patterning (Fig. 123), with half of them being arranged around the edge of the empty area (from its north-east to south-west). In fact, of the 25–30 graves which define the inner boundary, 16 (*c.* 55–65%) are graves of 'elders' (compared to an anticipated proportion of *c.* 20%). Although the distribution of biconical bowls of Middle Iron Age tradition close to the inner perimeter of the cemetery (Fig. 113) and the latest brooches towards the outer one (Fig. 111) suggests an easterly expansion of the cemetery, it is clear that the location of graves was not determined solely by the date of death.

Grave shape, size, and orientation

Grave size appears not to have been related to the sex of the deceased, but the graves of 'children' (average maximum dimension of *c.* 0.35 m) were consistently smaller than those of 'adults' and 'elders' (*c.* 0.57 m average). The degree of truncation to the graves means that grave depth, which may provide valuable evidence (Ucko 1969, 267) could not practicably be considered.

Of the 125 graves where the shape was recorded, 89 (71.2%) were circular (or subcircular), 14 (11.2%) square, 12 (9.6%) oval, 6 (4.8%) rectangular, and 4 (3.2%) too irregular in shape to be categorised. There was some correlation between grave shape and size, with five of the ten graves where the maximum dimension was over 0.8 m (*c.* 1.5 times the average of all graves), including the four largest, being either square or rectangular. There was also a correlation between shape and contents, in that of the seven graves of known shape which contained four or more pots, four (57.1%) were square (compared to 11.1% of the total). The other three were circular.

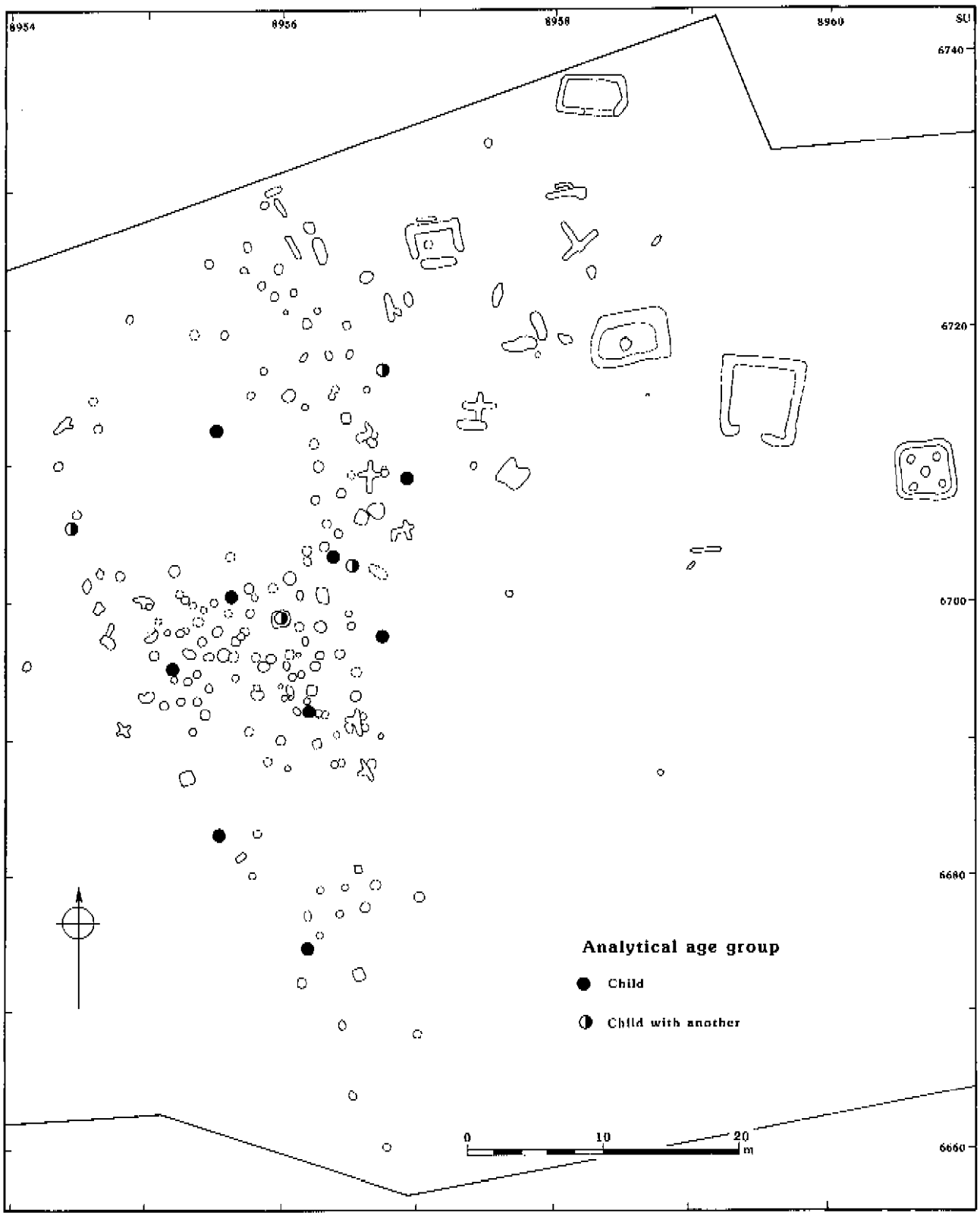


Figure 120 Distribution of 'child' Iron Age graves

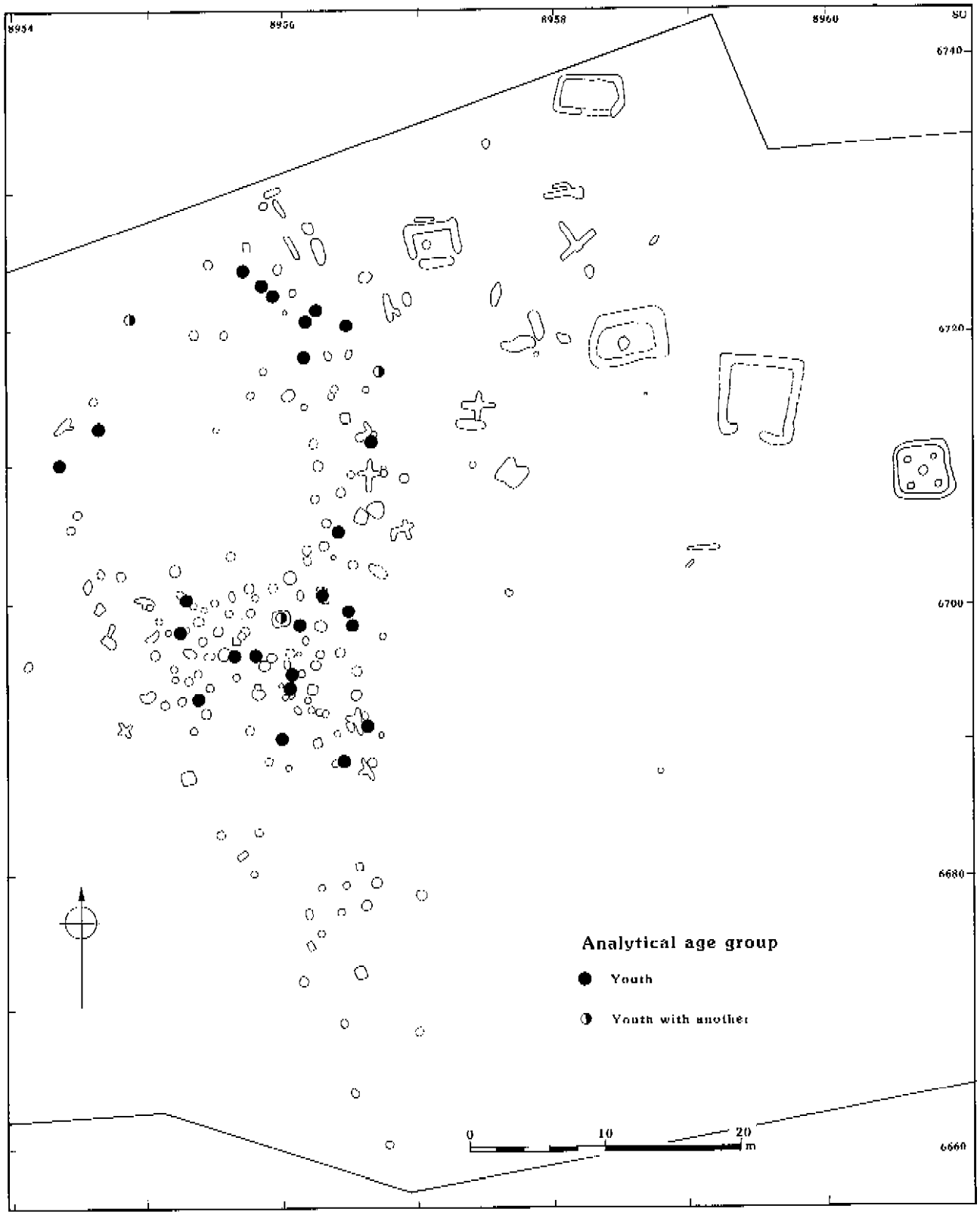


Figure 121 Distribution of 'youth' Iron Age graves

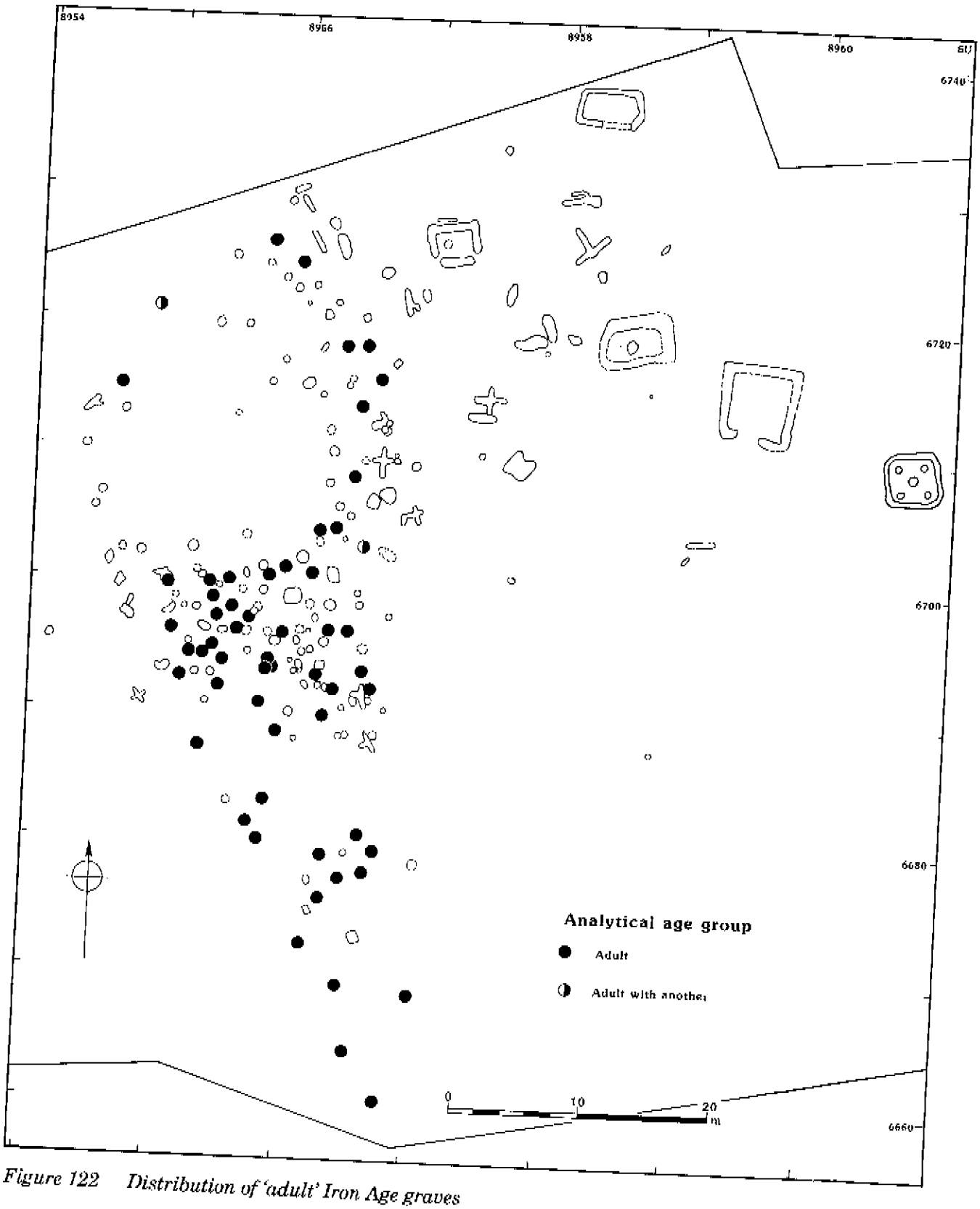


Figure 122 *Distribution of 'adult' Iron Age graves*

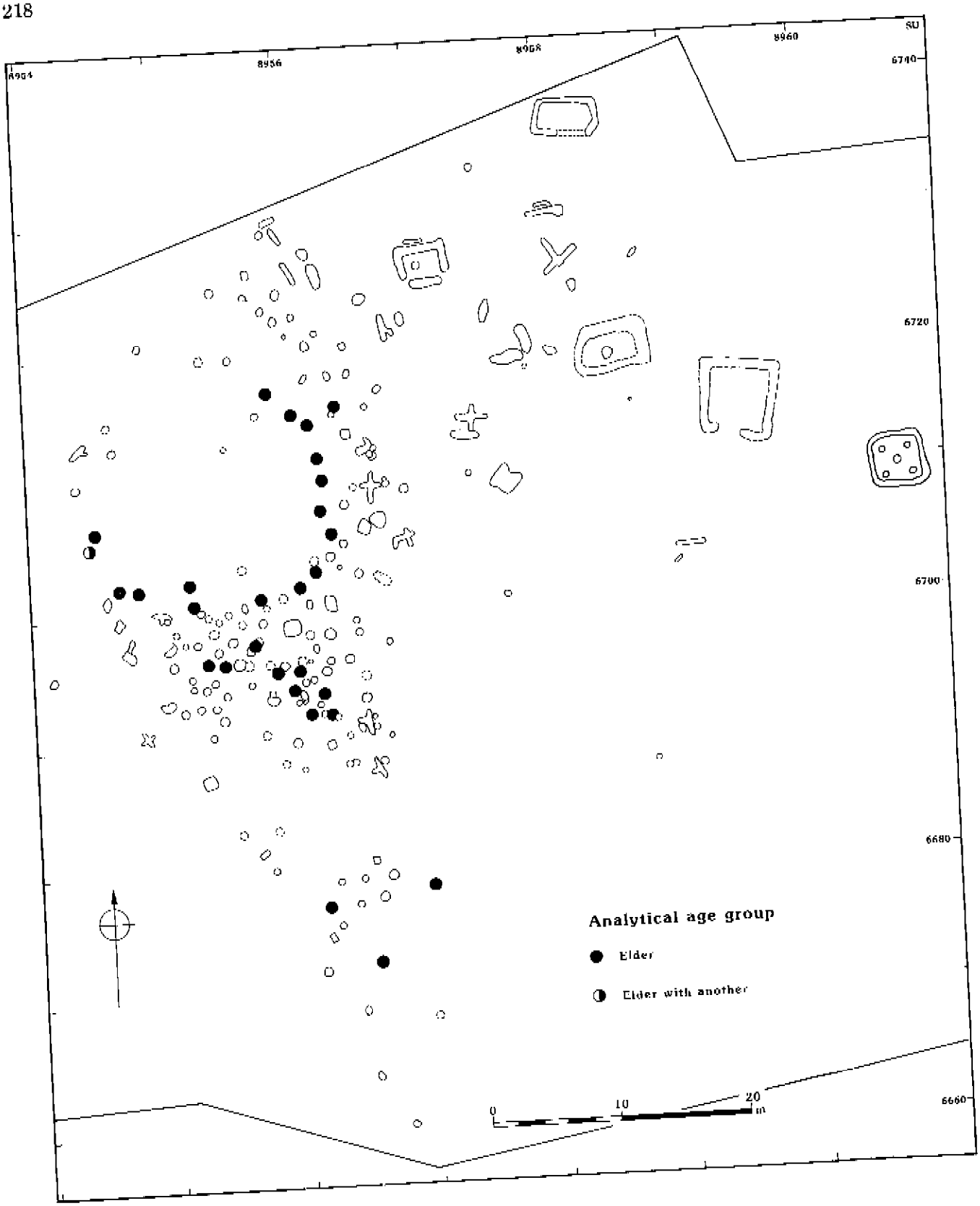


Figure 123 Distribution of 'elder' Iron Age graves

For the purposes of analysing the orientations of the graves, circular graves are treated as having no orientation (although many of them were not exactly circular and so did display some degree of alignment). There was a clear preference for the oval and rectangular graves to have an approximately north–south orientation, with the long axes of 11 of the 18 such graves (61.1%) lying either north–south or north-north-west–south-south-east. In addition, 12 of the 14 the square graves (85.7%) had one axis lying between these same compass points.

However, the dispositions of the grave contents did not show such a clear orientation, with cremation deposits placed either centrally within the cut, or showing no clear weighting towards any side of the grave, and the pots being placed around the bone seemingly at random. The probable presence of vessels of wood or wicker, which unless they had metal repairs or were in contact with metal objects (e.g. a casket with no metal fittings whose mineral preserved traces were found on a Late Iron Age mirror at Dorton; Farley 1983), have been lost without trace can only be noted.

'Focal' graves

A number of graves were set apart by their location, form, and contents. The four largest graves were square or rectangular, and three of these (20095, 1.02 m; 20252, – 0.95; and 20484, 0.93 m) were to varying degrees spatially isolated from other graves. Both grave 20252 and grave 20484, towards the southern end of the cemetery were surrounded by empty areas, with smaller graves being placed around them in rough arcs between 3 m and 5 m away. This was particularly clear around grave 20484. Grave 20095, at SU 89559 06699, in the area of highest grave concentration, had a similar, but smaller, empty space around it, with only one grave within 1 m of it. These graves may have been foci around which other graves were arranged.

These larger 'focal' graves contained individuals of varying ages, 20095 being the dual cremation burial of an unsexed infant/juvenile and an unsexed subadult, 20252 being an female adult, and 20484 being an unsexed older adult (Pl. 26). However, they all contained three or more artefact types, with 20095 having five pots (three jars and two bowls) as well as a piece of gold, quite possibly from a tubular torque or bracelet, 20484 having four pots (two jars and two corrugated bowls) and three brooches, and 20252 having no pots but an iron ring, belthook and two brooches with chain. Grave 20252 is further distinguished within the cemetery by placing the cremated bone in its four corners and in containing a very large quantity of pyre debris.

Plate 26 Iron Age grave 20484 viewed from the south (Fig. 95). Note the shallowness of the grave, also the copper alloy Feugère 2b brooch (ON 27263) lying on the unurned cremated bone of an older mature/older adult. In addition to the pairs of jars and corrugated bowls, the grave also contained other brooch fragments and fragments of two antler toggles

Table 30 comparative assemblages from Iron Age sites

Human bone	*Costume*	*House hold goods*	*Pottery*	*Animals*	*Tools*	*Transport*	*Weaponry*	*Other*	*Coins*
Copse Farm									
r. femurs skull	brooches rings	querns	bowls jars storage vessels amphorae	frags: C = 37.2% S = 30.1% P = 11.9% H = 17.6% D = 2.9% B = 0.3%	Knife sickle/ billhook bone points	terret	–	–	–
North Bersted									
cranium Mandible	brooch	querns	bowls jars storage vessels	frags: C = 46% S = 35% P = 12% H = 3% D = 1%	–	–	–	–	–
Trundle									
Jaw skull l. femur l. ulna	ring bone toggle ?beltloop	latch- lifter querns	jars storage vessels	present: C, S, P, H, D, deer (v. rare)	sickle knife adze awl bone points spindlewhorl loomweights weaving combs smithing slag	–	spear x 2	?currency bar ring	–
Hayling Island									
cranium mandible	brooches belthook strap links	tankards	bowls jars	frags: S = 61% P = 39%	–	bridlebit linchpins (several) nave hoops terret	spear x 17 chain mail scabbards shields	currency bars (several)	151
Westhampnett									
	brooches toggles keys razor knife	querns*	bowls jars	identified bone in contexts: piglet = 25% lamb = 25% C = 5%	–	–	–	1	–

Key: C = cattle, S = sheep, P = pig, H = horse, D = dog, B = bird; * = from pyre-related feature and postholes
Sources: Bedwin and Holgate 1985; Bedwin and Pitts 1978; Curwen 1929; 1931; Downey *et al.* 1980

Pyre and grave goods

All but seven of the 161 graves contained some form of pyre or grave good and their analyses are presented together below. Although this conflates two quite separate stages in the mortuary rituals, the materials in both are largely discrete and are readily discerned. Metal objects were largely incorporated as pyre goods, usually costume fittings, animal bone is only identified as a pyre good, while pots were placed as grave goods. In order to enlarge the sample the number of types of material selected for inclusion in the analyses has been limited. Pots have been classified as either simply jars or bowls. Metalwork has been restricted to brooches (including rings and chains assumed to have been attached to them), and any other identifiable metal artefacts, and finally animal bone. While the quantity of materials deposited during the burial, especially grave goods, would have been constrained by the dimensions of the grave, there was no clear correlation between contents and size. Particularly in the larger graves, but also in a number of the smaller graves, the cremated bone, pots and other finds were arranged in such a way that there

were significant empty areas within the grave, suggesting that other materials, such as wicker or wooden vessels, items of clothing or textiles, foodstuffs — including animal meat or perhaps eggs (*cf.* Murphy 1990, 13), and other organic materials such as flowers (e.g. Tipping 1994), none of which have survived, may also have been deposited.

There is no doubt that the types of pyre and grave goods were deliberately selected. This is brought out clearly by a comparison of the types of material found on the contemporaneous or nearly contemporaneous sites: the fort at the Trundle, the farms at Copse Farm, Oving and North Bersted, and the temple at Hayling Island (Table 30; Figs 4, 115).

It can be seen that household goods and tools (which sometimes were placed as grave goods in Iron Age burials in Britain (Stead 1990, 75; 1991a, 79–80)) are absent, and most of the metal objects are costume fittings placed as pyre goods, perhaps adorning the clothing of the corpse rather than representing their actual dress.

Personal adornment appears to be generally absent. Toe and finger rings, have been found with Arras-type, 'Durotrigian', and south-western burials of Iron Age date (Parfitt 1995, 109). As these rings are often spiral, it seems unlikely that many, if any, of the rings identified as coming from brooches or necklaces at Westhampnett are really toe or finger rings. As at least one spiral or overlapping ring which is likely to have been toe or finger ring has been found at Copse Farm, Oving (Bedwin and Holgate 1985, 229, fig. 9, 3), their absence from the cemetery may suggest that some personal adornments were removed from the dead. Glass beads and bracelets, whether of shale or glass (Fitzpatrick 1985) also appear to be absent. Only the possible gold torque or bracelet or arm/foot ring could be considered to be personal adornment, but the signification of such an object may have had wider religious and eschatological meanings (*cf.* Furger-Gunti 1982, 28–34, 40–2).

In common with most Late Iron Age burials in southern England, weapons are also absent (Collis 1973; Parfitt 1995, 155), providing a striking contrast with the weaponry from Hayling Island temple where many other finds such as the chariot fittings, coins, and perhaps the currency bars, may also be of a martial character (Fitzpatrick 1984; Hingley 1990; Müller 1990, 76–113). As we have seen only certain sorts of pots — bowls and jars — were chosen for burial, and some may have been purpose made. The selection of lambs and piglets for sacrifice and the reserving of some elements of them on the pyre is also clearly shown.

When these prescribed selections are considered in relation to the natural and human factors determining preservation (above), it is clear that considerable caution must be exercised in assessing the results of the analyses. Almost half the graves contained either no materials (3.7%) or only a single one (45.3%), with 29.2% containing two materials, 14.3% containing three and the remaining 11 graves (6.8%) with four or more (Fig. 124). A total of 150 graves (93.2%) contained one or more pottery vessels (Fig. 125), of which 71 (47.3%) contained jars only, 27 (18.0%) contained bowls only, and 45 (30.0%) contained a combination of vessel forms (in the remaining 5 graves the vessels were too fragmentary form their form to be identified) (Fig. 126). In addition 42 graves (26.1%) contained some metal object (or object with a metal component), the most common items being brooches (and rings and chains associated with them) which were found in 30 (72%) of those graves.

The low percentage of cremation burials to be sexed (24 female and 5 male) means that few clear sex-based associations can be seen in the data (Fig. 127). The deposition of particular materials within the graves did not appear to have been sex-related, as, with the exception of the single coin, all artefact types which were found in the female graves were also found in the male graves. However, bearing in mind the small sample size, female graves did on average contain fewer artefact types (2.2 types) than the male graves (3.3 types) (Fig. 128).

The number of artefacts was also also age-related, with an average of 2.3 types in the graves of 'elders', 1.9 types in the graves of 'adults', 1.6 types in the graves of 'youths' and 1.1 types in the graves of 'children' (Fig. 128). This pattern was reflected though less markedly in the numbers of pots in the graves, with an average of 1.7 vessels in the graves of 'elders', 1.6 in the graves of 'adults', 1.5 in the graves of 'youths' and 1.1 in the graves of 'children' (Fig. 128).

In addition, the placing of some pyre goods was age-related. Animal bone, predominately legs from lamb and young pig, was reserved for the pyre and found in 45.2% of the graves of 'elders', 24.1% of the graves of 'adults', 17.8% of the graves of 'youths', and not at all in the graves of 'children' (Figs 129–30). However, the sample (36 graves) was too small to allow any associations between people and animal species to be positively identified. A similar, though less marked, pattern was evident in the distribution of metalwork (usually costume fastenings), which was found in 45.2% of the graves of 'elders', 31.0% of the graves of 'adults', with 17.9% and 22.2% in the graves of 'youths' and 'children' respectively (Fig. 130).

The clearest indication of an age-related artefact association was found in the vessel forms placed in the graves (Fig. 131). Bowls without accompanying jars were found in 62.5% of the graves of 'children', the proportion falling to 25.0% of the graves of 'youths', and 5.8% and 7.4% of the graves of 'adults' and 'elders', respectively. In contrast, bowls and jars together were found in 51.9% of the graves of 'elders', 33.3% of those of

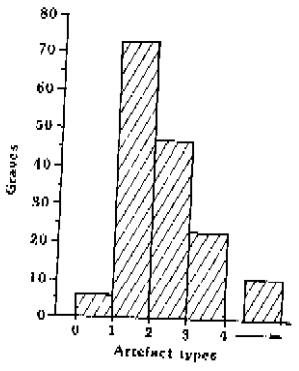


Figure 124 Number of artefact types in Iron Age graves

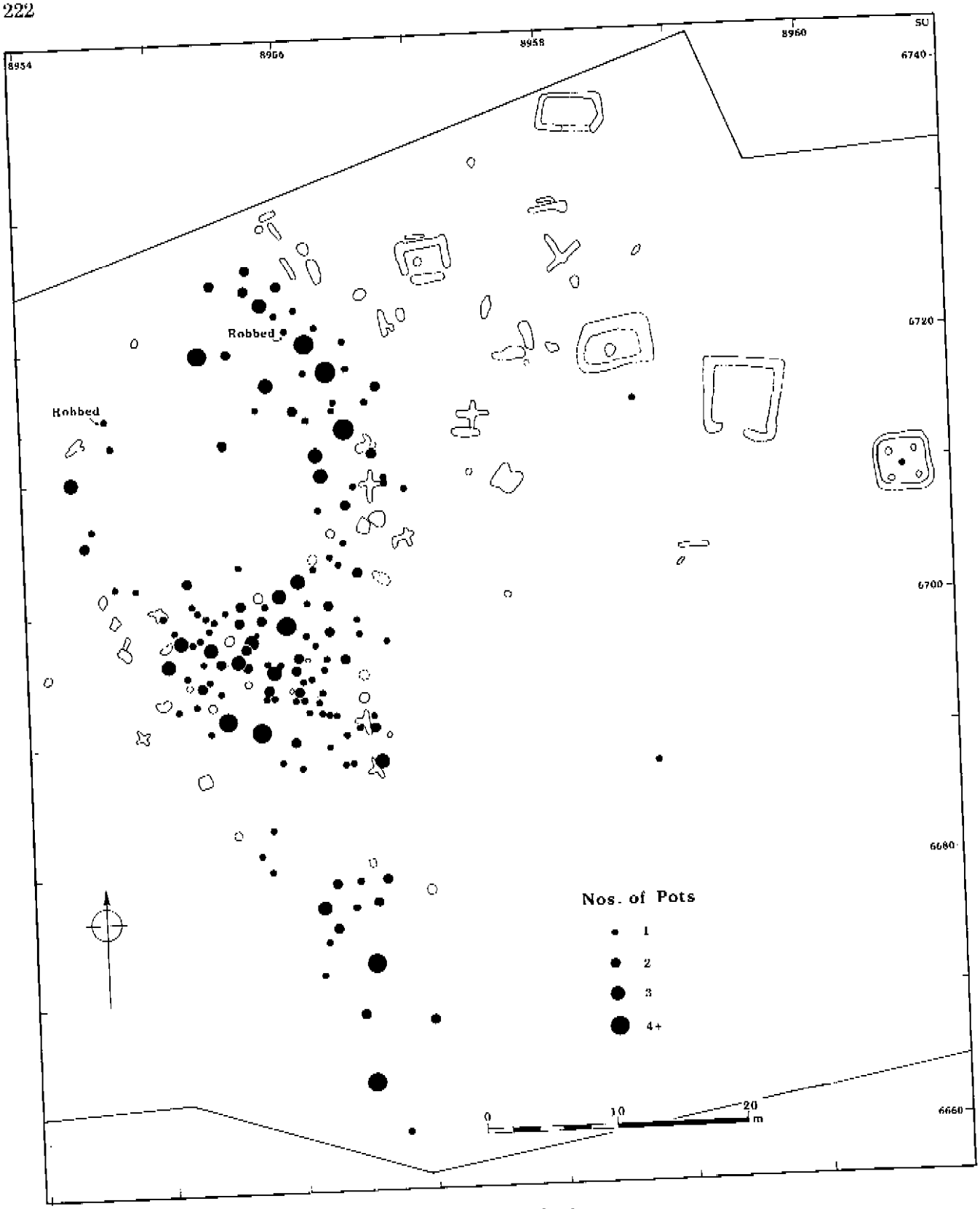


Figure 125 Number of pots in Iron Age burials, distribution

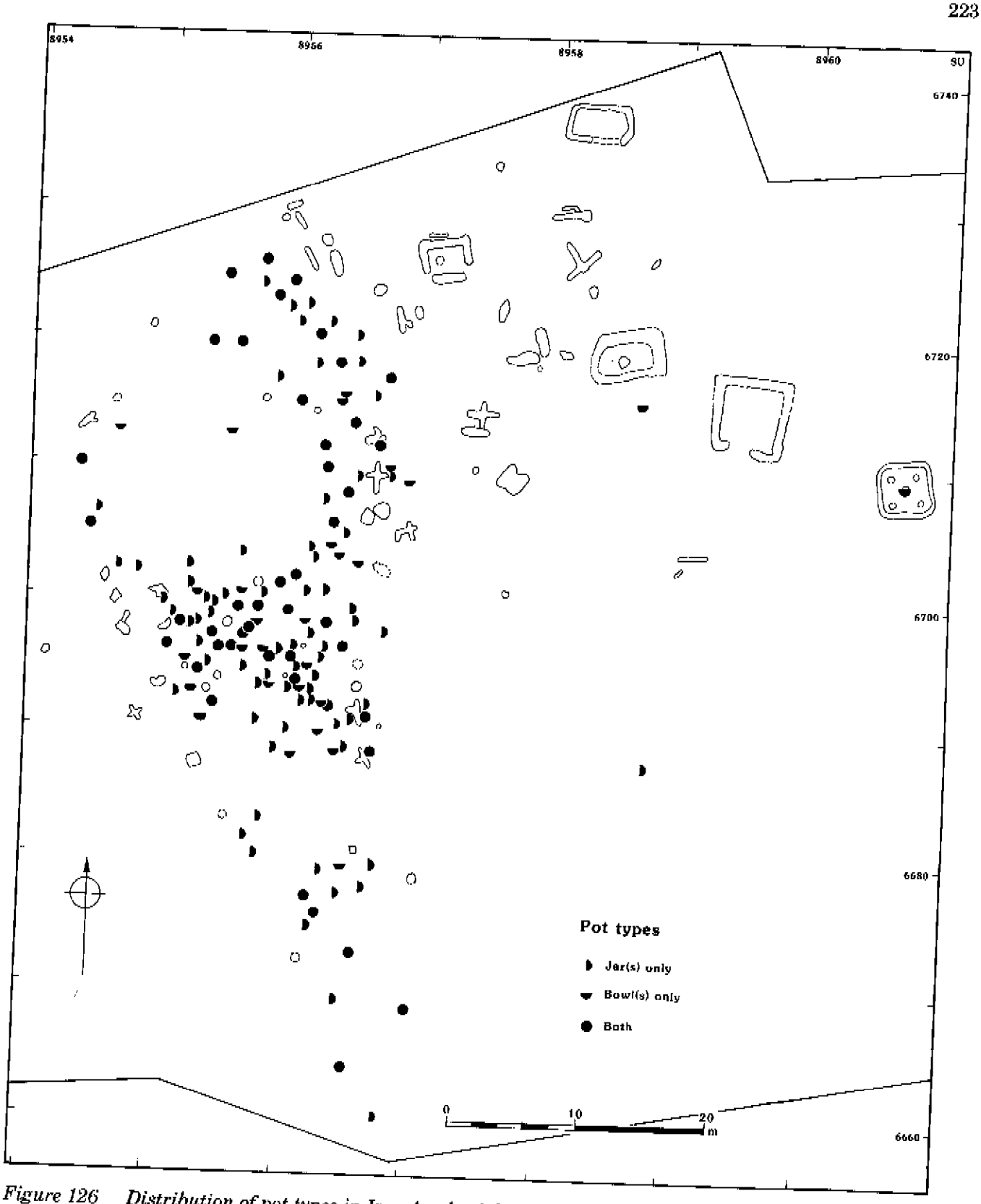


Figure 126 *Distribution of pot types in Iron Age burials*

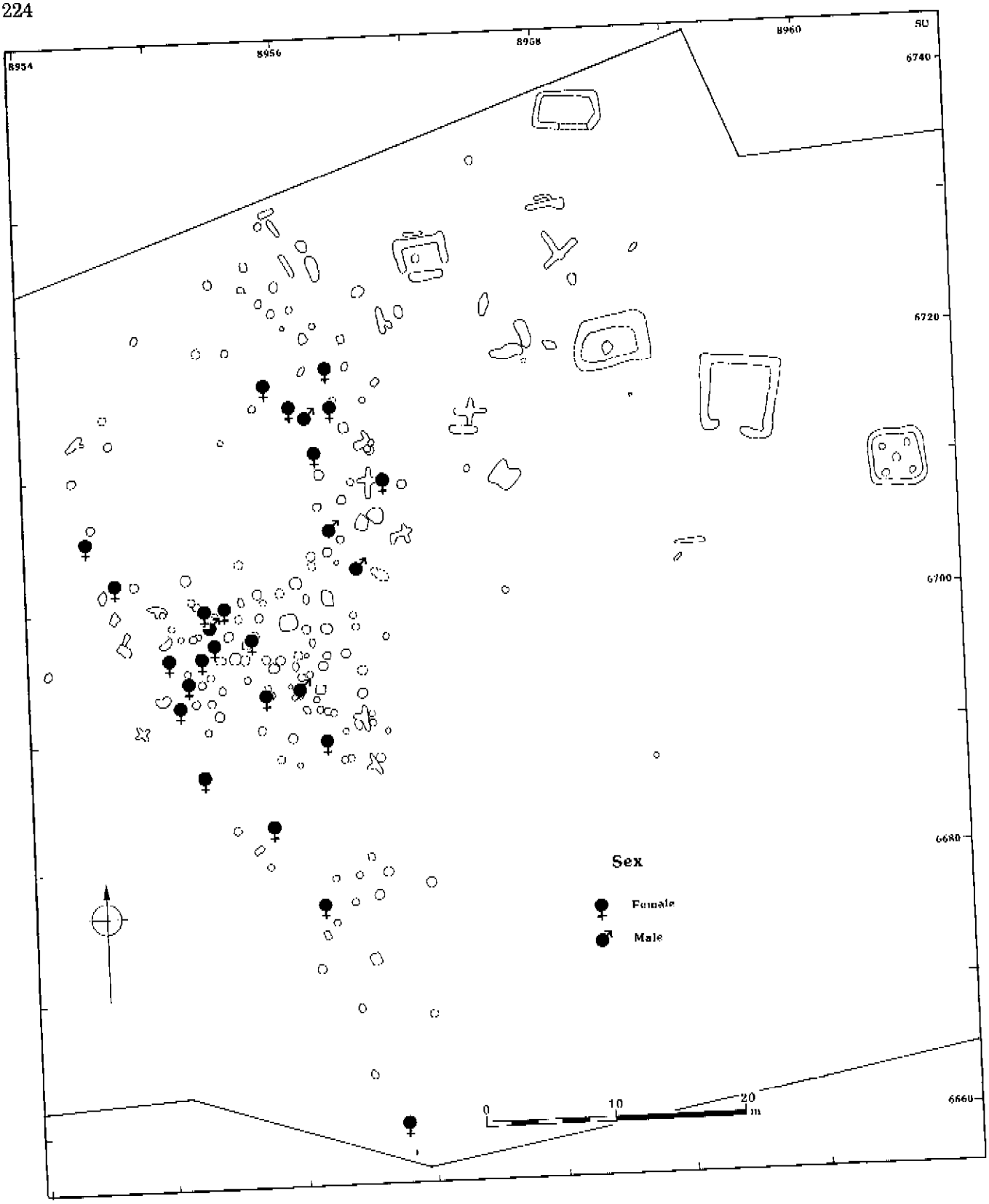


Figure 127 Distribution of sexed Iron Age graves

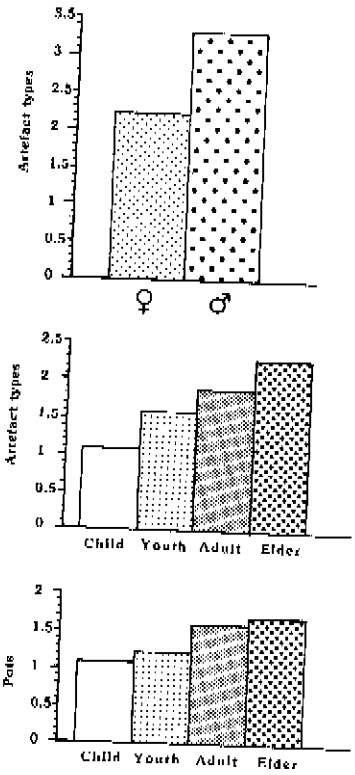


Figure 128 Iron Age graves: average numbers (excluding dual cremation burials) of (top) artefact types by sex, (middle) artefacts by analytical age group, (bottom) pots by analytical age group

'adults', 21.4% of those of 'youths', and were completely absent from those of 'children'. Jars alone were more evenly distributed across the age range, although being most common in the graves of 'adults' (60.1%; Pl. 27).

The Setting of the Westhampnett Religious Site

In many respects the Iron Age religious site is presently unique in Britain and while it is one of, if not *the*, earliest cremation cemeteries in Iron Age Britain, the absolute chronology is less important than the adoption of the rite itself. Equally its size, shape, the association of shrines, pyres, and burials, and the unurned burial rite, all find few, if any, parallels. Yet in many other respects it incorporates elements typical of the period.

Diversity in burial rites

During the Middle–Late Iron Age the placing or burial of varying amounts of human remains in settlements, sometimes as secondary burial after excarnation, is widely attested (Wilson 1981; Wait 1985, 83–121) and such remains, probably of Middle Iron Age date, are known from pits and the east gate in the hillfort at the Trundle (Curwen 1929, 45, 67, 84; 1931, 146). It has been argued that the human remains in pits represent a 'non-normative burial' (in relation to excarnation; Wait 1985, 118–21; Cunliffe 1992, 76) and are the remains of unclean people or outcasts. In itself this is contradictory

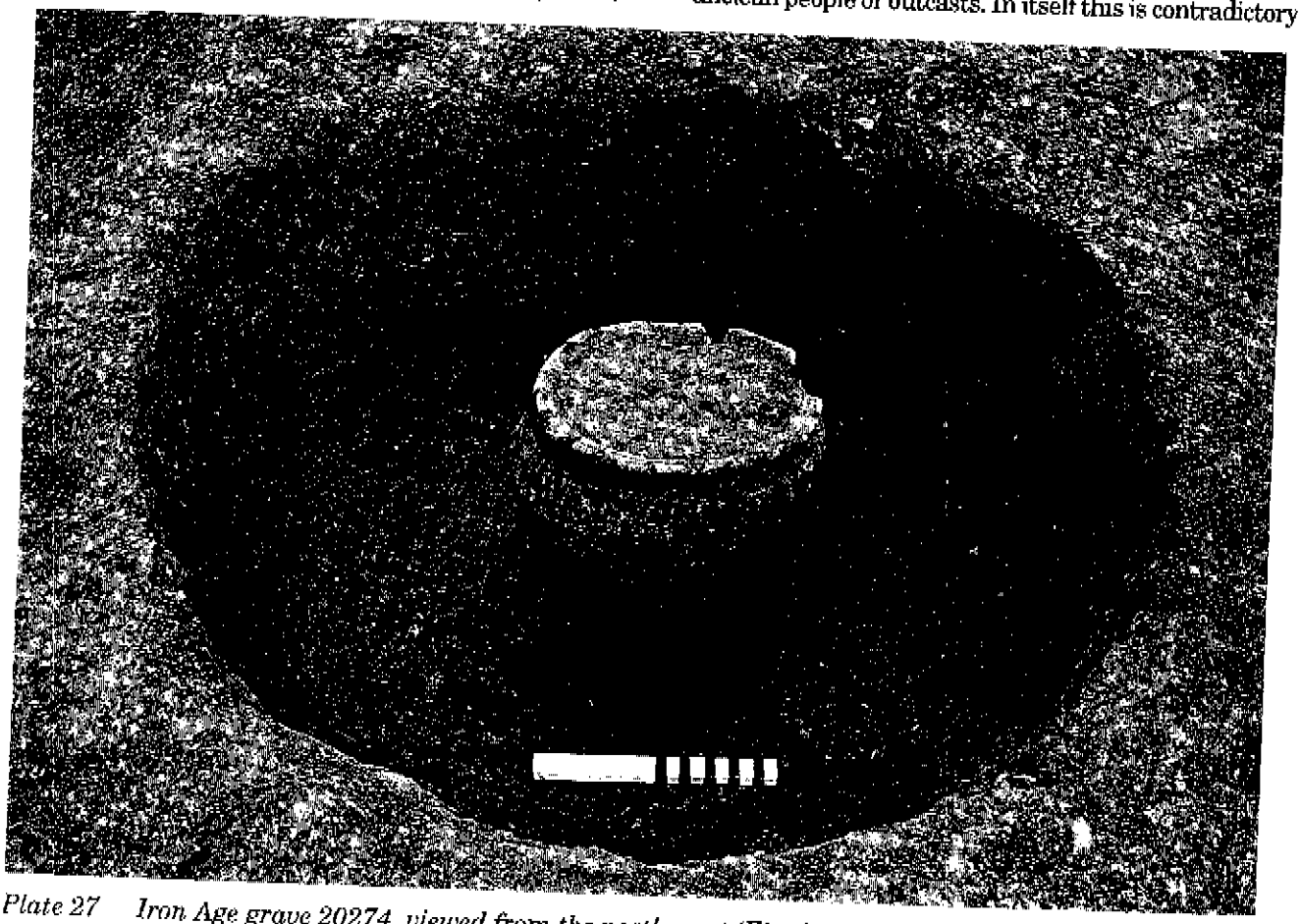


Plate 27 Iron Age grave 20274, viewed from the north-west (Fig. 84). The grave contained the unurned cremated bone of an unsexed older mature/older adult, and cremated cow and unidentified, but cow-sized, animal bone and a high-shouldered jar (ON 27165)

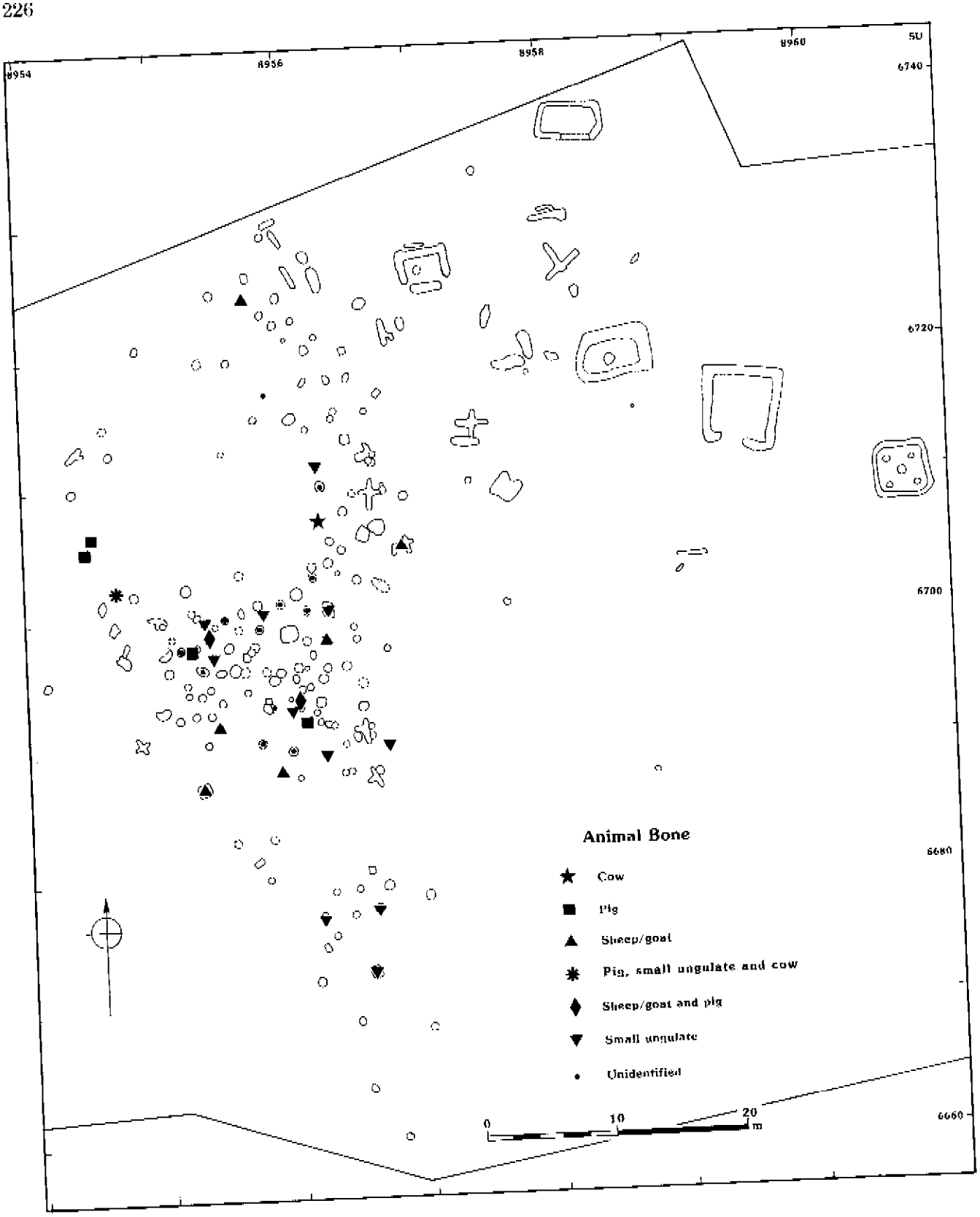


Figure 129 Distribution of animal bones in Iron Age graves

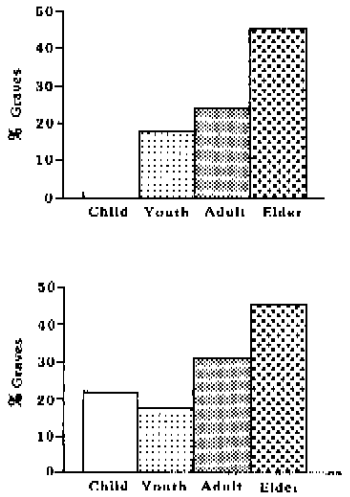


Figure 130 Percentage of Iron Age graves in each analytical age group containing (top) animal bone and (bottom) metalwork

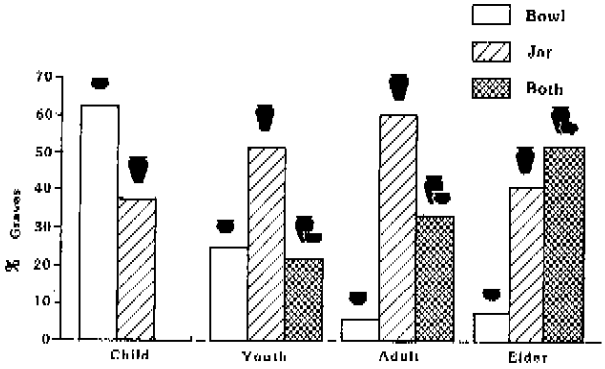


Figure 131 Percentage of Iron Age graves in each analytical age group containing pot types and combinations

for they constitute the majority of evidence for burials at this time and *a priori* represent the typical. This interpretation is also predicated in part on the assumption that the other deposits in the pits represent the disposal of 'ordinary rubbish' and are inappropriate materials with which to surround a human burial.

