An Anglo-Saxon Cemetery at NORTON Cleveland

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In Memoriam
David Birkett

1934–1990

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Cover photograph: The site of the Norton Saxon cemetery from the north, 1986 (photo: Blaise Vyner)

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1 Type Ala monochrome medium annular bead
2 A1b monochrome medium double segmented annular bead
3 A1c monochrome large annular bead
4 A1d monochrome medium annular bead: three segments
5 A2 monochrome globular or barrel-shaped bead
6 A2c monochrome medium globular or barrel bead
7 A4c monochrome nine-lobed sub-melon bead
8 A4d monochrome five-lobed sub-melon bead
9 A4e monochrome four-lobed sub-melon bead
10 A4f monochrome ten-lobed sub-melon bead
11 A5a monochrome long cylinder bead: circular section
12 A5b monochrome long cylinder: square or rectangular section
13 A5d monochrome long cylinder bead: multiple segments
14 B1 gold-in-glass single barrel-shaped bead
15 B2 gold-in-glass double segmented bead
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20 C1e polychrome annular bead: spiral and wavy internal lines

21 C1f polychrome annular bead: spirals overlain by lines
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27 C3a polychrome barrel-shaped bead: double swag and spots
28 C3b polychrome long cylinder: double swag
29 C4 polychrome medium annular bead with spots
30 C5b polychrome barrel-shaped speckled bead
31 C5c polychrome long cylinder speckled bead
32 C6b polychrome barrel-shaped bead: diagonal stripes and band
33 C7a polychrome long cylinder bead: band & reticella trails
34 C7b polychrome long cylinder bead: band & reticella trails
35 C7c polychrome long cylinder bead: diagonal spirals
36 C7d polychrome long cylinder bead: overlaid wavy lines
37 C8 polychrome double-segmented bead: horizontal spirals

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Summary

The accidental discovery of a 6th century grave in 1982 led to the survey and excavation of an almost complete Anglo-Saxon cemetery between 1983 and 1985. This represents the first large-scale investigation of a well-furnished Early Anglo-Saxon cemetery within the presumed boundaries of Bernicia, the northernmost of the Northumbrian kingdoms. Its location in the Tees valley frontier zone between Bernicia and Deira (ie later Yorkshire) is significant and is matched by the incompletely-investigated cemetery in Darlington and other sites between the rivers Tees and Tyne. One hundred and twenty burials were recorded, of which all but three were inhumations, the rest being urned cremations. The date range for the cemetery is based on the grave finds recovered and covers the greater part of the 6th century, possibly extending into the early 7th century. The finds indicate close links with sites as far north as the Tyne valley and with other Anglo-Saxon communities and workshops to the south in Anglian England (Yorkshire, Lincolnshire, the Midlands and East Anglia), after these regions had adopted Scandinavian modes of female dress *c* AD 500.

Résumé

La découverte accidentale en 1982 d'une tombe du 6ème siècle a mené à l'enquête et à la fouille d'un cimètiere anglo-saxon presque complet entre 1983 et 1985. Ceci représente la première enquête à grande échelle d'un cimetière anglo-saxon bien équipe à l'intérieur des limites présumées de la Bernicie, le royaume northumbrien le plus septentrional. Son emplacement, dans la zone frontièr de la vallée de la rivière Tees entre Bernicia et Deira (c'est-à-dire le Yorkshire éventuel), est révélateur et est similaire à celui du cimetière de Darlington, qui n'a pas encore été complètement examine, et à d'autres sites entre les rivières Tees et Tyne. Cent vingt sépultures furent enregistrées, dont toutes sauf trois étaient des inhumations, le reste étant des urnes contenant des cendres. La gamme de dates du cimetière est basée sur les objets découverts dans les tombes et recouvre la plus grande par-tie du 6ème siècle, allant peut-être jusqu'au début du 7ème siècle. Les découvertes indiquent des liens proches avec des sites aussi septentrionaux que la vallée de la rivière Tyne et avec d'autres communaumtés et ateliers anglo-saxons vers le sud, en Angleterre anglienne (Yorkshire, Lincolnshire, les Midlands et 1'East Anglia) après l'adoption par ces régions de modes scandinaves de vêtements féminins vers l'an 500.

Zussammenfassung

Der Zufallsfund, 1982, eines Grabes aus dem 6. Jahrhundert führte zwischen 1983 – 1985 zu der Vermessung und Ausgrabung eines nahezu vollständigen angelsächsischen Gräberfeldes. Dies war die erste großangelegte Untersuchung eines gutausgestatteten früh-angelsächsischen Gräberfeldes innerhalb der angenommenen Grenzen von Bernicia, dem nördlichsten der northumbrischen Königreiche. Seine Lage in der Teestalgrenzzone zwischen Bernicia and Deira (d.h. dem späteren Yorkshire) ist von Bedeutung und kann mit den unvollständig untersuchten Gräberfeldern in Darlington und anderen Fundstätten zwischen Tees und Tyne verglichen werden, Es wurden einhundertundzwanzig Gräber festgestellt, von denen drei Körpergräber und der Rest Brandbestattungen in Urnengräbern waren. Der Datierungsrahmen für dieses Gräberfeld basiert auf den gefundenen Grabbeigaben und erstreckt sich über den großeren Teil des 6. Jahrhunderts und reicht möglicherweise bis in das frühe 7. Jahrhundert. Die Funde deuten auf enge Beziehungen mit Fundstaätten hin, die sich im Norden bis in das Tal des Tyne erstrecken; im Süden weisen sie auf Verbindungen zu anderen angelsächsischen Bevölkerungsgruppen and Werkstätten im anglischen England (Yorkshire, Lincolnshire, Mittelengland and Ostanglien) hin, nachdem diese Gebiete um circa 500 n. Chr. die skandinavische Form der Frauentracht angenommen hatten.

1 Introduction

Discovery of Grave 1

The first burial was discovered by children playing on the bank at the south edge of a hollow way, Mill Lane, running east-west between Billingham and Norton-on-Tees in May 1982. The skull and some of the grave finds were removed, but these were recovered subsequently by the police, who then excavated the rest of the skeleton. It is believed that originally there had been more beads in the assemblage than were actually recovered. Burial in the first half of the 6th century was initially suggested by Professor Rosemary Cramp and Dr Tania Dickinson. A date for this burial early within that period, ie the first quarter of the 6th century, now seems probable. Although a note on this grave has been published (Vyner 1984), it is included in the present volume as Grave 1, the human remains and finds also being discussed in the relevant sections.

Further investigation in 1983, 1984 and 1985 revealed that this burial formed part of a cemetery and its excavation revealed three urned cremations and 117 inhumation graves. The greater part of the cemetery is located at a height of 19 m OD on a sand and gravel terrace overlooking to the east the Billingham Bottoms (Fig 1). This is the marshy stream valley of the Billingham Beck, which joins the Tees estuary some 3.5 km to the south. The land in the eastern part of the cemetery slopes gently towards the Bottoms and, in as much as this can be determined now, the cemetery edge appears to be some 400m from the Beck. It seems probable, however, that the course or courses of the Billingham Beck were not formalised until the period around the Norman Conquest and the establishment of watermills at Norton, which were first mentioned in the *Boldon Book* of 1183 (Bennett and Vyner 1979, 10).

The archaeology and early history of Norton

A number of settlement sites of the later prehistoric and Roman periods have been discovered in north Cleveland (Still and Vyner 1986). It is clear that the Lower Tees Valley was intensively farmed and occupied from the later pre-Roman Iron Age onwards, best evidenced locally in the Iron Age sub-rectangular enclosure at Thorpe Thewles (Heslop 1987), 4 km to the north. No other site datable to the Early Anglo-Saxon period is recorded from Norton parish, but there are a number of undated burials from Norton which might be attributable to the Anglo-Saxon period. Five such sites are recorded within 500 m of the excavated cemetery. Human bone was the only discovery in three cases (Cleveland County Archaeology Sites and Monuments Record 740–2), but one found near Norton Mill in 1804 was associated with a silver artefact (Surtees 1823, 144; Brewster 1829, 10). This might conceivably belong to the Early Anglo-Saxon cemetery. House building at Fernie Road in the 1930s led to the discovery of six burials in stone coffins associated with three bronze swords and a dagger (CCA SMR 737: R Watkin, pers comm). Unfortunately both the skeletons and the artefacts were reinterred during the building operations, so it is impossible to assign these burials to a specific period.

The place-name of Norton refers to its geographical relationship with the earlier estate centre of Stockton, a short distance to the south-west (Watts 1978, 30, map on 31). In the late 10th century, a charter of *c* AD 994 recorded the gift of Norton and its estate to the community of St Cuthbert at Durham (Craster 1954, 193; Hart 1975, 125 no 128; Sawyer 1968, 454, no S1661). The estate was probably dual-centred, being administered from Stockton and with its ecclesiastical centre at Norton. In 1183 the Bishop of Durham possessed a ball *(aula)* at Stockton (Austin 1982, 54–5), while, in the late 11th century, the cruciform Saxon church was constructed at Norton, perhaps to receive a contingent of the Community of St Cuthbert following their expulsion from Durham by the Normans.

The extent of the early medieval estate of Norton seems to have been co-terminous with that of the medieval parish. It was bounded to the north and east by the valley of Billingham Beck, to the south by the River Tees and to the west the boundary was based on smaller tributary streams.

In 1183 a survey was made of the estates of the Bishop of Durham *(Boldon Book)* and this quite clearly shows Norton as the most substantial settlement within its estate or parish (Austin 1982, 26–7). It may have acquired much of its present form by the late 12th century, that is, a rectangular green to which two rows were apparently added to create a 'High Street'. Some elements of this layout were the product of planning and indeed the whole form might have been the result of the various campaigns of planning visible in the villages of north-east England (Roberts 1972; 1987).

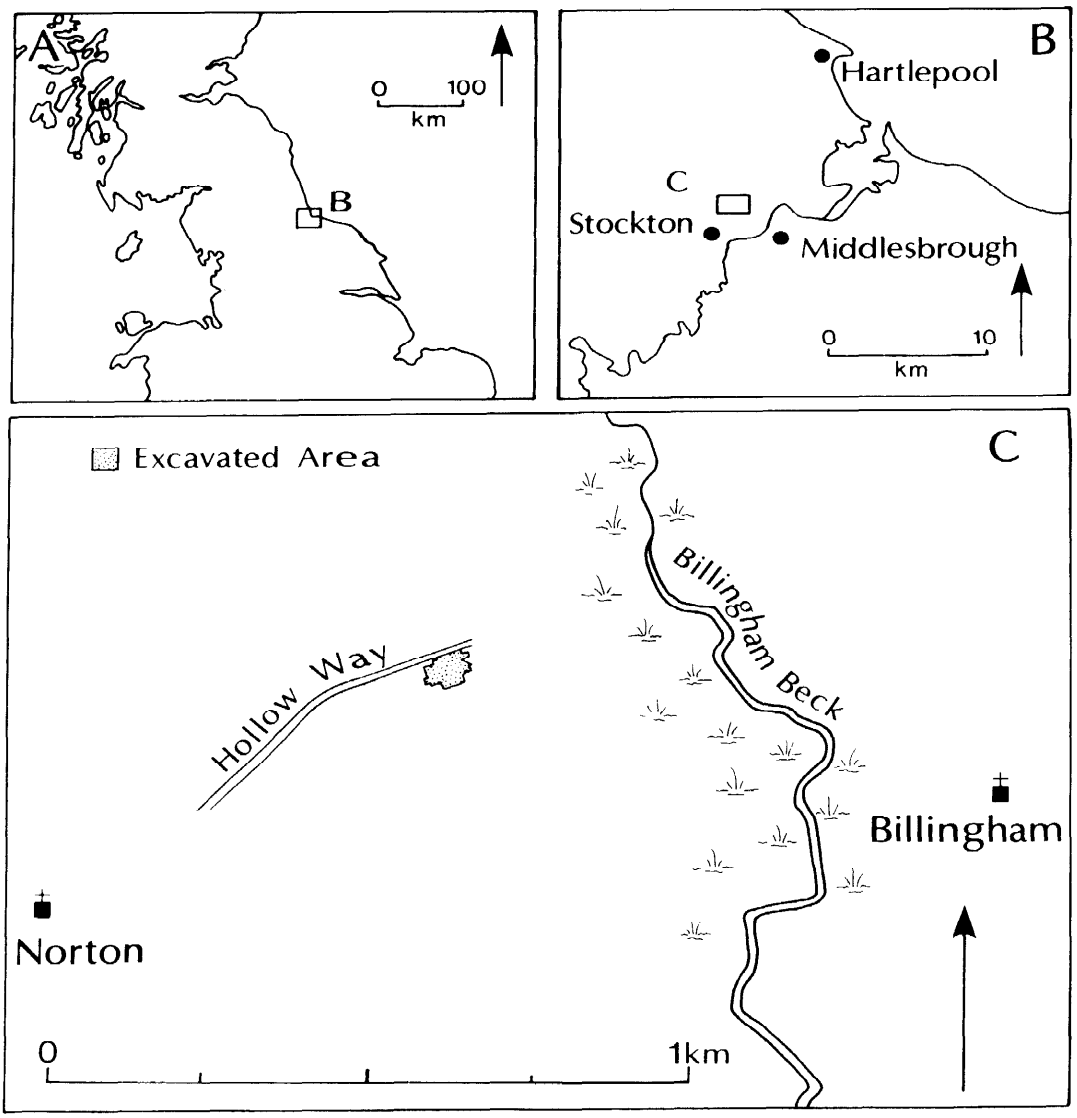


Figure 1 Site location plan and extent of area excavated, showing the relationship of the cemetery to the hollow-way and Later settlements at Billingham and Norton

Previous discoveries of Anglo-Saxon burials in north-east England (Figs 2–3 and Table 1)

Recent surveys of post-Roman and Early Anglo-Saxon burial sites in the Bernician province of Northumbria by Miket (1980) and Alcock (1981) provide additional information to add to the gazetteer entries published by Meaney (1964). Bernicia is here defined as extending from the Tees in the south to beyond Bamburgh in the north (and after *c* AD 638 to Edinburgh and the Firth of Forth) and from the North Sea in the east to the Pennines and Cheviots in the west (Blair 1949; Alcock 1981, 172). The sites fall broadly into two groups: those with small numbers of well-furnished burials or others with rather larger numbers, but accompanied by few or no grave finds. This distinction between well-furnished burials and those with token contents may be chronological, the less well-furnished belonging to the 7th to 8th centuries and may at the same time reflect the adoption of Christianity and the influence of missionaries from the 620s onwards, eg Hepple and Great Tosson (Cramp 1983, 269), which are described below (Figs 2–3 and table 1).

The 1876 finds from Greenbank, Darlington (Co, Durham) representing a minimum of six well-furnished inhumation graves and located just 19 km west of Norton (Miket and Pocock 1976) is typical of the first group. The range of objects found is comparable with those recovered from Norton and

they may well represent part of a similar sized contemporary cemetery in the Tees valley. Unfortunately recent redevelopment in an area adjacent to the Greenbank site produced no further burials or artefacts. The weapons consisted of two swords, two shield bosses and three or four spearheads; two Group IVa and two Class C2 cruciform brooches, two cross-potent small-long brooches and two circular, presumably annular brooches, and beads; together with a buckle, bronze tweezers, bronze bodkins, an ornamented chatelaine, an iron key, two iron bands, what might have been a spindle whorl, and three pottery vessels.

On the other hand for the second group, Yeavering in the valley of the Glen (Northumberland) has produced the largest sample of excavated post-Roman inhumation graves in Bernicia. These were arranged in two cemeteries and originally between them contained several hundred burials. The western cemetery occupied area D and the eastern one areas A and B (Hope-Taylor 1977, fig 63). It is unfortunate that no full catalogue of the excavated burials appeared in the published report and also that the report's discussion of the cemeteries is so limited. Apparently only four furnished graves were discovered among the many excavated in each cemetery. There were two inhumations accompanied by knives in the western ring-ditch complex *(ibid,* 187, 244–6, 282–3, figs 41, 50–2, 88.8 and 10). Then within the eastern cemetery *(ibid,* figs 26–7 and 33), grave AX contained a strange implement interpreted, not entirely convincingly, as a surveyor's *groma (ibid,* 67–9, 200–3, figs 25 and 94) and grave BZ56 had iron belt fittings, a purse-mount and a knife *(ibid,* 185 and 187, figs 35 and 87). Strangely enough, only the latter was considered to represent the burial of an Anglo-Saxon and the vast majority of the cemetery population was seen as being native British, though the possibility that their burial practices from phase IV onwards in the eastern cemetery were influenced by Christianity must be borne in mind.

The still more recent excavations at Milfield North and Milfield South (Harding 1976; Harding 1978; Scull and Harding 1990), located not far from Yeavering in the valley of the Till, have produced other inhumation burials as by-products of the investigation of prehistoric features (Harding 1981). Of the five graves at Milfield North, one of a child had no finds, two had only a knife, one had a knife, a rivet and an annular brooch, all of iron, while the best furnished contained a knife, an annular brooch pair, a pin, a buckle and a chatelaine openwork ring. A possible sixth grave has been adduced from various finds including an iron annular brooch and a chatelaine. By contrast only one of the 21 graves excavated out of an estimated total of 60 at Milfield South was accompanied by finds. In this case, it contained an iron ring, an iron knife and a strange knife-like implement with three perforations with the upper burial, and a lace tag, an iron knife, and an iron buckle with the lower burial of the grave.

These post-war excavations help to make some sense of the more or less unsatisfactory records of old discoveries in Northumberland at Lowick of a seax and three inhumation burials, not necessarily from the same site (Miket 1980, 297–8); at Galewood of an inhumation accompanied by two bronze rings (probably annular brooches), a bead, a pot with pierced lugs, two spearheads or else a spearhead and a knife *(ibid,* 294, no 13); at Howick Heugh of at least 15 inhumations, one of which was found with a spearhead, one with just a knife, one with a knife and a bridle-bit, and yet another with a knife and two beads *(ibid,* 295, no 16: Keeney 1939; Cramp and Miket 1982, 5–6, fig 4); at Great Tosson of inhumations associated with a spearhead and bronze buckle, among other objects (Miket 1980, 294, no 14). Also in Northumberland, inhumations were discovered together with a bronze spoon and earscoop, iron tweezers, two knives, a faceted rock crystal, two single beads on wire rings, and a bronze chain at Hepple *(ibid,* 295, no 15: Miket 1974a; Cramp and Miket 1982, 4–5, fig 3.2); at Capheaton there is a hanging-bowl from a probable barrow-burial context (Miket 1980, 292, no 6; Cramp and Miket 1982, 10, fig 7.12 and pl 2.12); and at Barrasford a secondary inhumation armed with a sword, a shield boss ornamented with silver discs, and a knife (Miket 1980, 290, no 1). In the Yeavering and Milfield area, the Group G1.5 penannular brooch from Wooler *(ibid,* 296, no 25; Dickinson 1982, 49, fig 4.30) conceivably might have come from a grave context.

The Tyne and Wear valleys have produced a series of sites with objects which similarly might come from burial contexts, but which unfortunately cannot be demonstrated to do so. A now-lost sword scabbard strap mount (Miket 1980, 293, no 10: Forster and Knowles 1911, pl IV.10) and a small pot were found at one site in Corbridge (Forster and Knowles 1910, 272) and two Group II cruciform brooches and a string of 32 glass beads at another (Knowles and Forster 1909, 342, 406–8, fig 25; Reichstein 1975, 153, Taf 95.1, 95.2). The latter surely came from the neck and shoulder area of a long-ago-disturbed inhumation grave. Doubt has recently been cast on the provenance of two small-long brooches, one of the cross-potent type and the other with a square plate with notches in the upper corners and a crescent-shaped footplate. These were supposedly discovered prior to June 1984 with a metal-detector to the south of Corbridge, but an alternative possibility is Newton Kyme near Tadcaster in North Yorkshire (Miket 1985). Other small-long brooches have been reported from Cleadon between the Tyne and Wear estuaries (Miket 1984) and Hylton by the Wear (Miket 1982). There is also the Class C2 cruciform brooch found with a glass vessel and the separate find of a Group IVa cruciform brooch from Benwell by the Tyne (Miket 1980, 290–2, no 2: Brewis 1936; Jobey and Maxwell 1957; Cramp and Miket 1982, 8, fig 5.7 and 6, pl 1.7 and 6). Another Class C2 cruciform brooch comes from the Tyne estuary or its bank at Whitehill Point (Miket 1980, 296, no 24; Cramp and Miket 1982, 9, fig 6.10 and pl 1.10), in addition to the two zoomor-

Table 1

	Square-headed brooch	Annular brooch	Cruciform brooch	Small long brooch	Bronze tweezer	Bronze buckle	Chatelaine	Beads Amber-	Iron Key	Iron sword	Shield boss	Iron bands	Spearhead	Pot	Hanging bowl	Bone comb	Earscoop & spoon	Iron tweezers
Benwell	1		1															
Cheaters		1																
Chesterholm		1																
Darlington	2	2	2	2	1	1	1	■	1	2	2	2	4	3				
Capheaton															1			
Hepple								■								1	2	1
Cleadon				1														
Hylton				1														
Howick Heugh								■					1	1				
Castle Eden																		
Corbridge			2	?2				■						1				
East Boldon						1												
Barrasford										1	1							
Galewood		2											1	1				
Great Tosson						1							1					
Humbleton																		
Milfield North		4																
Milfield South																		
Newcastle								■										
Piercebridge	1																	
Sunderland								■										
Whitehill Point	1																	
Wooler																		
Binchester								■						1				

phic annular brooches from Chesterholm and Chesters respectively (Miket 1978). It would be unwise to conclude too much from the single beads at Newcastle and Sunderland (Miket 1980, 296, nos 21 and 23).

Moving further south and closer to Norton, there are very few convincing recorded burial sites from pre-1974 County Durham. Finds of long-cist burials from Brierton, Cornforth and Copt Hill, Houghton-le-Spring *(ibid*, 300, nos 2, 3 and 6) are not among them. The most recent find, prior to the discoveries at Norton, was the chance excavation of a north-south aligned crouched female inhumation within the Roman fort at Binchester, just north of Bishop Auckland on Dere Street in 1978. She was accompanied by an insular version of a Frankish brooch type called an S brooch (Briscoe 1968), together with 26 beads and an antler disc and ring (Miket 1980, 297, no 27; Coggins 1979). A total of 44 unpublished inhumation burials with radiocarbon dates centred on the 8th and 9th centuries excavated at the same site (Cramp 1983, 268) suggest the possibility that this 6th century furnished burial was placed within a contemporary cemetery.

In the eastern part of the county, single isolated burials may be represented by inhumation graves at East Boldon and Castle Eden. The former was associated with a small rectangular bronze buckle decorated with three garnets in gold studs of 7th century date (Miket 1980, 294, no 12; Cramp and Miket 1982, 9–10, fig 6.11 and pl 1.11) and the latter with a famous 6th century glass claw-beaker (Miket 1980, 292, no 7; Evison 1982, 60–1, pl VIIa; Austin 1987, 57–60). As Austin has pointed out,

Anglo-Saxon artefacts from Bernicia

Iron knife	Cut rock crystal	Bead earring	Iron buckle	Bronze chain	Horse bit	Roman brooch	Glass clawbeaker	Sword mount	Iron shears	Loom weight	Bronze discs	Belt hanger	Iron ring	Penannular brooch	S shape brooch	Bone disc	
																	Benwell
																	Chesters
																	Chesterholm
																	Darlington
																	Capheaton
2	1	2		1													Hepple
																	Cleadon
																	Hylton
3					1	1											Howick Heugh
							1										Castle Eden
								1									Corbridge
																	East Boldon
1																	Barrasford
1																	Galewood
					1				1								Great Tosson
										1							Humbleton
4			1								1	1					Milfield North
2			1										1				Milfield South
																	Newcastle
																	Piercebridge
																	Sunderland
																	Whitehill Point
														1			Wooler
															1	1	Binchester

this glass vessel is no longer necessarily the most northerly find of this type, for a ribbed glass fragment, possibly from a claw-beaker, was excavated in the foundation trench of a building at Thirlings in Northumberland (Miket 1974b, 183). On the other hand, these two individual burials could just as easily prove to be the only recognised parts of substantial cemeteries. This was certainly the case at Norton and, as we have already noted, there are reasons for believing the same to be true for the half dozen to a dozen graves from Greenbank, Darlington.

Following discoveries of Anglo-Saxon metalwork, limited excavation during 1991 at Andrew's Hill, Easington, County Durham has confirmed the existence of a further large, but damaged, cemetery of apparent 6th century date (Pickin 1991, 16). The discovery was made as this text was being prepared for publication and too late for inclusion in discussion.

Finally, yet another Class C2 cruciform brooch has been recovered recently as a chance find, this time to the west of Darlington at Piercebridge. It was found by divers on the riverbed of the Tees at the Dere Street crossing (Selkirk 1989) (Pl 13). Its discovery reinforces the impression that this brooch type was popular in Bernicia, being present in numbers at Norton and Darlington, quite apart from the single examples from Benwell and Whitehill Point in the Tyne valley

The inadequacy of so much of our data from Bernicia prior to the Norton excavation should have made it too dangerous to generalise. For example, it can be seen that Alcock was being deliberately provocative by arguing for a 'high ratio of sword-to

spear-graves in Bernicia', with the implication of 'a society in which warrior-peasants were thin on the ground, and warrior-aristocrats relatively numerous' (Alcock 1981, 177; 1987, 263). The presence of 12 spears, five shields and a large knife that can be classed as a seax, from the Norton cemetery (see 'The grave finds', this volume) is balanced by the absence of even a single two-edged sword here, in contrast to Darlington with its two swords, and argues for caution to prevail. Professor Rosemary Cramp's condition, stated before the Norton 1984–5 excavation seasons, that 'about fifty graves are the minimum necessary for a meaningful analysis of a burial community and in that case the Bernician graves are useless for analysis' (Cramp 1983, 270), can be met with the 120 burials available from Norton. But many more Early Anglo-Saxon sites will have to be investigated on an adequate scale in Bernicia, before we can claim any real understanding of social organisation in the Anglo-Saxon kingdom.

But was Norton really in Bernicia? More recently Cramp has perceived 'a difference in the archaeological evidence for Deira and Bernicia' in terms of the absence of cremations north of the Tees and the relative densities of Early Anglo-Saxon burial sites between Yorkshire and north-east England. She went on to suggest that if the Tees Valley is the dividing area between the two kingdoms then one should perhaps accept that the whole valley, and not the North or South bank, would fall into Deira or its sphere of influence' (Cramp 1988, 74). This allows her to include the Darlington and Norton cemeteries as Deiran rather than Bernician and to exclude both sites from Alcock's Bernician group of furnished burials. In view of the general similarity of the cruciform and small-long brooches recovered from sites between the Tyne and the Tees valleys (see The grave finds', this volume), and the possibility that at least some of these finds represent cemeteries rather than isolated burials, this does not seem to be a particularly strong line of argument.

Meanwhile aerial photography has proved an effective means of identifying and analysing settlement and cemetery complexes on sands and gravels in northern Bernicia, notably at Yeavering and Milfield (Hope-Taylor 1977), but also at Thirlings (Miket 1974b; 1975; 1976; 1977; Miket and O'Brien 1982) and Sprouston (Smith 1984, 184–8). A group of *Grubenhäuser* or sunken-featured buildings was located at New Bewick (Northumberland) recently and one excavated (O'Brien 1987), while more than 60 sunken-featured buildings can be plotted now in a re-analysis of the Milfield complex air photographs (Gates and O'Brien 1988). Such techniques are not automatically successful on sands and gravels, however, and unfortunately they frequently cannot be applied to other soil types found in north-east England. As yet no settlement site of the period has been identified in the region between the Tyne and the Tees, despite success in locating later prehistoric settlements in the Tees valley (Still and Vyner 1986; Still *et al* 1989).

Apart from Darlington and a few other sites as far north as the Tyne valley, it is to the cemeteries of Deira (modern Yorkshire) that we should look for parallels to the Norton site. The mixed cremation and inhumation cemeteries near the coast at Hob Hill, Saltburn-by-the-Sea (Hornsby 1913; Gallagher 1987) and Robin's Hood Bay (Meaney 1964, 296), together with the chance finds to the south of the Tees of a Group Cl spearhead at Thornaby (Sherlock 1988), an isolated cremation burial (Meaney 1964, 303; Myres 1977, fig 332.150) and a Class F cast copper alloy penannular brooch at Yarm (Brown, M 1977), are the Anglian finds closest to Norton and the other sites to the north of the Tees valley. A further possible Anglo-Saxon burial site was discovered at Maltby, Cleveland in 1990. The finds recovered consist of beads, part of a cruciform brooch, a pair of 6th century relief-decorated bow brooches imported from north Germany and iron fragments (Sherlock and Welch forthcoming).

Further away to the south-west is the cemetery and settlement complex at Catterick, datable to the later 5th and 6th centuries (Alcock 1987, 250–3, table 1, fig 16.9; Leeds 1949, pls 33 and 122; Hildyard 1953; 1957; Myres 1969, 75 and 108 n 4; Cramp 1970, 206 n 6; Pocock 1970; 1971; Leeds and Pocock 1971, fig 4c; Webster and Cherry 1973; Swanton 1974, 40; Myres 1977, fig 113.337; Wilson 1982; Cardwell 1988). Then there are the Vale of Pickering sites with the coastal inhumation cemetery on Seamer Moor, Seamer (Meaney 1964, 300; Wright 1865; Myres 1977, figs 99. 1105 and 104.1104) and inland sites such as the Staxton cemetery (Meaney 1964, 301–2; Sheppard 1938) and the extensive cemetery and settlement complex currently under excavation at West Heslerton (Powlesland *et al* 1986, 163–7).

The historical context and place-name evidence

Surveys of the historical evidence for the origins of Northumbria have recently been published by Dr D N Dumville (1989), Dr D P Kirby (1991) and Dr B Yorke (1990). According to Bede, the Bernicians like other Northumbrians were Angles *(Historia Ecclesiastica Gentis Anglorum,* hereafter *HE,* I.15; Colgrave and Mynors 1969, 50–l). The first potentially datable event which mentions Bernicia occurs in the compilation known as the *Historia Brittonum,* cap 61 (Morris 1980, 37, 78), where Soemil is said to have first separated Deira from Bernicia. If Soemil was indeed the great-great-great grandfather of the Ælle, who was king of Deira from 568 to 598, this would place this achievement before or around the middle of the 5th century. It is usually taken to imply Deiran independence from British rule in eastern Yorkshire.

The next such event concerns Ida uniting the Din or fort of Guoaroy to Bernicia at some stage during his 12 year reign. Guoaroy was later renamed Bamburgh after Æthelfrith's queen Bebba. Ida's

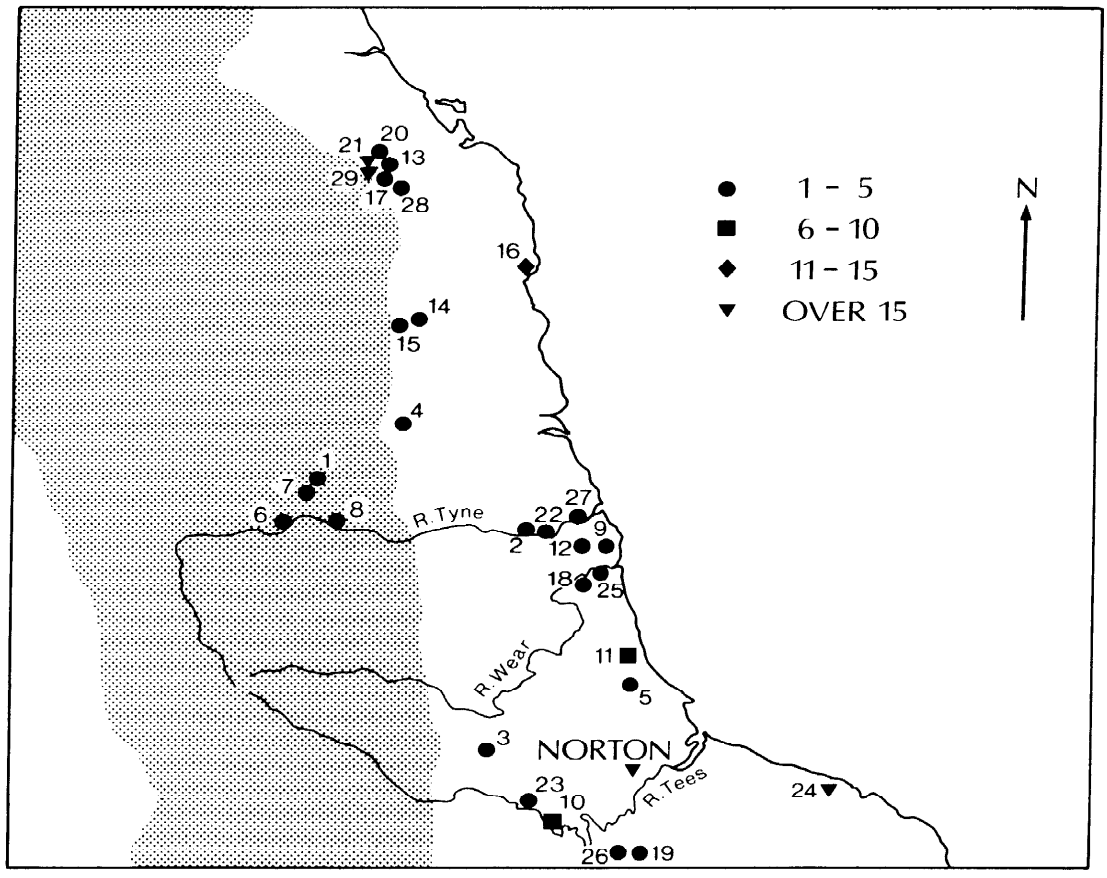


Figure 2 Distribution of Anglo-Saxon burials in north-east England

Key

1 Barrasford
2 Benwell
3 Binchester
4 Capheaton
5 Castle Eden
6 Chesterholm
7 Chesters
8 Corbridge
9 Cleadon
10 Darlington
11 Easington
12 East Boldon
13 Galewood
14 Great Tosson
15 Hepple
16 Howick Heugh
17 Humbleton
18 Hylton
19 Maltby
20 Milfield North
21 Milfield South
22 Newcastle upon Tyne
23 Piercebridge
24 Saltburn
25 Sunderland
26 Thornaby
27 Whitehill Point
28 Wooler
29 Yeavering

success in taking control of this coastal stronghold may have been achieved by either aggression or by negotiation as a federate settlement (Alcock 1987, 247). Whichever is the case, it has traditionally been accepted as marking the beginning of Anglo-Saxon control of Bernicia. Bede calculated Ida's reign from a regnal list as beginning in 547 and ending therefore in 559. This may need to be corrected to 548–560, if Edwin's reign began in 617 rather than 616 (Kirby 1991, 67–8). On the other hand, Bede assumed that all the kings listed ruled successively. As other sources suggest that some of them governed contemporaneously, it may be that Ida's reign began later in the 6th century (Yorke 1990, 75–7; Blair 1950; Miller 1979, 49). A chronicle fragment derivative of Bede's summary chronicle claims that Oessa-Eosa was the first member of the Bernician royal dynasty to come to Britain (Dumville 1973). If the regnal list is correct in making him Ida's grandfather (Dumville 1976), he might have

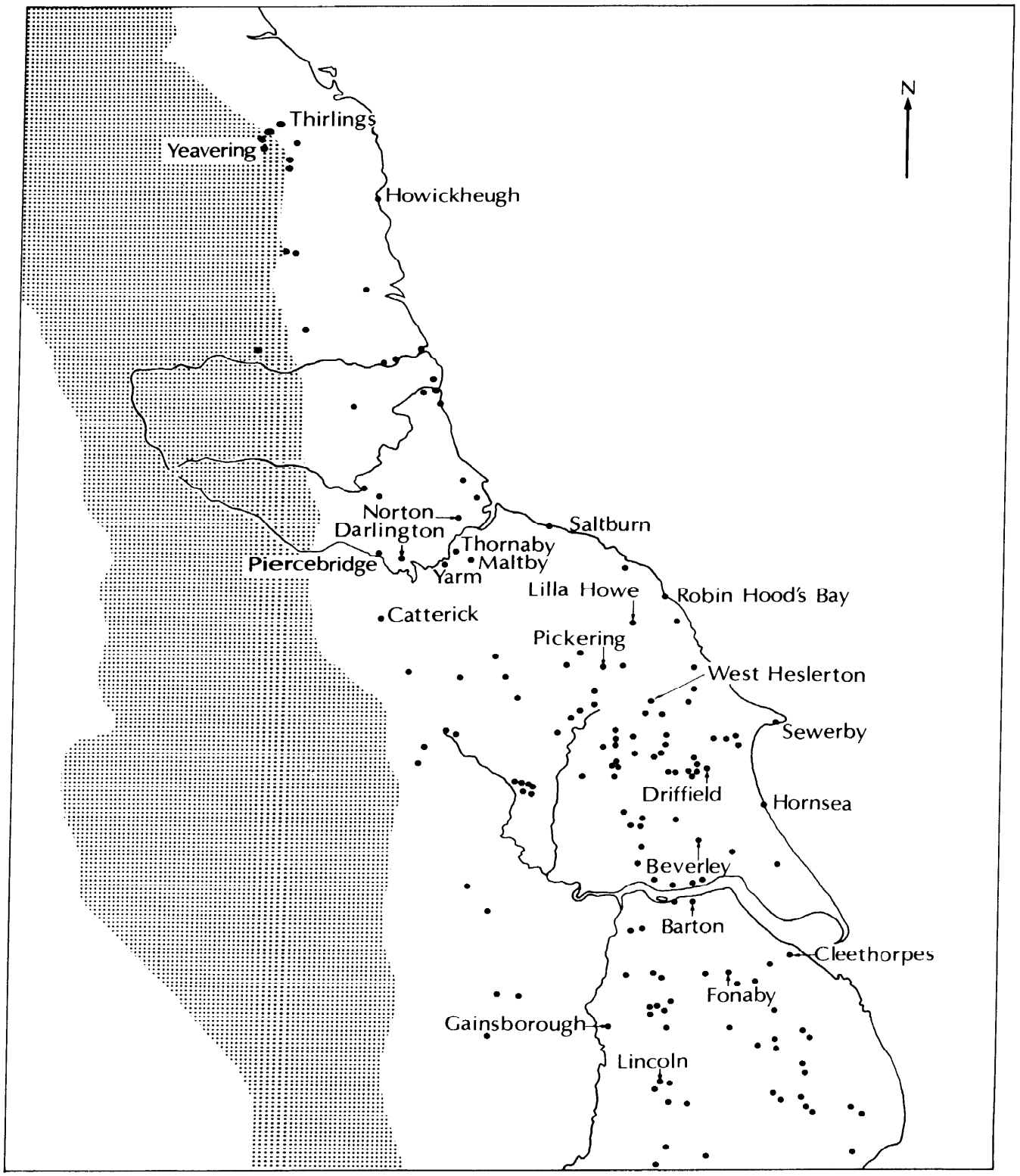


Figure 3 Anglo-Saxon cemeteries in north-eastern England

arrived here as early as *c* AD 500. Æthelfrith (592–616), a grandson of Ida, is the first Bernician king with reliable dates for his reign (Yorke 1990, 77).

Dr Margaret Faull points to the admittedly late source of Reginald of Durham, as an indication that Ida may have annexed Bernicia with Deiran assistance (Faull 1979, 31–3; Arnold 1885, I, 338–9). This is a reference to an earlier landing by Ida at Flamborough Head in Yorkshire, a defensible location with the earthworks of Dane's Dyke there. It is certainly tempting to see the sequence of coastal Anglo-Saxon cemeteries in Yorkshire from Hornsea to Saltburn (now in Cleveland) as supporting a northward process of colonisation. The acquisition of Bamburgh might be seen as a dramatic, but logical extension of this process, though most scholars would now agree with Dumville that there is no basis for seeing Ida and his followers as holding 'little more than a pirate stronghold on the rock of Barnborough' (Blair 1947, 48; Dumville 1989,218).

An alternative route of Anglian penetration can be traced inland northwards along Dere Street from Yorkshire into (pre-1974) County Durham, which is matched by the distribution of late cruciform brooches (Pocock 1970,409) and of Old English place-names for fortified sites in *burh* and *ceaster* (Cramp 1983, figs 1 and 2). We would be more reluctant now to assume that until the battle of Catræth in *c* AD 588–90 'the English had no control of the important route along the line of the present Al north of Catterick or the Stainmore route west, and until these were under their control the only safe link with the Northern settlement must have been by sea' (Cramp 1970, 200). The sites known today in the Tees valley from Piercebridge to Norton, together with Binchester a little further north on Dere Street; Castle Eden; and the many Wear valley and Tyne valley sites which have produced finds of the 6th to early 7th centuries, cannot be ignored. Taken together with the evidence for a late 5th to 6th century settlement and cemetery complex at Catterick, they suggest that apparent gaps in the Early Anglo-Saxon archaeological evidence may well be filled in time.

Thanks to the reassessments of the historical and archaeological evidence by both Campbell (1979) and Alcock (1987, 162–3), it is possible to produce a reasonably convincing portrait of the territorial organisation of 7th century Bernicia. Royal centres were arranged in a hierarchical pyramid, with a few fortresses such as Bamburgh and Dumbarton, described by Bede as both *civitas* and *urbs,* at the summit. A *civitas* is a particularly important type of *urbs,* so below this came an *urbs* which was not a *civitas,* eg Dunbar, perhaps controlled by a royal official as in the case of the *præfectus* at Dunbar (*Vita Wilfridi,* cap 38; Colgrave 1927, 76–7). Such an *urbs* might also be described as a *castellum*. At the lowest level came the *villa regalis* or *vicus regis,* of which the villas of *Ad gefrin* and its successor of *Mælmin* (Bede, *HE,* II.14; Colgrave and Mynors 1969,188–9) are good examples, usually identified respectively with Hope-Taylor's site at Yeavering and the still unexcavated cropmark site at Milfield (Hope-Taylor 1977). These villa sites were clearly numerous, visited briefly by kings and their retinues in order to consume food rents, settle disputes and administer justice (Charles-Edwards 1989, 28-33). As such, they hardly deserve to be labelled as palaces. Unfortunately neither Bede nor our other early sources provide us with the locations of any comparable royal centres between the Tyne and Tees and the closest of those mentioned for Deira to the south was the *vicus* at Catterick, apparently visited by Edwin and Bishop Paulinus in the same year as their 36-day stay at Yeavering of 627 or 628 *(HE* 11.14; Colgrave and Mynors 1969, 188–9; Kirby 1991, 78–9).

Place-name research by V. E. Watts in County Durham is still in progress and only interim statements have been published by him to date. The *-ingahām* name of Billingham is one of the earliest Old English settlement name forms to survive there (Watts 1970, 253–4 while it seems that 'on the whole . . . the *tun* names must be associated with secondary settlement during the Anglian period (Watts 1970, 256). Norton was apparently so-called in relation to the estate-centre of Stockton, reflecting the documented Anglo-Scandinavian or Late Anglo-Saxon estate pattern (Watts 1978, 30–1; Copley 1988, 87, no 226). We cannot claim to know the name adopted by the small 6th century cemetery community and its neighbours to describe their land-holding there.

The Durham place-name distribution maps do reveal, however, three clearly demarcated zones, which are from east to west, a *tun* name area, a *lēah* 'wood, clearing or glade in a wood' area and finally one which contains neither form in the Pennine uplands and moors and also, incidentally, on the coastal plateau (Watts 1976, 219, figs 20.4 and 20.5). It is within this framework of agricultural land to the east, woodland to the west and the Pennine uplands beyond them, that we must consider the limited archaeological evidence for the Early Anglo-Saxon period in Durham, all of which seems to be confined to the *tun* settlement area, as defined by Watts.

2 The excavation

Methodology

A resistivity survey was undertaken in the autumn of 1983 in the immediate vicinity of the initial discovery of 1982: a grassed field used as a general recreation ground. The survey used a Martin Clark Type 3 resistivity meter over an area 20 m from east to west by 11 m north to south with the probes spaced at 50 cm intervals, in an attempt to locate further graves. It revealed four linear anomalies, only one of which proved later to be a grave.

In the spring of 1984 a trial excavation was undertaken to ascertain whether the initial grave had existed in isolation or as part of a cemetery. Two complementary strategies were adopted involving on the one hand, random sample trenches which were excavated by hand and on the other, the opening of trial trenches in the immediate area of the first discovery (Pl 1). For the purposes of the sampling strategy, Norton East Mill Field, as it is described on the *Norton Tithe Award Map,* was divided into 200 numbered 10 m grid squares. Ten numbers were selected at random and those squares then excavated. The results of this sampling were not encouraging, however, for no archaeological features were located. It became clear subsequently that a much larger sample of squares would have been necessary to achieve success. Despite this negative result, the other trial trenches located two inhumation burials within 3 m of the initial grave.

As the soil was only 20–25 cm thick, the site was stripped manually thereafter (Pl 1), a tactic which paid an immediate dividend as the third burial to be excavated consisted of a semi-articulated scatter of human bone, partly mixed in the former ploughsoil. The field had been ploughed during the Second World War and visible surface traces of ridge and furrow and insubstantial land boundaries testified to earlier agricultural activity there. Many other graves proved to be shallow and had been disturbed, but nevertheless many of the grave finds were successfully recovered. This manual stripping also proved valuable in the cases of two of the three cremations. These were also in very shallow pits and the upper parts of their urns had been disturbed by the plough. Yet it proved possible to recover potsherds and some of the scattered cremated bone in the topsoil.

Plate 1 General view of excavations in 1985

Figure 4 *Norton cemetery plan showing excavated features*

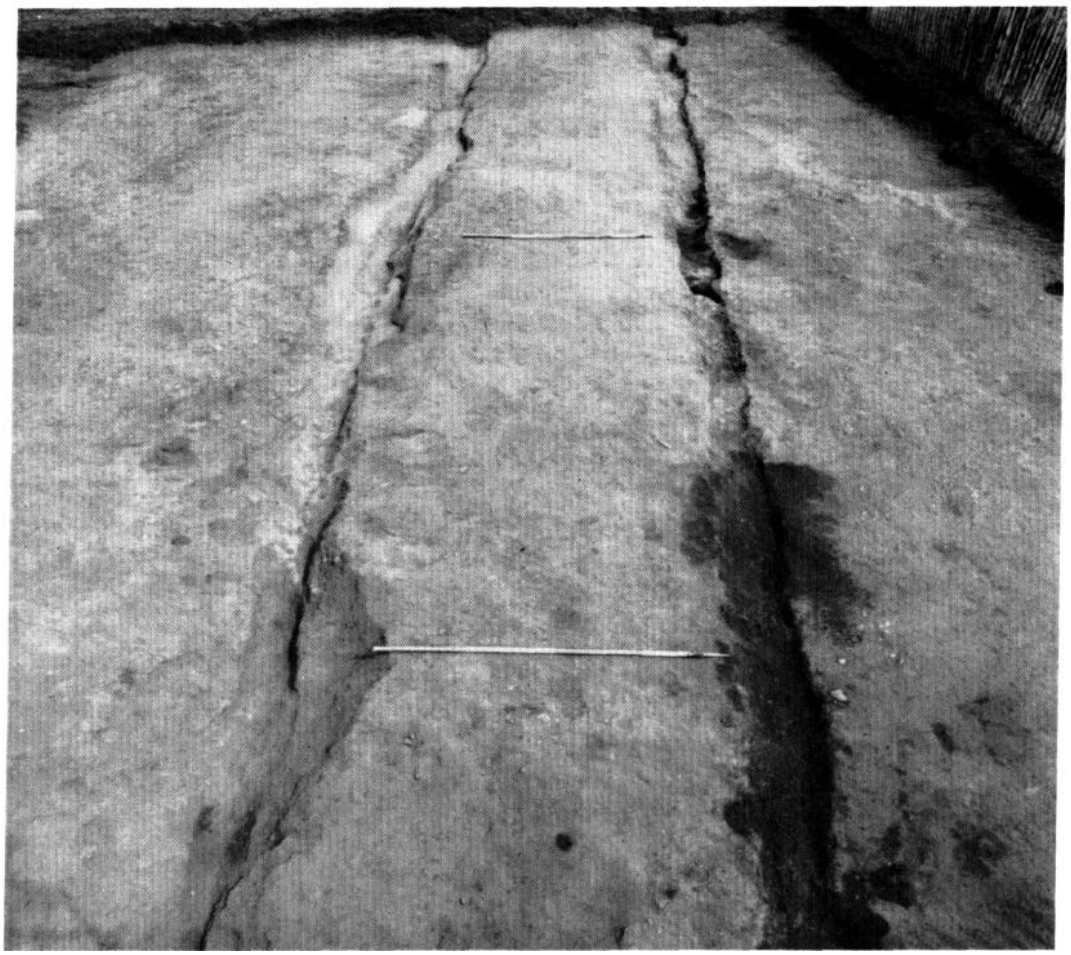


Plate 2 Boundary ditches in the southern part of the site: view from west

Pre-cemetery excavated features (Fig 4 and Pls 1–4)

A series of shallow ditches and gullies ante-date the Anglo-Saxon cemetery, though some of them were utilised as boundaries for the cemetery (Fig 4). There are also some smaller features which contained burnt clay and a pit with charcoal in its fill.

The southern side of the cemetery was enclosed by ditches 353 and 347, both of which are shallow and narrow (Pl 2). Ditch 353, the southernmost of the two, turns through 90° to form the western boundary of the cemetery as well and, in the process, is cut by the more northerly east-west aligned ditch 347. On the west side of the site ditch 347 was well defined but in the east it had been disturbed by ploughing and more recent activities. Although because of subsequent disturbances, it could not be excavated for the full 70 m exposed, ditch 347 had been continuous. The general character of both ditches is similar with a width of 60 cm, a depth of 15–20 cm, a gentle V-shaped profile, and shallower on the sloping ground to the east. The northern inner ditch 347 cut another ditch 358, while the southern ditch 353 terminated west of this same ditch.

Feature 358 was a shallow and narrow ditch which delimited three sides of an annexe or enclosure (Pl 3). It had been severely disturbed by ploughing and also by post-medieval feature 361. The open side of the annexe faced north into the cemetery area, but this need not be significant, as the only artefacts recovered were Bronze Age sherds found some distance to the south of the annexe area. The fill of ditch 358 produced no finds and excavation to its south produced no further features. As there was no trace of structural features within the annexe, it would seem that ditch 358 is unlikely to represent a drain or foundation trench for a building. Further, this ditch can be demonstrated to be stratigraphically earlier than the Anglo-Saxon cemetery to its north and it probably belonged to the same period as ditches 347 and 353, which are interpreted here as part of an earlier field system.

Plate 3 Ditch 358 to the south of the cemetery

Two further ditches on the western side of the excavated area may also have served as boundary ditches. Ditch 334 was a continuation of the southern ditch 353 and is 90 cm wide and 30 cm deep with a rounded terminal at its northern end. The other ditch, 309, was 11.5 m long and 80 cm wide with gently sloping sides and a flat bottom. The two ditches ran in parallel separated by a 1 m gap at the south and a 1.5 m gap at the north end.

Very few finds were recovered from the fills of these features, but sufficient to allow the suggestion of a late prehistoric date for their construction. During the excavation a small assemblage of worked flints was recovered, mostly from the topsoil, but three flints were found in the fill of ditch 347 and were the only artefacts from it. In addition a thumbnail scraper was discovered in the fill of ditch 353 at the south-west corner of the excavated site. Only two potsherds were recovered from ditches 347 and 353 which, stratigraphically-speaking, were the two earliest features on the site. These sherds are suggested here to be datable to the pre-Roman Iron Age or Romano-British period.

There was a series of short gullies on the western side of the cemetery, consisting of shallow and narrow ditches aligned north to south. They were dug into the natural gravel subsoil and were not intercut, except for gulley 286, which intercut with both gulley 301 and Grave 120. It is improbable that gullies 270, 279, 283 and 288, which are undatable, would have formed a western boundary to the cemetery, as four burials occur beyond them. On the other hand, it is possible that they were associated with a group of small pits and also perhaps with some patches of burnt clay discussed below. The only associated artefact was a flint flake. Finally a similar gulley, 252, was located within the cemetery and was cut by Grave 94.

Two small features, 325 and 294, also on the west side of the site contained burnt clay. There were traces of charcoal in the fill of pit 325 and several small unburnt stones in both pits to indicate that the burning did not take place *in situ*. The clay was presumably burnt in their vicinity and then

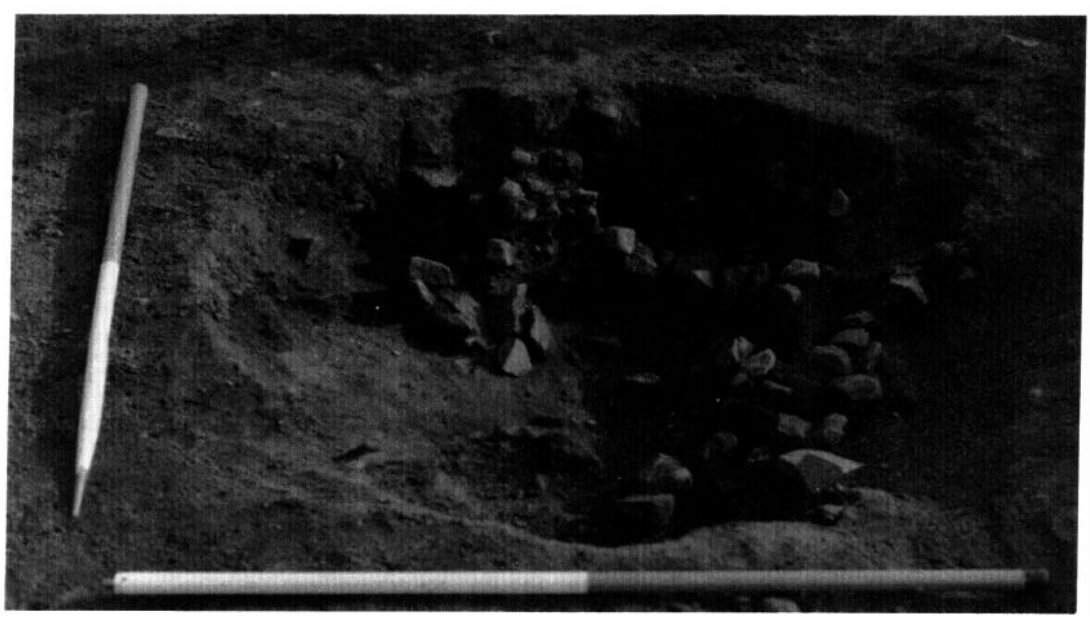


Plate 4 Pit 248 containing burnt stones

deposited in them. A third pit, 248, again contained several fills of burnt material and this time a number of burnt stones at its bottom (Pl 4). Three other features at the western edge of the site may also be associated with this phase of activity.

They are a shallow pit, 285 and two small gullies, 319 and 321 to the north, whose function is unclear. Gulley 321 produced a Roman potsherd.

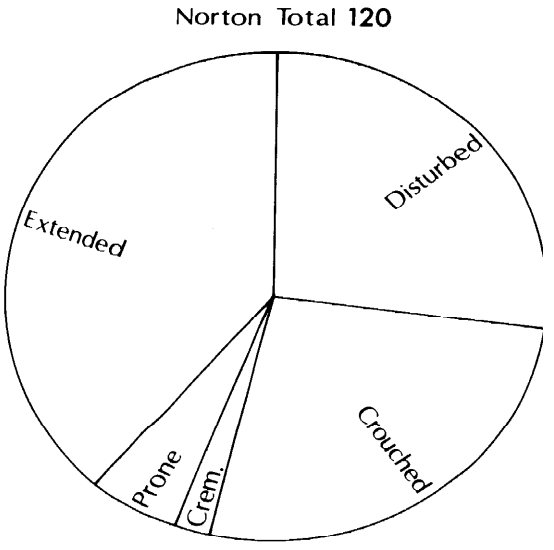
Layout of the Anglo-Saxon cemetery (Figs 5–8 and Table 2)

The cemetery appears to be bounded on the east by the slope down to the marshes of Billingham Bottoms, on the north by the hollow way known today as Mill Lane and to the west and south by the ditches already discussed, which are presumed to belong to a late Iron Age or Romano-British field system. Three types of inhumation burial, in graves cut to different depths, were revealed in the cemetery. In the first, the corpses were lying on the surface of the subsoil and no grave cut was visible. Their skeletal remains had been disturbed and some of the bone was recovered from the topsoil. A shallow hollow marked the graves of the second type. The skull and feet at the higher ends were frequently plough-damaged, whilst the ribs and pelves were protected by occupying the deepest section of these grave cuts. Well-defined graves dug into the subsoil form the third type and these were usually undisturbed. Graves of all three depths can be found in every part of the cemetery, but there were more shallow disturbed burials in the northern and eastern cemetery quadrants. In all 25 inhumations were buried on the subsoil surface, 26 in shallow hollows and 65 in well-defined graves, together with one badly-disturbed burial and three cremations.

The corpse might be placed in any one of a variety of positions within the grave (Table 2 and Figs 5–6). The most popular found the body laid extended on its back. This occurs with 46 burials (38.3% of the total of 120 burials). A crouched position is recorded for 32 inhumations (26.6%) and seven (5.8%) had been placed face-down in the prone position. Nevertheless a further 30 skeletons (25%) had been disturbed so badly that their original position could not be determined and another two burials (1.66%) had no bone surviving, while three (2.5%) had been cremated.

With only three exceptions all the inhumations were aligned north–south or within 40° of this orientation (Figs 6 and 7). Two of the exceptions are the prone burials of Graves 47 and 116. These lay close together at subsoil surface level, orientated east–west and without grave finds. Grave 102 was the third exception, also aligned east–west. No human bone was visible in this grave, though the finds lay as if they had accompanied a corpse.

A combination of skeletal evidence and grave finds (Table 2) gives totals of 23 men, of whom 10 were accompanied by weapons; 66 women and female children, of whom 28 were identified from grave finds rather than from the bone evidence; and 31 unsexed burials. There were 25 children of 12 years or younger, of whom 17 were unsexed burials and 8 were among the female graves. (For more detailed



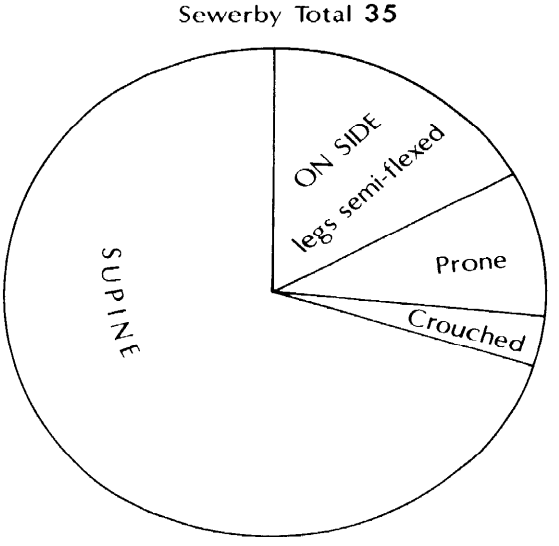
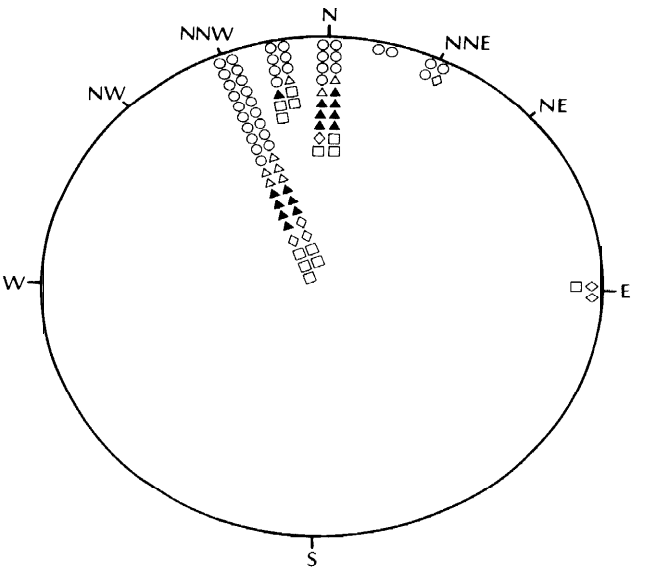


Figure 5 Burial positions at Norton and Sewerby



○ extended
△ crouched right
▲ crouched left
◇ prone
□ burial position unknown
36 burials too disturbed for classificatior

Figure 6 Orientation of graves at the Norton cemetery

discussions of the skeletal material see 'The human remains' and 'The social structure of the Norton cemetery', this volume).

The graves appear to have been laid out in rows rather than in plots, a pattern also observed at the Hob Hill cemetery in Saltburn (Hornsby 1913, 133), Norton's nearest known cemetery neighbour. Two groups of different alignments can be observed in the burial rows at Norton, separated by a north–south gap through the centre of the cemetery (Fig 7). This gap was 5 m wide at the north end and 4 m wide at the south and in the middle of it is a disturbed hollow, feature 37. On the eastern side of the cemetery gap, the graves are orientated roughly north-south between compass bearings of 0° and 20° , but in the western area they were between 339° and 359° . Some 31 of the row burials in the eastern half of the cemetery may be aligned upon a putative prehistoric feature to the south where fragments of a Bronze Age collared urn were found (Graves 88, 29, 7, 8, 64, 54, 70, 44, 48, 86, 68, 71, 85, 43, 32, 72, 45, 53, 62, 67, 46, 52, 56, 73, 65, 55, 51, 58, 80, 63, 78). Thus five rows could be seen as radiating from the findspot of this Bronze Age pottery (Fig 8; row 1: Graves 70, 64, 54 and 7; row 2: 68 and 71; row 3: 56 and 46; row 4: 73, 65, 55 and 51; row 5: 63 and 78). There are exceptions to this general pattern of grave rows, however, and some burials seem to be organised in discrete groupings or plots (Pl 5).