It cannot be assumed that the practice of cremation burial superseded these rites of excarnation and secondary burial in modern West Sussex, or that it was a normative rite applied to the whole community.

At Westhampnett young children and babies generally do not appear to have been buried in the cremation cemetery, while at the contemporaneous settlement at Copse Farm, Oving, unburnt bones from individual elements (legs/skull) from three people were recovered from a ditch (Bedwin and Holgate 1985, 232). Possibly slightly earlier are the remains of a skull from the settlement at North Bersted (Bedwin and Pitts 1978, 339–40) and the fragments of lower jaw, skull, femur, and ulna from separate contexts at the Trundle (above). The recognition of Late Iron Age inhumation burials which appear to be contemporary with cremation burials at Baldock–Wallington Road and, possibly, King Harry Lane in Hertfordshire (Burleigh 1993, 47) and Mill Hill, Deal (Parfitt 1995) indicates that cremation was not the only rite.

This might suggest either a period of overlap between the rites of cremation burial and excarnation/secondary burial, or that the rites continued side by side. At Westhampnett the age and, so far as it is possible to assess, the sex of the deceased buried in the cemetery are compatible with the suggestion that they represent most of, if not all, the members of family groups but there seems little need to replicate the argument of 'outcasts' for those individuals some of whose remains were found at Copse Farm, Oving. A diversity of rites is apparent in northern France in the Mid–Late La Tène where cremation burials were placed in formal cemeteries, excarnated bodies, usually represented by single bones, were placed in settlements, and dismembered bodies were displayed in sanctuaries (Lambot 1993, 220). The links between this practice and the presence of very small quantities of human bone at the Hayling Island temple (Downey *et al.* 1979, 8) is not known. At Hayling Island many of the weapons given to the gods had also been deliberately broken and this clearly echoes the dismembering of corpses and the mutilation of weaponry seen at the northern French sites (e.g. Rapin 1993). A similar transformation, this time created by the pyre, is seen at Westhampnett

There are also similarities between the cremation burials at Westhampnett and the broader rite of excarnation/secondary burial in so far as not all of the body was selected for burial, whether in a grave or in a settlement. Whether this represents continuity and beliefs shared between the two rites is another matter, but the cremation took place hard by shrines which are readily paralleled in British Iron Age contexts while it is suggested below that the graves were laid out in relation to a symbolic round house. At the very least the cremation pyres were surrounded by tradition, but tradition changes and renews itself:

Middle Iron Age	*Late Iron Age*
Excarnation	Cremation
?Costume	Clothed/adorned
?Wordly goods	Pyre goods
Dispersal of some bones	Dispersal of some cremated bones
Partial burial in settlement	Partial burial in cemetery
	Grave goods
Shrines in settlement	Shrine associated with cemetery
	Temple in delimited sacred space with gifts to gods
Intensification and extensification in settlement	

It is apparent that there are also important differences. Excarnation is a slow process: the act of cremation is rapid. In formalising a cemetery which clearly separated the dead from the living, and in the juxtaposition of shrines and a cemetery, a new sort of religious site

where the otherworld could be reached was engraved on the landscape. It was not alone in this, for the round temple within an enclosure at Hayling Island, and the contexts and character of the votive deposits from them, illustrate a new way of communicating with at least some gods at sanctuaries with clearly defined sacred spaces. This is part of a broader trend towards the definition of sacred ground as the great majority of structures which have been suggested to be shrines date to very late in the Iron Age and although a few, generally earlier, examples have been found in the heart of settlements (Danebury, Heathrow, Cadbury Castle, and Stansted), most have been identified underlying Romano-British temples.

Cemeteries and settlements

The vast majority of Aylesford burials occur in small groups, sometimes near a farm (e.g. North Shoebury; Wymer and Brown 1995, 158, fig. 25) but often in an apparently isolated cemetery. Although 'Welwyn-type' burials have often been found alone, some are known to be part of cemeteries which also contain modestly furnished graves (e.g. Welwyn Garden City; Stead 1967). Of the few cemeteries whose extent is clearly defined, only those at Owslebury (Collis 1977a), and presumably Mucking, Essex (Going 1993), can be associated with a particular settlement. Consequently little consideration has been given to the topographic setting of cemeteries or their relation to settlements (*cf.* Parker Pearson 1993). The Maldon Hall Farm, Essex enclosure which contained a small cemetery was located below the brow of a small hill (Lavender 1991, 203). The siting of the Westhampnett cemetery on a low but prominent hill would have ensured its visibility but this location also physically, and perhaps conceptually, placed the dead above the contemporaneous settlements on the Coastal Plain. The outline of the hill will have been more prominent in the Iron Age before it was softened by the build-up of colluvial deposits on its slopes which, when examined in Area 1 to the north (see Volume 1), appear to date to the Iron Age, and may well have been caused by destabilisation of the ground surface consequent on the removal of trees and undergrowth to serve as fuel for the pyres.

Larger settlements such as Baldock would seem to have more than one cemetery and this is also the case at St Albans. At Baldock the three burials in enclosures appear to be placed along what was then the northern edge of the settlement and they appear to have influenced the layout of the settlement for a while, although they were eventually encroached upon (Stead and Rigby 1986, 84–5, fig. 3, 38A; Burleigh 1982, fig. 2). It can hardly be coincidental then that burials associated with *oppida* are located near the massive dyke systems which are usually taken as defining these sites. At St Albans the King Harry Lane cemetery either used the northern dyke of the Prae Wood element of the *oppidum* as a boundary, or itself formed such a boundary. This may also be the situation with the Verulam Hills Field cemetery, and, although it is early Romano-British in date, this location is matched by that of Folly Lane on the northern edge of St Albans (Niblett 1992, fig. 1; Hunn 1992). A similar pattern occurs at Colchester where there is a trend for burials to occur relatively close to the dykes. The Lexden cemetery, with c. 20 known burials, lies to the south-west of Sheepen, which seems increasingly unlikely to have been the focus of the *oppidum*. The Lexden Tumulus might have been deliberately incorporated within the dyke system as the dykes have been interpreted as deliberately arching around it, although it is by no means certain (Foster 1986, 3, fig. 1–2; Hawkes and Crummy 1995, 164–9, fig. 7.1). The recently discovered well-furnished Stanway burials lie outside, but still close to, the dyke system (Crummy 1993; Hawkes and Crummy 1995, 169–70).

Such an association with settlements thought to be seats of authority may be echoed by the occurrence of the rare contemporaneous cremation burials under barrows in Wessex. Corney has identified a tendency for these burials to be associated with Banjo enclosures and/or dyke systems which, he suggests, in Wessex may have fulfilled some of the roles played by what have traditionally been defined as *oppida* elsewhere (Corney 1989).

As we have seen, on the evidence presently available for Chichester, this does not appear to be the case for the Westhampnett cemetery. Instead the immediate context of the Westhampnett religious sites appears to lie with nearby farm sites which have been shown to be of Mid–Late Iron Age date such as Copse Farm, Oving (Bedwin and Holgate 1985), Carne's Seat, Goodwood (Holgate 1986b), Oldplace Farm, Westhampnett (Bedwin 1983a, 36, fig. 4; 1984, 50, fig. 3.3), Westhampnett Area 5, or which are suspected to be of this date, such as Selhurstpark Farm (Bedwin 1984, 46, fig. 3.2; Holgate 1986b, fig. 1) and Denge Bottom (Bedwin 1984, 46; Holgate 1986b, fig. 1) (Fig. 4).

The size of the cemetery

Despite this evidence for increased settlement on the West Sussex Coast Plain the size of the Westhampnett cemetery was unexpected. The majority of known Late Iron Age burials in central and south-eastern England (excluding 'Durotrigian' burials in Dorset) have been found either singly or in small groups (Whimster 1981, 155–6), either associated with farmsteads or as apparently isolated cemeteries. Such cemeteries, both cremation and inhumation, are not particularly common and in central–southern and eastern England and only 11 of them contain 10 or more burials, and most have 30 or less (Fig. 132). Only two contain more than 30 burials: King Harry Lane and Westhampnett.

Many of these cemeteries were explored in older excavations where the full extent was not identified, for example, Aylesford (Evans 1890), Boxford–1966 (Owles 1967, 88–9, only six burials), and Swarling, Kent (Bushe-Fox 1925), but this is not the case for all of them. For example the cemeteries at Deal–'Central Cemetery', Kent (Parfitt 1995), Mucking, Essex (Going 1993, 20), and Owslebury (Collis 1977a) all appear to have been fully excavated, although they may not have been the only cemetery used by the communities.

The most comparable cemetery in terms of its size is King Harry Lane (Stead and Rigby 1989; Fig. 136). There some 75 phase 1 burials have been securely attributed to the Iron Age and many of the 91 phase 2 and 149 phase 3 burials, which straddle the Iron Age and Romano-British periods, may also date to the Iron

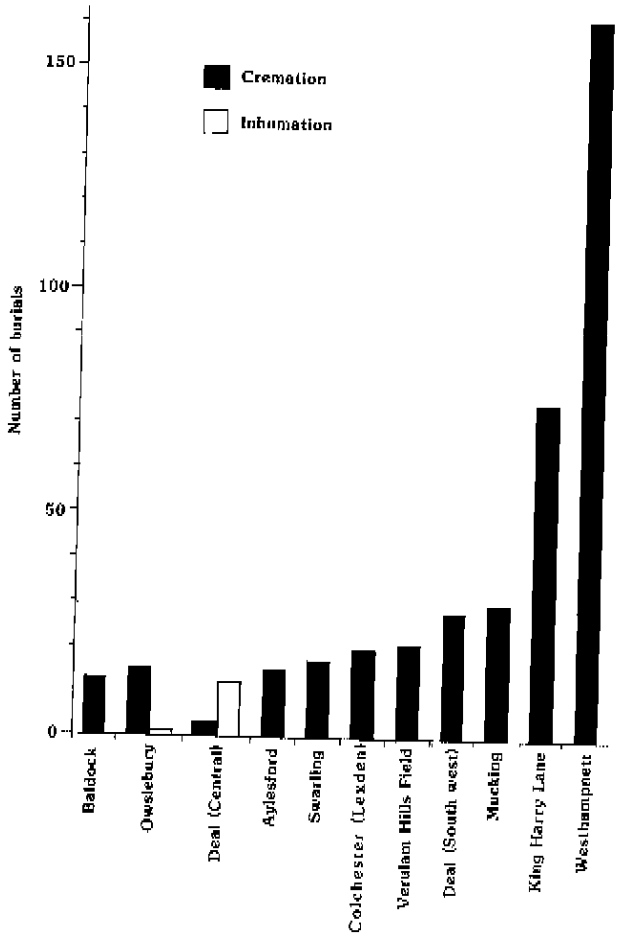


Figure 132 Incidence of cremation / inhumation graves at Iron Age cemeteries

Age. This might suggest that the Iron Age cemeteries at Westhampnett and King Harry Lane are of a comparable size. These cemeteries are amongst the largest known in western Europe during the pre-Roman Iron Age. While the distribution of the rite of cremation burial is discontinuous (Collis 1977b, 2–3, fig. 3; Roymans 1990, 237–9, fig. 9.12), only the cemeteries of Horath with 184 burials (both Mid and Late La Tène, spanning c. 200 years (Mahr and Miron 1980/81; Roymans 1990, 223), Lebach with 200 (Collis 1977b, 4) and Wederath–Belginum with c. 200 Late Iron Age (La Tène D) burials (Haffner 1989a, 49–76; R. Cordie-Hackenberg pers. comm.) are larger. The large cemeteries at Epiais-Rhus, Oise, France (143 cremation burials; Roymans 1990, 233) and Wederath–Belginum are both associated with village-like settlements.

The Organisation of the Religious Site

In view of the number of occasions on which Bronze Age barrows appear to have provided the focus for Roman shrines (Woodward 1992, 26–8) and Anglo-Saxon cemeteries (Evison 1987, 154), it is possible that the ring ditch 20822 played a similar role at Westhampnett. If it did, it does not seem to have obviously influenced the structure and disposition of the cemetery which instead has its own logic. It is perhaps more likely that the hill was selected for values ascribed to it by the Iron Age peoples, for example it may have had a sense of place, or been numinous, that is possessed of a spirit.

The distribution of burials which had the earliest sort of pottery, biconical bowls in the Middle Iron Age tradition, placed as grave goods indicates that the central circular area was established at the outset and it seems to have been respected throughout the main use of the cemetery. This is shown clearly in the distribution of Feugère type 2 brooches when considered by context (Fig. 133). The only grave which transgresses this boundary was the one grave (20457) which contained an Iron Age pot and one apparently of Romano-British style. This burial could have been made up to 70 years after the main use of the cemetery had ceased, suggesting that while the site of the cemetery was clearly recognised, for the burial of what by then may have been an heirloom with a modern pot where non-grave contexts help define the circular area is unlikely to have been coincidental, the importance ascribed to the barrier was then not clearly defined. There is some evidence for the expansion of the cemetery to the south and east in the form of a few graves being dug through the sites of pyres, and a few graves intercut, but otherwise there are almost no vertical stratigraphic relationships between Iron Age features.

In consequence it seems likely that the organisational principles of the whole site, including the location of the shrines and the funerary monument (enclosure 20706), were established at the outset.

The shrines

The plans of two of the four enclosures (20277, 20657, 20761, and 20562), have close parallels with a number of Mid–Late Iron Age structures whose small size, square or rectangular shape, and east-south-easterly orientation help to distinguish them as shrines (Drury 1980; Wait 1985, 154–78; Grimes and Close-Brooks 1993, 336–8). Although the two enclosures whose entrances could be defined face south, on the basis of their other similarities with these buildings they are identified as shrines. Enclosure 20562 is particularly close in plan and size to rectangular trench-built structure 2 from Danebury, Hampshire (Cunliffe 1984a, 85–6, fig. 4.33) (Fig. 134) and the Heathrow, Middlesex, shrine (Grimes and Close-Brooks 1993) (Fig. 135), while enclosure 20277 is similar to Danebury rectangular trench-built structure 3.

When found within settlements such shrines are centrally located within farm compounds or forts (Figs 134–5) but, as Wait notes, where they are located within enclosures they are often sited eccentrically within them (Wait 1985, 172). Although they are apparently not within an enclosure, the Westhampnett shrines are grouped together to one side of the cemetery. The different, southerly, orientation of the shrines may be associated with their mortuary setting. The only structure for which a comparable use has been suggested is the larger circular feature found on the site of the Middle Iron Age cemetery at Harlyn Bay, Cornwall, which has been suggested to have had some form of funerary or mortuary function (Whimster 1977, 63–70, fig. 23–4).

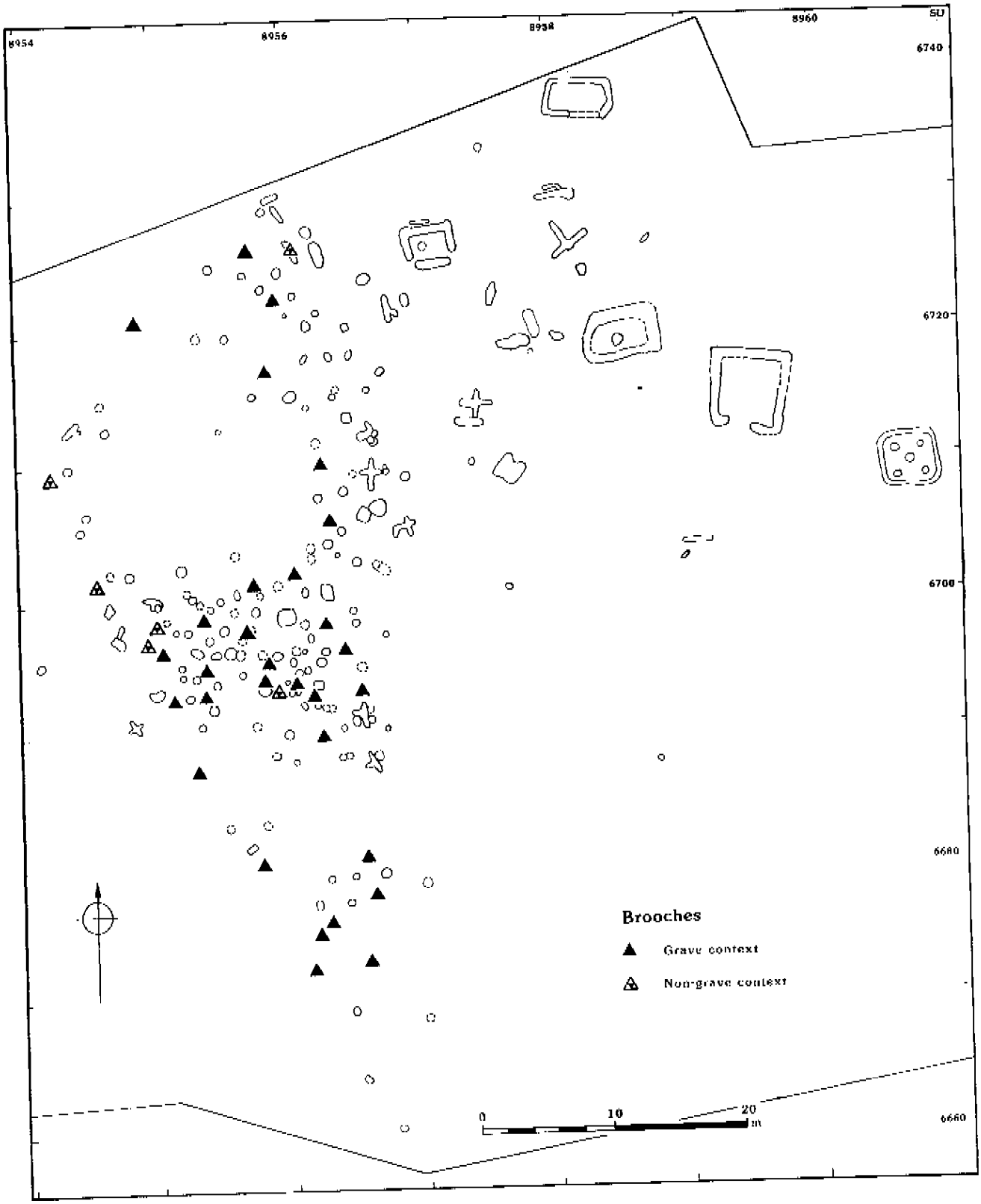


Figure 133 Grave / non-grave contexts of brooches

Venclová has noted that in continental Europe the front walls or entrance sides of Iron Age shrines are often emphasised, for example by being open (1993, 62) and enclosure 20277 appears to represent a variation on this, with what appears to be a facade, serving to both conceal and reveal the entrance. The small size of the British shrines has led to the suggestion that only small groups or individuals entered the shrine at one time (e.g. Wait 1985, 171–2).

As with those at Danebury and Cadbury Castle (Fig. 134), the shrines are situated on the summit of the hill. The Westhampnett examples stand on the slightly higher ground above the 23 m contour and their southern aspect embraces most of the pyre sites and graves. Almost no burials were made to the east of the westernmost of the shrines. The architecture of the small British shrines — square or rectangular — sets them apart from domestic round houses. Although little is known of the materials or construction of the Westhampnett shrines, fired clay perhaps from daub was found in 20277, 20562, and 20761, and it is likely that their construction was similar to some of the Danebury shrines, where the walls were made of close-set planks placed side-by-side in continuous bedding trenches (Cunliffe 1984a, 81–7). Most Iron Age round houses in southern England have post-built foundations with wattle and daub walls and this suggests that the shrines had a different appearance, quite possibly with pitched gable-ended roofs (*cf.* Allen 1973), but there is no need to ascribe the roofing of shrines to Roman influence (*pace* King 1990, 223–9). Their shape, which allows reference to all the cardinal points simultaneously, also breaks with the cosmological referents of the round dwelling house. Rather than the shrine being intended for only a few people, it may be that they were houses for the gods, or idols of them appropriate for invocation or veneration in mortuary rituals.

Most Iron Age shrines have yielded few finds and there is little which sets them apart from domestic assemblages. The limited examination possible of the Westhampnett examples means that little information is available but the small quantities of pottery from the shrines may suggest that pots were used in some of the rituals acted out in them; perhaps, as with those used at the pyres and placed in the graves, they contained food and drink.

It cannot be determined whether all the shrines were constructed at the same time. At Danebury the sequence of shrines spanned several centuries but at Westhampnett they could be contemporaneous, invoking different deities or ancestors, or have had different roles such as housing the cremated remains for given times. It may not be fortuitous that features containing material deriving from pyres were found in shrines 20277 and 20761. This might indicate one of the uses of the shrine rather than the relative date of the features.

The round shrines at Hayling Island (Fig. 135) and Harlow (France and Gobel 1985) both date to late in the Iron Age and may represent a change in the beliefs embodied at sites like Danebury and Westhampnett. In contrast to most Iron Age shrines, which have few finds and little to distinguish them from domestic assemblages, abundant evidence for votive offerings was recovered from Hayling Island and Harlow, further emphasising their difference.

Pyre sites and pyre-related features

Pyre sites and pyre-related features are distributed around the perimeter of the cemetery, usually occurring in groups but the largest concentration is in the north-east of the site. Almost all the pyre-related features, some of which may of course be pyre sites, are located in or adjacent to this concentration although there are almost as many pyre sites on the west of the site. There are some indications that the pyre sites on the western side of the cemetery were not as deep as those elsewhere and along with the comparative rarity of associated pyre-related features, this distinguishes them from the sites of other pyres. The remains of the individuals and objects found at these pyre sites do not appear to differ from those elsewhere and the significance, if any, of these observations is unknown. Most of the pyre sites share a common north–south orientation and this may indicate that the deceased were usually cremated facing north or south. It is possible that the north-easterly grouping of pyre sites and pyre-related features was determined by proximity to the shrines; some pyre sites were placed between the shrines. Nails were found at all of the pyre sites and have been suggested to indicate the re-use of timbers. It is possible, however, that they derive from some form of superstructure or other element which adorned the pyres.

Very few Late Iron Age pyre sites have been identified in England. Some of the examples which have been claimed are not entirely convincing, for instance Puddlehill, burial 7 and Sandown (Whimster 1981, 354, 378; see p. 66). The few certain or plausible examples appear to be related to individual burials, all of which can be interpreted as being of high status; St Albans–Folly Lane (Niblett 1992) (Colchester–Stanway Enclosures 1 and 3 (Crummy 1993), Baldock–Upper Walls Common (Burleigh 1982, 7–14; Selkirk 1983, 72) and at Handley, Dorset (White 1970). A pyre-related feature has been identified immediately next to the Baldock burial, both of which were apparently sealed beneath a barrow (Burleigh 1982, 7–14; Selkirk 1983, 71–2; Murphy 1990). None of these individual pyre sites compares with the range and number of pyre sites and pyre-related features at Westhampnett, and the under-pyre flues seem unparalleled in England. As almost all of the pyre-related features contained cremated human bone, the possibility of these deposits representing the remains of funerary meals comparable to the Roman period *Aschengrüben* from Wederath–Belginum, Germany (Abegg 1989) can be discounted.

The significance of the cereals present in small quantities at some pyre sites is unclear. The presence of common arable weeds amongst the charred plant remains might suggest that the cereals were used as kindling. This would be compatible with evidence from Bronze Age cremation burials (e.g. Walker forthcoming) and a Late Iron Age deposit from Baldock (Murphy 1990). Although these often contain tubers and the rootlets of onion couch grass, their absence at Westhampnett may reflect only the moist rough pasture of the Coastal Plain.

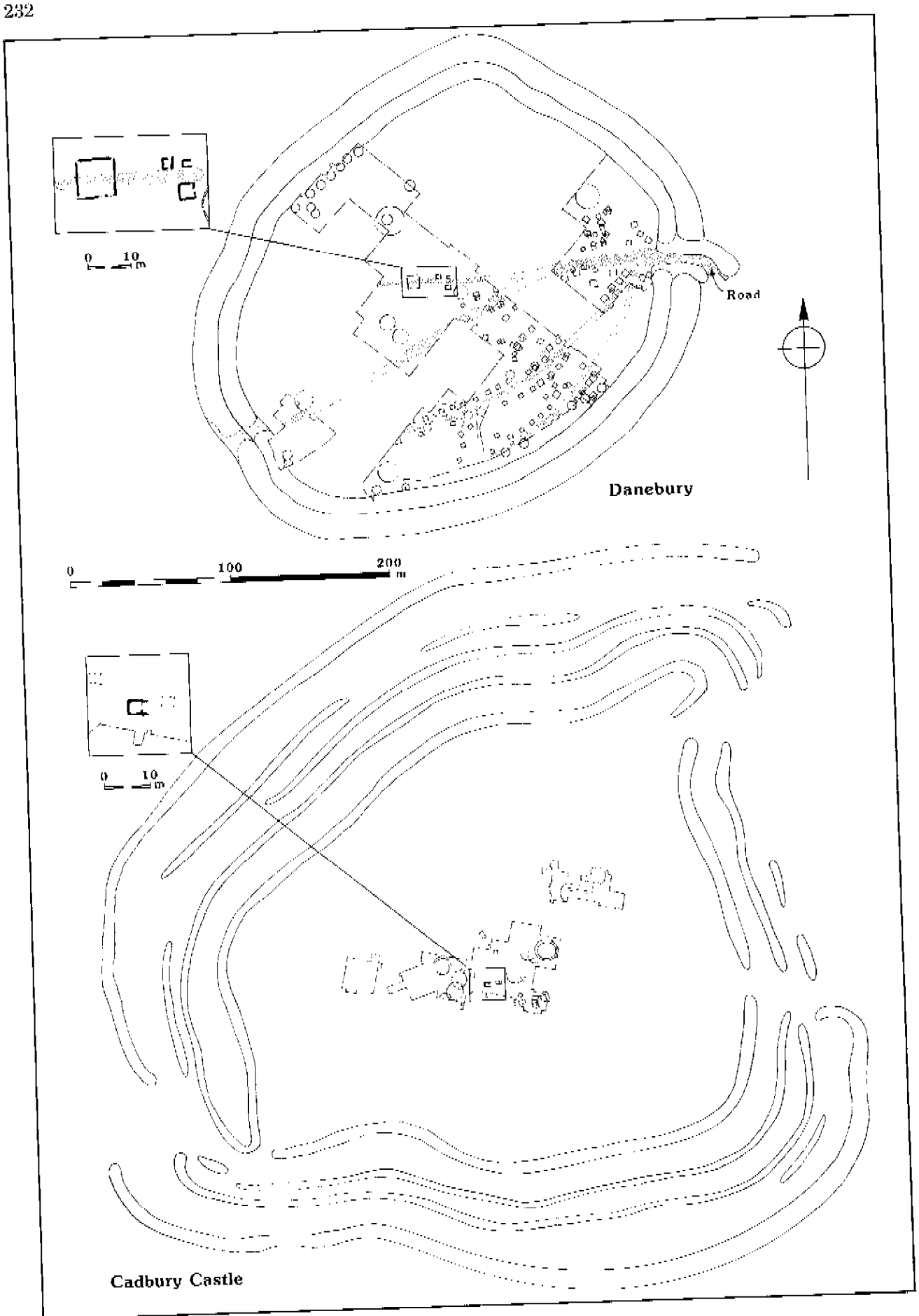


Figure 134 Plans of Danebury and Cadbury Castle with details of shrines inset

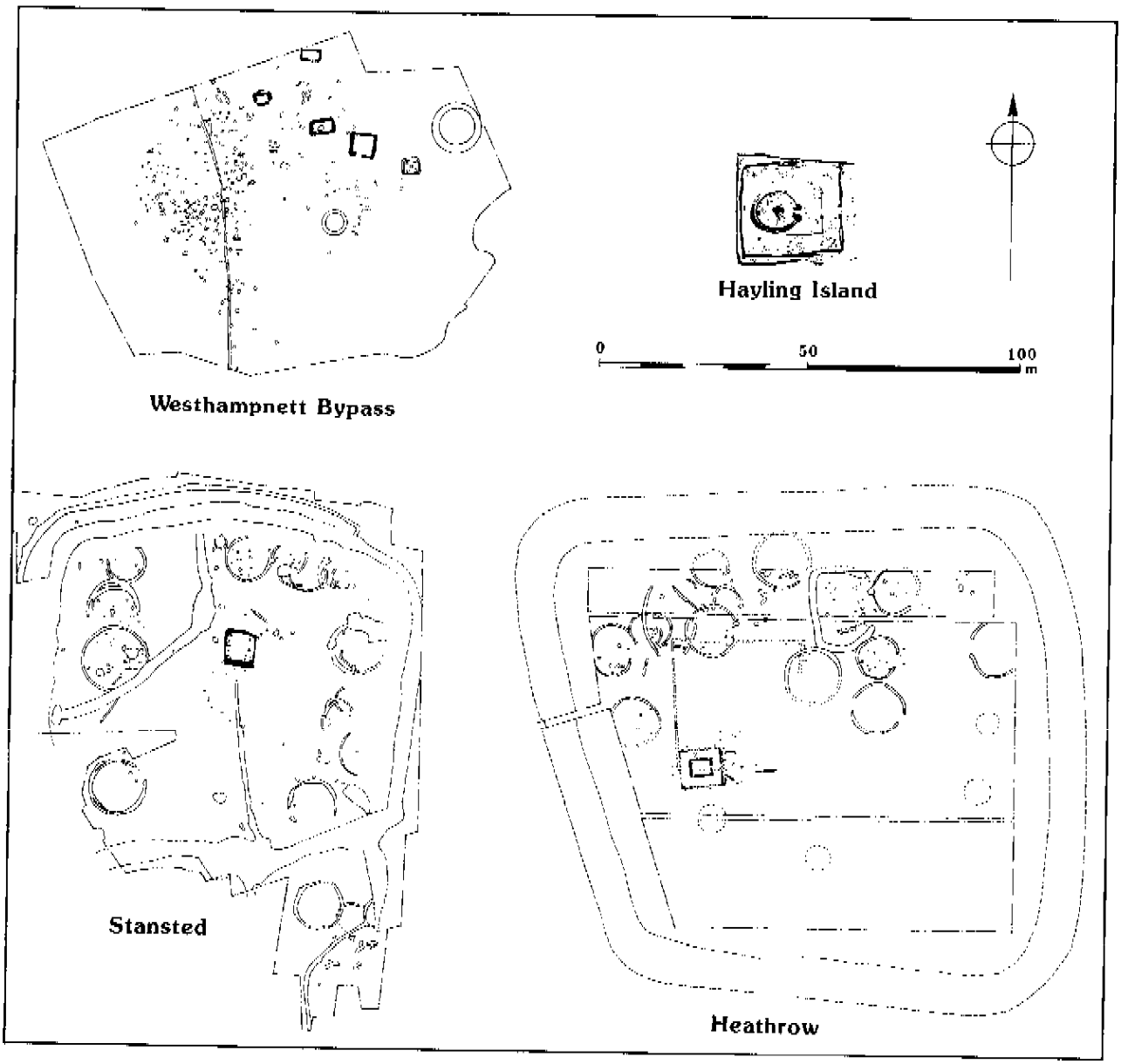


Figure 135 Plans of the Westhampnett, Hayling Island, Stansted, and Heathrow shrines

It is possible, though, that the cereal remains should be associated with foodstuffs. Evidence elsewhere for this is limited. At the Anglo-Saxon cemetery of Spong Hill, Norfolk, only ten urns from 2384 burials contained charred macrofossils and while these remains were regarded as being from offerings of food (*cf.* McKinley 1994a, 91–2), as the samples were hand-picked after dry sieving little weight can be placed on this suggestion. However, food including breads and pastries, are known from late 2nd/early 1st century BC contexts at Wederath–Belginum, Germany (Cordie-Hackenberg *et al.* 1992, 114, Abb. 3–4), so the possibility cannot be discounted.

While the cereals may have served as kindling, the choice of plant or selected parts, for example armfuls of cereals from the fields (there are no beans for example, or rhizomes) or bundles of twigs from the woods, may have been influenced by the attributes ascribed to the plants. The association of cereals, likely to have been processed in the late summer or early autumn, with sloes which fruit in the autumn, is notable and may represent a symbolic scattering of grain over the pyre. Another possibility is that some foods for use in the rituals were prepared on the site, which could account for the few quern fragments and the possible whetstone which could have been used for sharpening blades. It may be noted that the mineral-preserved remains of wheat have been found in association with metalwork in the Late Iron Age sanctuary of Mirebeau-sur-Bèze, Côte d'Or, France (Brunaux 1988, 121; Guillaumet and Barral 1991, 195).

A repeated ritual was the placing of the broken remains of complete pots which had been burnt on the pyre in the bases of the pyres. These often appeared to have been placed after the turning over and mixing of the pyre sites (e.g. pyre sites 20295, 20260/20310, 20776, pyre-related features 20125, 20130) and while it is possible that the reheating of pots made them more

susceptible to breakage, it appears that pots were deliberately smashed on the sites of some pyres. On one occasion a very small layer of pyre debris (20720) was found within the circular space but whether this indicates the dispersal or deposition of pyre material within the circle is unknown.

Other features

The interpretation of what appear to be a number of rows of postholes is enigmatic. These often appear to be free-standing alignments although in one case two parallel rows could be reconstructed as a four- or six-post structure. On the west of the cemetery they appear to lie largely to one side of a ditch but as the dating of the ditch is uncertain so is the significance of this observation. In the case of the rows it is suggested that they either formed a screen or facade, or supported wooden statues such as the larger versions of the wooden figures known from elsewhere in Britain (Coles 1990; 1993) and continental Europe (e.g. Furger-Gunti 1982, 40–1, Abb. 29). For those rows which can be interpreted as four- or six-post structures, a scaffold for displaying the corpse is one possibility, among others (Ellison and Drewett 1971, 190–2).

Organisation of the cemetery

Perhaps the most striking aspect of the cemetery is its overall layout which describes slightly more than a semicircle. The circle is completed by a small number of pyre-related features to the north and west (Fig. 133). With the exception of some the posthole groupings, the single small layer/deposit of pyre debris and a burial made very late in the Iron Age or in the Romano-British period, the circle thus defined was respected throughout the use of the cemetery.

It is possible that a smaller and more discrete burial area exists to the south, clustering around grave 20484. If this is the case, the 'satellite' graves describe an arc predominantly to the north and west, the analogue of those in the main group. No pyre sites or pyre-related features are associated with this possible discrete area but there is nothing apart from the apparent reversal of pattern which otherwises distinguishes the individuals or the mortuary rituals from those in the main group.

The two groupings are contemporaneous and share a common western boundary running approximately south-east–north-west and a common eastern boundary running north–south. Both subscribe to the clearly ordered layout of the religious site as a whole. No central feature, archaeological or natural, such as a tree throw, was identified in the main grouping.

Grave groupings

A small number of graves may have provided the foci for arcs or circular groupings of other graves. This finds parallels at two other cremation cemeteries in southern England, although neither displays the overall organisation of the cemetery around a circular space.

At Aylesford, Evans recorded that 'The [grave] pits lay in groups forming more or less irregular circles ... and so invariable was this arrangement that the workmen when they came across one grave were sure to hit on several more in its vicinity' (1890, 320–1). The six graves excavated by him were also in a circular arrangement and were described by him as 'the Family Circle' (*ibid.*, 321–2, fig. 4) (Fig. 136). A similar disposition may have existed at Kempston, Bedfordshire, where pots were 'found in a circle' (Simco 1973, 11) and some of the Aylesford graves appear to occur in arcs (Bushe-Fox 1925, 4, pl. xvi). Such arrangements have also been clearly identified at King Harry Lane (Fig. 136). Within square or rectangular enclosures the burials were grouped in a circular arrangement which focused on a central burial in a large square or rectangular grave. These focal burials appeared to be the earliest in the sequence. Seven or eight of these enclosures were identified and a further two, possibly three, circular settings arranged around large graves, but which were not apparently enclosed, were also suggested (Stead and Rigby 1989, 80–1, 84, fig. 47, 182).

The validity of some of these proposed clusters may be questioned (Millett 1993) and less than half of the central burials in the only certainly Iron Age phase of the cemetery (phase 1) are early and well furnished (3/7, accepting 'clusters' A–G only). Fewer than half of the groups are enclosed (40%), and the enclosures contain fewer than half of the burials in the cemetery in this phase (42%). There was not any evidence from the cremated human bones to suggest biological groupings between the burials in the enclosures, and the central burials were of both sexes and a range of ages. Consequently there is rather more variability than the idea of 'a family group' buried in enclosures might suggest. Even so the possibility remains that the King Harry Lane cemetery was composed of a series of smaller discrete cemeteries, and the circular setting of many graves at both Aylesford and King Harry Lane is beyond doubt.

Grave form and burial rite

The generally simple and small graves which display considerable variety in their exact shape appear to be typical of most Late Iron Age cremation cemeteries in southern England. The possible focal graves isolated on the basis of their square or rectangular shape, their size, and orientation are also well furnished with grave goods, and possibly pyre goods also, and are readily paralleled. These features are characteristic of the 'central burials' at King Harry Lane and Stead noted that the well-furnished 'Welwyn-'type series of cremation burials were characteristically placed in large, rectangular, graves (Stead 1967, 44). Large rectangular vaults of Late Iron Age and very early Romano-British date, either for burials or associated with them, have been found since at Colchester–Stanway (Crummy 1993) and St Albans–Folly Lane (Niblett 1992).

This pattern is not immutable as the well-furnished burials at Baldock–The Tene and Dorton, were in circular graves, a variation which in view of the date of the graves is not likely to be chronological in origin (Stead and Rigby 1986, 51, fig. 20; Farley 1983), and the grave under the Lexden Tumulus was oval (Foster 1986). None the less the general distinction of what may well be higher status burials by the shape of the grave, its depth, and orientation on the cardinal points, is part of broader western European tradition clearly seen in the Clemency burial, Luxembourg (Metzler *et al.* 1991,

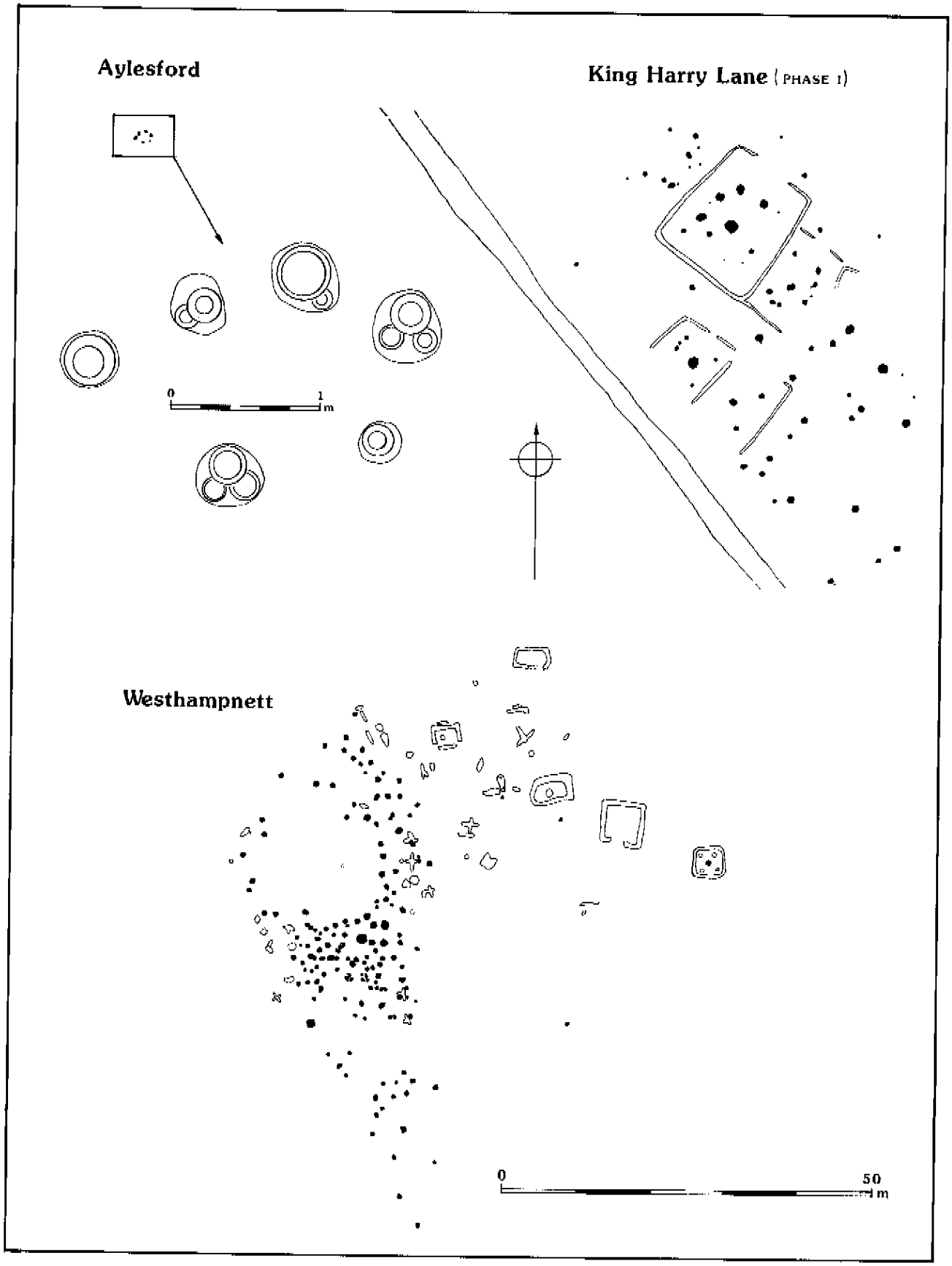


Figure 136 Plans of Aylesford, King Harry Lane (phase 1), and Westhampnett

149, fig. 103). In the case of Westhampnett the shape of the grave echoes those of the shrines.

Funerary monument

One grave is distinguished by being set in a small enclosure. Parallels may be found in rather larger square ditched barrows found in the Midlands and beyond, some of which are of Iron Age date (Whimster 1981, 121–8), and at least one, at Maxey, Cambridgeshire, had postholes at its corners although any traces of a burial had been destroyed (Pryor *et al.* 1985, 73, 237, fig. 40, 44, 55, 165). However, the Westhampnett grave is sited south-east of the Iron Age shrines and it also has parallels in size and, to a lesser extent shape, with an Iron Age structure at Lancing Down, West Sussex, which has been interpreted as a shrine. The Lancing Down structure is a *c.* 2 m square building with a central posthole. The building rested in a bedding trench and was surrounded by a larger bedding trench which had postholes at its corners. The outer wall appears to have been open on the north and immediately adjacent are a series of postholes which may represent a porch. It dates to just before the Roman Conquest (Bedwin 1981, 42, 46, fig. 2–3, pl. 2) and this arrangement of space is not dissimilar from that of shrine N2 at Cadbury Castle, Somerset, which is considered to have a porch and also to date from very late in the Iron Age (Alcock 1970, 19–20, pl. vi, b, fig. 2; 1972, 163–4, fig. 10, 27, pl. 48–9). Black's suggestion that the Lancing Down shrine was a burial and that other burials there are of Iron Age date (Black 1986, 203–4, fig. 2) is not supported by the evidence.

There are, however, also strong similarities with features at the nearby Anglo-Saxon cemetery of Apple Down, Cemetery 1, north-west of Chichester. The Anglo-Saxon features are essentially four-post structures, some of which have a fifth posthole in the centre, and two have, as at Westhampnett, an enclosing ditch (Down and Welch 1990, 29, fig. 2.23, structure 3). All of the Apple Down structures are considered to have been associated with cremation burials, some of which were placed centrally, with others in the postholes. The great majority of these features did not, however, provide any evidence for graves. Related structures of similar date are known from Carisbrooke Castle, Isle of Wight, and Alton, Hampshire, and further afield (Down and Welch 1990, 25–33; Evison 1988, 34–6).

However, the Westhampnett cremation burial contained a pot whose fabric and form is comparable with others from the cemetery although, uniquely, it is covered with a red slip or pigment. Despite its similarities with sites in Sussex, it may be that the affinities of the four-post structure lie elsewhere, with contemporaneous burials in continental Europe. Small four-post structures with a cremation burial placed centrally are well known in France, and these comprise one extreme of a range of structures some of which could have been very elaborate, closely resembling shrines (Villes 1981, 88–92, fig. 29; Lambot *et al.* 1993, 131–8, fig. 73–8). Some of the more modest four-post structures found in Ardennes are surrounded by shallow bedding trenches (Ménil-Annelles, structures H, J, K; Flouest and Stead 1979, 20, fig. 10, (where they are mid-La Tène)) and Acy-Romance 'La Noue Mauroy' (Lambot *et al.* 1994, 78–81, fig. 45, 48 (Late La Tène)).

These parallels for the monument and those of the red-finished pot from the grave might suggest that the person buried in grave 20566 was from France and for this reason was buried at the limits of the cemetery. It is considered more likely, however, that the similarity with the Lancing Down shrine (and others) is not fortuitous and the Westhampnett funerary structure suggests a link between the gods and the dead, or some of the dead, perhaps in the guise of sacred descent. The differences between tombs and shrines can be slight, and the observations that the grave lies at the eastern most side of the cemetery and on the line of the modern equinoxes in relation to the centre of the circular area may be directly relevant (Fig. 137).

The Mortuary Rituals

At Westhampnett not all of the cremated bones were selected for burial in graves and some seemingly empty or destroyed graves may in reality have been cenotaphs. In this respect, despite McKinley's distinction of burials with very small quantities of bone as 'memorials', all of the burials are memorials or tokens. One consequence of this is that information on sex, though not age, is comparatively limited. When compared to the finds assemblages from settlements and shrines (Table 30), it is clear that a specific, and restricted, range of materials was selected at different stages of the mortuary rituals, and that not all of them were chosen to be placed in graves. The mineral-replaced remains of wooden vessels found on iron repair staples suggest that some things which were chosen for burial have decayed to the point of invisibility in manual archaeological excavation.

If the object of the analyses was solely to isolate the material correlates of particular social types or social complexity, or to infer archaeologically something of the social status or *social persona* of the deceased, this might seem disappointing. There are of course, alternative views (Parker Pearson 1982). The role of ideology in disguising, manipulating and making 'natural' the 'true', contradictory, nature of social authority has been stressed by some authors (e.g. Shanks and Tilley 1982). But, leaving aside the merit of the individual case study, 'a structure of social authority does not stand naked awaiting the cloak of ideological legitimacy to be thrown over it by ritual practice' (Barrett 1991, 7). There is more to the archaeological study of both ideology and death than the legitimation of power.

Death is a protracted social process, one of transition, in which the mourners may experience strong and often confusing emotions of anger, grief, and sorrow. Other people may also be required to participate in the expression of such emotions, whether or not they share them. The mourners may be distinguished from the remainder of the community at this time and they also have to renegotiate and reaffirm their relationships between themselves and the altered social order and with the deceased. The archaeological study of mortuary rituals is concerned as much with these emotions, actions, and the rituals through which some of these

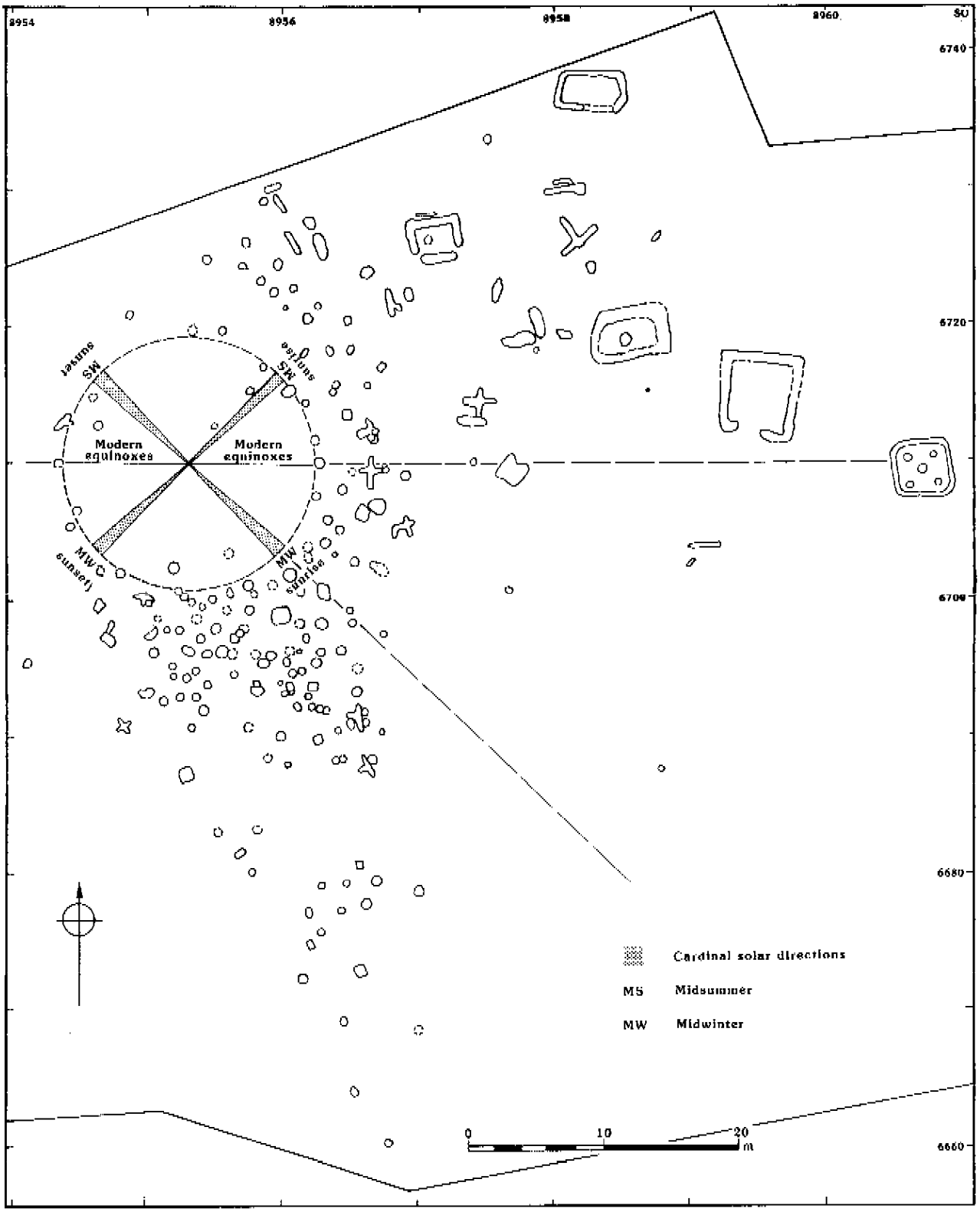


Figure 137 Possible cosmological referents within the religious site

practices are effected, as with the study of social status or ideology.

One characteristic of such rites of passage is that they reproduce an idealised presentation of society, but in the case of mortuary rituals those relationships need not be represented by the deposition of grave goods. At Westhampnett what appear to be distinctions of vertical ranking, of age and between sexes, seem to be reproduced. The clearest example is in the tendency of the burials of 'elders' to have been made near to the inner perimeter of the cemetery. However, what those people did in life, which might be represented by the tools they used, was left behind. Some graves are distinguished by their size and shape and contain a larger number of offerings placed by the mourners. In one case what is likely to have been a gold torque or bracelet had been placed on the pyre but not chosen for burial, yet such distinctions are noticeable for their rarity and these graves, while perhaps acting as foci for small groups of burials, do not command the spatial structure of the cemetery. As is the case with other Late Iron Age cremation burials in southern England, brooches were found evenly with both sexes and with all ages. A slight general trend for females to have more brooches may reflect only a different costume. There is a suspicion that the burials of individuals with whom reserved portions of sacrificed animals were cremated are largely found in the south-west of the cemetery. The single burial (20252) in which the bone was separated into four piles and some of the pyre debris placed over it suggests, at the very least, that different sorts of burial and probably death were recognised. In this case the death may have been considered inauspicious, for whatever reason, such as death away from the community, at a certain time, or by suicide, etc.

In general the great majority of funerary rites were apparently repeated by and shared by the people from several settlements or one clan who used the cemetery to bury their dead in common and whose presence may well have been required at the funeral. Even if a smaller burial ground may be distinguished to the south of the main one, the same rituals appear to have been used. The repeated actions of ritual practices are one way in which understandings of the world, of society, and of an individual's own experience are reached, reaffirmed, or revised. Although these formal, repetitive rites derive from shared beliefs, each person's experiences of them would have been different (Lewis 1980).

Death requires clearly defined rites of passage (van Gennep 1960), often dealing with the dissolution of the body and the transference of the soul and this has been elaborated by Huntingdon and Metcalf (1979, 98) who also argue that:

> Van Gennep's notion that a funeral ritual can be seen as a transition that begins with the separation of the deceased from life and ends with his or her incorporation into the world of the dead is merely a vague truism unless it is positively related to the values of the particular culture.

The rituals enacted during mortuary rites also draw on the rituals of everyday life. By their nature everyday routines structure action, time and space and, sanctified by tradition, they constitute the *locales* in which the recursive face-to-face of everyday day life *habitus* is played out. It is precisely the links between these different fields — the everyday and death — which help to give ritual its significance.

This sense of community is strikingly close to Turner's formulation of *liminality* and *communitas*, developed out of the liminal phase of van Gennep's rites of passage (Turner 1967; 1969). Van Gennep argued that all rites of passage or transition have a tripartite structure marked by three phases: separation, liminality, and reincorporation, but in funeral ceremonies the transitional phase is so distinct that it requires separate consideration.

While not explicitly concerned with funerals rather than ritual and its roles in structuring society, Turner identified many rituals as being essentially concerned with *liminality* whose characteristics are ambiguous, 'a cultural realm which has few or none of the attributes of the past or coming state' (Turner 1969, 94). *Communitas*, which is suggested to be a model emerging:

> recognisably in the liminal period, is of society as an unstructured or rudimentary structured and relatively undifferentiated comitatus, community, or even communion of equal individuals who submit to the general authority of the ritual elders. (*ibid.*, 96).

He goes on to suggest that *communitas:*

> is almost everywhere held to be sacred or 'holy', possibly because it transgresses or dissolves the norms that govern structured and institutionalised relationships and is accompanied by experiences of unprecedented potency. (*ibid.*, 129)

This levelling, when people are released from social structure into *communitas*, characterises much of the structure, rituals and also the symbolism of the religious site at Westhampnett.

It has become increasingly clear that in Iron Age Britain the shape, organisation, and orientation of settlements and houses incorporated cosmological referents and that their thresholds shared a required orientation. It seems possible that much of symbolic referents of Iron Age settlements were dark, chthonic, and, perhaps, female (Fitzpatrick in press).

These spatial and temporal structures were also reworked at the cemetery. The four shrines share a common alignment to the south, which contrasts with the easterly orientation of shrines found on settlements. Many of the pyre sites are aligned north–south and the rows of postholes could also form alignments. It seems unlikely to be coincidental that the semi-circle which is marked out most clearly by the graves of 'elders', and completed as a circle by other graves and pyre-related features, echoes the shape of the contemporaneous round house. It may be that solar or lunar concepts are being signified at the cemetery but these have been argued to also be embodied in round houses. The dominant orientation of round house entrances lies between

the modern equinox and the midwinter solstice (Fig. 137) and the great majority of the burials in the cemetery lie to the west, or right of the midwinter solstice sunrise; that is to the right of the threshold when viewed from inside a house. When compared with this possible symbolic house, which encompasses a wider community, the sole burial which is associated with a monument and is set within a small enclosure, is spatially isolated and is found to lie on the equinoxes (Fig. 137). It is also the only grave to contain a red-finished and burnished pot, in contrast to the dark, frequently heavily burnished, pots in the cemetery.

Cosmological referents have been found on other Iron Age religious sites, such as the Mid–Late La Tène sanctuary at Gournay-sur-Aronde, Oise, France (Brunaux 1988, 15). At Westhampnett the re-enactment of the solar orientations need not have demanded sophisticated astronomical skills and it would be mistaken to ascribe to the modern equinox a special significance in itself. The entrances of the shrines face away from the hillfort of the Trundle, whose ramparts embellish the skyline of the South Downs. Today, if one stands on the hill on which the religious site was located and faces towards the western end of the South Downs and then turns around (through 180°), one is facing in the general direction of the winter solstice sunrise (Pl. 28). In comparison with shrines found on settlements, the entrances to the shrines have been rotated to the south by 90° and in comparison with the orientation of round house entrances, so has the distribution of the majority of the burials. In some respects the possible southern group of graves is an analogue of this.

These observations should not be overemphasised, but it may at least be said that the organisation of the religious site appears to incorporate cosmological referents in its shape and orientation, and by implication a number of homologies and oppositions. These should not be read as all being in opposition; their meaning is ascribed by context or the 'plane of classification' but as well as being cognitive classifications they are as Turner has put it 'also, and perhaps as importantly, a set of evocative devices for rousing, channelling and domesticating powerful emotions such as hate, fear, affection and grief' (1969, 42–3).

Oppositions		*Archaeological referents*
profane	sacred	symbolic house/graves/shrines
dead	living	graves/symbolic house/shrines
night	day	architecture/cosmology
dark	light	architecture/cosmology
left	right	movement right through 90°
incomplete	complete	cremation/cadaver and burial
animal	human	cremated bones
cold	hot	cremation/burial
above	below	cremation/burial
black	red	pottery

The orientations of the buildings and structures and the circle delineated by the graves also serve to embody concepts of time, nature, and the skies within the architecture of the cemetery and this may have guided the mourners in their orientation, actions, and pathways across the area. In creating an eschatological map and embodying time the architecture will also have guided the social process of dying, when the deceased became dead which might, for example, be determined by how long the soul should wander, when it might join the ancestors, or when it returned to live in or amongst the living, when the selected remains of the body should be interred, or when ceremonies should be held. Within this architecture of shrines and a symbolic house the mourners negotiated the places of the living and the dead, integrating the mortuary rituals within those wider rituals of everyday life, such as the preparation of food, which were enacted on settlements (*cf.* Bloch and Parry 1982).

The practice of cremation was introduced from France where it is likely that it had been practised in some regions from the Mid-La Tène onwards. Contemporaneous classical sources either drawing on Posidonius (Diodorus Siculus, Strabo) or independently (Caesar), specify that in the earlier–mid 1st century BC some of the inhabitants of central and southern France distinguished the immortal soul from the body. These writers state that the soul came to live in that of another person. Slightly later classical sources, Lucan and Pomponius Mela, who wrote in the mid–later 1st century AD, echo the immortality of the soul, but suggest that at least some went to join the souls of their ancestors in an underworld paradise (e.g. Wait 1985, 205; Brunaux 1988, 47–8). Lucan also suggests that warriors who died in battle and whose bones were stripped clean by birds joined the gods in the sky (Brunaux 1988, 87).

The reasons for these differences need not concern us here, but it is directly relevant that Caesar, Diodorus, and Mela all made these comments in the context of cremation and burial. As has been attested frequently, the physical transformation of the corpse by cremation is often associated with the release of the soul from it but such a transition from the corporeal to the spiritual is not a universal belief and the adoption of a new burial rite need not indicate the adoption of new religion (Ucko 1969, 274). It may, however, be suggested that the adoption of cremation in Iron Age Britain was influenced by ideas similar to those from the distant regions of France. These ideas may have been reformulated and given new meanings drawn from existing religious beliefs but the changes shown by a new burial rite and new sorts of religious sites, Westhampnett and Hayling Island, might suggest that new religious ideas were being adopted and that new sites in new locations appropriate to these ideas were conceived. Votive deposits, as represented by coin hoards such as those from Selsey increase. These sites for communicating with gods and spirits are now separated from farms and forts.

At Westhampnett there is little, if any, explicit archaeological evidence for those conceptions of the spirits or soul held by the mourners burying the dead, although the single coin from burial 20493 can be interpreted as indicating a journey for at least that person's soul. The structure of the cemetery does, however, provide some evidence; the graves are placed outside the symbolic house, which is overlooked by the shrines and by a funerary monument. In a very real sense the pyre sites,

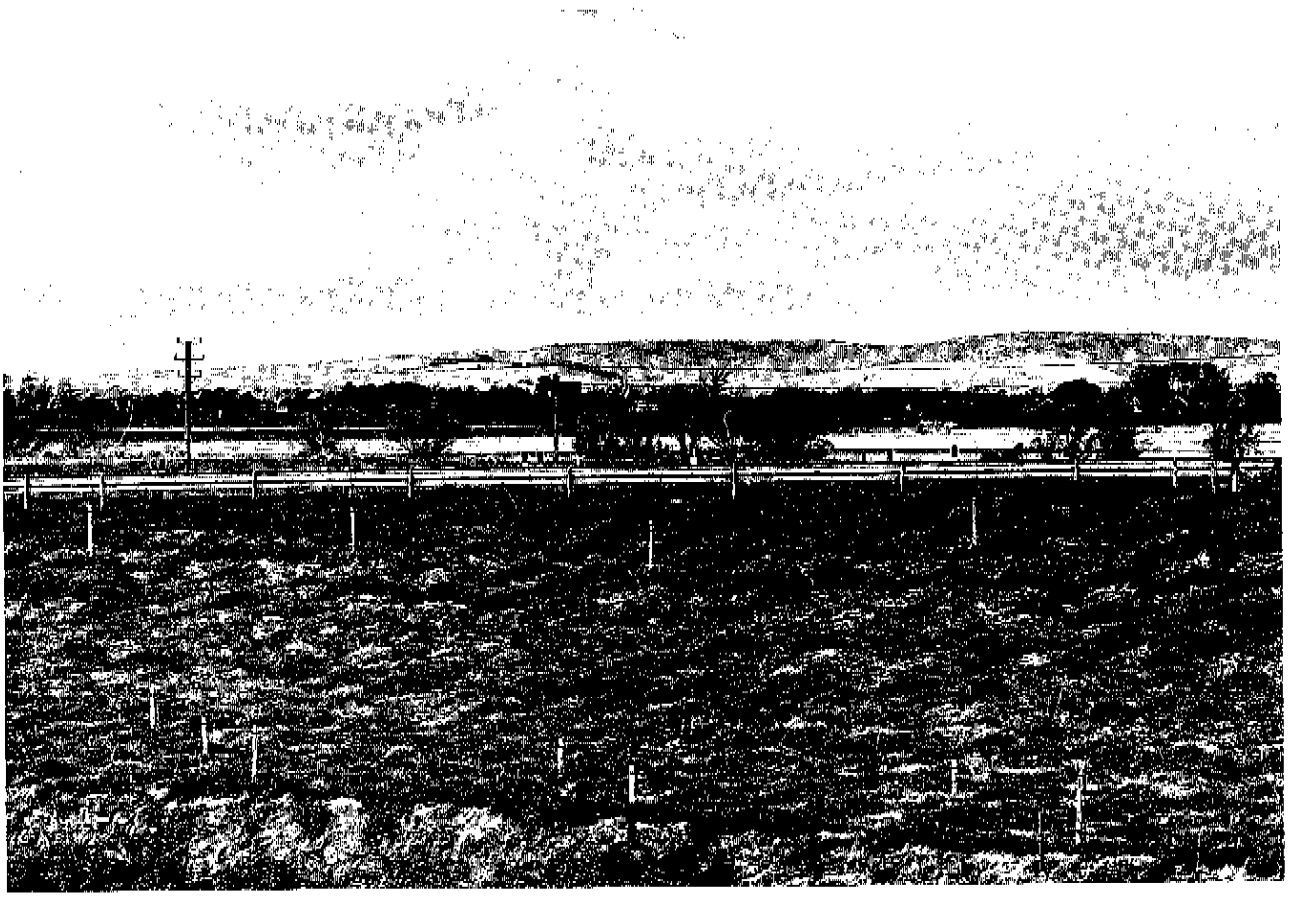


Plate 28 Skyline of the western end of the Sussex Downs viewed from the position of the religious site, looking to the north-west

the locus of this transformation, lie between these juxtaposed symbolic structures. The rituals associated with cremation apparently included the turning over of the pyre site and also the smashing of pots on it. In short, everything at the pyre site — corpse, pyre, sacrifices/foods, pots — was either transformed or broken, suggesting their transference as metaphysical essences. On cremation some, maybe all, of the soul was partially freed, but the final release required incorporation or travel between either the living (the symbolic house), the dead (the grave monument), or the gods (shrines). This separation and integration may have been mediated by a liminal period, perhaps lasting for years, during which the soul or its ghost wandered betwixt and between but the final resting place of a symbolic token of the deceased now accompanied by unbroken grave goods and perhaps laid to rest shrouded in straw, was outside the house, at the boundaries between culture and nature and the living and the dead. These ideas and their possible archaeological correlates, some at best circumstantial, may be summarised as in the scheme presented opposite.

A possible sequence for Iron Age mortuary ritual at Westhampnett and some possible archaeological correlates

SEPARATION: BIOLOGICAL Death

Mourning >

Dress/adorn the dead in costume appropriate to age, sex and statuses
Carry body to religious site
?Dead laid out on platform in symbolic house of ancestors in cemetery
Gather pyre materials from settlement (culture) and woods (nature)
Construct pyre, incorporating pots within it?
Sacrifice animals, reserve portions for deceased and place on pyre
?Scatter grain on pyre

TRANSITION

Light pyre
Cremation
Leave pyre to cool overnight
Collect all of the cremated human bone, reserving a portion from all parts of the body, and tokens of the costume fittings and animal bone
Turn over and mix the pyre site
Smash burnt pots on pyre
?Curation of selected cremated remains (tokens) in shrines
Dispersal of cremated remains

Excavate grave outside symbolic house of ancestors
Re-wrap *selected* cremated bones (incorporating pyre goods) in cloth or place in bag?
Burial
Place grave goods, pots, wooden vessels
?? Place reserved portions of sacrificed animals
? Cover burial with straw
Close grave

Erect grave marker

INCORPORATION: DEAD PERSON ADMITTED TO ANCESTORS

< Formal mourning ceases

3. The Romano-British Cemetery

by A.P. Fitzpatrick and Andrew B. Powell

The Romano-British cemetery was sited some 20 m east of the Iron Age cemetery covering an area approximately 25 m east to west by 21 m north to south, centred on SU 89595 06700, and contained 36 graves (Fig. 39–41, 44). The shape of the cemetery suggests that the graves were positioned in relation to the undated ring ditch 20789 with over 20 of them arranged in a rough crescent around the north and east of the ring ditch. Only a single pyre-related feature was of Romano-British date (although two features c. 120 m east-south-east in Area 7 may be associated with the cemetery; Volume 1). In contrast to the Late Iron Age religious site, several Romano-Britishcremation burials, recorded and published to varying standards, are known from the West Sussex Coastal Plain (Fig. 138).

1 Enclosure, Pyre-related Feature, and other Features

Ring Ditch 20789

This small ring ditch, centred on SU 89588 0664 at the south-west of the cemetery, was c. 6 m in diameter (Pl. 29; Fig. 40; 44; 139). Three 1 m wide sections were excavated across the ditch which was 0.6–0.7 m wide and 0.15 m deep, with moderately steep sides and a slightly concave base. No features, such as settings for postholes, were observed nor were any finds recovered.

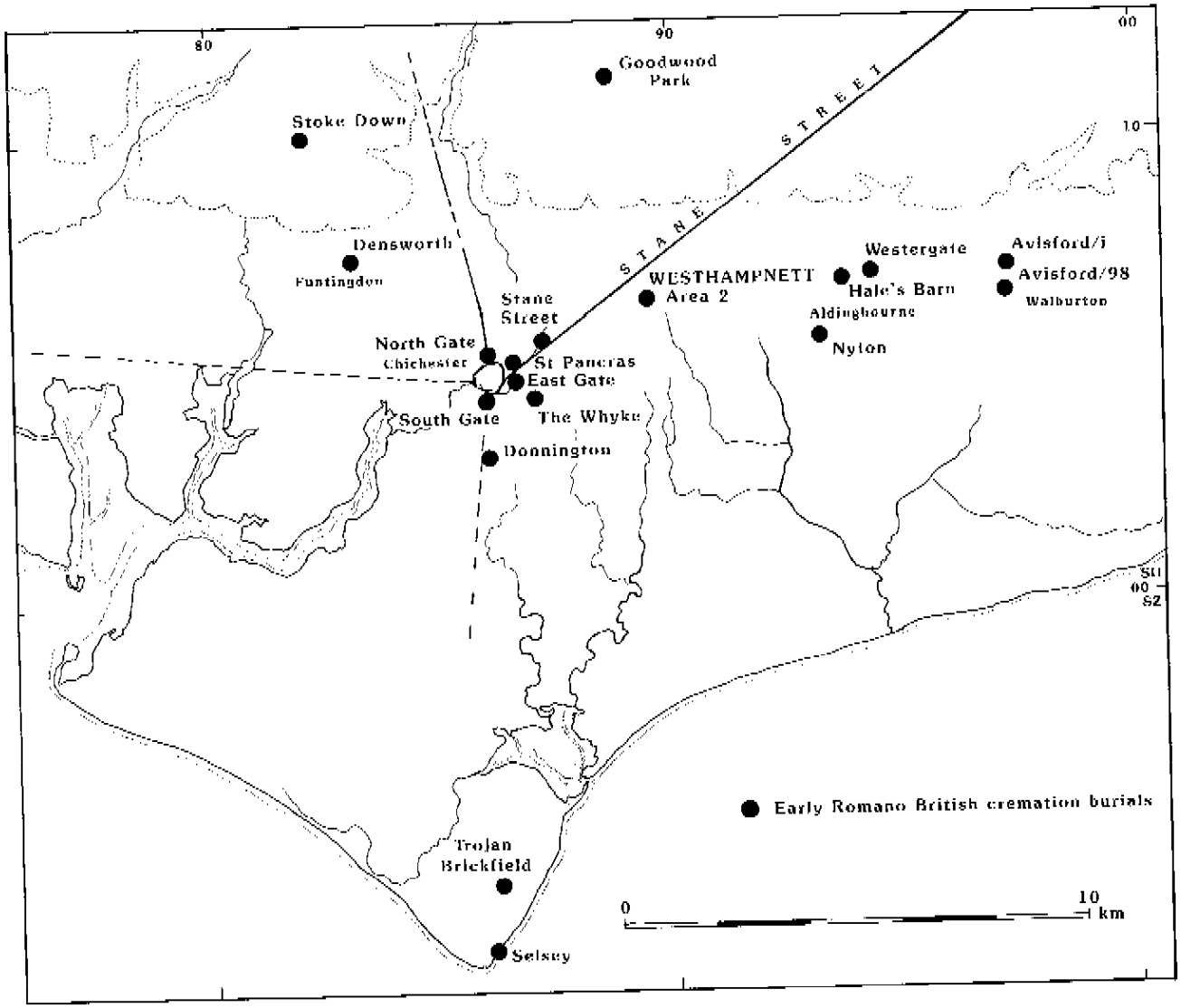


Figure 138 Romano-British sites on the West Sussex Coastal Plain and South Downs

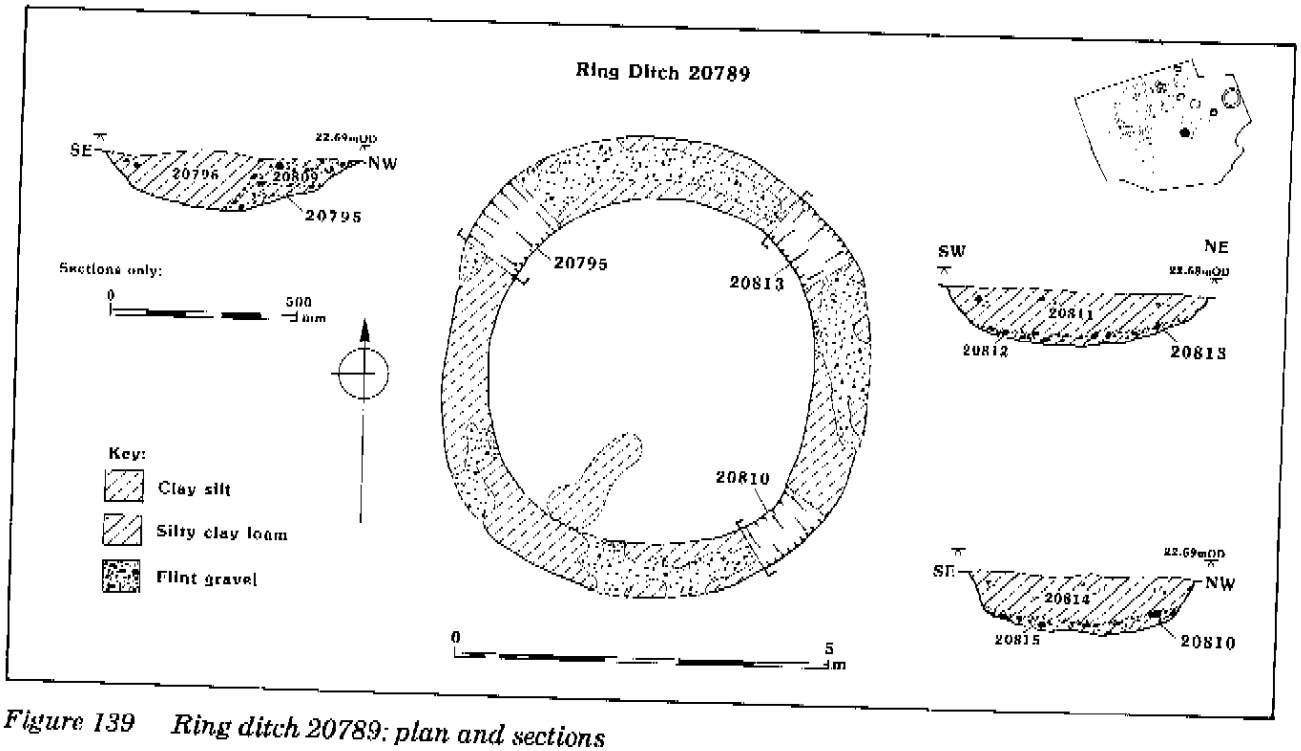


Figure 139 Ring ditch 20789: plan and sections

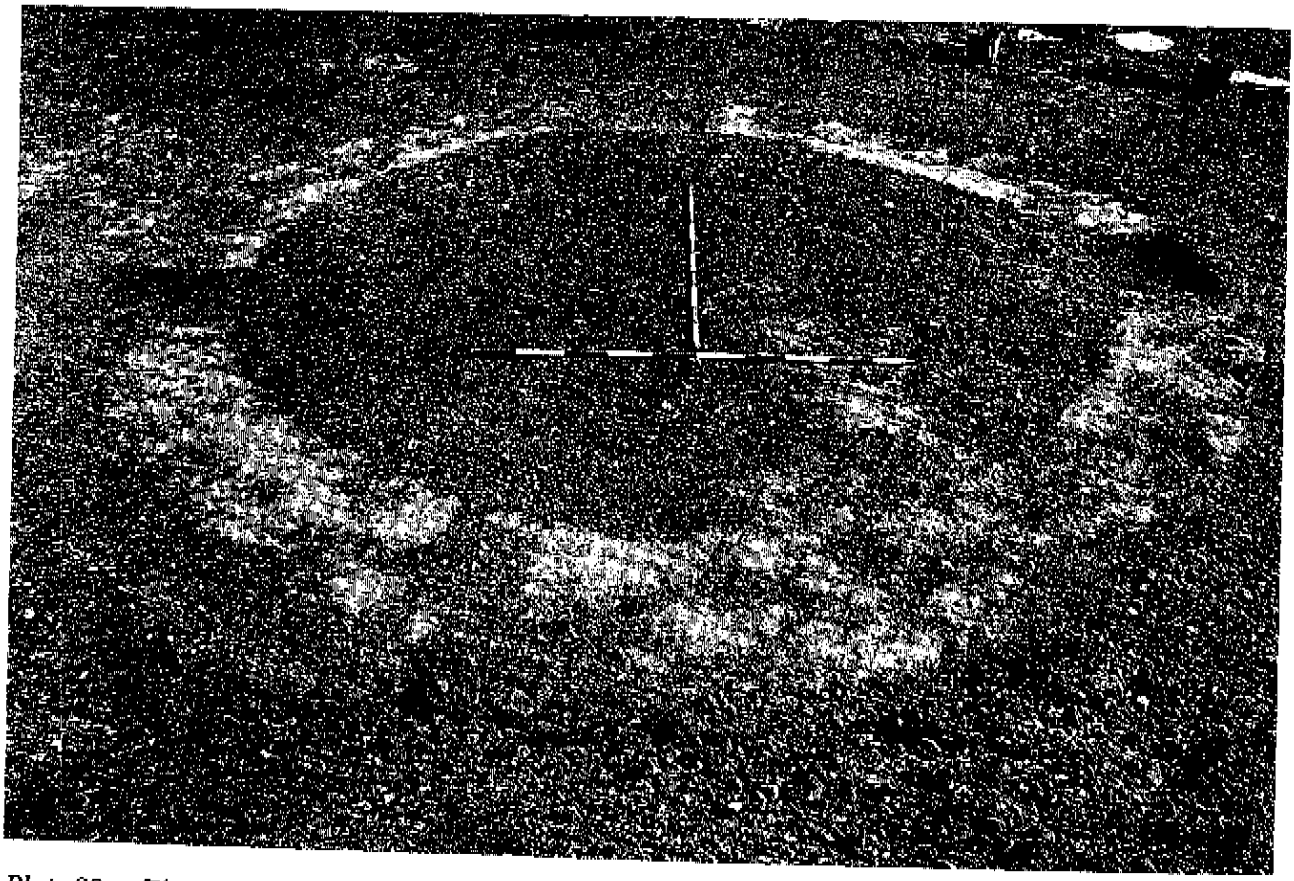


Plate 29 The small, undated ring ditch, 20789, in the area of the Romano-British cemetery, viewed from the south-west

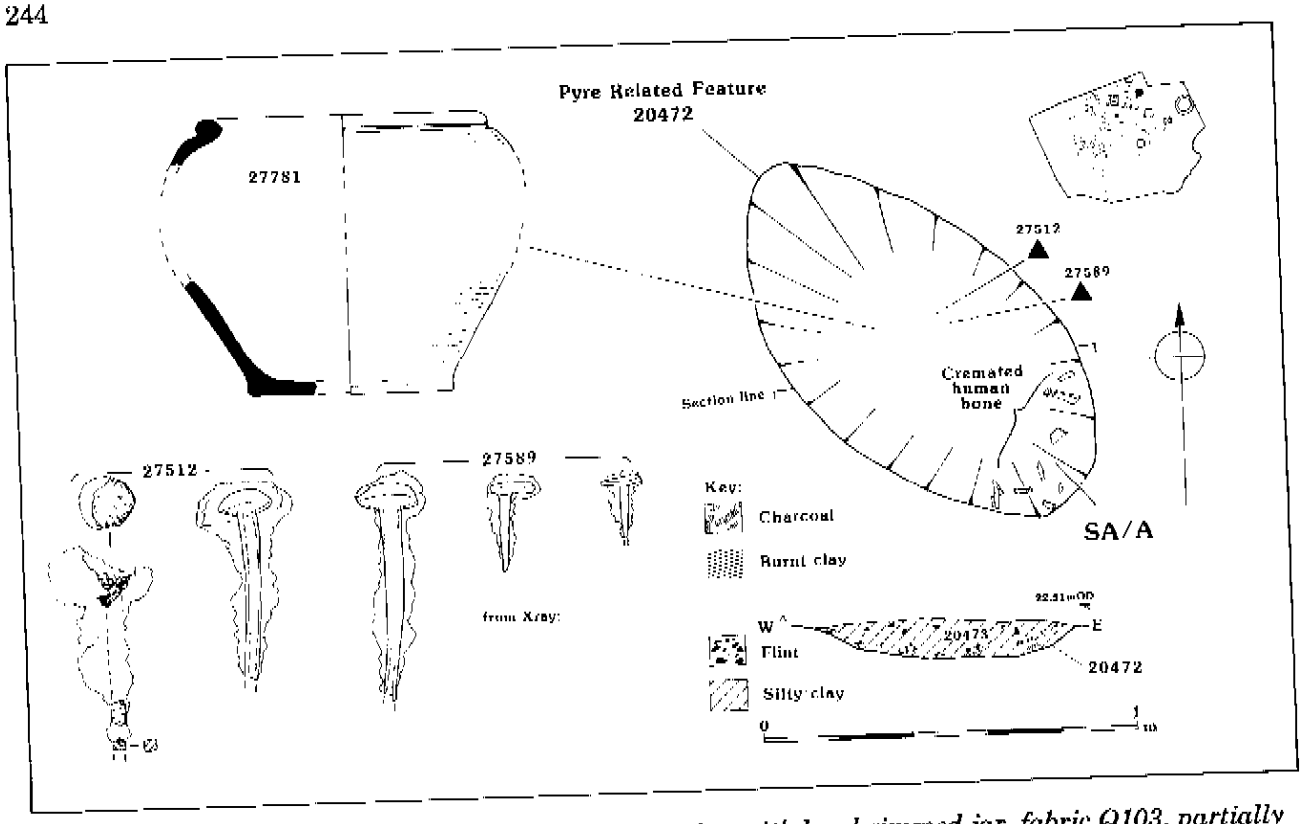


Figure 140 Pyre-related feature 20472: plan and section with bead-rimmed jar, fabric Q103, partially burnt (ON 27781) and nails (ON 27512, 27589)

Pyre-related Features 20472 and 20769

Feature 20472 at SU 89590 06730, was a shallow oval cut measuring 1.2 m by 0.6 m (Fig. 36; 140). It contained charcoal throughout its fill (20473) as well as large pieces on the base. It also yielded cremated human bone (106.5 g, subadult/adult), nails, sherds of burnt Romano-British pottery, and a fragment of smolten glass (Fig. 140). It represents the only pyre-related feature from Area 2 which can be attributed with any certainty to this period, although a number of other such features towards the north-east of the site, and considered as part of the Iron Age cemetery, produced no dating evidence and are possibly Romano-British in date (e.g. pyre sites 20687 and 20702). A single small area of cremated human bone (20769; 85.7 g, adult), 0.22 x 0.10 m, could be a pyre-related feature. It is undated but lies within the area of the Romano-British cemetery (Fig. 40). Burnt pottery was also found in the upper fills of the ?Bronze Age ring ditch, 20822.

Other Features

Approximately 5 m north of the small ring ditch (20789) lay a 2.5 m long slot (20762) aligned east to west, 0.3 m wide and 0.2 m deep, its eastern end cut by grave 20754 (Fig. 40). The slot, which contained sherds of Romano-British pottery, was initially recorded as one of a pair of parallel features but this second possible feature proved ephemeral. In its shape it is similar to Iron Age pyres.

Two postholes within the circular space in the Late Iron Age cemetery and which contained large nails or bolts have both been tentatively dated to the Romano-British period on the basis of a single hobnail found in one of them (Fig. 29). The reliability of this phasing is obviously open to question and it should be noted that a small number of other features in the Late Iron Age cemetery contained tiny fragments of glass, including a single bead of Late Roman or Anglo-Saxon type, which are considered to be intrusive (see above).

2 Burials

The burials varied in the nature and disposition of their contents, and in the size, shape, and orientation of the graves within which they were placed. Many of the graves were very shallow and had been severely truncated, and a few were only identified by the presence of the pottery vessels (Pls 30 and 31). Graves included urned and unurned cremation burials, accompanied by up to eight accessory pottery vessels, and only occasionally other objects, such as a casket or wooden box.

3 Cremated Human Bone from Burial and Cremation-related Contexts, by Jacqueline I. McKinley

Cremated human bone was recovered from 31 contexts in the Romano-British cremation cemetery (Table 31). In order to avoid repetition, where comments about the

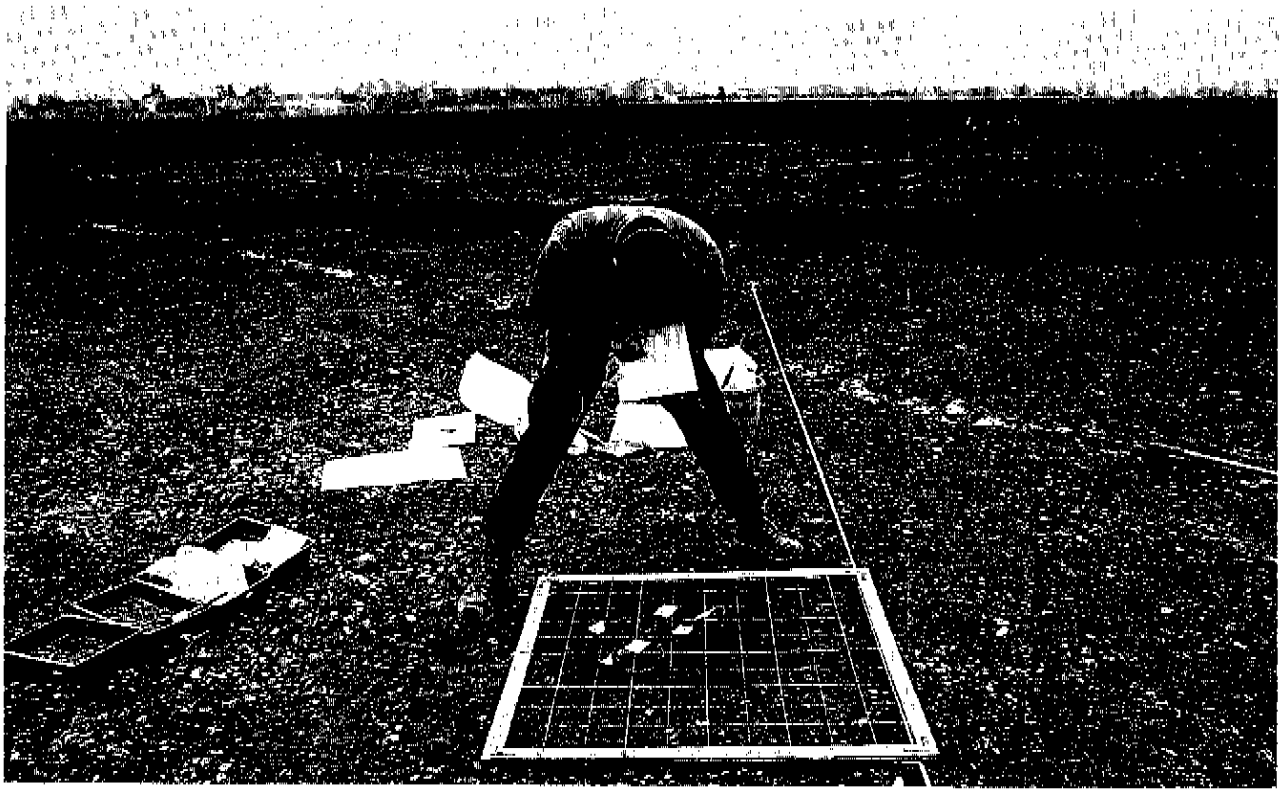


Plate 30 Planning Romano-British grave 20392 (Pl. 32; Fig. 146). The view to the south-east shows Tangmere in the distance and the slight rise in the ground of Area 2. Note the truncation and shallowness of the grave

methods, results, and interpretation of the cremated human bone have already been made in relation to the Late Iron Age cemetery (above), they are not repeated here, and only those aspects relating specifically to the Romano-British cemetery are described in full.

Methods: Vessels Emptied in Spits

A sample of complete pottery vessels thought to hold cremated bone were selected for extraction of their contents by 20 mm spits to enable the closer examination of bone collection and deposition. Five vessels were emptied in spits by finds staff, and a further five in quadranted spits by the writer. In the latter case, where it proved appropriate, annotated plan and section drawings were made during excavation of the interiors of the vessels (Figs 141–3). The bone from each context was examined by quadrant/spit to see if any deliberate order of deposition within the urn could be ascertained.

Summary of Results

A summary of the results is presented in Table 31 and the weights of bone from all contexts containing bone and a note on the relative quantity of bone in the unsorted residues, is held in the archive. Unless stated otherwise, all bone, human and animal, is cremated/burnt.

Nature of contexts containing cremated bone

The same definitions of context were applied as outlined in the discussion of the Late Iron Age cemetery (above), and the contexts are summarised in Table 32.

Condition of bone

The vast majority of the cremated bone appeared to be in good condition and showed no indication of changes resulting from detrimental burial conditions. Bone from two contexts was worn and chalky in appearance, suggestive of erosion from acid solution passing through the burial medium but, as with the Late Iron Age burials, there is nothing to indicate why these contexts should have suffered where the others did not. It can only be supposed that minor differences in their micro-environments led to the erosion of the bone.

It was noted by the writer whilst emptying two of the urned burials, that some spongy bone, for instance the femur head in grave 20803 (in vessel ON 27440; Fig 142), noted as complete in the vessel, collapsed entirely on excavation. In both these burials, the rest of the bone appeared unworn. Were this to have been the pattern in all the other burials, it will have passed undetected, the spongy bone having crumbled to dust unobserved.