One group of eight burials in the north-east corner stands out, being separated from the rest of the cemetery by a distance of 2 m. Perhaps reinforcing

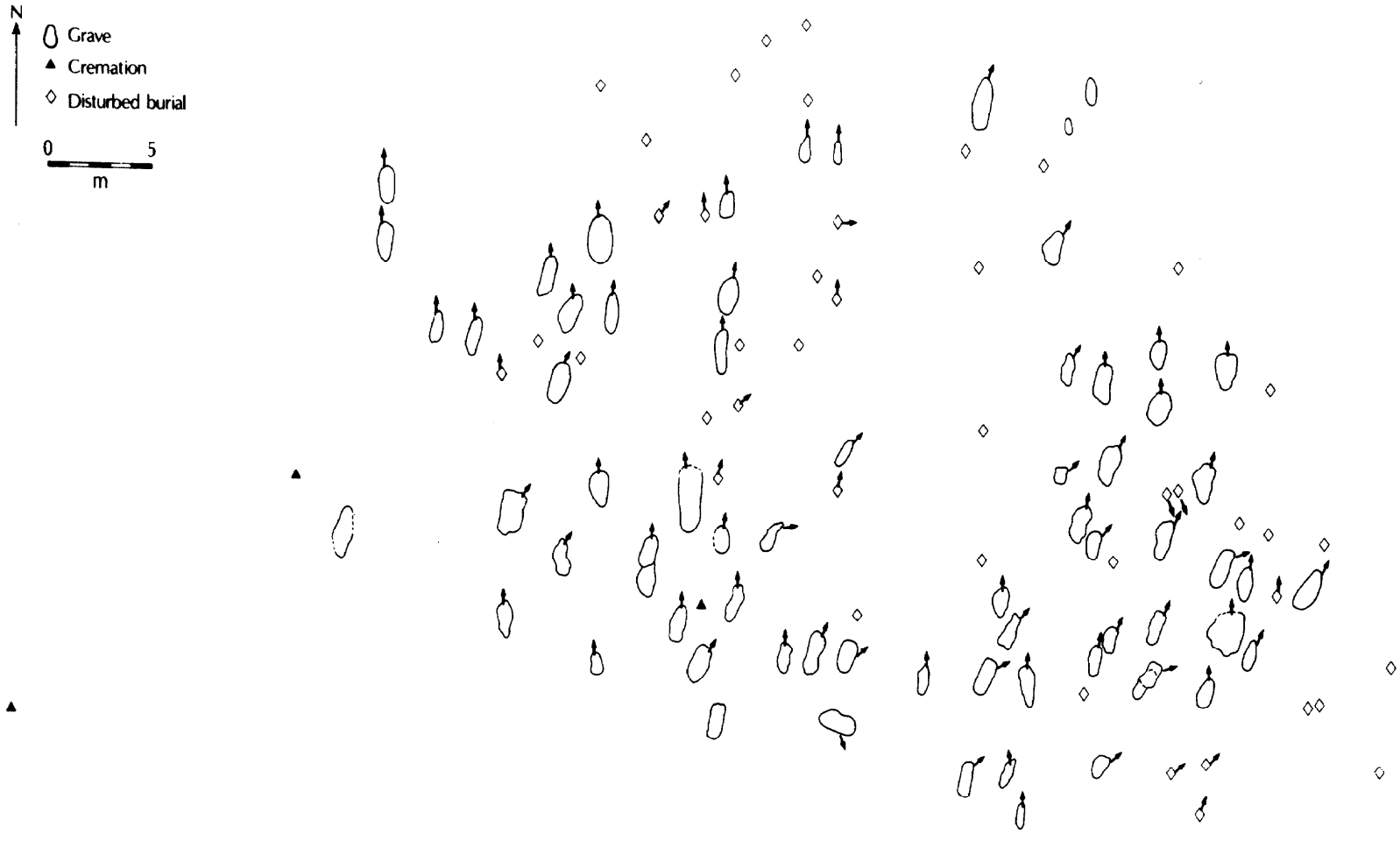


Figure 7 *Alignment of graves at the Norton cemetery*

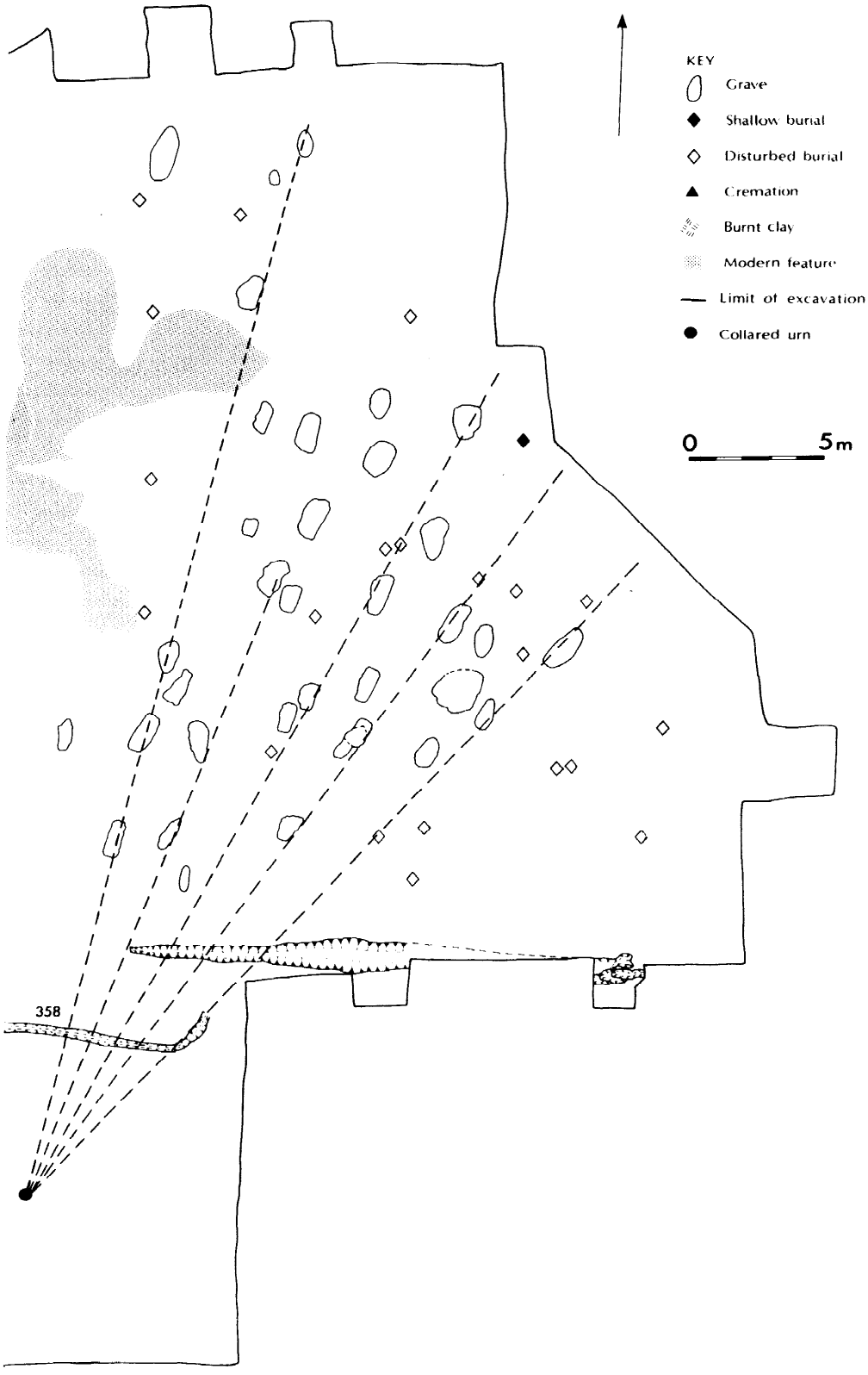


Figure 8 Cemetery plan, showing, in the eastern part, the radiation of burials from a point to the south, the findspot of Bronze Age pottery and potentially originally a burial mound

Table2 Summary of burial, age, sex and grave finds at Norton

Grave no	Depth	Body Position	Age	Sex from skeleton	Gender by artefacts	No of artefact types
1	?	?	25-35	Female	Female	5
2	shallow	crouched	?m-age	Female	Female	3
3	shallow	?	7-11	?	?	0
4	19 cms	crouched	21-25	?male	Female	5
5	shallow	crouched	12-18	?	?female	2
6	shallow	?	10-14	?	?	0
7	shallow	extended	45-61	Male	Female	6
8	subsoil surface	extended?	?y-adult	?	?	0
9	shallow	crouched	25-35	Female	Female	4
10	22 cms	extended	15-21	Female	Female	1
11	slight hollow	extended	12-18	?	Female	10
12	20 cms	extended	21-25	Male	Male	2
13	shallow	extended	35-45	Male	?	2
14	8 cms	crouched	10	?	?	0
15	slight hollow	extended	12-18	?	?	0
16	32 cms	extended	12-18	?	?	1
17	slight hollow	prone	?y/m-age	Male	?	1
18	19 cms	extended	25-35	Male	?	0
19	disturbed/shallow	crouched	15-21	Female	Female	6
20	slight hollow	?	25-35	?male	?	1
21	shallow	extended	25-35	?	Female	5
22	30 cms	crouched	25-35	Female	Female	7
23	40 cms	crouched	25-35	?female	Female	4
24	35 cms	extended	15-21	Male	Male	2
25	shallow	crouched	20-30	Male	Male	2
26	shallow	crouched?	6-12	?	?	1
27	shallow	?	5-9	?	Female	2
28	52 cms	prone	15-21	Female	Female	6
29	20 cms	extended	25-35	Female	Female	11
30	shallow	crouched	25-35	?female	Female	4
31	30 cms	crouched	17-25	Male	?	0
32	slight hollow	?	?m-age	Male	?	0
33	shallow	?	child	?	?	1
34	55 cms	extended	25-35	Male	Male	6
35	20 cms	crouched	25-35	Female	Female	9
36	47 cms	extended	15-21	Male	Female	2
37	47 cms	extended	?m-age	Female	?	0
38	47 cms	crouched	20-30	Female	?	2
39	shallow	?	2	?	Female	2
40	30 cms	extended	20-30	Female	Female	10
41	shallow	crouched	20-30	Female	Female	6
42	25 cms	extended	20-30	Male	Male	2
43	18 cms	crouched	6-10	?	?	1

Grave no	Depth	Body Position	Age	Sex from skeleton	Gender by artefacts	No of artefact types
44	23 cms	?	child	?	Female	4
45	22 cms	crouched	12	?	Female	5
46	25 cms	extended	12-18	?	?	0
47	subsoil surface	prone	?m-age	?female	?	0
48	12 cms	extended	17-25	?female	Female	3
49	15 cms	extended	20-30	Female	Female	4
50	12 cms	crouched	7-11	?	?	0
51	shallow	?	adult	?	Female	1
52	52 cms	extended	25-35	Female	Female	10
53	shallow	?	5-9	?	?	1
54	30 cms	extended	12	?	Female	4
55	30 cms	extended	25-35	Male	Male	4
56	49 cms	crouched	30-40	Female	Female	6
57	25 cms	crouched	17-25	Male	Female	3
58	25 cms	crouched	15-21	Male	?	1
59	25 cms	extended	35-45	Male	Female	4
60	45 cms	crouched	15-21	Male	Male	2
61	shallow	crouched?	?m-age	?	Female	1
62	10 cms	?	1	?	?	1
63	14 cms	extended	25-35	Male	Female	8
64	30 cms	extended	35-45	Male	Male	6
65	5 cms	extended	30-40	Female	Female	3
66	25 cms	extended	10	?	Female	3
67	28 cms	crouched	17-25	Male	?	0
68	25 cms	extended	35-45	Female	Female	4
69	70 cms	extended	17-25	Male	Male	3
70	40 cms	extended	15-21	?	Female	9
71	12 cms	extended	15-21	Male	Female	2
72	15 cms	?	2	?	Female	2
73	15cms	crouched	17-25	Female	?	0
74	shallow	?	?m-age	?	Female	2
75	8 cms	?	?	?	?	0
76	18 cms	extended	?m-age	Male	Female	2
77	slight hollow	?	?	Female	Female	4
78	29 cms	extended	45-61	Male	?	3
79	subsoil surface	extended?	25-35	Male	?	1
80	shallow	?	25-35	Male		
		?	adult	Female	Female	1
81	subsoil surface	?	12	?	?	1
82	shallow	crouched?	adult	?	Female	4
83	subsoil surface	?	adult	?	?	0
84	20 cms	prone	35-45	Female	Female	6
85	35 cms	extended	16-20	Female	Female	7

Grave no	Depth	Body position	Age	Sex from skeleton	Gender by artefacts	No of artefact types
86	17 cms	extended	35-45	Male	Female	6
87	13 cms	crouched	17-25	Female	Female	3
88	subsoil surface	?	adult	?female	?	0
89	16 cms	?	12-18	?	?	1
90	36 cms	extended	25-35	Male	Female	4
91	53 cms	prone	17-25	Male	?	0
92	19 cms	no bone	?	?	Female	2
93	18 cms	extended	25-35	Male	?	0
94	46 cms	extended	25-35	Female	Female	7
95	20 cms	?	4-8	?	?	0
96	23 cms	?	45-61	Female	Female	6
97	30 cms	?	?m-age	?	?	0
98	55 cms	crouched	20-30	Male	Female	1
99	55 cms	prone	17-25	Female	?	2
100	shallow	?	35-45	?	?	3
101	15 cms	?	6 months	?	?	1
102	15 cms	no bone	?	?	Female	6
103	30 cms	?	adult	?	?	0
104	19 cms	extended	12-18	?	Female	2
105	25 cms	crouched	45-61	Female	Female	5
106	34 cms	crouched	35-45	Female	Female	2
107	35 cms	extended	15-21	Male	Female	4
108	22 cms	?	3-5	?	?	1
109	35 cms	extended/flexed	5-9	?	Female	1
110	45 cms	extended	5-9	?	?	1
111	9 cms	extended	adult	?	?	1
112	33 cms	crouched	17-25	?female	Female	1
113	30 cms	crouched	32-38	?male	Female	5
114	shallow	cremation	over 21	?	?	1
115	30 cms	cremation	?	?	?	1
116	subsoil surface	prone	infant	?	?	0
117	29 cms	?	4-8	?	?	0
118	subsoil surface	?	7-11	?	?	0
119	17 cms	cremation	10-15	?	?	1
120	65 cms	extended	25-35	Male	Male	3

Graves containing crouched burials: 2, 4, 5, 9, 14, 19, 22, 23, 25, 26, 30, 31, 35, 38, 41, 43, 45, 50, 56, 57, 58, 60, 61, 67, 73, 82, 87, 98, 105, 106, 112, 113: 32 graves (26.6%)
Graves containing extended burials: 7, 8, 10, 11, 12, 13, 15, 16, 18, 21, 24, 29, 34, 36, 37, 40, 42, 46, 48, 49, 52, 54, 55, 59, 63, 64, 65, 66, 68, 69, 70, 71, 76, 78, 85, 86, 90, 93, 94, 104, 107, 109, 110, 111, 120: 46 graves (38.3%)
Graves containing prone burials: 17, 28, 47, 84, 91, 99, 116: 7 graves (5.8%)
Disturbed graves: 1, 3, 6, 20, 27, 32, 33, 39, 44, 51, 53, 62, 72, 74, 75, 77, 80, 81, 83, 88, 89, 95, 96, 97, 100, 101, 103, 108, 117, 118: 30 graves (25%)
Graves with no bones: 92 and 102: 2 graves (1.6%)
Cremations: 114, 115, 119:3 burials (2.5%)

L

Plate 5 Graves at the eastern side of the cemetery after excavation

this suggestion of spatial isolation is the presence of several artefact types not represented elsewhere in the cemetery. These are a re-used Roman coin in Grave 7, the small-long brooch in Grave 21 and the two iron girdle-hangers in Graves 21 and 29, though one copper alloy girdle-hanger occurs outside this group in Grave 1. There is also the fact that all the knives found in these graves belong to Evison's Type 1 (Fig 14). The quality and quantity of grave finds varied between graves within the group. Graves 7, 21 and 29 had above average numbers of different artefact types with each extended burial, while Graves 8, 18, 20, 26 and 32 were poor in terms of both the number of artefact types and their quality. Four of these poorer burials were extended and the remaining four disturbed, but one of the latter is likely to have been crouched on the grounds of the size of the grave. Five out of the eight burials were therefore extended, one was crouched and the other two were disturbed, implying a predominance of extended interment here within a cemetery with a fairly equal mix of crouched and extended positions. The mix of sexes and ages present is also suggestive: three males, three females and two unknown, with one child, one teenager, four adults of around 30, one middle-aged male and one woman in her late fifties.

Another group of ten burials in the north-west quadrant (Graves 16, 27, 28, 34, 35, 39, 40, 41, 42 and 104) stands out from the row-grave arrangement. This group of graves is spatially isolated from the rest of the cemetery by *c* 2 m. Grave 35 would fit into a row of crouched inhumations facing in the same direction with Graves 98 and 105. Four of these share a septal aperture of the humerus, which may represent a family trait (see 'The population', this volume). The ten consist of two males, five females and one other female judged by the grave finds, leaving two of unknown gender. Seven were buried in deep-cut graves and five of the ten were extended, two crouched, two disturbed and one buried prone. The age band was broad, with two children, three teenagers and five adults between 20 and 35 years old. As was the case with all of the child burials, the two here had few grave finds. Grave 39 contained a bone ring and a small

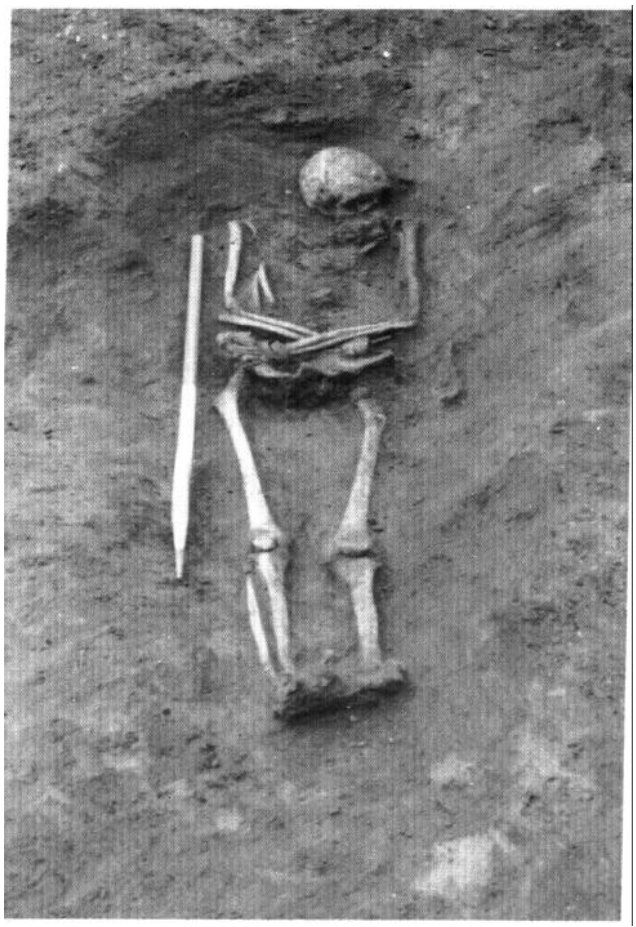


Plate 6 Grave 40; inhumation with silver bracelets on each wrist

pot on the right side of the body and Grave 27 had a small buckle and some copper alloy fragments. The two men were each accompanied by a spear and a shield, while the women had above-average: numbers of artefact types. They include Grave 40, perhaps the highest-status female inhumation in the cemetery (Pl 6), Graves 28 and 35 with annular brooches and key sets, Grave 41 with annular brooches and a copper alloy spangle and pin.

Grave structures and dimensions (Figs 9-11 and Tables 3–6)

The location of the individual graves must have been visible on the ground surface during the lifetime of the cemetery, as there are very few inter--cutting graves. Nevertheless there was no trace of grave markers as found in the 7th century cemetery of St Peter's, Broadstairs in Kent (Hogarth 1973) and the 5th to 6th century inhumation sector of Spong Hill, North Elmham in Norfolk (Hills *et al* 1984), whether marker posts, posts to support canopies, ring-ditches or other enclosure ditches. Presumably the remaining upcast after backfilling would have left a low earth mound, which would gradually subside into the grave and usually would have been removed by subsequent ploughing. One potential archaeological indicator of such an earth mound at Norton would seem to be a small capping of clay over Grave 84, while the isolation of Grave 120 does suggest the possibility that it had once had a barrow above it.

A majority of the 65 burials from well-defined graves were in grave-cuts which had an uneven bottom and gentle sloping sides. Eighteen of them did not fit this pattern, however, for eight had steep and almost vertical sides, three had flat bottoms and sloping sides, whilst the other seven showed slight variations from shallow to sloping sides. These 65 burials include 25 placed in graves which, when excavated, were deeper than 31 cm (Figs 9–11). The deepest graves are more than twice as common in the western half of the cemetery, with 18 cut deeper than 31 cm there compared with just seven on the east side. It should be borne in mind, however, that the ground is sloping down towards the valley in the eastern half of the cemetery, making it more vulnerable to soil erosion than the flatter western area. This category of deeper grave includes some of the richest assemblages in the cemetery, suggesting a potential correlation between the furnishing of burials and the dimensions of their graves, in particular their depths. The significance of this has been noted in some other contemporary cemeteries, notably in the 6th century Frankish cemetery at Basel-Bernerring in Switzerland (Martin 1976, 142–5, Abb 34 and 35). Whether there is a direct link between the energy expended

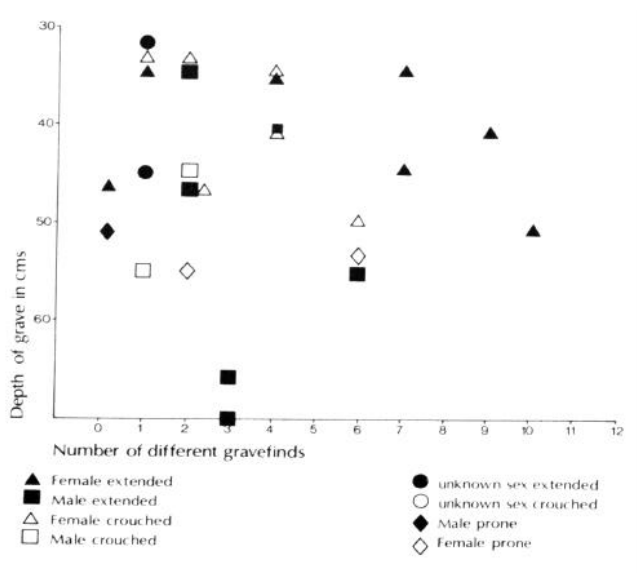


Figure 9 Grave depth in relation to grave finds

in grave digging and the number of artefact types among the grave finds at Norton will be discussed later (see 'The social structure of the Norton cemetery', this volume). In the meantime, it should be noted that there were just two graves with depths between 61 and 70 cm (Graves 69 and 120), six between 51 and 60 cm (Graves 28, 34, 52, 91, 98 and 99), and seven between 41 and 50 cm (Graves 36–38, 56, 60, 94, 110), compared with 25 between 21 and 30 cm, 24 between 11 and 20 cm, five between 5 and 10 cm, with 22 classed as shallow, two as surface burials, 14 as disturbed and one of unknown depth (Grave 1).

In Table 3 the excavated graves are attributed to one of four groups on the basis of their shape in plan. The categories are:

1 regular with straight sides and ends
2 regular with rounded ends
3 irregular
4 square (ie equal length and width with straight sides)

In addition there was one exceptional grave which was circular. As this had been disturbed, however, it was not classified as a separate category. The dimensions of each grave are expressed in terms of a ratio of width to length in Table 4. Thus a square grave has a ratio of 1:1, while the majority of graves possess a ratio of 1:2, although five have ratios of 1:3 and three large graves of 1:4.

Graves 46, 65 and 93 are the three with ratios of 1:4, each containing an extended skeleton. But these are not rich graves, for Grave 65 contained just a penannular brooch and a knife, while Graves 46 and 93 were unaccompanied. Nor are they deep graves, ranging from 5 to 25 cm. By way of contrast, the 1:3 graves, nos 40, 55, 68, 96 and 120, were among the best furnished in the cemetery. Graves 40 and 120 were perhaps respectively the richest female and the most prestigious male burials, Grave 55 was the best-equipped weapon burial with spear, seax and shield, Grave 96 contained a cruciform brooch, annular brooches and wrist clasps, though Grave 68 had just a string of beads, wrist clasps, a latchlifter and a knife. Depths for these five graves ranged from 23 to 65 cm, with all but one a moderate 30 cm deep or less.

There was no positive evidence that any of the burials had been enclosed by a wooden coffin-like structure. The 12 graves in category 1 with straight sides would be the most obvious candidates. Yet only one of those, Grave 52, contained an extended inhumation with two iron nails, and there was no visible trace of wood planks or the soil stains of replaced wood there. Since environmental conditions permitted the bucket wood of Grave 120 and some fragments of a leather sheath from Grave 84 to be preserved, plank traces of coffin structures fastened by treenails or jointing might have been expected to survive, if they had existed, though that does not necessarily mean that there had never been any coffins.

Table 3 Variety of grave shapes

Grave shapes	Graves
Regular straight sides and ends	12
Regular rounded sides and rounded ends	16
Irregular graves	35
Square graves	1
Circular graves	1
	Total 65

Graves intercut by other features and multiple burials

In most cases the Norton graves had not been cut or disturbed by other features, but there are exceptions. Thus Grave 94 had cut the linear gulley 262 and Grave 120 had been cut by the curvilinear gulley 286. There are also two instances of multiple burials, in which a still later burial disturbed or at least cut into the backfill of its predecessor or predecessors. Inhumation 38 clearly followed the deposition of inhumations 36 and 37, while inhumation 59 was in a slightly deeper grave than the bodies of 57 and 58, which had been buried together (Pl 7). There was no disturbance to any of these three burials, nor was there a discernable cut in the grave fill, but it seems probable that inhumations 57 and 58 were interred at a higher level after no 59 had been buried. Then Grave 107 had been cut by the later interment of Grave 110, while Graves 6, 21, 22 and 61 had all been disturbed by later features.

The number of instances of multiple burial at Norton is a notable feature. In addition to the cases of Graves 36–38 and of Graves 57–59, already

Table 4 Ratio of grave width to length

	1:1	1:1½	1:2	1:2½	1:3	1:4
Number of burials	1	18	32	5	5	3
Total	64 + 1 circular grave = 65					

Plate 7 Multiple grave 57, 58, and 59 (l to r)

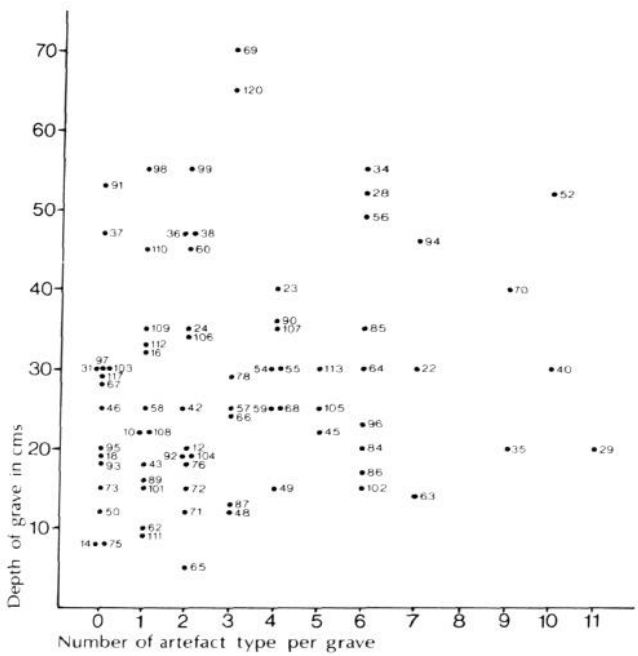


Figure 10 Grave depth and number of artefacts per grave

considered, there are examples in Graves 78, 79, 47 with 116, and Graves 98–99. Both Graves 78 and 79 contained an adult male burial accompanied by the remains of a small child, placed on the right side of the adult. The child in Grave 78 lay beside the man's right arm, while that in Grave 79 was beside his thigh. In the case of Graves 47 and 116, two east-west aligned burials lay side by side on the subsoil, but no part of inhumation 47 survived above the waist level, whilst inhumation 116 consisted of the arms of a person younger than no 47.

Finally there is the case of two superimposed burials in a large deep grave with a single fill. The lower burial of inhumation 99 was in a prone position, while the skeleton of inhumation 98 lay above it, crouched on a shelf at the east side of the double grave. Grave finds imply that the occupant of the upper was an adult female, whilst the prone burial was perhaps also that of a young woman on the basis of its skeleton. The closest parallel is provided by the Sewerby double grave 41 and 49 (Hirst 1985, 38-43), in which two women were buried one above the other in a single deep grave. In that case, however, the prone burial was the upper of the two, while both Sewerby women were rather better furnished in terms of dress fastenings than the Norton pair. Only one other certain example of a woman buried above another woman is cited in the Sewerby report, that from Mitcham (Surrey) graves 44 and 45 (Bidder and Morris 1959, 62), though something similar may have occured in Bifrons (Kent) grave 64 (Godfrey-Faussett 1880,553).

A more common pattern is for a man to be overlain by a woman, eg at Finglesham grave H3 (Chadwick 1958, 25) and Riseley grave 66, both in Kent (Cumberland 1938; Hilton 1980, 18–19 and 66) and Farthingdown in Surrey (Hope-Taylor 1950). Suttee

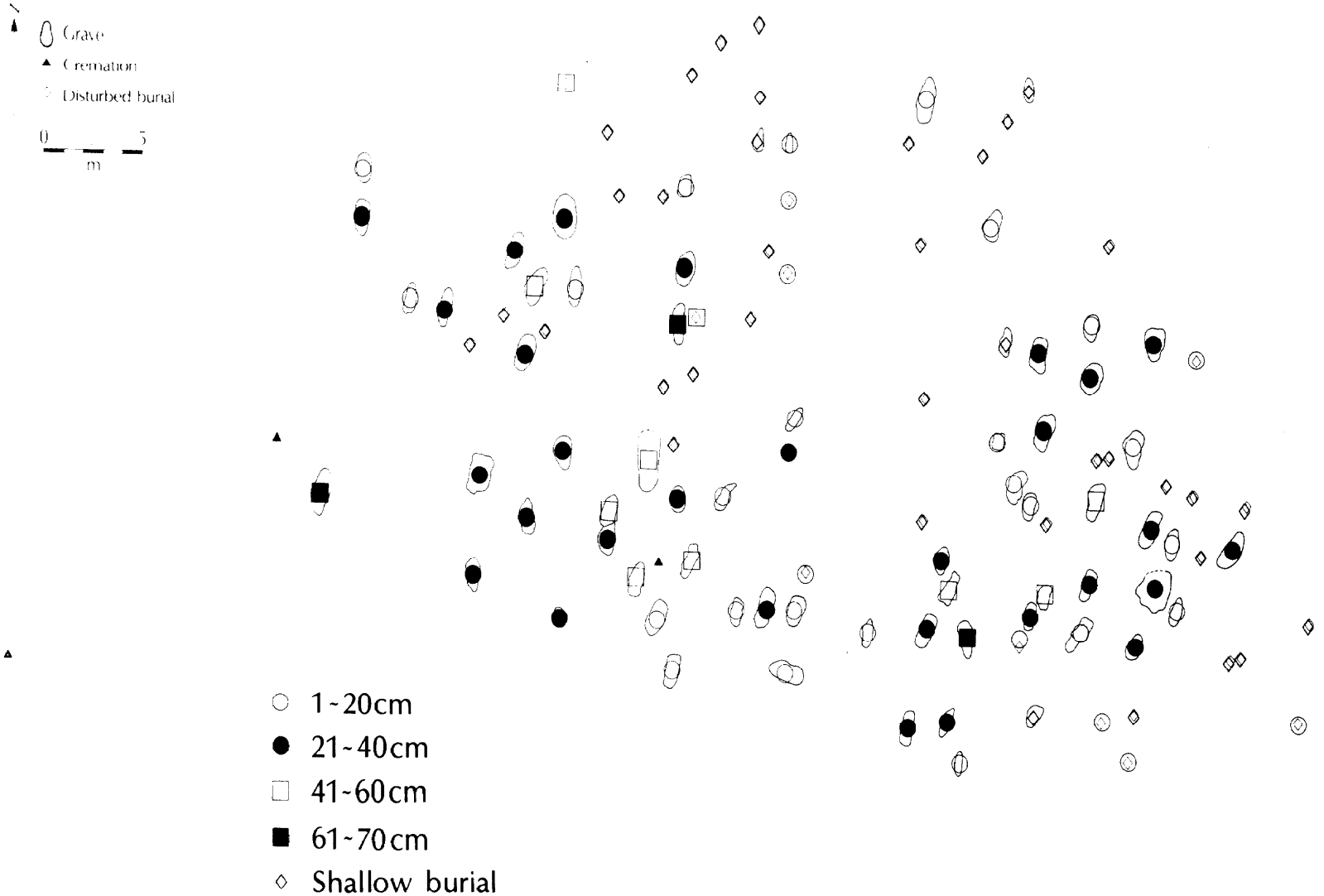


Figure 11 Relative depth of graves below subsoil surface

has been offered as an explanation for the latter practice, but where two women are buried thus some other reason must he sought. At Sewerby the suggestion was made that the woman of the prone burial had been considered by the community to have caused the death of the other young woman, perhaps by poison or witchcraft, and as punishment had been buried alive over her victim. Unfortunately that particular explanation hardly assists our understanding of the relationship of the two women in the Norton double grave. A local example of such superimposed burial is provided by a Romano-British grave excavated recently at Hartlepool, consisting of a supine adult male placed above a younger female buried on her right side with the legs drawn up (Daniels *et al* 1987).

Prone and crouched burial (Fig 12 and Tables 5 and 6)

The Norton cemetery has a total of seven prone burials, an unusually high number for any Anglo-Saxon cemetery, though they represent 5.8% of all burials there. Three were female (Graves 28, 84 and 99) and two male (Graves 17 and 91), but the last two (Graves 47 and 116) could not be sexed. Grave finds accompany four out of the seven at Norton and, as an example, there is Grave 84, which belonged to a well-dressed woman, wearing, among other fittings, a fine florid cruciform brooch. Yet her grave was relatively shallow with a small 4 cm thick cap of clay on top of the ground surface and only 20 cm above the floor of the grave. This cap is unlikely to represent part of a cairn comparable with the remains of a chalk cairn identified above the upper fill of the double grave 41/49 at Sewerby (Hirst 1985, 38–40, fig 16). Grave 17 was another shallowly buried prone inhumation accompanied by an iron buckle and resting on the subsoil surface.

On the other hand, Graves 28 and 91 were both placed in deep graves with the skull to the south and the feet to the north. Yet the man in Grave 91 lacked grave finds and while the woman in Grave 28 was accompanied by annular brooches, beads and a key set among other objects, these artefacts were not located as if worn by her. Rather they appeared to have been placed on her back after she had been laid in the grave. The majority of the 19 burials at Norton found without any grave finds had been disturbed and indeed, apart from Grave 91, there were just two other unaccompanied burials which had not suffered disturbance. These were Grave 18, where the iron file from the topsoil may well be modern and Grave 31 with a broken flint blade, which may represent a residual find. There was excellent bone survival in Grave 91, so it seems probable that the absence of accompanying grave finds was significant and perhaps implies burial naked or in a shroud cloth. Deposition without clothes has been postulated for other unaccomp anied prone burials elsewhere, for example at Kingsworthy graves 43 and 78 in Hampshire (Hawkes and Wells 1975) and Holywell Row grave 26 in Suffolk (Lethbridge 1931, 17). In the case of Norton Grave 91 (Pl 8), the man lay with his left arm underneath the body and the right parallel with the west side of the grave. The feet were left raised together near the top of the grave fill, despite the fact that the right femur was 5 cm shorter than the left, having been broken and fused without being properly reset.

Plate 8 Grave 91; prone inhumation with the left arm under the body and the legs raised

In Anglo-Saxon cemeteries as a whole a majority of prone burials seem to be female (Harman *et al* 1981, 187–8). Apart from those in Norton graves 17 and 91, male prone burials are known from Swaffham (Norfolk) grave 15 (Hills and Wade-Martins 1976, 7, fig 6), Farthingdown, Frilford, Little Downham, Little Wilbraham, Meon Hill and Roche Court Down (Harman *et al* 1981, 187–8). If this rite implied burial alive and was reserved for witches (Amira 1922, 179), were the men warlocks? It has been suggested that the position with the hands placed under the chest and possibly tied, as at Swaffham grave 15, was an ignominious fate to pay for a repugnant act of cowardice or treachery (Evison 1987, 134). A related pose occurs in Grave 99 at Norton (P19), in which the hands were raised

Plate 9 Grave 99; prone inhumation with the hands raised and the legs drawn together

Plate 10 Grave 60; crouched inhumation with spearhead and shield boss

above the body and together, as if bound, and the legs were raised and appear to be similarly bound.

On the other hand, there is a long tradition of prone burial in the Roman and pre-Roman cemeteries of Britain and in particular those of the north (Faull 1977, 5–11, 26–36, figs 2 and 3; Harman *et al* 1981, 164–8, fig 5). This rite, together with contracted burial and a preference for northerly grave orientation, has been seen by Dr Margaret Faull as evidence for continuity of British burial customs among Anglo-Saxon communities. As north–south alignments predominate at Norton and there are 32 crouched burials and seven prone, we have a total of 39 individuals or 32.5% of the cemetery as a potential native British component of the community. This proportion may of course have been larger, for presumably a number of the 30 disturbed burials will also have been crouched. Indeed, the inhumation graves were evenly distributed throughout the Norton cemetery, with 61 to the west and 59 to the east of the central gap, and so were the burial positions adopted (Table 5 and Fig 12). Thus there were 19 crouched and 20 extended burials on the west side and 13 crouched to 26 extended inhumations in the east. Prone burial was also evenly divided between the two halves of the cemetery.

In view of the large number of disturbed graves and the fact that 13 of these occur in the west and 17 in the east, there is no reason why there should not have been a completely equal preference for crouched and extended positions throughout the period of use of the cemetery. But we should not get carried away with this possibility that prone and crouched burial represent British survival at Norton. Crouched burial is usually a minority rite, though one that occurs throughout Anglo-Saxon England (Faull 1977, 5 and 8, figs 3 and 4) and continues in the later Christian medieval periods (Cramp 1981, 46; 1982, 35–6; 1983, 270), while prone burial is also widespread as an occasional minority rite in Early Anglo-Saxon cemeteries.

Table 5 Burial position and location in the west and eastern halves of Norton cemetery

Crouched	Extended	Prone	Disturbed	Cremation
2 W	7 E	17 W	1 W	114 W
4 W	8 E	28 W	3 W	115 W
5 W	10 W	47 E	6 W	119 W
9 W	11 W	84 E	20 E	3 burials
14 W	12 W	91 W	27 W	
19 W	13 W	99 W	32 E	
22 W	15 W	116 E	33 W	
23 W	16 W	7 graves	39 W	
25 W	18 E		44 E	
26 E	21 E		51 E	
30 W	24 W		53 E	
31 W	29 E		62 E	
35 W	34 W		72 E	
38 W	36 W		74 E	
41 W	37 W		75 E	
43 E	40 W		77 E	
45 E	42 W		80 E	
50 E	46 E		81 E	
56 E	48 E		83 E	
57 E	49 E		88 E	
58 E	52 E		89 E	
60 E	54 E		95 W	
61 E	55 E		96 W	
67 E	59 E		97 W	
73 E	63 E		100 W	
82 E	64 E		101 W	
87 E	65 E		103 W	
98 W	66 E		108 W	
105 W	68 E		117 E	
106 W	69 E		118 E	
112 W	70 E			
113 W	71 E		no bone	
32 graves	76 E		92 W	
	78 E		102 W	
	79 E		32 graves	
	85 E			
	86 E			
	90 E			
	93 W			
	94 W			
	104 W			
	107 W			
	109 W			
	110 W			
	111 W			
	120 W			
	46 graves			

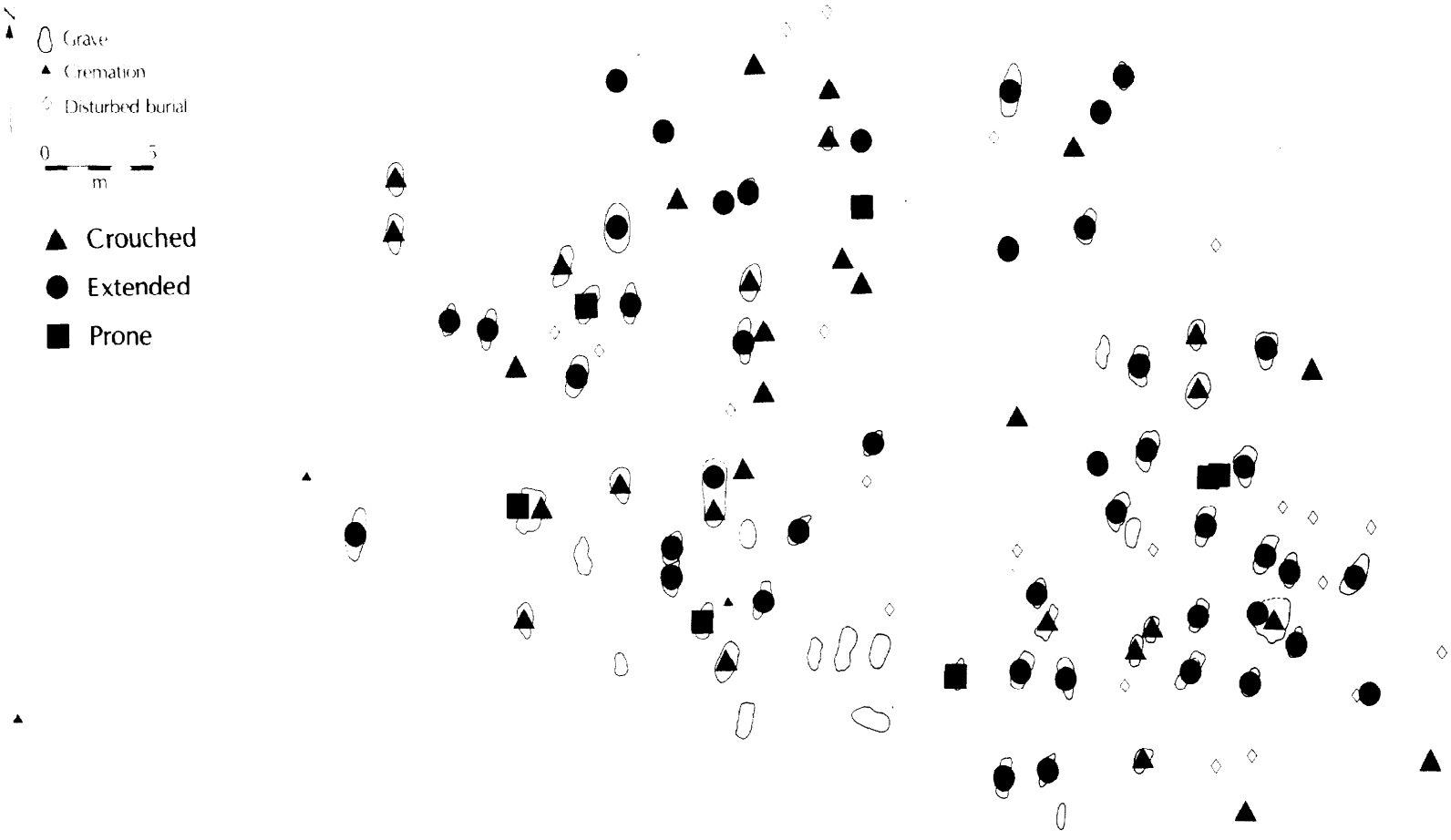


Figure 12 Distribution of burial mode

Table 6 Average number of artefact types within each burial mode

Burial types	Crouched	Extended	Disturbed	Prone	Cremations
Total number of artefact types	95	169	48	15	3
Number of burials	32	46	32	7	3
Average per burial mode	2.97	3.67	1.5	2.14	1

Some of the Norton crouched burials can be found in rows with the face of the skull gazing in the same direction, Examples are Graves 35, 98 and 105; Graves 2, 4 and 5; as well as Graves 14, 31 and 37. Rows of extended inhumations facing in the same direction are also observed, eg Graves 63, 66 and 78; Graves 69, 71 and 85, while Grave 68 in the same row was disturbed; and finally Graves 32, 48, 54 and 86, though Graves 32 and 48 were both disturbed. Other rows of graves have a mixture of crouched and extended burials facing in different directions.

Five of the 32 crouched inhumations had no recognisable artefact types in their graves, but all five had been partially disturbed- The average number of artfact types from the crouched burials is 2.97 compared with 3.67 for the extended and 2.14 for the prone burials while, not surprisingly, disturbed graves had only 1.5 (Table 6).

It should be noted in passing that recorded crouched burials are relatively rare in other Bernician sites. The closest example to Norton is the contemporary Binchester furnished female grave (Coggins 1979, 236) and the other is Howick Heugh, which has two crouched burials in graves II and V (Cramp and Miket 1982, 6) out of six for which there is some type of record. This does reflect how few Bernician burials have been fully recorded.

Disturbed burials

Twenty two of the 30 disturbed burials were simply plough-damaged and were distributed in the eastern and southern areas of the cemetery, 17 in the eastern half. This area of the site slopes down towards Billingham Bottoms and also has a sandy subsoil, which provides less resistance to ploughing than the western half of the cemetery's gravel subsoil. In addition several burials, including Graves 44 and 61, had been disturbed by post-medieval features. Pit 37, which seems to represent a sand quarry, had dug into Grave 21 and partially affected several other graves. A sloping hollow, feature 38, probably created by the uprooting of a tree, had disturbed Graves 6 and 22, and the initial discovery of Grave 1 by schoolchildren meant that it was impossible to ascertain the original position of its skeleton or of the accompanying artefacts.

Cremation burials

Prior to the Norton excavations there were no recorded Anglo-Saxon cremations north of the Tees. As noted in the *Introduction*, there is a known cremation urn from Yarm on the south bank of the Tees (Myres 1977, fig 332.150) and there were also the urns at the excavated mixed-rite cemetery at Hob Hill, Saltburn (Hornsby 1913; Myres 1977, figs 193. 152, 273. 153 and 344.151; Gallagher 1987). For other examples we have to look much further south in Yorkshire. Of' the three urned burials discovered at Norton, Cremations 114 and 115 were located close to inhumations in the cemetery. They were found to be resting in slight hollows, badly damaged by ploughing, with only the bottom third of each pot surviving *in situ*. Each contained the remains of a single adult. By contrast, Cremation 119 at the western edge of the cemetery was virtually intact. Its undecorated urn lay in a shallow pit on top of some animal bones, either cattle or horse. Two individuals are represented by the cremated bone, a teenager and an adult. There were no associated finds to assist the dating of these three urns, but their handmade pottery forms and fabric are similar to those of sherds found elsewhere in the cemetery. On balance it seems probable that they belong to the Anglo-Saxon cemetery.

3 The grave finds

The discussion of the finds examines first the weapon forms of spears, buckler-sized shields and a seax; secondly dress fittings and ornaments of brooches and dress pins, pendants and beads, bracelets, wrist clasps and belt fittings; thirdly personal equipment, notably knives, keys, girdle hangers, toilet implements and bag fittings; and finally considers the accompanying vessel types, whether of wood or pottery, including the three cremation urns. This is followed by a discussion of the metal punchmarks and reports on the textiles and on aspects of the conservation of the finds assemblage.

Weapons

Spearheads and ferrules

There were twelve spearheads from the cemetery, two as unstratified finds in the topsoil and the remaining ten from grave assemblages. In addition there were four ferrules, one from the topsoil and the rest from grave contexts. Dr M Swanton's groupings (Swanton 1973) are used *faute de mieux*, but the criticism that they are over-elaborate and not easily applied to newly-excavated material remains valid (Hills 1976).

A small leaf-shaped bladed head of his Group Cl appears in Grave 42 (Fig 46). The C series seem to have been popular throughout the Early Anglo-Saxon period, though Swanton suggests that the Cl size may have been going out of favour by the middle of the 6th century (Swanton 1973, 49–51, map: fig 10). In her discussion of the Upper Thames region Dr Tania Dickinson argues, however, for a 6th and 7th century date range for Cl spearheads, with only one demonstrably pre-7th century example associated in Berinsfield (oxfordshire) grave 24 with a shield boss of her Group 3, while another example occurred in a Final Phase cemetery context also in Oxfordshire at Stanton Harcourt (Dickinson 1976, 293–6). A different small leaf-shaped blade form with a longer socket of Group D1 occurs in Norton Grave 12 (Fig 36), a type which can be found in contexts from the 5th to the 7th centuries (Swanton 1973, 64–7, map: fig 19).

Spearheads of Series H are by far the most common single form present at Norton with examples of all three variant sizes: Group H1 spears in Graves 25 and 60 (Figs 39 and 51) together with two unstratified pieces (Fig 67.5 and 6); H2 blades in Graves 69 and 120 (Figs 55 and 64); and H3 types in Graves 55 and 64 (Figs 49 and 54). These angular blades have a marked strickening or concave curve above the angle and are datable by contexts of the 5th and 6th centuries, perhaps occasionally extending into the early 7th century (*ibid*, 101–114, maps: figs 38, 40 and 42). Finally there is one example in Grave 34 of a special form, Series L (Fig 43), with the angled profile of Series H and a stepped cross-section, datable from the mid-5th to the mid-6th centuries (ibid, map: fig 54). A ferrule capped the other end of this spear and of the two H3 pieces (Figs 49 and 54), while a further ferrule was found unstratified (Fig 67.7), perhaps associated with one of the two H1 strayfinds.

Overall it would seem that none of the spearheads is inconsistent with a general 6th century date for the Norton cemetery, though several are of forms which can continue into the 7th century. Groups C1, D1, H2 and H3 are all found in Yorkshire cemeteries according to Swanton's maps, but apparently no other examples of Groups H1 or L occur so far north. These patterns are not altered by the five spears from the recently published Sewerby cemetery in east Yorkshire, which belong respectively to Groups Cl, C2, C3, E3 and H3 (Hirst 1985, 90–1) and a chance find of a Cl spearhead from Thornaby in the Tees valley (Sherlock 1988), but we must wait to see what emerges from the forthcoming West Heslerton cemetery report.

Associations from the Norton graves confirm the picture. There was an early shield boss type, Dickinson's Group 4 of 5th to 6th century date, from the same grave as the miniature Group Cl spearhead, while the spears of Group H1 and L were in each case associated with shield bosses of Group 1.1 attributable to the later 5th and 6th centuries. The two Group H3 spears were found respectively with a Group 2 and a Group 5 boss, both of them again 6th century forms (Dickinson 1976, 273–90). A copper alloy bound wooden bucket of Grave 120 associated with the Group H2 blade (Pl 11) again supports the idea of a 6th century context. So in the absence of distinctive 7th century shield boss forms of either the early low cone or the later tall cone or sugar-loaf types (Evison 1963), there seems little reason to push for a 7th century date for any of the weapon burials.

Only three spearheads were demonstrably accompanied by a ferrule to protect the other end of the wooden shaft. The Group L spear from Grave 34 had been placed to the west of the body, its blade by the head and the ferrule at the foot end. The distance from tip of head to ferrule tip was 2 m, a result comparable with similar measurements of spear lengths at the Buckland, Dover, cemetery in Kent (Evison 1987, 28) and at Mucking in Essex of between 1.85 and 2.80 m long (Jones and Jones 1975,178). In the case of the Group H3 spear from Grave 64, the

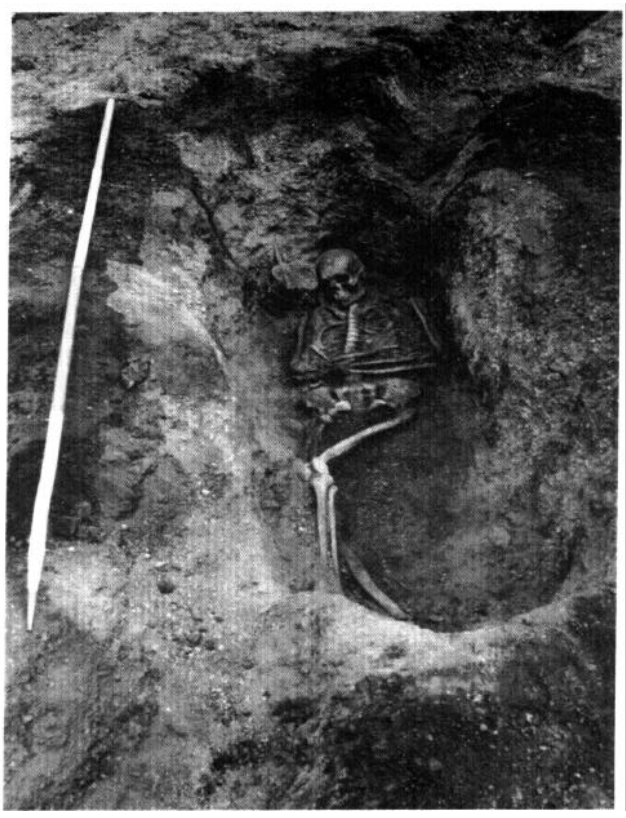


Plate 11 Grave 120 with spearhead resting upon a copper-alloy bound wooden bucket

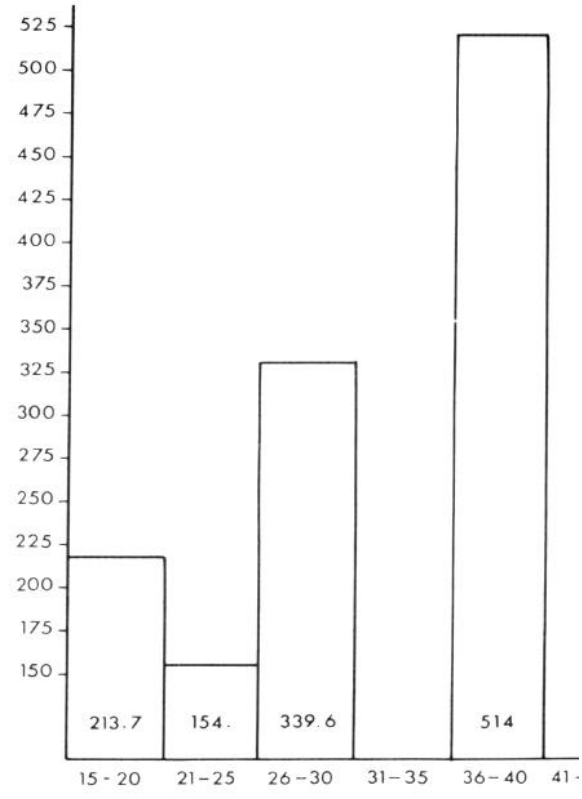


Figure 13 Age at death related to length of spearhead

ferrule lay at a distance of 1.10 m from the tip of the spearhead, while the third ferrule from Grave 55 was found above the skull not far from the other H3 spearhead. Presumably this reflects a snapping of the wooden shaft in two, as was seemingly the case also in Sewerby graves 37 and 45 (Hirst 1985, 91). It is possible to identify the wood of the spear shaft in some cases and alder. birch and hazel were present at Norton (details in 'Conservation report and technological examination', this volume).

Apart from the two unstratified pieces, in every case the snearhead was found in the area beside the skull and shoulders: the conventional position for this weapon in a grave. Two were above the head (Graves 34 and 69), three were placed in front of the face (Graves 25, 60 and 64), one to the right of the head (Grave 120) and another behind the head (Grave 55). Two (Graves 24 and 42) were located on the left side of the body beside the shoulder or arm and the remaining blade (Grave 12) was on the right side.

The age range for burials with spears was *c* 18–40 years, the majority of the spear bearers dying in their twenties. Graves 24 and 60 with occupants in their late teens and Grave 64 with a man of 35–45 years represent the extremes. It may be significant that the oldest of these spear-men had the longest spear belonging to Group H3 and there seems to be a correlation between the estimated age of the deceased and the length of the spearheads at Norton (Fig 13), as has been argued by Dr H. Härke from his extensive sample of Early Anglo-Saxon cemeteries (Härke 1990, 35). It would seem that the spear was the basic weapon of the adult free man in Anglo-Saxon society and its presence in a grave probably denoted his legal and social status rather more than his prowess in warfare and hunting (Härke 1989; 1990). When it is the sole weapon visible in a grave, it represents the lowest rank of armed burial. The next stage up are those graves containing a small wooden shield with iron fittings and after that are those with a third weapon, whether an axe, single-edged seax or the most prestigious of all weapons, the two-edged sword. Helmets and body armour are so rare that the burials containing them are classified as royal, princely or at the very least aristocratic. The richest of these can contain large assemblages of weapons as at Sutton Hoo (Suffolk) and Taplow (Buckinghamshire), possibly including the weapons of a bodyguard (Bruce-Mitford 1978; Mrs L Webster pers comm). Norton has no two-edged swords, but it does

possess one large knife from Grave 55, which as we shall see, might reasonably be classified as a seax. This was associated with a Group H3 spear with a ferrule and a Group 5 shield boss.

The implication is, then, that at least one of the five burials accompanied by a shield may have belonged to a rank above that of the simple shield- and spear-bearer. Further, the ferrule attached to the Series L spear in Grave 34, found with a Group 1.1 shield boss, may also suggest a slightly superior status for its owner in death. The bucket from Grave 120 is a further status indicator, as we shall see, which places its spear-owner in a special category, comparable perhaps with those in Graves 55 and 34. If not, it was surely the equal of the three burials with spear and shield in the second rank (Graves 42, 60 and 64), one of which also had a ferrule. That leaves the remaining six with just a spear as the lowest group (Graves 12, 24, 25, 69 and the two topsoil finds of spearheads and ferrule).

Shield bosses and fittings

Although the term shield is firmly established in the archaeological literature, it does give a false impression of the size, weight and use of this defensive weapon. They were not large static defences, behind which it was possible to shelter, an impression that is fuelled by the unusually large and elaborately-decorated parade shield from Sutton Hoo (Bruce-Mitford 1978). Rather, soil shadows at Mucking (Essex) have been claimed to imply an average diameter of 60 to 64 cm (Jones and Jones 1975, 178–9, fig 58) and Härke (1988,12) states that most shields had diameters of between 35 and 50 cm. These small leather-covered wooden buckler-sized shields were relatively light and very manoeuvrable, being grasped in the hand around an iron bar handle protected by an iron boss, with the combatant parrying blows from his opponent's spear, while searching for an opening to thrust home his own spear.

Dr Tania Dickinson's classification of shield bosses, based on her computer-assisted analysis of the Upper Thames region's sample of cemeteries (Dickinson 1976, 273–90; Welch 1983, 136–40; Dickinson and Harke forthcoming), provides the most satisfactory framework currently available for discussing Early Anglo-Saxon shield forms.

In both typological and chronological terms the Group 4 boss from Grave 42 (Fig 46) is the earliest form present in Anglo-Saxon cemeteries in this country and in this cemetery. It has the characteristic spike apex, a concave cone, a slightly overhanging carination above a straight wall, angled slightly outwards and a relatively narrow rim. A short handle with slightly flaring terminals accompanies it, together with three large and two small disc-headed rivets. The spike apex and the relatively high and narrow form suggest a direct relationship with the North German *Stachelbuckel* tradition (Jahn 1916, 171–8) from the pre-Roman Iron Age to the late 4th and the first half 5th century forms of Böhme's Rhenen-Vermand and Liebenau types on the continent (Böhme 1974, 112–3, Taf 63.15, 27.18). Dickinson sees the English examples as an insular variant on the continental series and suggests a broad date range extending from the early 5th into the 6th centuries. She quotes associations with spearheads of Groups B2, H1/2, H2, H3 and K1 in the Upper Thames valley and elsewhere in Wessex and the Midlands with spears of Groups E2 or 3, F2, K1, K2 and Series L. In addition, the shield in Brighthampton (Oxfordshire) grave 13a is secondary to a burial containing a 6th century small-long brooch (Akerman 1857, 395). The Norton boss was found with a miniature spearhead of Group Cl, which together one would expect to find buried within the 6th century.

There are two Group 1.1 bosses from Graves 34 and 60 respectively (Figs 43 and 51). The former has a button apex, straight cone, an overhanging carination above a concave wall and a moderately wide rim accompanied by a small disc-headed rivet and a handle in fragments together with a Series L spearhead and ferrule. A large perforation through the central button apex of the boss from Grave 60 implies the former existence of a separate and probably decorative disc, presumably fitted in place with a large rivet through the button. This was perhaps of copper alloy or silver and possibly had cast chipcarved decoration as seen on the shield boss buttons from Mucking grave 600 (Evison 1973, pl LIb; Jones and Jones 1975, fig 61), Barton Seagrave in Nottinghamshire (Smith 1902, fig 9), Barrington B in Cambridgeshire (Fox 1923, 253, pl XXXVI.10) and Bidford-on-Avon (Warwickshire) grave 182 (Humphreys *et al* 1924, 276–7, 287, pl LVII fig 2). If so, the disc mount certainly has not survived in the Norton grave inventory. Again the cone is straight, the carination overhanging a concave wall with a moderate rim. Most of the short handle is intact and it had slightly flared terminals. There are also two small disc-headed rivets and a Group H1 spearhead. Dickinson sees this form as derived from her Group 4 form and cites associations of Series J, K and L spearheads as well as Group H1, H2 and E/H1 and E/H2 examples with bosses of both Groups 1.1 (straight cone) and 1.2 (concave cones) in the Upper Thames region, but also refers to an assemblage with a C2 spear and a 7th century seax found with a 1.1 boss in Yarnton (Oxfordshire) grave 1. Nevertheless, the overall impression of a 5th to 6th century date range seems valid and the example from Sewerby grave 45 was discovered with an H3 spear implying a first half 6th century date (Hirst 1985, 91). It would follow that both the Norton examples were probably buried within the 6th century

The Group 2 shield boss in Grave 64 (Fig 53) has a central button at the apex, a slightly concave cone, no overhang at the carination and a straight wall and moderate-sized rim. Its handle is of the usual short form with slightly-flared terminals and it is accompanied by a long Group H3 spearhead and ferrule. Dickinson cites spearheads of Series H, J and L as well as Groups El and F1 in the Upper

Thames valley and the H3 spear from Norton would fit the 6th century date range she proposes for bosses of a form intermediate between her Group 1 and the convex cone bosses of her Group 3.

Finally there is the Group 5 boss from Grave 55 (Fig 49), also associated with a Group H3 spear and ferrule. It possesses the characteristic broad disc-headed apex button, straight sides, an overhang on the carination above a concave wall and a broad rim, together with the usual short handle with flared terminals. It is also accompanied by two large and one small disc-headed rivet as well as a large knife or seax. This boss form seems to be derived from the Group 4 bosses and the association of one with a 'Linton Heath' sword and a Group H3 spear-head in Long Wittenham (Berkshire, now Oxfordshire) grave 67 (Akerman 1860b, 343; Kennett 1971a, 14; Menghin 1983, 337, Karte 12: Kempston-Mitcham Type scabbard-mouth mount) is one of a small group of assemblages which allows Dickinson to argue for a date range of the late 5th to 6th centuries.

The Norton shield bosses were found in a variety of locations within their graves. In Grave 55 it was west of the skull with shield rivets and the spear-head alongside, apparently all placed together after being dismantled. In the case of the crouched burial of Grave 60, the boss lay between the lower pelvis and the right foot. The bosses of Graves 34 and 42 were placed more conventionally on the chest, the former in the middle and the latter to the right side, close to the arm. In Grave 64 it was located beside the west wall of the grave, the left hand placed with the fingers between the boss and its handle. Shield mounts consisting of large disc-headed rivets with mineralised wood traces still attached have already been mentioned. Their diameters range from 50 to 57 mm with rivet lengths of 14 to 22 mm and they were found with the shield bosses of Graves 42 and 55 (Groups 4 and 5 respectively). The two in Grave 55 were located with the other dismantled fittings beside the skull, but in the case of Grave 42, the three mounts were placed to either side of the boss, presumably still more or less in situ, with one on the north opposite the two together to the south. Much smaller disc-headed rivets associated with the shield boards occurred in Graves 34, 55, 60 and 64.

Seax

The borderline between a large domestic knife and a weapon with a single-edged blade which can be called a seax is not particularly easy to define. In typological terms the knife in Grave 55 (Fig 49) belongs to Evison's Type 6, characterised by a straight back, incurved near the tip and a curving blade (Evison 1987, 113, text fig 22). In terms of its length of 29.2 cm, with a blade of some 22 cm, it falls within the lower size range of a seax.

In his classic study of the Merovingian cemeteries in the region of the Mosel valley around Trier, Professor K Böhner defined small narrow-bladed seaxes of his Type Al as having overall lengths of 26 to 48 cm and blade lengths of 22 to 31 cm. Nor is the Norton seax far from the overall length range from 29.5 to 39.5 cm belonging to the lighter group of Type A2 (Böhner 1958, 135–8). These Frankish weapons are found in continental graves from the 5th century and become increasingly common during the 6th century.

A 6th century date certainly seems highly probable for the Norton weapon in view of its association with a massive H3 spearhead and a Group 5 shield boss. It thus joins a select band of Anglo-Saxon seaxes which can be placed in that century rather than the more normal date range in the 7th century or later. Mrs Sonia Hawkes commented on three of these in her discussion of the Polhill seaxes (Hawkes 1973, 188–90). She claimed a date in the late 5th and early 6th centuries for the still unpublished context of Kingsworthy (Hampshire) grave 49 (a Series J spearhead with a bronze wire inlaid socket, a Group 3 shield boss with a long handle, a bucket and tweezers), though this might be extended as late as the middle of the 6th century in a more conservative assessment. A mid-6th century date was attributed to Gilton (Kent) grave 10 and grave 56 in the same cemetery was also datable within that century (Faussett 1856, 7 and 21; Faussett MS II, 12, fig 3 on 11 verso, 46–7 and 30,46–7). These Kingsworthy and Gilton seaxes share an attenuated triangular form, the back being quite straight, meeting an equally straight but tapered cutting edge without any curvature at the point. The seax of Dickinson's Type Al from Eynsham I (Oxfordshire) grave 1 also has a triangular blade with a short tang and was associated with a Group K1 spearhead, again suggesting a 6th century date (Dickinson 1976, 269–72). If the Böhner Type Al seax from Westgarth Gardens, Bury St Edmunds (Suffolk) Grave 1 really was associated with a 6th century shield boss, it too can be added to the list (West 1988, 11, 20, fig 57.1B and A).

On the other hand, the seax from Buckland, Dover (Kent) grave 93 is 39 cm long with a blade width of 3.5 cm and shares the unusual form for a seax of an Evison Type 6 knife with the Norton weapon. Unlike the Grave 55 piece though, the Dover seax possessed a pommel and a sheath containing two smaller knives. It was buried in a context of Evison's cemetery phase 3, dated AD 575–625 (Evison 1987, 31, fig 43) and, therefore, might belong to the later 6th rather than the early 7th century.

Finally, there is a recently published seax from the mid-6th century context of Apple Down, Compton (West Sussex) Grave 63. It is associated with a rectangular belt set decorated with a central garnet and two Salin Style I animals (Down and Welch 1990, 92–3, fig 2.27 no 3). The seax was *c* 35 cm long with a blade width of 2.8 cm when excavated, with what seemed likely originally to have been an angled back and a straight blade.

The adoption of a Frankish weapon type in the 6th century so far north in England is remarkable, but not too surprising in view of the presence of a Frankish shield-on-tongue belt set buried with a

woman in Grave 22 (Fig 38). There is also a Frankish throwing-axe blade of francisca type belonging to Böhner's Type A from the nearby cemetery at Saltburn (Hornsby 1913, 136, fig 3; Gallagher 1987, 13, 17–19, fig 4.17; Böhner 1958, 166–7, Taf 31). Presumably in this case the axe was imported in the late 5th or more probably in the first half of the 6th century.

Dress fittings and ornaments

Cruciform brooches (Pl 12)

The study of cruciform brooches in this country has rather given the appearance of being at a standstill. In part this is because of Michael Pocock's withdrawal from active research during the 1980s, though we can now look forward to the future publication of Dr Catherine Mortimer's research (1990). This will propose five main groupings for the Anglo-Saxon cruciform brooches (A–D and Z) and discuss a range of interesting technological information, including the alloys used in the castings. In the meantime, Dr Joachim Reichstein's groupings of the earlier forms, based on research in the late 1960s and early 70s, have not found universal acceptance here (Reichstein 1975). Nevertheless, his chronological scheme has been adopted essentially intact by Dr John Hines (1984), despite the problems this poses in practice (Welch 1987).

For the present, it seems that the groups proposed long ago by Nils Åberg (1926, 28–56, 185–94) provide the safest basis for discussing these brooches. Following Aberg, but in contradiction to E T Leeds, cruciform brooches with square headplates are considered here to be true cruciform brooches of his Group V, rather than a special form of square-headed brooch (Leeds Class C: Leeds 1949, 78–89, pls 127–43). Modifications proposed by Leeds to Groups III and IV (1945, 69–72, figs 37 and 38) and by Leeds posthumously (edited with additional information by Pocock 1971) for Group IVb and the florid brooches of Group V are adopted here. Until Catherine Mortimer's full scheme is published, these will have to do.