Disturbance

The cemetery had suffered from varying degrees of damage, particularly truncation through cultivation (Pl. 30), but as most of the burials contained structured

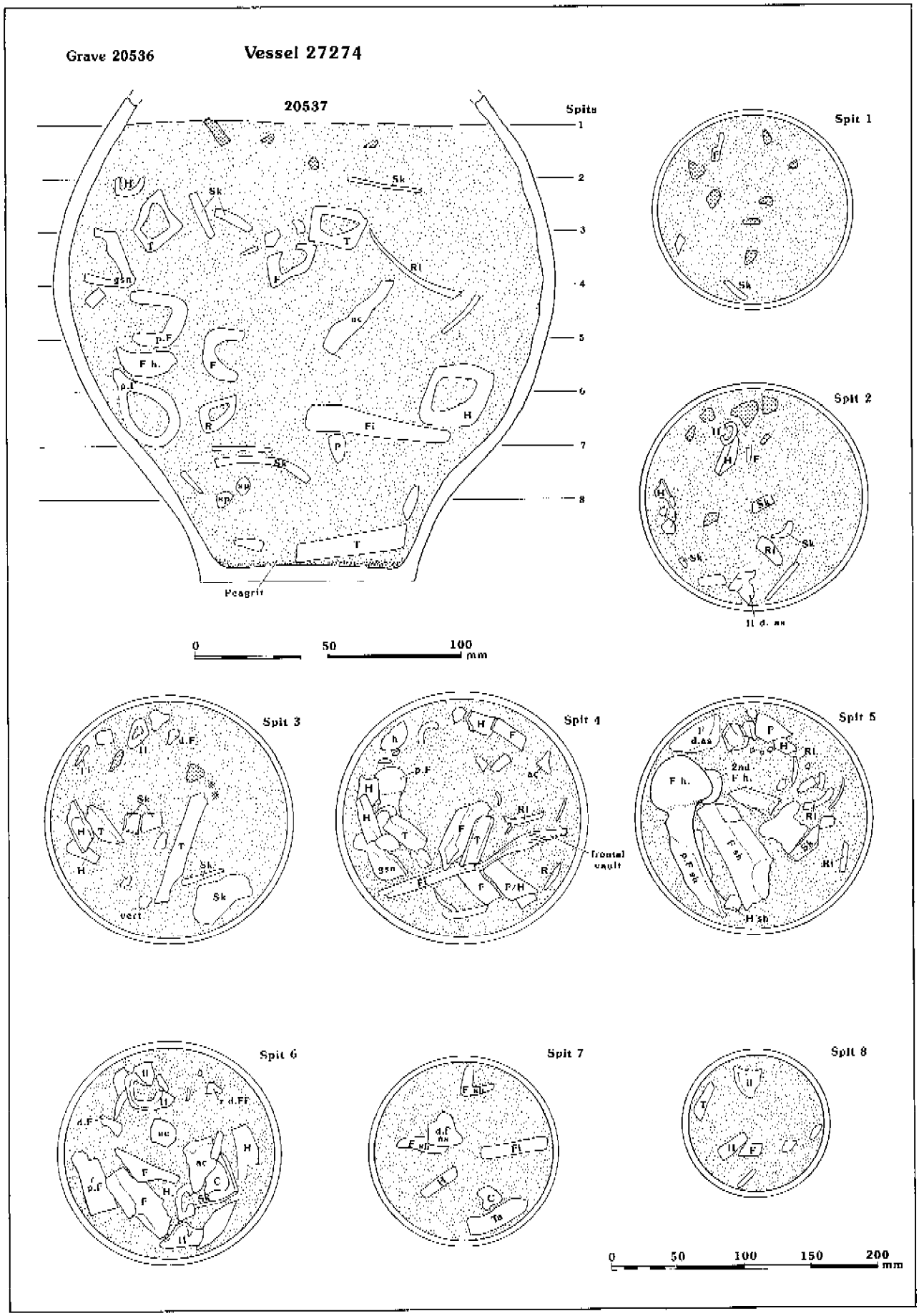


Figure 141 Vessel ON 27274, from grave 20536, excavated in spits

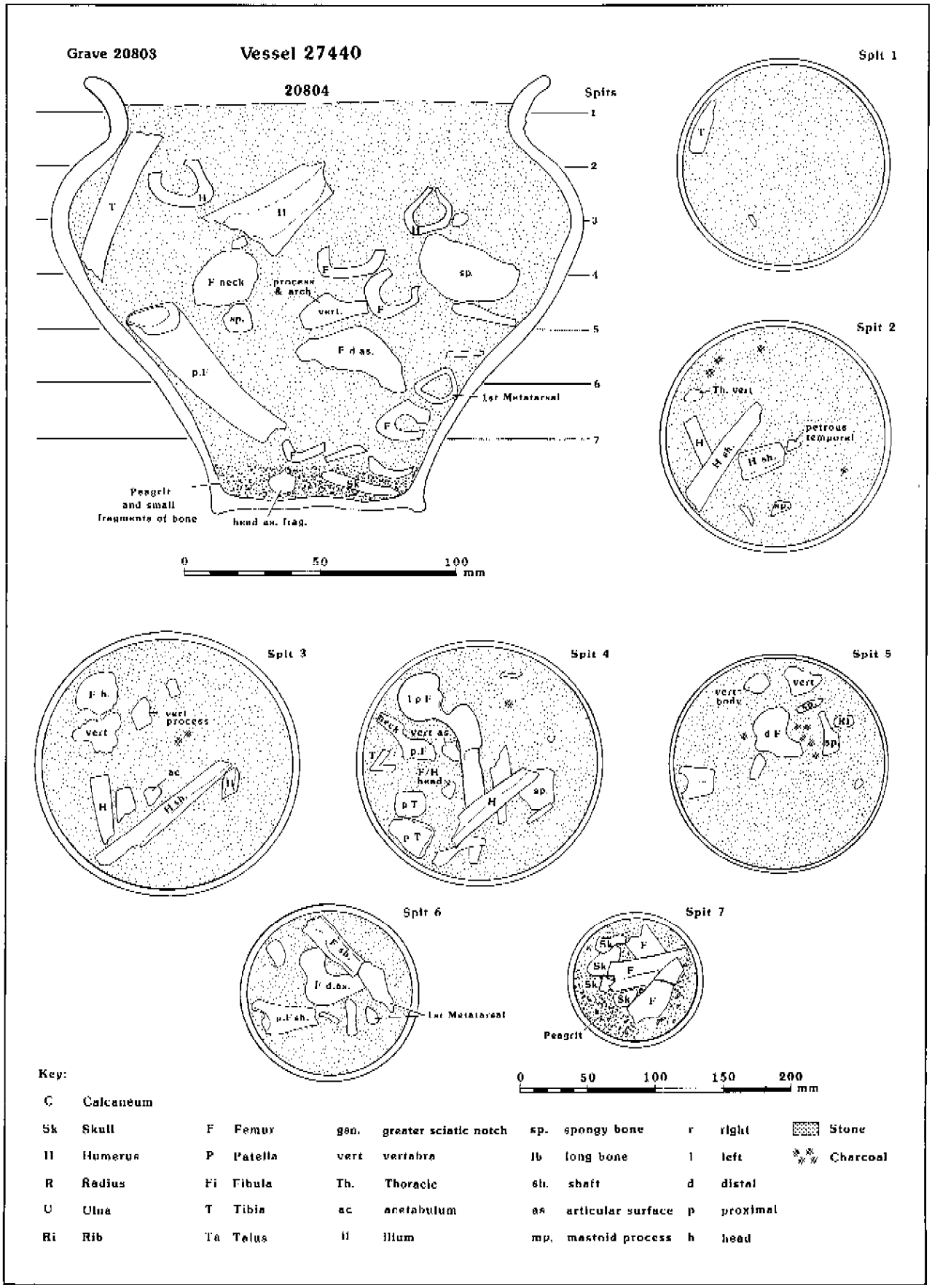


Figure 142 Vessel ON 27440, from grave 20803, excavated in spits

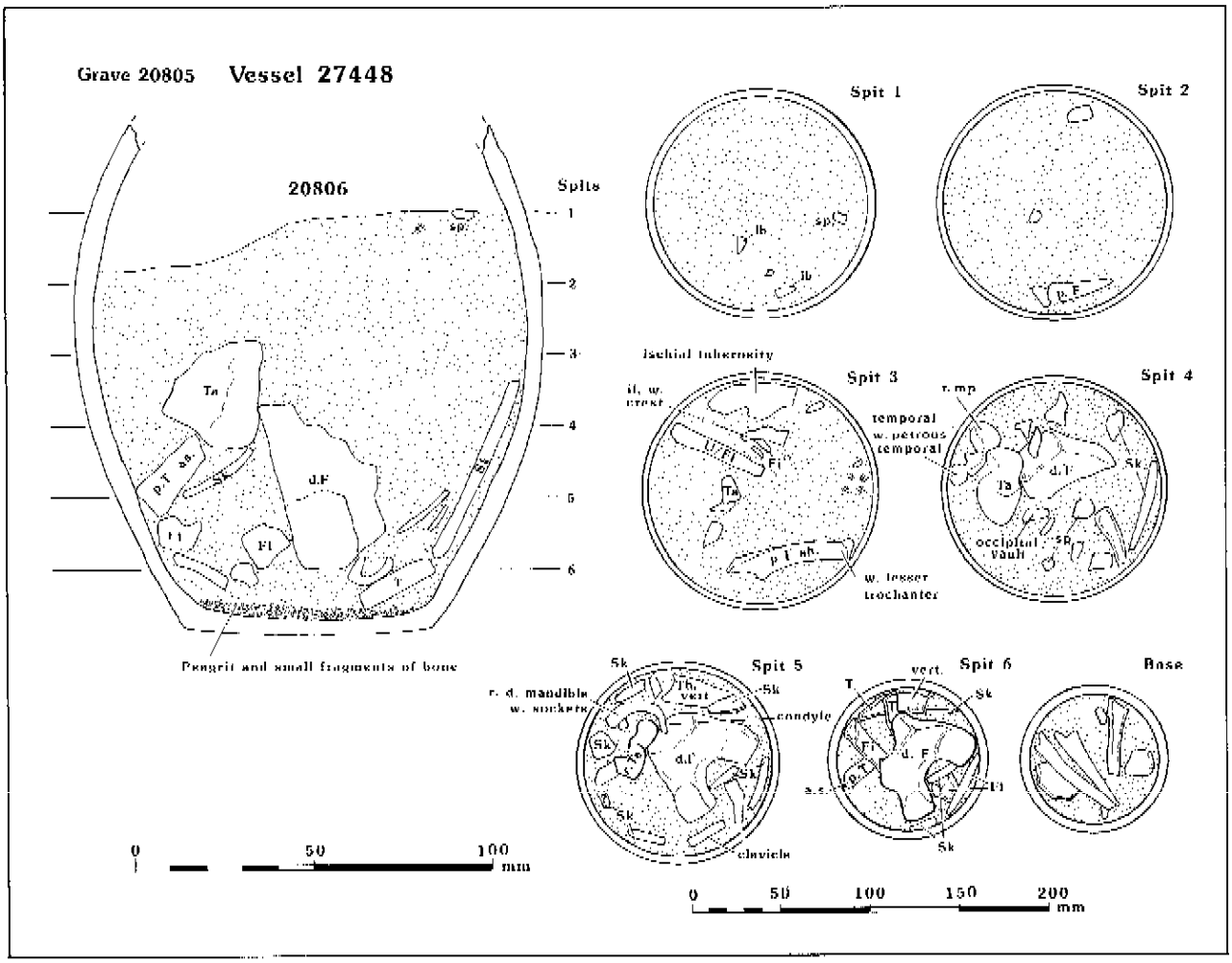


Figure 143 Vessel ON 27448, from grave 20805, excavated in spits

deposits it was possible in most cases to ascertain their level of disturbance. As this may affect the integrity of the context (see Iron Age section), the quantity of observable bone within the burial and the bone fragment size, meaningful comment on these aspects can only be made where the deposits are undisturbed. The level of disturbance is indicated, and summarised by type of context, in Table 32.

Demography

Individuals included in this discussion comprise counts taken from the burials (Table 31). Minimum numbers are given, with additional tentative identifications where the integrity of a context may be severely compromised and/or the interpretation of the context in under question. A minimum of 30, possibly 32, individuals was identified from the cremation burials (Table 33).

Age

Three (10.0%), possibly four, individuals (12.5%) were immature; two (6.7%), possibly three (9.4%) individuals could be aged no closer than subadult/adult; and 25 (83.3%) were adults. Two burials were of dual cremations with a possible third. The distribution differs only slightly from that noted for the Late Iron Age cemetery, with the exception that far fewer individuals were assigned to the subadult/adult group, probably because of the superior condition of the bone and the burials (see below). The figures also correspond closely with those for the somewhat larger contemporaneous cemetery at Baldock–Area 15, Hertfordshire (McKinley 1991), with 12.3% immature individuals and 70.3% adults. As at Westhampnett, no infants of <1 year were identified from Baldock but both sites differ from St Stephen's, Hertfordshire (McKinley 1992), where of the 21% immature individuals identified from the cremation burials, two were foetus/neonates.

As noted above (see Iron Age section), the number of immature individuals is lower than may be expected, probably with the same causal factors applying. For the Romano-British period, however, there are also cultural indicators to suggest that infants of less than one year were not necessarily afforded the same burial ritual as other members of the population.

Sex

Twelve of the individuals from cremation burial contexts were sexed (40.0%), that is 44.4% of the subadult-adult 'population'. The greater number of sexed individuals within this group, as compared with the Late

Table 31 cremated human bone from Romano-British contexts — summary of results

Grave	*Fill*	*D*	*Type*	*Total wt (g)*	*NI*	*Age*	*Sex*	*Pathology / Morphological variation*
20392	20393		?u+un	29.5	2	1) infant 2) subadult/adult	?	
20472	20473		prf	106.5		subadult/adult		
20536	20537	*	u+un	605.1	1	older mature adult	M	o.a - acetabulum; exo - femur
20538	20539	*	u	618.3	1	older mature adult	??M	o.p. - L; exo - humerus; new bone - d. humerus
20576	20577		u	312.3	1	adult	??F	
20587	20586		u+un	89.2	1	adult	?	
20591	20590		u	176.2	1	older mature adult	F	
20602	20603		u	33.9	1	adult	?	
20611	20612		un	410.2	1	older mature/older adult	??F	Schmorl's - T
20665	20666	$	u	218.3	1	adult	?	
20705	20704		u	129.2	1	subadult/adult	?	
20713	20714		u	213.2	1	older mature/older adult	??F	
20721	20722		u+un	27.3	2	1) adult 2) immature		
20723	20724		u	204.3	1	adult	??F	
20725	20726		u	161.3	1	older mature/older adult	?	o.p. - C
20727	20728	*	u	190.9	1	mature/older adult	??M	exo - femur
20731	20732		un	48.3	1	adult	??F	
20733	20734		u	169.6	1	adult	?	
20737	20738		un	94.9	1/?2	1) adult ?2) immature	?	
20739	20740	$	un	81.2	1	adult	?	
20748	20749	$	?un(?m)	3.0	?1	subadult/adult	?	
20754	20755	$	u	166.3	1	adult	F	
20769	20768		?prf	85.7		adult	?	
20785	20786		u	20.8	1	adult	?	
20787	20788	*	u	2.1	1	young infant		
20791	20792	*	u+un	68.7	1	adult	?	
20803	20804	*	u	302.9	1	older mature/older adult	??F	o.a. - costo-vertebral
20805	20806	*	u	191.3	1	older mature/older adult	??M	o.a. - costo-vertebral
20817	20816		u	169.7	1	adult	?	
20818	20819		u	157.4	1	adult	?	
20820	20821		u	240.7	1	adult	?	

For key, see Table 1

Iron Age, is again probably related to the superior condition of the bone and the burials (see below). Of the total number of individuals, 26.7% were identified as female (29.6% of the subadult–adult individuals), with 13.3% (14.8%) identified as male. As with the Late Iron Age group, the high percentage of unsexed individuals precludes any significant comment on this aspect of the demography. The greatest number and median figure again falls in the older mature/older adult category for females, with that for the males in the older mature adult category.

From Baldock–Area 15 (McKinley 1991) 44.7% of adults were sexed, from St Stephen's 57.5% (McKinley 1992). In both cemeteries a greater number of females was identified than males, 37.1%:20.4% from St Stephen's. In both cases it was felt that the significance of this variation in numbers between females and males was limited, in that there may be a bias in the ease of identifying females within cremation burials (McKinley 1992; 1994a).

Table 32 number of features containing cremated bone, with levels of disturbance

Type	*Total*	*	$
Unurned burials	4	–	1
?Unurned burials	1	–	1
Urned burial	19	5	2
Urned and unurned burials	4	2	–
?Urned & unurned burials	1	–	–
?Pyre-related features	2	–	–
Total	31	7	4

Table 33 number of individuals identified in each age and sex category

Age category	*Total*	*F*	*??F*	*Total F*	*M*	*??M*	*Total M*
Young infant	1	–	–	–	–	–	–
Infant	1	–	–	–	–	–	–
Immature	1(?2)	–	–	–	–	–	–
Subadult/adult	2(?3)	–	–	–	–	–	–
Older mature adult	3	1	–	1	1	1	2
Mature/older adult	1	–	–	–	–	1	1
Older mature/older adult	5	–	3	3	–	1	1
Adult	16	1	3	4	–	–	–
Total	30(?32)	2	6	8	1	3	4

Estimated population size

The criteria for, and limitations of, this aspect are presented in the section on the Iron Age cemetery. The Romano-British cemetery appears to have been in use over a maximum of 80 years. On this basis, an estimate of 19–20 individuals (depending on inclusion or exclusion of the tentatively identified individuals) may be calculated for the size of the 'population'. The size of the community utilising the cemetery was apparently much reduced from that of the Late Iron Age, probably extending to only one or two extended 'family groups' or 'households'.

Pyre Technology and Ritual

One, possibly two, pyre-debris dumps or 'pyre-related features' of Romano-British date (20472 and 20769) were recorded in Area 2, although a further feature, recorded in Area 7, c. 120 m to the east-south-east of the cemetery contained a small quantity of cremated human bone and is presented in Volume 1.

Efficiency of cremation

The vast majority of the cremated bone appeared well cremated. The bone was almost uniformly buff–white in colour, indicative of full oxidation of the organic components of the bone (Shipman *et al.* 1984). Slight differential burning to individual bones was noted in seven (22.6%) contexts; all were adult burials. In each burial only a few bone fragments were affected and never the entire skeletal element.

Black (charred), blue, and grey variations were noted in fragments of skull vault, humerus and radius shaft, patella, a lumbar articular process, proximal femur, and tarsal bones, four showing involvement of two or more bones. Such variations are within the range of what may be considered 'normal' and may have resulted from any slight problem with either time, temperature, or oxygen supply (McKinley 1989; 1994a). No specific difficulties with technology are indicated.

Collection

Weight of bone

No bone was recovered from seven of the graves, and these should be considered as comparable with the Late Iron Age 'memorials' (above). The overall average weight of bone from the burials was 171.2 g, with a maximum of 618.3 g from an undisturbed, urned adult burial, and a minimum of 1.1 g from a disturbed, unurned immature burial. Only four of the 21 urned burials were totally undisturbed, showing a weight range of 190.9–618.3 g, with an average of 333.5 g for the single adult burials. The undisturbed combination burials (60%) showed slightly greater weights with a range of 302.9–687.1 g, and an average of 531.7g. There were no undisturbed unurned burials, however, taken overall, the average weight of bone from the unurned burials was 139.8 g as compared with 174.8 g from the urned burials and 219.1 g from the combination burials.

From the undisturbed adults burials at the contemporaneous cemetery at St Stephen's (McKinley 1992), the average weight of bone from the urned burials was 899.6 g, with a range of 71–1447.2 g; average 824.0 g from the unurned burials and 640.0 g from the boxed burials. At Baldock–Area 15 (McKinley 1991) the overall range was <0.1–1599.1 g with an average of 267.4 g. The undisturbed adult burials had a range of 1–1599.1 g and an average of 452 g from the unurned burials, 100–1419 g with an average of 619.2 g for the urned burials.

Both the range and the average bone weights are noticeably lower at Westhampnett than at either St Stephen's or Baldock. The variations in quantities of bone collected for burial remains unexplained, though there may be a variety of reasons (McKinley 1994a). Although this may indicate a genuine difference in the quantity of bone collected, there is no apparent relation to the age or sex of the individual other than the obvious lower average weights for immature individuals.

Alternatively, it may be a question of bone survival. As noted above, during examination of the bone it was observed that there were comparatively few fragments of spongy bone, particularly articular surfaces of long bones, and of small bones such as tooth roots, and hand and foot bones. The vast majority of the bone was in good condition and did not appear to have been eroded by adverse gravel soil conditions. While most of the bone was examined after excavation and post-excavation treatment by wet sieving, five of the urned burials were emptied by the writer. The bone from these vessels appeared to be in a similar condition to that from the other contexts. As elsewhere, there were relatively few

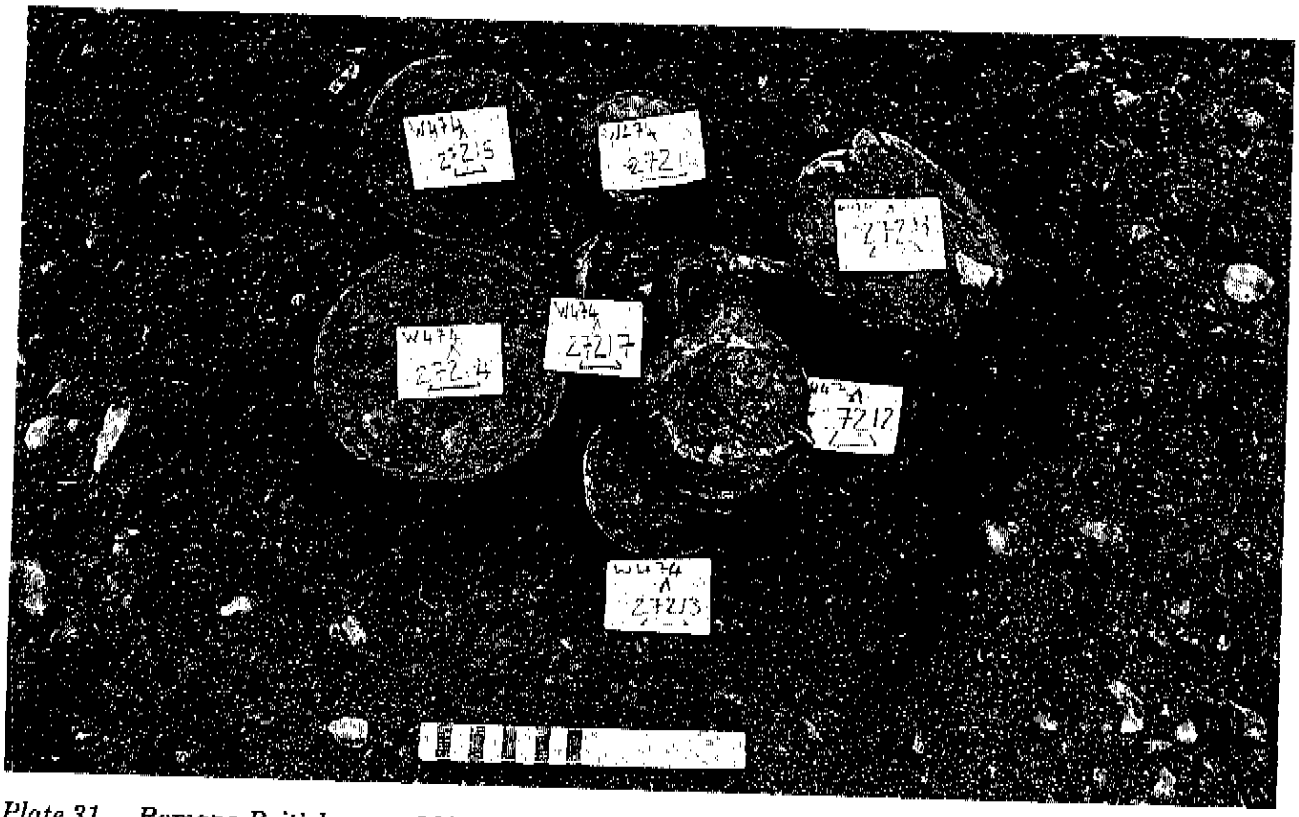


Plate 31 Romano-British grave 20392, viewed from the east, which contained the unurned (and possibly urned) cremated bones of an unsexed infant and an unsexed subadult/adult, accompanied by a leather covered wooden casket and seven pottery vessels, including two flagons (Fig. 146)

small bones; there were, however, many more fragments of spongy bone. These fragments often comprised whole articular surfaces within the vessels, but on excavation, despite great care, many crumbled to dust. This suggests that the paucity of spongy bone within the burials as a whole is the result of poor survival, probably contributing to the low bone weights.

Fragmentation

The factors affecting fragmentation have been considered fully in the section on the Iron Age cemetery. Overall there was an average of 55.7% bone in 10 mm fraction, with an average maximum fragment size of 42 mm. From undisturbed burials, an average of 69.8% bone was in the 10 mm fraction, with an average maximum fragment size of 50 mm. The maximum percentage of bone in the 10 mm fraction was 85% from an undisturbed combination burial in which 75% of the bone was identifiable. The maximum fragment size recorded in analysis was 75 mm, from an undisturbed urned burial in which 68% of the bone was identifiable. There were no undisturbed unurned burials, but from the least disturbed, 43% of the bone was in the 10 mm fraction, the maximum fragment size was 39 mm and 31% of the bone was identifiable.

The majority of the Romano-British burials were urned or combinations and here, unlike in the Late Iron Age burials, there is a noticeable difference between the overall figures and those for the undisturbed burials alone, the latter being higher. The figures are generally higher than those recorded for the Late Iron Age, demonstrating the difference between urned and unurned burials. It has been shown elsewhere that burial in an urn offers added protection to the bone, and that site disturbance increases bone fragmentation (McKinley 1994b).

Five urned burials were emptied by the writer but only three warranted planning (Figs 141–3). Comparison of the *in situ* bone fragment size with that of fragments recorded during osteological analysis emphasises the high degree of fragmentation which may occur in the course of excavation (McKinley 1994b). In grave 20536, a maximum fragment of 120 mm was noted in the vessel (ON 20537, Fig. 141, spit 5, proximal femur), while in analysis the maximum fragment recorded was 70 mm. In context 20804, a fragment of humerus shaft 120 mm long was noted in the vessel (ON 27440, Fig. 142, spit 3) but the maximum fragment noted in analysis was 57 mm. In grave 20805 the size of the maximum fragment in the vessel was 80 mm (ON 27448, Fig. 143, spit 3, proximal femur shaft) compared with 63 mm in analysis. Cremated bone is a brittle substance, and, even with the greatest care, every time it is handled it breaks up a little further. It should be emphasised that fragment sizes recorded in post-excavation are highly unlikely to represent the size of fragments at the time of deposition.

The fragment sizes observed are within the normal range noted elsewhere (e.g. Stirland 1989; McKinley 1994b). There is nothing to suggest that any deliberate fragmentation of bone took place prior to burial.

Skeletal elements within the burial
The generally low percentage of axial bone noted in the Romano-British burials is to be expected in view of the observations made with regard to the poor survival of spongy bone. The ease with which even small fragments of skull may be identified usually results in there being a relatively high percentage identified within a burial; hence the total lack of any skull bone in adult grave 20754, and paucity of fragments in several others, is unusual. The total weight of bone in this burial is small (166.3 g, 47% identifiable bone), comprising a maximum of 17% of the total expected bone weight, probably closer to 8%. Since up to 90% of the human remains may not have been included in the burial it is not implausible that skull fragments were overlooked by accident. It certainly suggests that the inclusion of some elements from each skeletal area generally noted in cremation burials was not considered of such importance in these instances. There is also a vague possibility that the lack of skull fragments may have been in consequence of a deliberate action.

Deposition of bone
It may be seen from Figures 141–3 that vessels were apparently not always used to full capacity, and the relatively small quantities of bone (grave 20536, 605.1 g; grave 20803, 302.9 g; grave 20805, 191.3 g) demonstrate that more bone would have been available. Most of the gaps within the fills probably represent spaces left around the large, bulky bone fragments where few smaller fragments or fragments of small bones were used to infill. There may, however, have been some organic components within the fill which have been subsequently lost. The organic components of the body do not always completely oxidise during cremation and fragments of the resultant light, very brittle, black soft tissue residue have been noted by the writer in a number of cremation burials (McKinley 1994a, 'slag'), particularly the waterlogged Romano-British burial from Purton, Wiltshire (McKinley in prep.). A few small fragments of a brittle, black 'slag-like' material, similar in appearance to this soft tissue residue, were found in four Late Iron Age contexts at Westhampnett (pp. 66–8).

As noted elsewhere by the writer (McKinley 1992; 1993a; 1994a), there was no order of deposition to suggest that collection commenced at one end of the pyre and progressed to the other, though the adjacent positioning of both proximal femora in spit 5 of context 20537 (grave 20536, vessel ON 27274; Fig. 141) may suggest they were recovered together. There are a number of possible interpretations to the apparently random deposition of bone within the urns; bone may have been raked together off the pyre before collection and been mixed in the process; different individuals may have been collecting bone at the same time and depositing their contributions at random; or the urn may not have formed the original receptacle used during collection.

Dual cremation
Two definite and one possible dual cremation burials were identified (7–11% of burials). Each consisted of a subadult or adult with an immature individual. In each case here, the probability of a family relationship of some kind between the individuals is compelling, to be placed so close in death suggests a comparable closeness in life. At St Stephen's (McKinley 1992) 3% of burials were dual cremations, with 4.8% from Baldock–Area 15 (McKinley 1991). These figures should be viewed as a minimum, as there is a reasonable supposition that there is a bias against immature individuals, particularly young infants, either due to non-recovery from the pyre for burial, or poor bone survival.

Pyre goods and staining to bone
Blue and/or green spot staining was noted on bone from two burials; the significance of this has been considered section on the Iron Agecemetery.

'Memorials'
One context was considered to be a possible memorial (20749), as defined by the writer in the section on the Iron Age cemetery.

Pathology and Morphological Variations

A summary of lesions is presented in Table 31. The number of individuals with lesions is seven (c. 22–23%). All were adults (c. 28%), older mature or older, including two females (25%) and four males (100%).

From phases 1–3 at the King Harry Lane cemetery, Hertfordshire, pathological lesions were noted in 1% of individuals (Stirland 1989). In the St Stephen's cemetery (McKinley 1992) the percentage was 48.8%. The significance of these comparisons is limited, however, and cannot be taken as a realistic reflection of variations in incidence of pathological conditions for the reasons outlined above relating to the condition of the bone and the burials.

The lesions observed were largely age-related changes (though there may have been other predisposing factors). Osteoarthritic lesions were noted in the costo-vertebral joints of two individuals and hip joint of one individual. Osteophytes, new bone growth on the margins of articular surfaces, were observed in a maximum of two joints/joint groups of two individuals. Exostoses, new bone formation at tendon/ligament insertions in two individuals, were most commonly noted on the posterior proximal attachments of the femur shaft.

None of the observed lesions was severe. The significance of the apparent greater prevalence of lesions in the identified males is questionable. As it was possible to sex only c. 42% individuals, there may be bias caused by more elderly males (i.e. those with greater potential to present with pathological lesions) being identified. In addition, as discussed in relation to the Late Iron Age cemetery, the observed lesions probably form only a very small part of the number which would originally have existed. No significant differences were apparent between the Late Iron Age and Romano-British 'populations' in the types or the distribution of lesions, either in terms of bones or individuals affected. The range and types of lesions would not extend beyond what would be considered 'normal' for a 'domestic population' of this date.

4 Animal Bone from Burials and Cremation-related Contexts, by Jacqueline I. McKinley and Pippa Smith

Fragments of burnt/cremated bone from two Romano-British contexts were received for examination, as were fragments of unburnt animal bone from one cremation burial. The same methods as used in the analysis of the material from the Late Iron Age religious site were followed and further discussion of the condition of the bone, age, skeletal elements, and taphonomy may be found in that section (pp. 73–4).

A summary of the results is presented in Table 34. One could be identified to species (sheep/goat), one (unburnt) to species-size (small ungulate); the species in the third context could not be identified. The quantity of animal bone recovered was very small, 0.2–1.3 g, i.e. a maximum of 1% of the total bone weight from the contexts.

Table 34 animal bone from Romano-British contexts

Feature	*Context*	*Wt (g)*	*MNI*	*S/G*	*S. ung.*	*Unid.*
20538	20539	0.2	1		l.b. (u/b)	
20705	20704	1.3	1	meta. (1)		skull (2)
20748	20749	0.4	?1			?1

S/G = sheep/goat; s.ung = small ungulate; unid. = unidentified; u/b = unburnt; meta. = metapodia; l.b. = long bone

5 Charcoal, by Rowena Gale

The methods of processing, assessment, and analysis employed were the same as for the Late Iron Age religious site (p. 78). Only comparatively small quantities of charcoal were found in contexts of Romano-British date, largely due to the rarity of pyre sites and pyre-related features within the excavated area.

Samples from two graves included very poorly preserved charcoal (Table 35). Grave 20731 (sample 29289) and grave 20737 (sample 29292) included mainly oak but also some shrubbier species. The contents of two vessels, ON 27303 (grave 20536) and ON 27307 (grave 20587) included small quantities of oak, ash, and rosaceous material, with the addition of hazel in the former and maple and birch in the latter.

As in the Late Iron Age, the wood used would in part have been determined mainly by what was available in the immediate environment. Not surprisingly the character of the dominant woody vegetation growing in the early Romano-British landscape appears to have altered little from that of the Late Iron Age. Oak, ash, and hazel remained important sources of wood and timber.

As also indicated by the evidence from the Romano-British site in Area 3 (where a single fragment was identified), beech charcoal was sparse, however, the remains of mineralised beech were found on grave goods (Watson below). It is not improbable in view of its paucity, that the charcoal may represent, for example, the burnt remains of pyre goods rather than fuel. Although the origin of the grave goods is unknown, locally grown timber was probably available for their construction. Beech was established on chalkland in southern England by the Neolithic period (Godwin 1956) although its distribution may not have been widespread until the late 2nd millennium BC when grasslands were becoming a common feature of the landscape (Tittensor 1979). Its minimal occurrence in the charcoal at Westhampnett suggested that it was not common in the immediate locality of the site. Maple, birch, Pomoideae, and *Prunus* were also identified.

6 Charred Plant Remains, by Pat Hinton

The methods of processing, assessment, and analysis employed were the same as for the Late Iron Age religious site (p. 83). Only very small quantities of charred plant remains were found in contexts of Romano-British date. As with the charcoal this is presumably due to the rarity of pyre sites and pyre-related features within the excavated area.

Two samples from graves (20392 and 20723) and four from pots (vessel 27275 from grave 20538 and vessels 27415, 27416, and 27418 from grave 20748) were examined. The sample from grave 20723 contained no charred seeds and that from grave 20392 only one cereal fragment. The samples from vessels 27415 and 27418

Table 35 charcoal from Romano-British features

Context	*Sample*	*Ac*	*Be*	*Cory*	*Fra*	*Pom*	*Pru*	*Que*	*Ros*
Grave									
20536	P27303	–	–	2	4	?	?	4	1
20587	P27307	2	4		4	?	?	2h	2
20731	29289	–	–	3	?1	2	8	74r	–
20737	29292	?3	–	–	–	–	–	33	–
Pyre-related feature									
20472	29209	–	–	–	–	–	–	231rsh	–

For key see Table 7

Table 36 Romano-British metalwork

Context	*Material*	*Type*	*No frags*	*MNI*
Graves				
20392	Fe	Nails	5	5
20536	Fe	Nail shank	1	1
20587	Fe	Hobnails	82	68*
20665	Fe	Nail	1	1
20705	Fe	Nail	1	1
20731	Fe	Rectangular staple	1	1
20739	Fe	Nail shank	1	1
20748	Fe	Box fittings	49	1 box
20754	Fe	Nail	1	1
20803	Cua	Mirror	6	1
	Fe	Nail shank	1	1
Pyre-related feature				
20472	Fe	Nails & frags	31	13
Postholes				
20158	Fe	Large clenched nail	1	1
	Fe	Hobnail	1	1
20362	Fe	Large nail	1	1
Total			183	

* from two shoes

included a few cereals while those from the other two vessels contained only charcoal fragments. Only chance deposition is indicated.

7 Metalwork, by R. Montague, with a contribution by Jacqui Watson

Introduction

A total of 183 pieces of metalwork came from Romano-British contexts, of which 149 pieces were recovered from graves, 31 from pyre-related features, and 3 from postholes. The assemblage comprises 6 fragments of copper alloy and 177 of iron. The range of objects represented is very narrow and includes a copper alloy mirror, a wooden casket or box with iron fittings and another jointed wooden object (probably a simple casket or box) with iron nails (Table 36).

Metalwork from the Graves

Mirror

(Grave 20803, ON 27447)

A single undecorated copper alloy mirror was recovered. It is broken and incomplete with six surviving fragments (Fig. 156). The break between two of the fragments is ancient. Three of the original edges survive, suggesting that the mirror was rectangular. The upper surface appears to be tinned and the edges are bevelled, presumably for fixing into a wooden frame, though no trace of this survives. However, there was a suggestion of some organic material on either side of the mirror. Of rectangular mirrors Lloyd-Morgan has commented that 'The origins of this type are uncertain, but by the first century AD it was one of the most popular forms, with examples coming from virtually all provinces of the empire. Some mirrors have remained in circulation for a number of years, but there is no evidence for their manufacture during or after the second century' (1981, 3). Grave 20803 was that of an older mature/older adult, possibly a female.

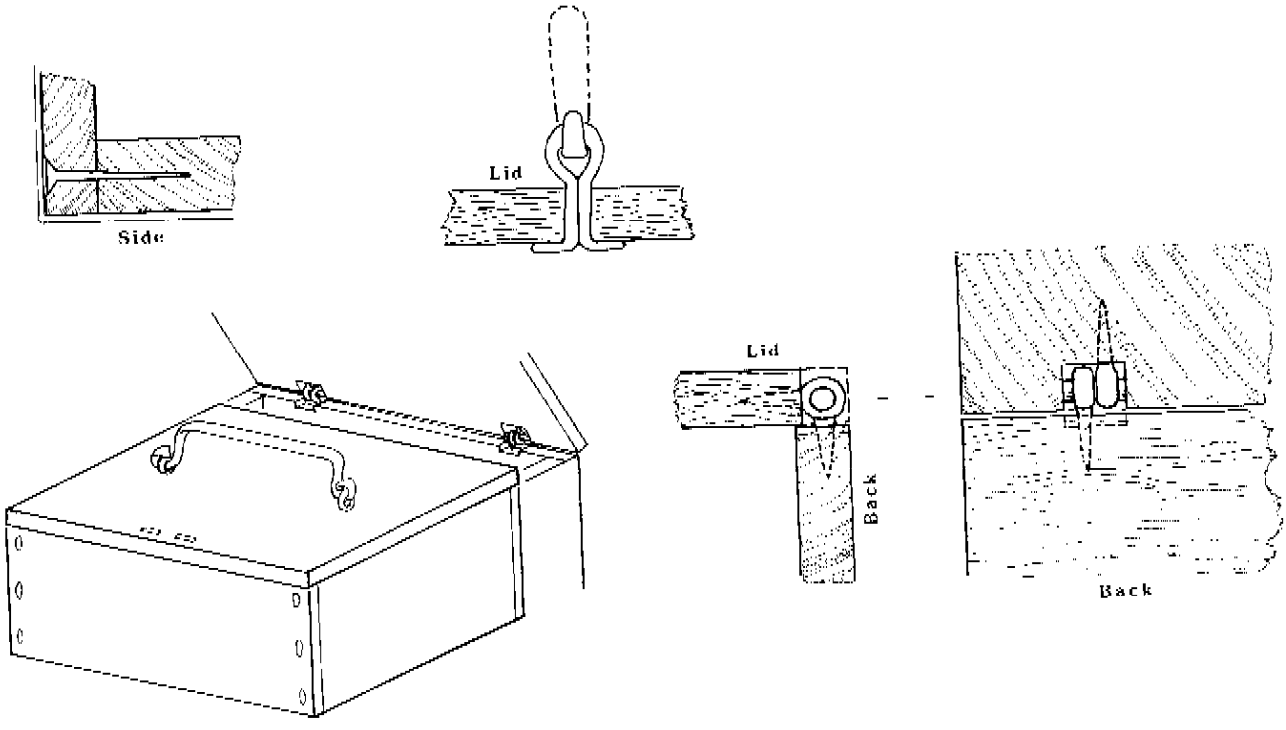


Figure 144 Suggested reconstruction of wooden box or casket with iron fittings from grave 20739

Wooden caskets with iron fittings

(Grave 20739, ON 27760; grave 20392, ON 27218–22)

Grave 20739 produced a quantity of iron fittings and a lock fragment from a wooden casket (ON 27760; Fig. 153). The fittings comprise a lock fragment, and a minimum number of nine split-spiked loops. Two of these bore the remains of a presumably decorative sheet iron plate which would have sat behind the head of the loop; others may have been used to attach a drop handle to the casket and others were almost certainly used as hinges. Two rectangular staples, a stud, 16 small wedge/spike-headed nails, and 15 similar-sized nail shank fragments were also recovered. Most of the iron fittings had mineral-preserved wood remains on the shanks. The grave contained the remains of an adult, of indeterminate sex.

Grave 20392 (Fig. 146) produced four or five nails. The four remaining nails all have mineral-preserved wood traces on the underside of the head and on the square-sectioned shanks. These nails are much larger than those used in the construction of wooden casket, ON 27760. Grave 20392 contained the remains of two individuals: an infant, and a subadult/adult of indeterminate sex.

Construction of the wooden caskets from graves 20739 and 20392, by Jacqui Watson

Grave 20739, ON 27760: The casket was basically made from boards (*Fagus* sp.), 7–10 mm thick, and these were nailed together. As most of the nails were recovered during the sieving of the whole-earth samples there is no indication of the original size of the casket. The nails themselves, however, seem to have been countersunk and this type were used for the construction of boxes known to have been covered in leather. This construction (Fig. 144) finds a parallel in the cremation casket from Godmanchester, Cambridgeshire (under examination in the Ancient Monuments Laboratory, and also made of beech) and another from Wederath-Belginum, Germany (Dewald and Eiden 1989). The set of the hinges indicates that the lid was made from a single piece of wood, 11.9 mm thick with a radial surface from the split spiked loop used to attach a ?drop handle. The lid would have been notched or cut-away to accommodate the hinges while still being supported by the back of the box. The same type of hinges were used on the caskets from Romano-British burials XLV and LIX at Skeleton Green, Hertfordshire (Borrill 1981).

Grave 20392, ON 27218–22: Again, as most of the nails were recovered during the sieving of the whole-earth samples there is no indication of the original size of the box. The four extant nails seem to make up one corner of casket made of radial surface oak boards (*Quercus* sp.) *c.* 11 mm thick. Nails ON 27218 and 27222 have evidence for a joint. This box also appears to have been leather covered.

Rectangular staple

(Grave 20731, ON 27615)

A single small rectangular staple, broken at both ends, was recovered from grave 20731, that of an adult, possibly female individual. The staple did not bear any mineral-preserved wood remains but by comparison with the small staples from the Late Iron Age graves it could conceivably derive from a wooden vessel.

Hobnails

(Grave 20587, ON 27338–9, inc. 27651, 27600)

In grave 20587 the former position of two shoes, marked by the hobnails, was clearly visible (Fig. 148). The shoes had been placed side by side to the north-east of the four pots in the grave with the soles on the ground. Shoe ON 27338 had a MNI of 36 hobnails, and shoe ON 27339 had a MNI of 21. A further MNI of 11 hobnails was recovered from the whole-earth sample. Grave 20587 was that of an adult of indeterminate sex.

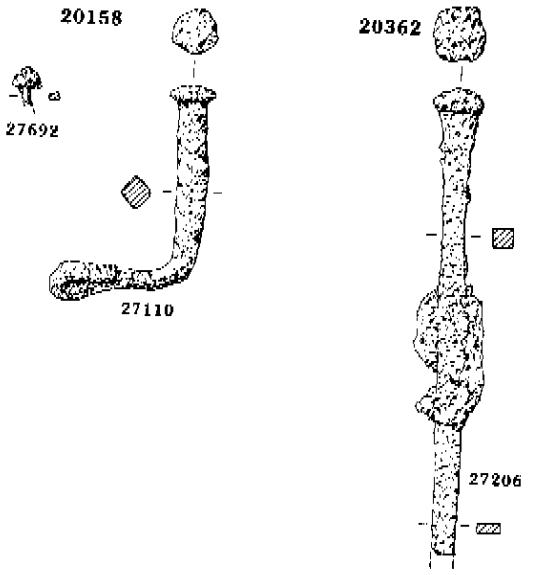


Figure 145 Hobnail (ON 27692) and nail (ON 27110) from posthole 20158; nail (ON 27206) from posthole 20362. Scale 1:2

Nails

(Grave 20392, ON 27218–22; grave 20536, ON 27596; grave 20665, ON 27364; grave 20705, ON 27627; grave 20731, ON 27772; grave 20748, ON 27628; grave 20754, ON 27513–4; grave 20803, ON 27760)

A total of 12 flat, round-headed nails or nail fragments with square-sectioned shanks (Manning's type 1B (1985, 134, fig. 32)) was recovered from eight separate graves. The five nails, possibly from a wooden box from grave 20392 have been considered above. The other seven graves all produced a single nail or nail fragment (two fragments from grave 20754 could be from one nail). Three were found amongst urned cremated bones (graves 20705, 20748, and 20803), one amongst the cremated bone of a combined burial, above and around the urn which also contained part of the cremated bone (grave 20536); and three within the fill of graves (20665, 20731 and 20754). Four nails had mineral-preserved wood remains (Table 37).

Metalwork from Other Features

Hobnails

(Posthole 20158, ON 27692)

A single hobnail (Fig. 145) was recovered from posthole 20158. This nail was corroded to a larger nail, discussed below.

Nails

(Pyre-related feature 20472, ON 27512, 27589; posthole 20158, ON 27110; posthole 20362, ON 27206) (Fig. 29).

Pyre-related feature 20472 (Fig. 140) produced 31 nail fragments, representing a MNI of 13 nails of Manning's type 1B. The large nail from posthole 20158 had its end clenched over (Fig. 145). This large nail, found together with a hobnail (above) has a square-sectioned shank tapering to a rectangular section, and a slightly domed head which is small in proportion to the rest of the nail. It is likely to have served a structural purpose. Posthole 20362 contained a similar large nail (Fig. 145). These are the only nails of this type from Area 2.

Table 37 metalwork from Romano-British graves with mineral-preserved organic materials

Feature	*Context*	*ON*	*Type*	*Wood*	*Leather*
20392	20393	27218	Fe nail	oak	
		27219	Fe nail head	oak	?? over head
		27220	Fe nail	(oak)	
		27222	Fe nail	(oak)	
20536	20537	27596	Shank	?oak	
20665	20666	27364	Fe nail	unid.	
20705	20704	27627	Fe nail	??ash	
20739	20740	27760	Box/casket with iron fittings	beech	
20748	20749	27628	Fe nail	unid.	

Key:
? = probably; ?? = possibly; unid. = stated to be an unidentified species; (oak) = not identified specifically to species but as considered to be part of same casket are also likely to be of oak

Discussion

In contrast to the Late Iron Age pyre sites and related features and graves, the Romano-British graves are marked by a paucity of metal pyre or grave goods. Of the 37 Romano-British graves, 9 (25%) contained personal belongings such as mirrors, wooden caskets or boxes, or shoes with iron fittings. The iron rectangular staple from grave 20731 may also have been a fitting on a wooden vessel, although no mineral-preserved wood survives.

There is no direct evidence that any of the metal objects from the Romano-British graves were pyre goods. The absence of mineral-preserved materials, for example on some of the nails and on the copper alloy mirror (which presumably had an organic frame), need not indicate that these were pyre goods. The presence of mineral-preserved wood in six of the graves (Table 37) indicates that the wooden objects of which the iron objects were originally part were probably placed as grave goods.