There is a single brooch of Group II from Norton Grave 1; three of Group IVa from respectively Graves 63, 96 and 102, together with a fourth unstratified (13) from the topsoil; two florid brooches of Group V from Graves 30 and 84; and finally four Class C2 square-headed brooches from Graves 22, 57 and 61, the latter unusually being a pair, as well as two fragments of a footplate from Grave 77, a bow and upper footplate from Grave 80 and an unstratified foot terminal (12), all of Class C2 (Pl 12). These fit well into the established pattern of cruciform brooches for north-east England. Group II brooches are the earliest form to be found anywhere in Bernicia. There is the brooch of Reichstein's Holywell Type and the associated Corbridge Type brooch, both assigned to his period D3, from a probable grave-group at Corbridge (Knowles and Forster 1909, 342, 406–8, fig 25; Brown 1915, pls XLI.4 and CLVIII.9; Reichstein 1975, Taf 95.1 and 2). A distinctive half-round cast knob of a Group II cruciform brooch is to be found among the finds from the nearby Hob Hill, Saltburn cemetery (Gallagher 1987, fig 2.5), while the Group II brooch from grave 12 is in typological terms the earliest of the cruciforms from Sewerby in eastern Yorkshire (Hirst 1985, 58, fig 36.4). In this particular case, however, it was found associated with a pair of Group IVb (b)i brooches.

Strangely, there is no evidence for any brooches of Group III in Bernicia, though they do occur further south in Yorkshire, e.g. Sewerby grave 35 (Hirst 1985, 58, fig 44.6). Instead we move straight on to Group IVa, the form at the overlap between Groups III and IV. These do not, therefore, need to have any lappets flanking the upper footplate by the junction with the bow, though all the Norton examples in fact possess lappets. Brooches of this sub-group are found from Darlington (Miket and Pocock 1976, 65–6, 68–9, pls VII.C and VIII.A) and Benwell (Cramp and Miket 1982, 8, fig 6.6, pl 1.6) in Bernicia and they are also well represented in Yorkshire (Leeds 1945, figs 37 and 38: distribution maps of respectively Group I to IV and Group III to IV brooches), eg Sewerby graves 8, 15, 28 and 57 (Hirst 1985, 58, figs 34.2, 37.6, 42.1 and 58.5).

No examples of the later, more developed, forms of Group IV have been discovered on Bernician sites as yet, however, and the next cruciforms to be found here are florid brooches and Class C2 square-headed brooches of Group V. Darlington produced two Class C2 brooches (Miket and Pocock 1976, 65, 67–8, pl VIIA and B), Benwell and Whitehill Point are the sites of two others (Cramp and Miket 1982, 8, fig 6.7, pl 1.7 and 9, fig 6.10, pl 1.10) and a fifth comes from Piercebridge (Selkirk 1989) (Pl 13). A florid cruciform brooch of Group V (j) is known from Hob Hill, Saltburn (Hornsby 1913, 133, fig 2; Leeds and Pocock 1971, 20, 33 and 34, fig 2; Gallagher 1987, 11, 17, fig 2.1), another of Group V (a iv) from Catterick (Leeds and Pocock 1971, 16–17, 31, fig 4c) and there are Class C2 brooches from Catterick (Pocock 1970, 408–9, pl Ib; Leeds and Pocock 1971, 32), Staxton (Leeds 1949, pl.131) and Sewerby grave 49 (Hirst 1985, 60, fig 52.16, pl IVc).

To summarise, the eleven complete or near-complete Norton cruciform brooches (Pl 12), along with the three sets of C2 fragments, have confirmed the established pattern for the region of a few rare Group II brooches, followed by substantial numbers of Group IVa and Class C2 brooches, as well as the occasional florid cruciform brooch. The Group II brooch from Grave 1 (Fig 33) lacks the lower footplate with its zoomorphic head terminal, which had been broken off a little below the pincatch, a single spring lug, marked wings either side of the central headplate panel, three simple semicircular knobs cast-in-one with the headplate and facetted decoration. It can be related to brooches in Reichstein's *späte* (late) types in Period

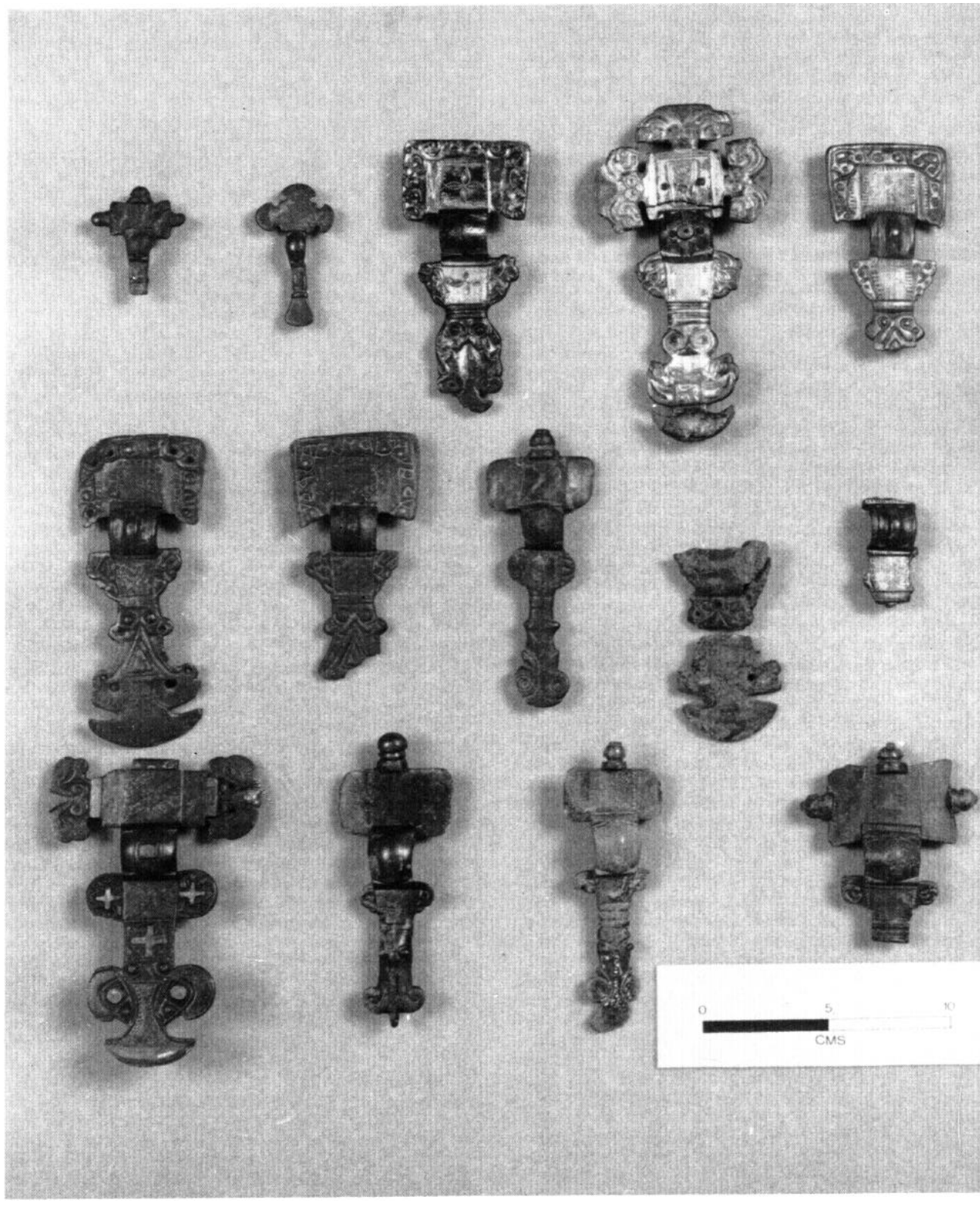


Plate 12 Cruciform and small-long brooches

D3 (Reichstein 1975, Taf 84–100) and in particular the pair of his Midlum Type from Rothwell in Northamptonshire *(ibid*, no 841, Taf 87.1 and 2). Hines gives D3 a date range of *c* 475–525 (Hines 1984, 27–8), but the damage to the Norton brooch and the traces of the organic threads which were used to sew this brooch to the dress after its pin fittings had been damaged implies that it may well have been buried towards the end of this period, though certainly not too long after 525. Its associations represent an incomplete assemblage, but include coloured glass and one amber bead, incomplete Class B clasps and part of a girdle hanger.

The finest made of the Norton Group IVa brooches is that from Grave 102 (Fig 62). This has punch decoration of a double line V on the outer border of the headplate's central panel and a double line U on the outer edges of the upper footplate panel. A single knob with an lengthened nipple extension is cast-in-one with the brooch at the top of the headplate. Only one of the two lateral side knobs survives, now separated from the headplate, but formerly having the function of an end-stop for the iron pin's spring bar held by a single lug at the back. The vertical centre-line of the bow has milled decoration and the side lappets off the upper footplate bear well-designed downward-biting animal heads seen in profile. Their head frames, eyes and curled-in upper jaws are clearly depicted. The animal-head foot terminal possesses a pair of eyes, two separated scroll-form nostrils and a flattened crescent-shaped area below them. For close parallels we need look no further than Benwell (Brewis 1936, pls IV and V, Cramp and Miket 1982, 8, fig 6.6, pl 1.6) and Londesborough (Yorkshire) Grave 9 (Åberg 1926, 46, fig 76; Brewis 1936, pl V; Swanton 1966, 277, fig 6.1).

Next in terms of sophistication of manufacture is the incomplete unstratified brooch (Fig 67.13). Its lower footplate is missing, broken off just below the pincatch, while the three knobs are cast-in-one with the brooch, each having a nipple extension and the iron spring was held in place between double lugs at the back. Punched ringlets demarcate the borders of the central headplate panel, the headplate wings, the bow and the upper footplate panel, while there is a notched bar at the base of the central headplate panel and the upper footplate panel. Compared with those on the Grave 102 brooch, the profiled downward-biting animal heads on the lappets are relatively crude, but headframes, eyes and curled-in upper jaws are represented on them.

The brooch in Grave 96 (Fig 61) must have had separately cast and attached, functional side-knobs on the headplate, which resembled that surviving from Grave 102, to act as stops for the iron spring bar held by a single lug at the back. The upper knob lacks a nipple element and is cast-in-one with the brooch, while the headplate wings are simple extensions of the central panel. A stylised profiled downward-biting animal head decorates just one of the lappets, for the casting of the other had been a failure. The head and separated jaws are visible in simple outline form only and are paralleled on a Group V(a) florid brooch from Morning Thorpe (Norfolk) grave 16 (Green *et al* 1987, 37, fig 297B). The animal-headed terminal of the footplate has two eyes and a central vertical bar ending in a suspension loop, which separates the two scrolled nostrils. This suspension loop is a very useful feature for attaching strings of beads and pendants to a brooch and it is surprising that it does not occur more often. A brooch from Lakenheath (Suffolk) on display in the British Museum (M & LA 1910,12–23,3) shows this feature, as does a Group III brooch from Bergh Apton (Norfolk) grave 6 (Green and Rogerson 1978, 11, fig 67.8i).

Separate and functional side-knobs are once again missing from the Grave 63 brooch (Fig 53), but the single lug for its iron spring is present. Its upper knob with a nipple extension is cast-in-one with the brooch and the wings are simple extensions of the central headplate panel. Remains of thread wound across the headplate in a diagonal cross and around the narrowest section of the upper knob helped to fasten the hinge end of the pin to the spring lug and headplate, after its pin mechanism failed. This is reminiscent of the use of sewing thread on the Group II brooch from Grave 1. The lappets are simple semicircles in form and contain no zoomorphic ornament, just simple incised lentiform designs. These lappets can be compared with those on the brooch from Londesborough grave 10 (Swanton 1966, 279–80, fig 6.2). On the footplate terminal, the two animal eyes are crude bumps, but the nostrils consist of a series of coiled circles related to the scroll idea.

Associations of other dress fittings with these Group IVa brooches at Norton are consistent. A single cruciform brooch is found with a pair of annular brooches and Class B7 clasps in Grave 96, while in Grave 102 the cruciform brooch and annular brooch pair is accompanied by coloured glass beads, one amber, one rock crystal, one stone bead and Class B18c clasps. Then in Grave 63 there is just a single annular brooch, a string of coloured glass, gold-in-glass and amber beads and the clasps of B16 and B20.

It is difficult to obtain agreement on the absolute date range of these IVa brooches. They fall within the D3/E periodisation of Reichstein's *späteste* (latest) brooch forms, which include Group IVa brooches with lappets from St John's College Cricket Field in Cambridgeshire (Reichstein 1975, 150, Taf 109.3 and 5) and Group IVb brooches from Holywell Row (Suffolk) graves 16 and 79 and Little Wilbraham (Cambridgeshire) graves 40 and 81 *(ibid*, 154, Taf 110 and 105; 151, Taf 112 and 111). Hines suggests a date range of *c* 500–550, influenced by his belief that all cruciform brooch manufacture ceased in the 560s or 70s (Hines 1984, 27–8), but there is no reason why a later chronology of *c* 525–575 should not be adopted (Welch 1987,258). After all, the association of a pair of Style I decorated Class C clasps and a pair of Kühn Type 21 Frankish radiate-headed brooches datable *c* 520–550 or

520/30–560/70 with a cruciform brooch of Group III in Little Wilbraham grave 133 (Reichstein 1975, 151, Taf 106) fits this revised chronology quite well. The attempt by Hines to argue that the Group IVb brooch in Holywell Row grave 16 (*ibid,* Taf 110) might be contemporary with the florid Group V brooch from Swaffham (Norfolk) Grave 6 (Hills and Wade-Martins 1976, 4, fig 8.6C, pl IV), the differences between them being governed by taste and cost rather than time (Hines 1984, 27–8) is surely wishful thinking. If the later chronology is accepted, then the florid brooches will not be placed in a period *c* 550–70/80, but be in fashion from *c* 575–600, or even continue into the early 7th century.

As already noted, true florid cruciform brooches, as opposed to Class C2 brooches, are extremely rare in northern England (Leeds and Pocock 1971, figs 1 and 2), so to find two in one cemetery is noteworthy. The piece in Grave 30 (Fig 42) was again associated with a pair of annular brooches with coloured glass and amber beads. Clearly it represents a fine example of Pocock's Girton Type or Group V(a iv), which is also represented at Catterick *(ibid,* 16–17, 31, fig 4c), as well as by the knob section from Girton in Cambridgeshire *(ibid,* pl ID), after which the type is named, and a brooch from Islip in Northamptonshire (Leeds 1941, pl LI). Other Group V(a) brooches from Upton Snodsbury in Worcestershire (Brown 1915, pl XLV.4), Fonaby in Lincolnshire (Cook 1981, fig 21) and Swaffham (Norfolk) grave 6 (Hills and Wade-Martins 1976, pl IV) share elements in common with the Norton and other V(a iv) brooches. The Norton brooch with its silver sheet panels in bichrome style had clearly been treasured, as after breaking in two along the bottom of the headplate, it had been repaired with six rivets fastening it to an iron strengthening plate behind the central headplate panel and bow. A single spring lug at the back of the headplate took the iron pin fitting.

By contrast the bichrome style brooch from Grave 84 (Fig 58) is in many respects unique, as far as can be gathered from a survey of published florid brooches. The upper flattened knob section is missing, but the two lateral knobs are reminiscent of those on the Group V(a) brooch from Morning Thorpe grave 16 (Green *et al,* 1987, fig 297B).

Diagonally-set quatrefoils ornament the headplate's central panel and the upper footplate panel. Then there are three chipcarved simple equal-armed crosses in the semicircular lappets and the central footplate panel, which stand out in relief and additionally are picked out by being silvered. These are so conspicuous as to suggest that they might be overt Christian symbols. As Christianity cannot be shown to have reached Bernicia prior to Edwin's conversion in 627 or 628, however, due caution must be observed. Such a cross is after all a very simple geometric motif and need not possess an iconographic role. The heavily-stylised downward-biting animal heads above the crescentic foot terminal are a little reminiscent of the openwork footplates of Group V(k) brooches, such as those from Stapleford in Leicestershire (Leeds and Pocock 1971, 20 pl IIIB) and Longbridge in Warwickshire (Aberg 1926, 53, fig 87) and also the Class C3 square-headed cruciform brooches (Leeds 1949, pl 138–43). Its iron spring and pin were attached to a double lug fitting at the back of the headplate. An incomplete annular brooch and clasps of Class Bl3a are the principal associations of the Norton brooch.

Brooches of Class C2 are the most popular of the Group V cruciform brooch forms in northern England. Although superficially these possess the headplate of a great square-headed brooch, the positioning of animal mask designs at the centre of each of the three outer plate edges represents the knob element of their cruciform brooch ancestry, quite apart from the presence of lappets and other cruciform footplate characteristics. Pocock (1970) follows Leeds (1949) in arguing for East Anglian prototypes, represented by the Kenninghall, Norfolk brooch (Leeds 1949, pl 130), as the basis for the main northern group of the Staxton *(ibid,* pl 131), Benwell (Cramp and Miket 1982, pl I.7), Hornsea, Driffield and Whitehill Point brooches (Leeds 1949, pls 132, 133 and 137). He contrasts this group, with its easterly and coastal distribution, with sub-groups represented by the brooches from Fonaby (Lincolnshire) grave 38 (Miket and Pocock 1976, pl IXA; Cook 1981, 36, fig 13, pl IIB) and Darlington (Leeds 1949, pls 134–5; Miket and Pocock 1976, pls VIIA and B) on the one hand, and the Catterick brooch on the other (Pocock 1970, pl Ib). These share a more westerly inland distribution and are seen as reflecting a Deiran advance northwards along the Roman roads from York to Catterick and on into County Durham *(ibid,* 409). Unfortunately for this view, the Piercebridge brooch belongs to the main northern group (Pl 13), despite its inland location. Appropriately enough, Norton has produced brooches which can be assigned to the main group and also, in one case, to the Fonaby-Darlington sub-group.

The best made of them is the Grave 22 brooch (Fig 38), which has many points of similarity to that from Fonaby and both of the Darlington brooches. Its iron spring and pin were fixed between a double lug at the back of the headplate. Bather less refined is the pair from Grave 61 (Fig 52) and the extremely crudely decorated brooch from Grave 57 (Fig 50), together with the footplate fragments of Grave 77 (Fig 57) and unstratified (Fig 67.12). These can be compared with the Whitehill Point and Driffield brooches of the main group. All three of these brooches have a double lug springholder for their iron pins. The unstratified footplate terminal fragment (12) may also be part of a Class C2 brooch and it seems highly probable that the bow and upper footplate section from Grave 80 (Fig 57) had belonged to a Group V brooch and quite likely to one of Class C2. Grave associations are again fairly consistent, with annular brooch fragments, Class B7 clasps and a Frankish style shield-on-tongue belt set in Grave 22; an annular brooch and a Class B7 clasp in Grave 77; and a pair of Class B17

Plate 13 Class 2 cruciform brooch from Piercebridge

clasps in Grave 57. These tend to suggest burial within the second half of the 6th century, rather than contexts of the 7th century.

There seems to be an overall consistency in the manner in which cruciform brooches were worn as dress fastenings at Norton. It is unfortunate that we cannot comment on the location of the Group II brooch in Grave 1, nor of the Group IVa in Grave 102 and the Class C2 brooches of Graves 61, 77 and 80. But the positioning of the remaining cruciform brooches on the right collarbone, at the throat or on the chest combined with either a pair of annular brooches (Graves 30 and 96) or a single annular brooch (Graves 22, 63 and 84) on the shoulders, except for Grave 57, is the same whether it is a IVa, florid or C2 brooch that is being worn. Presumably the cruciform was used either to fasten a scarf, veil or light cloak over a tubular or *peplos* dress fixed at the shoulders by the annular brooches (see Brown 1978, 24–5 discussing Berinsfield Grave 102), or else placed centrally to secure the *peplos* dress to an undergarment (Owen-Cracker 1986, 39–40, fig 30; 1987, 152, fig 1). The textiles of this clothing consisted of tabby weave ZZ spun associated with the unstratified Group IVa brooch and the other IVa brooches in Graves 63 and 102, as well as with the C2 footplate fragments in Grave 77, and 2/2 twist ZS spun occurred with the florid brooch of Grave 30 and the C2 of Grave 22, while the fragment of linen behind the pin of the Grave 22 brooch may represent the undergarment attached to the *peplos* overgown.

Small-long brooch (Pl 12)

Small-long brooch is the rather unfortunate term which has been given to a wide variety of cheap bow brooches which imitate cruciform, square-headed and more rarely other brooch forms. The single example from Norton Grave 21 (Fig 37) is trefoil-headed, its flattened semicircular headplate extensions imitating the knobs of cruciform brooches and has a single lug at the back for its iron spring and pin. The plain shovel-shaped foot terminal, simple facetted ornament and absence of lappets imply an imitation of cruciforms of Groups I–III and its form places it in Leeds's early Class B (Leeds 1945, 9, fig 4b). This would suggest manufacture and burial in the later 5th or the first half of the 6th century, but broadly similar brooches can be found in contexts datable to the middle and second half of the 6th century.

We are grateful to Dominic Powlesland, Director of the Heslerton Project, for permission to quote the association of a similar trefoil-headed small-long brooch with a Group IVa cruciform and a Roman knee brooch in West Heslerton (North Yorkshire) grave 1A 50. There is also Sewerby grave 57 with a Group IVa cruciform and a pair of annnular brooches (Hirst 1985, 59, figs 57–8); the pair in Little Wilbraham (Cambridgeshire) grave 168 with a Group IVa cruciform and grave 81's pair with a Group IVb brooch (Reichstein 1975, 151, Taf 103 and 111); while Swaffam (Norfolk) grave 6 contained a pair accompanying a florid cruciform of Group V(a) (Hills and Wade-Martins 1976, 4–5, fig 8.6A–C).

These selected assemblages have been chosen to illustrate the probability of a general date range covering most of the 6th century for this relatively common form of small-long brooch. The associated clasps of Class B7, coloured glass and amber beads, iron buckle and key from Grave 21 perhaps permit us to prefer an earlier to a later date within the 6th century. In terms of its location on the right side of the neck, it seems to have been worn as a substitute cruciform brooch by a woman who apparently possessed no other brooches.

Other sites in north-east England which have produced small-long brooches are Darlington with cross-potent headplates (Miket and Pocock 1976, 66, 69–71, pl VIIIB and C), a square-headed brooch from Hylton (Miket 1982), a trefoil-headed brooch from Cleadon (Miket 1984) and a cross-potent brooch and a brooch with notches in the upper corners of its headplate from south of Corbridge (or else from Newton Kyme near Tadcaster in Yorkshire: Miket 1985), together with brooches from Saltburn (Gallagher 1987, fig 2.3) and Catterick (Pocock 1971, pl I). Now that the so-called Birdoswald brooch has been shown to be without provenance (Cowen 1965; Miket 1980, 292 no 3; Cramp and Miket 1982, 9, fig 6.9), the Cleadon and Norton brooches represent the most northerly of the recorded trefoil-headed brooches (Leeds 1945, 88–92, figs 4–7).

Applied saucer brooch

The oval baseplate, iron pin fittings and two sections of the rim of a large applied saucer brooch is a surprise element in Grave 105 (Fig 63), found paired together with an annular brooch and a string of amber beads with one blue glass bead. Applied saucer brooches are extremely rare in northern England, the pair of five-star brooches from Staxton in the Vale of Pickering (Sheppard 1938, 6, pl on 3: figs 1 and 2; Evison 1978, 261–2, 276; Böhme 1986, 547–8, Abb 64.5, 70) and another from Sancton in the Yorkshire Wolds (Welch 1976, 211; Evison 1978, 262, 276) being the closest to Norton. In the absence of the decorated plate it once possessed, we must rely on the diameter of the base to suggest a date range for the original brooch. This measurement is 43 by 49 mm, which is a little above the mid-point in the range of applied brooch diameters in the Upper Thames region of 28 to 66 mm, while the larger brooches with zoomorphic or anthropomorphic designs there have diameters over 48 mm (Dickinson 1976, 100–14). While some of the zoomorphic and anthropomorphic brooches have been attributed to the middle and second half of the 5th century (Evison 1978, 265–7, fig 2i–1, pl LVI; Böhme 1986, 548, Abb 65, 66, 70), the majority of them belong in the 6th century (Evison 1978, 265; Leeds 1912, pls XXVI.3, XXVII.1–2, 4–8; Kennett 1971b). In view of the moderate diameter of the Norton brooch base, it would seem that a general date of deposition in the 6th century is the most plausible suggestion open to us.

Penannular brooches

Both of the Norton penannular brooches belong to Fowler's Type G (Fowler 1960; 1963), which have been the subject of an invaluable recent reassessment by Dr Tania Dickinson (1982). The example from Grave 65 (Fig 54) was worn at the throat by a woman and was associated with just a knife. It has a plain hoop and a single dot in each terminal, which allows it to be classified as a G1.7 (Dickinson 1982, 49, fig.4.3, 15, 18 and 21). On the other hand, the smaller and more elaborately decorated brooch from Grave 40 (Fig 45 and Pl 16) is related to the G2 series (Dickinson 1982, 44–6, fig.5.46, 53 and 54) and forms part of one of the outstanding female assemblages in the cemetery. Again, it was worn at the throat and its associations include a pair of annular brooches on the shoulders, as well as a pair of Class B18 clasps and a fine pair of silver bracelets on the wrists.

Brooches of Group G1.7 have a predominantly western British distribution ranging from Goss Moor in Cornwall, Cadbury Congresbury in Somerset and Meols in Merseyside, together with one example from the Midland Anglian cemetery of Longbridge Park in Warwickshire, to which the Norton brooch now adds a northern Anglian

context. Other G1 brooches do occur in north-eastern English sites, however, with a G1.5 from Wooler and G1.8 brooches from the Yorkshire Wold cemeteries of Driffield barrow C38 (grave 30) and Londesborough (grave 7), the latter being a 6th century assemblage (Swanton 1966, 273–4; Dickinson 1982, 50, fig 2). Many other G1 brooches have been recovered from Anglo-Saxon cemeteries of the 5th to 6th centuries (Dickinson 1982, 50–4, Table I) and it seems reasonable to give the Norton brooch a 6th century date as well.

By way of contrast, Group G2 and related brooches have hitherto been restricted to sites in western Scotland at the Mote of Mark in Dumfries and Galloway, Castlehill Fort in Strathclyde, and two brooches vaguely provenanced to West Scotland *(ibid,* fig 1). The Norton Grave 40 brooch is the first G2 related piece to be found in an Anglo-Saxon cemetery context and fortunately it is one which can be firmly attributed to the 6th century.

Annular brooches

The most popular brooch form in the Norton cemetery by far is the annular brooch, typically worn in a pair as shoulder dress fasteners. There is a possible grand total of 65 brooches, of which 55 are made in copper alloy, three of which were unstratified fragments from the topsoil (nos 8–10), nine of iron and one of lead with an iron pin. Some doubt exists as to whether or not all of the iron brooches were indeed brooches, rather than buckles with rounded loops, eg Grave 5, no 2 (Fig 34), or annular rings, eg Grave 36.1 (Fig 45). Of the 32 graves which contained copper alloy annular brooches, three had both a pair and a single brooch (Graves 9, 11 and 112), 14 have a pair, mostly matched pairs, and the remaining 15 possessed just a single brooch, which might nevertheless be paired up with an iron annular brooch, as in Grave 7, or else with a different type of brooch, as in the case of Grave 105 with an applied saucer brooch. Only two of the seven graves with iron annular brooches has produced a pair of them (Graves 66 and 107), the rest being singles, as is the case for the lead brooch of Grave 104. But as we have seen, two of these single iron brooches were paired with copper alloy annular brooches in Graves 7 and 9. It is usually assumed that the iron annular brooches and oddities such as the crude lead brooch are the poor woman's imitations of the copper alloy versions.

All of the Norton copper alloy brooches fall into the categories F and G assigned by Leeds (1945, 46–9, fig 29). The Type F brooches consist of a narrow band with a half-round or oval section. Some of these are completely plain, ie Graves 2 (2.4), 7 (7.7) and 52 (52.13), more frequently others have moulded decoration in bead-and-reel style, ie Graves 9 (9.4), 11 (11.9), 44 (44.3) and 112 (112.1). In addition the pairs of brooches in Graves 23 and 112 which have cast milled decoration can perhaps be classed as belonging to Type F. The total of 11 Type F brooches from eight graves contrasts with the much more popular Type G annulars, represented by 44 brooches, including the three unstratified fragments. This large flat annular brooch variety comes in a narrow banded form with a width of 5 to 7 mm and a broad version 1 cm wide. Thirteen brooches from seven graves can be reasonably attributed to the broader sub-group, while another 28 from 20 graves belong to the narrower form. A few of these are completely plain, but simple linear and ring-and-dot or punched decoration is commonplace on them. Just one Type G brooch from Grave 96 has outlined animal-head terminals either side of the pin rest, while the pair from Grave 40 belong to a superior form with an inner thickened ring element.

Annular brooches of all these forms are one of the most typical features of female dress in the 6th century cemeteries of north-eastern England and even at the time of the Second World War, Leeds was able to cite 68 examples of his Type G brooches together with a few Type Fs from the cemeteries of the Yorkshire East Riding. The report on the Sewerby cemetery confirms this pattern with 27 annular brooches in 15 graves, mostly of Type G with some Type F and a few iron brooches (Hirst 1985, 55–7). Their dating at Norton is certainly centred on the 6th century, as numerous associations with Class B clasps and rather less frequent occurrences with cruciform brooches of Groups IVa and V (including Class C2) and with the applied saucer brooch make clear. If florid and C2 cruciform brooches went on being worn and buried into the early 7th century as well as the late 6th, then the annular brooches continued with them,

Tablet woven braids sewn onto the upper borders of a peplos-type tubular overgown are evidenced by the textile impressions on annular brooches from Grave 70 and less certainly from Grave 40. In the former case the gown's main textile was a tabby or twill and for the latter there is a choice of a tabby weave ZZ spun and a 2/2 twill ZS spun, while one of the annular brooches from Grave 19 was also associated with a 2/2 twill ZS spun.

Dress pins with spangles and hair pins

A total of 16 certain or probable pins occur in as many graves at Norton. Although it is possible to use a pin in a variety of ways as a hair and dress fastener, the positions in which several of the Norton pins were found imply that they were being worn by women as an alternative to a brooch near the neck or on the chest. The finest example in the cemetery is that from Grave 41 (Fig 46), found at the neck together with a pair of annular brooches. It is of cast copper alloy with a long shank and a short squared head terminating in a loop, to which a copper alloy wire ring was still attached with the remains of one plain and one decorated sheet spangle close by. Such spangles, which is the term normally

given to perforated triangular or sub-triangular fittings attached on rings, are commonly found as a decorative element on the looped ends of dress pins.

A comparable pin still with two of its original three spangles, which would presumably have jingled as the wearer moved, came from a woman's grave at Leagrave (Bedfordshire) found on the left clavicle and associated with a pair of disc brooches (Brown 1915, 369, pl LXXX.2; Smith 1923, 75, fig 87; Meaney 1981, 189–90, fig V.oo.iv). It was compared by Baldwin Brown with pins from Brighthampton (Oxfordshire) grave 17 (Akerman 1860a, 85, 97, pl III fig 1) and a grave from Searby (Lincolnshire) associated with a disc brooch, two annular brooches and a pair of girdle hangers among other things (Swanton 1973, 99, 189, fig 75c–h). He considered the very elaborate pin from Vermand III (Aisne, France) grave 22 (Böhme 1974, 59, 355, Taf 136.3, Karte 9) to be its probable precursor. This Vermand example gives its site name to Böhme's late 4th to 5th century Vermand Type, also recorded at Hermes, Éprave and Nymwegen (Grab Nieuwstraat), all within north-east Gaul.

Pins with rings and spangles attached to them occur in many cemeteries throughout Anglian England and are commonly referred to as belonging to the Leagrave Type. In addition to the examples already cited, there was a simple copper alloy pin with a ring, but no attached spangles, from Driffield (Yorkshire) barrow C38, grave 18, where it would appear to have been used as a hair pin (Mortimer 1905, 279–80, pl XCIX fig 787). Then there was the pin with a spangle from Empingham II (Rutland) grave 85b (Clough *et al* 1975, 79–80, pl 7d) and the dress pins found by the neck and shoulders in female assemblages at Morning Thorpe (Norfolk) in graves 86 and 378 (Green *et al* 1987, 59, figs 71 and 322C; 147–8, figs 264 and 436N). The former is made entirely of copper alloy and the latter of iron with a copper alloy spangle. Another iron pin with a copper alloy spangle formerly attached to it by a ring occurred in Spong Hill (Norfolk) grave 37, again below the neck (Hills *et al* 1984, 86–7, figs 46 and 90.37.7).

Norton Grave 56 also contained an iron pin (Fig 50) with a pair of copper alloy spangles still attached to its head by a copper alloy wire ring. Only the upper part of the pin now survives, found near the neck together with part of an annular brooch. It is possible that the pair of spangles on a ring from Grave 52 (Fig 48) had formerly been attached to a plain iron pin there and the two spangles from the disturbed assemblage of Grave 1 (Fig 33) may likewise have been the sole survivors of a now lost pin. On the other hand, spangles were sometimes used as elements of necklaces, eg Holywell Row (Suffolk) grave 1 and Nassington (Northamptonshire) grave 28 (Lethbridge 1931, 2, fig IA; Leeds and Atkinson 1944, 109; Meaney 1981, 189, fig V.oo.i).

An iron pin was found in Grave 7 with an expanded head (Fig 34) on the chest (4) below a pair of annular brooches and can be compared with that from Morningthorpe grave 369 (Green *et al* 1987, 143–4, figs 257 and 427J). Other iron pins occurred in Grave 28 (Fig 40) by the right shoulder (4); Grave 29 (Fig 40) broken in four sections (5d); Grave 30 (Fig 41) beside the pelvis (2); Grave 49 (Fig 47) under the jaw (3); Grave 82 (Fig 58) by the knees (4); Grave 86 (Fig 59) beside the right shoulder (4); Grave 105 (Fig 63) by the waist (2); Grave 106 (Fig 63) beside the pelvis (1); and Grave 107 (Fig 63) as a needle at the neck (5) beside a pair of annular brooches. Little can be said about the dating or precise function of all these pins, though those at the neck or on the chest were perhaps used to fix a head covering to the dress.

One small bone pin recovered from Grave 104 (Fig 63) has an expanded head and was found in a position at the top of the skull which would justify thinking of it as a hair pin or else a pin used to fix a veil or scarf to the hair. By contrast the terminal of a copper alloy pin occurred in Grave 35 (Fig 44) below the left thigh. Finally, it seems probable that the large copper alloy pin (5) from Grave 4 (Fig 34) formed part of a toilet set, though there is also a fragment of what may have been a copper alloy sheet metal pin (14) from this grave.

Beads and related pendants

Pendant ornaments and perforated beads which were worn suspended on strings over the dress were made of a variety of materials: sheet metal, stone, fossils, amber, bone and glass. Metal pendants will be discussed first here and these occur in the form of four disc pendants of scutiform type in Graves 48 and 70, one perforated Roman coin in Grave 7, a bead end-of-string stop in Grave 28, bucket pendants from Graves 35, 71 and 94 and finally a decorated amuletic bead in Grave 11.

Scutiform pendants or miniature imitation shields, suspended from a separate loop attached to the edge of the disc, have been the subject of recent surveys by Hines, as part of his study of Scandinavian influences on Anglian metalwork, and by Audrey Meaney as to their probable use as amulets (Hines 1984, 221–35, 335–8, maps 4.3 and 4.4; Meaney 1981, 159–62, figs V.d, V.o–p). A case can be made that they symbolised a magical protection to the women who wore them, related to that provided to a warrior by a lightweight buckler with a central iron boss. Hines sees their first appearance in England as taking place early in the 6th century in East Anglia, but with production continuing on through the 7th century into the period of the Final Phase cemeteries, that is the later 7th to 8th centuries.

The single pendant from Norton Grave 48 (Fig 47) was incomplete and was found at the neck with five amber beads. It has a central repoussé boss and spaced bosses within the outer edges, perhaps representing rivets. A related design with circlet punchmarks in place of the outer ring of bosses and the addition of circlets enclosing the central boss occurs

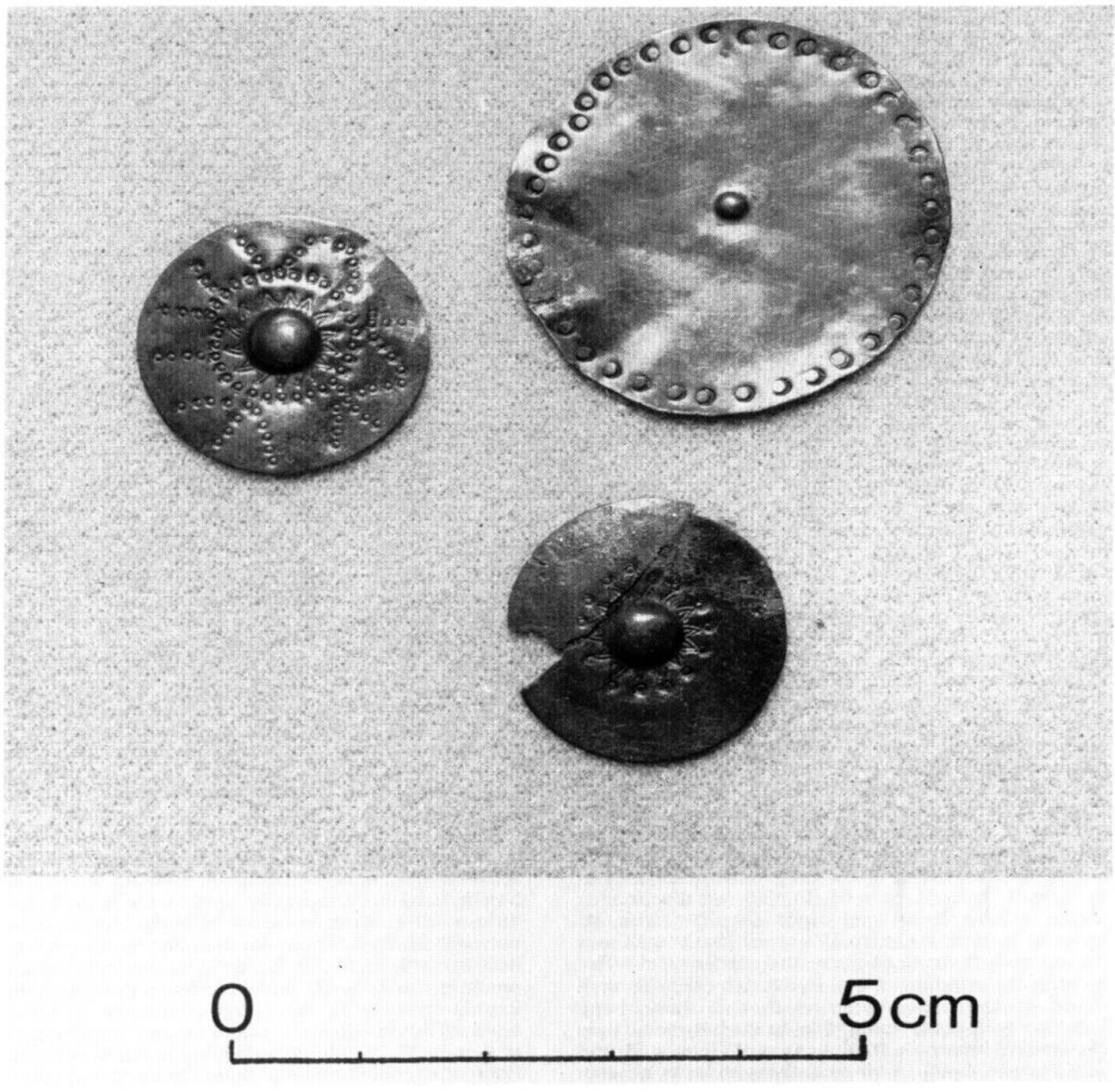


Plate 14 Grave 70; scutiform pendants

at Morning Thorpe grave 369 (Green *et al* 1987, 143–4, fig 427H). The set of three from Norton Grave 70 (Fig 56 and Pl 14) occurred together on the upper chest associated with a single annular brooch and a string of amber and glass beads. The largest of the three shares the same simple decoration as that from Grave 48, but, again, with circlet stamps instead of bosses. A series of punched designs, each consisting of a double V with a circlet at the apex, radiates out from the central boss of the other two pendants, with the outer area of one also being decorated by a lattice of triangular patterns made up from lines of punched circlets. The same punch design of a V and circlet can be seen on the pendant

from Morning Thorpe grave 322 and the lattice patterns of circlet stamps on that from grave 375 *(ibid,* 125–6, fig 401Ei and 146–7, fig 434B). In the case of both Norton assemblages the disc pendants were presumably made and buried within the 6th century and represent to date the most northerly discovery of this object type in England, previously restricted to eastern Yorkshire as far north as Sewerby and further south through England to Kent (Hines 1984, map 4.4).

Perforated Roman coins are fairly frequent finds in Early Anglo-Saxon cemeteries (King 1988), but only one was found at Norton, in Grave 7 (Fig 34) on the upper chest area of a female burial. It has been identified by Mr P J Casey as a copy of an issue made by Constantine I of AD 341–6. Another Roman coin was also discovered unstratified in the topsoil and identified by Casey as a Gratian VOTXV MVLTXX Lyms RIC 30 of *c* AD 382–3. Re-used Roman coins in Early Anglo-Saxon cemetery contexts often take the form of 4th century issues and, again, these have been the subject of a recent survey (White 1988, 62–101). While a purely decorative role cannot be ruled out for old coins worn as pendants, they may also have functioned as good luck charms (Meaney 1981, 220) and as cheap substitutes for purpose-made bracteates and scutiform pendants. On the other hand, the small subcircular copper alloy perforated sheet washer found to the right of the neck of the woman in Grave 28 (Fig 40) was probably purely functional, acting as the end-stop for a string of beads.

Bucket pendants or miniaturised copper alloy sheet models of buckets are another Scandinavian and continental fashion apparently introduced to Anglian England in the 6th century (Hines 1984, 13, 306, map 1.3; Meaney 1981, 166–8, figs V.t–v). There were five assemblages at Norton containing a total of 16 of these amuletic pendants, all of which belonged to women. The fragments of a single pendant in Grave 27 (Fig 39) was located in the area of the chest. That of Grave 63 (Fig 53) was also incomplete and lay below the right shoulder with an annular brooch, a Group IVa cruciform brooch and by the neck a string of glass and amber beads. The incomplete pendant from Grave 94 (Fig 60) was found at the neck, implying that it was strung together with glass and amber beads between a pair of annular brooches. In the cases of Graves 35 and 71 (Figs 44 & 56), however, the pendants all revealed traces of solder during conservation and were found above and around the skull, suggesting that they ornamented the hair or a head veil or scarf. On the other hand, none of the examples cited by Meaney were found around the skull: the ten pendants from Nassington grave I were at the neck and the two in grave 31 by the right hand, perhaps part of a purse collection (Leeds and Atkinson 1944, 110, 112–3, 123, fig 6); at Holywell Row grave 10 there were eleven accompanying four amber beads and a pair of annular brooches in a child's burial (Lethbridge 1931, 4, fig 18D); a singleton was by the neck in a child's grave at Updown, Eastry (Kent); in Driffield barrow C38 grave 22 they were on the neck under the chin (Mortimer 1905, 281, pl CI fig 802); and finally at Cheesecake Hill, Driffield, barrow C44 grave 6 they were set in a crescent on the chest (Mortimer 1905, 291–2, pl CXIII fig 873). These last two east Yorkshire examples were the most northerly known prior to the Norton excavations. Their small size and fragility may have caused them to be overlooked in the past and further adequately recorded examples are needed to establish how they were worn in 6th century Anglian England. The bucket pendant(s) from the more recently excavated Morning Thorpe grave 397 certainly seem to have been hung with the other beads around the neck and on the chest, for what that is worth (Green *et al* 1987, 155, figs 280 and 449Evi, C and H).

The large elongated herringbone-decorated silver bead made in two halves soldered together from Norton Grave 11 (Fig 35 and Pl 15) has only one close parallel in the form of the unpublished fragments of a similarly decorated bead from West Heslerton (North Yorkshire) grave 1 B 17 associated with a pair of iron tweezers, four blue glass beads, a piece of cullet, a fragment of a bangle and an iron fragment, perhaps part of a knife, examined through the courtesy of Mr D. Powlesland. Otherwise the type of metal bead found in 6th century Anglian cemeteries was relatively plain, consisting of two hollow silver hemispheres or 'bells' soldered together, as at Sleaford (Lincolnshire) grave 143 (Thomas 1887, 398, 406, pl XXIII.8) and at Morning Thorpe graves 384 and 400 (Green *et al* 1987, 149–50, 155–7, figs 439D and M, 452B and C). More sophisticated and elongated hollow metal beads have been recovered, however, from 7th century Kentish cemeteries, eg Sibertswold grave 31 (Faussett 1856, 108, pl 11.6).

A total of 54 graves (or 55 if the decorated silver bead and bone spindle-whorl of Grave 11 are counted as types of bead) at Norton contained beads, but 16 of these only produced a single bead, 20 (or 21) between two and eight beads, nine between 11 and 20 beads and the remaining ten between 26 and 102 beads. Surprisingly, metal pendants and metal beads were not necessarily found associated with large numbers of other beads. Thus the bucket pendant was accompanied in Grave 27 by a buckle, but no beads at all. The fine decorated silver bead from Grave 11 was found with another amuletic object: a cowrie shell and just one bead-like object: a bone spindle whorl. The scutiform pendant of Grave 48 was associated with just five beads; the washer end-stop of Grave 28 was with 11 beads; and the bucket pendants of Graves 35, 71 and 94 were with respectively 12, 16 and 26 beads. On the other hand, the bucket pendant from Grave 63 was accompanied by 55 beads and the three scutiform pendants of Grave 70 were located with 45 beads and the perforated coin of Grave 7 with 74 beads.

Amber was the most common raw material and amber beads were found in 45 of the 54 graves

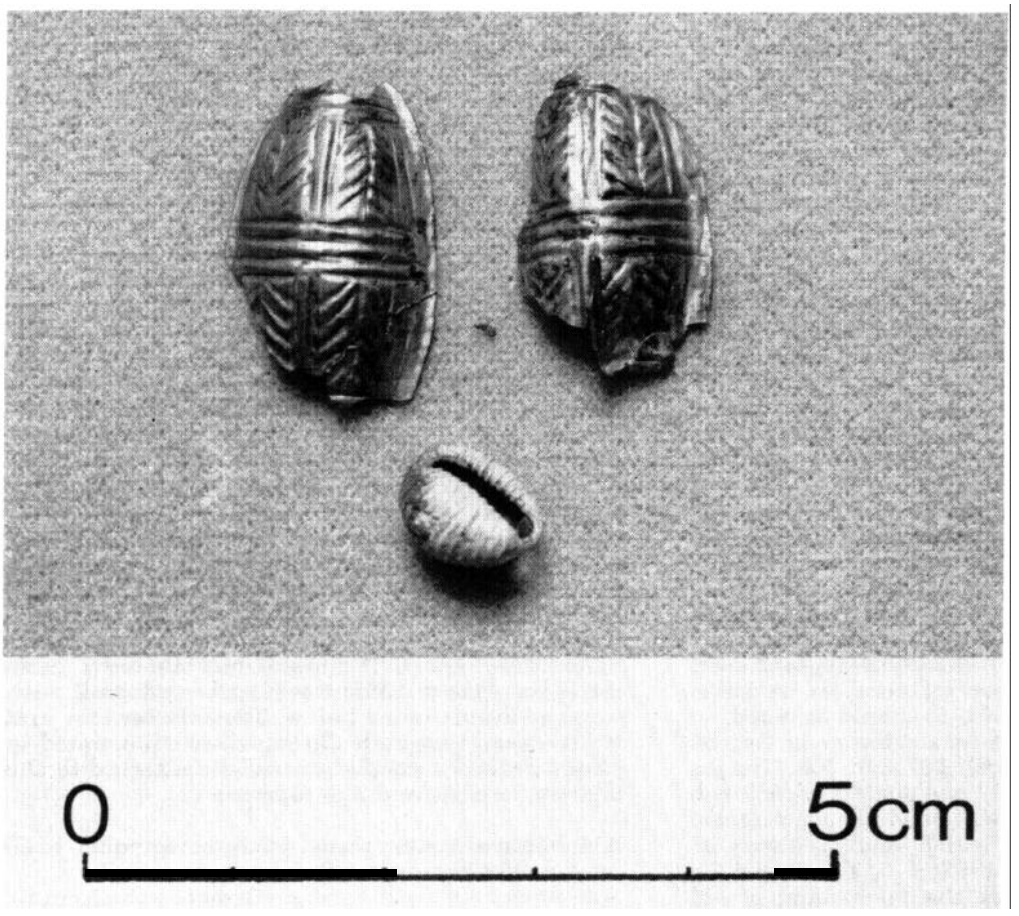


Plate 15 Grave 11 silver amulet bead and cowrie shell

containing beads. Unfortunately it is not possible to determine whether the amber was collected off the nearby beaches of the North Sea coast or imported in quantity from the Baltic region, as the amber washed up on the east coast of England originates from the western edge of the Baltic deposits (Beck 1970, 8; Huggett 1988, 64–6). In view of the sheer numbers present in this and other 6th century Anglo-Saxon cemeteries, importation from the Baltic seems probable. Amber beads were the sole bead type found in 17 graves, eight of which contained just one bead in any case and the maximum number in this group of 17 graves were the eight beads of Grave 85. At the other extreme 62 of the 63 beads in Grave 52, 53 out of 74 in Grave 7, 52 out of 62 in Grave 4, 42 out of 45 in Grave 70, 38 out of 40 in Grave 29 and 36 out of 59 beads in Grave 63 were fashioned from amber.

The observed contrast at the Sewerby cemetery between graves in which amber beads predominated and others in which blue glass beads were dominant (Hirst, 1985, 71–7, 85) is matched at Norton. Here though, plain translucent blue glass beads occurred in significant numbers in no more than two assemblages: the 82 out of a collection of 102, with just one amber bead present, in Grave 102 and the 25 out of a total of 36, including seven amber beads, in Grave 21. The six blue glass beads were outnumbered by the 11 amber beads out of a total of 18 in Grave 40 and likewise the seven in Grave 7 were dominated by the 53 amber beads out of a total of 74. Monochrome glass beads were the only bead type found in two assemblages (Graves 20 and 84), but then each of those contained just a single bead, respectively of translucent blue glass and opaque grey white glass. There was also just one assemblage (Grave 22) which contained nothing but polychrome glass, yet again in the form of a single opaque green bead with dark speckles on a light background. Then monochrome and polychrome glass beads were exclusive to one other burial (Grave 44) with a total of seven beads: one translucent blue, two translucent green, one opaque green, one opaque bluegreen, one opaque yellow and one opaque brick red bead with a pale band.

Much more common were mixed strings with beads of different materials. There were 25 graves which contained both amber and glass beads, while

two had both amber and stone beads and finally four burials were accompanied by a single stone or bone bead. No conclusions can be drawn from the distributions of amber and glass beads. In the case of the amber beads, they were found throughout the cemetery, though rather more were located in the south and east. Five graves containing glass beads were located on the north side, with eleven to the south. Nor can we separate out in chronological terms those two strings with many blue glass beads from those in which amber dominates. Grave 21 contained a trefoil-headed small-long brooch and Grave 102 a Group IVa cruciform brooch for the 'blue glass strings', but then Grave 63 also had a Group IVa cruciform brooch, Grave 40 a pair of silver bracelets, a pair of annular brooches and a G2 related penannular brooch and Grave 105 an applied saucer brooch and an annular brooch for the 'amber bead strings',

Nothing out of the usual marks out the range of glass beads from Norton, whether in terms of forms, colours or decoration. Gold-in-glass beads were present in small numbers in Graves 4, 21, 28, 41, 63 and 71. Decoration on the polychrome glass beads is largely limited to the normal dots, waves, swags and spirals and the absence of elaborate drum-shaped beads and of any millefiori or complex reticella designs (Koch 1977, Farbtaf 1–6 should be noted.

Stone beads occur mostly as singletons in Graves 5, 9, 29, 76, 102 (two beads), 107 and 108. The jet beads in Graves 29 and 107 are distinctly different from the 120 out of a necklace of 146 beads recently excavated in a Romano-British double burial at Hartlepool (Daniels *et al* 1987, 1–3, figs 2 and 3). While they may represent the re-working of old Roman pieces, jet pebbles also occur on Yorkshire beaches and could be obtained easily and then worked into beads (Hirst 1985, 70). Indeed, jet beads have been found in quite a few Early Anglo-Saxon cemeteries, including the nearby site of Hob Hill, Saltburn (Meaney 1981, 73–4, fig IIIe–g; Gallagher 1987, 25, fig 6.74). There was also a chalcedony bead among the unstratified material (759). Rock crystal and quartz beads represented in Graves 108 and 102 were rare and apparently highly prized, perhaps as amulets (Huggett 1988, 70, fig 4; Meaney 1981, 77–82, 90–6). Similarly, fossils (crinoid ossicles) may have possessed amuletic powers, explaining their presence in Graves 29 and 101 *(ibid*, 116–7). Organic material was also utilised in the form of the bone beads and spindle-whorls found singly in Graves 4, 11 and 107, which may again have a magical or amuletic value *(ibid*, 145–7). The spindle-whorl has one flat face and the other lathe-turned and rounded. It may perhaps be comparable with the domed antler disc from the female grave at Binchester (Coggins 1979, 236). In addition, there are the two bone fragments from Grave 96.

The overall total of 793 beads, including the unstratified finds, can be broken down into the following categories: 66% amber, 25% monochrome glass, 5% polychrome glass, 1% gold-in-glass and 3% other materials. The vast majority of them were worn by women and were found under the jaw and on the collarbone or on the chest. In many cases their strings must have been attached to brooches rather than hung round the neck and some beads were preserved in the corrossion products of an annular brooch in Grave 94 (5), which had a bead and traces of thread adhering to the fabric. The main string of beads in Grave 102 is of interest as the polychrome beads were used as spacers between the monochrome annular beads. One group of beads from that burial had been threaded on a string around the wrist: a fashion which has been observed frequently in other Anglo-Saxon cemeteries. Single beads or pairs of beads can and do occur in male burials at Norton as at other cemeteries, eg Sewerby (Hirst 1985, 62). Norton Graves 64 and 69 each contained an amber bead together with a weapon assemblage and this suggests that Grave 58 with its single amber bead may well belong to a man, as is implied by the skeletal evidence, and likewise for the knife and the single amber and stone beads from Grave 76. On the other hand, there are single beads associated with the female assemblages of Graves, 11, 22, 49, 59, 65, 77, 84, 87, 90 and 113.

For this report the published Sewerby bead categories (Hirst 1985, 64–70) were adopted, with some additions noted below. The full Sewerby and Norton bead type series are available illustrated in colour in the respective microfiche attached to the Sewerby volume and this report.

A1d Monochrome glass medium annular bead with three segments:
Grave 44 (1 example).

A4d Monochrome yellow glass sub-melon bead with five lobes:
Grave 7 (1 example).

A4e Monochrome glass sub-melon bead with four lobes:
Grave 87 (1 example); Grave 102 (1 example).

A4f Monochrome blue glass sub-melon bead with ten lobes: Grave 102 (1 example).

A5d Monochrome blue glass long cylinder bead with multiple segments:
Grave 94 (1 example: 10 segments).

B3 Gold-in-glass bead with multiple segments and a long cylindrical form. Similar to A5d in form, except gold-in-glass:
Grave 4 (1 example); Grave 28 (1 example); Grave 63 (2 examples).

B4 Gold-in-glass bead with a collar at one end:
Grave 41(1 example).

C1d Polychrome glass annular bead with a single spiral around the middle:
Grave 21(1 example).

C1e Polychrome glass annular bead with a yellow spiral and wavy internal green lines:
Grave 68 (1 example); Grave 69 (1 example).

C1f Polychrome glass annular bead with a brick-red background, two yellow spirals overlain by green lines:
Grave 102 (4 examples).

C2c Polychrome glass barrel-shaped bead with five yellow wavy lines:
Grave 19 (1 example); Grave 102 (1 example).

C2d Polychrome glass annular bead with a pale background overlain by brown and green broad wavy lines from top to bottom:
Grave 87 (1 example).

C2e Polychrome glass annular bead with blue and red wavy lines and one blue band crossing all the wavy lines:
Grave 102 (1 example).

C2f Polychrome glass long cylinder bead with a brick-red background and yellow wavy lines overlain by green wavy lines:
Grave 102 (2 examples); unstratified (755, 758)

C3a The same as Sewerby Type C3 (polychrome glass barrel-shaped double swag and spot-decorated bead):
Grave 63 (1 example); Grave 102 (4 examples); Grave 113 (2 examples); Grave 94 (1 example); Grave 107 (1 example) .

C3b Polychrome glass long cylinder bead with a yellow background and a green double swag:
Grave 63 (1 example); Grave 30 (1 example); Grave 113 (1 example).

C5c Polychrome glass long cylinder bead, triangular section, speckled green and yellow:
Grave 22 (1 example).

C6b Polychrome glass barrel-shaped bead with diagonal stripes of red and yellow separated in the middle by a band:
unstratified (760).

C7c Polychrome glass long cylinder bead with diagonal spirals:
Grave 63 (2 examples).

C7d Polychrome glass barrel-shaped bead, cream-white at top and bottom with a thick orange band through the centre:
Grave 82 (1 example).

C8 Polychrome glass double segmented bead with a brick-red background and yellow horizontal spirals:
Grave 113 (1 damaged example),

D5 Amber annular bead with six flat faces and an overall cube shape:
Graves 2, 4, 7, 19, 28, 29, 35, 51, 52, 56, 66, 70, 107, 113.

D6 Amber rounded bead with no flat faces:
Graves 2, 4, 29, 35, 52, 63, 70, 71, 94.

D7 Amber bead with three flat faces giving a triangular section:
Graves 2, 4, 7, 10, 19, 28, 29, 30, 40, 51, 52, 56, 58, 70, 71, 87, 94, 105, 107, 113.

D8 Amber bead with two long flat faces and two shorter flat faces, giving a rectangular section:
Graves 2, 4, 9, 29, 41, 52, 63, 70, 71, 76, 85, 105, 113.

Jet (see Sewerby: Hirst 1985, 70):
Grave 29 (1 example - E3
Grave 107 (1 example - E4).

F Rock crystal (see Sewerby: Hirst 1985, 70):
Grave 108 (1 example).

H Worked stone: each of the five beads is individual and each has a separate entry in the grave catalogue:
Graves 5, 9, 76, 102 (2 examples); there are also natural fossils in Graves 29 and 101.

J Bone: four beads:
Graves 4, 11 (spindle-whorl), 107 (2 examples).

Bracelets

The fine pair of punch-decorated silver sheet spiral bracelets from Grave 40 (Fig 45 and P1 16) must surely mark the burial of a very important woman in the Norton community. Each was made from a single lozenge-shaped strip of beaten silver, with plain narrow rounded terminals and punched ornament along each edge and across the centre. The punch design consists of a double circlet at the apex of a double V and is similar to the design on one of the Grave 70 scutiform pendants (Fig 56 and P1 14). Execution of the punching was variable and in some places the impressions were incomplete. The inner surface was plain and there were traces of wear inside that worn on the right hand of this lady, who apparently died in her twenties.

Such armlets or bracelets in silver are an occasional feature in Midland cemeteries, but could never be described as commonplace. The most recent survey of silver bracelets is that published by Kennett in a discussion of one with ribbed decoration from Sandy, Bedfordshire (Kennett 1970, 27–8, fig 9.16). An overall impression from grave associations is that they represent a fashion item of the 6th century and in particular its second half, perhaps even extending into the early 7th century.

The punch-decorated pair from Long Wittenham (Berkshire, now Oxfordshire) grave 123 were asso-

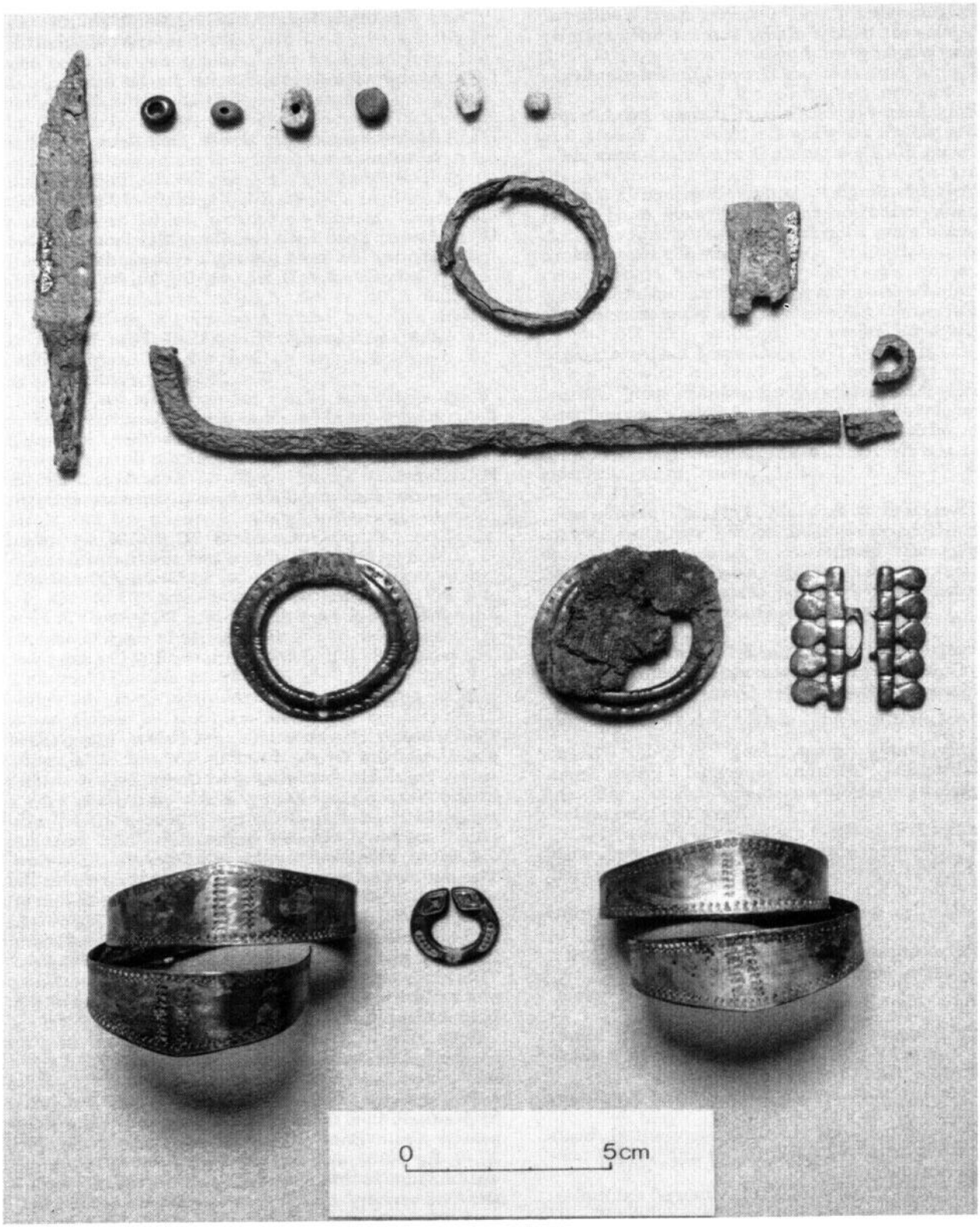


Plate 16 Grave 40; artefacts

ciated with a pair of zoomorphic cast saucer brooches (Akerman 1860b, 347, pl XIX figs 5–6). The dating of the punch-decorated pair from Holywell Row (Suffolk) grave 11 is essentially given by the great square-headed brooch of Hines Group IV (Lethbridge 1931,4–9, figs 2–3, plan 3; Leeds 1949, pl 11; Hines 1984, 1267). Certainly Kennett,s date of deposition as late as the mid-7th century on the basis of associated silver pendants is both unnecessary and improbable. He commented himself on a more reasonable attribution made in 1969 by Sonia Hawkes to the second half of the 6th century (Kennett 1970,27–8 and n 80; Millard *et al* 1969,20 n 31), while the first half to mid-6th century seems more probable now. A fragment of another with punched ornament was found with a cremation-damaged great square-headed brooch of Hines Group X in a bossed pot at Lackford (Suffolk), urn 50/178 (Lethbridge 1951, 18–19, fig 17.50.178B; Hines 1984,138–42, fig 3.5). Then the single ribbed bracelet from Barrington A (Cambridgeshire) grave 11 (Smith 1868, 159, pl XXXIV.1) and the pair of punch-decorated bracelets from Tuddenham (Suffolk) were apparently in both cases discovered with great square-headed brooches of Hines Group XV (Leeds 1949, pls 21 and 25; Hines 1984,148–51). The Barrington assemblage also contained a pair of six spiral cast saucer brooches and the Tuddenham grave an Åberg Group IV cruciform brooch and a pair of annular brooches. Brooches of Hines Group IV fall in his phase 1 of *c* 500–520, Group X in his phase 2 of *c* 510–50 and Group XV in his phase 3 of *c* 530–70 (Hines 1984,180 and 197), but a later redating of these phases to respectively *c* 510–30, *c* 520–60 and *c* 550–90 has been proposed by one of the present authors (Welch 1987, 257). Finally there is the Longbridge Park (Warwickshire) grave, in which a single ribbed and punch-decorated bracelet was associated with a typologically late florid cruciform brooch and a gold C bracteate (Smith 1904,262–3; Smith 1923,85–6, fig 101; Hines 1984,213–4).

In addition to the bracelets already mentioned above, Kennett listed one other ribbed and punch-decorated example from Barrington A in the Cambridge University Museum, three more from Barrington in the British Museum (1876,2–12,31-33), of which two were ribbed and punch-decorated and the third punch-decorated and, finally, three punch-ornamented fragments from Kenninghall (Suffolk: BM 1883,7–2,20–21). Baldwin Brown also illustrated one from Warren Hill (Suffolk) and another which had formerly been in the collection of Trinity College Library, Cambridge (Brown 1915, 456, pl CVIII.6 and 13). Kennett compared the punch designs used on these bracelets with those found on the still rarer silver necklets known, for example, from Emscote (Warwickshire) (Chatwin 1925,269–72, pl XXX2), Market Overton (Rutland) grave 129 (Crowther-Beynon 1911, 483–4, fig 1b; Clough *et al* 1975, 83, pl 8b)) and the West Stow (Suffolk) cemetery (West 1985, fig 266.1), which he suggested, reasonably enough, to be a broadly contemporary phenomenon.

With the exception of the Long Wittenham bracelet, most of the known examples came from the Anglian Midlands and East Anglia. Prior to the Norton discovery, the most northerly recorded example of such silver bracelets appears to be the punch-decorated pair from Sleaford (Lincolnshire) grave 143 (Thomas 1887, 398) on display in the British Museum.

Clasps or wrist-clasps

These metal fittings were normally found to have been attached to the split ends of long sleeved-dresses or undergarments and fastened into one another by a simple hook and eye mechanism (Owen-Crocker 1986, 40–2, figs 33 and 34; 1987, 152, fig 10). They formed an integral element of female dress in Anglian England from the end of the 5th century and through most if not all of the 6th century. Over half of the Norton clasps were found at or near the wrists, though there were quite a few exceptions: Grave 29 with two on the left arm, but a third by the left ankle; Grave 45 with one beside a pot close to the skull; Grave 56 one behind the pelvis of a crouched burial; Grave 68 one under the jaw with the beads and the other on the pelvis; Grave 70 one near the feet and the other near the left knee; and finally Grave 96 with two beside the left shoulder. To what extent these reflect disturbance of grave fills or the separate deposition of damaged or incomplete clasps with the burial is unclear. There have been examples of clasps used to fix trouser bottoms with male burials and the full length of a garment from waist to throat in Scandinavia, so it may be that not all the Norton clasps were worn as sleeve fasteners. As with so many of the dress fittings discussed here, these clasps represent a fashion introduced from Scandinavia and in particular from south-west Norway and have been the subject of a detailed study by Dr J Hines (1984, 35–109,307–34, fig 2.1, maps 2.1–17).

Interestingly, there are no examples at Norton of clasps of either Hines Class A, made of metal wire coiled in spirals, or his Class C decorated cast forms, which in practice are ornamented with Salin Style I animal designs. On the other hand, metal-plate clasps of his Class B are the most numerous group of clasps by far in Scandinavia and England, so it is no surprise to find that all the clasps represented in 22 graves at Norton belonged to this class. The single piece from Grave 1 (Fig 33) could not be assigned to any specific sub-group, but the most common variant represented in 11 graves is the basic B7 clasp (eg Fig 33: Grave 4/8). They have rectangular metal plates, either plain or with simple decoration and were sewn onto the garment *(ibid*, 59–61, 72–5, 318, 319–23, maps 2.6 and 10), rather than being riveted on with buttons or fastened with a bar and a pin. A date range from the late 5th into the second half of the 6th century has been argued for this, the most common form of clasp found in England. Associated brooches at Norton, which inc-

lude the small-long brooch of Grave 21, the Group IVa cruciform brooch of Grave 96 and Class C2 cruciform brooches in Graves 22 and 77, support this view. The Norton examples mark an important extension northwards of the known distribution from Yorkshire and Lincolnshire and much the same is true of all the Class B clasp variants present at Norton (Hines 1984, maps 2.10–14). It should be noted that three sets of B7 clasps were associated with clasps of B12 (eg Fig 34: 7/11, defined as metal bars sewn to the garment with lugs (Graves 7, 21 and 68). Presumably these B12 pieces represent replacements for easily damaged clasps belonging to mature women estimated as being in their thirties or forties in two instances and mid twenties to thirties in the other. There was quite a variety of clasps in the graves, with only twelve matching pairs, and even among the three B7 clasps of Grave 7 (Fig 34: 7/8–10) no two clasps were exactly alike in terms of their ornamentation. Both repoussé bosses and punchmarks were used to decorate the Norton clasps and the variety of punchmarks will be discussed further in a separate section. Only three assemblages contained clasps which lacked punched ornament and one of these (Grave 40) contained gilded clasps of B18c (Fig 45: 40/9–10).

Two burials contained clasps of B13a with a rectangular plate and an applied cast bar, which were sewn to the garment (Figs 41: 29/9 & 58: 84/7–8). One of these was associated with a florid cruciform brooch (Grave 84) and the other (Grave 29) with annular brooches and another clasp type which has an applied cast bar of B17a (Fig 41: 29/8). Class B17 clasps are distinguished by the shaped rear edge of their plates from the rectangular plates of B13, but once detached from their sheet metal plates and their grave assemblages, it is impossible to distinguish the cast bars from clasps of B13, B14 and B17 *(ibid,* 87). Thus the detached bar from Grave 70 found with a pair of B16 clasps can only be attributed to one of those three types. B16 is a rather rare form, defined as having plates with a shaped rear edge sewn to the garment and either plain or simple decoration of repoussé bosses or punched ornament. One was found with a B20 clasp in Grave 63 (Fig 53: 63/7) together with a Group IVa cruciform brooch and a further pair with repoussé bosses and punched decoration (Fig 50: 57/3–4) was associated with a Class C2 cruciform brooch. Just one other burial contained B20 clasps (Grave 56), consisting of a cast plate or bar with lugs or a shaped rear edge (Fig 50: 56/4). The last form to be discussed are the clasps of B18 with a bar cast in one with conjoined knobs or discs, which were sewn to the garment (eg Fig 44: 35/14–15). An unstratified piece (11) and examples from Graves 35, 40, 45 and 102 all belong to sub-type 18c. The pair from Grave 102 were found with a Group IVa cruciform brooch and have in common a similar double V punchmark, while the pair from Grave 40 were associated with a G2 related penannular brooch, a pair of annular brooches and a pair of silver bracelets. Overall then the Norton assemblages confirm the dating evidence for clasps as discussed by Hines and imply a general 6th century date range for the 22 graves concerned.

Buckles and belt sets

There were either 22 or 24 buckles from as many graves at Norton, depending on whether the annular iron ring with a pin from Grave 5 (Fig 34) is regarded as a brooch or a buckle, and whether the buckle from Grave 19 (Fig 36) is regarded as a more recent intrusion. In addition there were five strap ends, three of which were not associated with a buckle. These were recovered from 17 female burials, four male and five of uncertain sex. Most of them were found on or near the waist and a majority were simple iron buckles (13 examples) or iron loops with an iron plate attached (three examples). By contrast, the copper alloy loop from Grave 113 (Fig 64) and the iron loop with a copper alloy plate decorated with ring-and-dot designs in Grave 35 (Fig 44) were among the more sophisticated pieces. None of the buckles or other fittings revealed any evidence of having once possessed inlaid ornament in another metal. On the other hand, the triangular buckle plate from Grave 38 (Fig 45) belongs to a form introduced from the Frankish continent to England in the late 6th and early 7th century (Böhner 1958, 184–7, Abb 10; Welch 1983, 102). It was found with a knife of Evison Type 4, which as we shall see, is usually thought of as a 7th century form and the associated inhumation had been deposited in a multiple grave after inhumations 36 and 37. It seems probable, then, that Grave 38 should be attributed to the early 7th century.

The finest by far of the Norton belt sets is the shield-on-tongue buckle accompanied by three shoe-shaped rivets to fasten back a leather strap from Grave 22 (Fig 38) associated with a fine Class C2 cruciform brooch, implying burial no earlier than the later part of the 6th century. It is a composite piece cast round an iron core with a white metal finish obtained from a high tin bronze and represents a 6th century import either from the Frankish continent (Böhner 1958, Abb lb; Joffroy 1974, figs 41.244 and 42; Piton 1985, 369 pls 2 and 3), or possibly from Kent, which may well have had workshops capable of producing such items, as found at Dover graves 15 and 96a (Evison 1987, 87, figs 10 and 45) and sites elsewhere in southern England, eg Alfriston (East Sussex) grave 48 (Welch 1983, 99–100, fig 24c) and Berinsfield (Oxfordshire) grave 102 (Brown 1978, pl opp 16, 22–25).

Only one of the iron buckles preserved mincralised traces of an adjacent textile on its front and sides. This belonged to the male weapon assemblage of Grave 34 and represented a Tabby Weave of ZZ spun thread.

Personal equipment

Knives

There were 47 knives from as many graves, together with two unstratified fragments (2 and 3), of which 32 accompanied female burials, nine males and seven unsexable graves, many of which presumably belonged to men in reality. Most were found in the region of the lower arms, the waist, pelvis and upper legs and they seem to have been used as a general purpose domestic tool by their owners. Detailed study of the grain often revealed in the iron corrosion products of the former handles and sheaths for such knives has demonstrated that the handles were normally made of horn or bone rather than wood, but that sheaths were of wood (Watson 1988; Watson and Edwards 1990). In one case at Norton, in Grave 84, the copper alloy mounts from a sheath (Fig 58) were also preserved, possibly reused fragments from the handle of a wooden container.

The classification adopted here is the system created by Professor Vera Evison for her report on the Buckland, Dover, cemetery (Evison 1987, 113–6, Text fig 22, table XVII and fig 96), which has already been applied to the Sewerby cemetery (Hirst 1985, 88–9). All six types were represented at Norton and are listed here with their equivalents in Böhner's Trier scheme (Bohner 1958, 214–5, Taf 60) as follows:

1 Curved back and curved cutting edge (Böhner Type A): 6 examples.
2 Straight back and curved cutting edge (Böhner Type B): 15 examples.
3 Angled back and curved cutting edge (Böhner
4 Type C): 8 examples.
Curved back and straight cutting edge (Böhner Type C): 2 examples.
5 Angled back and straight cutting edge (Böhner Type C): 3 examples.
6 Straight back incurved near tip (Böhner Type D): 11 examples, (or 12 if we include here the Type 6 seax of Grave 55).

and belong to the following assemblages:

1 Graves 7, 9, 26, 29, 65, 90.
2 19, 40, 43, 59, 63, 74, 76, 78, 79, 82, 87, 96, 110, 111, 120.
3 13, 28, 34, 35, 49, 68, 85, 102.
4 23, 38.
5 52, 86, 113
6 16, 22, 24, 41, 54, 55(seax), 56, 64, 70, 84, 89, 94.
(Unclassified: Graves 11 & 45, u.s.2 & 3).

The presence of 13 knives of Böhner Type C (Evison Types 3–5) and 11 of Type D (Type 6) in an apparently 6th century cemetery is potentially significant, as their equivalents were all attributed to the 7th century in the Trier region. At Dover, Evison notes that Type 1 knives occurred in each and every chronological phase from the later 5th to the mid 8th century; that Type 2 was present in phases 1, 3, 4 and 6 implying a similarly broad date range; and that Type 3 appeared in phases 2–7 from the mid 6th to the mid 8th century, implying a much wider date range for Type 3 than Böhner allowed. On the other hand, her Type 4 begins in Dover phase 4 belonging to the second quarter of the 7th century and continues to the end of the cemetery's use; Type 5 may have begun in phase 3 of the late 6th to early 7th centuries; and, finally, Type 6 occurred in phase 6, attributed to the last quarter of the 7th century (Evison 1987,115).

Turning to their distribution at Norton (Fig 14), it is interesting to observe that virtually all the knives of Types 3–6 were concentrated in two distinct zones, one in the north-west quadrant and the other running diagonally north-east from the south-west corner of the east half of the cemetery. There were also three discrete clusters of Type 1 and 2 knives in the north-east and south-east corners of the cemetery and across the southern part of the western half of the cemetery. Unfortunately no marked chronological separation can be observed in the richer assemblages with these knives. Shield bosses of 6th century forms, Groups 1.1, 2 and 5 were associated respectively with knives of Types 3 (Grave 34) and 6 (Grave 64) and a seax of Type 6 (Grave 55), while Group IVa cruciform brooches were found with knives of both Types 2 (Grave 96) and 3 (Grave 102) in neighbouring burials and, less surprisingly, a C2 cruciform brooch occurred with a Type 6 knife (Grave 22). The implication must be that many supposedly 7th century knife forms were already being made and deposited within the second half of the 6th century.

Latchlifter-keys and girdle-hangers

Simple, but functional, iron latchlifter-keys occurred in 14 graves at Norton with one unstratified example (4). There were also single iron keys with symmetrical rounded wards, which probably could function, found in two graves. Finally there were two non-functional symbolic keys of copper alloy, belonging to the type commmonly referred to as girdle-hangers, one from a grave and the other a metal detector find from the topsoil (14).

All three types were typical features of Anglian female dress in the 6th century, worn suspended from the waist (Hirst 1985, 87–8) and, with the possible exceptions of Grave 54 and the stray find, all the Norton examples belonged to unambiguous female burials. Their associations suggest that they were worn by and buried with women throughout the life of the Norton community. Ten were found with annular brooches; the damaged, reused plain copper alloy girdle-hanger from Grave 1 was associated with a Group II cruciform brooch; the iron key/girdle-hanger from Grave 21 was found with a

Figure 14 Distribution of knife forms

simple trefoil-headed small-long brooch; and the iron keys from Graves 63 and 22 were accompanied respectively by a Group IVa and a Class C2 cruciform brooch.

They may well reflect the role of women as the guardians of the family valuables (the royal treasury in the case of queens) and represent the functional or symbolic keys to lockable wooden chests or caskets, rather than house door keys. A recent survey of keys and girdle-hangers of this period found in England and the continent by Professor Heiko Steuer (1982) considered their potential value as amulets, while an unpublished undergraduate dissertation examined the forms of girdle-hangers and their dating in Anglian England (Smith 1982). Girdle-hangers were normally worn in pairs suspended from the waist, but the undecorated girdle-hanger fragment from Norton Grave 1 (Fig 33) consists of the wards and a short section of the central bar with a rivet through it. A similar piece of reuse as a mount occurs at Morning Thorpe (Norfolk) grave 396, apparently still worn suspended from the waist (Green *et al* 1987, 154–5, figs 279 and 447D). The wards of the Grave 1 fragment form the basic open E form of Smith's Group Ia, with a small perforated projection at the centre of the lower end: a feature more typical of Smith's Group IV with enclosed wards. There is no such projection on the even less complete part of the lower end of a Group Ia girdle-hanger (Fig 67) found with the aid of a metal-detector in 1982 and perhaps also originally from Grave 1.

Prior to the Norton excavation, the most northerly recorded examples were from eastern Yorkshire at Londesborough grave 9 associated with three Group IV cruciform brooches (Swanton 1966, 277–9, fig 3.13), Sewerby graves 35, 38 and 49 with a Group III and a Class C2 brooch in the first and last of these respectively (Hirst 1985, 87–8, figs 44, 46 and 52) and Staxton graves 1, 2, 4 and unstratified, that in grave 1 being associated with a pair of five-star applied saucer brooches (Sheppard 1938, 8, 14, 20, figs 5, 15, 45 and 91). Interestingly, almost all these Yorkshire girdle-hangers have the closed wards of Smith's Group IV, but one of the two different girdle-hangers from Sewerby grave 49 has the simple open E form, while the other is enclosed (Hirst 1985, fig 52.11). The overall date range for girdle-hangers in Anglian England extends from the later part of the 5th century, with assemblages such as the Glen Parva grave containing Group I cruciform brooches (Clough *et al* 1975, 50, pl ll), to the late 6th or even early 7th century, with Group V florid cruciforms and Class C2 brooches, as at Sewerby grave 49. There is no reason, then, why Norton Grave 1, despite the damaged and repaired nature of its Group II cruciform brooch, and this fragment of a girdle-hanger should not have been buried within the first quarter of the 6th century.

The two iron keys from Graves 21 and 29 (Figs 37 & 40) share the feature of curved terminals found on keys elsewhere, eg Sibertswold (Kent) grave 103 (Faussett 1856, 118–9, pl XV.27). That from Grave 21 preserved mineral traces of an adjacent textile on one face, a 2/2 Twill of ZS spun threads and was associated with a small-long brooch, while that from Grave 29 was found with a pair of annular brooches. The largest assemblage of functional latchlifter-keys occurred in Grave 35 (Figs 43 & 44) with seven bars and while the majority of latch-lifters shared a simple L-shape, those in graves 28, 35, 52, 54, 63, 68, 70 and 85, together with the strayfind (Fig 67.4), possessed more than one 90° bend in the bar. This latter feature was also noted at Sewerby and considered there to be an additional security device (Hirst 1985, 88 n 239). Once again, it would appear that the Norton finds represent a northward extension of the previous known distribution of these objects.

Toilet implements

Toilet sets are known from only two graves at Norton. There were two copper alloy pins and an implement with a small scooped end in Grave 4 (Fig 33). One of the pins and the ear-scoop share twisted decoration on their shafts and simple turned over terminals to permit suspension on a wire ring. The remaining pin has a rounded shaft and its terminal is now missing. Both of the copper alloy implements from Grave 70 (Fig 56) were perforated and still attached to a wire ring. They have a flattened profile, but the ear-scoop again has a twisted shaft, while the pin is plain. This set can be compared with that from Portway, Andover (Hampshire) grave 44 (Cook and Dacre 1985, 35–6, 92, fig 60.44). It was suggested that the latter was worn suspended from a string round the neck. As the set in Grave 4 was found east of the skull, while that in Grave 70 was on the left side of the chest, together with a set of three scutiform pendants, it seems probable that the same was true at Norton. Both graves here included at least one annular brooch and clasp, implying that they belonged to women.

Pairs of copper alloy tweezers a1so also restricted to two assemblages. The cast pair with facetted decoration from Grave 29 (Fig 40) had one arm broken some time before burial and it seems probable that the crude punched ornament to both sides of the remaining arm was a secondary addition after this accident. By contrast, the sheet metal pair from Grave 78 (Fig 57) with simple linear decoration were intact. The former was associated with a woman and the latter with a man, and elsewhere they have been found accompanying both sexes, though perhaps they are more common in male burials (Hawkes and Hogarth 1974, 79). In north-east England a pair was found in Sewerby grave 56, which may belong to a man and another was an unstratified find from the same site (Hirst 1985, 89), while a further pair is recorded from Hob Hill, Saltburn, probably from grave 48 there (Gallagher 1987, 15, 23, fig 3.15).

Finally, sections of plain copper alloy tubes, which may perhaps represent cosmetic brushes (Brown 1974), were recovered from the female assemblages

of Graves 41 and 57 (Figs 46 & 50). They were found respectively on the left shoulder and at the feet.

Combs

There were three bone combs from Graves 11, 29 and 99, all of which belong to the simple double-sided type fastened with iron rivets (Galloway 1976, 154). That from Grave 99 (Fig 61) possesses coarse teeth compared to the fine teeth of the other two and has simple linear decoration along either edge of the central bar. The finest, from Grave 11 (Fig 36), has ring-and-dot ornament along the central bar and at either end, while the decoration of the less complete example from Grave 29 (Fig 41) is restricted to profiling of the end plates. This scalloped type of ornament is a feature of Late Roman and 5th century combs (MacGregor 1985, 92, fig 51), eg Lankhills, Winchester (Hampshire) graves 297, 365 and 381 from contexts datable between AD 370 and 410 (Galloway 1979, 247–8, fig 31) and Spong Hill cremation 1743 (Hills and Penn 1981, 31, figs 35 and 174). Nevertheless the associated annular brooches and B13a and B17a clasps would seem to imply a date no earlier than the late 5th century for the woman in Grave 29. A case might he made for dating this burial to the early 6th century in view of its proximity to Grave 21 with its trefoil-headed small-long brooch. The assemblage of Grave 11 also belongs to a woman, while the comb from Grave 99 was the only object to accompany a female buried in a prone position within a double grave.

Bag and purse fittings

A curious penannular iron ring with outward-coiled terminals from the female assemblage of Grave 19 (Fig 36) may represent a purse or bag mount, comparable perhaps with the iron split rings from Sewerby graves 15 and 49 and a third of heavy bronze from grave 38 (Hirst 1985, 87, figs 37. 17, 51.12,46. 8), rather than with the bar-shaped iron firesteel pursemounts (Brown, D 1977a). Cast copper alloy bag rings related to that from Sewerby grave 38 occurred in two other female Graves 29 and 52 at Norton (Figs 40 & 48) and presumably had a cloth bag attached to them, as with the ivory ring bag reconstruction prepared by Barbara Green (Myres and reen 1973, 100–3, text fig 3). Finally, a short section of copper alloy edging, perhaps from a purse or similar object in Grave 35 (Fig 44), may have been associated with a latchlifter key set.

Other rings

Nineteen graves contain small rings or ring-like objects of copper alloy or iron in most cases, but also of lead (Grave 87) and bone (Grave 39). The role of rings as components of bag collections has been usefully discussed by David Brown (1977b) and many of the Norton rings have been recovered around the waist, hips and upper leg areas (Grave 29: one iron and three copper alloy rings; Grave 41: one iron penannular ring; Grave 59: one iron ring; Grave 70: two iron rings; Grave 84: one iron ring; Grave 87: one iron ring; Grave 90: one iron ring; Grave 94: one iron ring; and Grave 105: one iron and two copper alloy rings). Many others have been found near the skull or upper body and will presumably have had a variety of functions. Some may be parts of damaged ring brooches, but others may have functioned, for example, as parts of strings of beads.

Amulets

The small cowrie shell associated with the silver bead from Grave 11 (Fig 35 and Pl 15) is a rather modest amuletic fertility keepsake compared with the imported cowries found in some Anglo-Saxon female graves as far north as Staxton grave 1 (Meaney 1981, 123–7 and in 44; Sheppard 1938, 12, pl 12). It was probably gathered off a local sea beach, as has been suggested for the five small cowries from the bead strings in barrow C44 (Cheesecake Hill), Driffield, grave 11 (Mortimer 1905, 292–3, pl CXIII fig 888). Part of a sheep's tooth from Grave 94 may also have had an amuletic function (Meaney 1981, 144–7), if it does not represent residual material or contamination of the grave fill.

Vessels

The Anglo-Saxon pottery

by Wendy Sherlock

A total of 18 handmade vessels are present, of which eight are nearly complete or can be reconstructed with reasonable confidence. A variety of forms occur including small globular vessels with rounded, thin, everted rims and larger ovoid and straight-sided, wide-mouthed jars with roughly finished rims. Three finger-pinched long vertical bosses or solid lugs have been applied to the globular pot from Grave 92 (2) (Fig 60), possibly in imitation of the pierced lugs found on other Anglo-Saxon 'cooking pots' (Myres 1977, 10, figs 75–77, see also fig 78 for other examples of pots with solid lugs). None of the others is decorated, but some have a burnished exterior surface finish (Graves 25/1 & 2, 39/1, 53/1, 92/2, 100/3, 107/2; also Grave 86 and the cremation urn of Grave 114, neither of which are illustrated). This lack of decoration on any of the Norton vessels, including the three used as cremation urns (Graves 114, 115 and 116), strongly suggests that they originated as domestic vessels, which were reused for funerary purposes. The majority of the small jars deposited as accessory vessels in the inhumation graves show evidence for burning and sooting on their finished surfaces.

An absence of ornament is not the only aspect which differentiates the three Norton cremation urns from their local decorated counterparts from Hob Hill, Saltburn *(ibid,* 31–4, 44–8, 57–9, figs 193. 152, 273. 153 and 344.151) and Yarm *(ibid,* 52–6, fig 332.150). They also do not belong to the same fabric types and a comparison with pottery from other regional cemeteries at Darlington, Catterick, Sewerby, York and West Heslerton has revealed no fabrics comparable to those of the Norton vessels. Nevertheless a shared tradition is visible in the undecorated pottery from these sites.

Four fabric types are distinguished by the tempering materials employed, all of which fire within a similar hardness and colour range, presumably in clamp-kilns. Each fabric type is represented by a variety of forms, all of which fit easily into the 6th century chronology proposed for the cemetery as a whole.

Fabric 1: Graves 2, 45 (2), 92 (2), 107 (2), 114, 115, 119 (1) (Figs 47, 60, 63 & 65).

This is composed of a fine sandy matrix consolidating 5–10% fine mica, medium-sized, sub-rounded, clear and milky quartz grains and 1% very large, sub-angular, clear and milky quartz and quartz sandstone. Variable firing conditions produce a fabric colour range (Munsell 1975) from a reduced grey-black to an oxidised pink-reddish yellow (5YR) on most vessels and a varying fired hardness between vessels ranging from very soft to well fired. Finishing methods also vary between vessels from a pimply to a smooth, burnished surface texture.

Fabric 2: Graves 11, 25 (2), 40, 96 (1), 100 (2) & (3) (Figs 39, 61 & 62).

This is composed of a very fine g-rained matrix, which combines 1–3% fine mica grains and approximately 5–20% poorly sorted and poorly mixed, medium to very large-sized, rounded to sub-angular quartz grains. Variable firing conditions produce a fabric colour range from a reduced grey-black to an oxidised very pale brown - pale brown (10YR). The fabric always appears hard fired with a laminated section. The surface texture ranges from roughly finished and pimply to burnished smooth. Interestingly this fabric corresponds with Middle Saxon Whitby-type Ware (Dunning 1943, 76–81), also known from Wharram Percy (Hurst 1979, 78) and is paralleled by the Yarm Early Saxon cremation urn (Myres 1977, fig 332.150).

Fabric 3: Graves 33 (1), 39 (1), 106 (Figs 42 & 46).

This is composed of a sandy matrix consolidating 3–5% medium to very large angular grains of black mica, white and clear quartz grains and rock fragments. Despite the coarse temper component, this fabric is fashioned into relatively thin-walled vessels, 4–7 mm thick, in various shapes. Though hard-fired, the vessel surfaces are cracked with a flaked fracture. Surface colouring varies from reduced dark grey-black to an oxidised light yellowish brown (10YR).

Fabric 4: Graves 53 (1) and 86 (Fig 48).

This is composed of a fine matrix consolidating 5–10% medium to very large sub-rounded quartz grains and rounded limestone fragments. Firing colour ranges from a reduced dark grey-black to an oxidised very pale brown (10YR). The fabric is hard-fired, but weakened by the larger inclusions. The surface is smoothed with occasional pitting caused by the leaching of some of these large inclusions.

Other pottery recovered during the Norton excavations included a small amount of later prehistoric pottery similar to that from the Iron Age settlement at Thorpe Thewles (Swain 1987) and a group of sherds considered to represent the remains of a fragmented Bronze Age collared urn. A few sherds of medieval and later pottery were also found in later features and the topsoil.

Thermoluminescent Dating

Two of the four potsherds sent to the University of Durham T L Laboratory were undatable, but the other two produced the following Low Accuracy dates:-

Grave 86: small find 348, Fabric 4:
dur 88 TLfg 95 – 1AS: 560 ± 290 years;
Grave 96: small find 390, Fabric 2:
dur 88 TLfg 95 – 3AS: 470 ± 300 years.

Wooden bowls

Lathe-turned wooden bowls have not survived their buried soil conditions at Norton, but thanks to the work of Dr Carole Morris (1982, 2567), we can recognise the metal mounts, frequently of copper alloy, used to repair the cracks and splits which commonly appeared on such bowls. There were three rim repair mounts at Norton, each consisting of a rectangular sheet of copper alloy bent over the edge and fixed by two rivets in the corners. That from Grave 29 (Fig 41) retained wood fragments and the others occurred in Graves 11 and 23 (Figs 35 & 39), the latter having a gilded surface. Two of these mounts from Graves 23 and 29 were found in a position suggesting they came from a bowl placed near the skull, but that from Grave 11 was located beside the right arm. All were female graves, but it may be that other lathe-turned bowls which had no need for such repairs had been deposited in other graves at Norton. Six bowl metal repairs were recognised at Sewerby, four from female, one from a male and one from a burial of uncertain sex (Hirst 1985, 94).

Bucket

The wooden stave bucket made of nine surviving yew staves with copper alloy bindings lacks a handle and may never have had one. It had been deposited by the skull in the weapon assemblage of

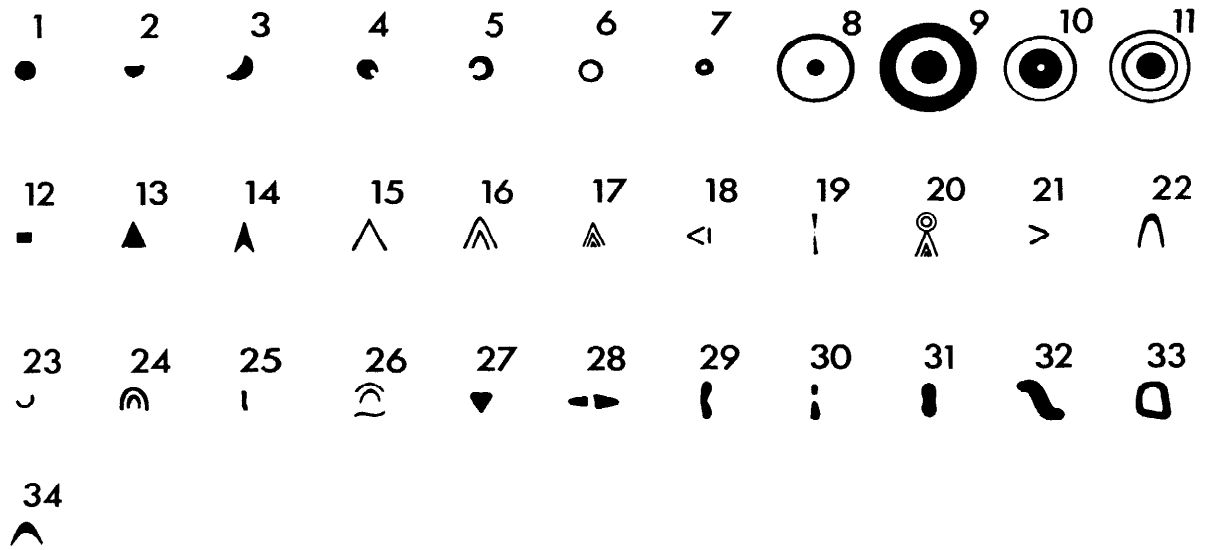


Figure 15 Types of punchmarks on metalwork (scale 2:1)

Grave 120 (Fig 66 and P1 11) and is a relatively rare find for a 6th century cemetery. In this regard it is comparable with the pair of silver bracelets from Grave 40 (P1 16), which, like a silver necklet, is an outstanding find in any contemporary female Anglian grave. Such buckets seem to be prized as status objects and presumably this single Norton example marks out the man buried here as an important individual in this community. This particular vessel seems to be of insular manufacture rather than one of the finer imports from the Frankish continent, such as the well-known example from Mucking grave 600 and others recorded from Eastry, between Dover and Sandgate, Howletts, Abingdon grave 93 and Great Chesterford grave 145 (Evison 1973; 1969, 166–7, fig 4.6). Two insular-made buckets of copper alloy bound yew staves have been published from the recently excavated cemetery at Portway, Andover in Hampshire, placed by the skulls of the women of graves 48 and 54 (Cook and Dacre 1985, 36, 40, 94, figs 38, 39, 61.1 and 65.1). Another two, again with yew staves, had been placed above the skulls of an armed man in grave 2 and a young girl in grave 27 at Alton in Hampshire (Evison 1988, 24–5, 71–2, 78, figs 23.2, 31.11, 43, 45). They seem to accompany male burials more commonly than females. In the Upper Thames region the 25 buckets which occur in sexable contexts consisted of 17 men, seven women and one child (Dickinson 1976, 362–72), while in Sussex half of the 18 assemblages with metal bound vessels included weapons and only three appeared to belong to women (Welch 1983, 149–51).

Repoussé bosses and punched decoration on metalwork

Both cast and sheet metalwork were decorated with additional ornament produced by the use of hand tools. Thin metal was pressed onto prepared dies with bosses from the underside of the sheet in repoussé technique. Such bosses are to be found in elongated form on two sections of the bucket framework from Grave 120 and in a more rounded form on the scutiform pendant from Grave 48 (5), as well as the sleeve clasps from Graves 7 (8–10), 9 (8), 21 (5), 22 (7 and 8), 52 (16 and 17), 57 (3 and 4), 59 (5), 70 (12 and 13), 77 (5 and 6) and 94 (6). Punchmarks applied to the front surface of the metalwork fall into a limited range of designs: mostly circlets, concentric rings, U shapes, triangles, V shapes, heart-shapes, rectangles and bars with angled ends (Fig 15).

By far the most common are circlets, but where the punch is applied at an angle, less complete sections of a circlet will be observable. More or less complete circlets occur on the unstratified Group IVa cruciform brooch (13), the florid cruciform brooch from Grave 84 (5), both Class C2 brooches from Grave 61 (2 & 3), the annular brooches from Graves 4 (6 & 7), 11 (8) and 22 (6), all three scutiform pendants from Grave 70 (15), in addition to the sleeve clasps from Graves 4 (8–10), 9 (8), 56 (4) and 70 (12 & 13). It is also found in more incomplete versions on the florid cruciform brooch from Grave 84 (5) and the knife mounts from that assemblage (4), as well as on the annular brooches

from Graves 40 (7 & 8) and 85 (9) and on a clasp and tweezers from Grave 29 (5 & 8). A simple punched dot is to be seen on one of the annular brooches from Grave 96 (4).

Circlets with a dot at the centre decorate the annular brooch pair from Grave 28 (6 & 7) and the buckle plate from Grave 35 (11), while a more elaborate version with three concentric rings around the dot occurs on the pair of annular brooches from Grave 19 (5 & 6). Three concentric rings ornament the annular brooches from Graves 70 (10) and 94 (4 & 5), as well as the clasps from Grave 35 (14 & 15). A simple U punchmark is the other device used on the Grave 94 annular brooches (4 & 5) and it also occurs on the bucket frame from Grave 120 (4), while a double line U can be seen on the upper footplate of the Group IVa cruciform brooch from Grave 102 (4).

Triangles are to be found on the florid cruciform brooch from Grave 84 (5), one of the annular brooches from Grave 90 (4), the sleeve clasps from Graves 7 (8–10), 29 (8 & 9) and 77 (5 & 6) and on the spangles from Grave 52 (15). Simple V-shapes occur on one of the annular brooches from Grave 9 (6) and on clasps from Graves 29 (9) and 63 (7). Double line Vs are to be seen on two of the Grave 70 scutiform pendants (15) and on the Group IVa brooch and the clasps from Grave 102 (4 & 6). There is even a triple line version on the Grave 57 clasps (3 & 4) and a triple V punchmark with a double circlet at its apex provides the ornament on the fine silver bracelets from Grave 40.

A heart-shaped device can be seen on the annular brooch from Grave 84, a rectangle is used on one of the clasps from Grave 7 (11) and bars with angled ends are to found on annular brooches from Graves 86 (5 & 6) and 90 (5).

It has not proved possible to demonstrate that any punch mark occurs on more than one object type in any single grave assemblage or grouping of assemblages at Norton.

Textile remains

by Penelope Walton

Introduction

Before the coming of Christianity it was a common practice among Germanic peoples to bury the dead fully clothed. These garments have for the most part disintegrated during their period of burial, but tiny areas of the textile have sometimes been preserved, usually in mineralised form, in the corrosion products of metal artefacts (Janaway 1983; Jakes and Howard 1986).

Textile remains of this kind have been recovered from over 90 Early Anglo-Saxon cemeteries. Most of them have been studied by Elisabeth Crowfoot, who has generously supplied her colleagues with a table of her published and unpublished findings (to appear in Bender Jørgensen forthcoming). Finds from the Saxon cultural region are comparatively few, but the Anglian region and Kent are well represented. North of the Humber large groups have been recorded from Sewerby (E Crowfoot 1985b) and West Heslerton (Walton in prep.), with smaller numbers of finds from Catterick, Dalton Parlours (near Wetherby), Ganton Wold and Uncleby (E Crowfoot unpublished), all in Yorkshire. Norton represents the most northerly site with textile remains.

Textile types from Norton (Table 7)

The remains from Norton are relatively few and poorly preserved. They consist of textile and yarn from 13 graves, all but one from women's burials, with one find from a brooch discovered unstratified in the topsoil. Most of the finds are mineralised, but there are four examples where the original fibre has been preserved: two in flax and two in wool.

It was possible to record full details of 12 different textiles, which may be divided into five different fabric types (for explanation of terms see Table 7 and Fig 16):

Textile-type	**No of finds**
tabby weave, ZZ	6
tabby weave, plied yarn	1
2/2 twill, ZZ	1
2/2 twill, ZS	3 (plus one for which no thread-count)
tablet-woven braid	1 (plus one probable)

There are also two examples of yarn wrapped around the heads of cruciform brooches.

ZZ tabby and ZZ twill

The weaves, tabby, 2/2 twill and tablet-weave, are all regularly encountered among the finds from Early Anglo-Saxon sites, but the predominance of ZZ tabby at Norton may be significant. In the cemeteries of Rent, ZZ tabby outnumbers ZZ twill by proportions of more than 8 to 1, eg Buckland, Dover (E Crowfoot 1987a); Finglesham (E Crowfoot 1958 and unpublished); Riseley, Horton Kirby (E Crowfoot unpublished); and Updown, Eastry (E Crowfoot unpublished). By contrast, in the cemeteries of the Anglian region, ZZ twill occurs in at least equal numbers to ZZ tabby and often outnumbers it by as much as 3 to 1, eg Sewerby and West Heslerton in Yorkshire; Fonaby, Lincolnshire (E Crowfoot 1981); Wakerley, Northamptonshire (E Crowfoot unpublished); Barrington, Cam bridgeshire (G Crowfoot 1951; E Crowfoot unpublished); Bergh Apton (E Crowfoot 1978), Morning Thorpe (E Crowfoot 1987b) and Spong Hill (E Crowfoot and Jones 1984) in Norfolk; and Little Eriswell, Suffolk (E Crowfoot 1966).

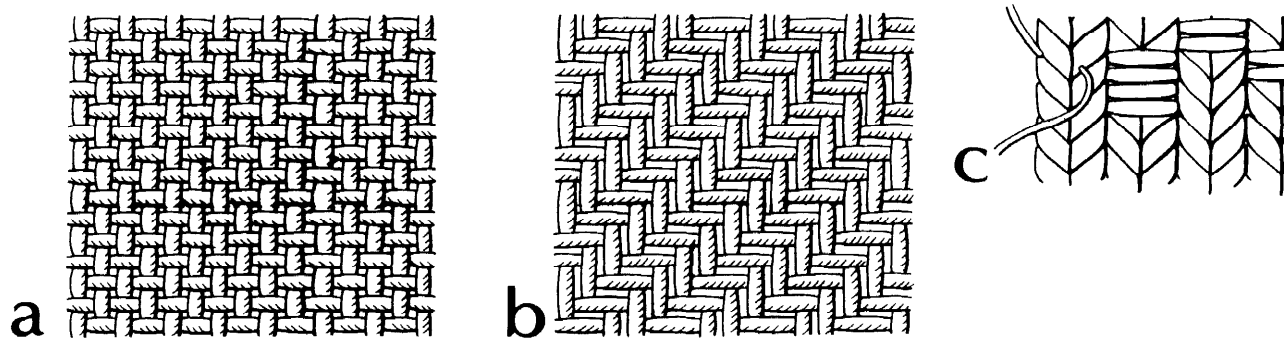


Figure 16 (a) Tabby weave; (b) 2/2 twill; (c) tablet weave with stitching from Grave 70

Lise Bender Jørgensen (1985, 98 and forthcoming) has concluded that these figures represent a cultural difference between the Anglian region and Kent. The cemeteries of Kent with textile remains belong to the late 6th and 7th centuries, however, and therefore they are not directly comparable with the Anglian sites, which are for the most part attributed to the 5th and 6th centuries. Of the larger Anglian cemeteries, only Sewerby carries through into the 7th century (Hirst 1985, 102) and this site, significantly, has the highest ratio of ZZ tabby to ZZ twill in the Anglian region of 1 to 1. Furthermore, the 7th century ship cenotaph at Sutton Hoo in Suffolk has a proportion of tabby as high as that in Kent with nine 22 tabbies to one ZZ twill (E Crowfoot 1983). The figures may therefore represent a general increase in the use of tabby weave over the period from the 5th to 7th centuries, rather than any cultural differences between regions.

The graves at Norton with textile remains range in date from the first quarter of the 6th to the late 6th or early 7th century. Although the finds are few, the preponderance of ZZ tabby adds to the evidence that this textile type became more common towards the 7th century.

ZS twill

2/2 twill with warp and weft spun in opposite directions (ZS) occurs in most large Anglo-Saxon cemeteries. The diagonal of the weave is often reversed to form chevron and diamond patterns. The Norton examples are so small that it is possible that they are in fact fragments from chevron or diamond weaves. Indeed there appears to be a break in the weave at the edge of the twill from the small-long brooch in Grave 21.

The number of simple and patterned ZS twills varies between sites, ranging from 6% of the textile finds at Little Eriswell to 42% at Buckland, Dover. As yet there is no obvious cultural or chronological pattern.

Tabby weave in plied yarn

The fragment of linen textile tucked behind the pin of the gilded square-headed cruciform brooch from Grave 22 is an unusual piece. Plied yarn is extremely rare in full-size textiles of this period and was largely limited to tablet-woven braids, which require the added strength given by plying. There is also a tabby-weave tape from the Sutton Woo ship burial (SH13: E Crowfoot 1983, 450 and 462), probably a shoe-fastening, which is worked from plied yarn, S-plied as at Norton. It is, however, much finer than the Norton example, with a count of 38 x 14 per cm; it is also narrower, with a width of 9–10mm, compared with a minimum of 15mm at Norton; and is possibly of wool.

The nearest parallel to the Norton piece seems to be a fragment of mineralised tabby from Buckland, Dover (grave 4, preserved on a spearhead), with a count of 8 x 13, yarn ? S-ply in one direction and Z-spun in the other – although the Dover piece is decorated in soumak technique or embroidery (Crowfoot 1987a, 194–5, text fig 43ii, pl 11d), while the Norton textile is plain. This particular Dover grave belonged to cemetery phase 3 dated to AD 575–625, which is comparable with the conventional dating of the Class C2 brooch from the Norton burial. The cemeteries of east Kent show a strong Frankish influence and in view of the Buckland parallel for the textile, it is interesting that a Frankish shield-on-tongue buckle set was also found in Norton Grave 22.

Tablet woven braids

Tablet weaving is constructed by twisting warp threads into parallel cords (using square perforated tablets) and passing a weft between, so that the cords are held together in a flat braid. If the weft decays, or is not visible for some other reason, it is difficult to distinguish between a braid and a series of cords lying parallel to each other. For this reason it is impossible to be certain whether the threads

Table 7 Textile remains from Norton cemetery

Grave	Sex/age	Cat no	Object	Position of textile	Dimen-sions	Fibre	Structure	Spin	Count	Comments
1	F/25-40	5	copper-alloy cruciform brooch	(i) around wings, over one of knobs and diagonally across back		prob. flax	plied yarn	Z2S		yarn 0.8 mm diameter
				(ii) on front of bow	6 x 5 mm	mineralised	?	?	?	very poorly preserved, but appears to be textile
19	F/15–21	6	copper-alloy annular brooch	on back of brooch and over hinge of pin	10 x 5 mm	mineralised	2/2 twill	ZS		
21	?F/25–35	2	iron latch-lifter	on one face, at hooked end	12 x 9 mm	mineralised	2/2 twill	ZS	8 x 10	
22	F/25–35	5	gilded copper-alloy squareheaded brooch	(i) on back of brooch and over catch	20 x 15 mm 8 x 6 mm	mineralised	?2/2	ZS	9x9	
				(ii) under iron pin, behind bow	15 x 15 mm	flax	tabby	S-plied in both systems	5x6	brooch probably pinned both textiles
30	F/25–35	4	gilded copper-alloy cruciform brooch	on back, around hinge of pin	20 x 8 mm 7 x 6 mm	mineralised	? twill	ZS	?	coarse textile, yarn 0.7 - 1.3 mm diameter. Brooch probably pinned this textile
34	M/25–35	5	iron buckle	on front and sides	20 x 6 mm 15 x 8 mm	mineralised	tabby	ZZ	16 x 14	close and even
35	F/25–35	12	copper-alloy annular brooch	on back around hinge of Pin	10 x 7 mm	mineralised	?	ZS	?	jumble of Z and S threads of varying diameter
35		13	copper-alloy annular brooch	on back around hinge of pin	12 x 10 mm	mineralised	?	ZS	?	as cat no 12 above
40	F/20–30	8	copper-alloy annular brooch	on front of brooch and Pin	18 x 15 mm 15 x 8 mm 15 x 5 mm	mineralised	tabby	ZZ	16 x 14	tabby lies over twill
40	F/20–30	8	copper-alloy annular brooch	on front of brooch and pin	10 x 5 mm	mineralised	2/2 twill	ZZ	16 x 14	
				(iii) on back of brooch	4 x 3 mm	mineralised	?	S-plied in both systems	?	
40	F/20-30	8	iron pin (loose in box with cat. no. 7 below)	along pin	fragments	mineralised	2/2 twill	ZS	?	coarser than ZZ twill on cat no. 7 below
40	F/20–30	7	copper-alloy annular brooch	on back of brooch	15 x 7 mm 10 x 4 mm	mineralised	? tablet braid	S-plied in warp	12 cords per cm	braid, or perhaps cords lying parallel

Grave	Sex/age	Cat no	Object	Position of textile	Dimensions	Fibre	Structure	Spin	count	Comments
63	F/25–35	5	copper-alloy cruciform brooch	(i) on front of brooch	8 x 6 mm	mineralised	tabby	ZZ	10 x 10	
				(ii) on iron pin	10 x 8 mm	mineralised	tabby	ZZ	11 x 12	
				(iii) around arms and criss-cross over front of brooch	15 x 4 mm	wool	single yarn	Z		yarn 0.4–0.7 mm
70	?F/25–35	10	copper-alloy annular brooch	(i) on front of brooch, over tip of pin	8 x 6 mm	mineralised	tablet braid	S-plied in warp no twist in brocaded weft	6 cords	tablets threaded alternately front and back; brocading with pairs of weft yarns. Stitched with Z-spun thread
				(ii) below tablet braid	10 x 3 mm	mineralised	?twill	ZZ	?	
				(iii) on back of brooch	5 x 3 mm	mineralised	?tabby	?ZZ	?	
77	F/–	3	two fragments of copper-alloy cruciform brooch	on front and back of both fragments	35 x 30 mm 30 x 20 mm 18 x 15 mm	mineralised	tabby	ZZ	16 x 14	
96	F/45–61	3	copper-alloy cruciform brooch	on back of brooch, around hinge of pin	10 x 8 mm	mineralised	?	ZS	?	very poorly preserved
102	?F/-	4	copper-alloy cruciform brooch	(i) on back of brooch, over hinge of pin	25 x 20 mm	mineralised	tabby	ZZ	16–18 x 16	in two layers
				(ii) on outer edge of a detached knob	8 x 7 mm	mineralisd	tabby	ZZ	16–18 x 16	probably same as above
				(iii) above (ii)	5 x 5 mm	mineralised	?	ZZ	?	much coarser than (i) or (ii)
Topsoil		13	fragment of copper-alloy cruciform brooch	on back, inside catch	25 x 8 mm	wool	tabby	ZZ	12 x 12	brooch pinned this textile

There are also traces resembling textile or thread on gravefinds 35/11, 40/8, 57/2, 61/3 but these are too poorly preserved to identify structure or yarn-type.

Key

Z twist of yarn runs in / direction
S twist of yarn runs in \ direction
ZZ yarn Z-spun in warp and weft
ZS warp and weft spun in opposite directions
Z2S a cord, having two Z-spun yarns plied together in the S-direction

on an annular brooch (7) from Grave 40 represent a tablet-woven braid or a fringe.

The textile on the annular brooch from Grave 70, however, is clearly tablet woven. The tablets have been threaded alternately right and left, so that alternate cords twist in opposite directions (Fig 16). Patterning has been introduced by passing an extra brocading weft through the weave and up over some of the warp cords. The brocading weft is arranged in pairs. Its thread is fine and lacks any twist, which suggests that it is silk, as few other fine fibres are long enough to be usable without being spun.

Tablet woven braids were a common feature of Anglo-Saxon dress, being used for belts, cuffs, garment edgings and headbands. They were frequently patterned, the richest by brocading with gold thread (Crowfoot and Hawkes 1967). The brocading weft generally covers more of the warp than is the case in Norton Grave 70, but there is a similar braid from Sewerby, with a plied brocading thread, which covers only small areas of the weave in a simple step pattern (E Crowfoot 1985b, 52–3).

The Norton braid appears to have been stitched to a tabby or twill textile. The braid probably formed the upper border of a loose tubular overgown of the type known to have been worn by Anglian women at this date (Owen-Cracker 1986, 28-39). The garment would have been pinned at the shoulder by the annular brooch on which the braid was found. The presence of brocading in silk, which was a luxury fibre and particularly rare in the Early Anglo-Saxon period, suggests a certain level of affluence. This is supported to some extent by the other dress accessories, scutiform pendants and sleeve clasps, together with the toilet implement set with this burial.

Brooches wrapped with yarn

The Group IVa cruciform brooch from Grave 63 has a wool yarn wrapped in a figure-of-eight around the broken end of the support (a single lug) for the pin-hinge; the yarn then circles the support several times (and probably the pin) and then criss-crosses over the headplate, passing round the wings and the upper knob. It seems likely that the yarn was intended to hold the hinge end of the pin in place. Although now broken, it appears that the main shank of the iron pin was intact at burial and fastened a garment of ZZ tabby.

A second cruciform brooch, this time of Group II from Grave 1, has a similar binding. In this case it is a plied thread of vegetable fibre, perhaps flax. It passes over one wing, diagonally acoss the headplate and around one of the side knobs. This yarn does not appear to be acting as a repair binding and it may have been used to stitch or tie the brooch to a garment or shroud.

At least four other sites have yielded similar finds. At Portway, Andover, Hampshire, grave 31 a thread had been wrapped several times around the spring of the pin of a small-long brooch (E Crowfoot 1985a, 101). A plied flax thread had been used to fasten the side knobs on to a cruciform brooch from Wakerley, Northamptonshire, grave 74 and the same had occurred with a florid cruciform brooch at Spong Hill, Norfolk, grave 2 (E Crowfoot and Jones 1984, 19). Finally there is the example of a Group III cruciform brooch from Morning Thorpe, Norfolk, grave 346 (E Crowfoot 1987b, 181, fig 411C, pl XX). The use of yarn to repair brooches therefore seems well established. Dr Owen-Cracker (1984, 91) also points out the reuse of old brooches in the 7th century, as toys and trinkets, and this may account for the very worn brooch which appears to have been stitched or tied on to the corpse's clothing.

Summary

Apart from the unusual tabby in plied yarn, the textiles from Norton are similar to those from other sites of the Early Anglo-Saxon period. The high proportion of tabby weave may reflect their dating to the second half of this period. There are no particularly fine weaves, elaborate patterns or any examples of gold-brocading to suggest high status, but the silk-brocaded tablet woven braid, if correctly identified, indicates a moderate degree of prosperity for the woman in Grave 70.

Conservation report and technological examination

By Carol E Brown

Introduction

The finds from the excavations at Norton were treated by three conservators over the period June 1984 to August 1986. Approximately one quarter of the material was treated by two conservators; Susan Rees (sr), then at the Department of Archaeology, Durham University, and John Atkinson, then at the North of England Museum Service laboratory at Newcastle upon Tyne. The remaining artefacts were conserved in the laboratory of the Department of Archaeology and Numismatics, National Museum of Wales, by the author (ceb). The treatment and techniques described below are based on those used at Cardiff. The wood used to construct the bucket was identified by Tony Tipper of the Botany Department, National Museum of Wales. I am grateful also to the following specialists: John Hines, of University College Cardiff, who commented on the bucket pendants and clasps, David Leigh, then also at University College Cardiff, for many useful comments on various aspects of the material, including the applied brooch, and Howard Murray of the Mary Rose Trust for advising on the conservation of the wood.

Before transportation to the laboratory the artefacts were kept damp and stored in refrigerators, the original soil still adhering. This procedure made subsequent 'cleaning' easier and also ensured the

survival of coatings and adherent organic remains. In discussion with the archaeologists involved, it was agreed that most of the finds were to be conserved to UKIC level 4 – *Full Conservation Standard* (Hunter 1988). Several selected items intended for display were to be conserved to level 5 – *Display Standard.*

Procedures used

Examination

Examination of the artefacts was initially carried out using a x20 stereo low-power binocular microscope and then, if appropriate, the more powerful Wild M8 model. All metals were radiographed to detect features such as surface coatings and construction details, also to make clear areas of deterioration and the true shape and dimensions of the object; this made it easier to remove disfiguring corrosion layers. Observations made from this basic' examination were followed up by more detailed analyses.

Analysis

X-Ray Diffraction analyses (XRD) were carried out by Mr Mike Lambert of the Dept of Geology, National Museum of Wales whilst X-Ray Fluorescence analysis (XRF) was undertaken by Dr P C Fisher of University College Cardiff, Department of Mineral Exploitation. Scanning Electron Microscope (SEM) pictures of mineralised organic materials were taken by the author using equipment in the Department of Zoology, National Museum of Wales. Resulting photographs were identified by Ms Jacqui Watson of the Historic Buildings and Monuments Commission (HBMC), Fortress House, London, and Ms Vanessa Straker, HBMC Bristol.

'Cleaning'

The removal of dirt and disfiguring corrosion is desirable in order to reveal more information about the object and to make its appearance more comprehensible to the draughtsman and the researcher. 'Cleaning' was initially carried out on all materials using handtools and a microscope in an attempt to observe details contained in the layers being removed. For most of the copper alloy and silver objects, this was the sole technique used. Airbrasion, using Aluminium Oxide powder, was used to help remove harder corrosion from the iron objects.

Stabilisation and reconstruction

Stabilisation was attempted for all materials, bearing in mind that ultimate stability is dependent on storage conditions outside the laboratory, over which the conservators had little control. All copper alloy and silver objects were treated with 3% Benzotriazole (BTA) in Industrial Methylated Spirits (IMS) under vacuum to prevent further active corrosion. Both copper alloy and silver were also lacquered to prevent further damage from handling and to protect the handler from the effects of BTA. Since no 'chemical' stabilisation technique comparable to the use of Benzotriazole for copper has been found suitable for all iron objects, stabilisation of ferrous materials was attempted by means of appropriate packing, ensuring that storage conditions were kept below 20% Relative Humidity. This was achieved by packing in airtight boxes with silica gel. Where required for purposes such as drawing, frequent handling or display, objects were reconstructed using easily-reversible adhesives such as HMG (Cellulose Nitrate).

Replicas

For display purposes, replicas were made of an annular brooch (Grave 35/12), wrist clasps (Grave 35/14), the 'Frankish' buckle (Grave 22/9) and the two gilded brooches (Grave 22/5) and (Grave 30/4). One-piece moulds were made from silicon rubber (RTV 531/T46) and casts made in epoxy resin (Araldite AY 103/HY 951) filled with metal powder and epoxy pigments.

Observations and results

The large brooches

Grave 84/5 (ceb 61) (Pl 17)
'Florid' style cruciform brooch. Cast in four pieces, the main body and three terminals. One terminal is still attached, one is missing; these had been attached with solder which is evident as a silvery coating around the joins and from scratch marks at the edges, which had been used for 'keying-in'. The main design is cast in; other decoration consists of lines of triangular punch-marks. Several 'proud' areas of the design show evidence of solder, and two pieces of silver foil are still attached, suggesting that these areas were decorated with soldered-on foil pieces (PI 17). The brooch appears worn and used; there is no extant pin or textile remains.

Grave 61/2 (ceb 71) (Pl 18)
'Square-headed' cruciform brooch. Cast in one piece with four pairs of holes for attachment- The main design is cast in; other decoration consists of rows of circular punchmarks. The brooch appears used; the catch-plate has been broken and repaired with a small square of copper alloy sheet, attached by an iron rivet (Pl 18). Most of the (iron) pin is missing but there are remains of mineralised textiles at both ends, suggesting it was pinned on.

Grave 57/2 (ceb 73) (Pl 19)
'Square-headed' cruciform brooch, with the foot missing. The main design is cast in; the brooch is decorated with double-line punchmarks through-

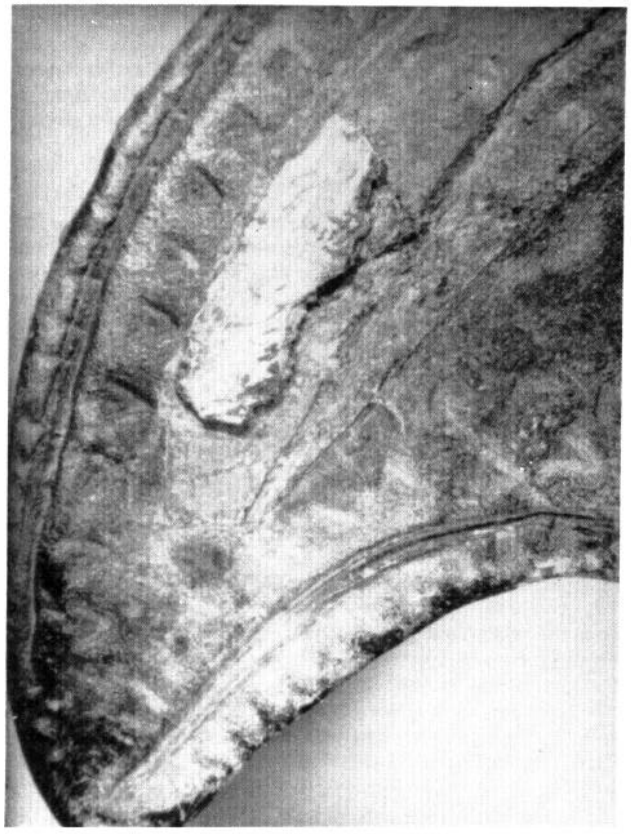


Plate 17 Grave 84 *(no 5/ceb 61); fragment of silver foil soldered on to foot of brooch*

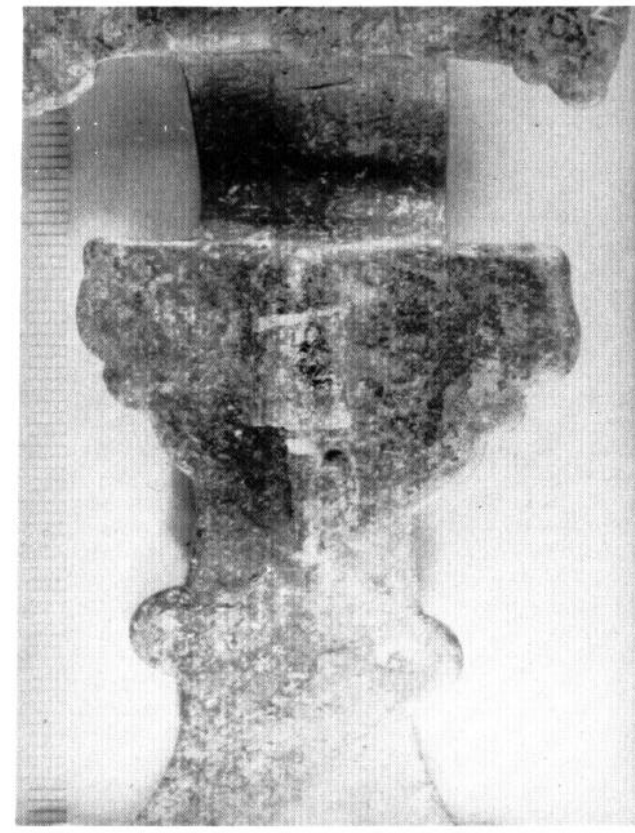


Plate 18 Grave 61 (no 2/ceb 71); catchplate of brooch repaired with copper alloy sheet attached by rivets

out. The break is corroded over and worn, implying that the brooch had been in use as a fragment. There are abrasion marks from the original finishing process on both faces (Pl 19). No evidence of pin or textiles.

Grave 21/4 (ceb 89)
'Small-long' brooch. Cast in one piece, with the pin broken off. This is undecorated, but a white powdery substance (XRD identification (ID) as lead carbonate) covered part of the surface and may be the remains of solder from the plating process. Small fragments of copper-mineralised textile remain under the pin hinge.

Grave 63/5 (ceb 122) (P1 20)
Plain cruciform brooch with remains of an iron pin. Cast in one piece, including the terminal on the top edge. The main design is cast in, including the two attachment holes. The surface is very badly preserved, possibly indicating long use and wear. Remains of string (flax) are wound around the terminal and across the face of the brooch, knotted at the back (Pl 20). This indicates that the brooch had been tied on as an object and not used as a fastener as Grave 1/5. Mineralised and replaced textile exist on both sides of the brooch.

Grave 80/1 (ceb 144)
Cruciform brooch fragment — bow and catchplate section. Decorated with circular and triangular punchmarks. This piece has been cut down from a whole brooch; the edges are filed smooth and corroded over and there is no obvious method of attachment.

Grave 77/3 and topsoil (ceb 165,166)
Two conjoining fragments of a cruciform brooch, comprising the foot and section from above the catchplate. The fragments do not join, but may be from the same brooch. Both fragments are very corroded and have worn and corroded edges. There are remains of mineralised textiles on both faces of each fragment. There are two iron rivet heads on

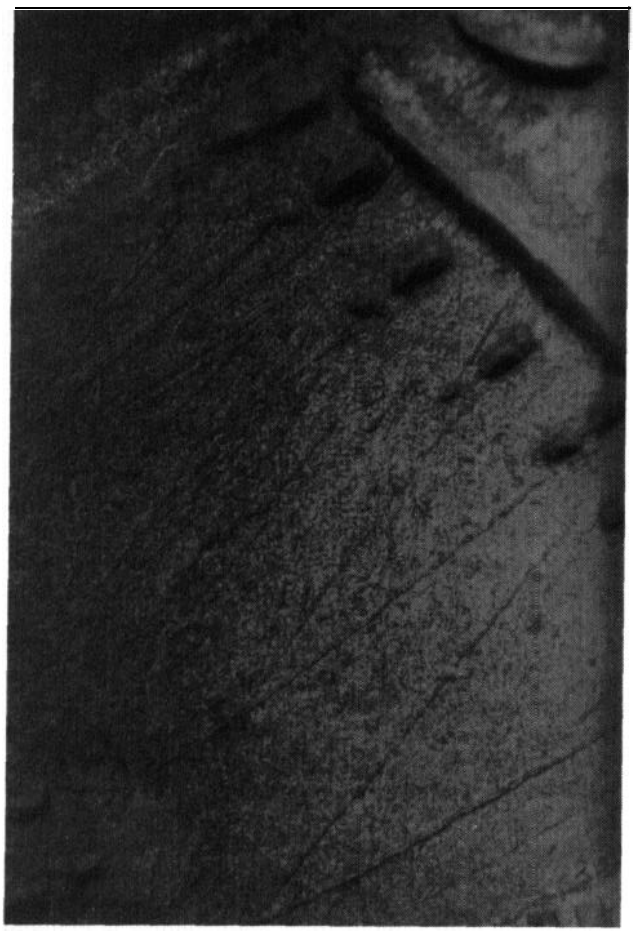


Plate 19 Grave 57 (no 2 / ceb 73); abrasion marks from manufacturing process on the brooch face

the upper surface of the mask motif, possibly the remains of a repair to the catchplate.

Topsoil 13 (ceb 186) (Pl 21)
Cruciform brooch fragment with the foot missing. Cast in one piece, including the three terminals. The main design is cast in, other decoration consists of very small circular punch marks. Toolmarks show that the edge of the brooch below the catch plate has been filed down to a bevelled edge, it also appears worn (PI 21). The pin is missing but there are remains of mineralised textiles on the back.

Grave 96/3 (ceb 103)
Cruciform brooch with loop on the foot. Cast in one piece with one terminal on the top edge. Two other terminals are included with this small-find number: these are similar to the attached one, but with small iron rivets for fixing, although they show no signs of having been attached to the main body. The main design is cast in. The surface is very badly worn and corroded around the edges, but scratch marks from the finishing abrasive can be seen preserved in the upper square face of the design. The pin is missing but there are mineralised textile remains on the back.

Grave 61/3 (ceb 173)
'Square-headed' cruciform brooch with part of the foot missing. Cast in one piece; the break at the foot has been made in antiquity, as the edges are worn and corroded over, though not filed. The iron pin survives in two pieces and there is *no textile* evidence.

Grave 10/4 (ceb 175)
Cruciform brooch with broken foot. Cast in one piece with one terminal on the top edge. The main design is cast in, the brooch is decorated additionally with semicircular and triangular punch-marks. This is a very worn item with a degraded surface, the edges are worn thin and the breaks are corroded over. The (iron) pin is missing; remains of mineralised textiles on the back.

Grave 30/4 (sr 1446)
Square headed cruciform brooch in two pieces; cast in one piece, with main design cast in. There is gilding over the whole surface; the ends of **the** terminals and foot show remains of 'solder'. On the foot a large piece of silver (almost pure silver — XRF) foil is still attached by solder. Each **terminal** had also been decorated in this way The brooch has been repaired in antiquity using a piece of iron **sheet** and six iron rivets in a rather crude fashion. The repair has failed due to corrosion of the iron. The pin is missing, but there are remains of mineralised textiles around the hinge end.