The occurrence of single nails of Manning's (1985) type 1B in graves finds parallels at, for instance, King Harry Lane, St Albans, where Manning's type 1B occurred in 42 graves, either singly or with 2–4 nails per grave (Stead and Rigby 1989, 111). Of the seven Westhampnett examples, four bore mineral-preserved wood traces (Table 37) and four were associated with cremated bone, of which three also had mineral-preserved wood suggesting the presence of wooden grave goods. A range of wooden caskets and boxes occurred at the Chichester–St Pancras cemetery (Down and Rule 1971) and it is possible that these nails indicate some sort of fitting covering the cremation urn or grave.

The presence of nails in the pyre-related feature suggests that at least some of the timbers used in the pyre were reused structural timbers, although the placing of wooden objects on the pyre cannot be ruled out.

8 Glass

Vessels from Graves

Two glass vessels in blue/green metals were recovered from graves: what may be a conical jug from grave 20739 (ON 27411) and a square bottle from grave 20791 (ON 27450). Both had been deposited as grave goods rather than as pyre goods and are common forms.

The rim and part of the shoulder are missing from ON 27411 and this may have been caused by a handle being broken off. The concave base and the constriction at the base of the slender cylindrical neck are similar to those of globular jugs (Isings form 52), but the possibility that the vessel is a flask cannot be discounted. Globular jugs are found frequently in contexts dating from the second half of the 1st century AD to the mid 2nd century (Cool and Price 1995, 122–3). Examples are known locally from Chichester (e.g. Cattlemarket and East Pallant House: Price and Cool 1989, 133, 137–8, fig. 19.2.27–33) and Fishbourne (Harden and Price 1971, 358–60, fig. 142, 89–91).

Square prismatic bottles (ON 27450), often with circular mouldings on the base (Isings form 50), were one of the most common glass vessels in the later 1st–2nd, and possibly early 3rd centuries AD. The present example is of poor quality, a not uncommon feature of Romano-British finds, which may suggest local production (Cool and Price 1995, 183–6). Local parallels come from Fishbourne (Harden and Price 1971, 361, 364, fig. 143, 102) and several sites within Chichester (e.g. Cattlemarket, County Hall and East Pallant House: Price and Cool 1989, 134, 140, esp. fig. 19.3, 49).

Non-grave Contexts

Four glass fragments were recovered from non-grave contexts in Area 2: one heavily distorted fragment from a pyre-related feature, an unstratified vessel rim, and fragments from two beads.

Pyre-related feature

A large green/blue lump of molten glass measuring c. 20 x 50 x 10 mm and weighing 5 g came from pyre-related feature 20472 (ON 27271). It might derive from a bead or, just conceivably, from a pillar-moulded bowl.

Postholes

A small fragment of a turquoise frit bead (not illustrated) was found in context 20204 (ON 27137), a posthole in the circular space in the Late Iron Age cemetery. The fragment, c. 12 mm in diameter, is very probably from a melon bead, a Romano-British type particularly common in the 1st–2nd centuries AD, examples of which are known from several sites in Chichester (Guido 1978, 100; Price and Cool 1989, 135). Part of a small, dark blue tubular bead was found in Late Iron Age grave 20245. Although the type is close to Romano-British ones (*op. cit.* 1978, fig. 37, 4–7), it is closer to Anglo-Saxon forms: a slightly larger example from Apple Down was found in a 6th century context (Down and Welch 1990, 37, 99, 166, pl. 41, 45). The fragments should be seen in the context of a scatter of fragments of possible Roman soda glass found in this area, and the slight evidence for some postholes being of this date.

Unstratified
The rim of a tubular rimmed bowl with an outbent rim (Isings form 44–5) in a green/blue metal (not illustrated) was found during topsoil stripping (ON 27501). In view of the damage to the Romano-British burials caused by ploughing it seems likely that the fragment derived from a grave. The form dates to the 1st–mid-2nd centuries AD (Cool and Price 1995, 94–5) and, again, is found widely including sites in Chichester (e.g. Cattlemarket and East Pallant House: Price and Cool 1989, 133, fig. 19.1, 20–1) and Fishbourne (Harden and Price 1971, 352).

9 Pottery, by L.N. Mepham, with a contribution by Brenda Dickinson

Introduction

This section discusses the 114 complete or partial vessels recovered from 36 graves within the cemetery. The condition of the vessels varied from those which were complete and unbroken, to those which survived only as a handful of abraded body sherds. The shallow depth at which most of the vessels were excavated underlines their vulnerability to post-depositional disturbance and, indeed, in many cases graves had been obviously disturbed at some point subsequent to deposition. It should be noted, however, that the generally smaller size of the Romano-British vessels in comparison to the Late Iron Age vessels from the same area led to the survival intact of a greater proportion of vessels. Surface abrasion to varying degrees, largely a result of the acidic soil conditions, was noted on many of these vessels, as for their Iron Age counterparts, and this was particularly noticeable on the softer fabrics such as samian, resulting in the partial or complete loss of surface slips and the obliteration of decoration.

Methods

The methods used for this assemblage were the same as those employed for the Late Iron Age cemetery vessels (see pp. 118–19), i.e. a detailed fabric and form analysis combined with the recording of dimensions, decoration, surface treatment, manufacturing technique, and evidence of use-wear.

Twenty-one separate fabric types were defined on the basis of the range and size of inclusions. These fabric types were then grouped according to the dominant inclusion type into four broad fabric groups: Group I (fabrics containing iron oxides); Group M (micaceous fabrics); Group Q (sandy fabrics) and Group E ('established' wares, i.e. fabrics of known type or source). Fabric types have been alpha–numerically coded within the overall fabric type series defined for all the Westhampnett excavations.

A type series was constructed for the vessel forms, using both complete and partial profiles; this has been grouped according to broad form groups: jars, beakers, bowls/dishes, platters, cups, flagons, and miscellaneous. As far as possible all vessels represented have been fitted into this type series. The correlation of fabrics to vessel forms is given in Table 38. Vessels are listed by grave in the catalogue (below), and summarised in Table 39. Each vessel is identified in the archive, within this report, and in the catalogue, by the five-figure Object Number (ON) allocated on site.

In the fabric descriptions below, terms used to define the frequency of inclusions, following the density charts devised by Terry and Chilingar (1955), are as follows: rare (1–3%); sparse (3–10%); moderate (10–20%); common (20–30%); very common (30–40%).

Fabrics and Forms

For the purposes of discussion, the twenty-one fabric types can be grouped into six broad categories:

1. Samian
2. Other imported wares
3. British fine wares
4. Fine pale-firing wares
5. Fine micaceous wares
6. Coarse sandy wares

Samian
Sixteen samian vessels were recovered from ten graves, in a range of eight identifiable forms (see Table 38): decorated beakers (Drag. 67), dishes (Drag. 36, Drag. 42), platters (Drag. 18/31) and cups (Drag. 27, Drag. 35, Curle 11, Curle 23). One unusual form was also present: a shallow, convex dish with a simple rim (grave 20538, ON 27313). It appears that this is a 'cut-down' version of another form, probably a Drag. 36, given the traces of an internal groove below the existing rim. The almost complete absence of slip from this vessel has obliterated any traces of the trimming operation.

The samian has been assigned to the production areas of Southern and Central Gaul on the basis of broad fabric characteristics (see catalogue), but with one or two exceptions no attempt has been made to identify specific production centres within these areas. All vessels are badly abraded, some lacking nearly all their slip.

Decorated samian, by Brenda Dickinson
Two decorated beakers (Drag. 67) were identified. One is too badly abraded for identification (grave 20686, ON 27371). The second (grave 20392, ON 27216) has been identified as follows (D. figure types are from Déchelette 1904; O. figure types are from Oswald 1936–7):

A small panelled jar, eroded, with: 1) a small double medallion with the head of a lion to right (?O.1403A), over a bird (O.2239B or ?C); 2) a harpy to left (O.861 variant) over a rosette (a smaller version of Rogers C87); 3) a Cupid (a smaller version of D.236 = O.401) and a vertical astragalus; 4) the medallion again, with a lion's head to left (D.753 = O.1421); 5) the harpy; 6) a naked man (O.633A); 7) the bird, as before. This is almost certainly by the Lezoux potter Drusus ii, on whose signed bowls of form 37 the following details appear: the animal heads (in another small medallion) on an unprovenanced bowl in the Museum of Archaeology and Ethnography, Cambridge; the lion to right on a bowl from Salzburg (von Koblitz 1926, no. 4); the Cupid on two bowls from the same mould, one from Corbridge, in a construction level of the Antonine I headquarters, the other from Verulamium (Dickinson 1984, D10). *c.* AD 125–45.

Table 38 Romano-British vessel forms by fabric

	Imports		*British fine*	*Pale-firing finewares*		*Fine micaceous wares*					*Coarsewares*									
	Samian	*Other*	*Samian*	*M100*	*Q123*	*I100*	*I103*	*M101*	*Q106*	*Q122*	*Q100*	*Q101*	*Q102*	*Q103*	*Q104*	*Q107*	*Q108*	*Q116*	*Q118*	*Q119*
Jars																				
Unspec. (1.0)	–	–	–	–	–	–	–	–	–	–	5	–	–	4	–	–	–	–	1	1
1(1.1)	–	–	–	–	–	–	–	–	–	–	5	2	1	6	–	–	1	–	–	–
2 (1.2)	–	–	–	–	–	–	–	–	–	–	2	–	2	8	–	–	–	–	–	–
3 (1.3)	–	–	–	–	–	–	–	4	–	–	3	–	–	4	–	1	–	–	–	–
4 (1.4)	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–
Beakers																				
Unspec. (2.0)	–	–	–	–	1	–	–	2	–	1	1	–	–	–	–	–	–	–	–	–
Poppyhead (2.1)	–	–	–	–	–	–	1	–	1	1	–	–	–	–	–	–	–	–	–	–
Drag. 67 (2.2)	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Roughcast (2.3)	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Butt (2.4)	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Bowls and dishes																				
Drag. 36 (3.1)	3+?1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Drag. 42 (3.2)	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
5 (3.4)	–	–	–	–	–	–	–	–	–	–	–	–	1	4	–	–	–	–	–	–
6 (3.5)	–	–	–	–	–	–	–	–	–	–	–	1	–	1	–	–	–	1	–	–
Platters																				
Drag. 18/31 (4.1)	1	–	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Cam. 14 (4.3)	–	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
7 (4.2)	–	–	–	–	–	–	–	–	–	–	–	–	–	2	–	–	–	–	–	–
Cups																				
Drag. 27 (5.1)	4	–	–	5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Drag. 35 (5.2)	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Curle 11 (5.3)	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Curle 23 (5.5)	1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
8 (5.4)	–	–	–	–	–	–	–	–	–	–	–	–	4	4	–	–	–	1	–	–
Flagons																				
Unspec. (6.0)	–	–	–	3	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1	–
Pulley-rim (6.1)	–	–	–	2	–	–	–	–	–	1	–	–	–	–	–	–	–	–	1	–
Miscellaneous																				
Unguentarium (7.0)	–	–	–	–	–	–	–	–	–	1	–	–	–	–	–	–	–	–	–	–
Total	16	1	1	12	1	1	1	6	1	4	16	3	8	33	1	1	1	2	3	1

Table 39 Romano-British vessel forms by grave

Grave	*Jar*	*Beaker*	*Bowl/ dish*	*Platter*	*Cup*	*Flagon*	*Unguent-arium*	*Total*
20392	1	1	1	1	1	2	–	7
20464	1	–	1	–	1	–	–	3
20536	2	1	–	–	2	–	–	5
20538	2	1	4	–	–	–	–	7
20576	1	–	–	–	–	–	–	1
20587	2	1	–	–	–	1	–	4
20591	1	–	–	–	–	–	–	1
20602	1	–	–	–	–	–	–	1
20611	–	1	–	–	–	–	–	1
20665	1	–	–	–	–	–	–	1
20678	1	–	–	–	–	–	–	1
20686	–	1	–	–	–	–	–	1
20705	2	1	1	–	1	–	–	5
20713	3	–	–	–	–	1	–	4
20721	2	1	–	–	–	–	–	3
20723	1	–	–	–	–	–	–	1
20725	1	1	1	1	–	–	–	4
20727	3	–	–	–	3	–	–	6
20731	1	–	–	–	–	–	–	1
20733	1	–	–	–	–	–	1	2
20735	1	–	–	–	–	–	–	1
20737	2	–	–	–	1	–	–	3
20739	–	–	1	–	2	–	–	3
20741	2	1	–	–	–	–	–	3
20748	1	–	1	–	2	1	–	5
20754	1	–	–	–	–	–	–	1
20780	–	–	–	1	2	–	–	3
20785	1	–	–	–	–	–	–	1
20787	3	–	–	–	–	–	–	3
20791	5	–	1	–	1	–	–	7
20793	–	1	1	–	–	–	–	2
20803	3	1	1	–	2	1	–	8
20805	1	–	–	–	–	–	–	1
20818	2	–	–	1	–	–	–	3
20817	1	–	–	–	–	–	–	1
20820	1	–	–	2	4	2	–	9
Total	51	12	13	6	22	8	1	113

Nb Tables 38 and 39 do not include ON 27391 from grave 20723 (stolen from site)

Other imported wares

Other than samian, only one imported ware was present: Central Gaulish colour-coated ware, represented by a single roughcast beaker from grave 20803 (ON 27446). This ware has been fully described and discussed by Greene (1979, 43–9); the example from Westhampnett was identified on the basis of the characteristic decoration consisting of the application of small granules of clay.

Central Gaulish colour-coated ware is found in pre-Flavian contexts in this country, for example nearby at Fishbourne (Cunliffe 1971, fig. 90, type 77) and Chichester–Cattle Market (Rigby 1989, 116), but it should be noted that the production of beakers continued into the 2nd century AD (Greene 1979, 43).

British samian, by Brenda Dickinson

A platter in a close imitation of samian (Drag. 18/31) has been identified as a product of the so-called 'Pulborough potter' (grave 20780, ON 27433). This platter is stamped OFVERIAN, identified as the stamp of G. Se– Verianus (die 2b).

This interesting vessel carries a stamp which has not been recorded before. Another, with the same reading but from a different die, occurs only in Britain, particularly in Sussex and the south-east. A third, from Ware, Hertfordshire, reading OFGSII•VIIR•, adds a possible *praenomen* and abbreviated *nomen*. The potter's wares are characterised by their poor workmanship, overfired fabrics, and poor glazes, which tend to form small blisters. The Westhampnett piece displays all these failings. This man is almost certainly one of the potters working at Pulborough in Sussex, where fragments of moulds for decorated ware were found on the site of the Roman villa. Bowls with the same type of decoration and in the same distinctive fabric are known from sites such as Chichester (Simpson 1952, fig. 5, 4–5) and Wiggonholt (Webster 1975, 164–6), where there were also a few plainware vessels (*ibid.*, 167–8) and the ware is also found nearby at Boxgrove–Ounce's Barn (Bedwin and Orton 1984, 73). The potter's use of *officina* suggests that workmen were involved in the enterprise; it is not yet certain that any other associated potters used their own name-stamps, but there is one other man who produced very similar fabrics and he may possibly have worked with Verianus. No kilns have been found so far, but there must surely have been at least one at Pulborough. One of the potters involved in making the decorated ware seems to have been responsible for a bowl found at Aldgate, London, which was either a waster or a casualty of the Hadrianic fire (Simpson 1952, 69). The figure-types and motifs are derived from ones used by Central Gaulish potters of Les Martres-de-Veyre and Lezoux, working in the Trajanic and Hadrianic periods. The British venture is not likely to have been later than Hadrian, to judge by the types of plain ware recorded so far.

Pale-firing fine wares

Two fabrics can be distinguished on the basis of colouring: both are pale-firing, indicating the use of an iron-poor clay matrix.

M100 Soft, fine silty matrix; sparse fine mica; rare red iron oxides; wheelthrown; oxidised pale orange–pink.

Q123 Soft, fine silty matrix; sparse, fairly well-sorted subrounded quartz <0.25 mm; rare red iron particles <1 mm; sparse fine mica; wheelthrown; oxidised pale orange–pink.

Fabric Q123 is represented by a single vessel (grave 20741, ON 27405), probably a small beaker. Fabric M100, occurring in four graves, is used for flagons, platters imitating a Gallo-Belgic form (*Cam.* 14), and cups imitating samian form 27: a total of 12 vessels (see Table 38). Seven of these vessels (four cups, two platters, and a flagon) occur together in one grave (grave 20820).

Fine, pale-firing wares comparable to these two fabrics, notably in flagon forms, have been found in some quantity in early Roman contexts at Fishbourne and in Chichester. It has not yet been established whether these represent local, traded, or imported wares (e.g. Rigby 1989, 117); certainly the forms represented were imported from continental Europe during the pre-Flavian period and later, but the evidence from Fishbourne and Chichester suggests that these forms were being copied from a very early date, either by a local or a non-local British source. Both the Gallo-Belgic platter imitations and the samian form 27 imitations occur at Fishbourne in Period 1 (AD 43–75), continuing in use sporadically into the Flavian period (Cunliffe 1971, pottery types 14 and 50 respectively); flagons (*ibid.*, types 113/114) are also found in Period 1 but are more common in the later 1st/early 2nd century AD. This dating is confirmed by vessels from Chichester (Rigby 1989, fig. 16.1).

Fine micaceous wares

This group of five fabrics has been defined on the basis of the fineness of the clay matrix and inclusions; all are sparsely to moderately micaceous.

I100 Soft, moderately fine, micaceous sandy matrix, slightly powdery feel; sparse, poorly-sorted black iron oxides <0.5 mm; wheelthrown; unoxidised.

I103 Very hard, fine sandy matrix; rare fine mica; rare fine black iron particles; wheelthrown; oxidised with unoxidised surfaces.

M101 Soft, very fine silty matrix; sparse fine mica; sparse iron particles <0.25 mm; rare carbonaceous material <0.5 mm; wheelthrown; unoxidised with oxidised margins.

Q106 Soft, moderately fine matrix with a slightly powdery feel; common, well-sorted rounded quartz <0.25 mm; rare iron oxides and mica <0.25 mm; wheelthrown; unoxidised.

Q122 Soft, moderately fine matrix; sparse, poorly-sorted subrounded quartz <0.5 mm; rare red iron particles <1 mm; rare fine mica; wheelthrown; oxidised.

With the exception of fabric Q122, all fabrics are restricted to small jar or beaker forms. Where the form of these can be ascertained, they comprise small ovoid vessels with burnished lattice or some other linear design (fabric M101), poppyhead beakers (fabrics I103, Q106, Q122), and one butt beaker (fabric I100). Fabric Q122 also includes one flagon and an *unguentarium* (grave 20733, ON 27400).

Some of these wares may be of local production. One group of kilns has been excavated in Chichester, which was producing fine wares of Gallo-Belgic type, as well as 'native' coarseware forms, in the mid-1st century AD, perhaps as part of the early military presence (Down 1978, 204–10, figs 10.3–10.5).

Coarse sandy wares

Coarse sandy wares make up most of the Romano-British cemetery assemblage, occurring in all but four of the 36 graves. Ten separate fabric types were identified.

Q100 Hard, moderately coarse matrix; common, well-sorted quartz <0.5 mm; rare iron particles, sometimes 'smeared' on exterior; very rare grog/clay pellet <1 mm; handmade or wheelthrown; unoxidised, sometimes with oxidised margins; distinctive 'speckly' appearance.

Q101 Hard, moderately coarse matrix; moderate, fairly well-sorted subrounded quartz <0.25 mm; handmade or wheelthrown; unoxidised, sometimes with oxidised margins.

Q102 Hard, moderately fine matrix; moderate, fairly well-sorted subrounded quartz <0.25 mm; sparse red iron particles; wheelthrown; oxidised with unoxidised surfaces.

Q103 Hard, moderately coarse matrix; common, fairly well-sorted subrounded quartz <0.25 mm; sparse red/black iron particles <1 mm, sometimes 'smeared' on exterior; rare carbonaceous material <2 mm; wheelthrown; generally at least partially oxidised.

Q104 Soft, moderately fine matrix; sparse to moderate, fairly well-sorted subrounded quartz <0.25 mm; sparse iron particles <1 mm; rare fine mica; wheelthrown; unoxidised with oxidised margins.

Q107 Hard, moderately fine matrix; moderate, well-sorted, subrounded quartz <0.25 mm; rare carbonaceous material <1 mm; rare iron oxides <0.25 mm; rare very fine mica; wheelthrown; unoxidised.

Q108 Soft, moderately fine matrix; rare, subrounded quartz <0.25 mm; rare carbonaceous material <1 mm; rare iron particles <0.25 mm; wheelthrown; oxidised pale orange–buff to brown.

Q116 Hard, moderately fine matrix; moderate, fairly well-sorted subrounded quartz <0.5 mm; rare red iron particles <0.5 mm; wheelthrown; oxidised buff–pink, externally unoxidised.

Q118 Hard, moderately fine matrix; moderate, fairly well-sorted subrounded quartz <0.5 mm; sparse, poorly-sorted red iron particles <1 mm; wheelthrown; oxidised, buff to orange–pink.

Q119 Hard, moderately coarse matrix; moderate, well-sorted subrounded quartz <0.25 mm; rare carbonaceous material <3mm; sparse red iron particles <0.5mm; wheelthrown; oxidised buff–pink with unoxidised core.

These fabrics are used predominantly for jar forms, and also for bowls, platters, cups and flagons. The following forms have been defined:

Jars and beakers

1 High-shouldered jars, in a range of sizes. The smaller examples frequently have vertical burnished lines (as paired lines, chevrons, or 'hairpins') below the shoulder. All examples are handmade. Paralleled at Fishbourne (Cunliffe 1971, type 316), where the type is found throughout the 2nd and 3rd centuries AD.

2 Rounded jars with simple everted rims, in a range of sizes. Three examples are decorated, one with burnished, horizontal linear and curvilinear motifs, one with vertical lines, as for Type 1, and one with incised 'S' motifs on the shoulder. One example has a tally mark below the rim (see Fishbourne type 313, a Rowlands Castle type). Both handmade and wheelthrown examples.

3 Ovoid jars or beakers with simple everted rims, in a range of sizes. Decoration is confined to the smaller examples, and consists of burnished lattice, chevrons, or diagnonal lines in a band around the body of the vessel. These examples are generally burnished externally above and below the zone of decoration. Both handmade and wheelthrown examples.

4 Carinated jar; one example only.

Bowls and dishes

5 Hemispherical bowls with hooked-over rims. Three matching bowls from one grave, and two other examples which are of slightly variant forms. Both the latter have incised decoration on the rims. All handmade. Hooked-rim bowls occur at Fishbourne in pre-Flavian contexts, but these examples have reeded rims (Cunliffe 1971, type 87).

6 Flat-rimmed, convex-sided bowls. This is not a particularly well-defined form; the three examples are of varying sizes and diameter:depth ratios. All handmade.

Platters

7 Copy of a Gallo-Belgic platter (Cam 2). Pre-Flavian.

Cups

8 Carinated cups. This type includes imitations of Gallo-Belgic 'bell cups', a pre-Flavian form at Fishbourne (Cunliffe 1971, type 48). These vessels, all handmade, are burnished above the carination, and three are decorated below with burnished vertical 'hairpins'. A further example is plain. Other examples in this group are variants: two with upright rims above a pronounced carination, one decorated with vertical 'hairpins'; one with a small everted rim and burnished lattice decoration above the carination (see Fishbourne type 209); and one with a hooked over rim similar to bowl Type 5.

Most of the coarse sandy fabrics occur in small quantities only, and potential source areas are difficult to pinpoint. One type which can be fairly confidently attributed to a particular source, however, is the greyware Q100, which is comparable to products of the Rowlands Castle kilns. Fabric Q103 appears to be an oxidised version of the same fabric. These two fabrics, with the characteristic iron oxide inclusions giving a distinctive 'speckly' appearance, match closely the fabric descriptions for Fabric Groups A and B at Fishbourne (Cunliffe 1971, 252–3), found from the pre-Flavian period through to the 3rd century AD.

Petrological analysis has indicated that these two fabric groups are indistinguishable, suggesting either that they are products of the same kiln, or that they are products of two kilns, or kiln groups, utilising the same band of clay (Peacock 1971). Certain forms found at Fishbourne in periods 2 and 3, notably the everted rim jars with 'tally marks' below the rim (Cunliffe 1971, type 313–4), match products of the Rowlands Castle kilns, but it seems likely, from the date range of Fabric Groups A and B, that kilns in this area were in production from at least the late 1st century AD, using the market of Chichester as their major outlet (*ibid.*, 254).

This is supported by the evidence from Westhampnett. Fabrics Q100 and Q103 are the most commonly represented fabric types within the Romano-British cemetery assemblage, as might be expected for local products, and also dominate the Romano-British assemblage from Westhampnett Area 3 (Volume 1). Fabric Q100 is restricted to jar forms (Types 1–3), while fabric Q103, also used predominantly for jar forms, is

Table 40 date ranges of grave groups (pottery)

Grave	*Ware/form*	*Date range (AD)*
20392	samian	125–145
20454	samian	120–140
20536	poppyhead beaker	70–150
20538	poppyhead beaker	70–150
20576		?
20587	poppyhead beaker	70–150
20591	greyware jar	2nd–3rd century
20602	greyware jar	2nd–3rd century
20612	greyware beaker	70–150
20665	greyware jar	2nd–3rd century
20678	greyware jar	2nd–3rd century
20686	samian	70–120
20705	greyware jars/bowls	70–150
20713	flagon	70–150
20721	butt beaker	pre-Flavian/?Flavian
20723	greyware jar	2nd–3rd century
20725	G-B copy/bowl	70–150
20727	samian	100–120
20731	greyware jar	2nd–3rd century
20733	greyware jar	2nd–3rd century
20735	greyware jar	2nd–3rd century
20737	carinated bowl	70–150
20739	bowl	70–140
20741	greyware jars	2nd–3rd century
20748	carinated bowl	100–150
20754	greyware jar	2nd–3rd century
20780	British samian (stamped)	100–150
20785	greyware jar	2nd–3rd century
20787	greyware jars	2nd–3rd century
20791	samian	100–150
20793	samian	2nd century
20803	samian	100–150
20805	greyware jar	2nd–3rd century
20817	greyware jar	2nd–3rd century
20818	G-B platter copy	70–150
20820	whitewares	70–150

also found in all the other forms listed above. One interesting difference, however, can be discerned between the fabric Q100 and Q103 vessels from the cemetery and those from Area 3: the latter are mainly wheelthrown, as are the published examples from Fishbourne, whereas the cemetery vessels are nearly all handmade (probably coil-built).

Date of the Cemetery

Given the lack of associated artefacts, the dating of the cemetery vessels relies heavily on the more closely datable finewares, such as samian, and on comparisons with assemblages from other sites in the area, such as the St Pancras cemetery in Chichester, and Fishbourne. The possibility of the curation of such fineware vessels as 'family heirlooms' beyond the period of their generally recognised circulation should be borne in mind, and potential evidence for such a practice can be seen in the presence of the 'cut-down' samian dish (grave 20538, ON 27313).

While many of the vessel forms from the Westhampnett cemetery can be paralleled amongst the Period 1 assemblage (AD 43–75) from Fishbourne (Cunliffe 1971), few if any appear to be exclusively pre-Flavian. Forms originating in the pre-Flavian period at Fishbourne include Central Gaulish roughcast beakers, native copies of butt beakers, convex-sided bowls (Type 6), whiteware cups imitating Drag 27 forms, flagons with pulley-rims, and Gallo-Belgic copies including *Cam.* 14 and *Cam.* 2 platters, and carinated ('bell') cups (*Cam.* Type *56*). Of these, only the butt beaker does not continue in use into the Flavian period (*ibid.*, types 64–5); the remainder are also found in late 1st and early 2nd century AD contexts. The flagons in fact become more common in the Flavian period (*ibid.*, type 297). Given the complete absence of Gallo-Belgic wares and pre-Flavian samian forms, a probable start date for the cemetery no earlier than *c.* AD 70 may be proposed, in line with similar reasoning for the St Pancras cemetery in Chichester (Down and Rule 1971, 69).

A currency within the late 1st/early 2nd century (AD 70–140) can be suggested for the poppyhead beakers and the hemispherical flanged bowls (Type 5), while most of the samian forms would indicate a range within the first half of the 2nd century AD.

The only forms which have a potential date range later than AD 150 are the jars, none of which are particularly closely datable, but are found at Fishbourne throughout the 2nd and 3rd centuries AD. The example with the tally mark, in particular (grave 20665, ON 27362), may be compared with examples from Area 3 which are dated by comparison with Fishbourne to the late 2nd/3rd century AD, although the possibility of an earlier date is discussed (Volume 1). In most cases, however, these jars are associated with the late 1st/early 2nd century AD forms listed above, with the result that a date range for the Westhampnett cemetery beyond the mid 2nd century AD cannot definitely be proposed. The dating for individual graves is summarised in Table 40.

Vessels Used as Containers for Cremated Bone

In 19 graves the bones were contained within a ceramic vessel. In all cases the vessel was either a jar or beaker; several different forms were employed (high-shouldered jars (4 examples), rounded jars (5), ovoid jars (3), carinated jar (1), poppyhead beaker (1), butt beaker (1), jar of unknown form (1), and beaker of unknown form (1)). The use of jars in particular as cinerary containers is a widespread and common practice during the Romano-British period (Philpott 1991, 30) and most of the vessels used at Westhampnett reflect the general practice of choosing simple, locally-produced, domestic vessels, with jars in the Rowlands Castle-type fabrics Q100 and Q103 most commonly used, as well as single

examples in each of fabrics Q102, Q104, and Q107. Some variation is apparent, however, with the occasional use of beakers in fine micaceous fabrics (I100, M101, Q122). A very similar pattern can be observed amongst the vessels from the early Roman cemetery at St Pancras, where greyware jars were by far the most common cinerary containers (Down and Rule 1971).

Vessels as Accompanying Furniture

The evidence for the use of pottery vessels to accompany cremation burials is discussed by Philpott (1991, 30–3), who suggests that a general pattern is observable in cemeteries of late 1st–2nd-century AD date in that the majority of cremation burials in these cemeteries were accompanied by between one and four vessels, including the cinerary urn. At Westhampnett the majority of the cremation burials (30 of 35, 86%) were accompanied by 1–5 vessels (13 burials with 1 pot, 3 with 2, 8 with 3, 3 with 4, 3 with 5), with a small number of more well-furnished graves with 6–9 vessels (1 with 6, 3 with 7, 1 with 8, 1 with 9). Non-ceramic items in the graves were limited to two wooden caskets or boxes, a pair of boots or shoes, a mirror, and two glass vessels. Although the glass vessels were found in graves containing four pots and eight pots respectively, they do not substantially alter the calculation.

Pottery from Other Features

Two other features contained Romano-British pottery. The first (20472) contained charcoal, cremated bone, smolten glass, and pottery, and is interpreted as a pyre-related feature. Parts of two vessels were present, one bead-rimmed jar in fabric Q103 (ON 27781; Fig. 140), and the base of a second jar of unknown form in fabric Q100. The bead-rimmed jar has been partially burnt. This is the only pyre-related feature which can be dated to the Romano-British period, and whether the vessel had been deliberately or accidentally burnt is open to question.

A shallow east-west slot (20762) to the north of the ring ditch, cut by grave 20754 (Fig. 40), produced 14 sherds in fabric Q103 and seven in fabric Q105. No vessel forms could be determined.

10 Ceramic Building Material and Fired Clay

A very small quantity of tile (6 fragments, 832 g) was identified as Romano-British on the basis of fabric and form. Five of the pieces were unstratified, the sixth was from undated ditch 20105. One of the unstratified fragments is from a *tegula*, the others are unidentifiable.

Part of a spindlewhorl made from a roughly trimmed Romano-British greyware sherd in pottery fabric Q100 came from the ditch of the Anglo-Saxon enclosure 20210. Such objects are common finds from Romano-British contexts (Crummy 1983), and this seems likely to be a curated or residual Romano-British object, although it is of course possible that it was manufactured in the Saxon period.

11 Catalogue of Romano-British Graves

* vessel containing cremated bone

Grave 20392 (Fill 20393)

(Figs 40; 146)
SU 89588.0/06710.0; circular, length 0.45 m, width 0.35 m.
Unurned (and possibly urned) dual cremation burials; 29.5 g of cremated bone: position of 27.9 g of cremated bone not recorded; 1.6 g from vessel 27211 to NW of accessory vessels; infant and subadult/adult.

ON 27218: Iron, nail; with mineral-preserved wood indicating that it joined a radial surface board 11 mm thick to an oak (*Quercus* sp.) board. This and 27222 have evidence for a joint and probably represent one corner of a leather covered casket (*JW*); length 40 mm.
ON 27219: Iron, nail; mineral-preserved wood (oak, *Quercus* sp), possibly with mineral-preserved leather over the head; head diam. *c.* 27 mm.
ON 27220: Iron, nail; mineral-preserved wood (oak, *Quercus* sp.); head diam. 16 mm.
ON 27721: missing, but probably an iron nail.
ON 27222: Iron, nail; mineral-preserved wood (oak, *Quercus* sp.) indicating that it was put through a radial surface board *c.* 11 mm thick, forming a joint with 27218; length 27 mm.
*ON 27211: High-shouldered jar (Form 1.1), fabric Q101; burnished vertical 'hairpins' on body; handmade.
ON 27212: Flagon (Form 6.1), fabric M100; wheelthrown.
ON 27213: Small, straight-sided bowl (Form 3.5), fabric Q101; handmade.
ON 27214: Samian platter, South Gaulish, Drag 18/31; illegible stamp.
ON 27215: Cup or small bowl imitating samian form Drag. 27, fabric M100; wheelthrown.
ON 27216: Samian decorated beaker, Central Gaulish, Drag 67.
ON 27217: Flagon of unknown form, fabric M100; wheelthrown.

Grave 20454 (Fill 20455)

(Figs 40; 146)
SU 89587.5/06705.5; grave cut not recognised.
No cremated bone recovered.

ON 27242: Samian dish, Central Gaulish, Drag. 42.
ON 27243: Base of jar of unknown form, fabric Q100; probably handmade.
ON 27256: Samian cup, South Gaulish, Drag 35.

Grave 20536 (Fill 20537)

(Figs 40; 147)
SU 89597.8/06704.8; circular, length 0.42 m, width 0.37 m, depth 0.21 m.
Urned and unurned cremation burial; 605.1 g of cremated bone: 586.2 g in urn to NE of accessory vessels (plus 18.9 g from grave fill); older mature adult; male.

ON 27596: Iron, nail shank; mineral-preserved wood (probably oak, *Quercus* sp.) (*JW*); length 23 mm.
*ON 27274: Rounded jar (Form 1.2), fabric Q100; handmade.
ON 27302: Small carinated cup (Form 5.4), fabric Q102; burnished 'hairpins' on lower part of body; horizontal burnishing above carination; handmade.
ON 27303: Poppyhead beaker (Form 2.1), fabric I103; barbotine dots in rectangular panels; wheelthrown.
ON 27304: Small carinated cup (Form 5.4), fabric Q102; burnished 'hairpins' on lower part of body; horizontal burnishing above carination; handmade.

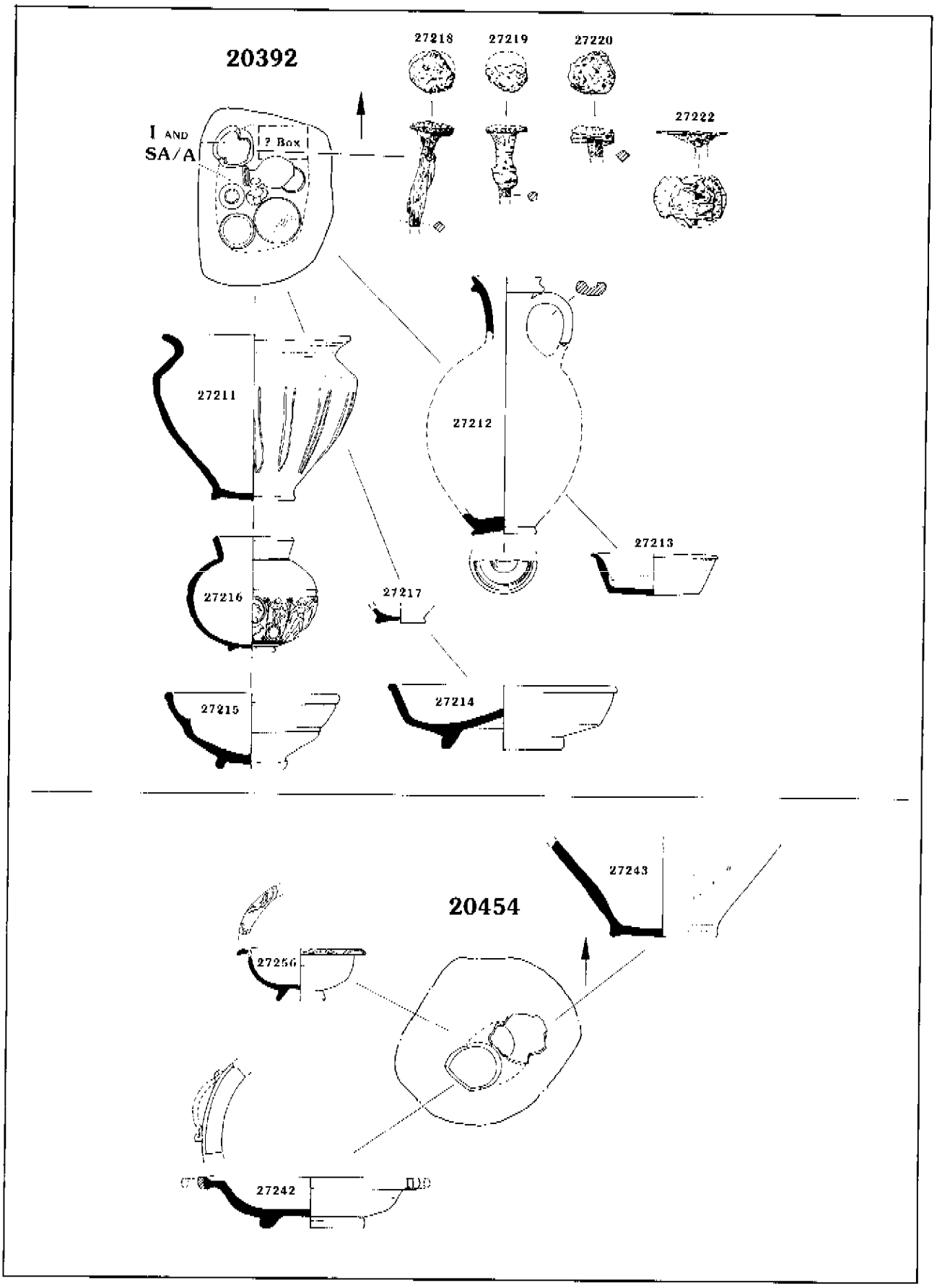


Figure 146 Graves 20392, 20454

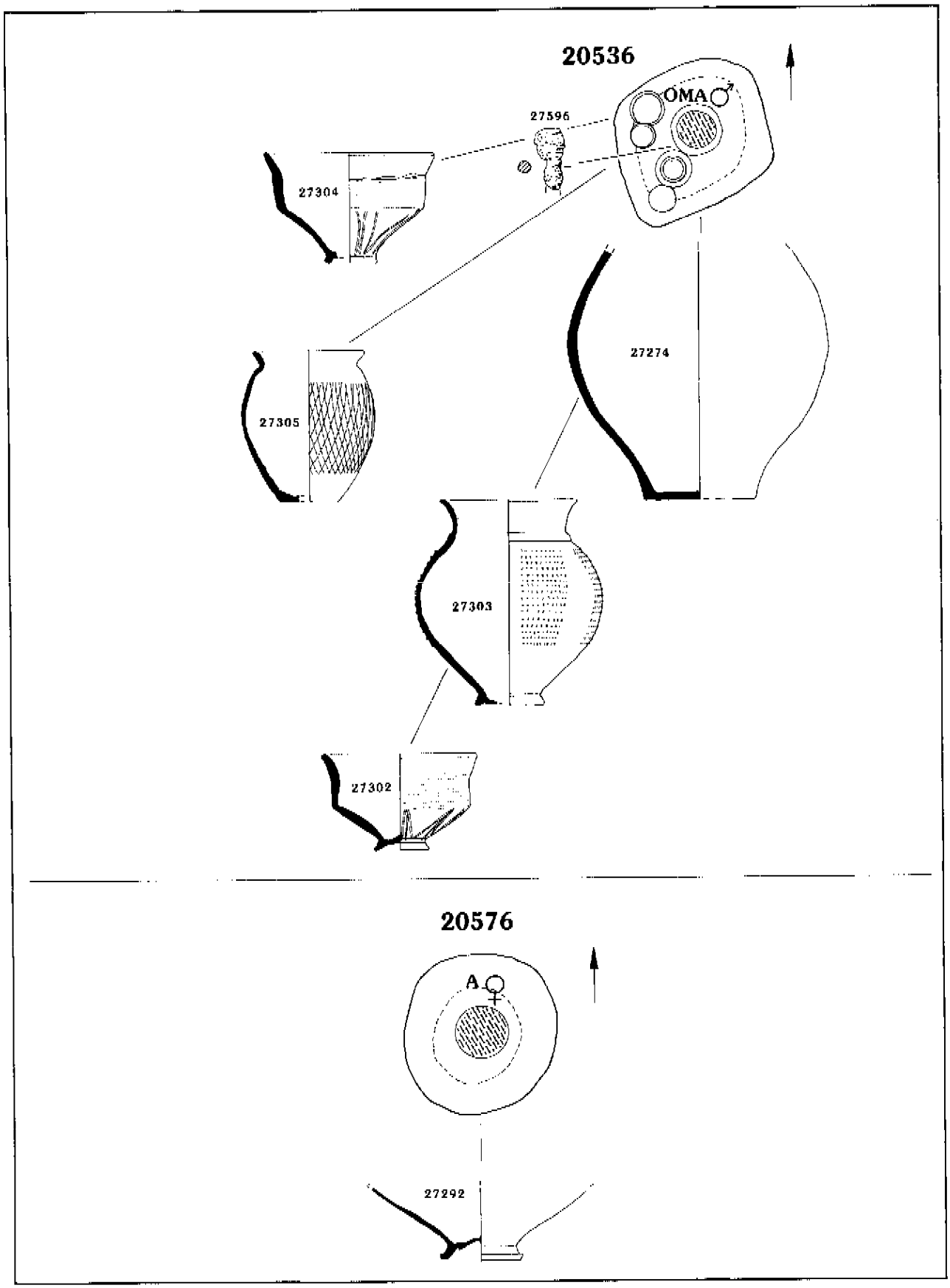


Figure 147 Graves 20536, 20576

ON 27305: Ovoid jar (Form 1.3), fabric M101; burnished lattice decoration; burnished above and below decorated zone; wheelthrown.

Grave 20538 (Fill 20539)

(Figs 40; 148)
SU 89598.2/06704.0; oval, orientation N–S, length 0.6 m, width 0.4 m, depth 0.11 m.
Urned cremation burial; 618.3 g of cremated bone in urn to NW of accessory vessels; older mature adult; possible male. Sheep/goat or pig bone unburnt, not located.

*ON 27275: Rounded jar (Form 1.2), fabric Q103; handmade.
ON 27308: Rounded jar (Form 1.2), fabric Q103; handmade.
ON 27309: Poppyhead beaker (Form 2.1), fabric Q106; barbotine dots in rectangular panels; partially slipped externally; wheelthrown.
ON 27310–12: Hemispherical bowls with flanged rim (Form 3.4), fabric Q103; wheelthrown.
ON 27313: Samian dish, unknown form, possibly a Drag. 36 dish with the flange removed, South Gaulish.

Grave 20576 (Fill 20577)

(Figs 41; 147)
SU 89604.3/06703.5; circular, length 0.53 m, width 0.4 m, depth 0.11 m.
Urned cremation burial; 312.3 g of cremated bone in urn in centre of cut; adult; possible female.

*ON 27292: Base of fine jar or beaker with pedestal base, fabric M101; wheelthrown.

Grave 20587 (Fill 20586)

(Figs 41; 148)
SU 89604.0/06705.4; square, orientation NNW–SSE, length 0.55 m, width 0.4 m, depth 0.15 m.
Urned and unurned cremation burial; 89.2 g of cremated bone: 70.4 g in urn to SW of accessory vessels, 18.1 g in centre and at W of cut; adult.

ON 27338–9 (incl. 27651 and 27600): Iron, hobnails, minimum number of 68, representing two shoes; four typical hobnails, two from each shoe, are illustrated.
ON 27306: High-shouldered jar (Form 1.1), fabric Q100; burnished 'hairpins' on lower part of body; handmade.
*ON 27307: Poppyhead beaker (Form 2.1), fabric Q122; barbotine dots in rectangular panels; wheelthrown.
ON 27324: Flagon (Form 6.1), fabric Q118; wheelthrown.
ON 27325: Small rounded jar (Form 1.2), fabric Q103; handmade.

Grave 20591 (Fill 20590)

(Fig. 149)
Location of grave not known; grave cut not recognised.
Urned cremation burial; 176.2 g of cremated bone; older mature adult; female.

*ON 27315: Ovoid jar (Form 1.3), fabric Q100; handmade.

Grave 20602 (Fill 20603)

(Figs 40; 149)
SU 89586.2/06711.2; grave cut not recognised.
Urned cremation burial; 33.9 g of cremated bone; adult.

*ON 27320: High-shouldered jar (Form 1.1), fabric Q100; handmade.

Grave 20611 (Fill 20612)

(Figs 40; 149)
SU 89593.7/06701.0; circular, length 0.25 m, width 0.18 m, depth 0.10 m.
Unurned cremation burial; 410.2 g of cremated bone in W of cut; older mature/older adult; possible female.

ON 27553: Beaker of uncertain form, fabric Q100; handmade.

Grave 20665 (Fill 20666)

(Figs 40; 149)
SU 89595.8/06700.7; oval, orientation NW–SE, length 0.7 m, width 0.45 m, depth 0.15 m.
Urned cremation burial; 218.3 g of cremated bone in (and at mouth of) urn at SW of cut; adult.

ON 27364: Iron, nail; mineral-preserved wood (unidentifiable to species) (*JW*); length 66 mm.
*ON 27362: Rounded jar (Form 1.2), fabric Q102; tally mark below rim; handmade.

Grave 20678 (Fill 20677)

(Figs 39; 149)
SU 89580.5/06711.4; circular, length 0.2 m, width 0.15 m, depth 0.1 m.
No cremated bone recovered.

ON 27365: High-shouldered jar (Form 1.1), fabric Q108; handmade.