The annular brooches

Grave 13/3 (ceb 162)
Annular brooch, cast in one piece with narrowed section for pin to hinge around. The pin is missing; decoration consists of inscribed lines and bands. A separate piece of iron-mineralised textile contains a complete cast of the original pin. There is a large patch of mineralised skin product on the reverse of the brooch.

Grave 19/5 (ceb 83)
Annular brooch, made in one piece from a strip of metal. Overlapping ends with matching perforations for the pin. Scratch marks for keying in solder can be seen on the adjoining faces of the overlaps. The brooch is distorted now, with the pin missing. Decorated with concentric circular punch-marks, the grooves have been filled with a white powder of which faint traces remain, this is possibly *niello* or pigment, Small fragments of iron and copper-mineralised textile are associated with the brooch, though not attached to it.

Plate 20 Grave 63 (no 5/ceb 122); mineralised remains of flax thread tied around brooch terminal

Plate 21 Stray find no 13 (ceb 186); edge of brooch filed down

Grave19/6 (ceb 85)
One of a pair with Grave 19/5. Made in one piece from a strip of metal, the overlapping ends have matching perforations for a pin. Scratch marks for solder as above. Decorated with concentric circular punchmarks. There are small fragments of iron-mineralised textiles around the pin hole.

Grave 35/12 (ceb 8)
Made in one piece from a strip of metal, with a groove along the centre of the reverse. With perforated overlapping ends where the iron pin is hinged through. Decorated with incised bands. Associated with the mineralised pin are mineralised textile fragments and skin products, indicating that it was pinned to the garment on burial and was lying on the body itself.

Grave 35/13 (ceb 9)
One of a pair with Grave 35/12 above, likewise made in one piece from a strip with perforated overlapping ends where the iron pin is hinged through. Like 35/12 the brooch has a conical shape, as if shaped over a *forma* by hammering. Decorated with incised bands, the middle section of the pin is missing; its ends are attached to pieces of mineralised textile indicating it was pinned in place on burial.

Grave 70/10 (ceb 46)
Flat annular brooch cast in one piece with iron pin wrapped around the narrowed section. Decorated with concentric circular punchmarks. A piece of mineralised textile (braiding) is wrapped around the pin hinge; also attached to the pin are mineralised leathery (skin?) material and a fragment of bone. The brooch was attached to the garment on burial by means of braid and pin.

Grave 94/5 (ceb 64)
Flat annular brooch cast in one piece with an iron pin wrapped around narrowed section. Decorated with inscribed bands and concentric and V-shaped punchmarks. There is evidence that a string of small amber beads was wrapped around the brooch. One bead remains preserved in the iron corrosion products; casts of others can be seen, as can the remains of string wrapped around the brooch. There are leather or skin remains and textile fragments also mineralised on the front of the brooch.

Grave 105/4 (ceb 106)
Made in one piece from a strip of metal, with overlapping ends and matching perforations for pin. Scratches on adjoining faces of the overlap allow for keying-in the solder. Decorated with punchmarks, circles, crescents and double-lines. The pin is missing, but there is a large lump of mineralised skin or leather and textile around the pin hinge area. Three amber beads, with threads still through them, remain in the corrosion products and mineralised organics.

The clasps

Grave 21/5 (ceb 87)
Pair of clasps, matching, both 'E' shaped. Both cast in one piece with three attachment holes each. Two circular silvery metal patches on raised squares on the front, as with Grave 68/4 and 5 below, there are also scratch marks, possibly from soldering on decoration. Small area of mineralised indeterminate organic material on the reverse.

Grave 21/6 (ceb 90)
Pair of clasps, matching, both 'E' shaped, from the same garment as Grave 21/5. Made from pieces of metal sheet decorated with repoussé circles and circular and V-shaped punchmarks. Both are eye catches, possibly indicating re-use. No organic remains evident.

Grave 29/8, 29/9, 29/10 (sr 1444 and 1447)
Three decorated plates ('bars? from wrist clasps, see clasps from Graves 70 and 84, above, all with traces of solder on the back and decorated with incised lines.

Grave 35/14 (ceb 21)
Pair of clasps, found joined together, with double hook-and-eye fastening. Both cast in one piece with six perforations on each for sewing onto a garment. The points at which the 'wrist band' of the garment ends can be seen on both clasps by the change in colour and pattern in the corrosion layer.

Grave 40/9, 40/10 (sr 1447)
Two clasps, both 'eye' types, each clasp is in one piece. Traces of gilding suggest that they have been gilded all over the front surface. Traces of mineralised textile appear on the back and also on the front, where they would have been stitched on through the holes. Clasp Grave 40/10 shows evidence of having been repaired where a reinforcing plate has been soldered on.

Grave 63/7 (ceb 35)
Pair of clasps, found joined together. With single hook-and-eye fastening, one has two holes for attachment, the other three; not a matching pair. Both cast in one piece. The 'hook' section has a rectangular bar decorated with incised lines soldered to it, also incised triangular decoration around the edge. The 'eye' section is decorated with circular repoussé features and double-line-and-circle punchmarks. There are impressions of both ends of the wrist-band in the corrosion products on the reverse sides, also small fragments of actual fibres.

Grave 68/4 and 5 (ceb 74)
Pair of clasps, an unmatched set - the 'hook' clasp is 'E' shaped and has three fastening holes, the 'eye' is rectangular and has two fastening holes. Both have been cast in one piece. The 'eye' clasp has two circular areas of silvery metal surface — perhaps where some other decoration has been soldered on, similar to Grave 21/5 above. No traces of textile remains.

Grave 70/14 (ceb 180)
Fragment of a plate from a clasp. Decorated with incised lines. White/grey orrosion products, possibly solder remains, on the surface. Similar to clasps from Grave 84.

Grave 77/6 (ceb 220)
Clasp made from a sheet of metal, this has been folded over deliberately and crushed. Decorated with repoussé work.

Grave 84/8, 88/8 (ceb 169 & 181, 171, 170)
Four clasps, two sets of two. Both pairs plain rectangular, made from a thin sheet of metal with two perforation holes each for attachment. Each clasp is decorated with a soldered-on bar with incised lines. Grave 84/8 (ceb 170 and 181) has a bar missing. Grave 84/7 (ceb 169 and 171) consists of a pair of clasps fastened and corroded together. One of the bars *in situ*, the other loose, with remains of solder visible. There are some textile fibres surviving on the back of clasp Grave 84/7.

Topsoil (ceb 155)
Single (hook) clasp cast in one piece. Slight flash line from a two-piece mould. Small patches of gilding on the surface, with four holes for attachment.

Bucket and scutiform pendants

Grave 35/16 (ceb 18)
Two bucket pendants corroded together. One with, one without, a base. Solder remains inside and on joins. No handle evident.

Grave 35/16 (ceb 20)
Bucket pendant without base. Solder remains as above.

Grave 35/16 (ceb 16)
Bucket pendant with base and fragments of handle. Solder remains as above. Mineralised organic remains on bottom of base.

Grave 36/16 (ceb 17)
Bucket pendant and base with a large fragment of handle. White/silver metal appearance.

Grave 35/17 (ceb 15)
Bucket pendant with base and remains of handle still attached. Solder inside and on joins. (XRD identified as lead carbonate).

Grave 35/18 (ceb 12)
Bucket pendant with base and fragment of handle. Solder remains inside and on joins.

Grave 35/19 (ceb 15)
Bucket pendant with base, no handle. Solder remains inside and on joins. (XRD ID lead carbonate).

Grave 35/19 (ceb 19)
Bucket pendant with base and remains of handle. Silvery metal appearance. Solder remains as above.

Grave 63/8 (ceb 112)
Possible bucket pendant without base. Not soldered, bent into place. Associated with copper alloy wire loop.

Grave 70/15 (ceb 77)
Three silver scutiform pendants. All have small copper alloy attachment loops which have broken off. These have been soldered on originally Decorated with repoussé work and circular and arrow-shaped punchmarks.

Grave 71/2 (ceb 51)
Fragments of bucket pendant. Solder remains as above.

Grave 71/3 (ceb 50)
Bucket pendant in several pieces. Base intact, handle in several pieces. Solder remains as above.

Grave 71/4 (ceb 49)
Fragmented bucket pendant. Most of base missing, handle intact. Solder remains as above.

Grave 94/8 (ceb 104)
Possible bucket pendant without base. Has overlapping join and there are remains of crystalline white solder corrosion products inside.

Grave 94/9 (ceb 105)
Cylindrical object with two flat circular end plates. Organic string-like material (mineralised) wrapped around a central 'spindle', (ID wood: ?birch).

Information from other copper alloy or silver objects

Grave 105/7 (ceb 154, 156)
Base plate of applied brooch with edging strips. Concave, sub-circular thin metal plate with unusual iron pin. The upper surface has a square plate of silvery metal rivetted to the centre; marks of solder remains all around this, including a flaky soft grey corrosion. With the brooch came small fragments of gilding, backed with the same flaky grey corrosion as above. It is clear that the brooch lost its soldered-on gilding in use, not in the ground. The edges of the plate are also very worn and thin. There are mineralised fabric remains on the pin. Grave 105/8 consists of two strips of copper alloy curved to fit the outside rim of the saucer brooch, probably the original edging pieces, previously soldered on.

Iron

Sparheads

Grave 12/1 (ceb 212)
A small spearhead which has been cut down from a larger one and re-used (see X-radiograph). There are extensive mineralised wood remains in the haft.

Grave 24/2 (sr)
Spearhead with extensive mineralised wood remains in the socket. (ID fruit tree/maple or lime).

Grave 34/2 (sr 1439)
Spearhead and piece of the haft. Mineralised wood remains in socket. The break is corroded over and has been made in antiquity.

Grave 34/3 (ceb 268)
Ferrule from spear 34/2, freshly broken, mineralised wood remains in the socket. (ID ?alder or ?hazel).

Grave 42/5 (ceb 239)
Very small spearhead, 7cm long, possibly cut down as Grave 12/1, but more likely has been made to this size. The haft is broken off, and is not complete, unlike the others. Faint mineralised wood remains.

Grave 55/5 (ceb 69)
Spearhead with a flat broad blade which has a pronounced midrib; small amounts of mineralised organics on blade and mineralised wood in the haft.

Grave 55/6 (ceb 96)
Spear ferrule, complete, with 55/5. Matching pair of holes in the open end for attachment. Mineralised wood remains in the socket.

Grave 60/2 (ceb 32)
Spearhead, complete, long leaf shape. Mineralised textile on shaft and mineralised wood in the haft.

Grave 64/3 (ceb 70)
Spearhead, complete and compatible with ferrule Grave 64/4. It has a very long leaf shape and a long haft, with two pins across haft to secure. Extensive mineralised textile and skin product remains. (ID ?ash, birch or maple).

Grave 64/4 (ceb 37)
Spear ferrule, complete, with incised line decoration around open end. Matches spear Grave 64/3 above.

Grave 69/2 (ceb 100)
Spearhead, long leaf shape with broken tip. The rivet head of one securing pin is visible. Extensive

Plate 22 Grave 34 (no 1 Sr 1448/ceb 238) mineralised wood (?hazel) remains on interior of shield handle (SEM x200, TLS)

mineralised wood remains in socket. (ID alder, hazel or birch).

Grave 120/3 (ceb 192)
Spearhead, complete, long triangular shape. One rivet to secure; extensive mineralised wood remains.

Stray find 5 (ceb 257)
Spearhead, narrow long leaf shape. One rivet securing. Mineralised wood remains.

Stray find 6 (ceb 267)
Spearhead, short with the tip broken off, the whole is only 102 cm long, and may have been cut down. Some mineralised wood in haft. (ID alder, hazel or birch).

Stray find 7 (ceb 268)
Spear ferrule from the spear stray find 6 above, the end is freshly broken off. Mineralised wood remains in the socket.

Shield bosses

Grave 34/1 (sr 1448, ceb 238) (Pl 22)
Boss not conserved in Cardiff, mineralised wood remains adhering to front and back. ceb 238 is the handle for the boss, the longitudinal edges are curled over the inside, as if round a wooden handle (Härke and Salter 1984). Mineralised wood remains on the interior surface of this (Pl 22). Also associated with the boss are two rivets, both with mineralised wood remains. (ID ?hazel).

Grave 42/1 (ceb 194-6)
Very small boss, complete, with handle (flat) still attached. Made in one piece, the tip extruded to make the apex *(ibid.).* Mineralised wood on the handle. Three 'shield mount' rivets with wide flat heads, Grave 42/2, 42/3 and 42/4. Mineralised wood remains on the reverse.

Grave 55/1 (ceb 67,97,98)
Boss, complete; flat profile with a deep carination, the handle is complete and still in position. Made in one piece except for the apex which is inserted into the extruded tip (see X-radiograph). Boss held by five rivets. Mineralised organic material on the inside of the boss under the handle. Mineralised wood remains also on the reverse of the rivets used to attach the handle to the boss. Associated with this are two 'shield mounts', Grave 55/2, 55/3, rivets with very large flat circular heads. Both of these have copper alloy coatings — patchy now and covered partially with iron corrosion. Some minerahsed wood remains on the reverse of these.

Grave 60/1 (ceb 195)
Large boss, complete. This has a shallow carination and flat 'button' apex with a central circular hole; five rivets for attachment. The flat handle is in two pieces, the two rivets for this have copper alloy roves. Very powdery mineralised wood and textile remains on the handle and under the rivets.

Grave 64/2 (ceb 66)
Boss, complete, with complete handle (a flat bar with raised centre). Made in one piece, with the tip extruded and a small flattened apex. Five rivets, 64/7, also associated with the boss. Mineralised wood on the back of the handle and flange, also on the back of two of the rivets.

Knives

All the knives found were associated with mineralised organic remains — mostly from handles, but sometimes on the blade as possible remains of scabbards, sheaths or clothing. The artefacts listed below are those which have organic material identifiable at least to wood/leather/horn/bone categories, or particular interesting technological features.

Grave 160 (ceb 92)
Knife with mineralised organic on handle, no ID.

Grave 18/1 (ceb 86)
Knife-like object with D-shaped cross section, no cutting edge, possibly a file.

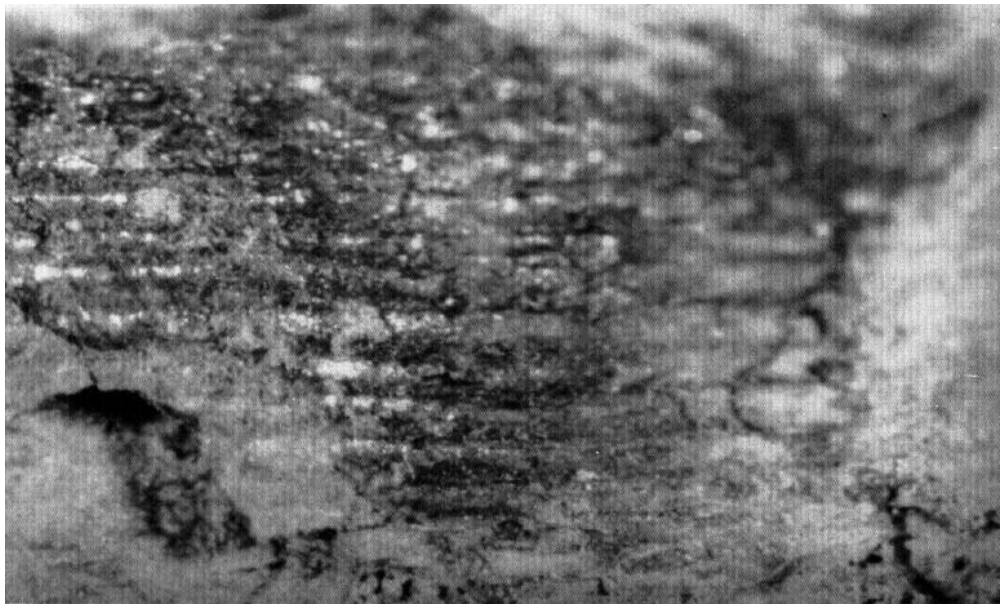


Plate 23 Grave 56 (no 2/ceb 30) striated mineralised organic material (horn?) on knife handle

Grave 34/4 (sr 1441)
Knife with mineralised organic remains on handle, no ID.

Grave 41/2 (ceb 107)
Knife with mineralised organic on blade, no ID.

Grave 56/2 (ceb 30, Pls 23 & 24)
Knife with mineralised striated organic on handle, probably horn.

Grave 78/1 (ceb 209)
Knife with mineralised organic on blade, no ID.
Grave79/1 (ceb 58)
Knife with mineralised organic on handle, no ID.

Grave 94/3 (ceb 248)
Knife with mineralised striated organic on handle, no ID.

Grave 96/2 (ceb 111)
Knife with mineralised organic on handle. Possibly degraded ivory

Grave 102/3 (ceb 250)
Knife with mineralised organic on handle, horn.

Other iron pieces

Grave 19/2, 19/3, 19/4 (ceb 234)
Latchlifter/keyset which comprises: knife, fragment of the ring to which the set has been attached, five key fragments, key in three pieces, possible purse mount or firesteel Grave 19/4, a semicircular flat-tened wire object with curled ends (Brown, D 1977a), mineralised textile fragments wrapped around this.

Grave 22/9 (ceb 25)
Buckle. 'Stripes' of tinning around the section as Grave 64/6 below, but more definite, this is in rings, rather than spiralling.

Grave 64/6 (ceb 40)
Buckle fragment, with decoration of bands of tinning consistent with wire wrapped around the section (see X-radiograph). Similar to Grave 22/9 above.

Grave 68/3 (ceb 101)
Latchlifter in two pieces, with spirally twisted handle (X-radiograph).

The bronze-bound bucket, Grave 120/4 (ceb 176) (Pl 25)
This is approximately 125 mm high, 160 mm diameter and constructed from nine staves, each 3–4 cm wide. There are five horizontal bands of copper alloy with four vertical strips and four small overlapping pieces between these at intervals around the rim. The copper alloy is decorated with circular and crescentic punchmarks. The rivets fastening the vertical pieces have plated heads (identified as tin — XRD). The horizontal bands are also fastened by solder remains, detected as above.

There are nine staves of yew wood; in the foot of each is a shallow groove cut to take the base. There was no evidence of a handle other than a dark

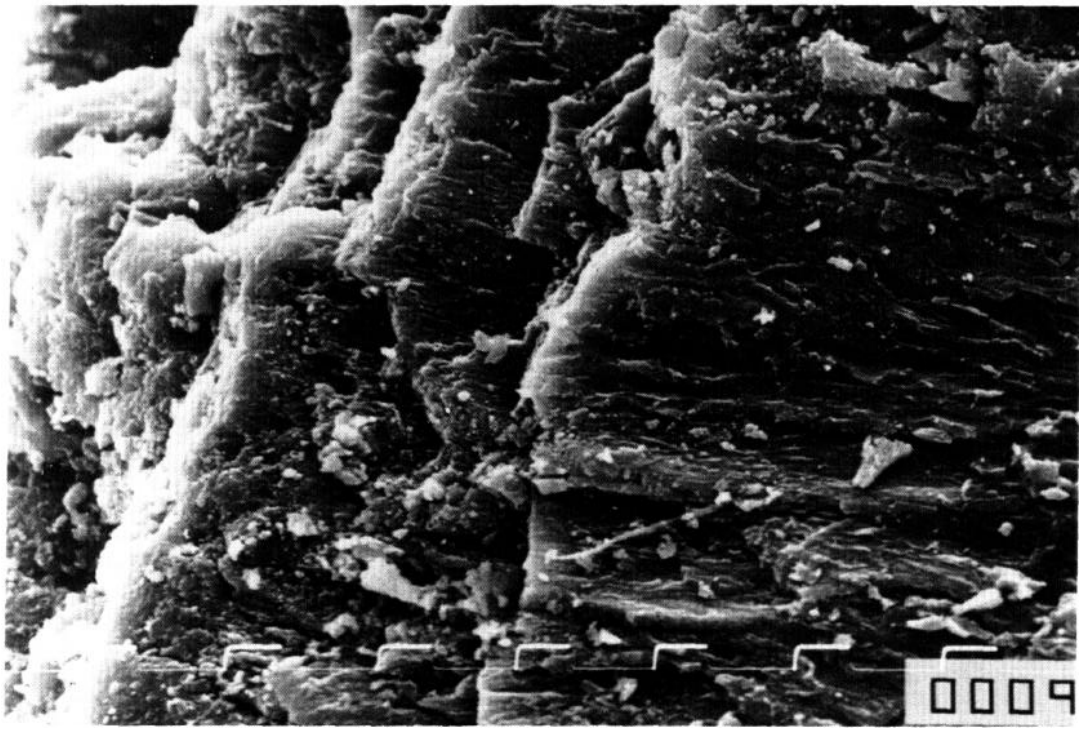


Plate 24 Grave 56 (no 2/ceb 30), as plate 22 (SEM x1500)

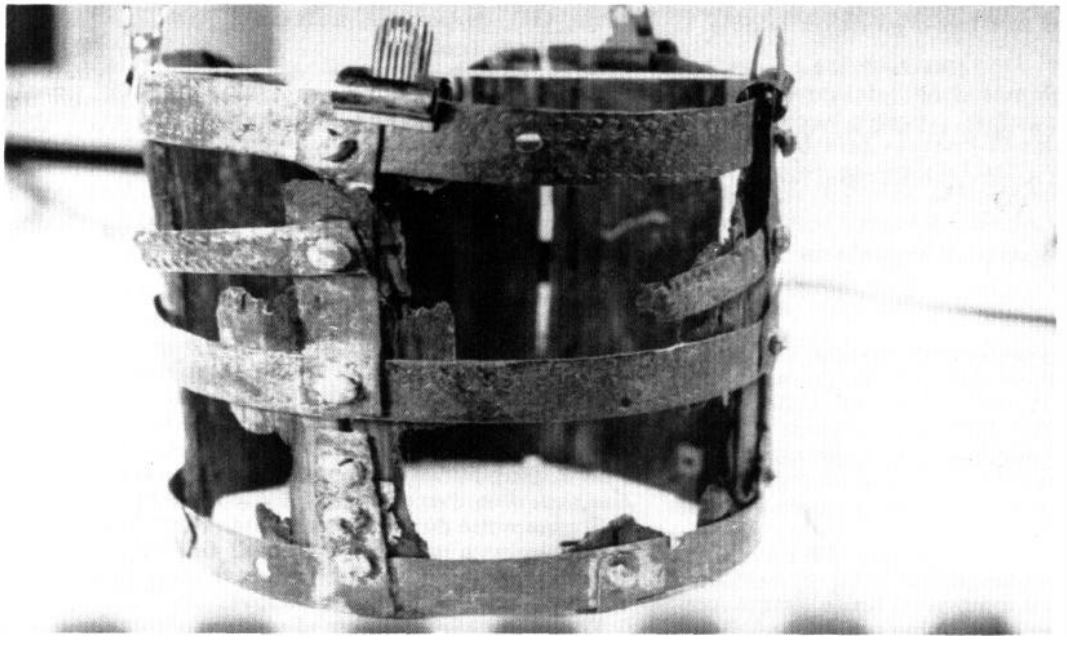


Plate 25 Grave 120 (no 4/ceb 176); copper-alloy bound wooden bucket during reconstruction

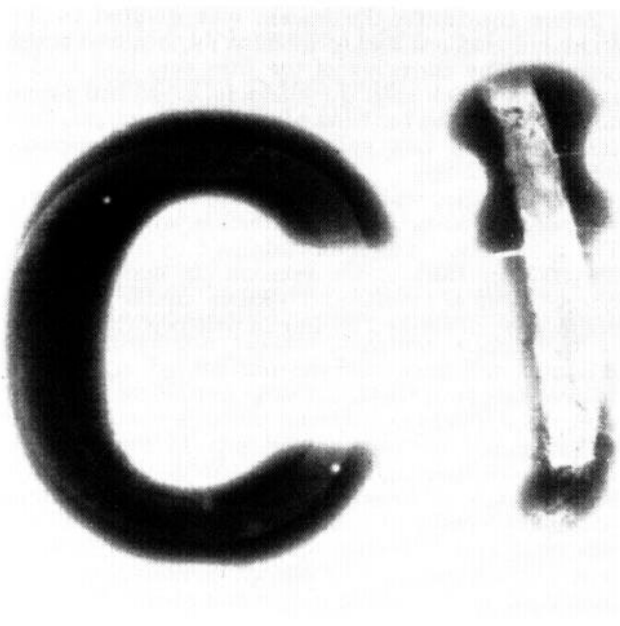


Plate 26 Grave 22 (no 9/sr 1446); X-radiograph (150 kv, 8mA) of shield-on-tongue buckle, showing core and cracking

organic stain evident in the surrounding soil on excavation. The only evidence for the contents of the vessel was a cut fragment of vertebral bone from an ox. Several patches of copper alloy-mineralised textile and other organic remains were noted on the bands, particularly the central horizontal one.

The object arrived in the laboratory in a very damp condition, but not waterlogged. Of the copper alloy parts, three horizontal bands were complete and there were fragments of the two thinner ones and the four vertical pieces. The metal showed signs of active bronze disease and the plated rivet heads were crumbling and fragile.

Only half of the original wood remained; this was fragile and 'buttery' in consistency, dark in colour and frayed around the edges. It was noticeably more degraded on the interior side, where it also displayed a chequered surface consistent with that produced by rots.

Treatment

Stabilisation of the metal required dry conditions while the wood needed to be kept damp initially. Therefore it was decided to plan the object thoroughly and then to separate the two materials as far as it was possible.

The copper alloy bands, vertical pieces and rivets were detached. Disfiguring surface corrosion and dirt were removed with hand tools (samples of solder and the plating were taken) and the metal was degreased in Acetone. It was then stabilised by immersion in 3% Benzotriazole in IMS under vacuum. The metal was subsequently rinsed, then lacquered with Incralac acrylic lacquer and stored in dry conditions to await completion of the wood treatment.

After detachment from the metal, the wood was drawn and immersed in deionised water. Sand and dirt were removed by brushing with soft hair brushes. A decision was made to treat the wood by freeze-drying after impregnation with the sugar Mannitol. This method was quick and cheap and had had good results with wood of similar type and thickness (Howard Murray, pers comm). When clean, the wood was transferred to a bath of 3% HC1 and left overnight to help remove further mud and dirt and to facilitate the impregnation. The pieces were well rinsed after this, then bagged individually in Netlon, labelled and soaked in a 10% Mannitol solution for five weeks. The pieces were then removed and frozen, before being freeze-dried in three batches for 8–13 hours per batch.

After this process, pieces were swabbed with IMS to remove 'water marks' left by the Mannitol. The wood was now very light, dry and brittle and in order to take the weight of the bands, was considered to be in need of consolidation. It was therefore consolidated with 10% Paraloid B-72 in Toluene.

Reconstruction

The bucket was reconstructed for illustration and display. The three circling bands were joined up first. Araldite epoxy resin and hardener (MY753/HY956) was used, since these joins had to hold a lot of pressure and the bands had 'sprung' a great deal, especially the lowest one. The staves were reassembled and attached to the interior of the relevant bands using HMG. The bottom band was finally fixed in place with a quick-setting epoxy (Devcon 5-Minute) and held with small padded clamps until set (Pl 25). The rivets, rivet heads and overlapping pieces were then re-inserted or applied. Crumbling rivet-heads were consolidated using 10% Paraloid B72 in Toluene.

The 'Frankish' shield-on-tongue buckle, Grave 22/9 (sr 1446) (Pl 26)

The buckle is complete, 3.5 cm long and 2.5 cm wide, and is a rounded oval in shape, consisting of a C-shaped piece and a tongue with a shaped and decorated end. The buckle is built over a thin (2 mm) iron core which exists in both the main part of the buckle and the tongue. This is clad with a 1 cm thick coating of dullish silver grey metal. Also with the buckle are three arrow-shaped 'studs' made entirely from the same silver-grey metal, about 2–3 mm thick.

The buckle has a rectangular section iron core running through it and through most of the length of the tongue. The rest of the metal has been cast onto the core (presumably it was held in place in the mould with chaplets, of which no traces remain).

The metal itself is a high tin bronze (XRF analysis at surface, 43.3%). A buckle of this type which has been sectioned showed a composition of copper 70.3%; tin 22.3%; lead 5.0%; zinc 2.4% taken anywhere in the sample other than the surface. At the surface however, the alpha phase of the alloy and the Pb corroded, enriching the subsequent structure with tin corrosion products. This phenomenon produced an average tin reading of 50% at the surface (Meeks 1986). The high tin content produces the dull grey colour seen on the Norton buckle and may have been deliberately induced as decoration. Also of interest are the polished 'flats' on the surface where the cast edges have been smoothed and bevelled.

Before treatment the buckle was covered in iron corrosion products and some faint mineralised textile remains. The corrosion of the iron core had lead to expansion which split the cladding in several places, notably along the bevelled edges. X-radiographs show that the core has split completely and corroded internally (Pl. 26).

After X-radiography, the dirt and disfiguring corrosion was removed from the buckle with handtools, The outer metal was then stabilised by immersion in 3% BTA in IMS under vacuum. It was then lacquered and a mould and replica made using the techniques described earlier in this report.

4 The social structure of the Norton cemetery

The quantity of disturbed skeletal material and the reasonably substantial number of unstratified finds indicate that the 117 inhumations and the three cremations by no means represent the complete cemetery at Norton (Fig 22). Doubtless in the past, as with Grave 1, other burials have been eroded out of the bank of the hollow way to the north or ploughed out of the eastern edge overlooking Billingham Bottoms. Such finds may lie behind rural traditions of a battle at this site. Nevertheless, by far the greater part of the cemetery has been successfully recovered by the excavation. For the first time ever within the region of the former Bernician kingdom, we have a near-complete view of an Early Anglo-Saxon community in death. If the associated settlement can ever be located, we might obtain an opportunity to study this same society's housing, ancillary buildings and at least some aspects of its rural economy. We may suspect that the settlement, whether concentrated in one place or dispersed over a wider area occupied the terrace between the cemetery and the medieval and modern village of Norton to the west. However, resistivity survey conducted in the open area to the west of the excavated cemetery revealed a number of anomalies which on excavation proved to be of geological origin, so it would seem that there was no settlement immediately adjacent to the cemetery, except perhaps to the south.

Cemetery analysis has been conducted here on the assumption that the artefacts found in the Norton graves provide a measure of either the personal wealth of that individual in life, or else the wealth of the kin group, whose leading representatives arrange for the funerals of their members. Our understanding of the customs and rules which governed who was buried with what in such cemeteries is, of course, limited. Inevitably we have lost a great deal of information concerning organic finds, which have disintegrated in the acid gravel and sand subsoil, for example any wooden bowls without metal mounts or repairs. As so many of the items buried were actually elements of the costume worn, it seems reasonable to suggest that most of them were personal possessions of the individual with whom they were buried. Perhaps items of dress should be differentiated as *grave finds* from, for example, vessels, which certainly sometimes contained offerings of food or drink to accompany the dead and thus merit the description of *grave goods.* Inevitably we cannot decide with any certainty why so many burials were unaccompanied by any finds, or what proportion of an individual's or family's possessions would find their way into the grave.

Three methods have been applied here, including computer-based seriation and social analysis programs originally developed by Professor R Hodson for the study of continental Iron Age cemeteries (Hodson and Tyers 1988) (Table 8). Their suitability had already been demonstrated through successful application to the analysis of gender by grave finds for the contemporary Anglian cemetery at Sleaford (Brenan 1985). *Gender* is defined here as a social and cultural construct, whereas *sex* is the biological aspect established from study of the human remains. Another approach used to demonstrate social status is a count of artefact types (Table 9), as in the Sewerby report (Hirst 1985, 96-102). The third is a manually-constructed chart of the female assemblages organised first by brooch types, then the presence of pins, beads and pendants and, lastly, by the presence of rings with three burials, based on the grouping of female graves already defined in the computer analysis (Table 10), similar charts of male weapon graves (Table 11) and burial assemblages of uncertain gender (Table 12).

It seems that either 60 or 61 of the 117 Norton graves contained find assemblages which can be attributed by gender to females (Table 10). The reason for the either/or here is the ambiguity as to whether we should interpret the annular ring with a pin from Grave 5 as an annular brooch or as a ring-shaped buckle. If it was worn as a brooch, then it seems probable that it belonged to a young woman, but if as a buckle, then it should not be firmly attributed to a particular gender, though as we shall see it might well belong to a young man. The crouched inhumation of a youth in this grave could not be sexed from the surviving bones. Nor was the position of the annular brooch/buckle between the arms and legs near the wrists and opposite the waist particularly helpful.

Of these 60/61 females by gender, eight are children of 12 years or less, while fewer than half are diagnosed by sex as female, with 24 certainly and four possibly female. On the other hand 19 of them could not be sexed, 11 are regarded as male and two as possibly male, while one burial contained both male and female adult bones (Grave 80). The discrepancy here between the results of the computer program analysis for gender and the skeletal report for sexing should be resolved by acceptance that the computer analysis provides a more complete and unambiguous answer than can skeletal material

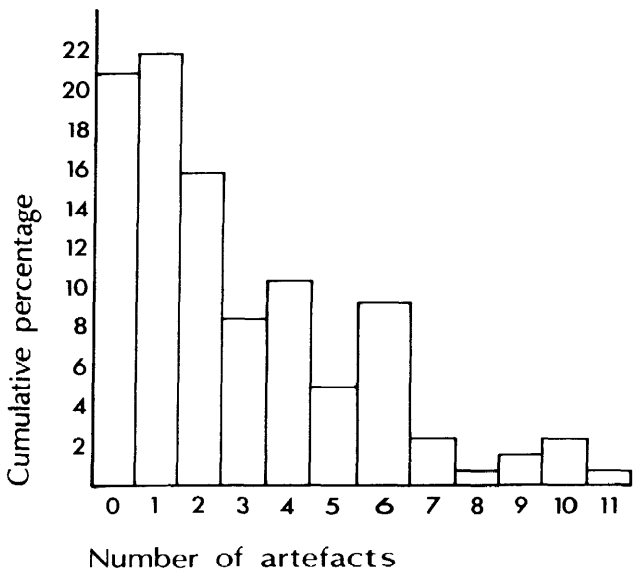


Figure 17 Number of artefact types with each burial

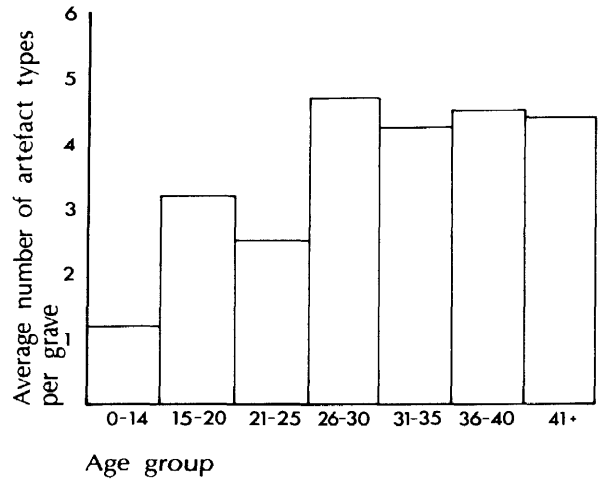


Figure 18 Average number of artefact types with each age group

from a site on which bone preservation was distinctly variable (Fig 25; but for alternative points of view to such problems, as viewed by bone specialists, see Henderson 1989 and Birkett 1982). Opposed to this half of the community now firmly labelled as female, we can put a mere ten weapon assemblages, each of which is identified in the bone report as an adult male (Table 11). Clearly there were originally at least another two such weapon burials in the cemetery as two spearheads and a single ferrule survive among the unstratified finds: a point which will be developed further below. If we add to these ten weapon graves the group of 21 or 22 inhumations (depending once more on our attitude to Grave 5) accompanied by finds that cannot be clearly differentiated as to gender (Table 12), together perhaps with the 25 unaccompanied inhumations (Table 9 and Fig 17), as probable males, we have a potential total of 56 or 57 male burials. A majority, consisting of 13 or 14 of the 21 or 22 ambiguous assemblages are unsexed, while only two are claimed to be female and just five male and one possibly male. With the 25 unaccompanied burials, again, a majority of 15 are unsexed and just two are female and a further two possibly female, with six males. In sum then, there are just six probable or possible females claimed out of a total of some 46 or 47 individuals. It does not seem unreasonable to suggest that most, if not all, of these were in fact male, giving us a community with a small majority of females, but basically balanced. The overall implication is that the vast majority of men were buried without weapons and with just a few basic items or no archaeologically visible grave finds at all.

On the other hand, nine of the ambiguous assemblages and seven of the unaccompanied burials are children of around 12 or younger. This is double the number of the eight children accompanied by female finds, so perhaps four or five of the former might be considered as likely to be female. As noted in 'The population' (this volume), infants and babies are under-represented in the cemetery and presumably in most cases their bodies were disposed of elsewhere; a situation which is common to virtually every Anglo-Saxon cemetery which has been studied to date.

Body position in the grave also varies between one of these gender groups and the rest. Eight of the ten weapon graves were extended and the other two crouched, whereas 25 of the female group were buried extended, 19 crouched plus one flexed, and two prone with 14 disturbed or fragmentary. Broadly similar results are obtained for the ambiguous find group (5 extended, 4 crouched, 2 prone, and 11 disturbed) and for the unaccompanied group (5 extended, 5 crouched, 2 prone, and 13 disturbed). If it is correct to associate crouched burial at Norton as the rite of an indigenous British element of the population (and it is a big 'if'), then at least 66% (and possibly 83%) of the 12 spear-bearing freemen can be presumed to be descended from Anglian settlers. The remainder of the male and female population seem to have been fairly equally divided as to burial position between extended and crouched.

Turning to the finds themselves, it has already been pointed out that Grave 55 with its seax, shield and spear stands out as the best equipped of the ten weapon burials. If we add the two unstratified spear finds into the equation, we seem to have two groups of six warriors (Fig 23). The better-equipped group contained either a shield or in one case a bucket as well as a spear. Three of them addition-

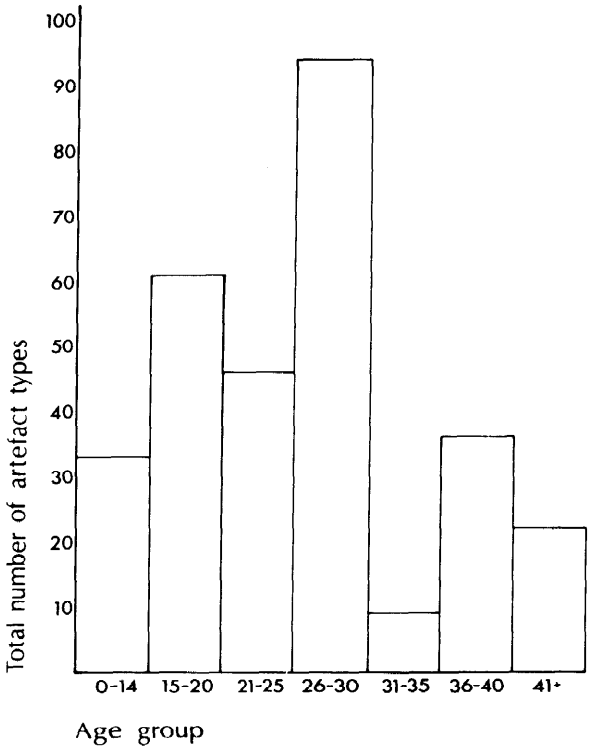


Figure 19 Total number of artefact types with each age group

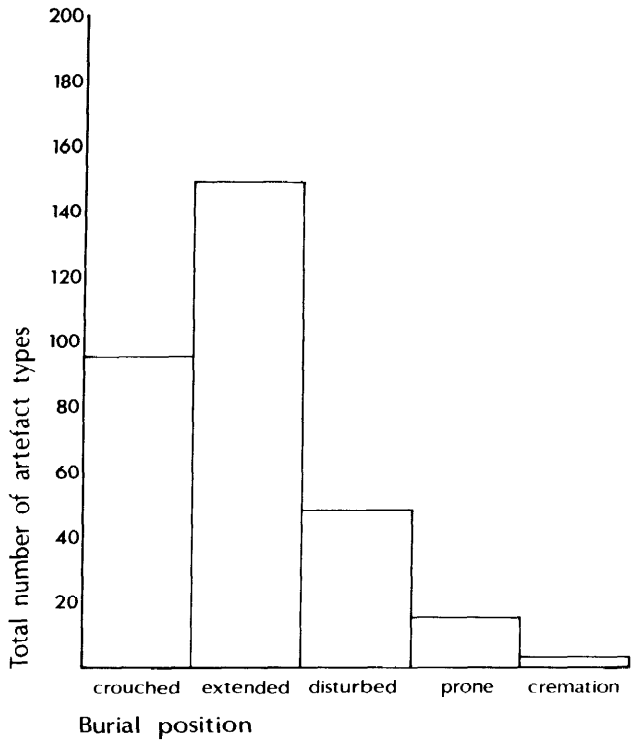


Figure 20 Total number of artefact types relative to body position

ally had a ferrule protecting the other end of the spear shaft. A spear is the only weapon present in the second group, however, though one of the unstratified spears may also have possessed a ferrule. Interestingly the proportion of burials accompanied by just a spear against those with a spear and a shield of 7:5 reflects the percentage figures for the Upper Thames region of 55% to 45% (Dickinson 1976, 291-329). The ten individuals with weapons from recorded graves at Norton, all of them adults, should not necessarily be viewed as warriors, but rather as men whose weapons symbolised their social status (Härke 1989; 1990). Certainly they commanded sufficient wealth to be able to afford to dispose of these weapons in their graves, rather than pass them on to their heirs.

The most outstanding female burial was certainly the woman in Grave 40, who wore the decorated pair of silver bracelets as well as sleeve clasps on her wrists, in addition to the finest pair of annular brooches from the cemetery and a Type G penannular brooch with her string of beads and also carried a set of keys. Her bracelets are unique for the cemetery, but though the computer analysis can do no more than count these as one object type equal in value to any other single object type, it still placed this assemblage at the head of the list (Table 8).

Brooches occurred in 44 of the 61 female graves, mostly annular forms, with two penannulars and one applied saucer brooch. The most showy in display terms are the cruciform and small-long brooches, which were found in 12 graves belonging to at least three generations in terms of manufacture and burial. The earliest was the Group II brooch from Grave 1 and it is possible that the single small-long brooch from Grave 21 was its contemporary. Three burials, each accompanied by a Group IVa brooch, are matched by a fourth unstratified brooch implying a further female grave for this middle-period group. Finally there were two graves with Group V florid brooches and three with complete Class C2 brooches, plus two more with damaged parts of such brooches. However much experts might disagree about the date ranges we should assign to these cruciform brooch groupings in absolute terms, there is a general acceptance of the relative sequence involved. When mapped on the cemetery plan, we can see the brooches of the Group II/small-long and Group IVa respectively in graves on the northern and southern edges of the burial ground, while the GroupV/Class C2 brooches are restricted to a west-east central band across the cemetery (Fig 18). The bracelet grave is situated to the west of this central band, perhaps implying a date in the second

Table 8

Grave no	pot	bucket	head	single bead	second pot	shield	knife	pot-sherd	buckle	single great brooch	necklace	second brooch pair	single small brooch	pin
40							■	■			■		■	
29							■				■			■
11				■			■	■	■					
23							■		■					
35							■		■		■			■
94							■				■		■	
85							■		■		■		■	
54							■							
52							■		■		■		■	■
1										■	■			
99								■						
70							■		■		■		■	
63							■			■	■		■	
22				■			■		■	■			■	
86							■	■			■			
21									■	■	■			
19							■				■			
28							■				■			■
68							■				■			
82							■				■			■
7							■				■			
44									■		■		■	
48									■		■			
102							■			■	■			
56							■		■		■		■	
84				■			■			■			■	
4											■			■
9							■				■	■		
96							■	■		■				
45	■						■				■		■	
59				■			■							
77				■						■			■	
57										■				
41							■				■			
78							■		■					

Analysis of social status in Norton

spear ferrule	matched brooch pair	dress	ring	odd brooch pair	bucket pendant	toilet imple-ment	clasp	amulet	key	comb	spangle	strap end	wood bowl	bracelets	Grave no
	■		■				■		■			■		■	40
	■		■			■	■		■	■			■		29
				■				■	■	■			■		11
	■												■		23
	■				■		■		■			■			35
	■				■		■	■				■			94
			■						■			■			85
			■						■			■			54
			■				■		■		■				52
							■		■		■				1
										■					99
			■			■	■	■	■						70
			■		■		■		■						63
							■		■						22
	■	■							■						86
							■		■						21
	■		■						■						19
	■								■						28
							■		■						68
									■						82
		■		■			■	■							7
								■							44
								■							48
	■		■				■								102
		■					■								56
			■				■								84
	■					■	■								4
				■			■								9
				■			■								96
							■								45
			■				■								59
							■								77
						■	■								57
	■	■	■			■									41
						■									78

Grave no	pot	bucket	spear-head	single bead	second pot	shiel	knife	pot-sherd	buckle	single great brooch	necklace	second brooch pair	single small brooch	pin
105											■			■
71											■			
27									■					
90				■			■							
66											■			
87							■				■			
36								■						
39	■													
49							■		■				■	
30										■	■			■
107	■										■			■
112													■	
61														
34			■			■	■	■	■					
64			■	■		■	■		■					
55			■			■	■							
104													■	■
106								■						■
113							■	■	■		■		■	
2								■			■		■	
65				■			■						■	
5				■									■	
72				■									■	
98													■	
76							■				■			
74							■				■			
92	■										■			
109											■			
51											■			
10											■			
80										■				
100	■			■	■				■					
69			■	■					■	Male				
38							■		■					
13							■		■					
12			■						■	Male				

spear ferrule	matched brooch pair	dress pin	ring	odd brooch pair	bucket pendant	toilet imple-ment	clasp	amulet	key	comb	spangle	strap end	wood bowl	bracelets	Grave no
			■	■											105
					■										71
					■										27
	■		■												90
	■		■												66
			■												87
			■												36
			■												39
		■													49
	■														30
	■														107
	■														112
	■														61
■	Male														34
■															64
■															55
															104
															106
															113
															2
															65
															5
															72
															98
															76
															74
															92
															109
															51
															10
															80
															100
															69
															38
															13
															12

Grave no	pot	bucket	spear-head	single bead	second pot	shield	knife	pot-sherd	buckle	single great brooch	necklace	second brooch pair	single small brooch	pin
17									■					
25			■					■	Male					
120		■	■				■							
24			■				■							
79							■							
16							■							
26							■							
43							■							
110							■							
111							■							
89							■							
42			■			■	Male							
60			■			■								
62				■										
101				■										
108				■										
20				■										
58				■										
81				■										
119	■	Cremations in urns												
115	■													
114	■													
33	■													
53	■													

half rather than the first half of the 6th century. We should also note the possibility that the assemblage of Grave 29 with its two annular brooches may be the contemporary of the two earliest female graves (Graves 1 and 21), in view of the profiled decoration of its comb end-plates, typical of later 4th to 5th century examples, and its proximity to Grave 21.

It is not difficult to imagine that the original 12 weapon burials might also be spread over at least three generations. This would imply perhaps four or so armed men in the community per generation, which matches approximately the number of women buried with complete cruciform or related bow brooches, together with the woman with the bracelets. These women might well be their wives, perhaps presented with these showy status objects on their betrothal or marriage by either their fathers or their future husbands. Dress pins with spangles probably had a similar dress function to the cruciforms and the female assemblages of graves 41 and 56 also deserve to be considered as potentially a part of this 'elite' within the community. It should be noted, however, that while only two of the ten weapon burials were crouched and eight were extended, three of the women with bow brooches were crouched, two extended, one prone and the remaining six disturbed. Grave 40 contained an extended burial, but Graves 41 and 56 with their dress pins were both crouched: a significantly different pattern to that of the weapon burials.

The plan (Fig 18) also shows the locations of the ten weapon graves, some of which might well have been related to these exceptional female graves. Grave 55 is almost adjacent three graves containing later cruciform types (graves 57, 77, 80) in the

spear ferrule	matched brooch pair	dress pin	ring	add brooch pair	bucket pendant	toilet imple-ment	clasp	amulet	key	comb	spangle	strap end	wood bowl	bracelets	Grave No
															17
															25
															120
															24
															79
															16
															26
															43
															110
															111
															89
															42
															60
															62
															101
															108
															20
															58
															81
															119
															115
															114
															33
															53

southeast quadrant; the small cluster of Graves 60, 64 and 69 are near neighbours of Grave 84's late cruciform brooch to the west and Grave 56's dress pin to the east; Graves 24 and 25 are adjacent to the C2 brooch of Grave 22 and quite close to the Group V brooch in Grave 30; while finally Grave 40 with its bracelets and Grave 41 with its dress pin lie between the weapon assemblages of Graves 34 and 42. That still leaves a number of cases where no such relationship can be postulated (ie Graves 1, 21, 61, 96, 102; 12 and 120), but overall the distribution appears to support the general case. Further it should be noted that all these graves occur either isolated or in rather small clusters, perhaps implying that the cemetery was organised into family burial plots, rather than consisting of a single burial area, which migrates across the site over time.

Only one burial contained as many as four brooches: Grave 9 with its various annular brooches. Of the six which had three brooches in them, three of them, Graves 41, 94 and 112 again consisted exclusively of annular brooches, though the burial in Grave 41 was also accompanied by a fine dress pin. On the other hand, Graves 30, 96 and 102 each had a cruciform brooch and a matched pair of annular brooches. The 20 assemblages with only two brooches mostly contained annular forms. One of the brooches in Grave 105 was an applied saucer brooch, while a cruciform and an annular occur together in each of Graves 22, 63, 77 and 84. Most unusual of all is the pairing of C2 cruciform brooches in Grave 61.

Again the 18 cases of a single brooch in a grave were mainly annular types. Yet there were the exceptions of the penannular brooch in Grave 65, the

Table 9 Number of artefact types within each burial

Grave no		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Brooches	Bow	1																				1	1		
	Annular		1		2	1		2		4		2								2			1	2	
	Other																								
Pins	Spangles																								
Pins	Other				1			1																	
	Spangles	2																							
Beads	Amber	1	23		52			53		3	2									11		7			
	Glass	3	4		9			21			1									2	1	29	1		
	Other				1	1		1		1		1													
Pendants	Bucket																								
	Disc																								
	Other							1				1													
Amulets												1													
Bracelets																									
Clasps		2			4			4		4												4	2		
Keys/girdle hangers		1										1								1		1	1		
Toilet implements					3																				
Comb												1													
Purse ring																				1					
Other rings																				1					
Buckles												1	1	1				1				1	1	1	
Strapends																									
Knives								1		1		1		1			1			1			1	1	1
Pots																									
Potsherds			1									1													
Wood bowls												1												1	
Bucket																									
Seax																									
Shield																									
Spear ferrule																									
Spearhead													1												1
Other																									
No of artefact types		**5**	**3**	**0**	**5**	**2**	**0**	**6**	**0**	**4**	**1**	**10**	**2**	**2**	**0**	**0**	**1**	**1**	**0**	**6**	**1**	**5**	**7**	**4**	**2**

Grave no		25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Brooches	Bow						1																		
	Annular				2	2	2					2					2	2			1	1			
	Other																1								
Pins	Spangles																	1							
Pins	Other				1	2	1					1													
	Spangles																								
Beads	Amber				19	38	4					10					11	8				2			5
	Glass				2		4					2					7	1			7				
	Other					2																			
Pendants	Bucket			1								9													
	Disc																								1
	Other				1																				
Amulets																					1				
Bracelets																	2								
Clasps						2						2					2					1			
Keys/girdle hangers					1	1						1					1								
Toilet implements						1												1							
Comb						1																			
Purse ring						2																			
Other rings						1							1			1	1	1							
Buckles				1							1	1			1						1				1
Strapends												1					1								
Knives			1		1	1					1	1			1		1	1		1		1			
Pots										1						1						1			
Potsherds		2									2		1				1								
Wood bowls						1																			
Bucket																									
Seax																									
Shield											1								1						
Spear ferrule											1														
Spearhead		1									1								1						
Other																									
No of artefact types		2	1	2	6	11	4	0	0	1	6	9	2	0	2	2	10	6	2	1	4	5	0	0	3

Grave no		49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
Brooches	Bow									1				2		1									
	Annular	1			1				1							1			2				1		1
	Other																	1							
Pins	Spangles								1																
Pins	Other	1			1																				
	Spangles				2																				
Beads	Amber			4	62				4		1	1			1	36	1	1	3		7		42	15	1
	Glass			1	1											23					1	1	3	1	
	Other																								
Pendants	Bucket															1								4	
	Disc																						3		
	Other																								
Amulets																									
Bracelets																									
Clasps					1				1	2		1				2					2		3		
Keys/girdle hangers					1		1									1					1		1		
Toilet implements										1													2		
Comb																									
Purse ring					1																				
Other rings					2		1					1				1			1				2		
Buckles	1				1				1								1					1	1		
Strapends							1																		
Knives	1				1		1		1			1				1	1	1			1		1		
Pots						1																			
Potsherds																									
Wood bowls																									
Bucket																									
Seax								1																	
Shield								1					1				1								
Spear ferrule								1									1								
Spearhead								1					1				1					1			
Other																									
No of artefact types	**4**	**0**	**1**	**10**	**1**	**4**	**4**	**6**	**3**	**1**	**4**	**2**	**1**	**1**	**8**	**6**	**3**	**3**	**0**	**4**	**3**	**9**	**2**	**2**

Grave no	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
Brooches Bow					1			1				1												1
Annular					1							1	1	2				2				3		2
Other																								
Pins Spangles																								
Pins Other										1				1										
Spangles																								
Beads Amber		6		1	1				1	3			8	6	4			1		4		20		
Glass										1		1			2							6		
Other				1																				
Pendants Bucket																						1		
Disc																								
Other																								1
Amulets																						1		
Bracelets																								
Clasps					1							3										1		2
Keys/girdle hangers										1			1	1										
Toilet implements						1																		
Comb																								
Purse ring																								
Other rings												1	1		2			1						
Buckles						1							1											
Strapends													1									1		
Knives		1		1		1	1			1		1	1	1	1		1	1				1		1
Pots																				1				
Potsherds														11										2
Wood bowls																								
Bucket																								
Seax																								
Shield																								
Spear ferrule																								
Spearhead																								
Other																								
No of artefact types	**0**	**2**	**0**	**2**	**4**	**3**	**1**	**1**	**1**	**4**	**0**	**6**	**7**	**6**	**3**	**0**	**1**	**4**	**0**	**2**	**0**	**7**	**0**	**6**

Grave no		97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Brooches	Bow						1																		
	Annular		1				2		1	1		2					3	1							
	Other									1															
Pins	Spangles																								
Pins	Other								1	1	1	1													
	Spangles																								
Beads	Amber				1		1			11		14		3				9							
	Glass						100			1		3						7							
	Other					1	2					3	1												
Pendants	Bucket																								
	Disc																								
	Other																								
Amulets																									
Bracelets																									
Clasps							1																		
Keys/girdle hangers																									
Toilet implements																									
Comb				1																					
Purse ring																									
Other rings							1			3															
Buckles					1													1							
Strapends																									
Knives							1								1	1		1							1
Pots					2							1							1	1				1	
Potsherds				1							23							1							
Wood bowls																									
Bucket																									1
Seax																									
Shield																									
Spear ferrule																									
Spearhead																									1
Other																									1
No of artefact types		**0**	**1**	**2**	**3**	**1**	**6**	**0**	**2**	**5**	**2**	**4**	**1**	**1**	**1**	**1**	**1**	**5**	**1**	**1**	**0**	**0**	**0**	**1**	**4**

Table 10 Female asemblages

Grave no.	61	80	1	21	57	30	102	96	22	63	77	84	4	19	23	28	29	35	41	66
Pair cruciform brooches	■																			
Single cruciform/small-long brooch		■	■	■	■	■	■	■	■	■	■	■								
Pair annular brooches						■	■						■	■	■	■	■	■	■	■
Two annular brooches								■												
Single annular brooch									■	■	■	■								
Penannular brooch																				
Applied saucer brooch																				
Dress pin																			■	
Other pin						■							■			■	■	■		
Spangles			■																	
Bucket pendant										■										
Other metal pendants																■				
Beads			■	■		■	■			■			■	■		■	■	■	■	■
Single bead									■		■	■								
Wrist clasps			■	■	■		■	■	■	■	■	■	■				■	■		
Bracelets																				
Buckles				■					■						■			■		
Strap-ends																		■		
Purse-ring														■			■			
Other rings							■			■		■		■			■		■	■
Knives							■	■	■	■		■		■	■	■	■	■	■	
Keys and girdle hangers			■	■					■	■				■		■	■	■		
Toilet implements					■								■				■		■	
Combs																	■			
Pot																				
Pot-sherds								■												
Wooden bowl															■		■			

Grave no.	86	90	94	107	112	40	9	7	11	98	2	5	44	45	49	52	56	70	72	85
Pair cruciform brooches																				
Single cruciform/small-long brooch																				
Pair annular brooches	■	■	■	■	■	■	■													
Two annular brooches							■	■	■											
Single annular brooch			■		■					■	■	■	■	■	■	■	■	■	■	■
Penannular brooch						■														
Applied saucer brooch																				
Dress pin																	■			
Other pin	■			■				■							■	■				
Spangles																■				
Bucket pendant			■																	
Other metal pendants								■	■									■		
Beads	■		■	■		■	■	■			■		■	■		■	■	■		■
Single bead		■							■			■							■	
Wrist clasps			■			■	■	■						■		■	■	■		
Bracelets						■														
Buckles									■				■		■	■	■	■		■
Strap ends			■			■														■
Purse-ring																■				
Other rings		■				■										■		■		■
Knievs	■	■	■			■	■		■					■	■	■	■	■		■
Keys and girdle hangers	■					■			■							■		■		■
Toilet implements								■										■		
Combs									■											
Pot				■										■						
Pot-sherds	■					■			■		■									
Wooden bowl									■											

Grave no.	104	113	105	65	82	106	27	71	48	10	51	109	68	74	76	87	92	59	54	39	36
Pair cruciform brooches																					
Single cruciform/small-long brooch																					
Pair annular brooches																					
Two annular brooches																					
Single annular brooch	■	■	■																		
Penannular brooch				■																	
Applied saucer brooch			■																		
Dress pin																					
Other pin	■		■		■	■															
Spangles																					
Bucket pendant							■	■													
Other metal pendants									■												
Beads		■	■		■			■	■	■	■	■	■	■	■	■	■				
Single bead				■														■			
Wrist clasps													■					■			
Bracelets																					
Buckles		■					■		■												
Strap ends																			■		
Purse-ring																					
Other rings			■													■		■	■	■	■
Knives		■		■	■								■	■	■	■		■	■		
Keys and girdle hangers					■								■						■		
Toilet implements																					
Combs																					
Pot																	■			■	
Pot-sherds		■				■															■
Wooden bowl																					

Table 11 Male weapon assemblages

	spear-head	spear-ferrule	shield	seax	bucket	buckle	knife	single bead	pot-sherd
55	■	■	■	■					
34	■	■	■			■	■		■
64	■	■	■			■	■	■	
42	■		■						
60	■		■						
120	■				■		■		
69	■					■		■	
12	■					■			
24	■						■		
25	■								■
	•	•							
	•								

Table 12 Other assemblages of grave finds

	buckle	knife	single bead	Pot	toilet implement	second pot	pot sherd	comb
78	■	■			■			
100	■		■	■		■		
99							■	■
13	■	■						
38	■	■						
5	■		■					
17	■							
89		■						
110		■						
26		■						
111		■						
16		■						
79		■						
43		■						
101			■					
81			■					
108			■					
20			■					
58			■					
62			■					
33				■				
53				■				
114				■				
115				■				
119				■				

small-long of Grave 21 and the cruciforms of Graves 1, 21, 57 and 80, while the single annular of Grave 56 was accompanied by a dress pin with spangles.

Important though brooches were to the better-dressed Norton women, it is the whole assemblage of Anglian dress fittings, including pins, beads and other pendants, wrist clasps and items suspended from the waist, which must be considered (Figs 21, 24, 26 and Table 10). These show up well both on the count of artefact types per grave and in the computer analysis. The social status program (Table 8) organises them firstly by the presence of bracelets (Grave 40), then wooden bowls (Graves 29, 11, 23), strapends (Graves 35, 94, 85, 54), spangles (Graves 52, l), a comb (grave 99), keys (Graves 70, 63, 22, 86, 21, 19, 28, 68, 82), amulets (Graves 7, 44, 48), clasps (Graves 102, 56, 84, 4, 9, 96, 45, 59, 77, 57), toilet implements (Graves 41, 78), an odd brooch pair (Grave 105), bucket pendants (Graves 71, 27), rings (Graves 90, 66, 87, 36, 39), a dress pin (Grave 49), matched brooch pair (Graves 30, 107, 112, 61), other pins (Graves 104, 106), single small brooches (Graves 113, 2, 65, 5, 72, 98), bead string (Graves 76, 74, 92, 109, 51, 10) and finally a single great brooch (Grave 80). When a single brooch or pair of brooches of one form count as just one other artefact type, then the single and incomplete section from a cruciform brooch from Grave 80 or even the pair of complete C2 cruciforms from Grave 61 each count as one type and appear low down in the ranking of female assemblages as arranged by the computer program.

On the other hand, turning to the chart of artefact types (Table 9), all those with eight or more artefact types (i.e. Grave 29 with eleven, graves 11, 40 and 52 with ten each, Grave 35 with nine and Grave 70 with eight) have at least a single annular brooch, if not two annulars. All six of these graves also appear in the top twelve female graves of the computer analysis. The woman in Grave 70 was also wearing a silk-brocaded tablet weave braid, emphasising her relative importance in the community. Overall, a balance must be sought between a straight count of artefact types, whether by hand or through a computer program and a qualitative assessment. This must take into account the workmanship and elaboration of particular artefacts, such as the cruciform brooches, which must have stood out on the dress of the women who wore them.

The depth of a grave may provide another indicator of the amount of care taken in preparing a burial, with due allowance for some shallow graves being protected originally by a mound, whose postulated height might be added to the grave depth recorded from the top of the modern subsoil level (Table 13 and Figs 9-11). In fact the deepest recorded graves are both weapon burials and consequently neither of them receives a high score in either the computer analysis or in the *Number of Artefact Types* (NAT) present, as can be seen in Table 13. The deepest is Grave 69 with a spear, buckle and single bead belongs to the lower ranking weapon burials, but the next deepest is the only male burial to contain a bucket (Grave 120) and there is reason to believe that it is one of the most important of the weapon burials from Norton. These two graves with depths between 61 and 70 cm (A) are followed by six with depths of between 51 and 60 cm (B). Grave 52 is a female burial with a NAT score of 8, ranked 9th in the computer analysis; Grave 28 is another woman with a NAT of 6 and ranked fairly high both in terms of the computer and the brooch type based analyses; Grave 34 has an assemblage with a NAT of 6 among the better equipped of the weapon burials; on the other hand, Graves 91, 98 and 99 have low NAT scores, though Grave 99 is ranked 11th overall in the computer analysis. Next there are seven graves with depths between 41 and 50 cm (C). Grave 94 belongs to a woman with a NAT score of 7, ranked sixth in the computer chart and moderately high in terms of the number of annular brooches present; Grave 56 is another woman with just a single annular brooch, a NAT score of 6 and ranked 25; Grave 60 is one of the better equipped weapon burials despite a score of just 2; but Graves 36, 37, 38 and 110 are all low-scoring assemblages.

The same information can be expressed more clearly as follows:

A: graves 61–70 cm deep: 2 graves: NAT 3 (but both are weapon graves).
B: graves 51–60 cm deep: 6 graves: NAT 0–10 (both sexes).
C: graves 41–50 cm deep: 7 graves: NAT 0–7 (both sexes).
D: graves 31–40 cm deep: 10 graves: NAT l–9 (both sexes).
E: graves 21–30 cm deep: 25 graves: NAT 0–10 (both sexes).
F: graves 11–20 cm deep: 24 graves: NAT 0–11 (both sexes).
G: graves 1–10 cm deep: 5 graves: NAT 0–1 (females & ambiguous, ? male assemblages).
Shallow etc. graves: 38 graves: NAT 0–10 (both sexes).

Thus the ten weapon burials occur in graves which range from shallow (Grave 25) to the deepest (Grave 69), while the highest-ranked female assemblages of Graves 1, 21, 22, 30, 40, 41, 56, 57, 61, 63, 84, 96 and 102 also run from shallow to 49 cm, but most of them are at least moderately deep. Ambiguous gender assemblages also range from shallow to a respectable 51 to 60 cm deep. Overall, it is difficult to see any firm correlation between grave depth and the ranking of assemblages of finds in this cemetery, When allowance is made for all the soil erosion suffered by this site, this is hardly a surprising result.