Grave 20686 (Fill 20685)

(Figs 39; 149)
SU 89580.0/06712.2; oval, orientation NNW–SSE, length 0.27 m, width 0.15 m, depth 0.06 m.
No cremated bone recovered.

ON 27371: Samian decorated beaker, Drag 67, South Gaulish.

Grave 20705 (Fill 20704)

(Figs 40; 150)
SU 89595.7/06698.8; grave cut not recognised.
Urned cremation burial; 129.2 g of cremated bone in urn to S of accessory vessels; subadult/adult. Sheep/goat and unidentified animal bone.

ON 27627: Iron, nail; mineral-preserved wood (possibly ash, *Fraxinus* sp.) (*JW*); length 27 mm.
ON 27374: Convex-sided bowl with flanged rim (Form 3.5), fabric Q103; ?handmade.
ON 27375: Small carinated cup (Form 5.4), fabric Q103; handmade.
*ON 27376: Base of jar of unknown form, fabric Q100; handmade.
ON 27377: High-shouldered jar (Form 1.1), fabric Q103; burnished 'hairpins' on lower part of body; handmade.
ON 27378: Base of jar or beaker of unknown form, fabric Q119; wheelthrown.

Grave 20713 (Fill 20714)

(Figs 44; 150)
SU 89592.8/06693.3; grave cut not recognised.
Urned cremation burial, 213.3 g of cremated bone in urn in centre of accessory vessels; older mature/older adult; possible female.

ON 27379: Base of jar of unknown form, fabric Q100; handmade.
ON 27380: Small ovoid jar (Form 1.3), fabric M101; burnished lattice decoration; wheelthrown.

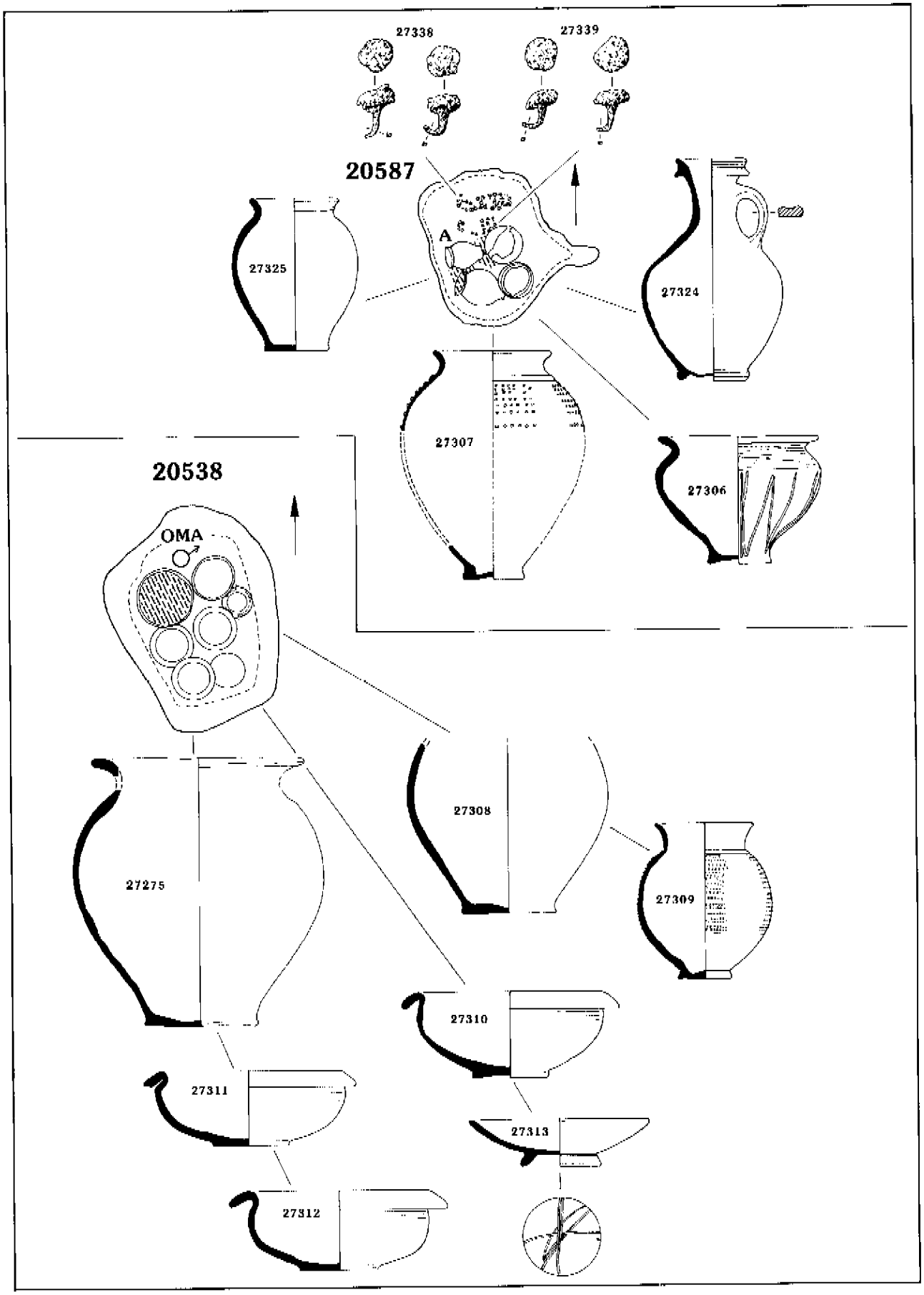


Figure 148 Graves 20538, 20587

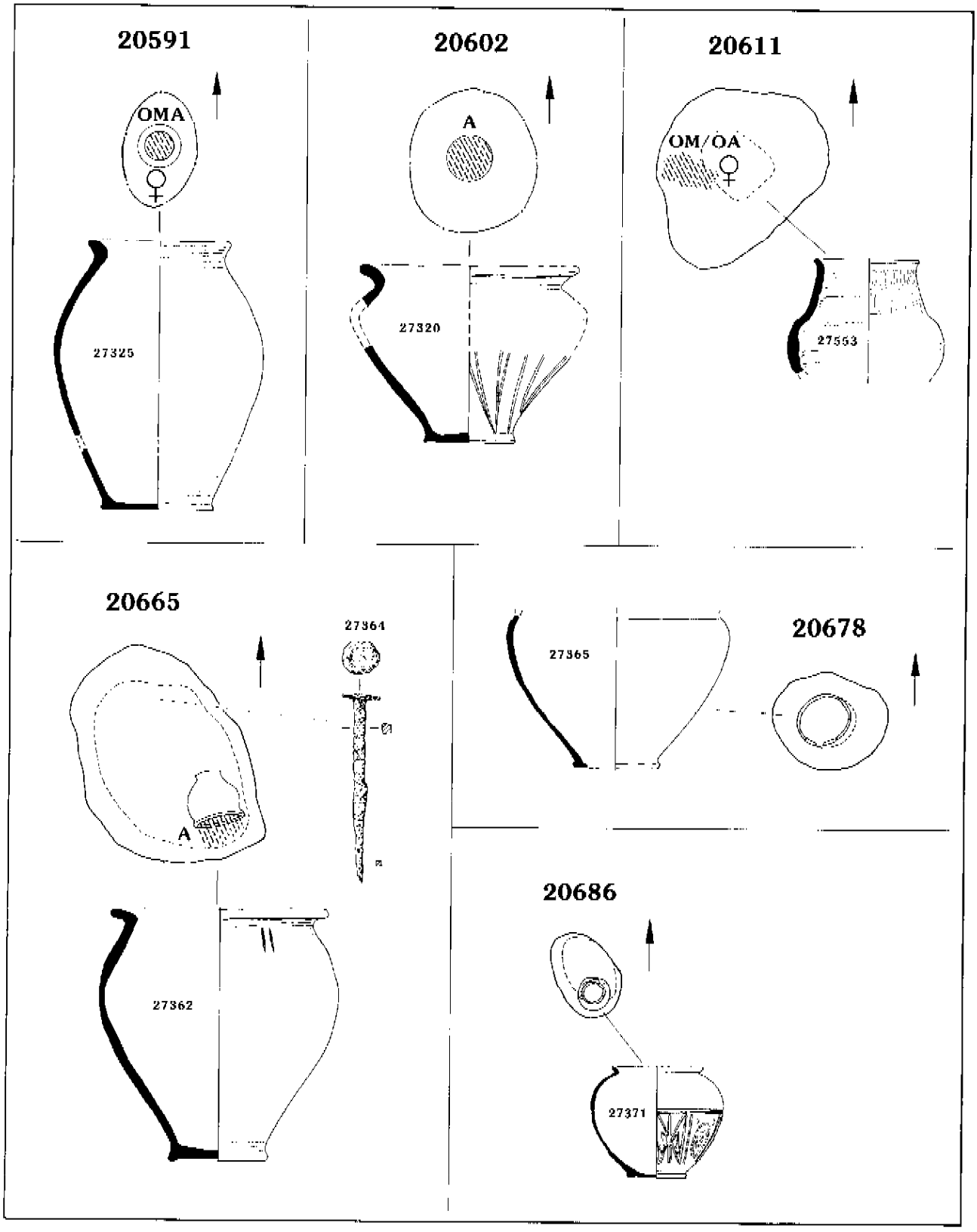


Figure 149 *Graves 20591, 20602, 20611, 20665, 20678, 20686*

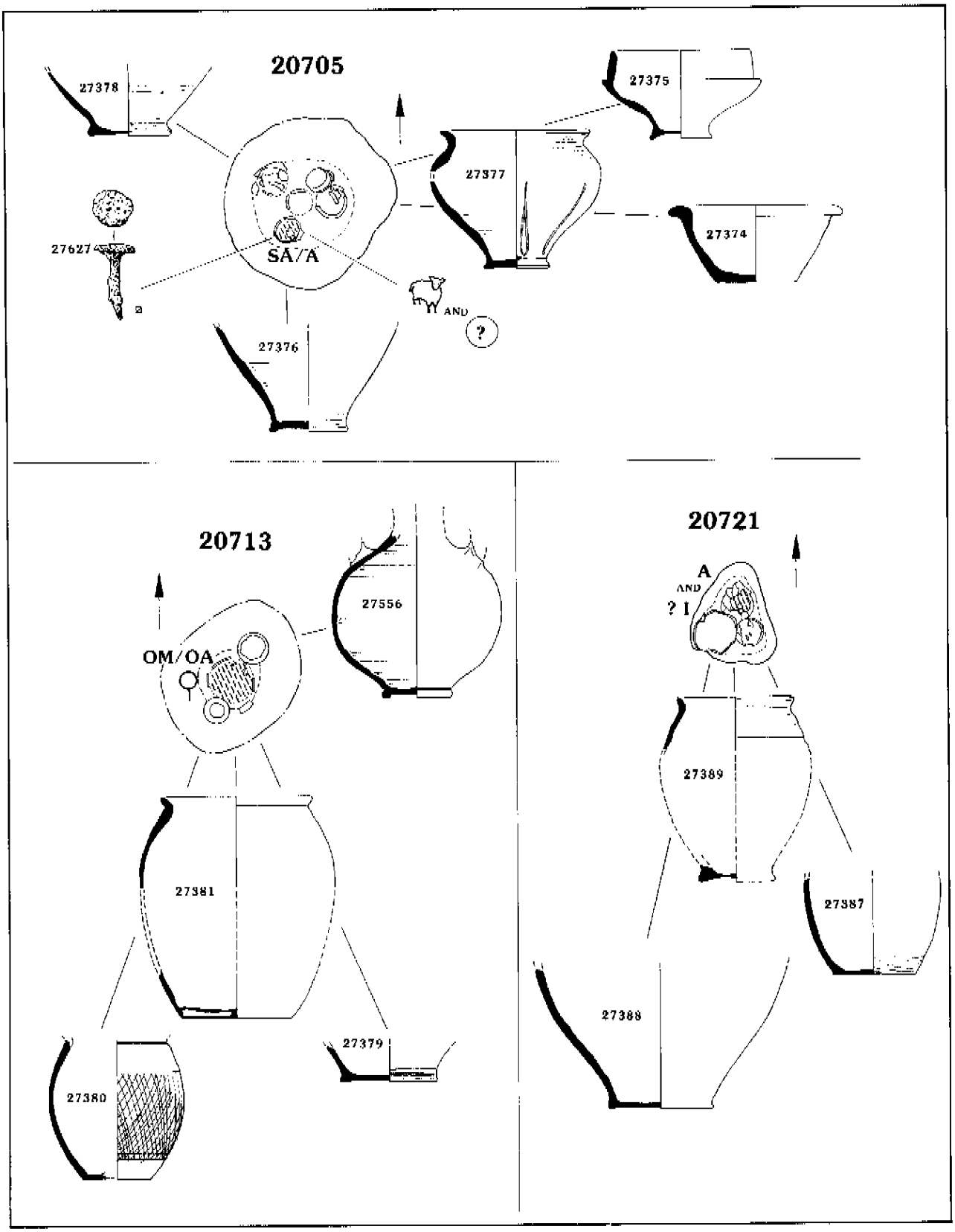


Figure 150 Graves 20705, 20713, 20721

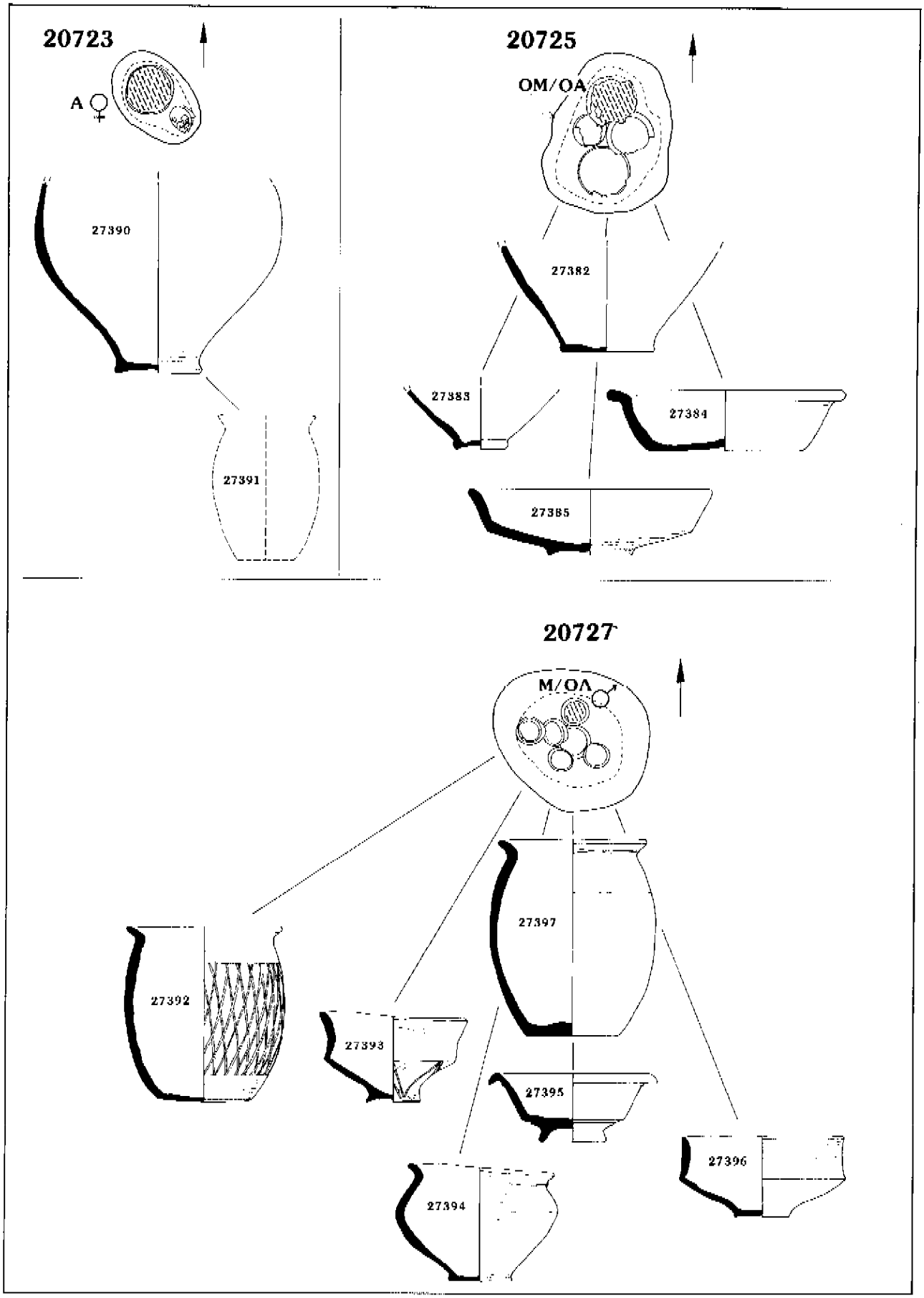


Figure 151 Graves 20723, 20725, 20727

*ON 27381: Ovoid jar (Form 1.3), fabric M101; wheelthrown.
ON 27556: Flagon of unknown form, fabric M100; wheelthrown.

Grave 20721 (Fill 20722)
(Figs 44; 150)
SU 89593.0/06692.0; irregular, length 0.2 m, width 0.2 m, depth 0.08 m.
Urned and unurned dual cremation burials; 27.3 g of cremated bone: 26.2 g in urn to N of accessory vessels; 1.1 g unurned; immature and adult.

ON 27387: Base of small ovoid jar (Form 1.3), fabric M101; wheelthrown.
ON 27388: Base of jar of unknown form, fabric Q100; handmade.
*ON 27389: Butt beaker, fabric I100, wheelthrown.

Grave 20723 (Fill 20724)
(Figs 44; 151)
SU 89592.6/06692.0; oval, orientation NW–SE, length 0.3 m, width 0.18 m, depth 0.9 m.
Urned cremation burial; 204.3 g of cremated bone in urn to NW accessory vessel; adult; possible female.

*ON 27390: Rounded jar (Form 1.2), fabric Q103); handmade.
ON 27391: Vessel fragments lost.

Grave 20725 (Fill 20726)
(Figs 40; 151)
SU 89588.5/06702.4; oval, orientation N–S, length 0.5 m, width 0.32 m, depth 0.07 m.
Urned cremation burial; 161.3 g. of cremated bone in urn to N of accessory vessels; older mature/older adult.

*ON 27382: Base of jar of unknown form, fabric Q103; handmade.
ON 27383: Base of jar or beaker of unknown form, fabric Q118; wheelthrown.
ON 27384: Convex-sided bowl with flanged rim (Form 3.5), fabric Q116; ?wheelthrown.
ON 27385: Platter imitating Gallo-Belgic form *Cam.* 2, fabric Q103; ?handmade.

Grave 20727 (Fill 20728)
(Figs 40; 151)
SU 89594.4/06694.8; circular, length 0.4 m, width 0.32 m, depth 0.18 m.
Urned cremation burial; 190.9 g of cremated bone in urn to N of accessory vessels; mature/older adult, possible male.

ON 27392: Ovoid jar (Form 1.3), fabric Q103; burnished lattice decoration; burnished above and below decorated zone; handmade.
ON 27393: Small carinated cup (Form 5.4), fabric Q103; burnished 'hairpins' on lower part of body; burnished above carination; handmade.
ON 27394: High-shouldered jar (Form 1.1), fabric Q103; handmade.
ON 27395: Samian cup, Curle 23, Central Gaulish (Lezoux).
ON 27396: Small carinated cup (Form 5.4), fabric Q103; burnished above carination; handmade.
*ON 27397: Ovoid jar (Form 1.3), fabric Q107; handmade.

Grave 20731 (Fill 20732)
(Figs 44; 152)
SU 89593.5/06691.5; oval, orientation NW–SE, length 0.6 m, width 0.35 m, depth 0.08 m.
Unurned cremation burial; 48.3 g of cremated bone at W of cut; adult, possible female.

ON 27615: Iron, rectangular staple; length 16 mm.
ON 27772: Iron, nail shank; length 19 mm.
ON 27399: Base of jar of unknown form, fabric Q103; handmade.

Grave 20733 (Fill 20734)
(Figs 40; 152)
SU 89596.2/06698.4; circular, length 0.2 m, width 0.17 m.
Urned cremation; 169.6 g of cremated bone in urn in centre of cut overlying vessel 27400; adult.

*ON 27398: High-shouldered jar (Form 1.1), fabric Q103; handmade.
ON 27400: *Unguentarium*, fabric Q122; wheelthrown.

Grave 20735 (Fill 20736)
(Figs 44; 152)
SU 89593.0/06692.6; grave cut not recognised.
No cremated bone recovered.

ON 27560: Base of jar of unknown form, fabric Q100; handmade.

Grave 20737 (Fill 20738)
(Figs 40; 152)
SU 89594.2/06696.7; circular, length 0.5 m, width 0.4 m, depth 0.14 m.
Unurned, possibly dual, cremation burial; 94.9 g of cremated bone to NE of accessory vessels; adult, also possibly immature.

ON 27401: Ovoid jar (Form 1.3), fabric Q103; burnished diagonal linear decoration; handmade.
ON 27402: Small carinated cup with flanged rim (Form 5.4), fabric Q103; handmade.
ON 27403: Base of ?high-shouldered jar (Form 1.1), fabric Q103; burnished chevrons on lower part of body; handmade.

Grave 20739 (Fill 20740)
(Figs 40; 153)
SU 89593.7/06702.7; square, orientation NW–SE, length 0.55 m, width 0.55 m, depth 0.20 m.
Unurned cremation burial; 81.2 g of cremated bone to W of accessory vessels and casket (but E of glass flagon); adult.

ON 27760: Iron, fittings (45 pieces) from a wooden casket; wood (beech (*Fagus* sp.)) only surviving as mineral-preserved traces on the fittings (*JW*). Subdivided into:
ON 27412: Lock bolt.
ON 27616: Split spiked loop put through a radial surface board 7.5 mm thick; perhaps used to attach a drop handle.
ON 27656 and 27754: Rectangular staples.
ON 27744–6, 27750 and 27751: Split spiked loops, probably used as hinges.
ON 27747, 27749 and 27756: Spike headed nails
ON 27748 and 27755: Nails with triangular heads. Some have evidence for joints, attaching radial surface boards 7–10 mm thick, to the adjacent sides. The head would have been flush with the surface and would not project into any leather covering.
ON 27752: Seven fragments from 3–4 split spiked loops; not illustrated.

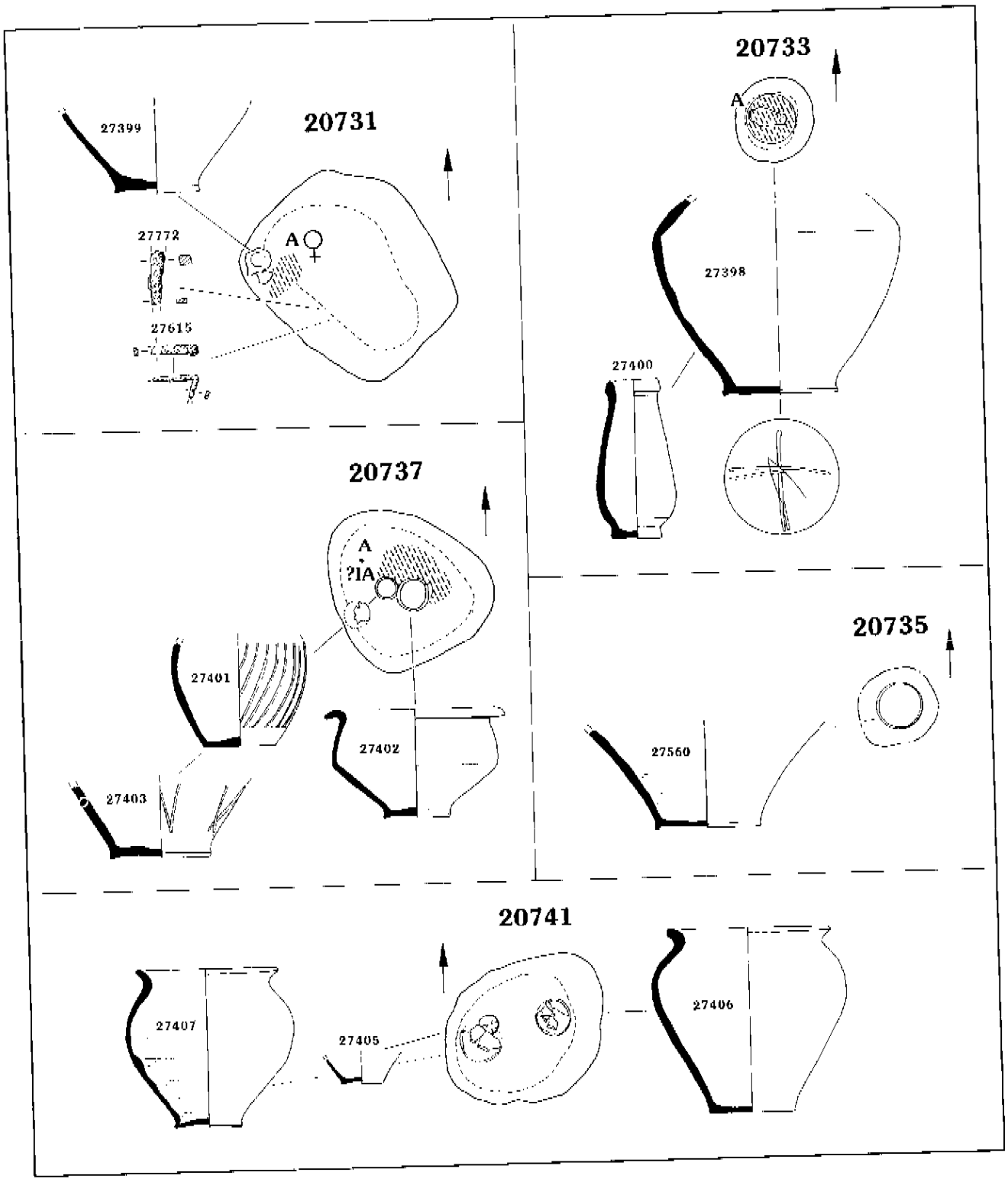


Figure 152 Graves 20731, 20733, 20735, 20737, 20741

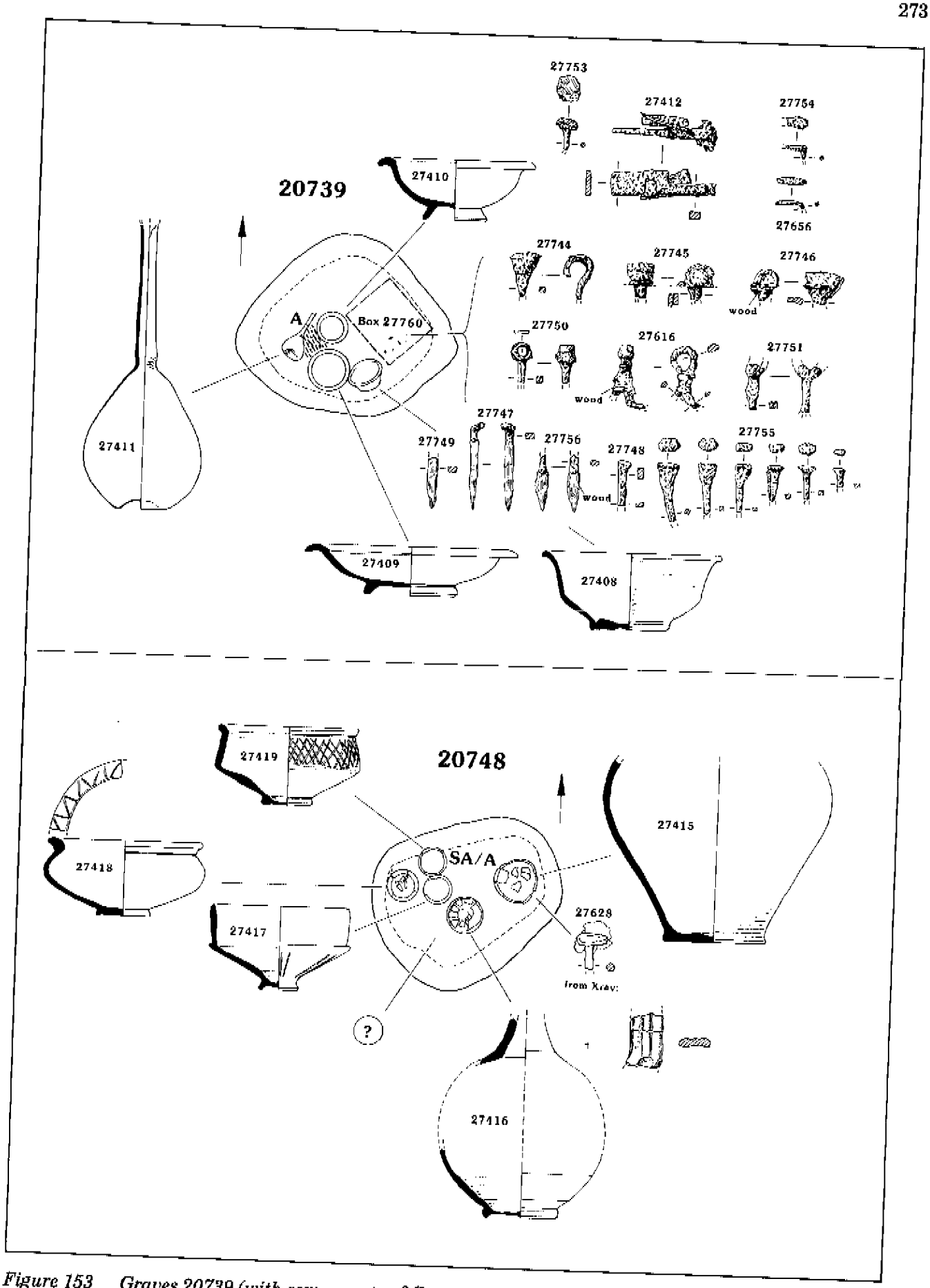


Figure 153 Graves 20739 (with components of Group No. box 27760 illustrated by Object Numbers), 20748

ON 27753: Small nail with possible domed head with wood on it; possibly a hobnail.
ON 27757 and 27759: 15 nail shanks; not illustrated.
ON 27408: Carinated cup (Form 5.4), fabric Q116; wheel-thrown.
ON 27409: Samian dish, Drag. 36, South Gaulish.
ON 27410: Samian cup, Drag. 35, South Gaulish.
ON 27411: Globular glass flagon (Isings Form 52?). Pale blue/green metal; occasional small bubbles. Neck cylindrical; expanding slightly at base; marked constriction at base. Body conical; ?expanding to globular form. Base concave and gently rounded; low kick.

Grave 20741 (Fill 20742)

(Figs 40; 152)
SU 89595.0/06697.5; circular, length 0.46 m, width 0.36 m, depth 0.12 m.
No cremated bone recovered.

Vessels at E and W of cut.
ON 27405: Base of small jar or beaker, fabric Q123; possible traces of colour-coat; wheelthrown.
ON 27406: High-shouldered jar (Form 1.1), fabric Q101; hand-made.
ON 27407: Rounded jar (Form 1.2), fabric Q103; handmade.

Grave 20748 (Fill 20749)

(Figs 40; 153)
SU 89586.6/06701.2; oval, orientation ENE–WSW, length 0.62 m, width 0.4 m, depth 0.1 m.
?Unurned cremation burial; location of cremated bone (3 g) not recorded; subadult/adult. Unidentified animal bone.

ON 27628: Iron, nail; mineral-preserved wood (unidentifiable) (*JW*); length 19 mm.
ON 27415: High-shouldered jar (Form 1.1), fabric Q100; hand-made.
ON 27416: Flagon of unknown form, fabric M100; wheel-thrown.
ON 27417: Small carinated bowl (Form 5.4), fabric Q102; burnished 'hairpins' on lower part of body; ?wheelthrown.
ON 27418: Small hemispherical bowl (Form 3.4), fabric Q102; incised chevrons on top of rim; ?wheelthrown.
ON 27419: Small carinated cup (Form 5.4), fabric Q102; burnished lattice decoration above carination; handmade.

Grave 20754 (Fill 20755)

(Figs 40; 154)
SU 89591.6/06703.3; circular, length 0.24 m width 0.2 m, depth 0.14 m.
Urned cremation burial; 166.3 g of cremated bone; adult, female.

ONs 27513/27514: Iron, nail; length 29 mm; iron, nail shank; length 17 mm. MNI = 1.
*ON 27422: Rounded jar (Form 1.2), fabric Q100; incised 'S' motifs around shoulder; handmade.

Grave 20780 (Fill 20781)

(Figs 40; 154)
SU 89586.4/06706.9; circular, length 0.2 m, width 0.2 m, depth 0.03 m.
No cremated bone recovered.

Vessel 27433 in centre of cut, under sherds from disturbed vessels 27432 and 27517.
ON 27432: Samian cup, Curle 11, South Gaulish.
ON 27433: British samian platter, Drag 18/31, Pulborough. Stamped OFVERIAN.
ON 27517: Samian cup, Drag. 27, Central Gaulish.

Grave 20785 (Fill 20786)

(Figs 40; 154)
SU 89592.2/06701.6; circular, length 0.12 m, width 0.12 m, depth 0.06 m.
Urned cremation burial; 20.8 g of cremated bone; adult.

*ON 27437: Small rounded jar (Form 1.2), fabric Q102, wheel-thrown.

Grave 20787 (Fill 20788)

(Figs 40; 154)
SU 89595.8/06698.3; circular, length 0.25 m, width 0.18 m, depth 0.12 m.
Urned cremation burial; 2.1 g of cremated bone in urn to E of accessory vessels. Young infant.

*ON 27434: Ovoid jar (Form 1.3), fabric Q100; handmade.
ON 27435: Small ovoid jar (Form 1.3), fabric Q100; burnished lattice decoration; burnished above and below decorated zone; handmade.
ON 27436: Rounded jar (Form 1.2), fabric Q103; handmade.

Grave 20791 (Fill 20792)

(Figs 40; 155)
SU 89594.2/06698.7; circular, length 0.42 m, width 0.34 m, depth 0.13 m.
Urned and unurned cremation burial: 68.7 g of cremated bone: 47.5 g in urn in centre of accessory vessels (plus 4.4 g in 27453, and 1.1 g in 27456), 15.5 g unurned; adult.

ON 27449: Small hemispherical bowl with flanged rim (Form 3.4), fabric Q103; incised lines on top of rim; handmade.
ON 27450: Square prismatic bottle (Isings Form 50). Blue/green mould-blown glass; frequent bubbles. Narrow cylindrical neck; rim folded out, up, in and flattened unevenly. Angular ribbon handle folded to neck; single, narrow rib, off-centre. Base square; two circular concentric mouldings. Poorly made.
ON 27451: Base of jar of unknown form, fabric Q103; handmade.
ON 27452: High-shouldered jar (Form 1.1), fabric Q103; burnished 'hairpins' on lower part of body; handmade.
*ON 27453: Rounded jar (Form 1.2), fabric Q103; burnished vertical lines on lower part of body; handmade.
ON 27454: Samian cup, Drag. 27, South Gaulish.
*ON 27455: Carinated jar (Form 1.4), fabric Q104; wheel-thrown.
*ON 27456: Small ovoid jar (Form 1.3), fabric Q103; burnished chevron decoration; handmade.

Grave 20793 (Fill 20794)

(Figs 40; 154)
SU 89595.0/06696.4; grave cut not recognised.
No cremated bone recovered.

ON 27438: Base of jar or beaker of unknown form, fabric M101; wheelthrown.
ON 27439: Samian dish, Drag. 36, South Gaulish.

Grave 20803 (Fill 20804)

(Figs 40; 156)
SU 89593.4/06703.5; oval, orientation W–E, length 0.6 m, width 0.4 m, depth 0.1 m.

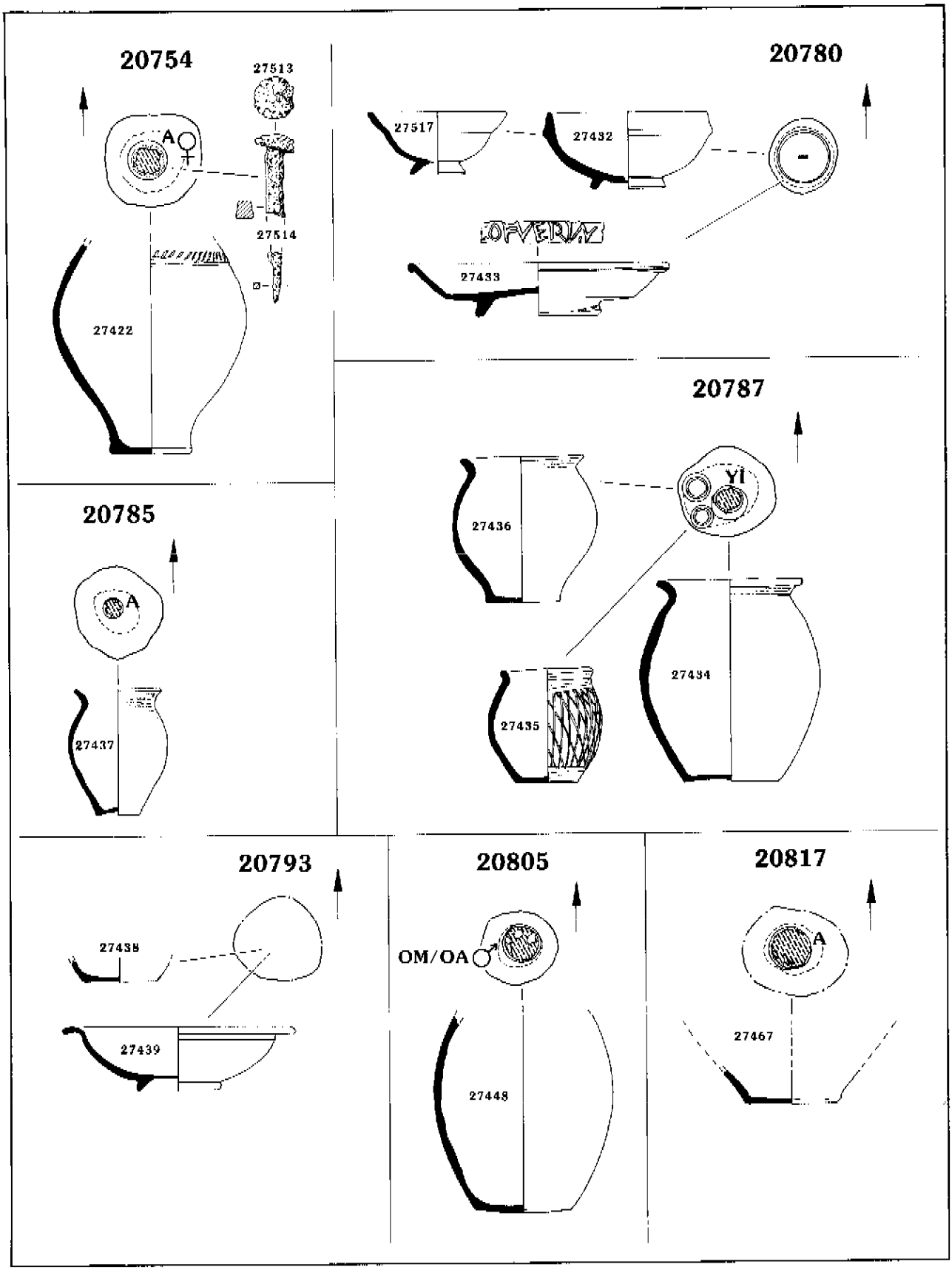


Figure 154 *Graves 20754, 20780, 20785, 20787, 20793, 20805, 20817*

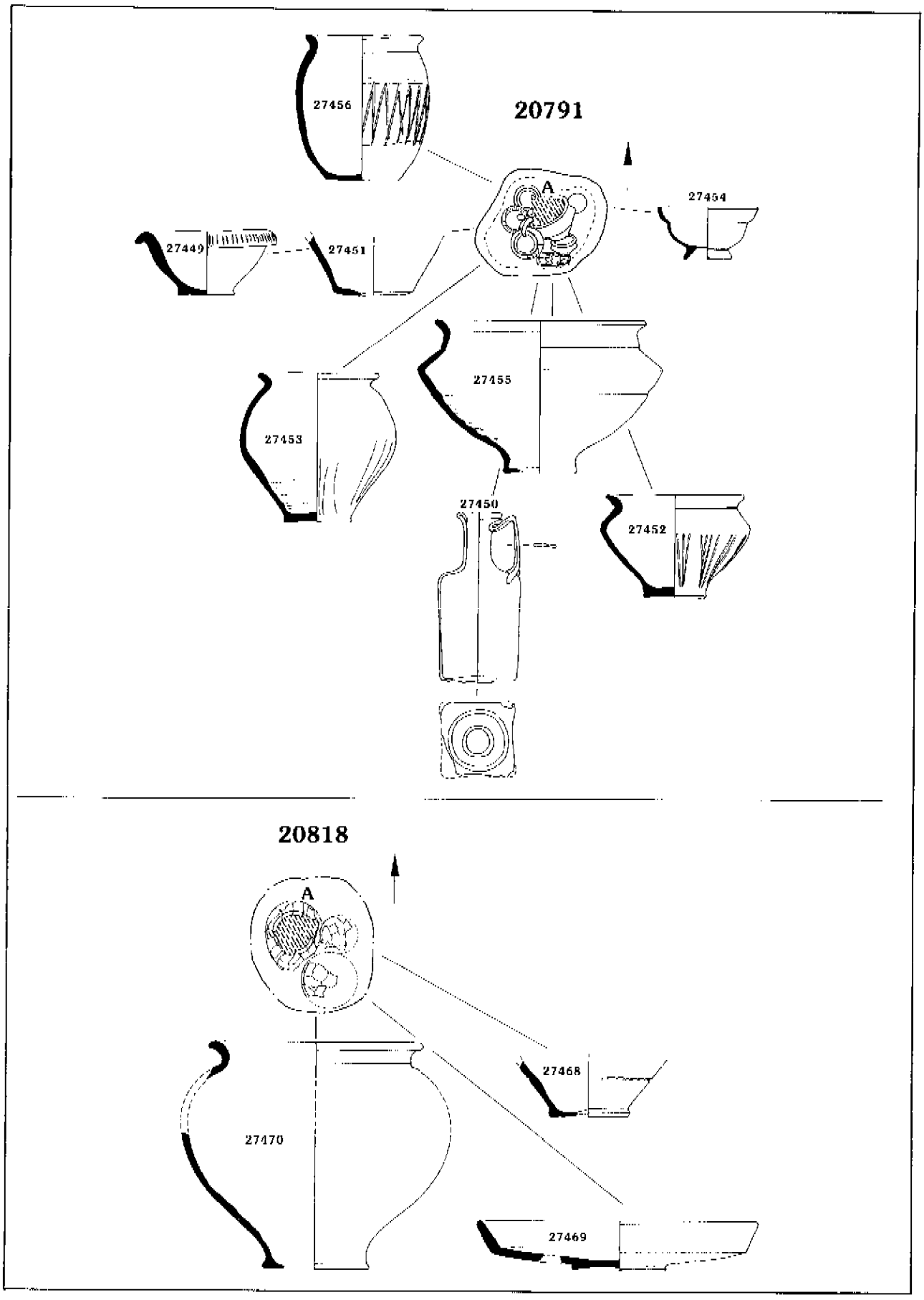


Figure 155 Graves 20791, 20818

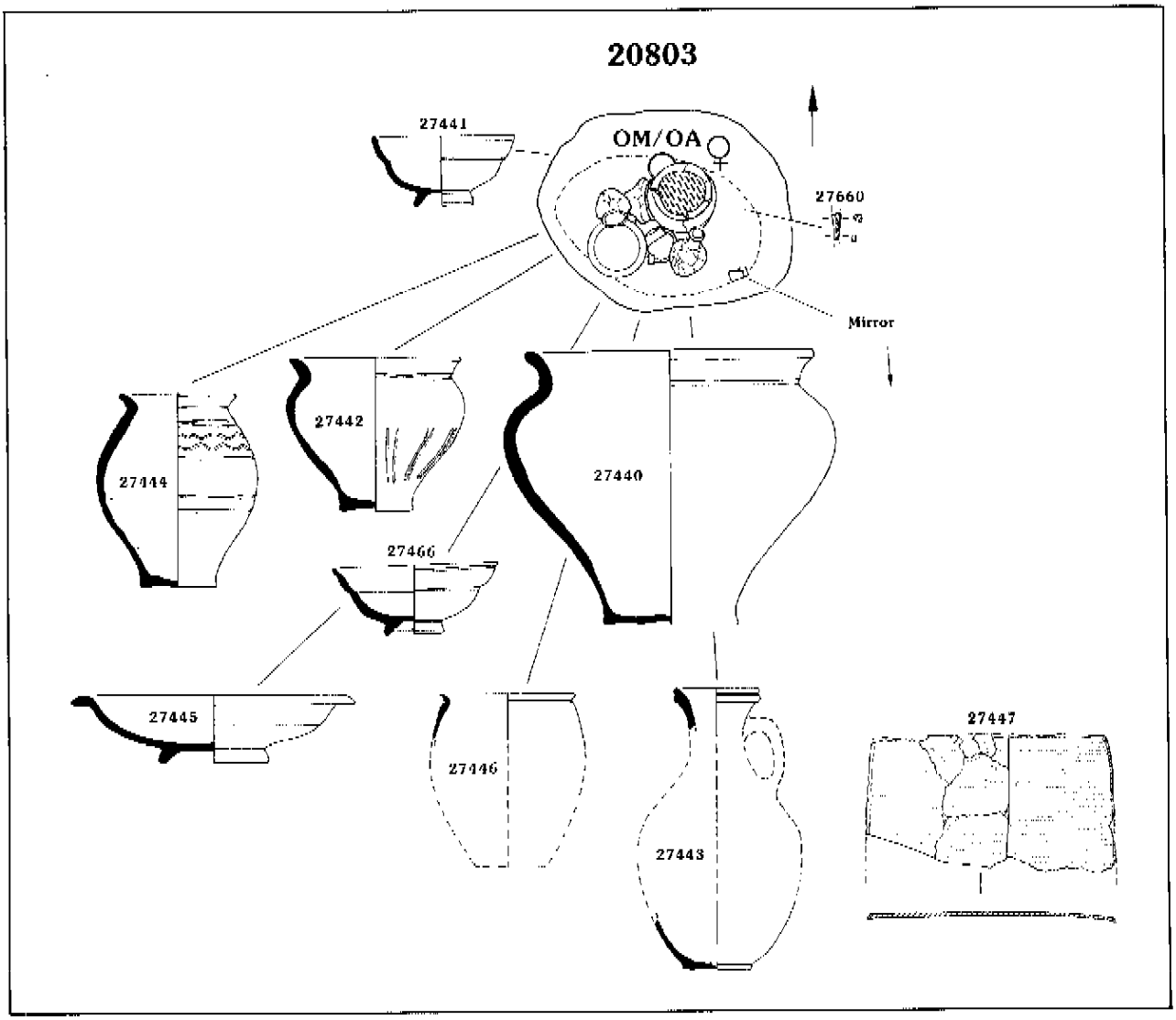


Figure 156 Grave 20803

Urned cremation burial; 298.5 g of cremated bone in urn to NE of accessory vessels (plus 4.4 g in grave fill); older mature/older adult, possible female.