An estimate of the population at Norton based on the skeletal evidence concludes that it consisted of 28 individuals ('The population', this volume). If the

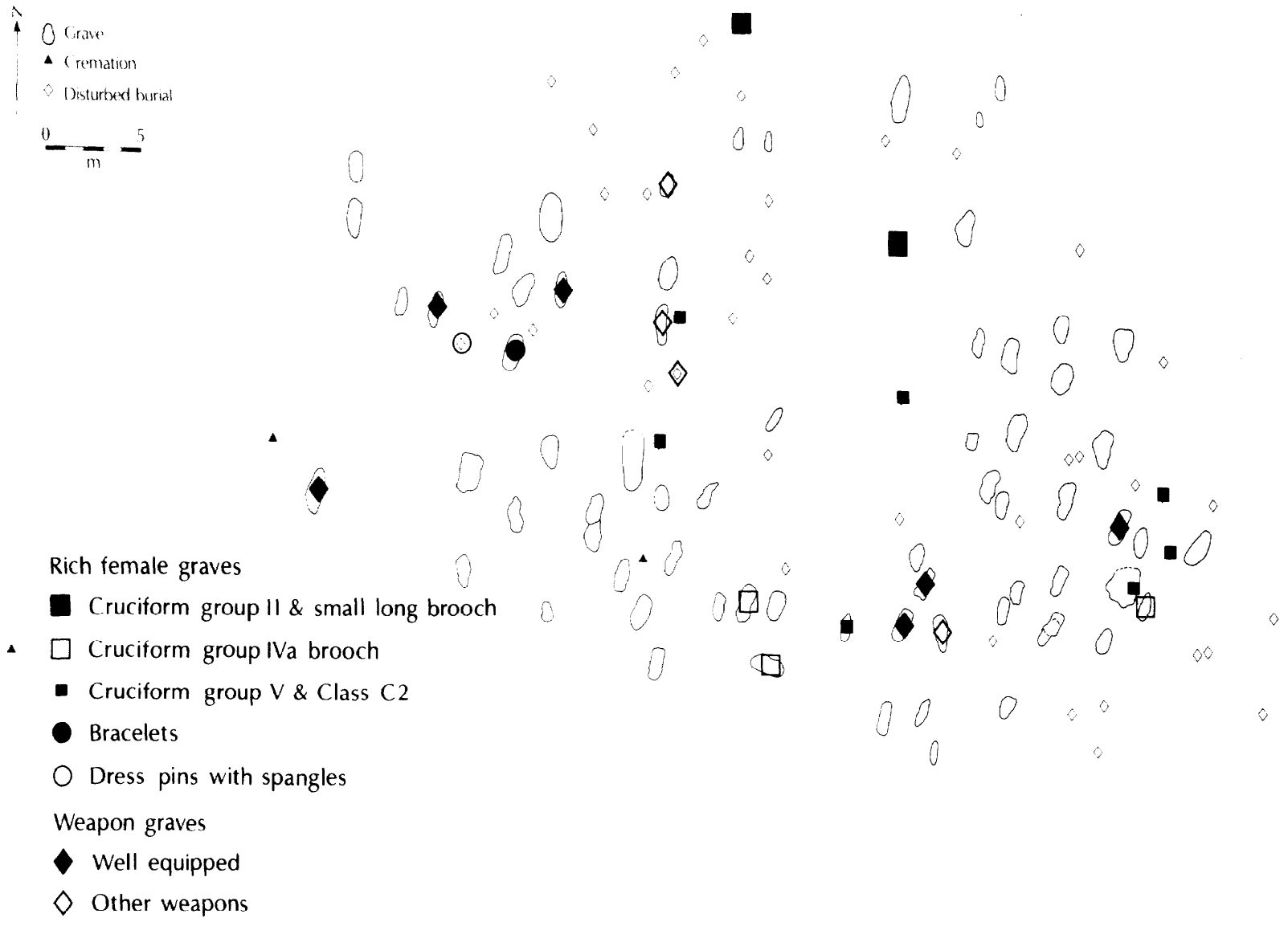


Figure 21 Distribution of rich female and weapon graves

Figure 22 Location of the burials

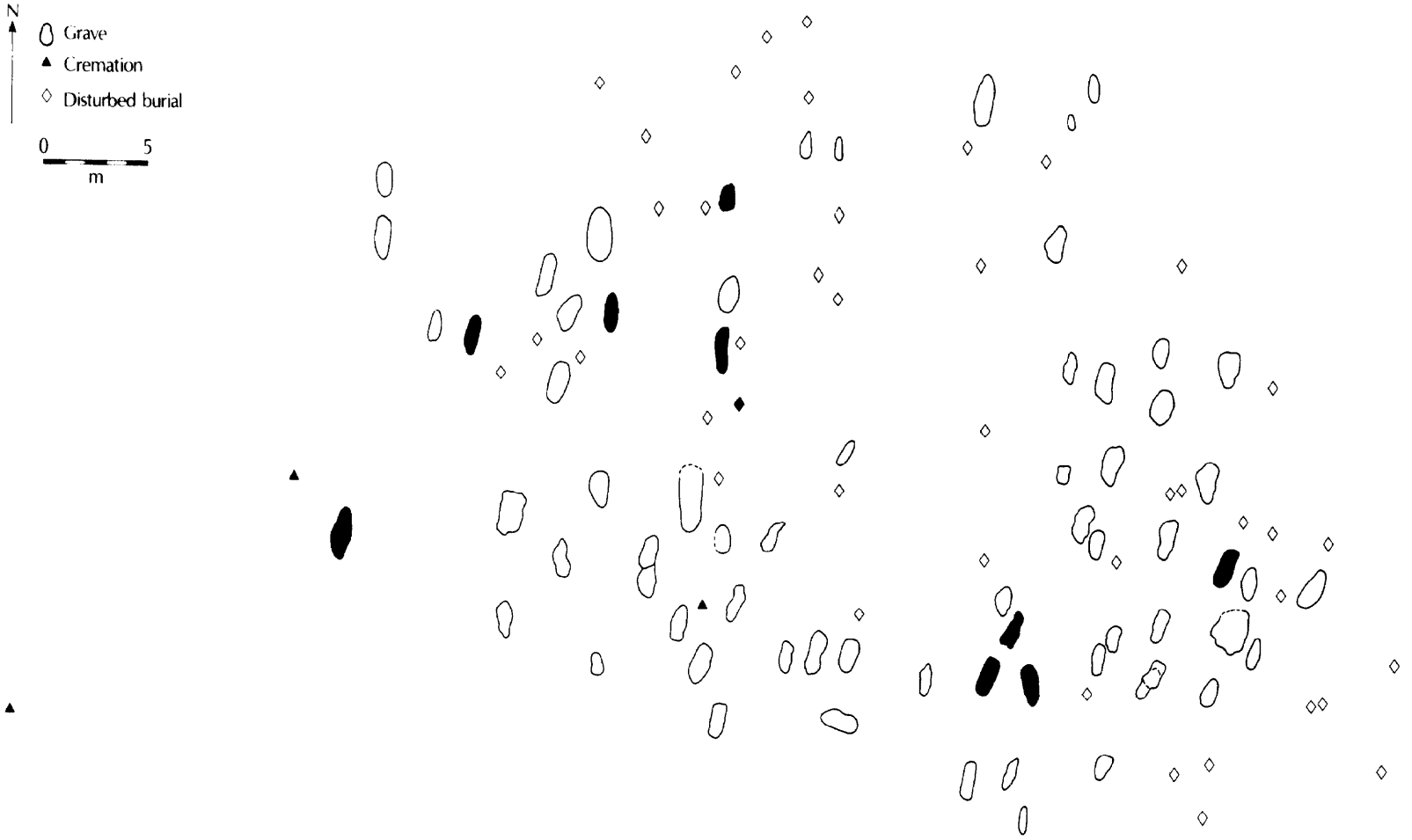


Figure 23 Distribution of weapon graves

Figure 24 Distribution of female dress accessories

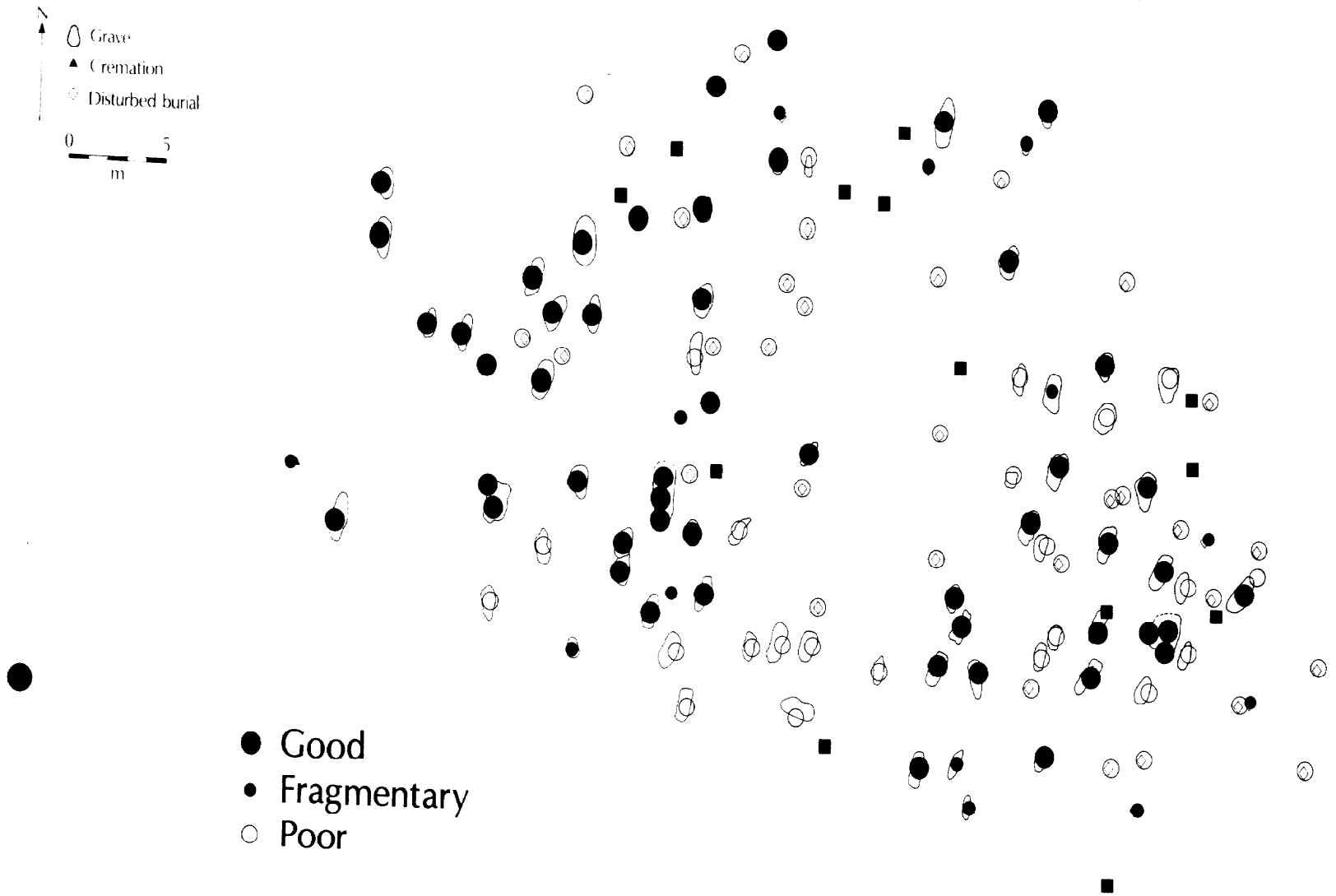


Figure 25 Bone condition at Norton

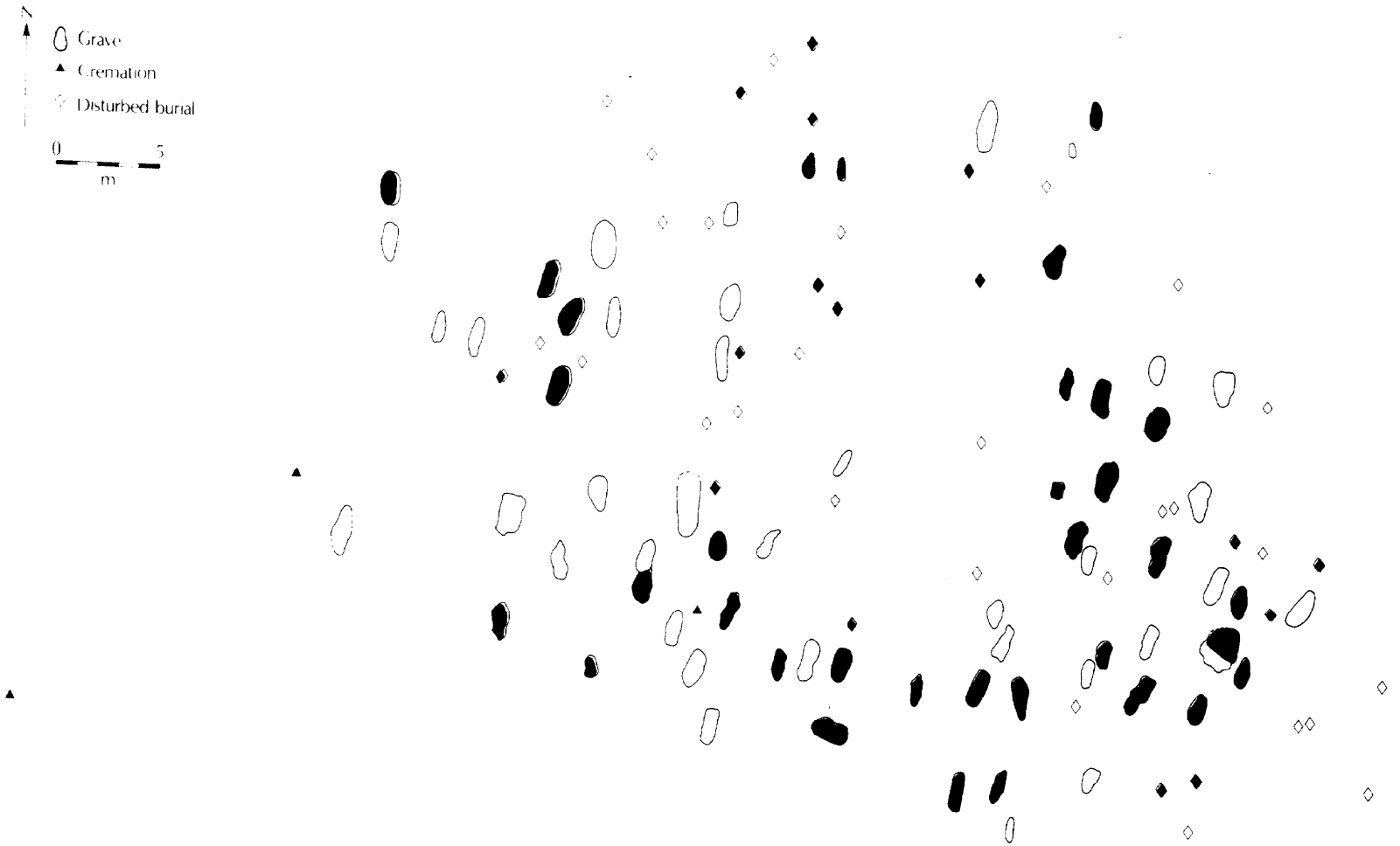


Figure 26 Distribution of graves with beads

Figure 27 Distribution of pottery fabrics

Table 13 Summary of social status and its relationship to grave depth

Key

SOCISTAT	Social status program	F	11-20 cm deep
NAT	Number of artefact types	G	1-10 cm deep
A	61-70 cm deep	s	shallow
B	51-60 cm deep	sh	slight hollow
C	41-50 cm deep	ss	subsoil surface
D	31-40 cm deep	?	unknown
E	21-30 cm deep		

SOCISTAT (Table 8)	DEPTH	NAT (Table 9)	DEPTH	CHART (Table 10)	DEPTH
Grave no		Grave no		Grave no	
40	E	29 (score 11)	F	61	s
29	F	11 (score 10)	sh	80	s
11	sh	40 (score 10)	E	1	?
23	D	52 (score 10)	B	21	s
35	F	35 (score 9)	F	57	E
94	C	70 (score 9)	D	30	s
85	D	63 (score 8)	F	102	F
54	E	22 (score 7)	E	96	E
52	B	85 (score 7)	D	22	E
1	?	94 (score 7)	C	63	F
99	B	7 (score 6)	s	77	sh
70	D	19 (score 6)	s	84	F
63	F	28 (score 6)	B	4	F
22	E	34 (score 6)	B	19	s
86	F	41 (score 6)	s	23	D
21	s	56 (score 6)	C	28	B
19	s	64 (score 6)	E	29	F
28	B	84 (score 6)	F	35	F
68	E	86 (score 6)	F	41	s
82	s	96 (score 6)	E	66	E
7	s	102 (score 6)	F	86	F
44	E	1 (score 5)	?	90	D
48	F	4 (score 5)	F	94	C
102	F	21 (score 5)	s	107	D
56	C	45 (score 5)	E	112	D
84	F	105 (score 5)	E	40	E
4	F	113 (score 5)	E	9	s
9	s	9 (score 4)	s	7	s
96	E	23 (score 4)	D	11	sh
45	E	30 (score 4)	s	98	B
59	E	44 (score 4)	E	2	s
77	sh	49 (score 4)	F	5	s
57	E	54 (score 4)	E	44	E
41	s	55 (score 4)	E	45	E
78	E	59 (score 4)	E	49	F
105	E	68 (score 4)	E	52	B
71	F	77 (score 4)	sh	56	C
27	8	82 (score 4)	s	70	D

SOCISTAT (Table 8)	DEPTH
Grave no	
90	D
66	E
87	F
36	C
39	s
49	F
30	s
107	D
112	D
61	s
34 (weapon grave)	B
64 (weapon grave)	E
55 (weapon grave)	E
104	F
106	D
113	E
2	s
65	G
5	s
72	F
98	B
76	F
74	s
92	F
109	D
51	s
10	E
80	s
100	s
69 (weapon grave)	A
38	C
13	s
12 (weapon grave)	F
17	sh
25 (weapon grave)	s
120 (weapon grave)	A
24 (weapon grave)	D
79	ss
16	D

NAT (Table 9)	DEPTH
Grave no	
90 (score 4)	D
107 (score 4)	D
2 (score 3)	s
48 (score 3)	F
57 (score 3)	E
65 (score 3)	G
66 (score 3)	E
69 (score 3)	A
78 (score 3)	E
87 (score 3)	F
100 (score 3)	s
120 (score 3)	A
5 (score 2)	s
12 (score 2)	F
13 (score 2)	s
24 (score 2)	D
25 (score 2)	s
27 (score 2)	s
36 (score 2)	C
38 (score 2)	C
39 (score 2)	s
42 (score 2)	E
60 (score 2)	C
71 (score 2)	F
72 (score 2)	F
74 (score 2)	s
76 (score 2)	F
92 (score 2)	F
99 (score 2)	B
104(score 2)	F
106 (score 2)	D
10 (score 1)	E
16 (score 1)	D
17 (score 1)	sh
20 (score 1)	sh
26 (score 1)	s
33 (score 1)	s
43 (score 1)	F
51 (score 1)	s

CHART (Table 10)	DEPTH
Grave no	
72	F
85	D
104	F
113	E
105	E
65	G
82	s
106	D
27	s
71	F
48	F
10	E
51	s
109	D
68	E
74	s
76	F
87	F
92	F
59	E
54	E
39	s
36	C

CHART (Table 11)	DEPTH
55	E
34	B
64	E
42	E
60	C
120	A
69	A
12	F
24	D
25	s

SOCISTAT (Table 8)	DEPTH	NAT (Table 9)	DEPTH	CHART (Table 12)	DEPTH
Grave no		Grave no		Grave no	
26	s	53 (score 1)	s	78	E
43	F	28 (score 1)	E	100	s
110	C	61 (score 1)	s	99	B
111	G	62 (score 1)	G	13	s
89	F	79 (score 1)	s s	38	C
42 (weapon grave)	E	80 (score 1)	s	5	s
60 (weapon grave)	C	81 (score 1)	s s	17	sh
62	G	89 (score 1)	F	89	F
101	F	98 (score 1)	B	110	C
108	E	101 (score 1)	F	26	s
20	sh	108 (score 1)	E	111	G
58	E	109 (score 1)	D	16	D
81	s s	110 (score 1)	C	79	ss
119	cremation	111 (score 1)	G	43	F
115	cremation	112 (score 1)	D	101	F
114	cremation	114 (score 1)	cremation	81	s s
33	s	115 (score 1)	cremation	108	E
53	s	119 (score 1)	cremation	20	s h
		3 (score 0)	s	58	E
		6 (score 0)	s	62	G
		8 (score 0)	ss	33	s
		14 (score 0)	G	53	s
		15 (score 0)	sh	114	cremation
		18 (score 0)	F	115	cremation
		31 (score 0)	E	119	cremation
		32 (score 0)	sh		
		37 (score 0)	C		
		46 (score 0)	E		
		47 (score 0)	ss		
		50 (score 0)	F		
		67 (score 0)	E		
		73 (score 0)	F		
		75 (score 0)	G		
		83 (score 0)	ss		
		88 (score 0)	ss		
		91 (score 0)	B		
		93 (score 0)	F		
		95 (score 0)	F		
		97 (score 0)	E		
		103 (score 0)	E		
		116 (score 0)	ss		
		117 (score 0)	E		
		118 (score 0)	ss		

Norton community was spread over three or perhaps four generations, it would consist of some 30 to 40 individuals in each generation, suggesting a hamlet-sized settlement of three or four farmsteads, comparable perhaps with that excavated at West Stow in Suffolk (West 1985). This implies that no more than three or four distinctively-furnished individuals from each gender existed for each generation. Of course, these six to eight men and women per generation might have belonged to just one family. If so, this family would have played a leading role in such a small community. On the other hand, it would surely be more convincing to see these individuals as the principal male and female figures in *each* of the three or four families: the *paterfamilias* and his consort. Their burials were differentiated from those of other members of these families by placing weapons and in one case a bucket with the adult male head of each family and showy jewellery, such as bracelets and cruciform brooches, with their wives. Other women were mostly reasonably well-dressed with annular brooches and clasps, but by contrast their men were placed in their graves with little more than a buckle and a knife and in many cases not even that. It would be unwise to label the unaccompanied burials as belonging to slaves, in view of the number of furnished female graves. Presumably when it came to burial practices, these men preferred to display their family wealth through the costume accessories of their women. The whole population represented here appears likely to have been a farming community. If there were warrior lords, to whom they paid food renders in return for protection, those nobles and their families were buried elsewhere.

5 The Norton cemetery in its national and international context

The excavated cemetery of Norton is in most respects a typical example of a 6th century Anglian cemetery for the region north of the Humber and south of the old Roman frontier along the Tyne. This seems to have been the core area of the Anglian Northumbrian kingdom as it first emerged in the historical record at the end of the 6th century. If it could have been transported intact into the Yorkshire Wolds or the Vale of Pickering, Norton's layout, organisation and contents would not have seemed too out of place, as the frequent comparisons made in this report with the Sewerby cemetery near the Yorkshire coast by Flamborough Head make clear. Only in terms of burial positions is it unusual.

The full range of Anglian female dress accessories is present at Norton: brooches of cruciform and small-long types as well as the ubiquitous annular forms and the occasional penannular, dress pins with spangles, glass and amber beads together with various metal pendants, amuletic objects kept for 'good luck', latchlifter keys and girdle hangers and, of course, sleeve clasps are typical elements of all furnished female graves for this period in Anglian England. The only major brooch types that are absent, which we might perhaps have expected to find at Norton, are the great square-headed forms of Leeds Classes A and B, the simple equal-arm brooches and a specialised type of annular brooch known as a swastika brooch from the openwork design found within the ring. A swastika brooch is known from an unpublished grave assemblage at Catterick excavated by Professor Rosemary Cramp, not too far away, but as yet none has been found in cemeteries north of the Tees, so this absence from Norton may not be particularly significant. Similarly, no square-headed brooches have ever been found further north than Yorkshire cemeteries such as Sewerby and Catterick (Thornbrough) (Hines 1984, maps 3.5 and 3.7). In the region north of the Tees cruciform brooches including the C2 form with its square headplate were exclusively used as the third brooch, rather than this role being shared with square-headed brooches as elsewhere in Anglian England. The third form of Anglian equal-arm brooches are relatively rare and confined to East Anglia and Scandinavia (Hines 1984, 253 and 339, map 5.2).

Some of the Norton graves contained rarities for the region, notably the fine pair of punch-decorated silver bracelets from Grave 40, which are a more frequent, though still rare, feature in the cemeteries of the Midlands and Cambridgeshire region. Such bracelets and similarly punch-decorated silver neck rings are among the most showy metalwork items used to differentiate certain individual women in a community and it would be expecting too much to have found a neck ring at Norton. The base and separate rim of a moderately large applied saucer brooch from Grave 105 comes into a related category, because of its rarity value. Such saucer brooches are commonplace in the Midlands and Cambridgeshire, but are hardly ever seen north of the Trent in the 6th century. The pair with a star design from Staxton in the Vale of Pickering and a single brooch fragment from a cremation urn at Sancton in the Yorkshire Wolds are rare exceptions. Unfortunately we will never know what design ornamented the upper plate of the Norton brooch and without this information it is impossible to suggest a location for its place of manufacture.

The Type G penannular brooches from Graves 40 and 65 presumably reflect access to the products of Celtic British metalworkshops. There is nothing unique about this fact, however, as several types of British penannular brooch are represented in Anglo-Saxon graves (White 1988, 6–25, fig 13.2 and map 1) and most of the recorded Celtic hanging bowls were recovered from Anglo-Saxon burials *(ibid*, 122–8, 135, map 8; Brenan 1991). We need not assume that all the workshops manufacturing such metalwork were located outside the zones of Anglo-Saxon settlement in the 6th and 7th centuries. There is no reason why British craftsmen need not have made their products for Anglo-Saxon as well as Celtic-speaking clients (Brown 1981).

The preference for north-south orientation and the probability that up to half the burials at Norton were crouched could also be taken to be an indication that at least half of its population was influenced by native burial traditions, which, as we have seen, cut across the boundaries of gender and sex divisions or differences between well-furnished and unaccompanied burials. If the community had a mixed population of Germanic-speaking Anglians and native British, we would have a possible explanation in the symbolic presence of these two brooches. On the other hand, it would certainly seem that the greater part of the community had chosen to label itself as 'Anghan' in terms of its dress accessories and weapon types, in spite of the positions in which their kinsmen laid out their corpses in the grave.

It is surely significant here that one of the Type G brooches formed part of the richest Anglian female assemblage present at Norton, accompanying an ex-

tended burial. Admittedly the other was accompanied by just a knife, but then the body was once again extended. In other words, these two brooches were apparently valued for their rarity and unusualness, rather than necessarily being selected as symbols of Celtic-British ancestry. We could only hope to answer the questions as to whether Anglian settlers took over and integrated with a thriving British hamlet, or instead occupied run-down or deserted farmland, if we could locate and excavate the settlement sites and the associated field systems of the post-Roman communities.

Still more exotic are the imports brought from the Frankish continent across the English Channel. The shield-on-tongue buckle and stud set from Grave 22 was probably imported and certainly would not be out of place in a northern French, Belgian or Rhineland cemetery. Such belt fittings are much more common in the southern counties of England and especially Kent. Finds of 6th century Frankish brooches are not unknown in the Yorkshire Wolds, however, for there is the example from Kilham (Brown 1915, pl CLVIII.7). While it is not inconceivable that such exotic objects reflect long-distance trade up the east coast, gift exchange for diplomatic purposes between leading families and then passed downwards socially as rewards for loyal service would be an alternative mechanism. There is also the real possibility of exogamy or arranged marriages with appropriate dowries over long distances as an explanation. An agreement between a southern English, presumably Kentish, family and its northern counterpart is not implausible. In view of the extreme rarity of such buckles and brooches in Anglian England, compared with the situation that prevailed in east Kent, these alternatives to commercial trade and barter should be taken seriously.

The seax from Grave 55 again represents the unusual adoption of a Frankish weapon form, which, prior to the 7th century, was still fairly rare in Kent, let alone elsewhere in England. It was perhaps Kentish-made rather than imported from across the Channel, but another distinctively Frankish weapon of 6th century date, the throwing-axe or francisca has been found in northern cemeteries. As one occurred among the Saltburn finds (Gallagher 1987), not too far from Norton, we are clearly not looking at a unique situation here. Good weapons were highly prized and granted as rewards for loyal service by war-leaders. The only surprise at Norton is that no two-edged swords of the *spatha* type were buried there, particularly in view of the two recovered from the Darlington cemetery nearby (Miket and Pocock 1976). Presumably, though, the Norton seax functioned as a substitute for such a sword. It is possible that this small community, consisting of no more than twelve weapon burials spread over at least three generations, had never received and could not afford to acquire any swords. Alternatively the sword or swords they possessed were far too valuable to be deposited in their graves and were passed on unburied as heirlooms.

If they really did not possess any full-length swords, it might further be argued that the Norton evidence implies primacy in rural hamlet communities for peasant warriors armed with spears and bucklers (apart perhaps for Grave 55), despite Alcock's claim (1981) that such spearmen were notable for occurring in relatively small numbers compared with 'aristocrats' bearing swords in Bernician burial sites. The Norton men buried with weapons were neither lavishly nor poorly equipped. A higher proportion of them than is usual in most Anglo-Saxon cemeteries possessed spears tipped with a bladed head at one end and a ferrule at the other. Their small shields were fastened with nothing more elaborate than simple iron disc rivets and the iron bosses used to protect their hand grips belonged to standard insular Anglo-Saxon forms. The convex-cone boss type (Dickinson's Group 3) introduced to southern England from the Frankish continent at the beginning of the 6th century is entirely absent, which is a little surprising in view of the presence of a seax.

It seems then that we can begin to right a serious imbalance in our archaeological evidence for weapon graves in north-east England and the former kingdom of Bernicia. Certainly it can now be argued with some justification that the Tyne-Tees region was probably settled by many small Anglian farming communities of the Norton type in the 6th century. This would seem more convincing than arguing for a series of, so far unidentified, British settlements, which presumably had been subjected to overlordship by a small, well-armed, Anglian elite, with no more than the occasional Anglian peasant farm or hamlet imbetween. The individual discoveries of 6th century female grave assemblages at Binchester, Castle Eden and Corbridge, together with the isolated finds of cruciform brooches from Piercebridge, Benwell and Whitehill Point and the other sites with small-long brooches etc suggest that Norton/Darlington-sized cemeteries may well have existed at or near these locations. Far north of the Tyne, the small cemetery, presumably only partially investigated so far, at Milfield North may be typical of later 6th-century burial sites in northern Bernicia (Harding 1976; Scull and Harding 1990). If so, other small 6th century community cemeteries may well have existed there, some of them similarly containing women who wore Anglian annular brooches as part of their relatively limited range of dress accessories. These northern cemeteries, whose archaeological investigation is long overdue, should match the evidence for peasant farmstead settlements identified from the air and by excavation at Thirlings, Milfield and New Bewick in the centre of the region between the Tyne and the Tweed.

At a local level in Bernicia then, Norton has provided us with our first, opportunity using modern methods to examine a near-complete Anglian 6th century community through its cemetery. Here at last we have a site which can help us place in context the old finds of a few graves here and a few objects there, which hitherto have characterised the

archaeology of the region between the Tees and the Tyne and further north. In the absence of adequately excavated workshop sites anywhere in early Anglo-Saxon England to compare with those on the small island of Helgo (Holmqvist 1972), it is, of course, rather rash to offer comments on the places of manufacture of the decorated Anglian metalwork at Norton. Nevertheless we are left with the impression that the earlier forms of cruciform brooches (Groups II and IVa) and the small-long brooch had been imported from workshops much further south. The same is true of at least one of the florid Group V brooches (from Grave 30), though the other (from Grave 84) seems at present to be unique. But the popularity of Class C2 cruciform brooches in northern England and in particular in the region between the Tyne and the Tees strongly suggests that workshops which were rather more local to the Norton community were producing their own copies of these brooches, which originated in East Anglia. Such an explanation would help to explain the extreme crudity of the brooches in Graves 61 and 57.

Precisely how late we should date the final inhumations at Norton must be a matter for debate. Many would still accept that at least some of the florid cruciform brooches and the C2 variant could have been buried in the early 7th century, but firm evidence is lacking for this. Other and perhaps better candidates for early 7th century burial here are provided by the triangular buckle plate from Grave 38, deposited after the burial of Graves 36 and 37 there, and the small bone pin and the strange lead ring brooch from Grave 104 on the western edge of the cemetery.

Turning to the significance of Norton on the broader regional level of the Anglian kingdoms and provinces described by Bede in the early 8th century, we have only to compare the Norton grave assemblages with those of cemeteries further south in Yorkshire (eg Sewerby), Lincolnshire (eg Fonaby and Sleaford), Norfolk (eg Bergh Apton, Morningthorpe and Spong Hill) or the Midland counties (eg Longbridge Park, Market Overton and Sandy), to find the same range of female dress fashion accessories. These seem to reflect the adoption of a specifically west Scandinavian mode of dress from Norway in regions which had already been settled by a mixture of peoples from southern Scandinavia and northern Germany, among them people who apparently called themselves Angles. These south Scandinavians and north Germans brought over with them the habit of wearing simple cruciform brooches and small-long brooches to fasten their female costume, but the Norwegian mode added to these the wearing of clasps to fasten long tailored sleeves on an undergown. Dr Hines has argued that clasps were introduced around AD 500 throughout much of eastern England from East Anglia to the Yorkshire Wolds (Hines 1984, 273, map 6.1). As he points out, we cannot identify a single grave in eastern England as belonging to a migrant from western Norway, wearing exclusively Scandinavian dress accessories. Rather we find mixed assemblages of Anglian English and Scandinavian artefacts. On the other hand, it is difficult to see how this new dress fashion could have become so popular so quickly if there had not been a fairly considerable migration of Norwegians and other Scandinavians to eastern England. Nevertheless it should be noted that not every scholar is convinced that these changes of fashion represent migration, rather than trade or other cultural links with southern and western Scandinavia.

It is unfortunate that the only burial at Norton that might conceivably have belonged to a first-generation immigrant from Scandinavia, or perhaps more probably an early convert to the new version of the Anglian female peasant costume, belonged to the woman from Grave 1. We can be certain that not all the dress fittings were recovered from this disturbed burial. Among those that were we find Class B clasps, a pair of spangles and a damaged girdle-hanger. The cruciform brooch attributable to Group II was no longer a working brooch when buried, but had been broken and was sewn onto the garment. It is not too dissimilar from other cruciform brooches which, according to Hines, are among the earliest of those associated with Class B clasps in England. There may once have been other members of the founding community at Norton buried with similar assemblages, but if so, they have presumably been lost to erosion in the hollow way at the north edge of the cemetery Of course the woman found with a small-long brooch in Grave 21 may well be her contemporary, in view of her proximity to the woman buried with an early form of comb, as well as with a pair of annular brooches and Class B clasps, in Grave 29.

We are left with the distinct impression, however, that the Norton community does not represent a band of colonists from Scandinavia. Rather they may be second, perhaps even third generation settlers, from a region further south in Anglian England, such as Yorkshire or Lincolnshire. Once established there, they could have incermarried with their native British neighbours. These Angles seemed to have moved into the Tees valley at about the same time as the Tyne valley was also being settled, ie no later than the first quarter of the 6th century to judge from the Group II cruciform brooches of Norton Grave 1 and Corbridge. The settlement at Norton lasted for at least three generations and perhaps an entire century, according to our analysis of the furnished burials in the cemetery. Their means of access and lines of communication were certainly not limited to coastal and river navigation, however, for the Anglian finds from former Roman forts and their vicinities imply that extensive use was made of the inland Roman road network linking York to the northern limes of Hadrian's Wall via Catterick, Piercebridge and Binchester.

The setting of the Norton cemetery in the landscape is of some interest; it has been suggested that some of the graves may have been set out in reference to the findspot of fragments of Bronze Age collared urn (Fig 8). This might have had some surface

representation in the form of a burial mound, although the local distribution of these monuments off the uplands is limited and there are none surviving in Cleveland north of the Tees (Crawford 1980, 5). A similar association between an Anglian cemetery and Bronze Age barrows can be found at West Heslerton (Powlesland *et al* 1986, 163). Whether or not there was a prehistoric focal point for the cemetery, it seems that at least this part of the local landscape was structured by the hollow-way and field boundaries, and probably also by the natural boundary of the marshy Billingham Bottoms. This boundary system is likely to belong to the Romano-British period, but it survived to be utilised by the cemetery, which clearly occupies a specific part of it, in much the same way as Cemetery 2 at Mucking (Jones and Jones 1974, 29).

None of the Norton settlers could be regarded as noble, but some members of this community were more ostentatiously buried than others. Only 12 men had iron weapons placed with them as symbols of their social status as freemen. Certainly there were never enough of them in any one generation to constitute a warband. They were matched by a woman with silver bracelets in one case and others wearing cruciform brooches in a dozen or so graves. Apparently they were able to obtain these fittings with relative ease, as often as not from distant workshops in other Anglian provinces to the south and even in Kent. The implication is that they actively maintained their contacts with their kinsmen to the south for up to three generations. As already noted, it would seem possible that the attempts by local craftsmen to copy the more elaborate decorated dress fittings late in the 6th century include the disastrously crude versions of Class C2 cruciform brooches found in Graves 61 and 57.

It is difficult to know whether the Angles of Norton and Darlington regarded themselves from the first as Bernicians, in contrast to their Anglian neighbours just south of the Tees in Deira at Saltburn, Yarm and Catterick. Did the river divide or link the communities that farmed either side of its banks, as has been hinted at in an assessment of the pre-Roman Iron Age settlement pattern? (Still and Vyner 1986, 20–21) Was the Tees ever a hostile frontier zone? Did loyalties to two rival royal families for control of a northern Anglian kingdom (which came to be known as Northumbria) from the later 6th century onwards have much effect on everyday life for peasant farming communities such as Norton? Such questions cannot be answered at present from the evidence of the Norton cemetery and its neighbours. There is nothing, other than a greater preference for crouched and prone burial, to differentiate the Angles of Norton from those of Sewerby and other Yorkshire 6th century cemeteries. Certainly Professor Cramp would see the whole Tees valley as a unity and part of Deira rather than Bernicia (Cramp 1988, 74). As already mentioned, however, such a view ignores those elements which Norton manifestly shares in common with other sites between the Tees and Tyne valleys.

The Anglo-Saxon migration across the North Sea and the settlement of eastern Britain should never be thought of as a single monolithic event. Rather it consisted of a long and complex series of processes, which commenced in the first half of the 5th century and which was in all probability still active in the second half of the 6th century. The initial settlements were relatively few and included the Yorkshire cremation cemetery of Sancton in the Yorkshire Wolds (Myres and Southern 1973) and possibly also those at The Mount and Heworth either side of York itself (Eagles 1979, 42, 106–7, 194–5 and 207). Their function may have been as billets for 'Saxon' troops hired by the British to prevent access via the Humber and the Ouse to the richest farmland of lowland Yorkshire by Pictish seaborne raiders. Comparable arrangements appear to have existed around the Wash and the Thames estuary, if the present, distribution of the earliest Anglo-Saxon cemeteries and settlements are any guide (Welch 1981 and forthcoming). Large-scale migration from northern Germany and Scandinavia appears to begin around the middle of the 5th century. Presumably this is the point at which the 'Saxon' mercenaries successfully rebelled against their British paymasters and began to carve out their own territories, according to our historical sources. The Yorkshire Wolds and the Vale of Pickering, the former Roman of the Parisi, became one such territory (Faull 1974; Eagles 1979; Ramm 1978), from which expansion into most of lowland Yorkshire followed in the later 5th century. The settlement at Catterick (Alcock 1987, 250–3) and coastal communities such as Sewerby then provide springboards for further movement north into Cleveland and County Durham in the early 6th century.

Dumville has observed that 'the transmitted royal pedigrees for Bernicia and Deira tell us nothing which we can use to help us to understand the process of Anglo-Saxon settlement' there, but, that 'by the earlier ninth century doctrines had arisen, cast within dynastic terms of reference, that settlement occurred in Deira by the middle of the fifth century and in Bernicia by *c* 500, and that the historical Bernician dynasty began to rule in 547' (Dumville 1989, 218–9). It can be claimed now that Norton's cemetery has helped to demonstrate in archaeological terms the existance of an early 6th century Anglian settlement in the southern region of Bernicia, which certainly antedates Ida's possession of the British promontary fort at Bamburgh by several decades. We still have much to learn from archaeology about the origins and development of the Anglian kingdoms of Bernicia and Deira and it is essential that every opportunity be seized to locate and excavate more Anglian cemeteries and settlements in north-east England. Norton has shown what can be achieved from a single excavation and the forthcoming publication of the West Heslerton cemetery to be followed by that of its associated settlement in the Vale of Pickering will help us to place Norton more fully in its northern Anglian context.

6 The human remains

The Population

by Mandy Marlow

Summary

This report is a summary of the results of analysis of the individuals recovered from the cemetery at Norton. It describes the age and sex structure of the population, the metrical characteristics of the skeletons, the incidence of non-metrical traits, stature reconstructions and the evidence derived from dental condition. A separate section by Dr D A Birkett considers pathological changes observed in the bones. More detailed information on all aspects of the skeletal series can be found in the archive report at Cleveland County Archaeology Section.

Introduction

The pagan Saxons from Norton were the first sub stantial group of their kind to have been excavated in north-east England. The relatively short period for which the cemetery was in use, *c* AD 520–620, improves the accuracy of estimates of population structure and inter-relationships.

Bone had been preserved in 109 of the 120 numbered burials. Most of the grave cuts contained only one body, but the disturbed or shallow interments frequently revealed a mixture of specimens. Examination showed there to be the remains of at least 126 individuals.

Preservation varied considerably throughout the site and, although the number of skeletons recovered was high, most had survived only in part, with just 44 being anywhere near complete (Fig 25). Although some material was too fragile and fragmentary to reconstruct, the main problem was erosion of the bone surfaces which severely restricted metrical analysis. Stature reconstruction was possible for only 30 adults and in only 20 cases could any cranial measurements be made. Nevertheless in all but 13 instances some estimate of age and/or sex was possible.

The characteristics of the Norton series have been compared with other burial populations from the region; from the later Saxon monastic cemetery at Monkwearmouth (Wells *et al* forthcoming), the later Saxon/medieval monastic cemetery at Jarrow (Wells, *ibid),* and the medieval cemeteries of Hartlepool Friarage Field (Birkett 1986) and St Helen on-the-Walls, York (Dawes and Magilton 1980). It should be noted that these cemeteries all received burials over longer periods than Norton. Similarities to the pagan Saxon groups from Sewerby (Hirst 1985), Kingsworthy (Hawkes and Wells 1983) and Portway, Andover (Cooke and Dacre 1985), and later Saxon series from North Elmham (Wells 1980) and Thetford, Red Castle (Wells 1967) have also been considered.

The sex structure of the population

The general skeletal form of the Norton series differed from that shown by later groups from the north-east; individuals were generally taller and more gracile with less clear-cut sexual distinctions. Most females had relatively narrow hips and sciatic notches of irregular shape, Male skeletons were not particularly robust. Some specimens were at odds with the overall trend, however, and such variations may be the product of interaction between early intrusive Saxons and native British groups. More detailed consideration of skeletal type is given below.

Determinations of sex were made by taking the characteristics of all major bones into account, but most weight was given to the pelvic form. Unfortunately most pelves were too incompletely preserved to allow measurements and the calculation of indices. Values of the ischio-pubic index are available only for three individuals, In many cases, however, the sciatic notch had survived and the angle of this was traced and measured.

Sex estimates were made for all the individuals within the series (Table 14). Reliability of these determinations obviously varies depending on the degree of preservation of each skeleton. In some instances, denoted by a single question mark, the remains were either too fragmentary to reach a decision or else the sex indications were contradictory. ?Male or ?Female indicates a tentative assessment of gender where a specimen was generally more male than female or vice versa. Because of the inaccuracies inherent in sexing juvenile material sex determinations were made only for adult specimens, ie, those over 17 years of age.

For the adults sexed to varied degrees the ratio of males to females is 1.1:1, 51% of these individuals being male and 49% female. Approximately equal proportions of the sexes in the population suggest that it was demographically normal. The gender ratio would shift if a greater number of the fragmentary and unsexable remains were originally more delicate female skeletons, but this would still represent no more than a random deviation from the norm.

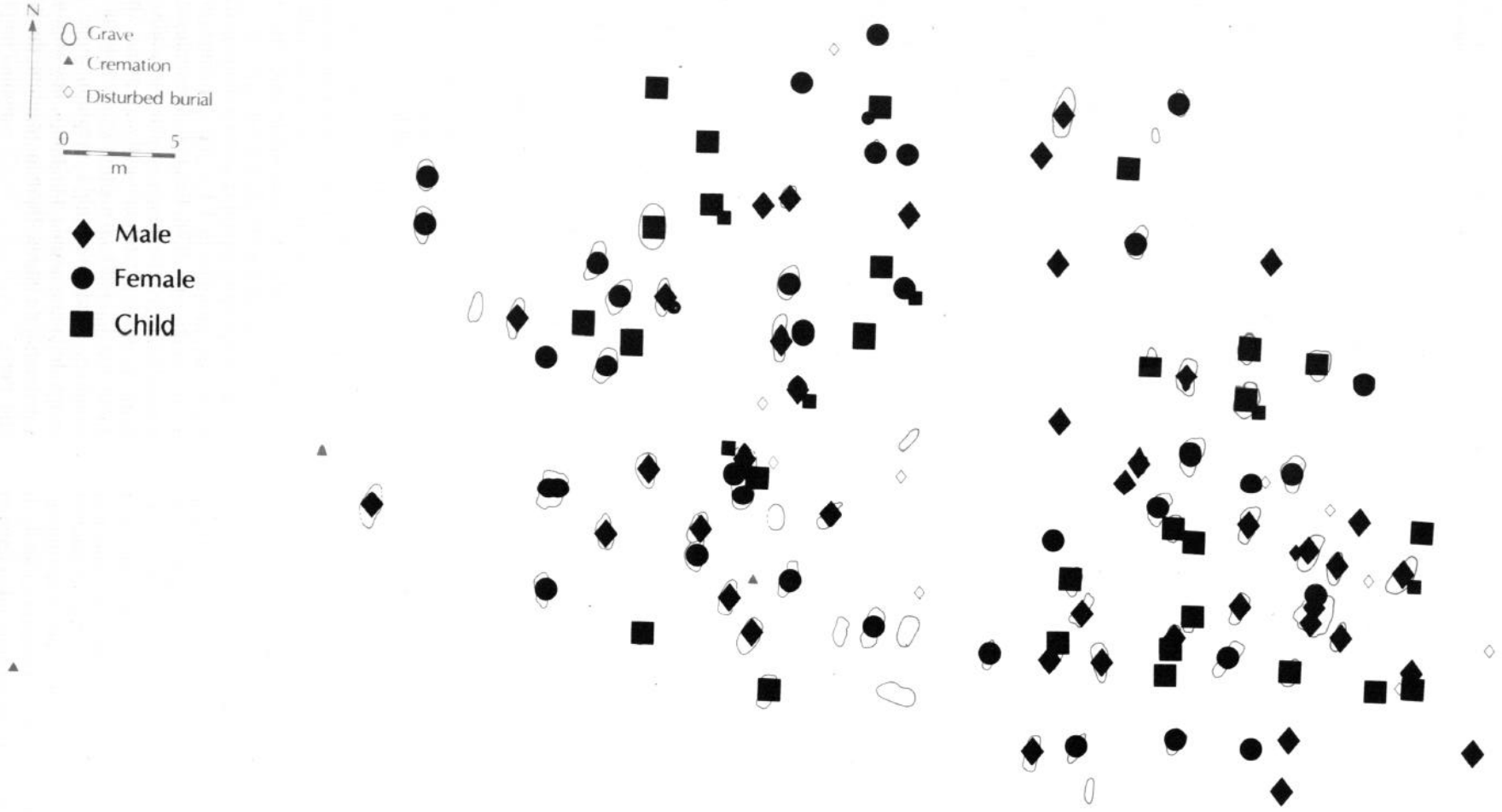


Figure 28 Distribution of the sexes

Table 14 Sex distribution

		Male	?Male	Female	?Female	?	Total
Adults —	No.	32	5	27	8	15	87
	%	37	6	31	9	17	100

In general these distributions of the comparative cemeteries were very similar to those for Norton. At the monastic sites of Jarrow and Monkwearmouth, (Wells *et al,* forthcoming) the number of men was slightly increased by clerical interments. A deviation from the norm of similar degree, but reverse trend was shown at Kingsworthy (55% female, 44% male, Hawkes and Wells 1983, 32) and Sewerby (57% female and 42% male, Hirst 1985, 34) with female inhumations outweighing those of males. The pagan Saxons from Portway, Andover, (Cook and Dacre 1985, 67–8) showed a normal gender ratio until sex determinations based on grave goods were included, boosting the proportion of women to 63% of sexed adults. Such a low frequency of male remains is often attributed to death in warfare with burial near the site of conflict. Although the warrior status of several men from Norton was indicated by grave goods of spears and shields, the normal sex ratio suggests that in this community, either most males lived and died relatively peacably at home, or efforts were made to recover the bodies of casualties. The low incidence of skeletal injury supports the former contention. The organised layout of the inhumations at Norton indicates that some form of grave marking was employed. From the distribution of male, female and juvenile burials there is no evidence of any age or sex segregation within the cemetery (Fig. 28).

The age structure of the population

Assessments of the age at death of juvenile skeletons were based on dental eruption, long-bone shaft length, and sequences of epiphyseal fusion (as discussed at the Workshop of European Anthropologists (WEA): Ferembach et al 1980, 528–32). Values represent developmental stages established for modern populations and their accuracy for past groups is uncertain. Living children show considerable variation in the chronological ages at which these stages are reached and a possible range is therefore given for each age estimate. This variation tends to increase with age, the range of the eruption pattern typical for a 2 year old is æ 8 months, for example, whilst that for an 11 year old is æ 30 months.

For the purposes of population analysis, individuals over 17 years of age are classed as adult. It is easier to estimate the age of younger adults and most accuracy can be achieved between the ages of 17 and 25 where epiphyseal fusion is completing. Age related changes in the pubic symphysis could only be assessed in four instances. Fully mature specimens were aged using dental attrition (Brothwell 1981, 72), and evidence of degenerative pathologies; note was also taken of cranial suture fusion although this technique is now generally out of favour (Ferembach *et al* 1980, 533–4).

The adult age determinations in the Grave catalogue are expressed as a median with an associated range. When little skeletal or dental evidence was available more general terms such as middle-aged, old, or simply adult have been applied.

Child mortality

The relative incidences of juvenile deaths at Norton are shown (Table 15 and Fig 29), with comparative figures for Jarrow being shown in the former. 30.2% of the Norton burial population died before reaching 18 years of age. Similar figures of 27%, 28.3% and 28.2% were obtained from St Helen-on-the-Walls, York (Dawes and Magilton 1980, 63), Kingsworthy (Hawkes and Wells 1983, 32) and Thetford (Wells 1967, 155), but at preconquest and medieval Jarrow the number of children was higher, 42.9% and 39.2% respectively.

The average age at death in childhood from Norton was 9.4 years (S. D. 4.5). This is also noticeably different from values at Jarrow (later Saxon and medieval) and Thetford, where the mean ages were 7.0, 5.5 and 2.6 years. The reason for this

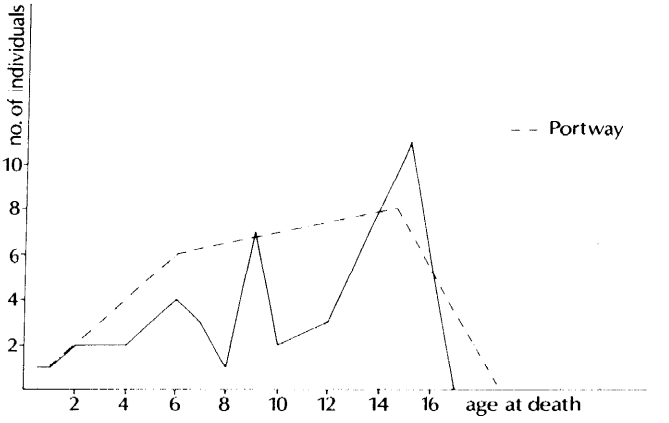


Figure 29 Age distribution of juvenile burials

variation seems to be the low number of babies and infants recovered at Norton. From Table 15 it can be seen that only 10.6% of the Norton children were less than 4 years of age, whilst at Jarrow infants this young constitute 30% of the juvenile figures. For Thetford the level was higher still, at 75%. At pre-Conquest Jarrow five of the children were newborn (6.8%), while at Norton the youngest was aged six months. Sewerby (Hirst 1985, 34), Portway, Andover, (Cook and Dacre 1985, 62), North Elmham (Wells 1980, 252–3) also showed a paucity of the remains of babies.

The low incidence of very young burials at Norton is unlikely to represent the true rate of mortality. There is no reason to suppose that survival at birth and through infancy would have been better than at the other sites considered and other reasons for the under representation must be sought. Young bones are very fragile and differential preservation may play some part. The graves of babies do not need to be dug as deep as those of larger individuals and so are easily disturbed and damaged by sub sequent surface activities. For the non-Christian series in particular it must also be considered that infants may have been the subject of alternative burial practices and their bodies not buried in the communal cemetery.

The peak of Norton deaths at 15 years is not repeated at other sites, although at Portway, Andover, (Cook and Dacre 1985, 61) the 10 to 15 age group is the most frequent. It is possible that the high rate of deaths at 15 may be related to the early adoption of adult roles and the hazards associated with this, childbirth or work accidents, for example. Other fluctuations in the incidence of child mortality are difficult to explain and may be a product of the small sample size.

The causes of these juvenile deaths can only be the subject of speculation for most childhood illnesses do not leave traces in the skeleton. As in the Third World today, however, poor hygiene and nutrition would increase the severity of childhood infections.

Adult mortality

Of the 87 adult skeletons from Norton reasonable age estimates could be made for 75%; details of the age and sex structure of these 66 burials are given in Table 16 (Fig 30). Individuals sexed as ?Male and ?Female are included in the figures, as they made no significant difference to trends or percentages. Data from St Helens, York (Dawes and Magilton 1980) is also given for comparison.

It can be seen that the individuals at Norton do not seem to have survived as long as their counterparts at St Helens, York. 45.4% of the Norton adults which could be firmly aged had died by the age of 25 and only 6.1% survived to pass 45 years. At St Helens, the higher incidences of death were delayed to between 26 and 45 years and in this later medieval series individuals also lived to be over 60.

It is worth noting here that there is probably a tendency to underestimate the ages of cemetery series (Dawes and Magilton 1980, 63). As previously mentioned, determinations for middle-aged and old adults are most difficult and least reliable. At both Norton and St Helen's toothwear gave consistently younger ages than suggested by other evi-

Table 15 Age distribution for child burials

	Norton		Jarrow			
			Pre-conquest		Medieval	
Age	No.	%	No.	%	No.	%
< 2 years	2	5.3	18	24.7	9	12.2
2 to < 4 years	2	5.3	14	19.2	16	21.6
4 to < 6 years	2	5.3	4	5.5	8	10.8
6 to < 8 years	7	18.4	3	4.1	14	18.9
8 to < 10 years	8	21.0	7	9.6	5	6.8
10 to < 12 years	2	5.3	4	5.5	8	10.8
12 to < 14 years	3	7.9	2	2.7	8	10.8
14 to < 16 years	11	28.9	-	-	2	2.7
16 to < 18 years	0	0	6	8.2	4	5.4
?	1	2.6	15	20.5	-	-
TOTAL	38		83		83	
% of burial population		30.2		31.8		31.3

Table 16 Age and sex distribution of adult burials

	Norton				St Helens, York			
	Male	**Female**	?	**All**	**Male**	**Female**	?	**All**
18–25 years								
No.	16	14	0	30	30	41	2	73
% of age group	53.3	46.7	-	-	41.1	56.2	2.7	-
% of sex group	47.0	48.3	-	-	13.6	17.1	14.3	-
% of total	24.2	21.2	-	45.4	6.3	8.6	0.4	15.4
26–35 years								
No.	12	10	2	24	49	93	6	148
% of age group	50.0	41.7	8.3	-	33.1	62.8	4.1	-
% of sex group	35.3	34.5	66.7	-	22.2	38.9	42.9	-
% of total	18.2	15.2	3.0	36.4	10.3	19.6	1.3	31.2
36–45 years								
No.	4	3	1	8	72	67	5	144
% of age group	50.0	37.5	12.5	-	50.0	46.5	3.5	-
% of sex group	11.8	10.3	33.3	-	32.6	28.1	35.7	-
% of total	6.1	4.5	1.5	12.1	15.2	14.1	1.1	30.4
46–60 years								
No.	2	2	0	4	42	24	0	66
% of age group	50.0	50.0	-	-	63.6	36.4	-	-
% of sex group	5.9	6.9	-	-	19.0	10.0	-	-
% of total	3.0	3.0	-	6.1	8.9	5.1	-	13.9
61+ years								
No.	0	0	0	0	28	14	1	43
% of age group	-	-	-	-	65.1	32.6	2.3	-
% of sex group	-	-	-	-	12.6	5.9	7.1	-
% of total	-	-	-	-	5.9	3.0	0.2	9.1

dence *(ibid)*. Differential preservation according to age may also lead to under representation of the oldest individuals. Bones become more fragile in old age and may not survive burial. It is possible that a high proportion of the adults that could not be aged accurately were in fact elderly.

The populations at Norton and St Helen's, York, show differences not only in longevity, but also in sexual patterns of mortality. At Norton the sexes showed a very similar age distribution. 48.3% of the female deaths and 47.0% of the male deaths occurred between 18 and 25 years. For St Helen's there was a distinct sexual dichotomy in mortality. The majority of females were aged between 26 and 35 years at death, whilst most males were between 36 and 45 years; more men than women also reached old age. The pagan Saxon group from Sewerby (Hirst 1985, 34) showed peaks of deaths in identical age ranges to those for St Helen's, but the Portway series revealed no sex difference in mort-

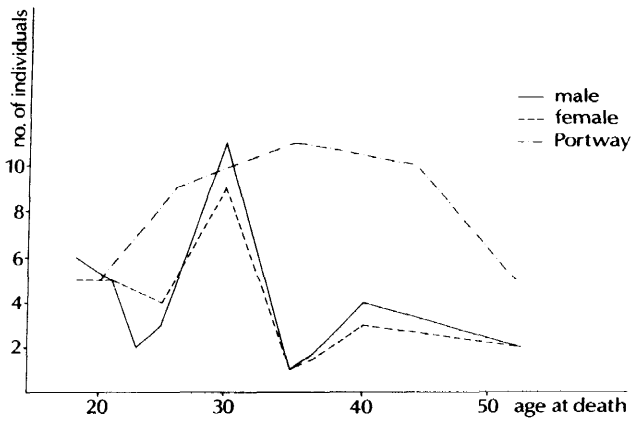


Figure 30 Age distribution of adult burials

ality as at Norton (Cook and Dacre 1985, 62). In most early populations males appear to have outlived females and the earlier death of women has been regarded as an indication of the stresses and risks of continual pregnancy.

Comparison of mean values of age at death with those for other cemeteries turther illustrates the shorter lifespan and different sex pattern shown at Norton (Table 17). The average age at death for a group is calculated using the median year of the age range of each individual.

The lower life expectancy seen at Norton is perhaps not so surprising for a cemetery that is likely to have served a small rural community or communities. The social and economic organisation of the later, urban and ecclesiastical groups was probably more developed, particularly for those associated with monastic establishments as at Jarrow, Monkwearmouth and the cathedral at North Elmham. Improvements in living conditions and a more reliable diet would increase survival rates.

The north-eastern populations show little sex difference in average age at death; for Norton the figures are almost identical. At Kingsworthy the expected trend is reversed. The differences in sexual patterns of mortality are difficult to explain. The highest percentage of female deaths might be expected to occur in early adult life and be associated with childbirth. At Norton the incidence of male deaths at this time is equally high. A generally high mortality rate of young adults might obscure any normal sex-related causes of death. There is no evidence that young male deaths have been boosted by any violent activity. Levels of adult maternal mortality may not be so obvious if girls married in adolescence and the deaths associated with childbirth and obstetric problems were occurring earlier in life. As previously mentioned, a high incidence of individuals aged at about 15 was identified from Norton, but not at the other sites. Unfortunately, reliable sexing of these young specimens was not possible and so the position remains unclear.

Table 17 Mean age at death

Site	Male	Female
Norton	28.4	28.5
Jarrow		
Pre-Conquest	41.5	40.7
Medieval	40.2	39.4
Monkwearmouth	37.5	36.0
Kingsworthy	37.0	39.4
North Elmham	38.2	35.8
Thetford	38.1	30.4

Population size

By constructing a life of all aged burials it is possible to estimate the size of the population from the overall life expectancy (Boddington 1987, 184). The mean size of the population contributing to the Norton cemetery is thus calculated at 28 individuals. This figure should be accepted with a degree of caution for the model assumes a static population and at Norton the true rates of infant mortality are unknown.

Stature

Table 18 summarises estimates of lifetime stature. The Norton values are based on 24 reliably and 6 questionably sexed individuals, as the latter did not significantly alter the mean. The height of each individual was calculated from long-bone lengths using the regression equation devised by Trotter and Gleser (Trotter 1970, 77). The formulae were devised for modern white Americans and so the true accuracy for Anglo-Saxons is uncertain.

On average individuals at Norton were slightly taller than those from the other cemeteries. The relative difference is larger in the females than the males. This higher stature could either be the result of genetic endowment, or nutritional and environmental factors, which enabled individuals to better achieve their potential. The mortality rates at Norton suggest that the living conditions were not superior to those of the other groups and the former explanation seems more plausible. The male height range of 18.6 cm is small and taller individuals were recovered at Jarrow, Monkwearmouth, Kingsworthy and St Helen's. The female range is greater, 27.8 cm and is exceeded only by St Helen's, York (Dawes and Magilton 1980, 28–9). No females were taller than those at Norton. The difference of

Table 18 Stature

Site	Sex	Mean stature (cm)	Range (cm)
Norton	Male	173.5	164.1 – 182.8
	Female	164.1	148.3 – 176.1
Hartlepool	Male	167.8	162.0 – 177.3
	Female	162.1	149.5 – 173.9
Jarrow:			
Pre-Conquest	Male	172	163 – 186
	Female	159	149 – 166
Medieval	Male	171	158 – 190
	Female	159	152 – 168
Monkwearmouth	Male	173	161 – 192
	Female	160	154 – 169
Portway	Male	171.7	164 – 165
	Female	160.5	154 – 165
St Helens, York	Male	169.3	153 – 184
	Female	157.4	145 – 173
North Elmham	Male	172.1	162.3 – 180.7
	Female	157.4	142.4 – 169.7
Thetford	Male	169.7	161.3 – 175.4
	Female	158.1	151.9 – 167.0

9.4 cm between male and female stature is relatively small. Perhaps sexual discrepancies in diet and health experienced elsewhere did not apply in the small community buried at Norton. Certainly the mortality patterns suggest that there was little discrimination between sexes in adult life.

Metrical analysis

Skeletons were subjected to a standard series of measurements (Trotter 1970, Krogman 1978, Dawes and Magilton 1980). These, together with indices calculated from them and mean values for the population, are in the archive report. Selected features are dealt with in more detail below. Only definitely sexed individuals have been used.

Platymeric index (Table 19a and 19b)

This index measures the degree of antero-posterior flattening of the femoral shaft.

All the male means fall into the hyperplatymeric range, below 75, which indicates a very flat upper femoral shaft. The average index for left female femora is also hyperplatymeric, but for the right side it is over 75, typical of a platymeric or not so flattened shaft. At Jarrow, Monkwearmouth (Wells *et al*, forthcoming) and North Elmham (Wells 1986, 255) means of the same orders were obtained, but the tendency at Hartlepool (Birkett 1986) was to moderate or eurymeric femora with values over 85.

The tendency at Norton for male femoral shafts to be more flattened than female ones is reversed at Jarrow, Monkwearmouth, Hartlepool and North Elmham. At St. Helens, York, most thigh bones showed some degree of front to back flattening. The platymeric form has been attributed to many causes including cultural habits and poor nutritional levels. Incidence is more common in archaic groups.

Platycnemic Index (Table 20a and 20b)

This index measures the degree of transverse flattening shown in the tibia1 shaft.

The female means all fall within the eurycnemic or broad category, 70 and over, as does that for right male tibiae. The other two male means indi-

Table 19a Platymeric index Means and range

Sex	Mean left	Mean right	Mean L & R	Range
Male	70.4	71.9	71.2	60.5 – 82.0
Female	73.7	76.2	75.0	60.0 – 93.3

Table 19b Platymeric Index: Distribution %

Sex	Hyperplatymeric	Platymeric	Eurymeric
Male	70.0	30.0	0
Female	46.0	46.0	8

Table 20a Platycnemic Index: Means and range

Sex	Mean left	Mean right	Mean L & R	Range
Male	68.9	70.6	69.8	56.1 – 81.8
Female	72.1	75.0	73.5	59.4 – 91.7

Table 20b Platycnemic Index: Distribution %

sex	Platycnemic	Mesocnemic	Eurycnemic
Male	19.0	46.0	35.0
Female	4.0	22.0	74.0

cate a moderately flat bone shaft. Average values for the other cemetery populations are similar.

The platycnemic category identifies a flat tibia shaft. Few individuals at Norton showed this characteristic and similar low levels were found at Jarrow, Hartelpool and St Helens. The causes of the variations in shaft form are uncertain, but again flattening is more common in past populations.

Cranial indices

The mean values of cranial measurements and of the indices calculated were also recorded. The preservation of most skulls was poor and so values are based on a small and possibly unrepresentative sample. Because of this, detailed comparisons would be misguided, but a few features are worth comment.

The mean cephalic indices for Norton and other groups are shown in Table 21. The Norton values are typical of long or dolichocephalic skulls (K). Averages for Jar-row specimens and the St Helens, York men are mid-range, whilst the Hartlepool group and the St Helen's, York, women show brachycephalic or rounded skulls. The data fits well into a temporal trend to brachycephaly shown in this country, Anglo-Saxon series typically being more long headed and later medieval individuals more round headed. Long headedness is also a feature of Scandinavian populations.

At the Saxon cemetery of North Elmham 57.6% of adults were dolichocephalic and 42.4% brachycephalic, which compares well with figures of 61.5 and 38.5% for Norton. Other cranial characteristics of the Norton specimens show no obvious differences to the pattern of other Anglo-Saxon groups.

Non-metrical traits

Discrete or non-metrical variants are genetically determined skeletal features which do not have a deleterious effect on health. These variants in normal form are discontinuous, they are either present or not. They may be the result of simple inheritance and if so may be used to investigate genetic relationships within and between burial populations.

The frequencies of the non-metrical traits identified in the Norton skeletons are detailed in Table 22. Only the more commonly detected variants are considered. They do not seem to be sex-linked so data for both sexes has been pooled.

N is the number of individuals in which observations of the feature could be made and + is the number which shows the positive trait. The percentage

Table 21 Average cephalic index

	Norton		Hartlepool		St Helens	
	Male	Female	Male	Female	Male	Female
Index	72.0	74.0	81.0	80.0	79.4	81.1

Table 22 Non-metrical traits

Trait	N	+	%
Septal aperture	45	21	47
Third trochanter	47	7	15
Vastus notch	36	4	11
Acetabular crease	24	1	4
Perforate sternum	4	2	50
Double transverse foramen In cervical vertebra	12	3	25
Metopic suture	47	7	15
Sagittal ossicles	33	1	30
Coronal ossicles	33	1	30
Lambdoid ossicles	33	9	27
Inca bone	33	2	6
Epipteric bone	9	1	11
Mandibular tori	53	2	4
Palatine tori	17	1	6
Sagittal sinus turns left	36	4	11
Double root 4	60	20	33
Shovel incisors	61	22	36

values are therefore not the total population, but the specimens in which certain features were preserved.

The most noticeable feature of the Norton group is the abundance of individuals with septal apertures of the humerus, 47.7%, 12 of these specimens were female, 8 male and 1 of unknown sex. At Jarrow, Monkwearmouth, Hartlepool and North Elmham values were around 10%. At North Elmham it should be noted that there is a marked difference in frequency between male (2%) and female (20%) incidences of this trait (Wells 1980, 264). Apart from this, patterns are not significantly different from those for comparative series. There was a high proportion of burials showing perforation of the sternum, 50%, but this figure depends on a total sample of only four and so seems unlikely to be reliable.

Frequencies for a third trochanter were lower than for Jarrow and Monkwearmouth, but higher than at North Elmham and Hartlepool. Norton shows a marginally higher incidence of retention of the metopic suture than at the other cemeteries. Lambdoid sutural bones are not as common as at St Helens, York, or Monkwearmouth but are more abundant than at North Elmham and Jarrow.

The high incidence of a particular non-metric trait, septal aperture of the humerus, suggests that the cemetery at Norton served a relatively isolated breeding community with a small gene pool. This seems to fit the rural environment, but is not reflected in the frequencies of other characteristics. It is possible that the community had not been stable for a sufficient time period to establish random variations and that the abundance of this one trait was due to founder effect.

The distribution of non-metric variants within the cemetery at Norton shows some evidence of clustering, but no relationships or distinct family plots have been identified at this stage, although there is clearly potential for further assessment (Fig. 31).

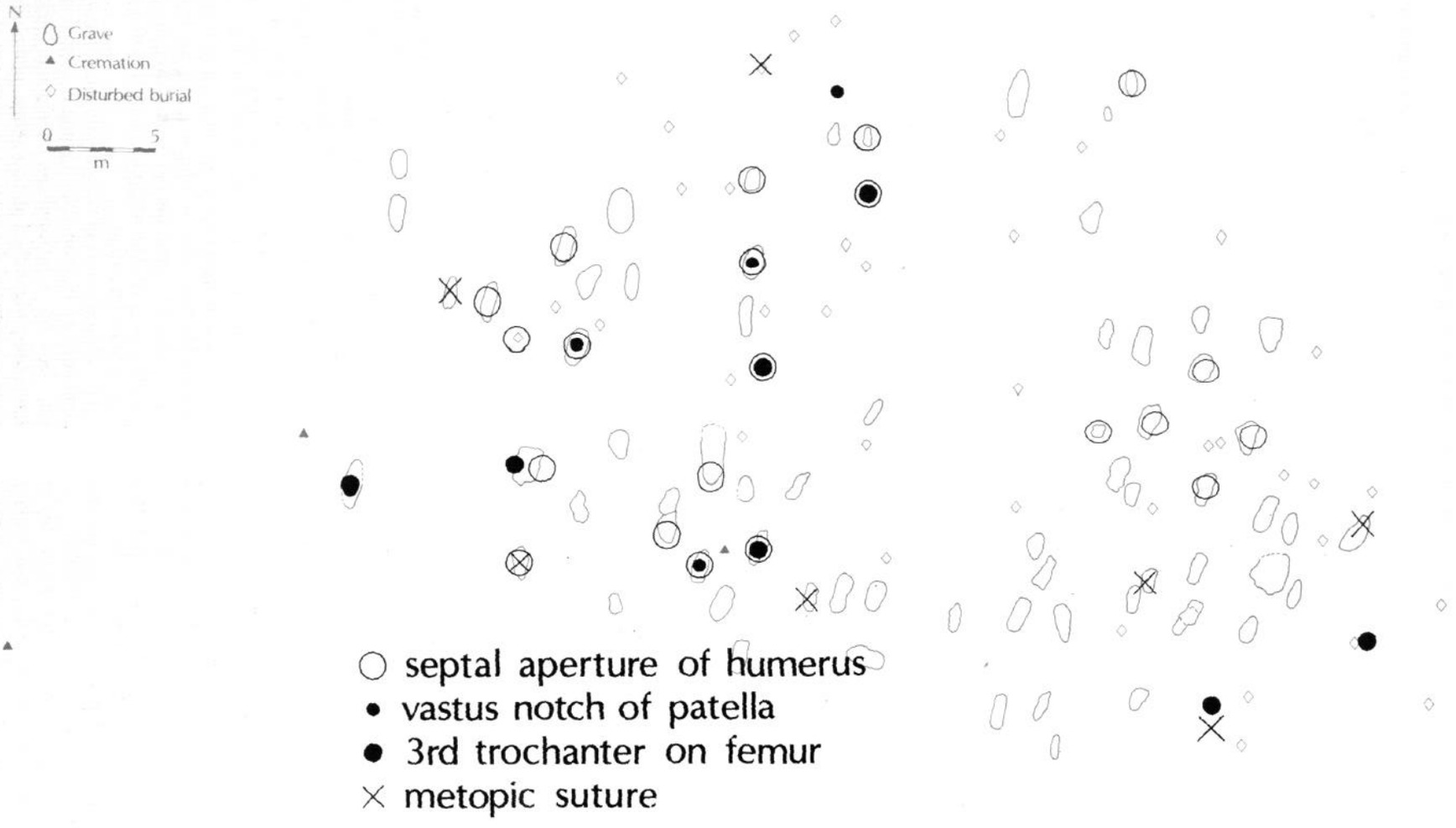


Figure 31 Distribution of the non-metrical traits

Table 23 Percentage incidence of ante-mortem tooth loss

	Norton	Hartlepool	Jarrow		North Elmham
			Pre-Conquest	Medieval	
Male	4.6	19.4	5.0	11.9	9.8
Female	3.6	17.6	3.1	7.7	12.1
All	4.1	18.6	4.2	9.5	11.1

Table 24 Percentage incidence of caries in remaining teeth

	Norton	Jarrow		North Elmham	Hartlepool
		Pre-Conquest	Medieval		
Male	2.7	1.1	2.3	6.8	4.4
Female	4.3	0.8	5.7	6.1	8.0
All	3.4	1.0	4.2	6.4	6.1

Dental evidence

In 63 adult skeletons from Norton some part of the upper and/or lower jaw had survived; mandibles being more prevalent than maxillae. 1128 intact tooth sockets could be identified, together with 1325 teeth. 46 sockets in 11 individuals indicated lifetime tooth loss. Only one mandible was completely edentulous. Levels of tooth loss in different series are detailed in Table 23.

The proportion of teeth lost by individuals at Norton was lower than in any of the other groups be they later Saxon or Medieval. The causes of tooth loss are complex, but may be related to advanced caries and periodontal disease. This suggests that the population from Norton may have had healthier gums and teeth.

In both sexes more lower teeth were missing than upper ones, approximately six times as many. Of the teeth lost 19.6% were incisors, 4.3% canines, 8.7% premolars and 67.4% molars. The first molar is usually the tooth most at risk, but for females the second molar was most frequently absent. Compared to Jarrow (Wells *et al*, forthcoming) and Hartlepool (Marlow 1986, 299), the Norton specimens showed a very low loss of premolars and a slightly increased loss of incisors. The reasons for this are not clear, but front teeth are often knocked out by falls or blows.

The caries rate at Norton is relatively low, as can be seen in Table 24. 18 adults had carious teeth and of these just over half had only one tooth affected. The childrens teeth showed little decay.

Although the Norton males showed a greater lifetime tooth loss, the teeth of the females are more carious. A similar sex difference in the frequency of caries also occur at both Hartlepool and Jarrow, females having roughly twice as many cavities. Variations in diet, such as differential intake of meat and cereals may account for this pattern.

In both sexes caries were most common in the maxilla and only the premolars and molars were found to be affected. The tooth usually most vulnerable to decay is the first molar. This was not the case for the females from Norton or Hartlepool, where the second molars showed the highest incidence. The second molar is also most frequently lost by Norton women and this may be a causal relationship. When it was possible to determine the origin of the caries cavities the majority, 52.9%, were interproximal. This was also the case at Hartlepool, Jarrow and North Elmham, although in modern teeth and at St. Helen's, York, occlusal caries predominated (Dawes and Magilton 1980, 93–4).

Eight periodontal abscess cavities were recorded in 5 individuals from Norton. This gives a frequency of 0.7% in the erupted teeth compared with 2.4% at both Hartlepool and Monkwearmouth and 1.1% at Jarrow. Periodontal disease causes the retraction of bone along the alveolar margins of the tooth sockets. Some degree of resorption was seen in more than half of the adult jaws available. In only 5% could it be said to be severe and in these cases the condition was usually more marked around the molar teeth.

Most adult teeth had some degree of calculus coating, which suggests that practices of oral hygiene were restricted. Tartar is reduced when a tough, chewy diet is consumed. Few individuals had heavy deposits and these seemed to be related to reduced jaw use due to severe caries or periodontal disease. Just over 50% of individuals with teeth remaining showed slight evidence of hypoplasia. This can be attributed to incidences of childhood disease and poor nutrition. The dental evidence from Norton suggests generally healthy teeth with low levels of caries and gum diseases.

Conclusion

The cemetery at Norton seems to have served a small, demographically normal community. The general physique of the individuals, tall, gracile and long headed, distinguishes them from later medieval groups in the region. A noteable feature of the Norton group is the high incidence of septal apertures in the humerus which, with other variations, suggests a restricted, in-breeding, community.

As well as physical differences, the burial population from Norton also shows demographic differences. Individuals at Norton died younger than seems to be the case elsewhere; 45% of adults were no older than 25 years, and there was no sex variation in mortality rates. The remains did not show significant signs of ill-health or malnutrition and the early deaths may simply reflect a hard subsistence economy. The low number of child inhumations in the cemetery is unlikely to represent the true level of infant mortality and may reflect alternative burial practices.

Skeletal pathology

by David Birkett

Pathological findings in excavated skeletons are used not only to detect the ocurrence of disease and trauma in individuals among the population, but through studying the prevalence of various disorders in the whole population, to try to establish something of the conditions under which they lived in terms of diet, occupation and general state of health.

Arthritis

This is the commonest disease found in ancient populations, which is to be expected since we have only the bones left to examine in the great majority of cases. Too much importance may be attached to the prevalence of arthritis, especially as in many reports changes round the joint, eg marginal osteophytes and vertebral osteophytosis, which are really only signs of increasing age, are reported as the occurrence of active osteoarthritis. There were few old individuals among these people and so little evidence of arthritis was found.

Osteophytic lipping of the vertebral bodies was found in the lumbar spine of three of the six males, (Inhumations 18, 63 and 120), in whom the spine could be fully examined, and was present in the thoracic spine of two of these three. The three individuals were all middle-aged. No osteophytosis was found in the three young-males. Two (Inhumations 23 and 106), of the four females with well preserved spines had vertebral osteophytosis in the lumbar spine, again they were assessed as middle-aged. The other two were young. These changes probably represent ageing of the spine. Definite osteoarthritis was seen in the intervertebral facet joints in one person: the cervical spine of a middle-aged male (Inhumation 18).

Osteoarthritis of other joints was found in four other people. Inhumation 7, an old male, had signs of arthritis in one patella, both ulnae and the left radius. Inhumation 18, a middle-aged male, had arthritis at the lower end of the ulnae in addition to his cervical spine. Inhumation 47, perhaps a female adult, had this disease in the hips and Inhumation 120, middle-aged male, in the left hip and right clavicle.

This low prevalence of osteoarthritis is to be expected in view of the age distribution of this population and there are no pointers, in terms of the various joints affected, to any particular occupational joint stresses.

Schmorl's nodes

This is a disorder of the intervertebral joints of the spine, which is not a true arthritis or inflammation of the joint, but is due to the erosion of a pit in the surface of the body of a vertebra by the pressure from an intervertebral disc. It is often symptomless and found on X-ray of young peoples spines taken for unrelated reasons. It is most common in the lower thoracic and upper lumbar spines. Eight (35%) of 23 people whose spines could be examined fully were found to have this disorder, six of 16 males and two of six females where the sex could be assessed. This is similar to the prevalence of the disorder in other populations examined.

Osteochondritis dissecans

This is another disorder associated with joint surfaces, but not a true arthritis. This disease starts with the death of a small wedge of bone and cartilage on a joint surface, usually the lower surface of the femur at the knee joint. The dead bone and cartilage may be cast off as a loose body into the joint, causing pain or locking of the joint, or it may heal over. The condition is said to be related to sport or other physical activity. Four skeletons showed this disease, three male and one female, all on the usual place on the femoral condyles. The finding of four cases of this disease in a population where only about 50 skeletons had a reasonable number of joint surfaces well enough preserved to look for this disorder suggests a higher prevalence than normal - perhaps a pointer to a hard physical life during adolescence, the age at which the disease usually begins.

Traumatic damage

Fractures and other signs of physical damage to bones were looked for to see if these people were exposed to any unusual or frequent kinds of stress or violence. This did not appear to be the case. The most dramatic signs of damage were seen in Inhumation 91, a young male. He already had

evidence of bone stress in the presence of Schmorl's nodes in his spine and osteochondritis dissecans in the lower end of the left femur - perhaps pointing to a more than usually active life. The right femur is some 5 cm shorter than the left and shows a well healed fracture of the middle of the shaft with some antero-posterior bowing. This severe fracture is usually seen now in traffic accidents or falls. This young man presumably suffered a severe fall onto the leg or possibly a terrible direct blow. The thick muscles of the thigh are usually sufficient to protect the femur from breaking as the result of a direct blow. The fracture is well healed, which means he recovered from the break and walked on the leg, albeit with a pronounced limp. He must have been strong and healthy, as there is a heavy loss of blood, usually several pints, round a break in the shaft of the femur and in modern medicine a blood transfusion is given. The powerful muscles of the thigh would contract as a response to the injury and pull the lower fragment up past the upper part, thus producing the shortening of the limb. Fracture of the femur in olden times must always have resulted in the shortening and deformation of the leg and probably put an end to a person's active physical life. In view of the good healing of the bone there is no evidence of this injury being responsible for this man's death in young adult life.

Inhumation 42, a young male, has a shallow, oval depressed area 30 x 20 mm on the left side of the skull above the left eye. The inner part of the skull is normal. This lesion is a depressed fracture of the skull and there is some reaction of the bone around the fracture suggesting that it became infected. The lack of damage to the inner aspect of the cranium means that a full recovery was likely. The probable cause of the injury could be a direct blow from a blunt instrument or a fall onto the ground, a door-post or similar object. It is of note that this second person with a fracture also had osteochondritis dissecans of the femur.

Inhumation 55, a middle-aged male, shows an irregular jagged hole in the left side of the skull with a shallow depressed area above it. The areas are well healed and suggest an old blow from a weapon.

Inhumation 78, an old male, had the left tibia and fibula joined by a bony fusion at the ankle joint. This fusion is most likely the result of bleeding following a tear of the ligament, which joins the two bones at this part, the result of a fall or twist of the ankle. There is no evidence of a fracture of the bone.

Other disorders observed

Inhumation 96, an elderly female, had a skull which showed a thinning and concavity of the parietal regions, a condition known as biparietal thinning. This abnormality was formerly attributed to various conditions, such as carrying heavy weights on the head, but it is now thought to be one of the consequences of bone thinning in old age.

Inhumation 99, a young ?female, showed a lateral bowing of the shafts of the tibiae. This did not seem to be associated with any other abnormality, there was nothing to suggest rickets and the condition would have produced the appearance of knock-knee or *genu valgum*.

General health status

Two abnormalities which are thought to be indicators of the general state of health of a population were investigated. *Cribra orbitalia,* a condition of pitting of the roof of the orbits is now considered to be due to a mixture of iron deficiency and protein deficiency in children and young people suffering from subnutrition. It was present in two of 23 (9%) of the skeletons in which the orbits were well preserved. This is not greatly different from the prevalence in other Saxon populations, eg Caister-by-Yarmouth (Wells pers comm), or the early medieval population of Hartlepool (Birkett 1986). One inhumation, 112, a young female, showed a thickening of the parietal area of the skull with surface pitting. This seems to be an example of porotic hyperostosis due to expansion of the bone marrow from the same cause as cribra orbitalia, which is usually found in the orbits of people with porotic hyperostosis. Unfortunately the orbits were not preserved in this skull, so it could not be recorded among the cases of *cribra orbitalia.*

Periostitis is a condition of roughening of the bone most often seen in the tibia. It has a number of causes, some due to infection and has been used to assess the tendency of a population to be exposed to recurrent ailments including infection. 8% (four of 52) of this group showed definite evidence of periostitis of the long bones; again, the levels seen in other similar populations.

It would seem from these investigations that the Norton population was not unduly undernourished or suffering from recurrent illnesses.

Conclusion

The examination of this population for pathology has been rather restricted and frustrating because of the poor preservation of many of the skeletons. The disorders that were found were those expected in most skeletal series with no abnormal frequency of diseases or injuries, no suggestion of a great deal of violence and no evidence of a generally poor diet or health.

Cremations

by Sally Parker

Three cremations were recovered; in two cases only a third of the urns remained. Graves 114 and 115 were in different rows of burials and were approximately 15 m apart. No finds were associated with these burials.

Grave 114

This contained 205 g of cremated bone fragments; the fragments ranged in colour from white to bluey-grey and in size from 45 mm to less than 1 mm. On the whole the fragments tended toward the upper end of the range. The majority of the fragments were from the long bones, some femoral; humeral and tibial, the rest were from the cranium or unidentified. The long bone was almost all highly calcined white, the cranial fragments were bluey-grey, which suggests that they had been burnt at a lower temperature than the long bone.

The identified fragments included two distal phalanges, some unburnt facial bone and a complete tooth. These last two in conjunction with the less well burnt bone from the skull suggest that the head was not as efficiently burnt as the rest of the skeleton. The tooth which was recovered is a lower right lateral incisor. By examination of the wear pattern on the incisive edge of this tooth an age at death of between 21 and possibly more than 35 years was reached. Despite the apparently unburnt appearance of the tooth, however, it is worth remembering that the accuracy of aging cremated individuals in this way is impaired by the possibility of changes arising from exposure to heat.

Grave 115

The urn contained 375.5 g of bone consisting of round bone, flat bone and trabecular bone. All three types of bone are found in the complete skeleton. Those in this cremation which could be positively identified include femoral, cranial, tibial and radial fragments. These ranged in size from less than 1 mm to 47 mm, but, unlike Grave 114, they tend toward the lower end of the scale. All the identified bone appeared to come from an adult skeleton.

The degree of twisting and cracking combined with the colour of the fragments, a highly calcined white, indicate a high firing temperature. Due to the lack of distinguishing fragments each urn can only be said to contain a minimum number of one individual. The cremations also contained some inclusions besides the gravel and soil matrix. One piece of glass and some pottery was recovered from Grave 115 and Grave 114 contained small amounts of charcoal.

Grave 119

Cremated bone was recovered from three contexts associated with this burial; the fill of the cremation urn (296), the fill of the grave (297) and the topsoil above the feature. All the identified bone from 296 was human, weighing a total of 1.552 kg. The parts of the skeleton present included fragments of skull, vertebrae, ribs, upper limb, pelvis and lower limb. Usually the minimum number of individuals is established by the duplication of certain parts of the skeleton. Although none of these was found to be duplicated, it was possible to determine that at least two individuals were present because both fused and unfused bone was found. The unfused bone was represented by various epiphyseal surfaces and in particular by an unfused distal articulation of a tibia. This articulation usually begins fusion at 13–15 years of age. Therefore it is possible to suggest that one of the individuals present was less than 15 years at death. The size of the articulation is consistent with an age range of between 10 and 15 years old. The remains of a second individual were considered to be those of an adult.

The colour of the fragments ranged from a lightly charred black to highly calcined white. The distribution of the colours indicated a pattern of differential burning, where the upper skeleton has been more completely burnt than the lower, the pelvic fragments being the least well burnt. The bone fragments from the grave fill (297) were both human and animal. Most obvious, because of their size, was the animal bone. These were very lightly burnt and were probably the remains of a large ungulate. The human bone consisted mainly of small fragments of articular surfaces, skull, vertebrae, ribs and long bone. There were some pieces of bone exhibiting epiphyseal surfaces indicating the presence of a subadult. It is not possible to speculate whether or not these fragments were originally from the remains contained within the urn.

The finds from the topsoil included unburnt animal bone and some small fragments of bone, which were probably human long or vertebral bone. There were no finds associated with this cremation.

7 Grave catalogue

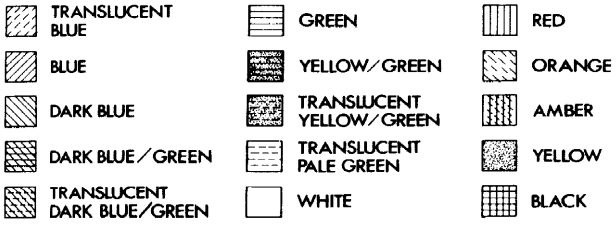


Figure 32 Colour code for illustrated beads

GRAVE 1

Female, age 25–35

Alignment unknown

A disturbed burial in a well-defined grave which was discovered by schoolchildren in 1982 (Vyner 1984). The grave finds were removed by the children and subsequently recovered by the Constabulary. The location of the objects in the grave is unknown, the objects recovered were:

1 Opaque long cylinder green monochrome glass **bead,** A5a
Opaque lime green monochrome long cylinder glass **bead,** A5b
Opaque polychrome blue opaque glass **bead** with a white trail, C2a
Amber **bead** with irregular barrel shape, D3

2 Two copper alloy sheet triangular **spangles.** Each 17 mm long.

3 Two fragments of copper alloy sheet **wrist** clasps, comprising the eye section of one clasp and the hook of a second. Hines Class B, Length of eye section 41 mm, hook 18 mm.

4 Fragment of a cast copper alloy **girdle hanger,** broken in antiquity, with the remains of an iron rivet which may have formed a repair. Length 43 mm.

5 Small cast copper alloy **cruciform brooch** with part of the foot missing. The brooch has wings either side of the central headplate panel, three half round knobs andsimple facetted decoration. The bow is simple and the footplate is plain with traces of a collar, below which it is broken- On the back there is a simple spring coil and catch-plate, but no trace of a pin. There are the remains of a plied thread, probably flax, ZZS spun, which passes over one wing, diagonally across the headplate and around one of the side knobs. This thread is evidence for the brooch being sewn onto a dress or shroud cloth. Faint traces of mineralised textile also occurs on the bow. Aberg Group II. Length 52mm.

GRAVE 2

Female, ?middle-aged adult
Also present bones of second individual: Sex?, age 7–11

Alignment NW/SE

A crouched burial lying on the left side with the skull at the S end facing E in a slight hollow. The burial had been disturbed on the west side by ploughing which had removed the skull and truncated the left arm. The right arm lay undisturbed across the chest. A necklace of 27 beads was scattered in two groups; nine amber and monochrome glass beads were found around the neck and the shoulder (1) although the majority (2) were under the ribs. Beside the disturbed jaw were fragments of a possible iron strap end (3) alongside an annular brooch (4). A sherd of Anglo-Saxon pottery lay S of the right leg below the pelvis.

1 Opaque pale green monochrome long cylinder glass **bead,** A5b
Four irregular barrel-shaped amber **beads,** D3
Three cuboid amber **beads,** D5
Rounded amber **bead,** D6

2 Three opaque dark red cylindrical glass **beads,** A5b
Seven irregular barrel-shaped amber **beads,** D3
Three cuboid amber **beads,** D5
Rounded amber **bead,** D6
Three triangular amber **beads,** D7
Rectangular amber **bead,** D8

3 Possible **iron strap** end with one straight end, the other end tapering to a rounded point. Length 39 mm.

4 Two fragments of a cast copper alloy **annular brooch** with lentoid section. The larger fragment has traces of an iron pin and textile. The textile is Z spun. Leeds Type F? Diameter 39 mm.

5 Anglo-Saxon **potsherd,** a single worn body sherd. Fabric 1 (not illustrated).

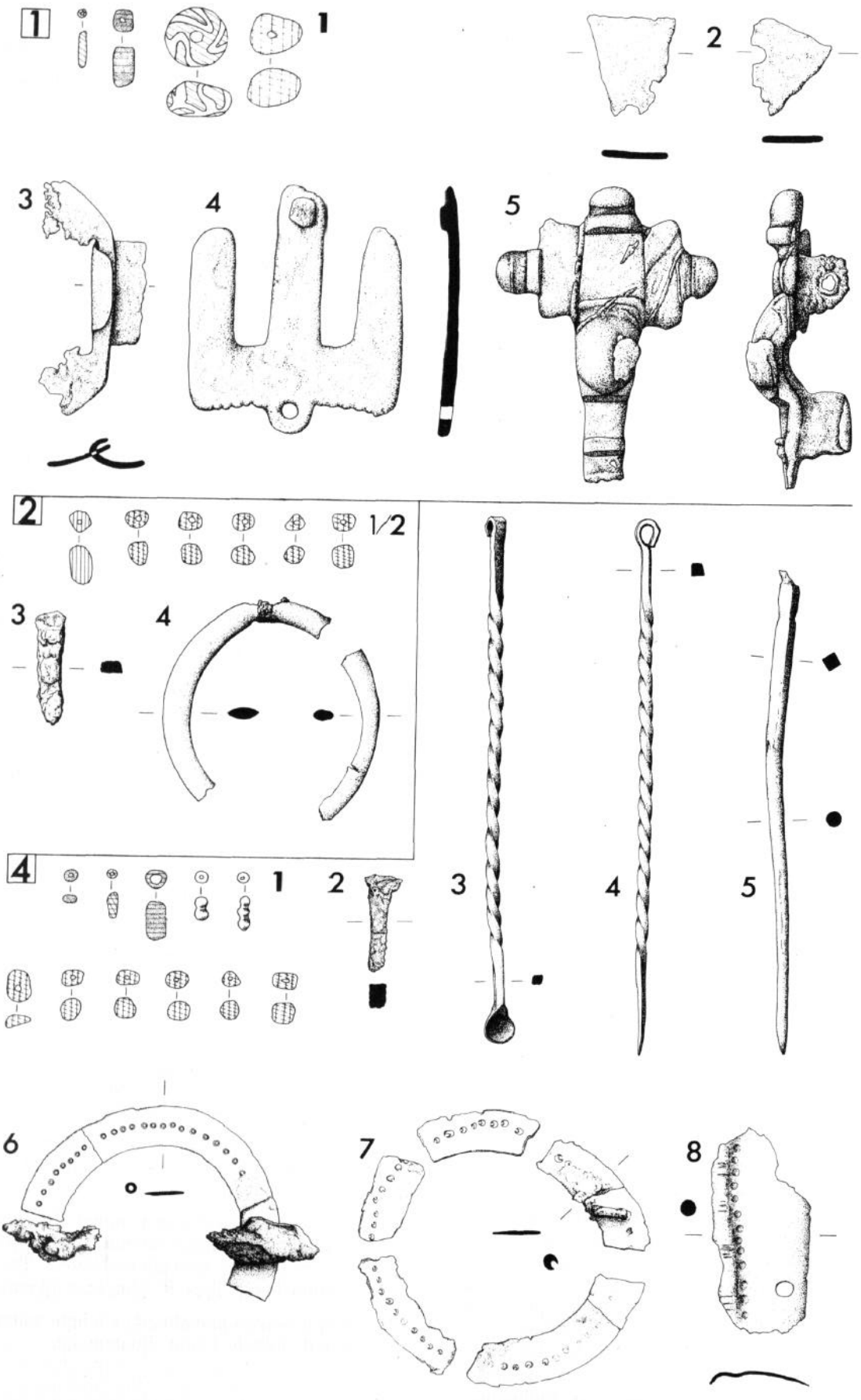


Figure 33 *Finds from Graves 1-4*

GRAVE 3

Sex?, age 7–11

Alignment unknown

A fragmentary burial much disturbed. The skeletal remains comprised one thigh and a leg lying on the subsoil surface. There were some fragments of bone in the topsoil, but no finds.

GRAVE 4

?Male — grave finds imply female, age 21–25

Alignment NW/SE

A crouched burial in a shallow grave with the head at the S end facing E. The left arm was beside the chest whilst the right arm lay across the left shoulder. There were 62 beads (1) in a row under the jaw and around the neck. In the top fill of the grave an iron object (2) was recovered, which may be a modern nail. E of the skull there was a toilet set comprising an earscoop (3) and two copper alloy pins (4 and 5). There were fragments of an annular brooch (6) on the right shoulder and another more complete (7) on the left. A pair of fragmentary wrist clasps (9 and 11) were in the probable vicinity of the right hand and another pair (8 and 10) near the left. There were three other copper alloy, objects (12, 13 and 14) associated with the gold-in-glass beads.

1 Three translucent pale yellow barrel-shaped glass **beads,** A2a
Translucent dark green cylindrical glass **bead,** A5a
Three opaque light green square glass **beads,** A5b
Opaque gold-in-glass **bead,** B2
One translucent gold-in-glass **bead,** B3
One wedge-shaped amber **bead,** D2
Thirty-four barrel-shaped amber **beads,** D3
Nine cuboid amber **beads,** D5
One rounded amber **bead,** D6
Seven triangular amber **beads,** D7
Rectangular amber **bead,** D8
Cylindrical polished bone **bead,** J

2 Iron **nail** with a rectangular shank and a flat rectangular head. Length 32 mm.

3 Copper alloy **earscoop** with twisted shank and a scoop at one end. Length 91mm.

4 Copper alloy **pin,** very similar to 3 above, with the top bent over to form a loop, it has a twisted shank which straightens out to a point. Length 95 mm.

5 Copper alloy **pin,** the top missing with a square shank. Length 85 mm.

6 Copper alloy sheet **annular brooch** with remains of iron pin attached, decorated with punched circles around the centre of the bands. Leeds Type G. Diameter 50 mm.

7 Copper alloy sheet **annular brooch** with remains of iron pin attached. All are pieces of flat round rings, plain on the back, decorated with punched circlets around the centre. Leeds Type G. Total external diameter 47 mm.

8 Copper alloy sheet **wrist clasp,** incomplete. With one attachment hole intact and traces of a second. The clasp is decorated with a strip of grooved transverse lines, adjoining a a line of punched circlets. The hook or eye section has not survived. Hines Form B7. Length 36 mm.

9 Copper alloy sheet **wrist clasp,** a rectangular plate with one attachment hole complete and most of a second surviving. The clasp is decorated with stamped circlets around the edges. A narrow strip of decoration along the inner edge consists of groups of transverse lines. The hook or eye section has not survived. Hines Form B7. Length 38 mm.

10 Copper alloy sheet **wrist clasp,** with only one complete attachment hole. Decorated as 9 above. The hook or eye section has not survived. Hines Form B7. Length 31 mm.

11 Copper alloy sheet **wrist clasp** fragment. Hines Form B7. Length 17 mm.

12 Copper alloy sheet object; a small thin fragment bent to a right angle. Length 10 mm.

13 A small copper alloy sheet object. Length 15 mm.

14 Fragment of copper alloy sheet pin. Length 15 mm.

GRAVE 5

Sex?, age 12–18

Alignment unknown

A fragmentary crouched burial in a shallow grave. The skeleton had been disturbed both to the N and S, the skull and feet being truncated. The inhumation was crouched on the right side facing E. There were some inclusions of orange clay around the grave, together with fragments of burnt clay. In the topsoil above the grave there was a bead (1); the only object in the grave was a small iron brooch or buckle (2) beside the wrist.

1 Stone annular **bead** with flat faces, broken into two, H

2 Iron **annular brooch** or **buckle** small and oval, complete with pin or tongue. Diameter 29 mm, length of pin 30 mm.

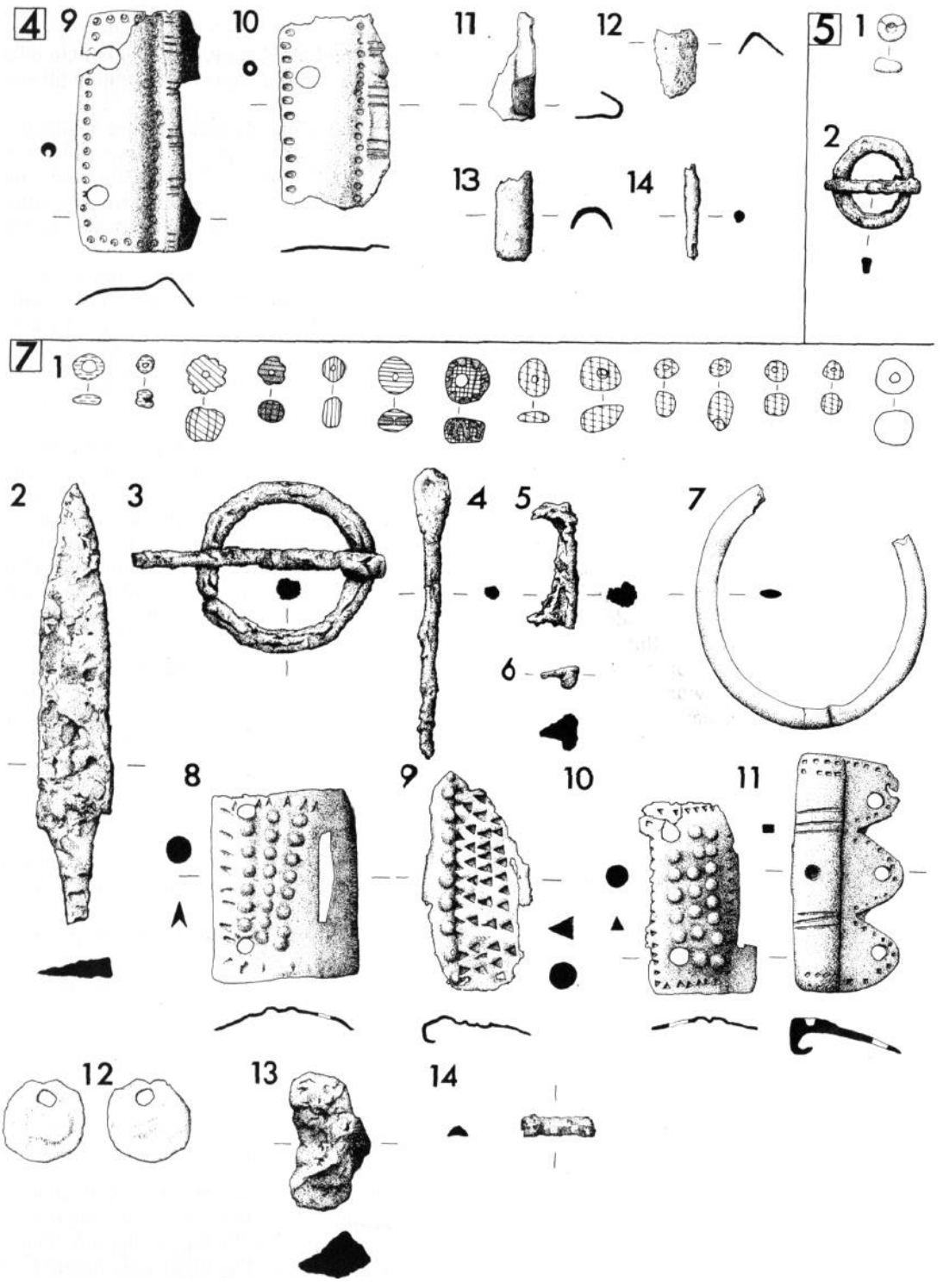


Figure 34 Finds from Graves 4–7

GRAVE 6

Sex?, age 10–14

Alignment unknown

A much disturbed burial, the remains of which were found at the edge of modern feature 38, a hollow probably created by the uprooting of a tree. The surviving skeletal fragments were restricted to the thighs; there were no surviving artefacts.

GRAVE 7

?Male — grave finds imply female, age 45-61

Alignment N/S

An extended burial in a slight hollow cutting into the clay, the feet and skull were marginally higher and had been disturbed. The skull was at the S end facing N, the right arm was bent across the chest and the left was on the hip. The body was leaning slightly on to the right side and had been truncated at the knee. There was a group of 75 beads (1) situated in a row around the neck. An iron knife (2) lay beside the pelvis on the left side. An iron annular brooch (3) lay on the left collarbone and an iron pin (4) on the chest. One iron nail (5) was on the chest and a second nail (6) was in the fill of the grave. Several fragments of a copper alloy annular brooch (7) lay on the right collarbone. There were wrist clasps on both wrists, although in neither case did these form a matching pair. Clasps (8) and (9) were on the right wrist and (10) and (11) on the left. A copper alloy perforated coin (12) and a small lead object (13) lay beside an iron nail (5). In the topsoil around the body there was one small fragment of copper alloy (14) and a fragment of glass, both probably modern.

1 Thirteen translucent glass annular **beads,** comprising five blue, five green, two brick red and one yellow, A1a
Translucent turquoise glass small double segmented annular **bead,** A1b
Two translucent blue glass sub-melon beads, A4c
Opaque glass yellow sub-melon **bead,** A4d
Two opaque long cylinder glass **beads,** one brick red, one green, A5b
Opaque glass polychrome annular **bead** with pale green background and a red spiral C1a
Dark blue translucent annular glass **bead,** with pale yellow spiral decoration, C2a
Three disc-shaped amber **beads,** D1
Irregular wedge-shaped amber **bead,** D2
Thirty-two irregular barrel-shaped amber **beads,** D3
Conical amber **bead,** broken at both ends, D4
Seven cuboid amber **beads,** D5
Nine triangular amber **beads,** D7
Pale milky white glass barrel-shaped bead — probably modern, A1a.

2 Iron **knife,** with curved back and curved blade, Evison Type I. Length 130 mm.

3 Iron **annular brooch,** plain ring with a long pin across. Diameter 54 mm, length of pin 77 mm.

4 Iron **pin,** one end a flattened pear shape, the other end broken before the point. The shank appears to be twisted. Length 92 mm.

5 Iron **nail,** bent at one end. Length 39 mm.

6 Iron **nail,** a very small fragment which has a flattened head. Length 10 mm.

7 Cast copper alloy **annular brooch,** two pieces of a plain flat narrow ring. Leeds Type F, Diameter 39 mm.

8 One of two copper alloy sheet **wrist clasps,** not a matching pair. It has an eye section, a rectangular plate with a narrow slot forming the eye, and has two attachment holes. The clasp is decorated with three rows of repousse bosses; along the edge are V-shaped punch marks. Hines Form B7. Length 30 mm.

9 The second sheet **wrist clasp** has a hook section, again a rectangular plate with hook, although the attachment holes have not survived. It is decorated with punched triangles closely spaced and a line of repoussé bosses next to the hook. Hines Form B7. Length 34 mm.

10 One of two copper alloy sheet **wrist clasps,** not a matching pair. This is a rectangular plate with two attachment holes and remains of an eye slot. Decorated with three rows of repousse bosses and small triangular stamps around the edges; similar but not identical to 8. Hines Form B7. Length 30 mm.

11 Sheet **wrist clasp** consisting of a cast bar with three lugs on one side and the hook on the other. The lugs have punched dot decoration round the edges and each has an attachment hole. The bar is divided into three plain areas by two groups of triple grooves. The top and bottom edges of the strip have two rows of dots. Hines Form B12. Length 37 mm.

12 Copper alloy **coin,** Roman, perforated near the edge. Copy of an issue of Constantine I (AD 341-6). Diameter 12 mm.

13 Roughly shaped lump of lead. Length 44 mm.

14 Copper alloy **bar** fragment with a ridge down the centre. Length 11 mm.

15 Fragment of the rim of a pale green glass **vessel** with a row of applied brown dots, probably modern (not illustrated).

GRAVE 8

Sex?, ?young adult

Alignment N/S

A much disturbed burial which was probably extended. It comprised discrete groups of disturbed bone, with skull fragments at the S end, some ribs and several leg fragments. The burial was lying on the subsoil surface. There was no grave cut surviving and no other finds.

GRAVE 9

Female, age 25–35
Also present bones of second individual: Sex?, adult

Alignment NW/SE

A crouched burial with the head at the S end facing E. The arms were in front of the body with the hands pointing E. The burial was lying on the gravel subsoil surface and was overlain by topsoil which had accumulated at the edge of the field. There were four heads (1), three amber together and one stone bead separate, all were around the neck. There were two iron objects; an iron knife (2) at the back of the pelvis close to an iron annular brooch (3). A copper alloy annular brooch (4) lay on the right shoulder, whilst another (5), was on the left shoulder. A further incomplete annular brooch (6) lay below the pelvis. On the left arm was a wrist clasp (7) whilst (8) was at the base of the spine and clasps (9) and (10) were below the left arm and above the right. A folded fragment of copper alloy (11) lay below the pelvis, alongside the incomplete annular brooch (6).

1 Two irregular barrel-shaped amber **beads,** both broken, D3
Rectangular amber **bead,** D8
Small disc-shaped stone **bead,** H

2 Iron **knife** with a long tang and short blade which is incomplete. Both the back and cutting edge are curved. Evison Type 1. Length 76 mm.

3 Iron **annular brooch,** with fragments of pin looped round the brooch. External diameter 35 mm.

4 Cast copper alloy **annular brooch** with a plain flat back and rounded front, decorated with bead and reel, groups of grooves alternating with expanded undecorated areas. A fragment of an iron pin survives, overlain with traces of mineralised fabric. The brooch is oval rather than round in shape, with a D-shaped profile. Leeds Type F. External diameter 34 mm.

5 Copper alloy sheet **annular brooch,** a flat round ring, decorated with a row of small punched pear-shaped dots along the outer edge. There is a fragment of iron pin and traces of mineralised textile adhering to the brooch. The pin joins the overlapping brooch terminals through a perforation in both ends of the ring. Leeds Type G, External diameter 40 mm.

6 Copper alloy sheet **annular brooch** fragment, consisting of half a flat ring with worn decoration on the front. There are faint traces of grooved lines and V-shape punchmarks along the front of the brooch. Part of the pin hinge section survives. The brooch band is 6mm wide. Leeds Type G, Diameter 41 mm.

7 Copper alloy sheet **wrist clasp,** plain but complete, with two attachment holes and a long slot forming the eye. Hines Form B7. Length 38 mm.

8 Copper alloy sheet **wrist clasp** with two worn attachment holes and a damaged hook. Decorated with a central line of punched circlets and a row of repoussé bosses either side. Hines Form B7. Length 32 mm.

9 Copper ahoy sheet **wrist clasp** complete with two attachment holes and a long slot forming the eye. The clasp appears to have some fabric adhering to the front. Hines Form B7. Length 37 cm.

10 Part of a hook section and a further fragment of a copper alloy sheet **wrist clasp** which had been attached to the eye section of clasp 9. Hines Form B7. Length of fragment 26 mm. Length of hook 20 mm.

11 Fragment of copper alloy sheet with two edges folded inwards. Length 20 mm x 17 mm.

GRAVE 10

Female, age 15-21

Alignment NW/SE

An extended burial in a shallow grave with the skull at the S end facing N. Below the pelvis the skeleton had been disturbed by ploughing. The arms were folded with the right hand crossing the left at the shoulder, the skull had fallen back to the S. There were three beads (1) beside the skull. A fragment of glass from the disturbed fill of the grave may be modern.

1 Opaque lime green glass annular **bead** with a faint black spiral inlay A1a
Irregular barrel-shaped amber **bead,** D3
Sub-triangular amber **bead,** D7

2 **Glass** fragment, a small white opaque lump (not illustrated).

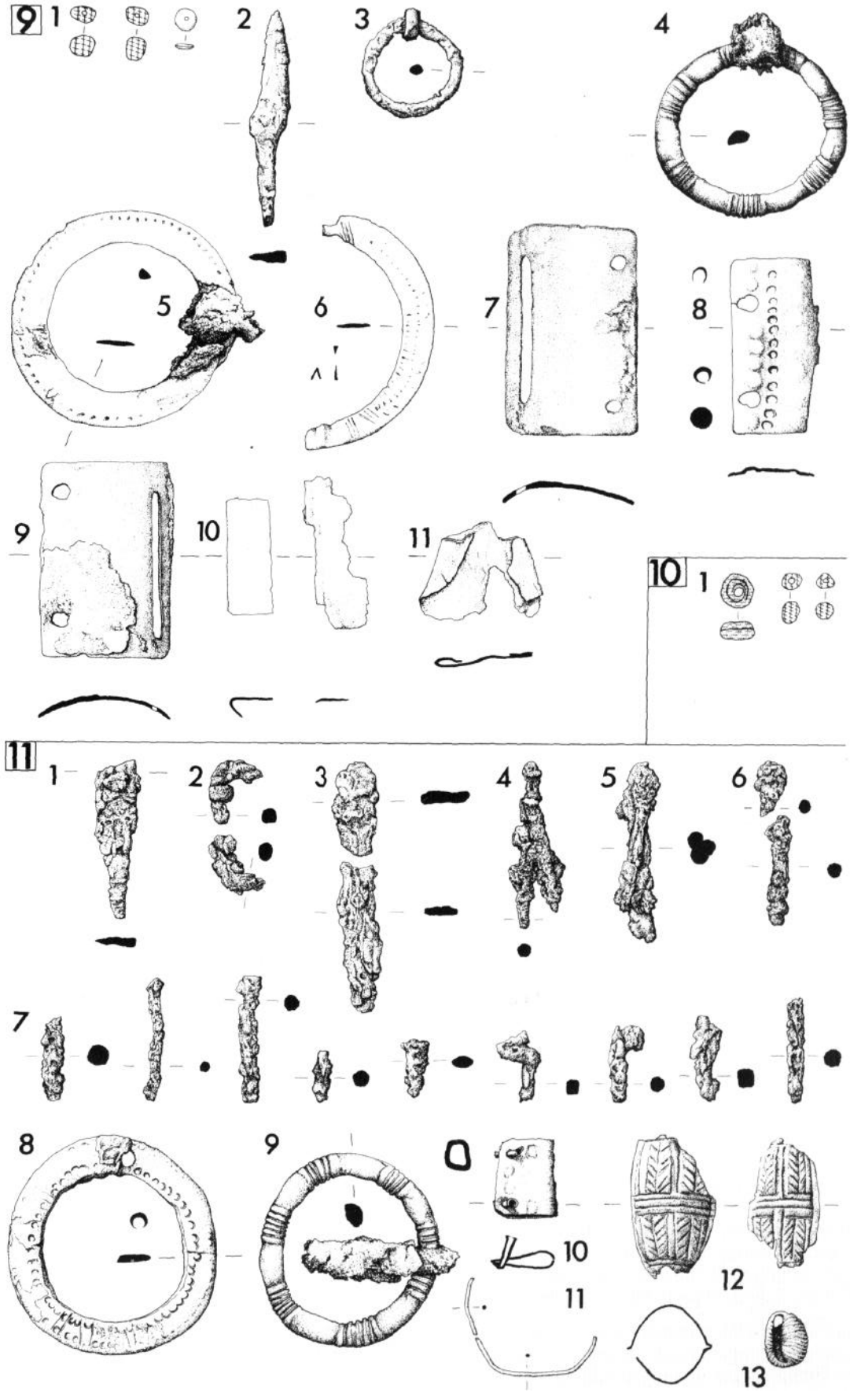


Figure 35 Finds from Graves 9–11

GRAVE 11

Sex? grave finds imply female, age 12–18

Alignment unknown

An extended burial lying in a slight hollow with the skull at the N end at a slightly higher level. The burial was extended and the ribs, arms and pelvis were disturbed. A sherd of pottery was found during sieving of the overlying topsoil, and an iron key set and knife (1-7) were beside the left thigh. There were annular brooches on the chest (8) and the left shoulder (9). Beside the right arm was a riveted copper alloy mount (10), probably a rim repair from a wooden bowl. On the left of the skull were two strips of silver wire (11), a silver bead or amulet (12) and a small cowrie shell (13). Beside these objects lay a comb (14) and spindle whorl (15), both made of bone, and fragments of a sea urchin. In topsoil above the burial was a fragment of calcined bone (not illustrated).

1 Iron **knife** fragment includes the tang but it is too incomplete to classify. Length 55 mm.

2 Iron **buckle** in two pieces; with fragments of a tongue adhering. Diameter approximately 22 mm.

3 Iron object in two pieces, with a rectangular profile and rounded terminal. Total length 80 mm.

4 Iron **keys** joined by corrosion and mineralised fabric, with a loop at one end. Length 55 mm.

5 Iron **keys,** two bars joined together by mineralised fabric. Length 62 mm.

6 Iron **key** with a loop at one end, broken in two pieces. Total length 55 mm.

7 Nine small fragments of iron from a **key set.**

8 Cast copper alloy **annular brooch,** a flat ring plain on the underside, but decorated on the front with punched semi-circles and occasional pairs of incised grooves. There is a small round perforation for a pin and some textile remains adhering to the brooch. Leeds Type G. Diameter 39 mm.

9 Cast copper alloy **annular brooch** with a flat base and rounded front decorated with groups of grooves alternating with expanded undecorated areas. There are remains of an iron pin with textile impressions adhering to the brooch. Leeds Type F. Diameter 33 mm.

10 Copper alloy sheet **mount,** a strip of metal bent over and fastened at the corners by two rivets. Strap end or more probably a rim repair piece for a lathe-turned wooden bowl. Length 13 mm.

11 Two sections of silver **wire,** one straight with a length of 10 mm and the second curved with a diameter of 21 mm.

12 Silver bead **amulet** in two pieces decorated on the outside with an incised herringbone design set in framed compartments. Length 23 mm.

13 Small **cowrie shell** associated with the silver bead amulet. Length 10 mm.

14 Bone **comb,** double-sided with a central strengthening strip of bone on both sides fastened by five iron rivets. Possibly made from the rib of a whale (J. Atkinson, conservator id). Decorated with punched ring-and-dot motifs. Length 134 mm.

15 Bone **spindle whorl,** lathe-turned with a domed shape with a series of grooves around the outside, and a flat base. Made from the head of a femur or humerus. Diameter 42 mm.

16 **Potsherd,** a base sherd with internal sooted residue, Fabric 2 (not illustrated).

GRAVE 12

Male, age 21-25

Alignment NNW/SSE

An extended burial in a shallow grave with the skull at the S end facing N. The burial had been disturbed by ploughing which had truncated the skull and the feet. The arms were at the side of the body with a spearhead (1) beside the right arm, pointing S, and a buckle (2) on the right side of the chest.

1 Iron **spearhead,** a small leaf-shaped blade, the blade has a very flat section with a long open split socket. Swanton Group D1. Length 176 mm.

2 Iron **buckle,** oval with the tongue looped round the side of the loop. There is a patch of mineralised textile adhering to the upper surface of the loop of the buckle, where it curves onto the pin. Length 35 mm, width 27 mm.

GRAVE 13

Male, age 35–45

Alignment NNW/SSE

An extended burial in a shallow grave, with the head at the end facing N. The skull and feet protruded from the grave and were disturbed. The arms lay at the side of the body, the left arm was slightly bent and holding an iron knife (1) with an

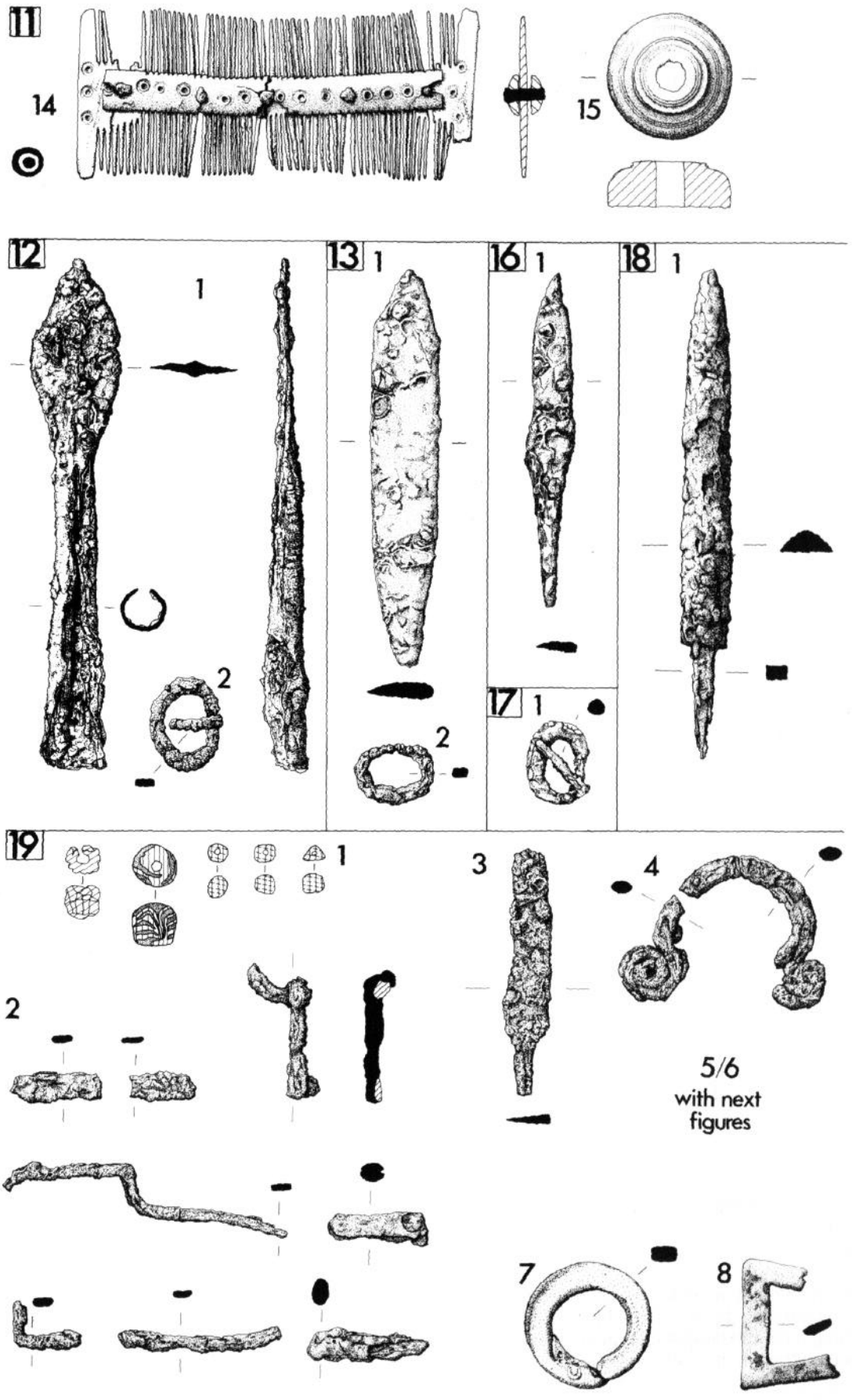


Figure 36 Finds from Graves 11–19

iron buckle (2) beside the hand. Also associated with this burial was a fragment of glass which was in the disturbed fill of the grave and may be modern.

1 Iron **knife,** most of blade complete but with the tang missing. It has an angled back and curved cutting edge, Evison Type 3. Length 140 mm.

2 Oval iron **buckle** without tongue. Diameter 20 mm.

3 Droplet of clear glass (not illustrated).

GRAVE 14

Sex?, age 10 years ± 30 months
Also present bones of second individual:
Sex?, age 7-11

Alignment N/S

A crouched burial with the skull at the S end lying on its left side in a shallow grave. The skull had been slightly damaged by ploughing and the legs were missing below the knee. The head was facing E and the arms were folded across the chest. There were no associated finds with this burial.

GRAVE 15

Sex?, age 12–18

Alignment N/S

An extended skeleton in a slight hollow originally with the head at the N end. The burial had been much disturbed by ploughing, particularly at the N end. The skull and left arm were missing and the knees were slightly bent. There were no surviving grave finds with this burial.

GRAVE 16

Sex?, age 12–18

Alignment NNW/SSE

An extended burial with the skull at the S end facing W. The arms were at the side of the body, the right arm crossed the waist and lay on the pelvis. The bone survival of this skeleton was generally good except in the chest area, where the ribs had not survived. There was only one find associated, an iron knife (1) lay on the chest with the handle at the W end.

1 Iron **knife** with a curved cutting edge and the back incurved at the tip of the blade. It has a long tang with mineralised bone or horn surviving, Evison Type 6. Length 116 mm.

GRAVE 17

Male, young/middle aged adult

Alignment NNE/SSW

A prone burial which was much disturbed, lying in a slight hollow. The skeleton had been disturbed by ploughing, with very little remaining above the waist. The surviving fragments were the left and right legs, pelvis, the left arm and pieces of the right arm and ribs. An iron buckle (1) lay slightly to the left of the waist position.

1 Iron **buckle,** small oval loop with tongue lying diagonally across. Length 29 mm, width 20 mm.

GRAVE 18

Male, age 25–35

Alignment NNE/SSW

An extended burial with the skull at the S end facing N. The arms lay at the side of the body, and the ribs, vertebrae and pelvis were intact. The legs were extended, crossing at the ankles. There were several undiagnostic bones on the right side and a large stone beside the left leg. There was an iron object, possibly a file (1), in the topsoil above the grave. This may be modern.

1 Iron **file** with tang and long blade, flat on one side, curved on the other. Length 170 mm. Probably modern.

GRAVE 19

Female, age 15–21
Also present bones of second individual:
Sex?, age 7–11

Alignment NNW/SSE

A crouched burial with the head at the S end facing W. The bone was generally in poor condition and in some parts the skeleton was much disturbed. The hands were joined together and pointed S whilst most of the vertebrae and ribs were missing. The pelvis survived and the legs were crouched. The associated finds comprised a row of beads on the chest (1), a set of iron keys (2) and a knife (3) lay below the right knee beside a penannular purse mount (4). There were two annular brooches, one (5) just below the right shousder and the other (6) at the same level but 10 cm further W. A copper alloy ring, perhaps a brooch (7) lay E of the ribs. A copper alloy object (8) was in the soily fill.

1 Translucent blue glass sub-melon **bead,** broken, A4c
Opaque light red, yellow wave decorated glass tubular **bead,** C2c
Nine irregular barrel-shaped amber **beads,** two broken, D3

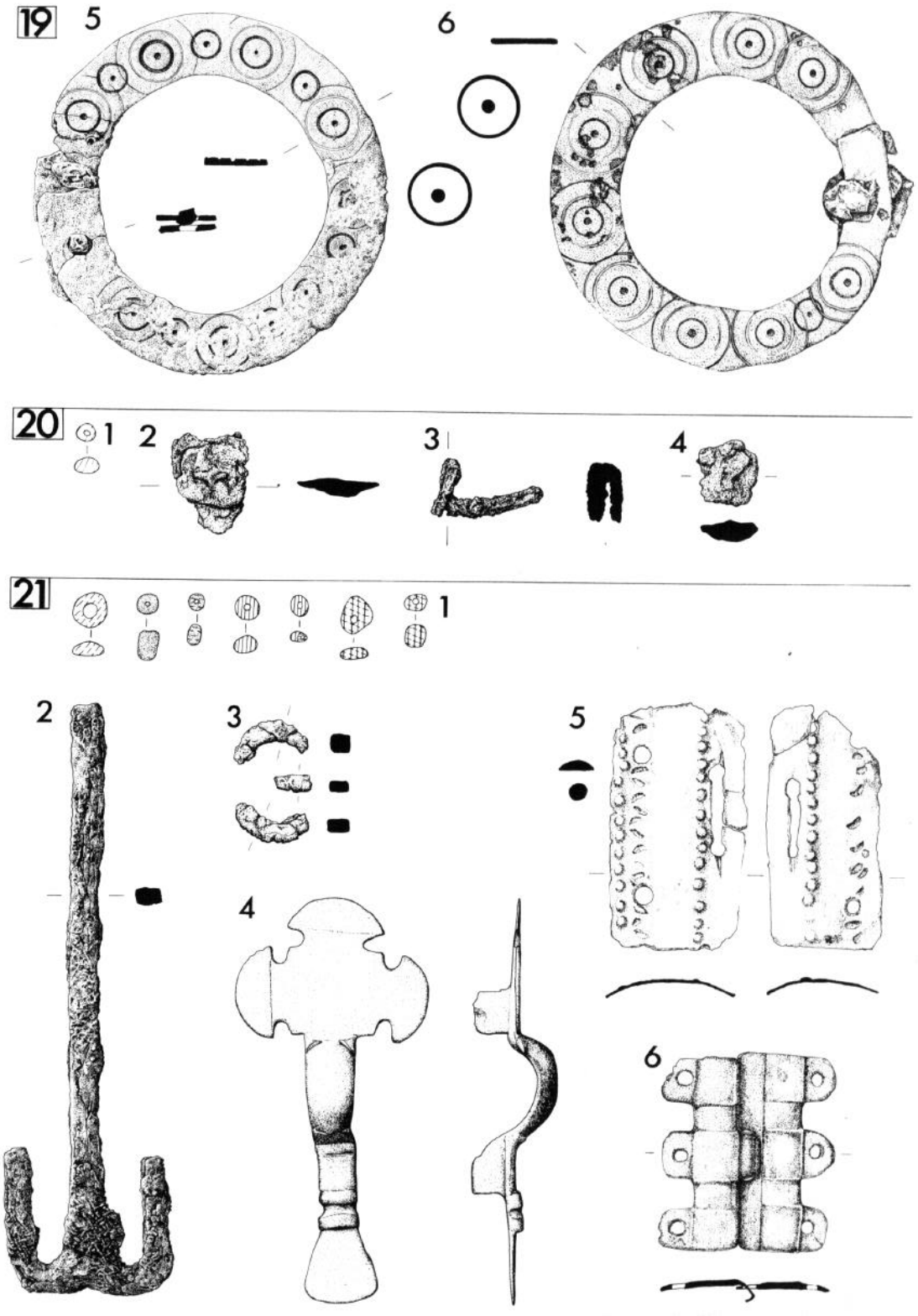


Figure 37 Finds from Graves 19–21

Sub-square amber **bead,** broken, D5
Triangular section amber **bead,** D7.

2 Iron **key set** with impressions of fabric remaining, comprising two iron bars bent at one end. One bar is almost complete and the other is only fragmentary. There are five fragments from iron bars. The complete bar is 99 mm long.

3 Iron **knife** with part of the top missing, Evison Type 2. Length 84 mm.

4 Iron penannular **purse ring** with coiled spiral terminals and traces of fabric adhering. Diameter 52 mm.

5 Copper alloy sheet **annular brooch,** a flat ring with overlapping ends which were originally secured by the iron brooch pin, remains of which are on the front. The face is decorated with a series of double rings and dot. Mineralised 2/2 twill ZS spun textile occurs over the pin hinge and the back of the brooch. Leeds Type G. External diameter 58 mm.

6 Copper alloy sheet **annular brooch,** a flat ring with the two ends overlapping. This brooch is similar to 5 with the same decoration. Leeds Type G. External diameter 59 mm.

7 Copper alloy penannular **ring,** this object may be re-used because there is a small mark on the ring near the terminal. External diameter 22 mm.

8 Copper alloy buckle, a bar with bevelled edges, trapezoidal, possibly medieval or modern. Length across the longest side is 22 mm.

GRAVE 20

?Male, age 25–35

Alignment unknown

A much disturbed burial in a slight hollow. The only fragments of bone surviving were from the back of the skull, with some parts of the vertebrae and arms. The burial probably faced E although this is not certain, owing to the disturbance. Two objects were found in the topsoil above the neck; a glass bead (1) and fragments of iron (2). The only artefacts associated directly with the burial were two iron objects (3) and (4), on the chest.

1 Translucent small blue glass annular **bead,** A1a

2 Iron object, comprising two strips of iron riveted together. Length 27 mm.

3 Iron **bar,** bent at one end. Length 32 mm.

4 Iron object. Length 20 mm.

GRAVE 21

sex? — grave finds imply female, age 25–35

Alignment unknown

An extended burial with fragments of skull disturbed at the S end by a modern feature. The skull had been disturbed above the jaw and the arms lay at the side of the body. The finds comprised one row of glass and amber heads (1) strung across the neck. In the topsoil above the grave there was an iron girdle hanger key (2). A fragmentary iron buckle (3) was recovered to the S in modern feature 37. A small-long brooch (4) lay under the jaw with the head plate at the top. There were two pairs of wrist clasps, (5) beside the right arm and (6) alongside the left arm.

1 Twenty-five translucent blue glass annular **beads,** A1a
Opaque long cylindrical yellow glass **bead,** A5b
Translucent barrel-shaped gold-in-glass-**bead,** B1
Opaque brick red annular glass **bead** with a pale band along its broad edge, C1d
Opaque brick red annular glass **bead** with green spots, C4
Five disc-shaped amber **beads,** D1
Two irregular barrel-shaped amber **beads,** D3

2 Iron **girdle hanger key** with forked terminals at one end and broken at the top. This has extensive mineralised 2/2 twill ZS spun textile remains around the forked area. Length 192 mm.