ON 27447: Cu alloy mirror; length 72 mm.
ON 27760: Iron, nail shank; length 8 mm.
*ON 27440: High-shouldered jar (Form 1.1), fabric Q100; handmade.
ON 27441: Samian cup, Drag 27, South Gaulish.
ON 27442: High-shouldered jar (Form 1.1), fabric Q102; burnished decoration of paired vertical lines on lower part of body; handmade.
ON 27443: Flagon (Form 6.1), fabric Q122; wheelthrown.
ON 27444: Small rounded jar (Form 1.2), fabric Q103; burnished linear and curvilinear decoration on upper half of body; wheelthrown.
ON 27445: Samian dish, Drag. 36, South Gaulish.
ON 27446: Central Gaulish roughcast beaker, wheelthrown.
ON 27466: Samian cup, Drag 27, South Gaulish.

Grave 20805 (Fill 20806)

(Figs 40; 154)
SU 89596.5/06697.8; circular, length 0.13 m, width 0.13 m, depth 0.13 m.

Urned cremation burial; 191.3 g of cremated bone; older mature/older adult, possible male.

*ON 27448: Ovoid jar (Form 1.3), fabric Q103; handmade.

Grave 20817 (Fill 20816)

(Figs 40; 154)
SU 89594.5/06699.0; grave cut not recognised.
Urned cremation burial; 169.7 g of cremated bone; adult.

*ON 27467: Base of jar of unknown form, fabric Q103; handmade.

Grave 20818 (Fill 20819)

(Figs 41; 155)
SU 89604.0/06702.6; grave cut not recognised.
Urned cremation burial; 157.4 g of cremated bone in urn to NW of accessory vessels; adult.

ON 27468: Base of jar or beaker of unknown form, fabric Q122; rouletted line above base; wheelthrown.
ON 27469: Platter imitating Gallo-Belgic form Cam 2, fabric Q103; ?handmade.
*ON 27470: High-shouldered jar (Form 1.1), fabric Q100; wheelthrown.

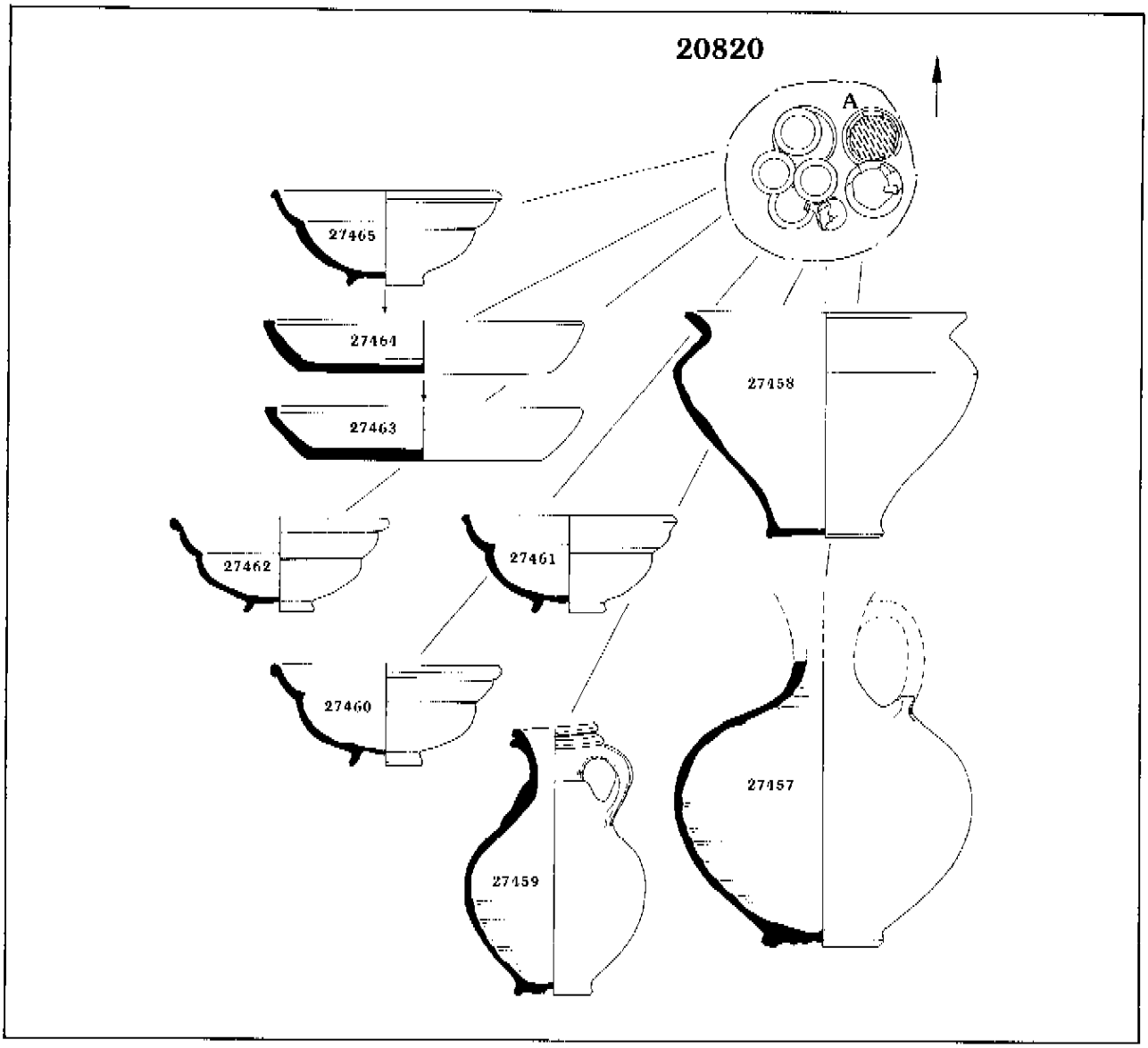


Figure 157 Grave 20820

Grave 20820 (Fill 20821)
(Figs 44; 157)
SU 89594.0/06694.0; grave cut not recognised.
Urned cremation burial; 240.7 g of cremated bone in urn to NE of accessory vessels; adult.

ON 27457: Flagon of unknown form, fabric Q118; wheelthrown.
*ON 27458: High-shouldered jar (Form 1.1), fabric Q103; handmade.
ON 27459: Flagon with double-beaded rim (Form 6.1), fabric M100; wheelthrown.
ON 27460–2, 27465: Bowls imitating samian form Drag. 27, fabric M100; wheelthrown.
ON 27463–4: Platters (stacked) imitating form Cam 17, fabric M100; wheelthrown.

12 Discussion, by A.P. Fitzpatrick

Ring ditch 20789

Romano-British monuments comparable to the ring ditch are rare. The closest parallels come from West Overton, Wiltshire, where three small round barrows marked by ring ditches (diameters: G7 *c.*7 m, G6a *c.* 2.5 m, G6 *c.* 4.5 m) had central cremation burials. Barrows G7 and G6a had post settings in the ditches and all three barrows appear to date to the earlier 2nd century (Smith and Simpson 1964). A circular masonry mausoleum *c.* 4 m in diameter and of 1st or 2nd century date was set within the walled cemetery at Langley, Kent (Jessup 1959, 14–15, 26–7, fig. 1), while another masonry tomb (or possible pyre setting) *c.* 5 m in diameter and of 3rd century date is known from High Rochester, Northumberland (Richmond 1940, 104–6, fig. 25–6; Charlton and Mitcheson 1984, 1, fig. 1, pl. 1a). The size of the West-

hampnett enclosure seems to set it apart from mausolea as, with a diameter of *c.* 6 m, it is rather larger than these rare circular examples or the slightly more frequent square ones. For example the late 1st or early 2nd century AD square examples at Derby Racecourse, Derbyshire are *c.* 3 m square (Wheeler 1985, 222–7, 248–50, fig. 98–100, pl. 16). The very large circular masonry monument, *c.* 18 m in diameter at Pulborough, West Sussex, suggested to be a mausoleum (Martin 1859, 140–2, fig. on 141; Toynbee 1971, 182) is so large that, if it really was a Roman monument, it bears closer comparison with round shrines, such as Hayling Island (Downey *et al.* 1980).

With the exception of the Pulborough example all of these monuments are funerary, but there is no clear evidence that this was the case at Westhampnett. Given the very shallow depth at which many of the Romano-British graves survived it seems unlikely that any central burial had been totally destroyed by ploughing so other explanations must be sought. It is striking that the disposition of the Romano-British cemetery around a circular space represents an analogue to the Iron Age cemetery. The ring ditch and the small mound it marked lies to the north of the dominant axis within the Iron Age cemetery, mid-winter sunrise, and the burials represent a mirror image of the distribution of the Iron Age graves. It is suggested here that the purpose of the enclosure was to physically represent the same sort of circle at the Iron Age cemetery which was either conceptual or marked by a natural feature such as a tree.

The possibility that ring ditch 20822 represents a Roman barrow (*cf.* Dunning and Jessup 1936; Jessup 1959; Toynbee 1971, 179–88) cannot be excluded, but it is considered that the monument is more likely to be Bronze Age.

The Structure of the Cemetery

The Romano-British burials cluster around enclosure 20789, concentrated to the north-west of it. In this respect it is the analogue of the distribution of the Iron Age burials around the circular space, but with the space being defined physically as well as conceptually. The single Romano-British pyre-related feature 20472 lies *c.* 20 m to the north of the burials. Although attributed to the Late Iron Age, some pyre-related features close by to it such as 20687 and 20702 are undated and could conceivably be Romano-British as could be 20762 which contained Iron Age and Romano-British pottery.

Although about a century, *c.* 50–40 BC–*c.* AD 70, separates the Iron Age and Romano-British burials, the Roman cemetery appears to respect the shrines and graves of the Iron Age religious site. The sole exception is grave 20457 lying within the circular space of the Iron Age cemetery and which contained an Iron Age pot and another in a fabric which is usually dated to after the Roman Conquest. In view of the ways in which Iron Age monuments are otherwise respected, it is considered that this burial was deliberately placed within the Iron Age cemetery. Whether the spatial meanings of the cemetery were acknowledged by that particular individual or the mourners is unknown. The intensity of use of the cemetery is clearly quite different from that seen at the Late Iron Age religious site, some 36 graves burials over approximately 80 years (*c.* AD 70–150; Fig. 158). It may well represent the cemetery used by a single family over several generations, some of whose ancestors lay in the Iron Age cemetery. The average number of burials per annum is 0.5 (36 graves/80 years) compared to 4 per annum in the Late Iron Age cemetery (161 burials/40 years), an eight-fold difference.

Rites Practised at the Cemetery

Although the rite of cremation burial was practised by the mourners at the Romano-British cemetery, and in invoking the central circular feature as a focus for the cemetery they appear to have been well aware of the significance of the Iron Age religious site, the rites practised at the two cemeteries were quite different in many respects. In contrast to the possible diversity of burials and ways of disposing of the dead in the Mid–Late Iron Age, cremation appears to have been much more frequent and, while not the sole rite in early Roman Britain, it was the dominant one. A comparatively large number of contemporaneous cremation burials are known from the immediate area (Pitts 1979b; Philpott 1991 *passim*; Bone 1989; Fig. 138), although there was still some diversity.

Only one pyre-related feature is certainly of Roman date and pyre debris is absent from the graves. As the

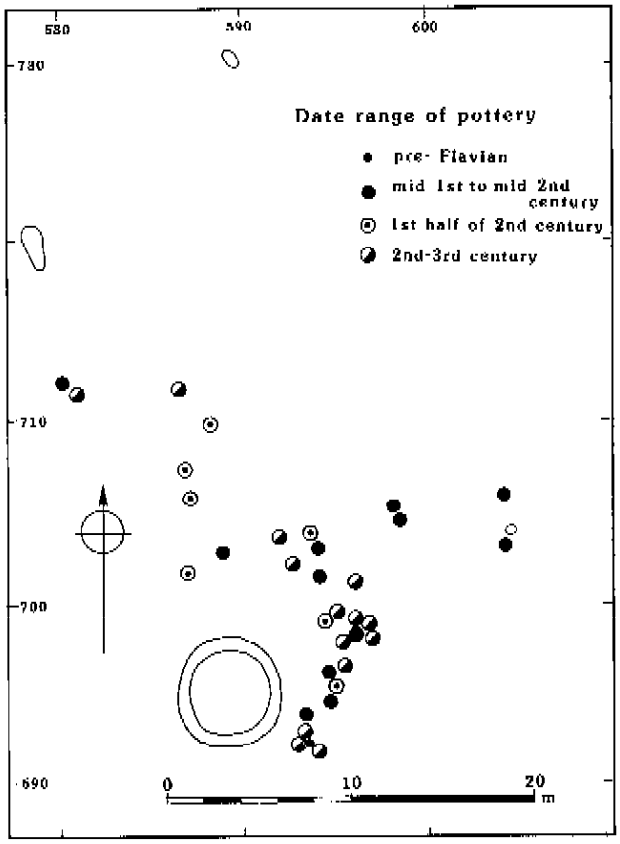


Figure 158 Date range of pottery distribution for Romano-British graves

cemetery was in use for *c.* 70 years, this indicates that pyres were probably not sited right next to the cemetery. Nor are there any shrines associated wth the cemetery; the only monument which has been ascribed a Roman date is ring ditch 20789. The earliest phase of the Romano-British site at Westhampnett Area 3, quite possibly a religious site, overlaps with the later use of the cemetery.

The presence of nails in the single pyre-related feature suggests that similar uses were made of timber from managed woodland and reused timbers as in the Late Iron Age. Animals were also sacrificed and parts of them were reserved for cremation with the deceased, and rather more cremated bone was selected for the burial, but this still represents only a token and the quantities are smaller than those from Romano-British cemeteries in Hertfordshire.

In contrast with the Late Iron Age cemetery the cremated remains are urned rather than unurned and compared with the diverse disposition of the burial and grave goods in the Late Iron Age graves, there is a clear tendency for the urn holding the cremated bone to be placed at the north of the grave. All of this suggests that the ways in which space, time, and movement were defined and reworked in the Romano-British cemetery by reference to architecture were different from that in the Late Iron Age. The cemetery now lay close to a burgeoning Roman town, but no villas are known nearby, only to the north of Chichester in the Chilgrove Valley. The impression of the cemetery is of a place where the funeral ceremonies were now less bounded and bound-up within an individual religious site; formal shrines such as Lancing Down and Hayling Island were enclosed by a *temenos* and lay within their own sacred space and at least some of the cremations took place elsewhere. The social and sacred geography had changed, and while the burial rite practised in the early Roman period may have superficial similarities with that of the Late Iron Age, there were major differences.

Despite the encouragement of *romanitas* in West Sussex which is manifested in the development of the town of Chichester, the early development of Italian style villas, and the palace at Fishbourne, the extent — if any — to which the rites of passage described by classical writers for burials in Italy in the later 1st century BC and 1st century AD (Toynbee 1971, 43–64) were known, adopted, or followed at Westhampnett is unknown. None the less sequences of those rites are found in so many cultures (*cp.* van Gennep 1960; Huntingdon and Metcalf 1979, 1–118), that the sources may have some relevance to Romano-British religious beliefs.

The classical writers suggest that at least some people believed that the soul parted from the body with the last breath. After a period in which the corpse was displayed, the body was carried to the cemetery by relatives and friends who were dressed in black. After cremation, sometimes with other pyre goods, and burial, a funeral meal was eaten at the grave side. That meal, the *silicernium* was eaten on the day of burial, a second one, the *cena novendialis* marked the end of prescribed mourning for the larger group after nine days. On the birthdays of the deceased and at the two festivals of *Parentalia* and *Lemuria* relatives visited the grave sometimes with gifts, and ate a meal at the grave side. It is within the context of such rites of passage that the analysis of the Westhampnett cemetery must be seen.

Analyses, by Andrew B. Powell and A.P. Fitzpatrick

As with the Late Iron Age cemetery the restricted evidence for the sex of the individuals buried there (Fig. 159) meant that the objectives of the analyses have been modest. Although it would be possible to examine the ceramic assemblage in some detail (*cf.* Millett 1993), and an attempt has been made to provide information in a comparable manner, the emphasis has again been on context, not object.

For the pupose of analysis, certain aspects of the form and contents of graves have again been amalgamated to provide more robust samples. The six age categories distinguished by McKinley have been grouped as 'child', 'youth', 'adult, and 'elder'. Pots have been categorised as either 'imports', 'finewares' (including imports) and 'coarsewares'. Grave shapes have been defined as 'circular' (a curved edge with long axis less than 1.5 times the short axis), 'oval' (a curved edge with long axis over 1.5 times the short axis), and 'square' (at least three straight sides approximately at right-angles, with long axis less than 1.5 times the short axis). These refer to the shape of the base of the grave cut, rather than the truncated upper edge of the cut. There were no rectangular graves.

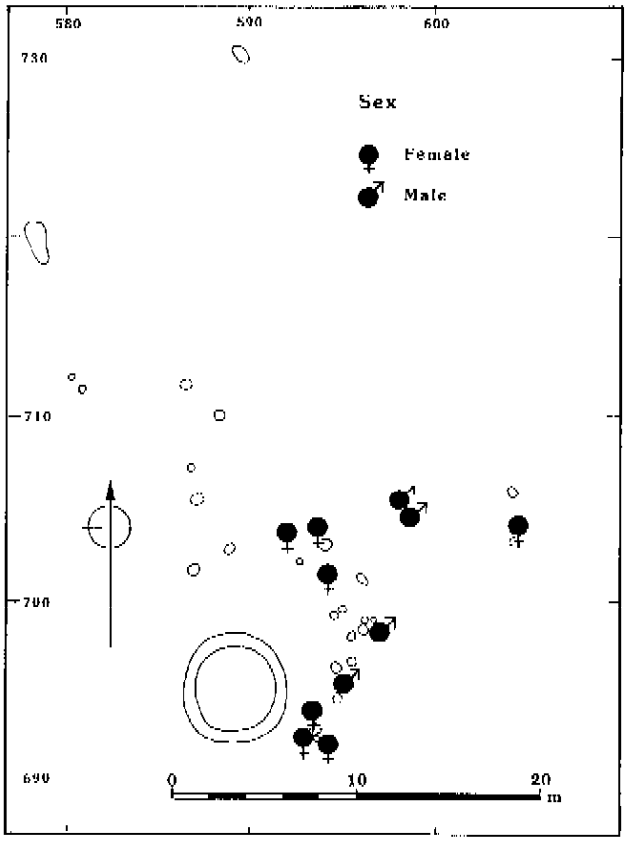


Figure 159 Distribution of sexed Romano-British burials

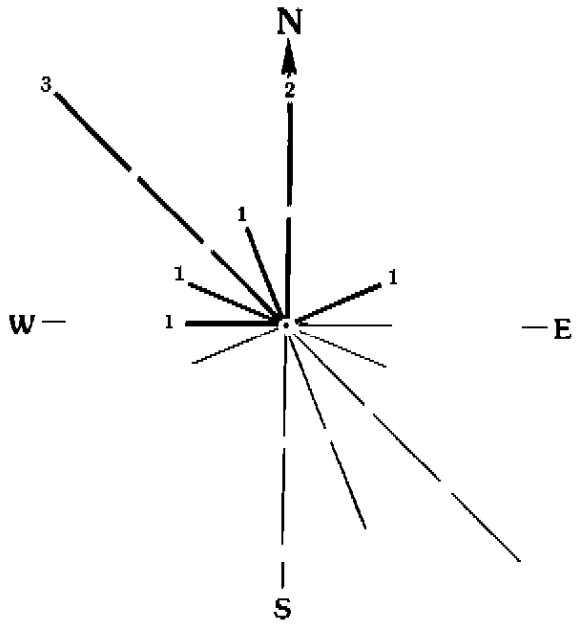


Figure 160 Orientation of oval Romano-British graves

Grave size, shape, and orientation

Because of the degree to which most graves had been truncated, their full dimensions could not be determined. However, as it was the base of each grave, as bounded by its sides, which formed the surface upon which the burial deposits were placed and arranged, this has been used in considerations of size and shape. Of the 26 graves considered, 15 (59%) were approximately circular in shape. Of the eight that were oval, six had one end of their axes aligned between north and north-west, while the two square graves had one axis aligned in the same quadrant (Fig. 160).

A similar pattern is evident in the relative orientations of the burial and grave goods. In 11 of the 16 burials (69%) which contained both cremated bone and grave goods other than a burial urn, the cremation deposits (whether urned or unurned) were sited to the north-west (4), north (3), or north-east (4) of the grave. In the five remaining graves the cremation deposits were either central (2), to the south (2), or to the east (1) of the grave (Fig. 161). This preference for an approximately north–south orientation might signify that the graves faced in a particular direction. Alternatively, the orientation may have resulted from the direction in which the mourners were facing when they were furnishing the grave, and the order in which the burial and grave goods were placed.

Cremated human bone

The grave cuts of ten burials were not identified during excavation so the quantities of bone recovered may not represent the full quantity present. Disturbance to the very shallow graves by ploughing may also have affected the quantities of bone recovered. Within the other 25 graves, there appear to be two main peaks in the quantities of bone deposited (Fig. 162), one consisting of the 14 graves (53.8%) containing under 100 g (including 4 graves with no bone at all), with a second group of 7 graves (26.9%) containing 150–250 g of bone. Of the remaining three graves, one had over 400 g and two adjacent older adult male graves (20536 and 29538), located towards the eastern side of the cemetery, each contained over 600 g. This distribution is unrelated to the sizes of the cinerary urns

Because of the small size of the sample the analyses of the graves should be treated cautiously. There were no apparent correlations between the grave contents and the quantity of bone. The age structure of the population buried in the cemetery is dominated by 'adults' (50%) and 'elders' (28.1%), with only three

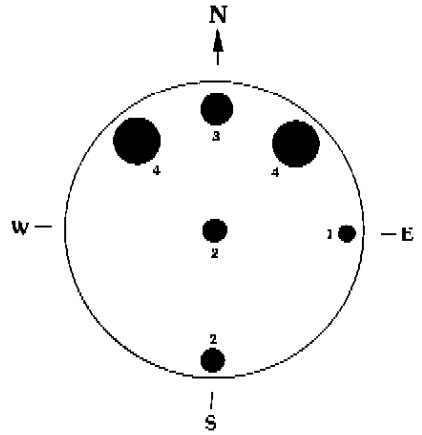


Figure 161 Orientation of cremation deposits in relation to other contents of Romano-British graves

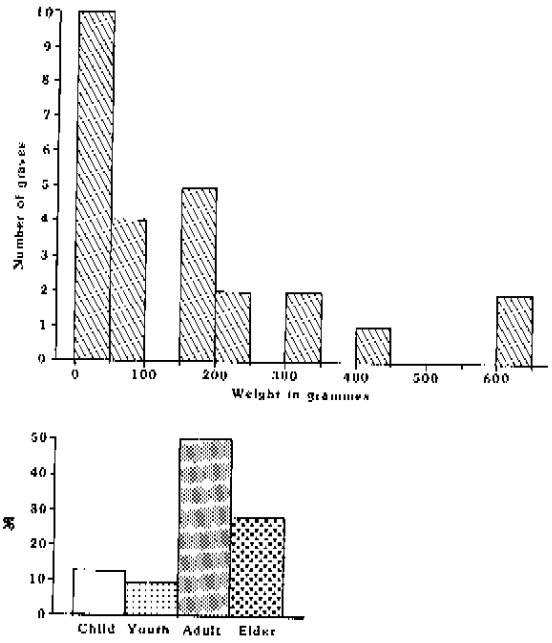


Figure 162 (Top) Weight of cremated bone in identifiable Romano-British graves; (bottom) age structure of the buried population

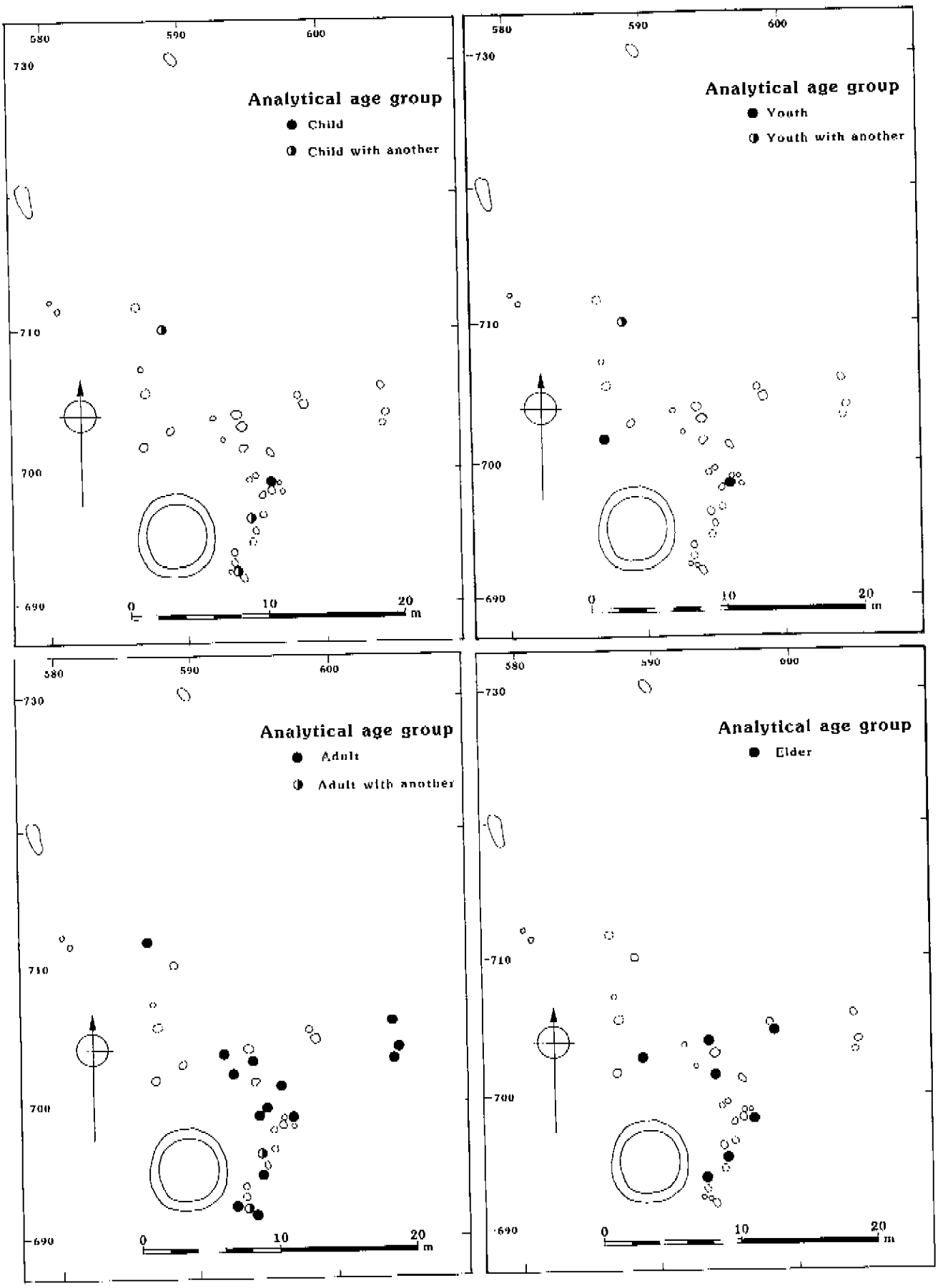


Figure 163 Distributions of graves of a) 'children'; b) 'youths'; c) 'adults'; d) 'elders'

'youths' (9.3%) and four 'children' (12.5%) (Fig. 162), but there is no visible pattern in the spatial distribution of the different age groups within the cemetery (Fig. 163). Only 12 of the 29 graves containing bone were attributable to sex (41.4%); four male and eight female.

Urned cremation burials and associated grave goods

In 24 graves the cremation burials were urned, the pots containing some or all of the cremated human bone. In all but two of these the burial urn was a jar. In two graves fineware beakers were chosen in preference to the accompanying jars and this difference may be chronological in origin. Jars were the most common vessel form found in the graves, accompanying 31 (86.1%) of the burials, and in 13 of graves being the only vessel type represented. Only two other graves contained vessels of a single type, in both cases beakers, with the result that most of the beakers, and all the bowls/dishes, platters, cups, and flagons were invariably associated with at least one other vessel form. However, although seven of the nine flagons were accompanied by cups, the small sample size means that this and other such associations between non-jar forms have limited statistical reliability.

The different vessel forms, and other artefact types do not appear to have been either age or sex related, with most of the forms found in the male graves also found in those of females. Because of the small sample size little significance should be placed on the observations that the only two sexed graves containing flagons were

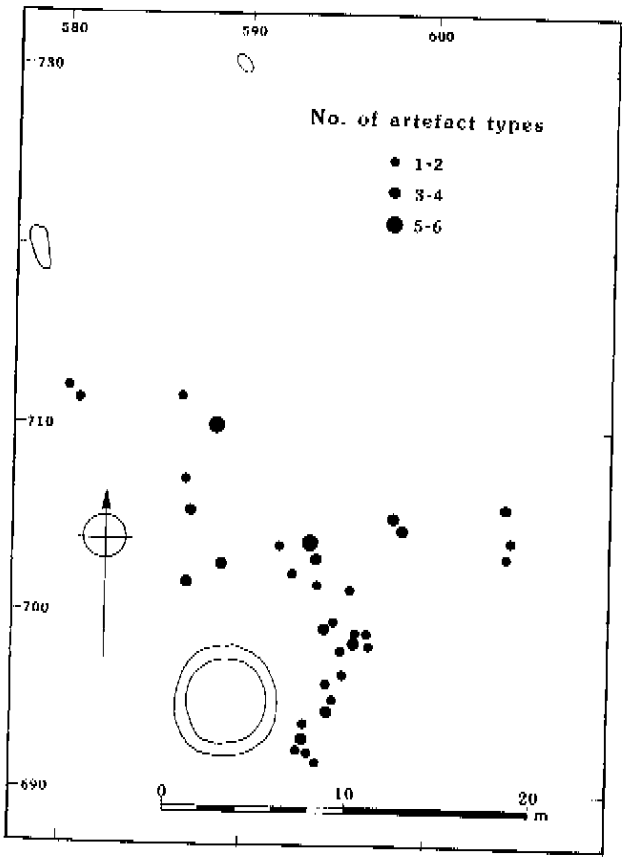


Figure 164 Number of artefact types in Romano-British graves, distribution

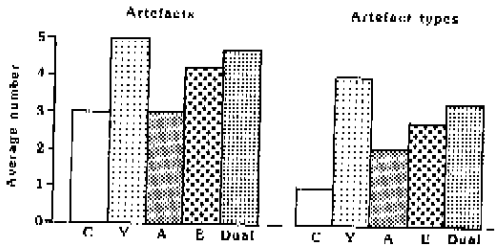


Figure 165 Average numbers of artefacts and artefact types by analytical age group in Romano-British graves

female, or that the only mirror was found in a female grave.

However, the quantity and the range of material in the graves, in terms of the numbers of artefacts and artefact types, does appear to have been age related (Figs 164 and 165). Older adult graves contained on average 4.2 artefacts (2.8 artefact types), and with 3.0 artefacts (2.1 types) in adult graves, and 3 artefacts (1 type) from the single unaccompanied infant/juvenile burial. However, the average of 5 artefacts (4 types) from the two unaccompanied subadult burials goes against this trend. The highest quantities of artefacts and types were found in the three burials containing double cremation burials which may reflect the placing of objects for both individuals.

The relative proportions of imports, other finewares and coarsewares also appear to be age-related (Fig. 166), with samian and other imports occurring in 33.3% of older adult graves, compared to 14.3% of adult graves, and none in the subadult or infant/juvenile graves. This pattern is not found in relation to other finewares, as these were found in 55.6% of older adult graves, 57.1% of adult graves, and 50% of subadult graves although, again, none is found in infant/juvenile graves. Conversely only 33.3% of older adult graves contained only coarseware vessels, compared to 42.9% of adult graves, 50% of subadult graves and the only unaccompanied infant/juvenile grave (i.e. 100%).

The grave contents also appear to have been sex related, with female graves containing on average 2.4 artefacts (1.8 types) compared to 4.8 artefacts (2.3 artefact types) in male graves (Fig. 166). However, this is only an average pattern, and the grave (20803) with the largest number of artefacts, including eight vessels (of which four were imports) and a copper alloy mirror, was female. Samian and other imported pottery occurred in 50% of male graves but only 12.5% of female graves (Fig. 166). Other finewares were found in 60% of male graves compared to 50% of female graves, while coarseware pots occurred alone in 27.8% of female graves and in a single male grave (20%).

The context of the cemetery, by A.P. Fitzpatrick

The location of the cemetery 4 km to the east of the *civitas* capital of Chichester is noteworthy as the cemetery at Chichester–St Pancras is one of the few Romano-British urban cremation burial cemeteries yet

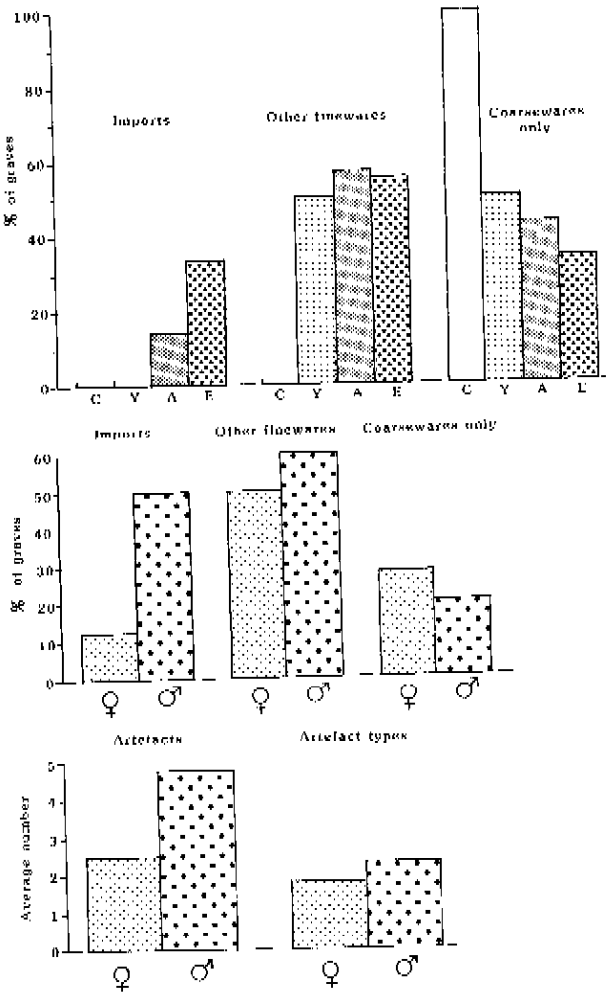


Figure 166 Percentages of Romano-British graves (top) in each age group and (middle) of either sex containing different pot fabrics; (bottom) average numbers of artefacts and artefact types by sex

excavated (Down and Rule 1971, 53–126) (Fig. 138). The cemetery, which has been partly excavated on a number of occasions, lies outside the east gate of Roman Chichester on the north side of Stane Street. Both cremation and inhumation burials were made at the cemetery but the main period during which it was used was between c. 70 AD and the late 2nd century when cremation was the dominant rite. The Westhampnett cemetery is almost largely contemporaneous, although most burials date to before the mid-2nd century, and lies 3.5 km to the east of the St Pancras cemetery and only 0.5 km south of Stane Street. Comparison between the two cemeteries is difficult as the cremated bones found at St Pancras were not reported on, nor is the individual context given; the shape of the grave, the placing of the burial, and the disposition of grave goods, etc.

No certain pyre sites were identified at St Pancras although several areas of extensive burning were (Down and Rule 1971, 71–2, fig. 5. 3–6), and a possible pyre site has been identified nearby at Densworth, Funtingdon (Black 1986, 210; although it is unnecessary to suggest that it represents a robbed-out enclosed crematorium). Some comparisons can, however, be made between St Pancras and Chichester. Distinctions in the grave goods were made by Down and Rule who identified two types amongst the cremation burials, the second of which was subdivided and these are summarised in Table 41.

In view of the disparity between the size of the two samples, little significance can be attached to the absence at Westhampnett of some of the less frequent sub-types distinguished by Down and Rule, although some of them, such as tiled cist burials and pipe burials (burials with libation pipes) might not be expected in a rural setting (*cf.* Philpott 1991, 10–11, 28–9). The suggestion that flagons in burials might have served this purpose (Down and Rule 1971, 72; Alcock 1980, 63) seems unlikely. In the case of the flagons from Westhampnett there is no doubt that any vessels whose necks protruded from the grave would have been damaged or destroyed.

In general a similar range of grave goods were placed by the mourners at both cemeteries, with urned burials unaccompanied by other objects, and unurned burials with accessory vessels for eating and drinking from being the most common. There is little to support the suggestion of a standard set or service of cup/beaker, flask/flagon and bowl/jar/plate suggested to exist by Black (1986, 225). While some examples can be suggested at Westhampnett (20392, 20803, and 20820) this

Table 41 types of cremation burial at Chichester–St Pancras cemetery

Type of burial	*Description*	*No.*
Type 1	*Urned cremation burial unaccompanied by grave goods*	147
Type 2	*Cremation burial with eating and drinking vessels*	
2a	Box/casket burial	33
2b	Cist burial lined with tiles	3
2c	Burial accompanied by eating and drinking vessels	64
2d	Crescentic burial. Vessels arranged in a semi-circle with a flagon or dish opposite and the bones scattered between	3
2e	Burial in which one or more pots were inverted	9
2f	Burial with coin(s)	2
2g	Pipe burial	1
Total		262

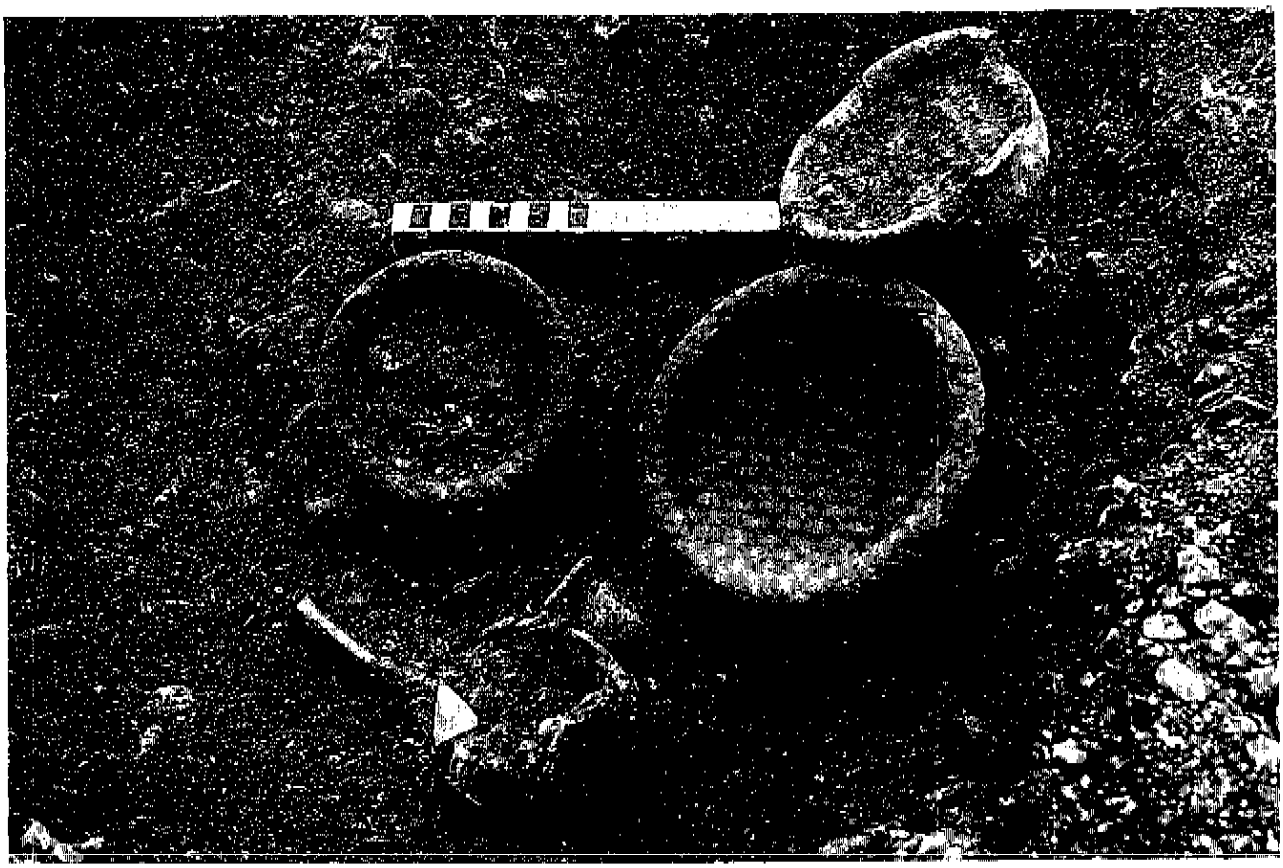


Plate 32 Romano-British grave 20739, viewed from the south-west (Fig. 153). The grave contained the unurned cremated bones of an unsexed adult accompanied by a wooden box with iron fittings, three ceramic vessels, and a glass flagon

follows from the original pairing of the fineware cups and platters/bowls.

Although it is difficult to assess, the distribution of the so-called crescentic burials (type 2d) which were unurned, may be related to the recurrent placing of the urn containing the cremated bone in the north of the grave at Westhampnett. There are hints of this arrangement at individual graves in central–southern England, at Neatham, Hampshire and at Densworth (Black 1986, 217), but this must be set against the considerable diversity apparent within a cemetery such as Alton, Hampshire (Millett 1986). The placing of objects such as pairs of shoes or boots (grave 20587), glass vessels (graves 20739, 20791) (Figs 153; 155) (Pl. 32), and mirrors (grave 20803) are all well known in Romano-British burials of this date and are also found in the St Pancras cemetery (Philpott 1991, 165–75, 115–22 and 182–3).

There are, however, differences between the cemeteries at the level of individual elements. Thirty-six burials at St Pancras contained lamps and lampstands but these are absent from Westhampnett and although in part this trend is chronological, with many examples dating to the mid–later 2nd century AD at St Pancras (Philpott 1991, 191), this does not satisfactorily explain the contrast. Instead it is linked to their association with the so-called 'box burials' (type 2a). The description of these given by Down and Rule (1971, 71) suggests that the objects in many of their type 2a box burials were large enough to be structural elements within the grave and they are distinguished from caskets, only three of which were found. Burials with these elements are found widely within Britain but there is a particular concentration, along with stone cists which may have had a similar role, within West Sussex (Philpott 1991, 9–10, 12–21, figs 1–3)

Burials with caskets were defined by Borrill who was able to distinguish them from boxes placed in graves on the grounds of their size and decorative fittings in copper alloy. Boxes, while undecorated, were considered large enough to accommodate all the grave goods (Borrill 1981, 304). A distinction between boxes and caskets is also made by Philpott but this is based essentially on the presence of decorative fittings as it is clear that some of the smaller boxes are virtually the same size as caskets (1991, 16, tab. 2). One point which deserves more consideration is that the differences between the two types of container may be largely chronological. Many caskets date to the 1st–mid-2nd centuries AD, while most boxes are rather later, of mid–later 2nd century date (Philpott 1991, 13–14, 17–18). At Westhampnett grave 20739, which contained a leather-covered casket, is of later 1st or 2nd century date, while grave 20392, which contained a small box perhaps also leather covered, dates to the mid-2nd century. The nails from a number of graves (20536, 20665, 20705, 20731, 20748, 20754, and 20803) may be associated with covers or lids rather than boxes.

Perhaps the most general difference between the grave goods is in the overall *distribution* of the number of objects placed in graves. Sixty percent of the St Pancras graves contained only the urned burial, but at Westhampnett the figure was 36%. Many of the box burials at St Pancras (33% of all burials) were very well-furnished with grave goods, being described as 'rich' by Down and Rule (1971, 70). In contrast to that essentially bimodal distribution, a much higher proportion of graves at Westhampnett contained more than one object and the overall distribution of number of artefact types is more even. Calculation of the mean number of pots per grave in a cemetery, as Philpott has done (1991, 33–5) is not presented here. While it provides aggregate patterns, it obscures distinctions such as those seen at Westhampnett and others, such as changes in the quantity of grave goods, which may be suspected (Millett 1987, 65; 1993, 275), or in the values ascribed to the grave goods (*cf.* Bradley 1988).

Millett has distinguished a distinctive early Roman cremation burial tradition in central–southern England called by him the 'East Hampshire Tradition' (1986; 1987; 1993, 276–7). These burials are characteristically well provided with pots, usually 10 or more and sometimes over 50, and appear to have been associated with non-urban settlements. Few early urban Romano-British cremation cemeteries have been excavated in the region, but in general the burials within them appear to be less well furnished with grave goods. In view of their essentially rural distribution Millett followed Jones in suggesting that the social elite did not live in towns or cities (1987, 63–5). Instead they were identified as the individuals who were buried in the 'East Hampshire Tradition' and who lived in the countryside.

The St Pancras cemetery was one of the sites used by Millett to distinguish 'rich' from 'poor' and 'town' and 'country' (Millett 1986, 80–2; 1987, 63–5). When compared with the contemporaneous and adjacent rural cemetery at Westhampnett such a simple characterisation is, inevitably, found to be more complicated. In particular the variation within the St Pancras cemetery is rather under-emphasised. Many of the type 2a box burials from St Pancras are suggested by Philpott to cluster in limited areas which may represent family groups (1991, 20). As we have seen, most of these box burials date to the mid–later 2nd century, reflecting a change through time. Thus while Millett's characterisation of town and country may be broadly correct, its chronological validity may be more restricted, perhaps only to the earlier–mid-2nd century. While comparatively modest in material terms the farmers who buried their dead at Westhampnett, perhaps a single family living on farms like those at Copse Farm, Oving remained some distinctions in death from those in the founded and planned *civitas* capital at Chichester.

Ultimately though, thorough discussions will not be based on the quantity and quality of grave goods — death in a material world — but on an assessment of the individuals with whom the goods were placed by their mourners.

4. The Anglo-Saxon Cemetery and Undated Features

1 **The Anglo-Saxon Cemetery**, by Andrew B. Powell and A.P.Fitzpatrick

A number of features towards the northern edge of the site provided evidence that the hill was also used for a flat inhumation cemetery during the Anglo-Saxon period, one of the first to be found on the West Sussex Coastal Plain (Figs 167; 168). In all ten possible graves were identified, three of which were set within a funerary enclosure. Because of the highly acidic soil conditions in this part of the site no human bone survived in any of the graves. Five of the ten graves were planned but, along with a number of other features, they were not excavated as there was insufficient time. The Anglo-Saxon spearhead from a cleaning layer was correctly identified in the field, but the poor condition of the metalwork meant that the small knives were not correctly identified until they had been conserved. Until that stage it was considered that the graves might date to the Late Iron Age. In view of the distribution of the graves in the northern part of the excavated area it is possible that the cemetery was larger, but the chance of such ephemeral evidence being noticed during road construction is slight.

Enclosure 20210

Three graves lay within a rectangular ditched enclosure (20210), centred on SU 89573 06724 (Figs 35; 169; 170). They were positioned side by side, and their east–west orientation was slightly skewed from that of the

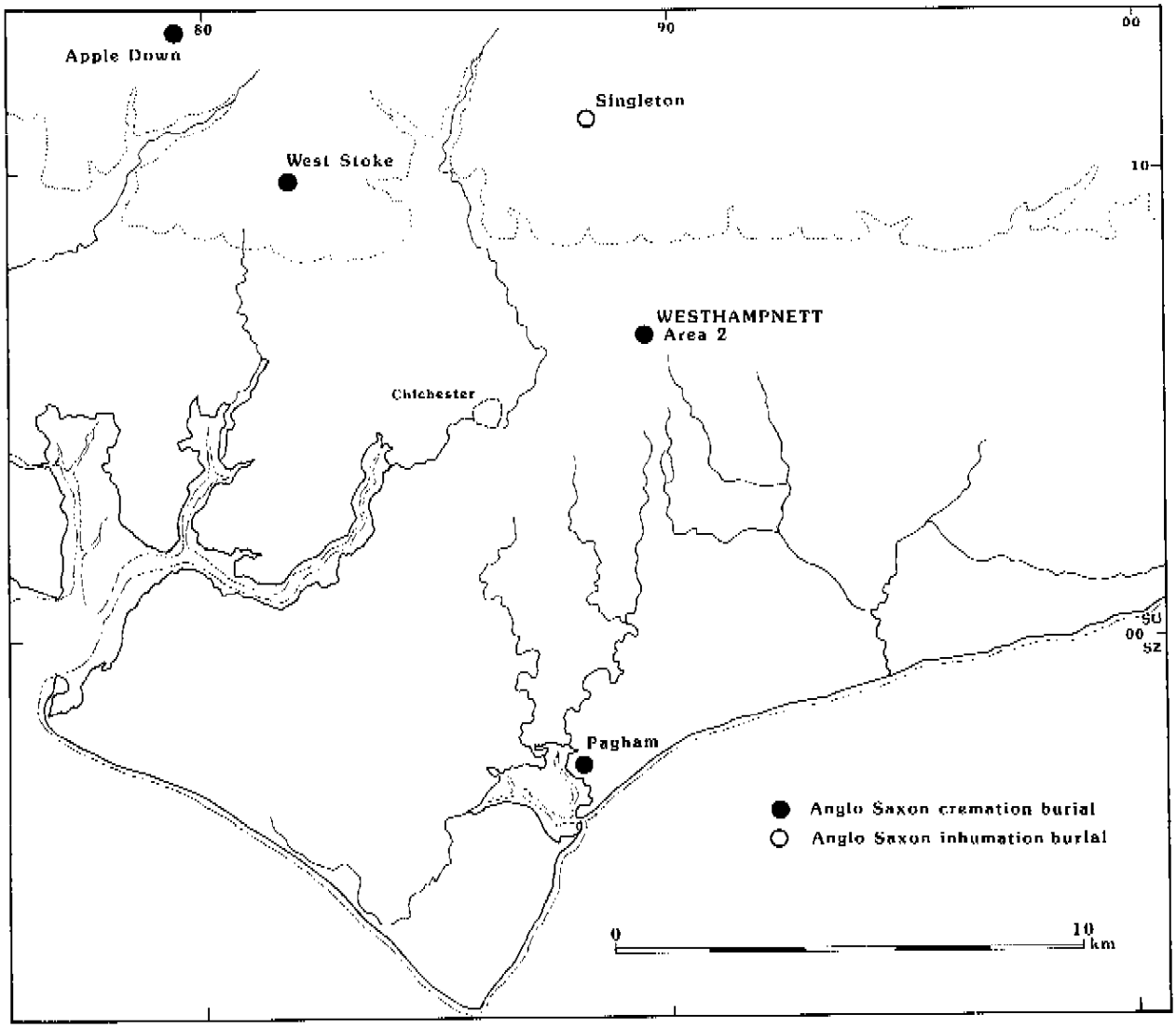


Figure 167 Anglo-Saxon burials on the West Sussex Coastal Plain and South Downs

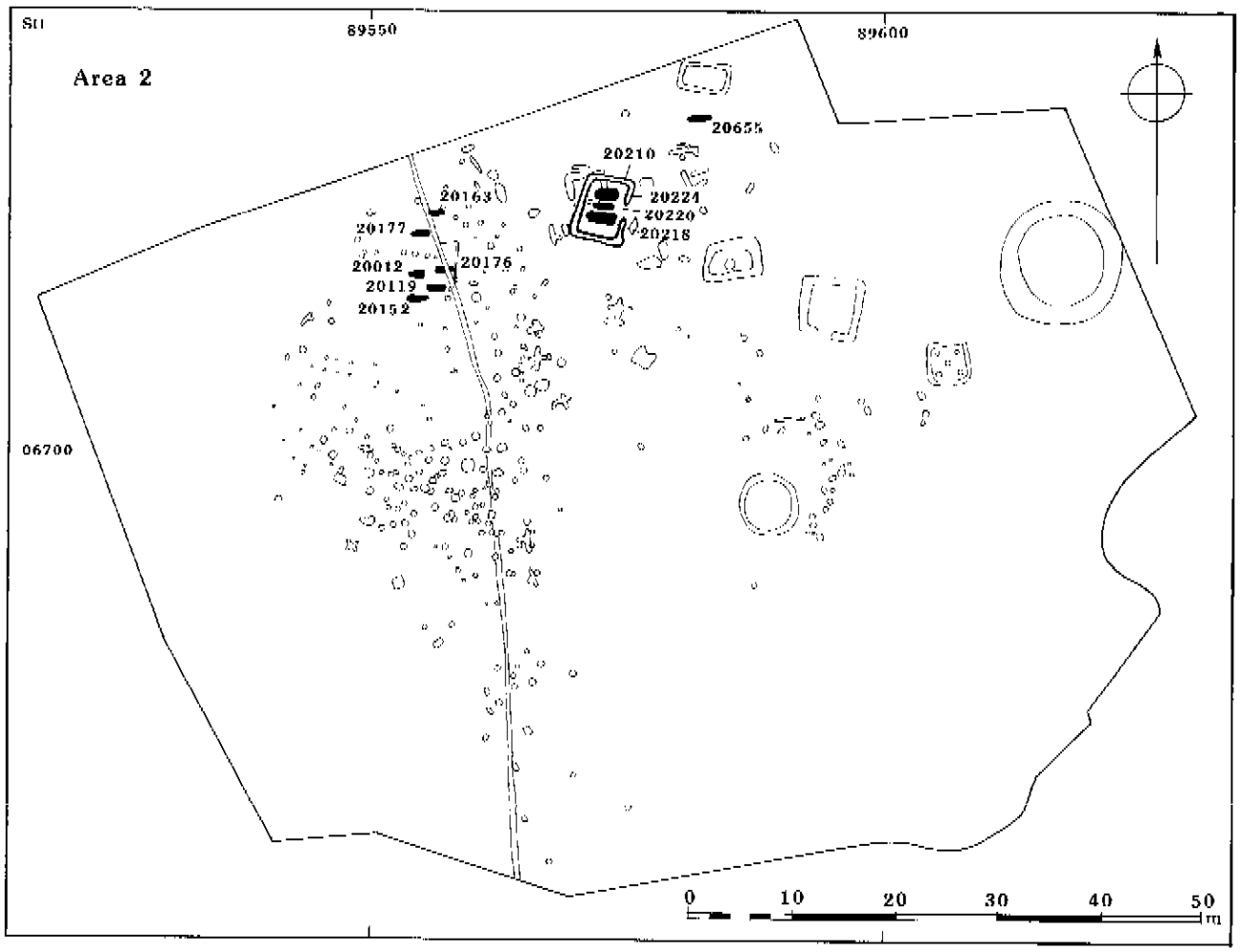


Figure 168 Certain and possible Anglo-Saxon features

enclosure. The southern grave (20218) measured 3 m by 1.4 m and had expansions, probably for postholes at its eastern end and possibly also at its north-west corner. The northern grave (20224) measured 2.2 m by 0.9 m, but the central grave (20220) was considerably smaller, measuring 1.7 m by 0.5 m. A knife was recovered (during post-excavation analysis) from a bulk sample. The three graves lay towards the northern end of the enclosure, suggesting that sufficient room had been deliberately left for a fourth interment at the south.

The enclosure was 6.8 m long by 5.2 m wide, with its long axis aligned slightly to the east of north, and with a 1.4 m wide entrance approximately midway along the eastern side. The ditch, which was up to 0.2 m deep, had an average width of 0.6 m, with moderately steep, concave sides and a flat base. There was no evidence for any timbers or other structural elements in the ditch. Small quantities of charcoal, cremated human bone, Iron Age pottery, and part of a spindlewhorl made from a Romano-British greyware sherd (fabric Q100) (p. 263) were recovered from the fill of the ditch. The presence of Iron Age pottery suggests that many of these finds are likely to derive from features such as the small Iron Age shrine (20277) which was cut by the north-west corner of the enclosure. There was no evidence for any unurned cremation burials of Anglo-Saxon date.

Grave 20655

A single grave (20655) was partly excavated 8 m north-east of the enclosure (Figs 36; 171). It was 2.4 m long, aligned east–west, 0.7 m wide and 0.5 m deep. The feature was excavated in half-section in an attempt to establish if it was a grave. As the only find was what was considered to be a nail it was not excavated further. However, as it is now clear that the object is an Anglo-Saxon knife the feature must be regarded as a grave.

Grave 20012

Grave 20012 consisted of a rectangular cut 1.7 m long and 0.7 m wide (Figs 34; 171), a comparable size to that of the central grave in enclosure 20210. A spearhead was found during cleaning outside of, but near to, the eastern end of the grave but it now seems probable that it derived from the grave, perhaps having been originally located high up in the grave. The base of the cut sloped quite steeply from the surface at the west to a maximum depth of over 0.5 m at the east. As the knife was found not much below the modern surface, the unusual profile of the grave may be due to the burial having been disturbed. Consequently it is not possible

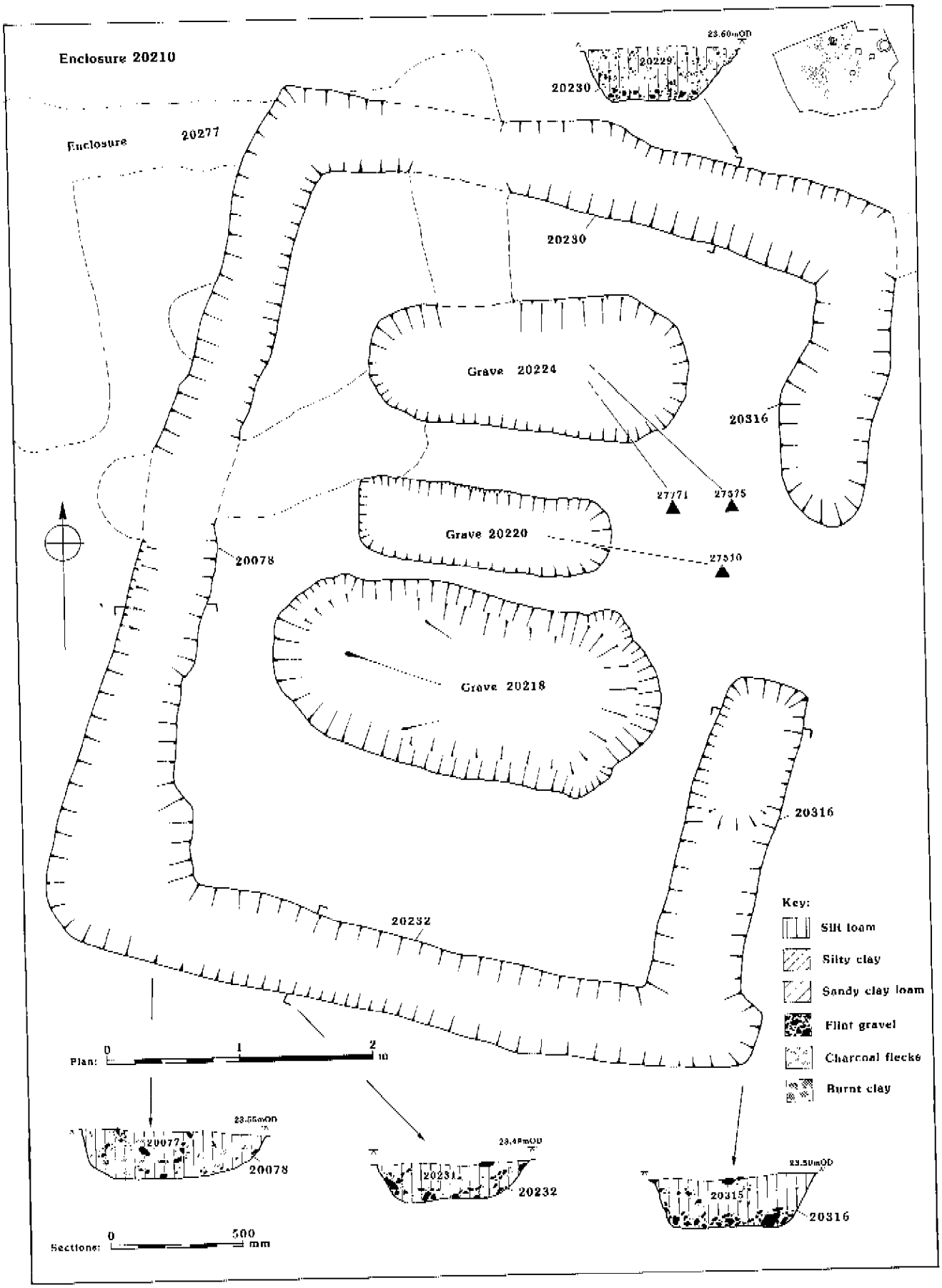


Figure 169 Anglo-Saxon burial enclosure 20210; plan and sections

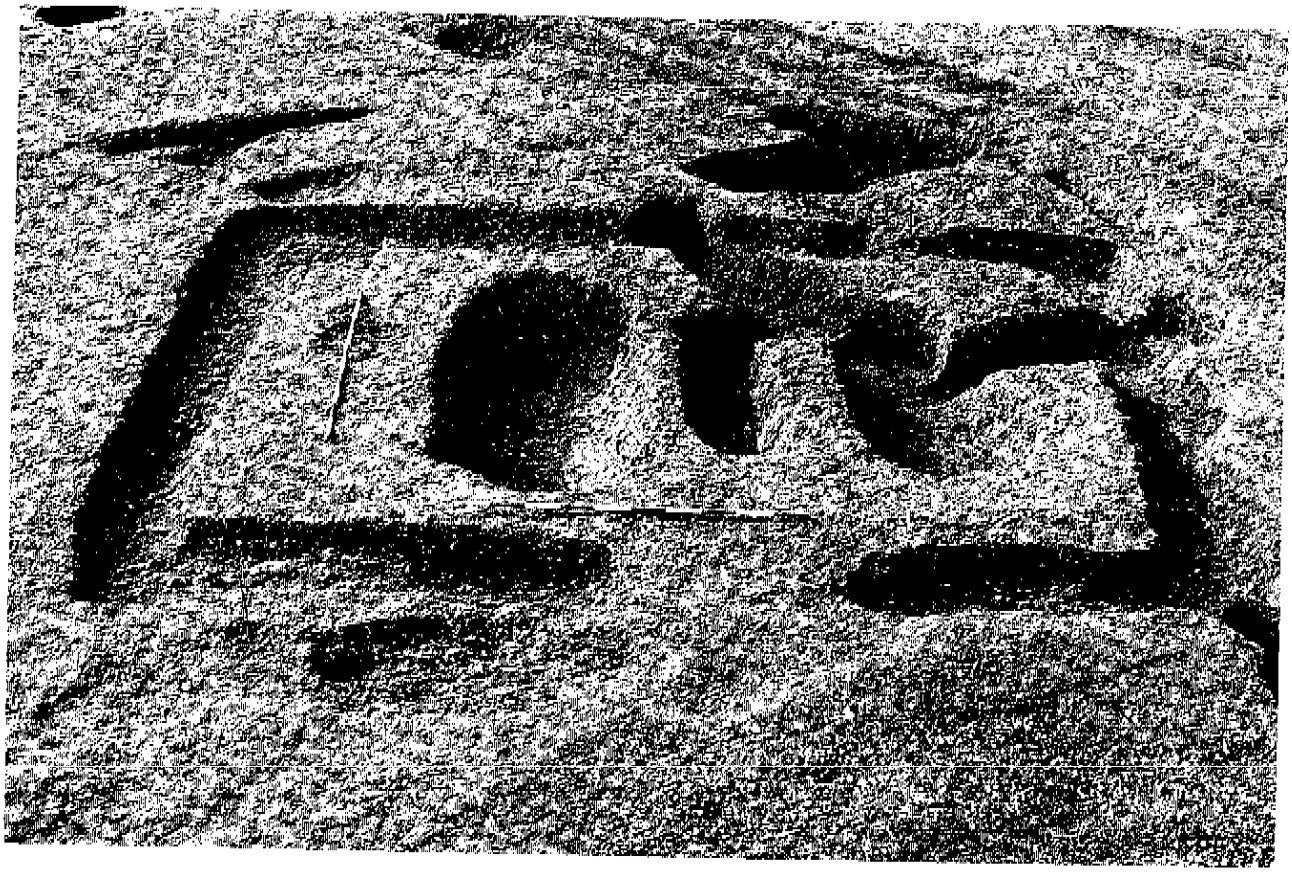


Plate 33 The Anglo-Saxon burial enclosure, 20210, viewed from the east with, from left to right, graves 20218, 20220, and 20223, after excavation (Fig. 169). The north-west corner of the enclosure cuts the front and eastern side of the Iron Age shrine 20277

to say from where in the grave the spearhead and knife blade originally came.

Grave 20163

The eastern end of this feature was not defined (Fig. 34). It was cut to the west by a later ditch (20105) but was neither recorded on the west side of that ditch, nor traced for more than 1.8 m on the east side. Its position, close to five other probable graves, as well as its alignment and dimensions, at least 1.8 m long, 0.6 m wide, and 0.3m deep, suggest that it was also a grave.

Graves 20119, 20152, 20176, and 20177

There were a further four probable graves (20119, 20152, 20176, and 20177) c. 15 m to the west of the enclosure (Figs 34; 38). They were aligned east–west and spread over some 9 m north–south centred on SU 89556 06719, within the northern part of the Iron Age cemetery. Lack of time meant that they were planned but not excavated.

Finally, to the east of ditch 20105, and cut by it, was an L-shaped length of ditch or gully, possibly forming the north-east corner of a square or rectangular enclosure (Fig. 34). It was not excavated, but appeared to be severely truncated, having a maximum width of 0.4 m and its east side (20111) and petered out after c. 3.5 m. The north side (20109) was traced for 1.7 m up to the point where it was cut by the later ditch, but not beyond it to the west. If this was part of a mortuary enclosure it could have enclosed grave 20176, and the others at the southern end of the group. It is considered more likely, however, that along with a number of others on the site, the feature is periglacial in origin (p. 3).

2 Anglo-Saxon Metalwork, by R. Montague

A spearhead and three knives were found, providing the principle basis on which the features were identified as graves.

Spearhead

(Grave 20012, ON 27013)

The spearhead has a concave, angular profile and a corrugated section. There are traces of mineral-preserved textile (a loose 2/2 twill, almost certainly wool (*PWR*)), which had been wrapped around the socket and mineralised wood (ash, *Fraxinus* sp.) within the socket. The spearhead had been hafted with ash cut from mature timber, a common choice for Anglo-Saxon spear shafts (*JW*).

The spearhead belongs to Swanton's series L, which has been dated to the mid-5th–mid-6th centuries AD (1973, 137; Welch 1983, 133). Spearheads of this type are widely distributed but geographically close parallels are known from the cemeteries at Apple Down, West Sussex (Down and Welch 1990, 93, fig. 2.48), Alfriston, East Sussex (Swanton 1973, 213), and Droxford, Hampshire (*ibid.*, 137, fig. 54; Aldsworth 1979, 139–40).

Knives

(Grave 20012, ON 27012; grave 20220, ON 27510; grave 20655, ON 27354)

The spearhead in grave 20012 was associated with a whittle tang iron knife which bears the mineral-preserved traces of the horn handle (*MB*). The tang is central to the blade and the point of the knife is missing. On a second knife from grave 20220, both the tang and the point of the blade are missing, but the cutting edge appears to be straight and the back is angled. Mineralised textile, probably a twill and almost certainly wool, is present on one face of the knife, on the opposite side to that illustrated in Figure 170 (*PWR*). The third, whittle tang, knife was recovered from grave 20655. It has the tang central to the blade and the point of the blade is missing. There are mineral-preserved traces of the horn handle and of the leather sheath (*MB*).

Two typologies for Migration Period knives have been developed, based on factors such as the position of the point of the knife relative to the centre line and the shapes of the cutting edge and the back of the knives, and their relationship to each other. Böhner developed a typology for Merovingian knives from the Trier region (Böhner 1958), and Evison subsequently developed a related typology for the knives recovered from the Buckland, Dover, Kent cemetery (Evison 1987, 113–16). As the tips of two of the three Westhampnett knives are broken neither typology can be applied exactly, but ON 27510 may be of Böhner type C/Evison type b. Böhner dated the type C knives to AD 600–725 corresponding to the dating of the Dover examples by Evison to AD 575–750.

Other metalwork

(Grave 20012, ON 27562 and 27680; grave 20218, ON 27574; grave 20224, ON 27575 and 27771)

Five other pieces of metalwork were found in the graves. Two square-sectioned nails, one with a flat, round, head were recovered from grave 20012; a further square-sectioned nail shank was recovered from grave 20218, and a flat, round-headed nail with a square-sectioned shank and a rivet from the fill of grave 20224. None of these objects are certainly coffin nails and none bore mineral-preserved wood. These nails are of a type common in the earlier periods of activity on the site and may well be residual: the nail from grave 20224 may be burnt. However, the absence of rivets from the Late Iron Age features on the site and their frequent occurrence in Anglo-Saxon graves elsewhere suggests that the rivet (ON 27771), if nothing else, is contemporary with the other Anglo-Saxon objects.

3 Textile Remains, by Penelope Walton Rogers

A loosely woven twill can be seen wrapping round the socket of the spearhead (ON 27013) from grave 20012. The thread-count is low, 9 x 8 threads per cm, and the yarn is Z-spun in both directions. Microscopy of the fibre suggested wool. Open-weave twills of this sort are not common in Anglo-Saxon graves, except, as here, in association with spearheads. There are, for example, similar textiles on spears in grave 374 at Morning Thorpe, Norfolk (Crowfoot 1987, 174, 185), and grave 2B63 at West Heslerton, North Yorkshire (Walton Rogers 1993). At the Sutton Hoo ship burial a fine twill was found wrapping weapons (Crowfoot 1983, SH8, 459) and it seems likely that in more ordinary graves coarse fabrics were used, as a wrapper round the head of the spear.

A finer textile, probably also twill, was found on the blade of a knife (ON 27510) from grave 20220. The thread-count was 15 x 10 per cm and the spin Z x S, the fibre again probably wool. This medium-weight textile is a typical clothing fabric of the early Anglo-Saxon period and probably represents the outer garment of the person with whom the knife was buried.

4 Other Finds of Anglo-Saxon Date

A single coin was found during the initial cleaning of the site, over the area of the main concentration of Late Iron Age burials, and a glass bead, possibly of Anglo-Saxon date, was found in the fill of one of the Late Iron Age graves.

Early Anglo-Saxon Coin, by John A. Davies

(Context 20000, ON 27075)

Sceat, Series X, Wodan/dragon type. AD *c.* 710–735. BMC 31 (North 117).

Obverse: Most of surface missing. Remains of the facing head of Wodan. Border of pellets.
Reverse: Dragon to left, with its head right towards tail. Border of pellets.
Weight: 0.49 g. Die-axis 0°.

(included in Cook and Besly 1992, 220, no. 248, pl. 30, 248).

Glass Bead

A very small blue cylindrical bead was found in the fill of Late Iron Age grave 20245 (not illus.). It is not an Iron Age form, being closer to Romano-British (Guido 1978, fig 37, 4–7) and, more particularly, Anglo-Saxon forms. A slightly larger example from Apple Down was found in a 6th century context (Down and Welch 1990, 37, 99, 166, pl. 41, 45). The bead is regarded as intrusive in the context in which it was found (p. 114).

5 Catalogue of Anglo-Saxon Graves

Grave 20012 (Fill 20011)

(Figs 34; 171)

SU 89554 06717; length 1.7 m, width 0.7 m, depth 0.5 m.

ON 27013: Iron spearhead; Swanton's series L; mineral-preserved wood in the socket (ash, *Fraxinus* sp) (*JW*); mineralised textile on one side of socket (40 x 30 mm), with traces continuing around the side and reverse. A loose 2/2 twill. Yarn Z-spun in both directions (Z x Z) and 9 x 8 threads per cm. Fibres circular cross-section, now 12–57 microns in diameter, almost certainly wool (*PWR*). There is also a single plant stem (*JW*); length 242 mm.

ON 27012: Iron knife; mineral-preserved horn handle traces around the tang; length 85 mm.

ON 27562: Iron nail; length 36 mm.

ON 27680: Iron nail shank; length 12 mm (not illustrated)

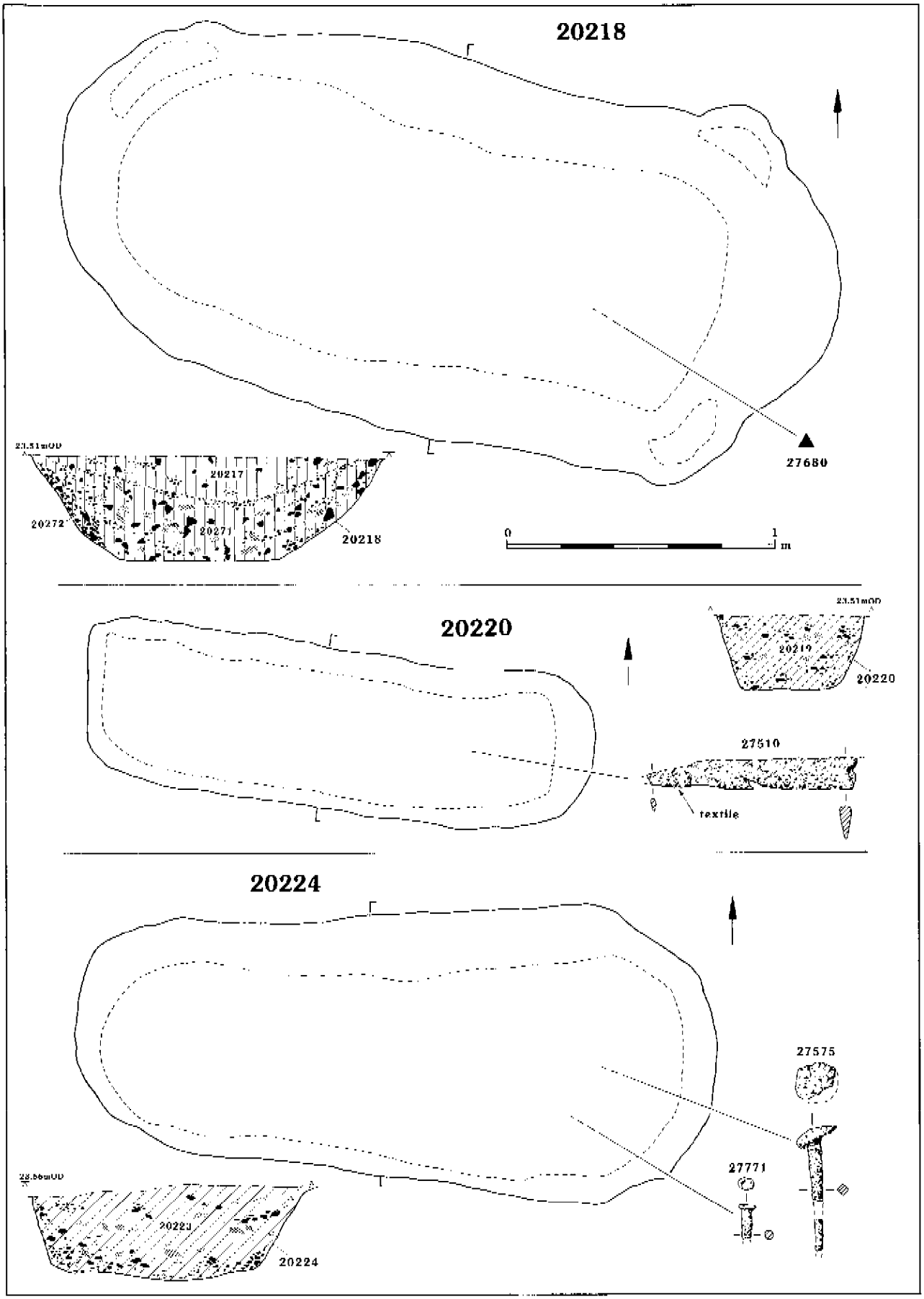


Figure 170 Graves 20218, 20220 (with knife ON 27510), 20224 (with nail ON 27575 and rivet ON 27771)

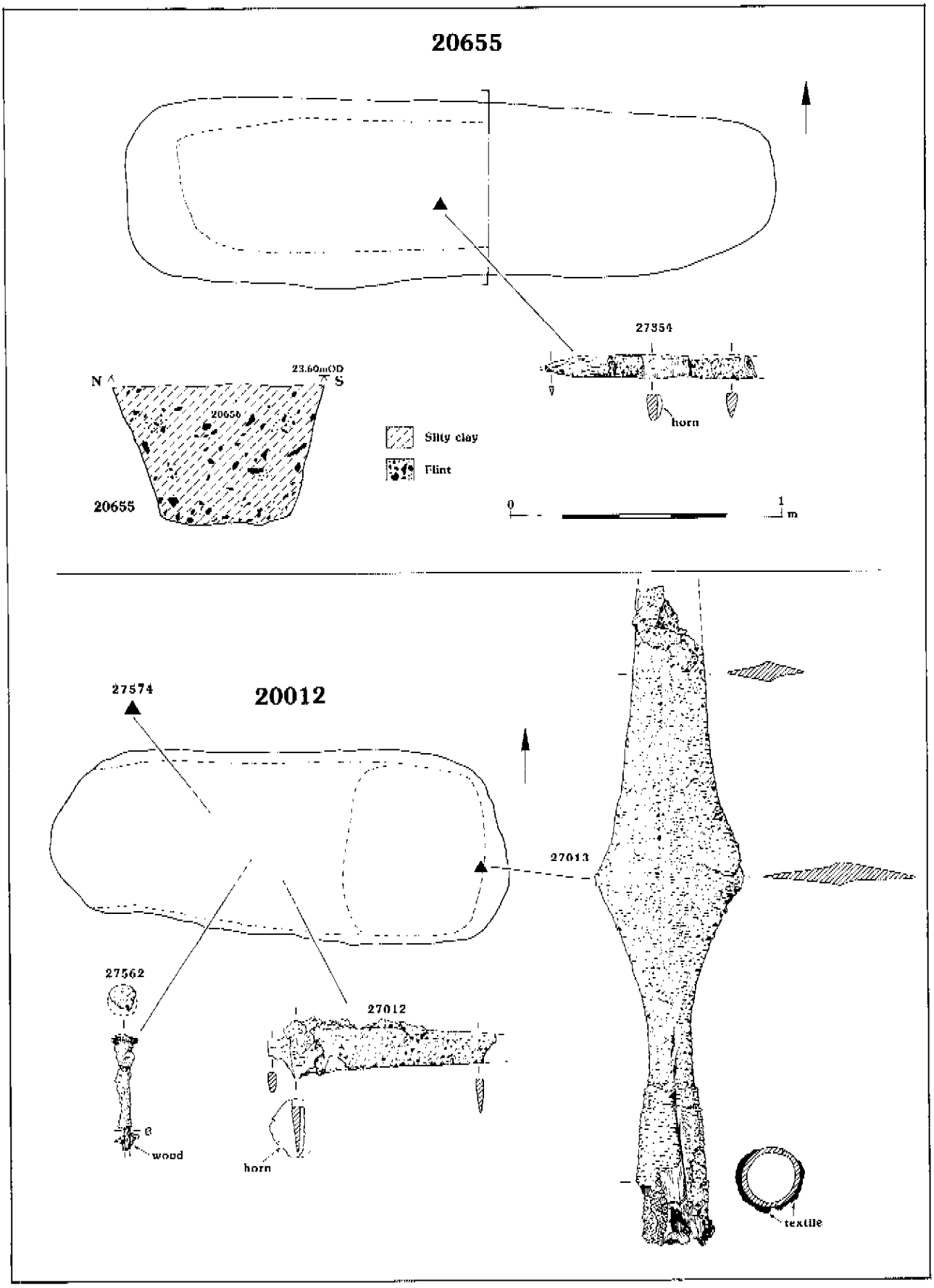


Figure 171 Grave 20655 (with whittle tang knife ON 27354), 20012 (with spearhead ON 27013, whittle tang knife ON 27012, and nails ON 27562 and 27680)

?Grave 20119 (not excavated)
(Fig. 34)
SU 89556 06716; length 1.80 m, width 0.65 m.

?Grave 20152 (not excavated)
(Fig. 38)
SU 89554 06715; length 2.1 m, width 0.65 m.

?Grave 20163 (not excavated)
(Fig. 34)
SU 89557 06724; length 1.40 m, width 0.76 m, depth 0.28 m.

?Grave 20176 (not excavated)
(Figs 34)
SU 89557 06718; length 2.1 m, width 0.7 m.

?Grave 20177 (not excavated)
(Fig. 34)
SU 89555 06721; length 1.65 m, width 0.7 m.

Grave 20218 (Fill 20217)
(Figs 35; 170)
SU 89573 06723; length 3 m, width 1.4 m, depth 0.4 m.

ON 27574: Iron nail shank; length 21 mm (not illustrated).

Grave 20220 (Fill 20219)
(Figs 35; 170)
SU 89573 06724; length 1.7 m, width 0.5 m, depth 0.3 m.

ON 27510: Iron knife; 15 x 10 mm of mineralised textile, probably twill on one face of the blade. Yarn fine Z-spun in one direction, thicker and more weakly spun (?S-spun) in other, *c.* 15 Z x 10 S threads per cm. Fibres; circular cross-section; diameters now 20–75 microns, almost certainly wool (*PWR*); length 78 mm.
ON 27575: Iron nail; length 28 mm.
ON 27771: Iron rivet; length 12 mm.

Grave 20224 (Fill 20223)
(Figs 35; 170)
SU 89573 06725; length 2.2 m, width 0.9 m, depth 0.2 m.

Grave 20655 (Fill 20656)
(Figs 36; 171)
SU 89582 06732; length 2.4 m, width 0.8 m, depth 0.5 m.

ON 27354: Iron knife; mineral-preserved horn handle traces around the tang; traces of mineral-preserved leather sheath on the blade; length 78 mm.

6 Discussion, by A.P. Fitzpatrick

Four of the five excavated graves contained metalwork, and in three cases (graves 20012, 20220, and 20655) this is certainly of Anglo-Saxon date. Careful consideration has been given to the possibility that some of the cremation burials attributed to the Iron Age might actually be Anglo-Saxon but the restricted distribution of the Iron Age burials and the grave goods placed with them rule out any significant misphasing (if any). Therefore the Anglo-Saxon cemetery appears to have contained only inhumation burials. None of the graves intercut and the westernmost ones appear to be in one, or possibly two, rows.

Rectangular enclosures are not frequent discoveries in Anglo-Saxon cemeteries and enclosure 20210 is the most significant element within the Westhampnett cemetery. A small number of related rectangular features are known, from Alton, Hampshire (Evison 1988, 35–6, fig. 50, pl. Vb), Morning Thorpe (Green *et al.* 1987, 42, fig. 5, 302) and Spong Hill, Norfolk (Hills *et al.* 1984, 12, fig. 1, 3; foldout), and Apple Down, West Sussex (Down and Welch 1990, fig. 2.14, S16/grave 69, fig. 2.54). However, none of these structures have entrances as at Westhampnett, which in some respects echoes some contemporaneous buildings (e.g. Bishopstone, East Sussex, structure 47; Bell 1977), and all appear to contain cremation rather than inhumation burials. It may be that this difference is chronological. In the cemetery at St Peter's, Broadstairs, Kent, penannular, and occasionally rectangular, enclosures around individual inhumation graves occur late in the cemetery's use, probably later in the 7th century (Hogarth 1973, 118–19, fig. 4), and a similar date for the Westhampnett example seems likely.

It should also be noted that the undated Westhampnett enclosure 20657 has some affinities with these rectangular Anglo-Saxon enclosures, although it is slightly larger. It is, however, also similar in shape to enclosure 20761 which was dated to the Iron Age and as enclosure 20657 did not appear to contain either cremation or inhumation burials (Fig. 10; Pl. 8), it has been grouped with the Iron Age shrines. The ring ditch 20789 also finds parallels in circular, penannular, and semicircular enclosures in Anglo-Saxon cemeteries, for example Morningthorpe, Spong Hill, and St Peters but as the Romano-British cemetery at Westhampnett appears to focus on ring ditch 20789 it is taken to be a feature of Roman or earlier date.

The presence of what may well have been postholes at three, and presumably originally all four, corners of inhumation grave 20218 finds parallels in a small number of inhumation cemeteries, including Apple Down, and Broadstairs and Ramsgate in Kent where they are suggested to represent canopies over graves (Hogarth 1973; Down and Welch 1990, 15, graves 99 and 157, fig. 2.4, 2.13, 2.56, 2.59, pl. 7; Hogarth 1973). Grave 99 at Apple Down is dated to the first half of the 7th century, and there is the suspicion that such features are generally comparatively late in date (Hogarth 1973, 118–19).

Such limited dating evidence as there is suggests that the Westhampnett cemetery was used, perhaps for only a short period, between the 5–7th centuries. The absence of cremation burials, the east–west orientation of the graves, the rarity of grave goods, and the parallels for the canopy over grave 20218 suggest that a date in the later part of this range is most likely. The South Saxons were converted to Christianity in the 670s and 680s. The sceat found during cleaning hints that an interest in the site of the cemetery continued into the early 8th century.

Although modest, this is one of the first Anglo-Saxon cemeteries to have been recorded on the Sussex Coastal Plain, endorsing Welch's suggestion that the number of stray finds from Chichester and Selsey indicate the presence of settlements and cemeteries. The timber canopy over grave 20218 and the wrapping of the spearhead from grave 20012 indicate that the mourners

followed rituals enacted over much of England, but the disappearance of the skeletons in the acidic soils makes it difficult to say more about the rituals or beliefs of the mourners at about the time Christianity was adopted.

The location of the Westhampnett cemetery, set on a small but locally prominent hill, does, however, echo the dominant location of cemeteries on the South Downs which were usually sited on low ridges and spurs (Welch 1983, 17–19). If any of the monuments associated with the earlier Iron Age or Romano-British cemeteries, or perhaps most likely the large barrow which is presumed to date to the Bronze Age, were still visible, they may have provided a focus for the Anglo-Saxon burials as has frequently been demonstrated elsewhere (e.g. Evison 1987, 154). On the basis of the limited excavation possible of the barrow it is not considered likely it is Anglo-Saxon (Shephard 1979). In relation to local sites on the South Downs this would might suggest that the cemetery was contemporary with the later phases of the Apple Down cemeteries (Down and Welch 1990), and with the poorly recorded burial at Singleton near the Trundle (Welch 1983, 502, no. 120).

7 Undated Features

A number of features cannot be dated, either simply because they were not excavated or because they yielded no clear dating evidence. These included a linear feature (20498) recorded running north-east for 20 m from SU 89542 06694, then turning to the north at SU 89556 06685. It ran for at least a further 5 m to the north, being recorded in Evaluation Trench 26 (Evaluation Context 1088), but it was not identified again during the excavation. It was 0.4 m wide and up to 0.3 m deep with a variable profile, and a number of sherds of Middle/Late Iron Age pottery were recovered from layer 20481 (ditch subdivision 20480). The line of the ditch, which is cut by Iron Age grave 20463, appears to be unrelated to the structure of the later cemetery. However, the large group of up to 25 postholes flanking the north-western side of the cemetery, some inside the empty area within the cemetery (above), are all sited to the north of this feature, and some of them may, therefore, be associated with it.

A second linear ditch (20105), running north–south across the whole site, cut through the centre of the Iron Age cemetery, as well as cutting two of the possible Saxon graves at the north end of the site (20163 and 20176), and a number of unexcavated features (20107, 20115, etc). Its profile was best illustrated in subdivision 20338 at c. SU 89554 06726, where it was 0.6 m wide and 0.4 m deep, with a moderately steep V-shaped section and a flat base. It contained three fills (20389, 20390, and 20391), consisting of brown silty clay loam containing increasing quantities of gravel towards the base. Its stratigraphical position, probably post-dating the Saxon graves, suggests that it may have been a medieval field boundary.

Plate 34 Area 2 during construction of the Bypass

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Abbreviations

BMC = Keary, C.F., 1887, *A Catalogue of English Coins in the British Museum. Anglo-Saxon series, Volume I*, London, British Museum.
D = figure types in Dechelette, J., 1904, *Les Vases céramiques ornés de la Gaule romaine*, Paris.
Mack = Mack, R.P., 1975, *The Coinage of Ancient Britain*, 3rd edn, London, Seaby.
North = North, J.J., 1980, *English Hammered Coinage, Volume 1. Early Anglo-Saxon–Henry III, c. 650–1272*, London, Spink.
O = figure types in Oswald, F., 1936–7, *Index of Figure-Types on Terra Sigillata,('Samian Ware')*.

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The abbreviation IA is frequently used for Iron Age, LIA for Late Iron Age, RB for Romano-British, and AS for Anglo-Saxon. Alphabetical order is used except for periods within sub-entries, which are grouped together and listed in chronological order: under burials/graves, for example, Iron Age precedes Romano-British, which in turn precedes Anglo-Saxon.

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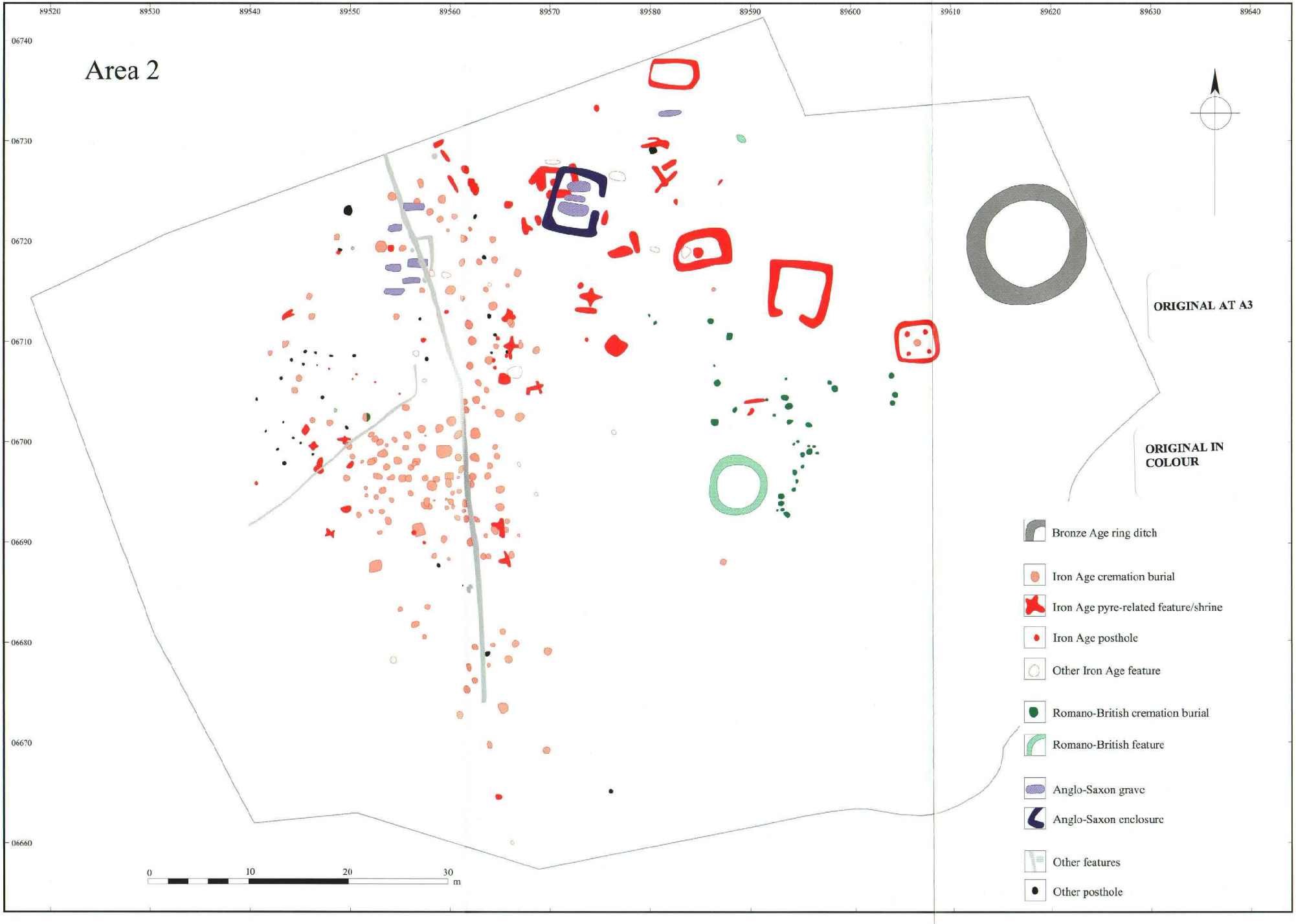

Westhampnett Area 2: phased all features plan. For details and feature numbers see Figs 34-35