3 Iron **buckle,** with oval loop and tongue, broken in three pieces with fragments of mineralised fabric adhering to the corroded ironwork. Diameter 30 mm.

4 Cast copper alloy trefoil-headed **small-long brooch** with simple facetted decoration. The head has a central rectangular panel with three flat lobes. The convex bow is faceted with a pair of short curved lines at each end. The foot has a shovel-shaped terminal with two raised bars above. The damaged hinge lug on the back had a small area of mineralised 2/2 twill ZS spun textile underneath and there is a pin catch. Leeds Type b. Length 67 mm.

5 Two copper alloy sheet **wrist clasps** both with short eye sections, one has two attachment holes, the other has only one complete and part of the other. They share the same decoration with two rows of repoussé bosses, one along the outer edge and the other along inside the eye, with a row of semi-circular

punchmarks in between. The eye slots were cast as two perforations joined by a narrow rectangular slot. Hines Form B7. Length of both clasps 40 mm.

6 Two cast copper alloy **wrist clasps,** a matching pair comprising both hook and eye sections. These consist of a strip divided into five sections by alternate raised bars. Three perforated lug plates with rounded ends protrude from one side of the raised sections; the hook and eye are located centrally. Hines Form B12. Length of hook 32 mm, length of eye 33 mm.

GRAVE 22

Female, age 25–35

Alignment unknown

A crouched burial in a well-defined grave which had been disturbed on the E side by a modern feature. The body was crouched on the left side with the skull at the south facing W. The only surviving human remains were the skull, pelvis, legs and one arm.

A bead (1) lay under the jaw and a knife (2) lay on the waist just above the pelvis. Beside the right thigh was a key set (3). There was also a fragment of ironwork (4) in the fill of the grave which could also be from the key set (3). The bead from under the jaw was associated with a square-headed cruciform brooch (5), which lay on the right shoulder, with the headplate marginally under the jaw. Fragments of an annular brooch (6) lay on the right shoulder under the square-headed cruciform brooch. There were two wrist clasps, (7) beside the left hand and a second (8) in the fill of the disturbance. A Frankish or Kentish shield-on-tongue buckle (9) was found on the right side of the waist beside the disturbed edge of the grave with three shoe-shaped belt studs (10).

1 Opaque cylindrical glass **bead,** which is a speckled mix of dark and light green. C5c

2 Small iron **knife** with a straight back edge which incurves at the tip of the blade, Evison Type 6. Length 10 mm.

3 Iron **latchlifter key,** broken into three pieces and bent to an angle at one end. Length 113 m. Also five small fragments of iron from a key set.

4 Iron **bar,** fragment of a key set. Length 60 mm.

5 Cast **square-headed cruciform brooch,** copper alloy decorated in Salin Style I. The headplate has three outward facing animal masks where the knobs would be located on a cruciform brooch, flanked by curved jaws. Its central panel has an incised quatrefoil at the centre and a row of crescent punchmarks down each side of the panel which continue along the edges of the bow. Directly below the bow the upper footplate panel is again decorated with the quatrefoil design The lappets are decorated with outward facing quadrupeds. Below these are two billeted bars above an animal mask, flanked by quadrupeds. The shovel-shaped terminal is partially damaged and decorated with a ring-and- dot punched ornament. On the back of the brooch the spring coil is intact, and an iron pin survives and joins the catchplate. Parts of the spring, pin and catchplate are covered with mineralised(?) 2/2 ZS spun textile. A fragment of linen textile tucked behind the bow under the pin is tabby weave S-plied in both systems. The brooch probably pinned both textiles. Leeds Class C2. Length 120 mm.

6 Two fragments of a copper alloy sheet **annular brooch** forming nearly half of a flat ring decorated with a row of punched circlets along the edges. One fragment includes a join where two overlapping pieces have been soldered together. Leeds Type G. The width of the brooch fragments is 10 mm.

7 Fragment of a copper alloy sheet **wrist clasp,** a thin rectangular plate with a row of repoussé bosses framing the edges. One attachment hole is complete, with traces of the other. Hines Form B7. Length 39 mm.

8 Two fragments of a copper alloy sheet **wrist clasp** similarly decorated to (7) above. Hines Form B7. Length of largest fragment 22 mm. Three other very small pieces are probably from this object.

9 Shield-on-tongue **buckle,** with an iron core and the surface layer comprising a high tin bronze. Oval with a flat base and rounded front, the buckle loop has an iron rod running through its centre which provides a hinge bar for the tongue. The tongue has a shield-form base. Diameter of 29 mm; length of tongue 36 mm.

10 Three shoe-shaped **belt studs** associated with the buckle (9) and also made from a high tin bronze. Two are largely complete and one fragmentary. Used to fasten the strap back onto itself after passing it round the buckle hinge bar. Length of studs 18 mm.

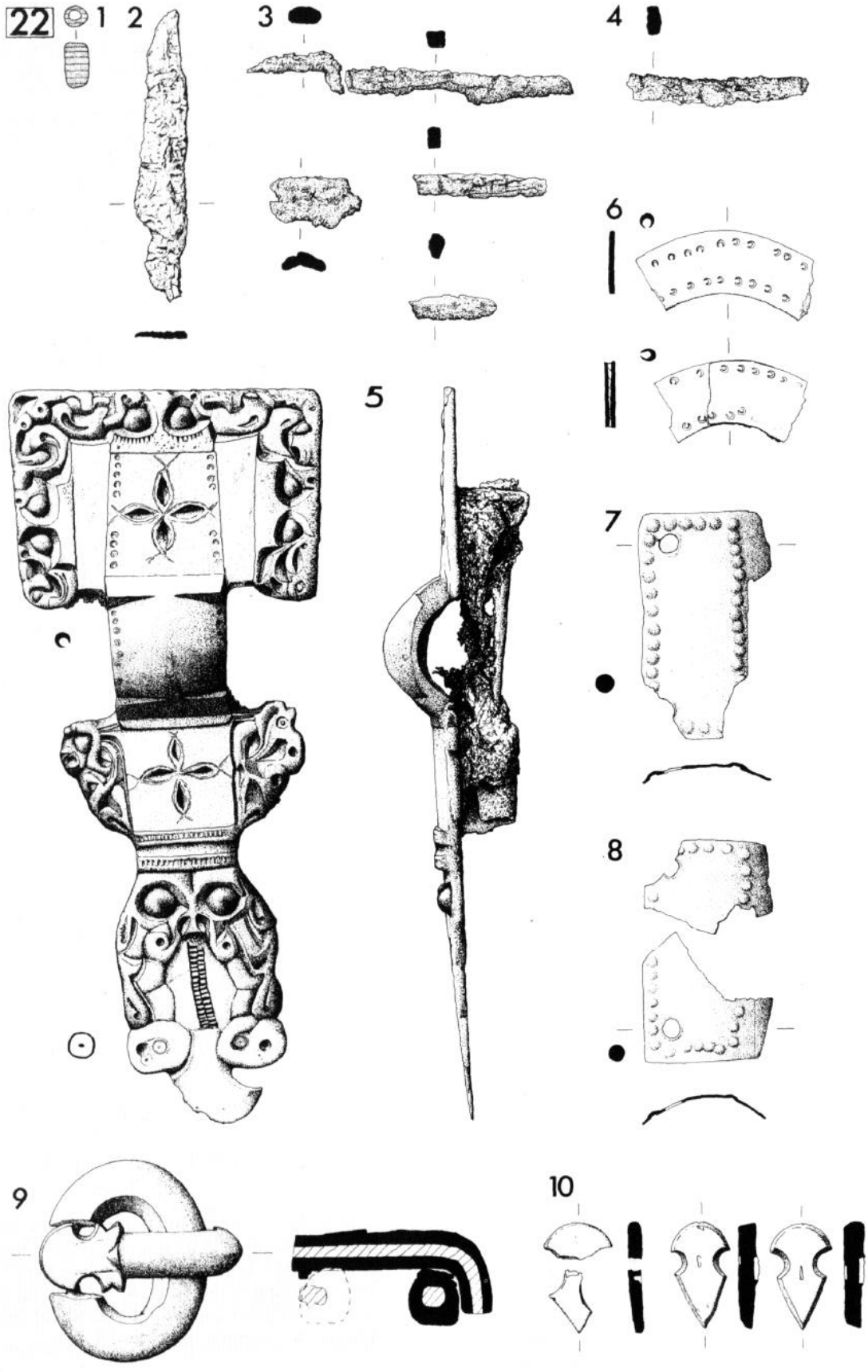


Figure 38 Finds from Grave 22

GRAVE 23

?Female, age 25–35

Alignment unknown

A crouched burial in a grave 35 cm deep with the skull at the N end facing S. The burial was lying slightly on the left side and the skull was at a higher level and had fallen forward slightly. There were very few ribs or vertebrae surviving, and the right arm lay across the chest and the left by the side of the body. The legs were bent almost double and pointed E. A knife (1) lay on the chest beside the left arm and an iron buckle (2) was at the waist. Three undiagnostic objects (3 and 4) occurred higher up in the fill of the grave. There was also a pair of annular brooches, on the left shoulder (5) and on the right shoulder (6). A copper alloy mount (7), probably part of a repair from a wooden bowl, was found on the N side of the grave in an appropriate position for a vessel above the skull. Above the right arm there was a burnt stone (not illustrated).

1 Iron **knife** with a curved back and straight cutting edge. The tang covered in mineralised bone or horn, Evison Type 4. Length 126 mm.

2 Iron **buckle,** D-shaped, with tongue partially surviving, traces of mineralised textile adhere. Length 24 mm, width 15 mm.

3 Short iron **strip,** bent at a right angle. Length 13 mm.

4 Two iron fragments, possibly **nails.** The longest 31 mm.

5 Cast copper alloy **annular brooch** with a fairly flat back, rounded front, decorated with transverse grooves. This decoration worn where the former iron pin was attached. There is a recessed bar for the pin. Leeds Type F. External diameter 40 mm.

6 Cast copper alloy **annular brooch,** matching brooch (5). There are textile remains adhering to this brooch around the end of the intact iron pin. The textile is Z spun, tabby weave. Leeds Type F, External diameter 38 mm.

7 Copper alloy sheet **mount;** rectangular with two perforations in the corners at one end, the other end curved and damaged. Most of the object is gilded. Probably part of a lathe-turned wooden bowl repair. Width 15 mm.

GRAVE 24

Male, age 15–21

Alignment NNW/SSE

An extended burial in a long narrow grave with steep sides. The skull was at the S end facing N, although it was 30 cm from the southern edge of the grave. The bones were very soft and the small bones had not survived. The arms were by the side of the body; but there were no ribs and very few of the vertebrae. The pelvis was intact and the knees slightly bent and pointing W. The body appeared to have slumped slightly, with the knees part raised. There were two finds in the grave, an iron knife (1) on the right side of the chest parallel with the right elbow, and an iron spearhead (2) beside the left arm.

1 Small iron **knife,** with the back incurved at tip of blade, The tang covered with mineralised remains of bone or horn. Evison Type 6. Length 93 mm.

2 Iron **spearhead** with an angular blade and an open split socket which contains mineralised wood remains. Swanton Group H2. Length 290 mm.

GRAVE 25

Male, age 20–30
Also present bones of second individual:
Sex?, age 4–8

Alignment N/S bearing 6

A crouched burial lying on its left side with the skull at the S end facing E. The inhumation was not in a discernible grave, rather simply buried in the sandy subsoil. The degree of bone survival was generally good except for the ribs. The burial had twisted from above the hip into a prone position. The skull lay on the right arm, with the hand across the face and the left arm bent double. The legs were bent at the knees and the left leg was over the right and further E. There were two sherds of pottery associated, (1) W of the vertebrae and (2) behind and to the W of the skull. An iron spearhead (3) lay in front of the face on the E side of the skull.

1 **Potsherd** from a small jar. Fabric 2.

2 **Potsherd,** a slightly everted rim from the same upright jar as 1. Fabric 2.

3 Iron **spearhead** with an open split socket and small almost straight angled head, Swanton Group H1. Length 212 mm.

GRAVE 26

Sex?, age 6–12

Alignment unknown

A much disturbed burial comprising a scatter of bones on the clay subsoil. This was probably a crouched burial with the skull at the S end. There were also fragments of rib and thigh scattered fur-

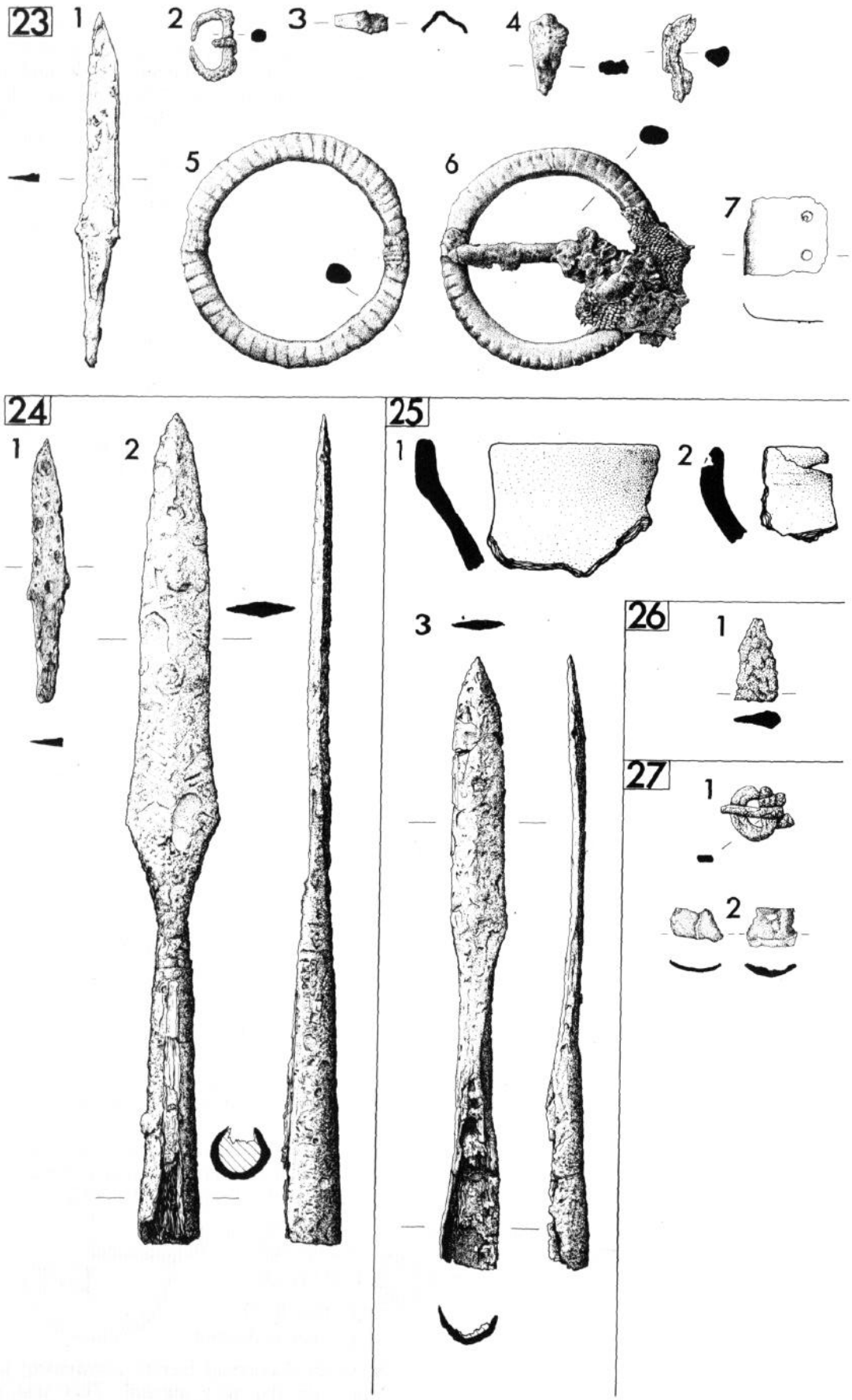


Figure 39 Finds from Graves 23–27

ther N of the burial. A fragmentary small iron object (1), most probably the tip of a knife, was found beside the thigh in the topsoil.

1 Iron **knife** with only the tip surviving. Evison Type I. 29 mm.

GRAVE 27

Sex?, age 69

Alignment E/W ?

A much disturbed burial with only the skull surviving. This faced on its right side, and so the burial may have been aligned E-W with the skull at the W end. The skull was lying on a sandy-clay subsoil with no trace of a grave. E of the skull, where the chest may have been, was an iron buckle (1) and several small fragments of sheet copper alloy (2).

1 Iron **buckle,** a small D-shaped loop the tongue wrapped round the loop on one side and resting in a shallow groove on other side. Fragments of iron flanking the tongue are remnants of the mounts which attached the buckle to the belt.16 mm wide and 20 mm long.

2 Six tiny fragments of copper alloy sheet, most are curved and possibly are parts of a **bucket** pendant. Largest fragment 6 mm long (only two illustrated).

GRAVE 28

Female, age 15–21

Alignment NW/SE

A prone burial in a well-defined grave 50 cm deep. The skull situated at the S end, lying face down on top of the left hand. The right arm was beside the body and the knees were at the N end. The legs were vertical against the wall of the grave and the feet were at the top of the fill. Bone preservation was generally good, although the front of the skull appeared to have been damaged. The grave contained three fills, one of which, a mix of sand and stones, lay over the skull and chest. There was a group of eleven beads (1) associated with the burial, which were on the right side of the skull adjacent to the shoulder. An iron knife (2) lay on the left side of the body beside the ribs. The remains of a key set (3) lay beside the vertebrae on the right side. An iron pin (4) lay N of the beads, whilst the ring section of a key set (5) lay below the left pelvis. A pair of annular brooches lay one on top of the other underneath the skull and beside the left arm; with (6) situated beneath (7). A copper alloy perforated disc or washer (8) was associated with the group of beads at the neck. It is possible that some of the artefacts could have been thrown into the grave after the body was placed in a prone position.

1 Translucent gold-in-glass **bead,** B1
Opaque cylindrical gold-in-glass **bead,** B3
Four irregular barrel-shaped amber **beads,** D3
Two cuboid amber **beads,** D5
Three triangular amber **beads,** D7

2 Iron **knife,** with a short blade and a long haft with remains of bone or horn adhering to it. The knife has a slightly curved back and a curved blade. Evison Type 3. Length 150 mm.

3 Iron **key set** consisting of five fragmentary iron bars, all broken. Only one example can be reconstructed, to a length of 77 mm.

4 Iron **pin,** of which only a fragment survives, this has a round profile. Length 22 mm.

5 Iron and copper alloy **key set** fragments, a corroded mass of iron with a thin sheet of copper alloy bent around part of the iron. The copper alloy sheet has two small perforations, one of which is broken, while the other has a copper alloy rivet hanging from it. Probably part of key set (3) above. Length 86 mm.

6 Cast copper alloy **annular brooch,** a flat ring with plain underside. The front decorated with grooves and three ring-and-dot punchmarks, though a fourth may be obscured by mineralised textile. There are individual and paired grooves separating each ring and groove. Leeds Type G. External diameter of brooch 45 mm.

7 Cast copper alloy **annular brooch,** a pair with brooch (6). A flat round ring decorated with six ring-and-dot punchmarks, the underside is plain. The brooch ring narrows for the pin bar. Leeds Type G. External diameter of the brooch 45 mm.

8 Copper alloy perforated **disc,** probably an end stop or attachment for the string of beads. Length 15 mm.

GRAVE 29

Female, age 25–35

Alignment N/S

An extended burial in a shallow grave which had well-defined vertical sides. The skull was at the S end facing E. The arms lay across the chest, the spine and some of the ribs had survived. The pelvis was intact and the knees slightly bent and pointing to the E. One jet bead lay on the chest and a group of amber beads was beside the jaw (1). W of the pelvis lay a small iron knife (2) and an iron girdle hanger (3) attached to a large iron ring (4). Beside

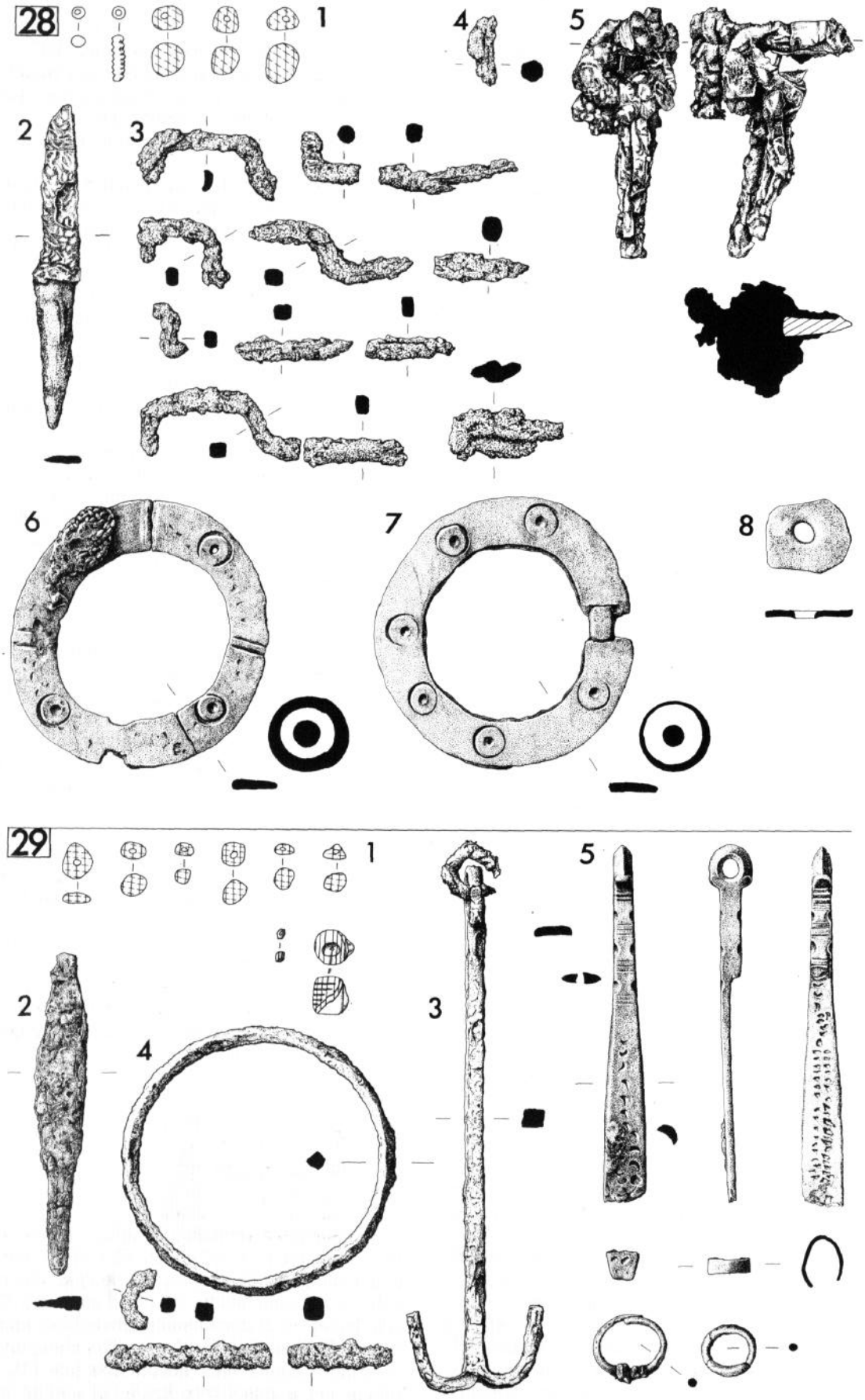


Figure 40 Finds from Graves 28–29

the collar bone lay two small fragments of iron, one of them a pin probably from an annular brooch (not illustrated). A pair of copper alloy tweezers and three rings (6) were found together higher up in the fill of the grave. Two annular brooches were also found, one (6) on the right collar bone and the second (7) under the jaw. There were also two wrist clasps on the left arm (8) and in the grave beside the left ankle (9). There were two copper alloy bars from wrist clasps (10) lying separately on the chest, and a copper alloy mount (11), probably a repair for a wooden bowl, had been placed behind the head. Above the skull in the fill of the grave lay a small copper alloy ring (12). On the E side of the grave parallel with the right elbow, lay a bone comb (13). Below the right pelvis lay a flint and a smooth stone (not illustrated).

1 Five disc-shaped amber **beads,** D1
Twenty-three irregular barrel-shaped amber **beads,** D3
Two cuboid amber **beads,** D5
Smooth rounded amber **bead,** D6
Six sub-triangular amber **beads** D7
Rectangular amber **bead,** D8
Minute six-sided jet **bead,** E3
Crinoid ossicle, H

2 Iron **knife** with curved back and blade, the tip missing. Evison Type 1. Length 112 mm.

3 Iron **girdle hanger** with two hooked terminals at the base. At the top there is a loop which contains a small iron ring. Length 182 mm. Diameter of small ring 20 mm.

4 Large iron **ring** with a lozenge section. Associated with the ring there was an iron object broken in two pieces, probably part of a pin, also a fragment of a small iron ring. Diameter of large iron ring 93 mm, large fragment of pin 58 mm and the small ring 22 mm.

5 Part of a bag collection consisting of (a) a broken pair of **copper alloy tweezers,** (b) four small fragments of copper alloy sheet, not illustrated, (c) three copper alloy **rings,** (d) two fragments of a small iron object, possibly a pin, not illustrated. The tweezers have a round loop at the top and are decorated internally and externally. The neck is faceted and has four groups of transverse grooves. The exterior is decorated with semi-circular punchmarks, which occur in one line down the centre before dividing into two rows. The interior has closely spaced triangular punchmarks arranged in a similar pattern. If this decoration was applied after the tweezers were broken, it may represent a craftsman's pactice piece. Length 62 mm.

6 Copper alloy sheet **annular brooch,** decorated with five incised grooves. The groove where the iron pin was situated has remains of mineralised textile. Leeds Tye G. External diameter 47 mm.

7 Copper alloy sheet **annular brooch,** iron pin almost totally corroded, with mineralised textile adhering to both sides of the brooch. There is a narrow bar for the pin, and a groove on the opposite side. Leeds Type G. External diameter 39 mm.

8 Two copper alloy sheet **wrist clasps,** a pair. The hook section has lost most of the hook, part of the two attachment holes survive. Remains of solder indicate where a cast bar of copper alloy had become detached. The cast bar, found separately, is divided by decoration into five sections by four thin bands of punched triangles; remains of solder survive on the reverse. The hook section has a damaged rear edge with traces of semi-circular punched decoration. Length 35 mm. The eye section is plain with the rear edge mostly missing, although traces of the two attachment holes are present. There are traces of solder for a decorative cast bar, which, although badly pitted, has similar decoration to the strip on the hook section. Hines Form B17a. Length 39 mm.

9 Copper alloy sheet **wrist clasp,** the eye section is a rectangular plate with two attachment holes. There is a strip of solder to the rear of the eye, and a line of decoration on each side of the attachment holes. The clasp is decorated on its outer edge with V-shaped punchmarks and there is an inner line of similar punched decoration. Hines Form B13a. Length 28 mm.

10 Two cast copper alloy **bars** from a pair of wrist clasps; each is divided by decoration into five sections, the outside and middle section being grooved, whilst the rest is plain. Length 22 mm.

11 Copper alloy sheet **repair mount** probably for a lathe-turned wooden bowl. A thin plate which has been bent back and held together at one end with two rivets, one of which is still in place. Unidentifiable wood fragments were associated with this object. Length 24 mm.

12 Copper alloy **ring.** External diameter 19 mm.

13 Fragments of a double-sided bone **comb** with a strip of bone down the centre of each side, fastened with iron rivets, with shaped end. Length 103 mm.

14 Waste **flint flake.** (not illustrated).

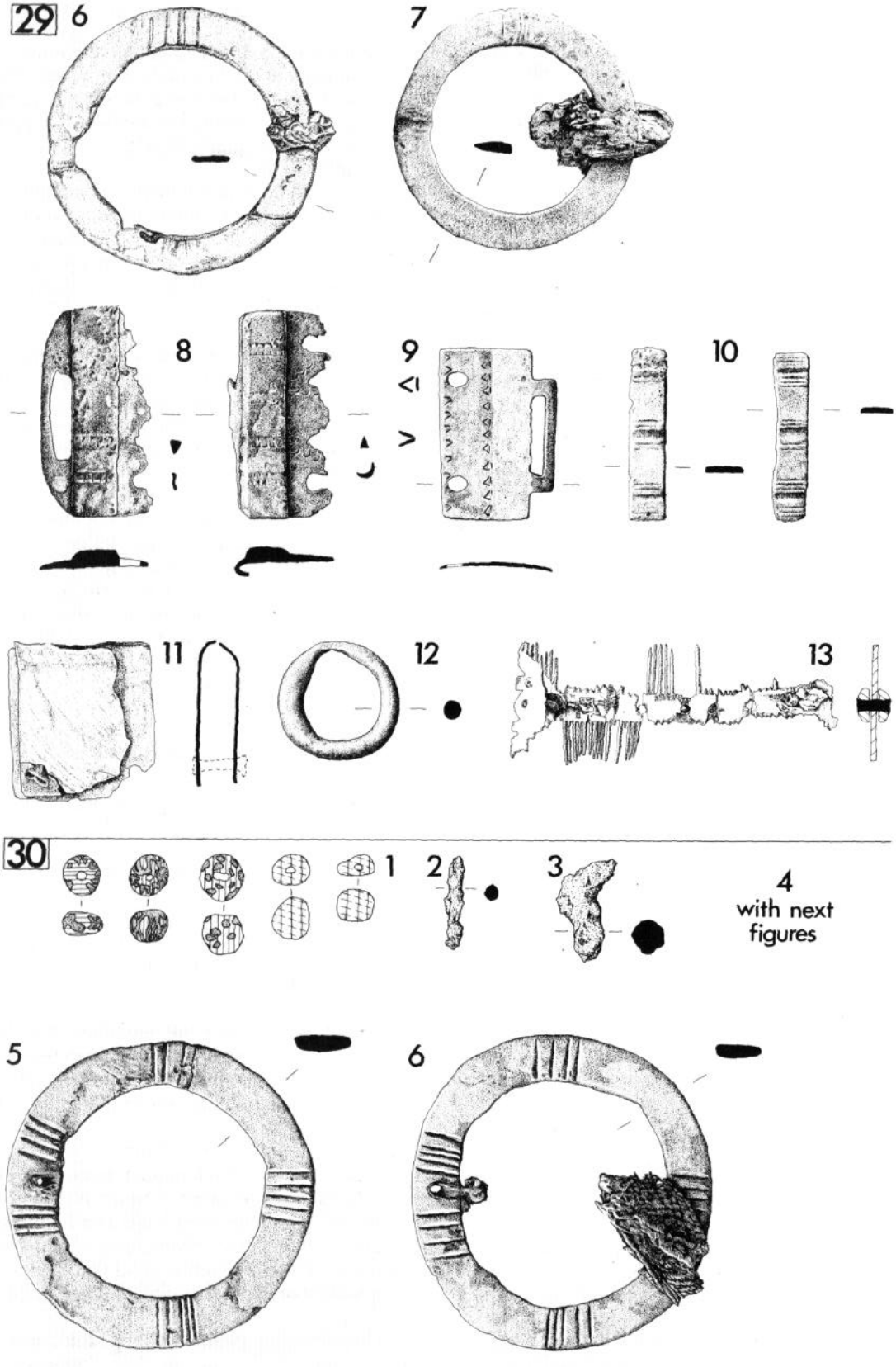


Figure 41 Finds from Graves 29–30

15 Four fragments of an iron **pin.** The largest fragment was 56 mm long (not illustrated)

16 Amber fragment, a smooth stone (not illustrated).

GRAVE 30

Female, age 26–35

Alignment NNW/SSE

A crouched burial in a slight hollow with the skull at the S end facing W. The bones were soft owing to the moist grave fill, very few of the smaller bones survived and not many of the vertebrae. The body was lying on the left side with the right arm pointed west. Fragments of the pelvis survived and the legs were bent and pointing to the NE, although the feet were missing. There were eight glass and amber beads (1) under the chin and associated with the cruciform brooch (4). E of the pelvis was an iron pin (2) and behind the right knee lay part of a pin (3). A florid cruciform brooch (4) lay on the right collar bone with the headplate slightly under the jaw. There were two annular brooches, one (5) on the right shoulder beside the cruciform brooch, the other (6) behind the right shoulder.

1 Two opaque annular black glass **beads** with lemon yellow wave decoration, C2a
Opaque brick red barrel-shaped glass **bead** with lemon yellow decoration, C3b
Opaque brick red barrel-shaped glass **bead** with lemon yellow spots, C5b
Three irregular barrel-shaped amber **beads,** D3
Triangular amber **bead,** D7

2 Fragment of an iron **pin.** Length 30 mm.

3 Iron object, possibly part of a pin. Length 28 mm.

4 Cast copper alloy **florid cruciform brooch,** gilded, although the gilding has worn off the higher, more exposed areas of the brooch. The headplate has a square central panel which contains a quadruped in Salin Style I set in a rectangular field. Each of the three knobs extending from the headplate consists of eyes from a mask below a plain triangular area which is flanked by animal heads with curved jaws. The brooch had broken along the base of the headplate and this had been repaired in antiquity. An iron plate was attached to the back of the headplate and bow using six iron rivets. These were still visible at the front of the brooch and the iron plate only survives around the rivets. The bow is faceted at the corners and has two grooves running down the centre interrupted by a central raised circle. The footplate has a plain upper panel with a narrow band of grooved decoration beside each lappet. The lappets depict downward facing animals heads seen in profile with curved jaws. Below this is a section of transverse grooved lines forming a collar above a mask. The eyes of the face are pronounced, with a long, narrow nose and mouth and the mask is flanked by two upward facing animal heads which spring from a square panel containing elements of Salin Style I animals. The brooch terminates with a plain crescent foot covered by an almost pure, silver foil, which was attached by solder. The catchplate has survived intact, but there is no trace of a pin. The iron spring coil is covered by mineralised(?) twill ZS spun textile and organic remains. Leeds and Pocock Group V (a iv). Length 157 mm.

5 Cast copper alloy **annular brooch,** a flat ring with a plain underside and grooved decoration in groups of four or five parallel lines on the front, with a perforation for an iron pin. There are traces of mineralised textile adhering to both sides of the brooch and the pin. The textile is Z spun, tabby weave. Leeds Type G. External diameter is 50 mm.

6 Copper alloy **annular brooch** identical to brooch (5) above, with an iron pin and again with some textile remains, 2 spun tabby weave. Leeds Type G. External diameter 50 mm.

GRAVE 31

Male, age 17–26

Alignment N/S

A crouched burial with the skull at the N end facing E, in a shallow well-defined grave. The skeleton was lying on the left side with the pelvis beside the W wall of the grave. The legs were bent and the knees pointed into the bottom of the grave, whilst the right leg lay slightly over the left. The right arm lay across the chest and the left arm was bent double. The bone had not survived well; there were no vertebrae, ribs or other small bones. The only find associated with this burial was a broken flint blade in the fill of the grave, beside the left elbow.

1 Fragmentary broken flint **blade.** (not illustrated).

GRAVE 32

Male, ? middle aged adult

Alignment unknown

A much disturbed burial in a slight hollow, comprising chiefly a scatter of bones. The remains

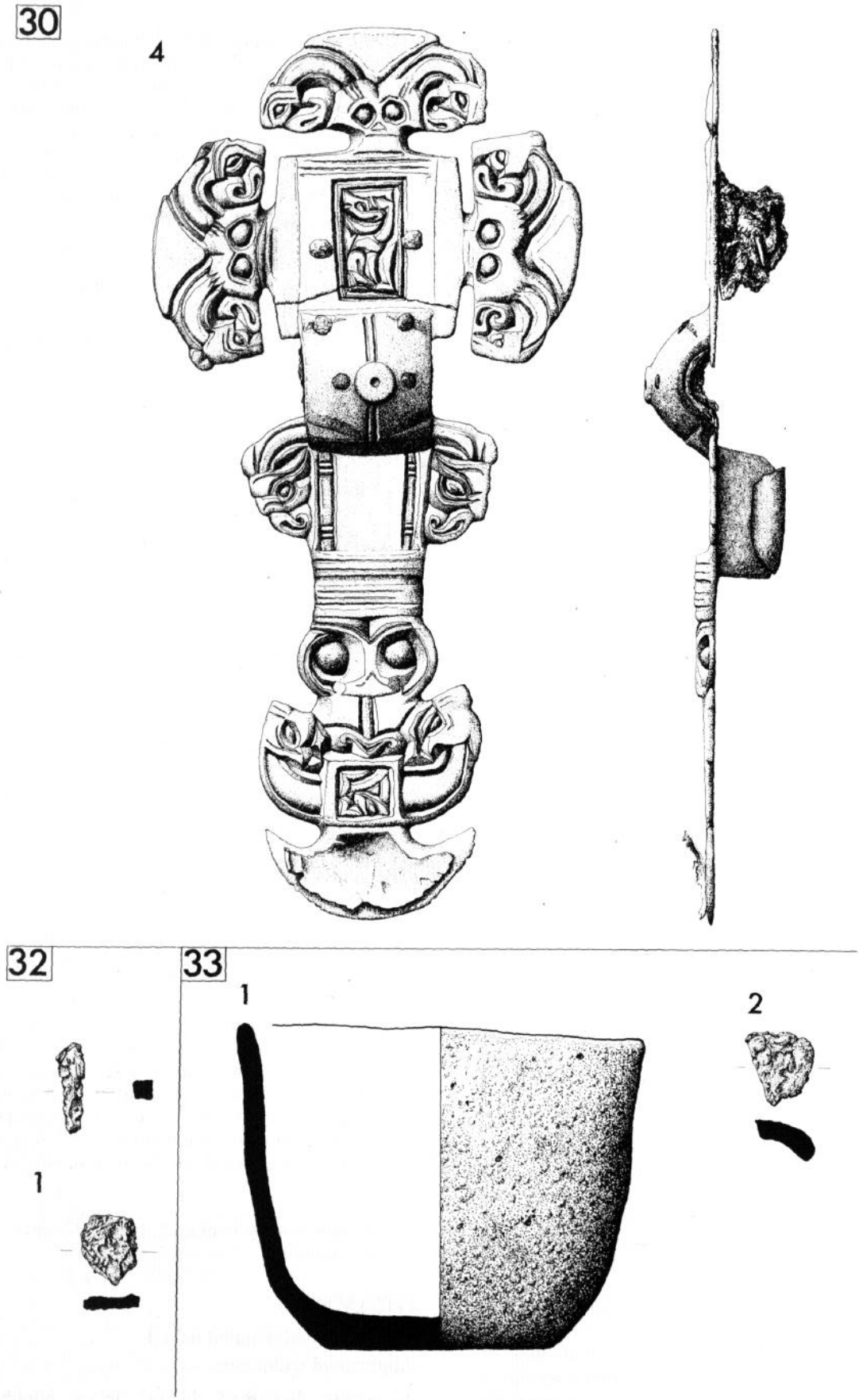


Figure 42 Finds from Graves 30–33

were the leg bones and some smaller fragments which were recovered from the topsoil. There was insufficient evidence to suggest alignment or burial position. The only find comprised fragments of ironwork (1) found underneath the leg bones.

1 Two fragments of iron, one is a flat **sheet** with two straight sides and two curved sides, length 28 mm. The other is a short length of **bar,** wider at one end than the other. Length 30 mm.

GRAVE 33

Sex?, child

Alignment unknown

A very fragmentary burial of a child. The skeleton lay in the sandy subsoil, although there was no trace of a grave cut visible through the sand. The bones comprised fragments of the skull and very little else. There were two finds in the subsoil 50 cm N of the grave, a pot (1) and a small iron fragment (2).

1 Complete hand-made straight-sided pottery **jar,** with roughly rounded rim. Fabric 3. Height 110 mm.

2 Triangular fragment of iron, without any diagnostic feature, possibly modern. Length 22 mm.

GRAVE 34

Male, age 25–36
Also present bones of second individual: Sex?, age 12–18

Alignment NW/SE

An extended burial lying on its back in a deep narrow grave with vertical sides. The skull lay at the S end and was in a very poor condition. The arms were at the sides and the right hand crossed the pelvis and linked with the left. The vertebrae did not survive, although the pelvis was intact. The legs were slightly bent at the knee and extended to the NW comer. Two sherds of pottery were recovered, one from the fill of the top of the grave and a second from above the left elbow. An iron shield boss (1) lay on the chest with the right arm slightly overlying the boss. Directly behind the shield boss there were six fragments of iron, one a rivet and the other five perhaps part of the shield handle. Beside the grave to the W was a spearhead (2) lying on the clay whilst to the S lay a spear ferrule (3). The distance from the tip of the spear to the tip of the ferrule was 2 metres. An iron knife (4) was beside the left hip and an iron belt buckle (5) was on the chest adjoining the shield boss. An iron rivet (6), probably from the shield, was recovered below the left leg beside the ankle.

1 Iron **shield boss** with a flat-topped button on top of a straight-sided dome, a concave wall and what remains of the sloping flange. There are some mineralised wood remains adhering on the underside of the flange. There are also some fragments of wood and metal from the interior of the dome (not conserved). Dickinson Group 1.1.Diameter of shield boss 128 mm. There is one iron **rivet** which has a diameter of 12 mm, and five fragments of iron which almost certainly form part of a **shield handle,** one of these pieces of iron is perforated by a rivet. Largest iron fragment 53 mm long.

2 Iron **spearhead,** a large angular blade with a stepped section and an open split socket retaining fragments of wood identified as alder or hazel. Swanton Series L. Length 294 mm.

3 Iron spear **ferrule** with traces of wood in the socket. Length 142 mm.

4 Iron **knife** with an angled back and curved cutting edge, the tip of the blade is missing, with bone or horn handle on hafted end, Evison Type 3. Length 128 mm.

5 Iron **buckle,** oval loop, tongue complete. Mineralised tabby weave ZZ spun textile adheres on the front and sides. Diameter 19 mm.

6 Iron disc-headed **rivet.** Length 15 mm.

7 **Potsherd** - Anglo-Saxon bodysherd (not illustrated).

8 **Potsherd** - Anglo-Saxon bodysherd (not illustrated).

GRAVE 35

Female, age 25–36

Alignment NW/SE

A crouched burial lying in a shallow well-defined grave with the skull at the S end facing E. The burial was lying on the left side, with the right arm folded in front of the face and across the head; whilst the left arm was bent and pointing S. There were no vertebrae or small bones surviving. Fragments of the pelvis remained and the legs were bent with the knees pointing NE. The grave finds comprised a group of one glass and eight amber beads (1a) around the neck and a smaller group (1b) comprising two amber and one glass bead above the left thigh. There was an iron key set (2-10), comprising seven iron bars, an attachment ring, together with a knife and a disc-headed rivet, below and behind the right thigh. A copper alloy rectangular belt plate attached to an iron buckle (11) was above the left thigh associated with three

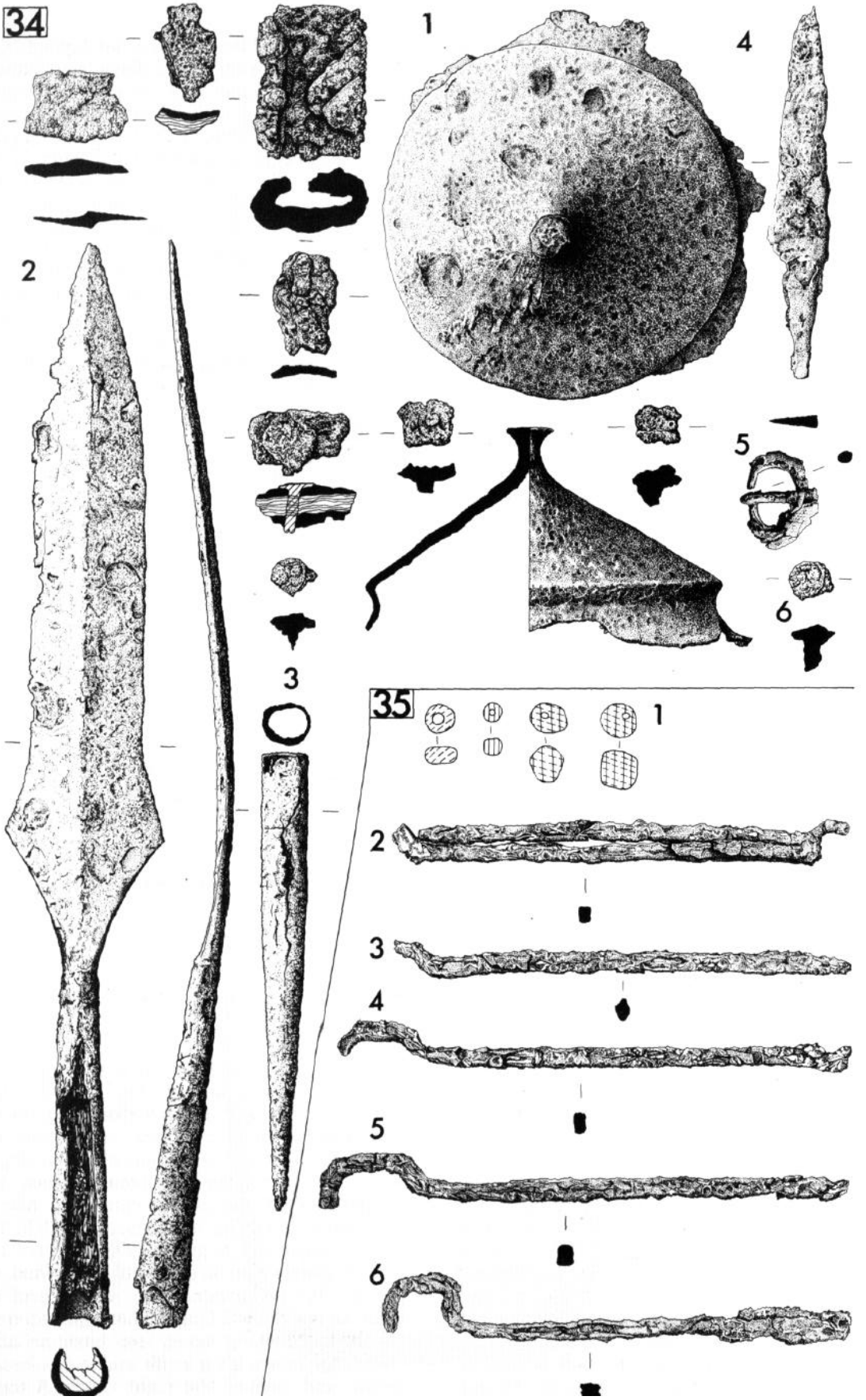


Figure 43 Finds from Graves 34–35

beads. There were two annular brooches, one (12) on the right shoulder and the second (13) beside the left shoulder. There were a pair of clasps on the right wrist (14) while clasp (15) was beside and E of, the left wrist. There were bucket pendants (16) W of and (17) S of the skull. Further bucket pendants (18) and (19) were found during the sieving of the grave fill. There was a group of copper alloy fragments (20-22) including a strap end below the left thigh and associated with the key set (2).

1a Monochrome opaque brick red barrel-shaped **bead,** A2c
Seven irregular barrel-shaped amber **beads,** D3
Disc-shaped amber **bead,** D5
1b Opaque blue glass annular **bead,** A1a
Two irregular barrel-shaped amber **beads,** D3

2 Two iron **bars** from a key set joined together with a fragmentary ring at one end and bent into a right angle at the other end. At the top end there are the corroded remains of a further two bars. Length 158 mm.

3 Iron **latchlifter** from a key set, broken at the top with a slight bend at the bottom. Length 156 mm.

4 Iron **latchlifter** from a key set, with fragments of a broken ring at the top and a bent right angle at the bottom. Length 174 mm.

5 Iron **latchlifter** from a key set, with a break at the top and bent at right angles at the bottom. Length 180 mm.

6 Iron **latchlifter** from a key set, with a break at the top, corroded fragments of other iron bars, and a double bend at the bottom. Length 159 mm.

7 Iron **latchlifter** from a key set, slightly bent at the top to form a loop, although this is broken. The bottom end of the bar is bent through 180 degrees and then is bent through right angles. Length 192 mm.

8 Iron **knife** with angled back and curved cutting edge, associated with the iron key set, Evison Type 3. Length 118 mm.

9 Iron **ring** associated with iron key set, this has almost a square section. External diameter 60 mm.

10 Iron disc-headed **rivet.** Diameter 20 mm.

11 Iron **buckle** and tongue with attached copper alloy rectangular belt plate. The buckle is oval and part of the tongue remains wrapped round the narrow bar section. The copper alloy belt plate is fastened by two large rivets and is decorated with ring-and-dot punchmarks around the outer edges and across the centre. The buckle is 30 mm long and 25 mm wide. The belt plate is 25 mm long.

12 Copper alloy sheet **annular brooch,** decorated on the front with six groups of three or four transverse grooves. The brooch has a wedge-shaped section and there is a groove around the centre of the brooch on the underside. Made from one strip of metal overlapped at the end, and connected by an iron pin. There are fragments of mineralised textile adhering on the back around the hinge of the pin. The textile is a jumble of Z and S threads of varying diameter. Leeds Type G. External diameter 55 mm.

13 Copper alloy sheet **annular brooch,** one of a pair with identical decoration to (12). Mineralised textile consisting of a jumble Z and S threads of varying diameter adheres on the back around the hinge of the pin. Leeds Type G. External diameter 54 mm.

14 Cast copper alloy **wrist clasps,** a matching pair. Two small hooks on one fit into two small, but worn, eyes on the other. The hook sections are decorated with groups of incised lines. There are ring-and-dot punchmarks on the outer edges of both hook and eye. The clasps have a scalloped outer edge and each has six attachment holes. Hines Form B18c. Length 36 mm.

15 Cast copper alloy **wrist clasp,** the eye section only, with decoration identical to (14) above. Only one of the eyelets survives complete. Hines Form B18c. Length 37 mm.

16 Four copper alloy **bucket pendants,** two corroded together, a further one complete, the fourth missing the base. All have a diameter of 9 mm.

17 Copper alloy **bucket pendant** in two pieces. Diameter 8 mm.

18 Copper alloy **bucket pendant,** complete with only a fragment of handle attached. Diameter 9 mm.

19 Three copper alloy **bucket pendants** one is complete with traces of a silver metal along the seams and handle, another two are plain buckets without handles or bases. Diameter 9mm.

20 Two copper alloy **strap ends** and other fragments. The largest fragment is perforated by a rivet at one end. around which is a simple

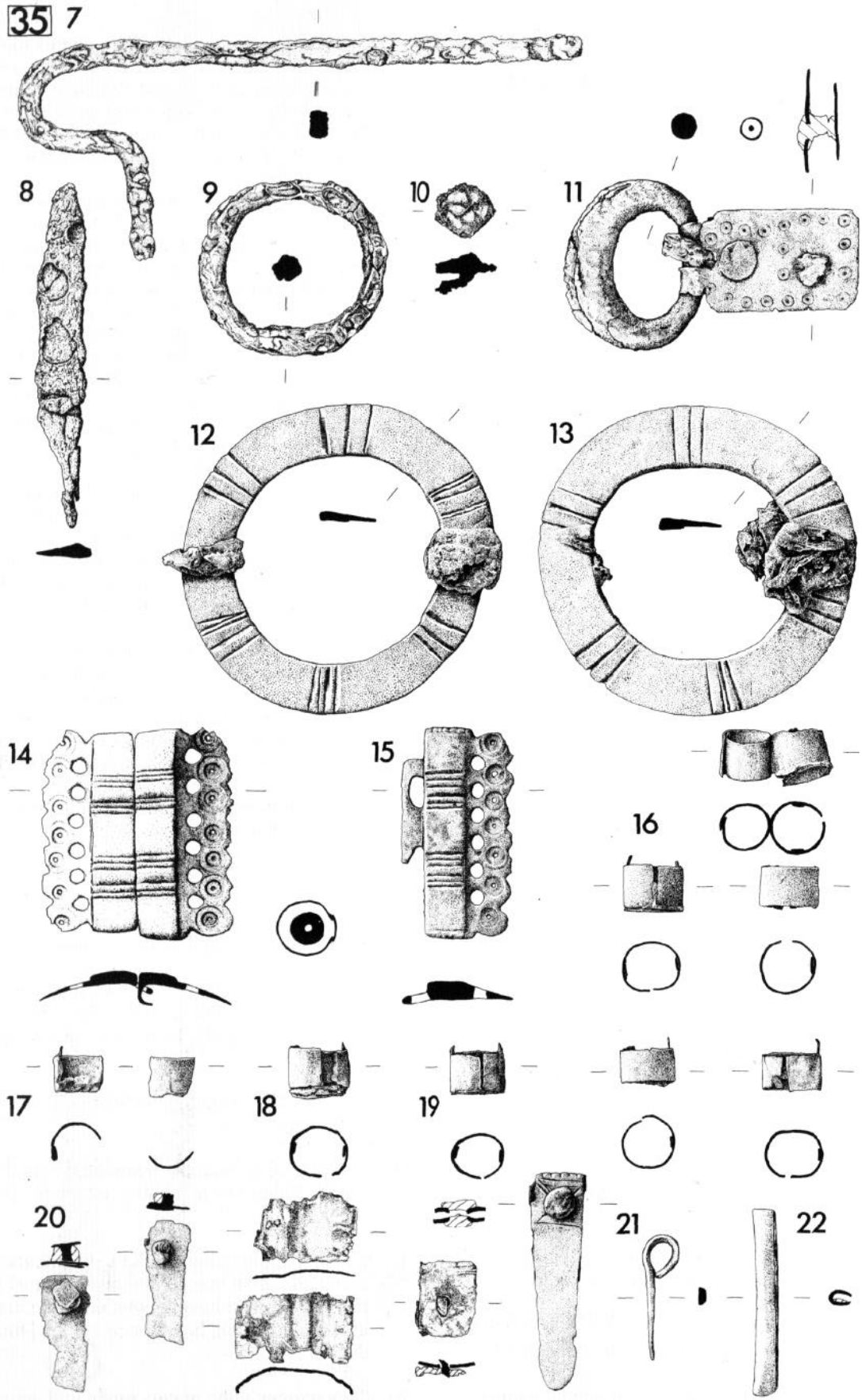


Figure 44 Finds from Grave 35

decoration of incised lines, the other end is rounded. There is a total of ten other copper alloy fragments of which six are illustrated. Lengths 19 mm and 20 mm.

21 Looped terminal of a copper alloy **pin.** Length 21 mm.

22 Copper alloy **edging** with the ends pinched closed. Organic remains inside are possibly leather, so perhaps edging for a bag. Length 32 mm.

GRAVE 36

Male, age 15–21
Also present bones of second individual: Sex?, age 13–17

Alignment NW/SE

An extended burial in a large and deep well-defined grave, which also contained inhumations 37 and 38. The grave had gravel edges and a sandy fill. The skull was at the S end and had been disturbed by the later insertion of inhumation 38. The right arm was bent with the forearm lying on the chest, whilst the left arm was overlain by inhumation 37. The vertebrae, ribs and pelvis all survived intact and bone survival was generally good. The legs were slightly bent with the knees pointing E and the feet N. The associated finds were an iron ring-shaped object (1) on the left shoulder and a sherd of pottery S of the left thigh.

1 Iron **ring** fragment square in section possibly from an annular or penannular brooch. External diameter of 36 mm.

2 **Potsherd,** fabric 3. (not illustrated).

GRAVE 37

Female, ?middle aged adult
Also present bones of second individual: Sex?, age 7–11

Alignment NW/SE

An extended burial in the same grave as inhumations 36 and 38. The skeleton was lying on the right side with the skull at the S end, facing E. The burial was W of and slightly S of grave 36 and was overlain by inhumation 38. The right arm was under the body and the left arm was on the chest. The vertebrae, ribs and pelvis were all intact. The knees were bent and pointing E, they were situated marginally N of the pelvis of inhumation 36. There were no finds associated with this burial.

GRAVE 38

Female, age 20–30

Alignment NW/SE

A crouched burial at the S end of the grave which contained inhumations 36 and 37. The burial overlay and slightly disturbed both inhumations 36 and 37, although there was no discernible cut through the grave fill. There was a good degree of bone survival. The skull was at the S end facing E and the body was tightly crouched, possibly to fit into the grave cut. The body was lying on the right arm, whilst the left was bent with the hand pointed S. The ribs had survived, although only some of the vertebrae remained. The pelvis was intact and the legs were bent, with the knees pointing E and the feet N. The feet were pulled up tightly to within 20 cm below the pelvis. The finds associated with this burial comprised an iron knife (1) beside the left elbow and a buckle and belt plate (2) at the waist.

1 Iron **knife** with a long narrow blade, curved back and straight cutting edge. The tip of the blade has traces of organic material adhering, possibly leather or skin, and on the tang there are wood remains, Evison Type 4. Length 117 mm.

2 Iron **buckle** and tongue with a copper alloy trapezoidal **belt plate.** An iron plate attached to a copper alloy plate by four copper alloy rivets. Between the two layers there is some organic material, possibly leather. The iron buckle appears to be a narrow oval shape with a tongue across it. It is obscured by a mass of textile covering the end of the copper alloy plate. Buckle 10-20 mm wide, 28 mm high. Belt plate 40 mm long.

GRAVE 39

Sex?, age 2 years ± 8 months

Alignment unknown

A much disturbed burial lying in a slight hollow. The skull was at the S end facing E, and the body was slightly tilted onto the right side. The body had been truncated below the chest and the only bones surviving were the collar bone, ribs and upper arms. There were two finds, a small pot (1) on the right side of the skull which had tipped slightly N, and a small bone ring (2) which lay on the right side of the chest.

1 Almost complete handmade biconical **vessel.** Fabric 3. Height 110 mm.

2 Broad plain bone **ring.** External diameter 14 mm.

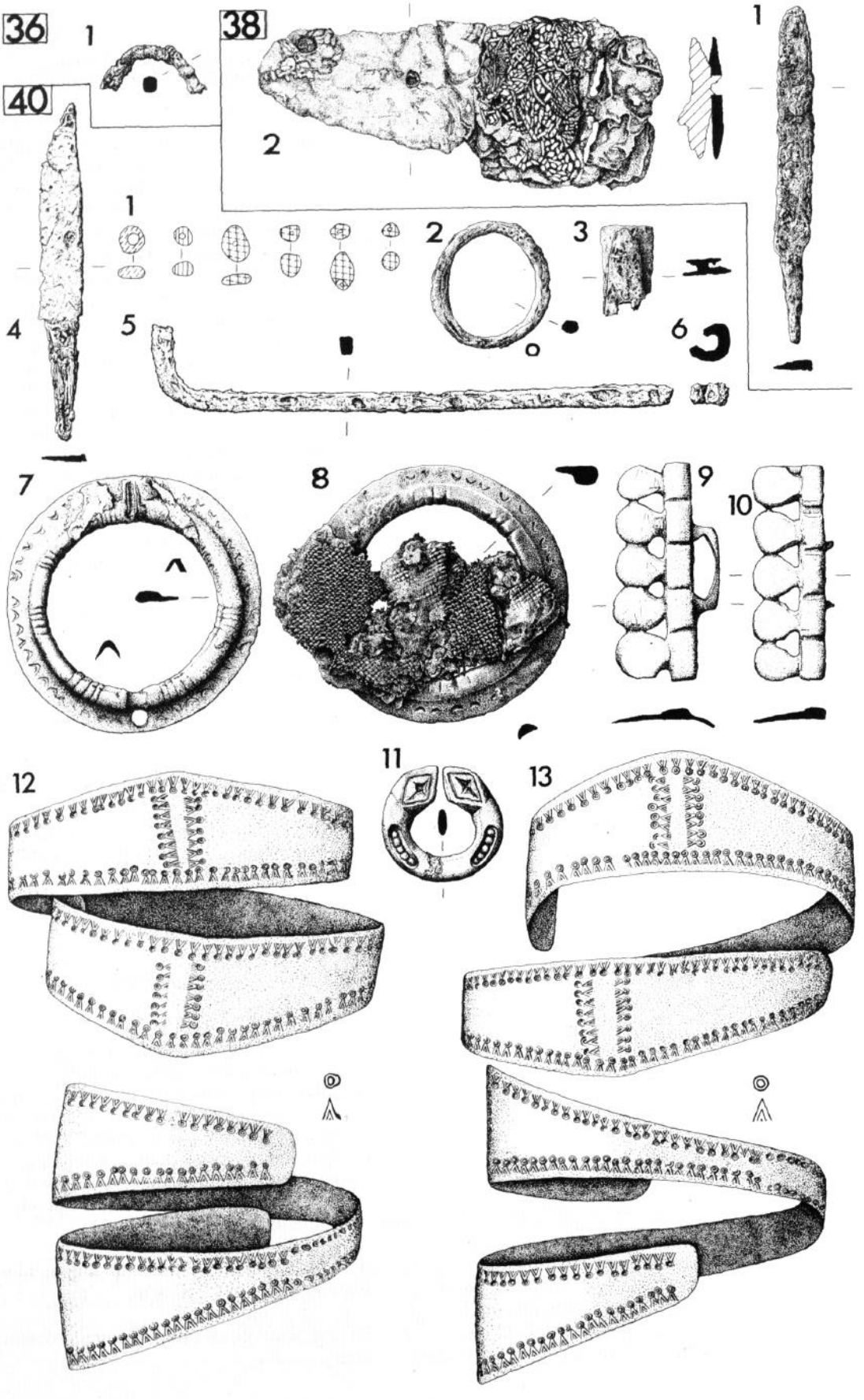


Figure 45 Finds from Graves 36–40

GRAVE 40

Female, age 20–30

Alignment N/S

An extended burial in a shallow grave with the skull at the S end facing NW. The burial was extended with the arms folded across the chest, left over right. The ribs and vertebrae did not survive very well although the pelvis was complete. There was a group of eleven amber and seven glass beads (l), on the right collar bone. Pottery sherds lay on the left shoulder beside a plain ring (2). An iron strap end (3) lay on the chest. W of the pelvis on the side of the grave lay an iron knife (4), latch lifter (5) and an associated small ring (6). There were two annular brooches, one (7) on the left shoulder and the other (8) on the right. There were two gilded wrist clasps, one (9) was beside the right wrist, the other (10) beside the left wrist. A small penannular brooch (11) lay on the collar bone with the beads. There was also a fine silver bracelet on each wrist with, (12) on the right and (13) on the left.

1 Six translucent blue glass annular **beads,** A1a
Opaque brick red glass barrel-shaped **bead,** A2c
Disc-shaped rectangular amber **bead,** D1
Eight irregular barrel-shaped amber **beads,** D3
Irregular long convex biconical **bead,** D4
Triangular amber bead, D7

2 Iron **ring,** small and plain. The surface covered in mineralised textile remains. External diameter 41 mm.

3 Iron **strap end,** consisting of two fragmentary plates, one rectangular, the other triangular, both have a recessed groove at one end and are joined by a rivet. Length 30 mm.

4 Iron **knife** with straight back, curved cutting edge and bone or horn adhering to the haft. Evison Type 2. Length 117 mm.

5 Iron **latchlifter,** an iron bar bent through right angles at one end. Length 179 mm.

6 Iron **ring,** a small thick ring associated with latchlifter (5) above. Diameter 11 mm.

7 Cast copper alloy **annular brooch,** with a central ridge, decorated with groups of four grooves and V-shaped punchmarks around the outer edge. There is a round perforation in the flat edge with grooves in the ridge for the iron pin. 'Two pieces of iron covered with mineralised textile are associated with the brooch and may be the remains of the pin. Mineralised textile on the back of the brooch consists of S-plied warp threads. which may represent either a tablet-woven braid or the corded fringe of a textile. Leeds Type G. Diameter 45 mm.

8 Cast copper alloy **annular brooch,** with a central ridge, decorated with groups of four grooves and V-shaped punchmarks around the outer edge. The underside is plain and flat. Both the front of the brooch and an iron pin are covered with mineralised textile representing a tabby weave ZZ spun overlying a 2/2 twill ZZ spun while a third mineralised textile S-plied in both systems exists on the back of the brooch. A fourth mineralised textile occurs on a loose section of the iron pin is a 2/2 twill ZS spun. Leeds Type G. Diameter 45 mm.

9 Cast copper alloy **wrist clasp** comprising a rectangular bar divided by four transverse grooves into five sections. The five sections each have a flat round plate on one side leaving gaps for attachment. On the opposite site is a very worn eye. Traces of gilding cover the front, whilst the back is plain and flat. Hines Form B18c. Length 37 mm.

10 Cast copper alloy **wrist clasp,** similar to 9 above, with the eye broken. On the underside is a small flat rectangle of copper alloy soldered across plate and bar in order to strengthen the clasp. Traces of gilding are present on the front. Hines Form B18c. Length 37 mm.

11 Cast copper alloy **penannular brooch** with two lozenge-shaped terminals, each containing a four pointed star. The terminals have a gap of 1 mm between them. On each side of the ring are five raised dots in a sunken rectangle. There are traces of textile remains in the area where a pin would be located, opposite the brooch terminals. Related to Dickinson Type G 2. Diameter 42 mm.

12 Silver **bracelet** decorated with punchmarks of a double circlet and a double V-shape. The spiral-form bracelet comprises two linked lozenges with rounded terminals. Two lines of transverse decoration cross the widest part of the bracelets and there is a row of punched circlets on the apex of the V decoration along both edges. At its narrowest, the bracelet has edging decoration of circlets only The bracelet is very worn at the back. External diameter 57 mm. Height 51 mm.

13 Silver **bracelet,** similar to (12) except that it has traces of fabric adhering to the outside. External diameter 63 mm. Height 60 mm.

14 **Potsherd.** Fabric 2. (not illustrated)

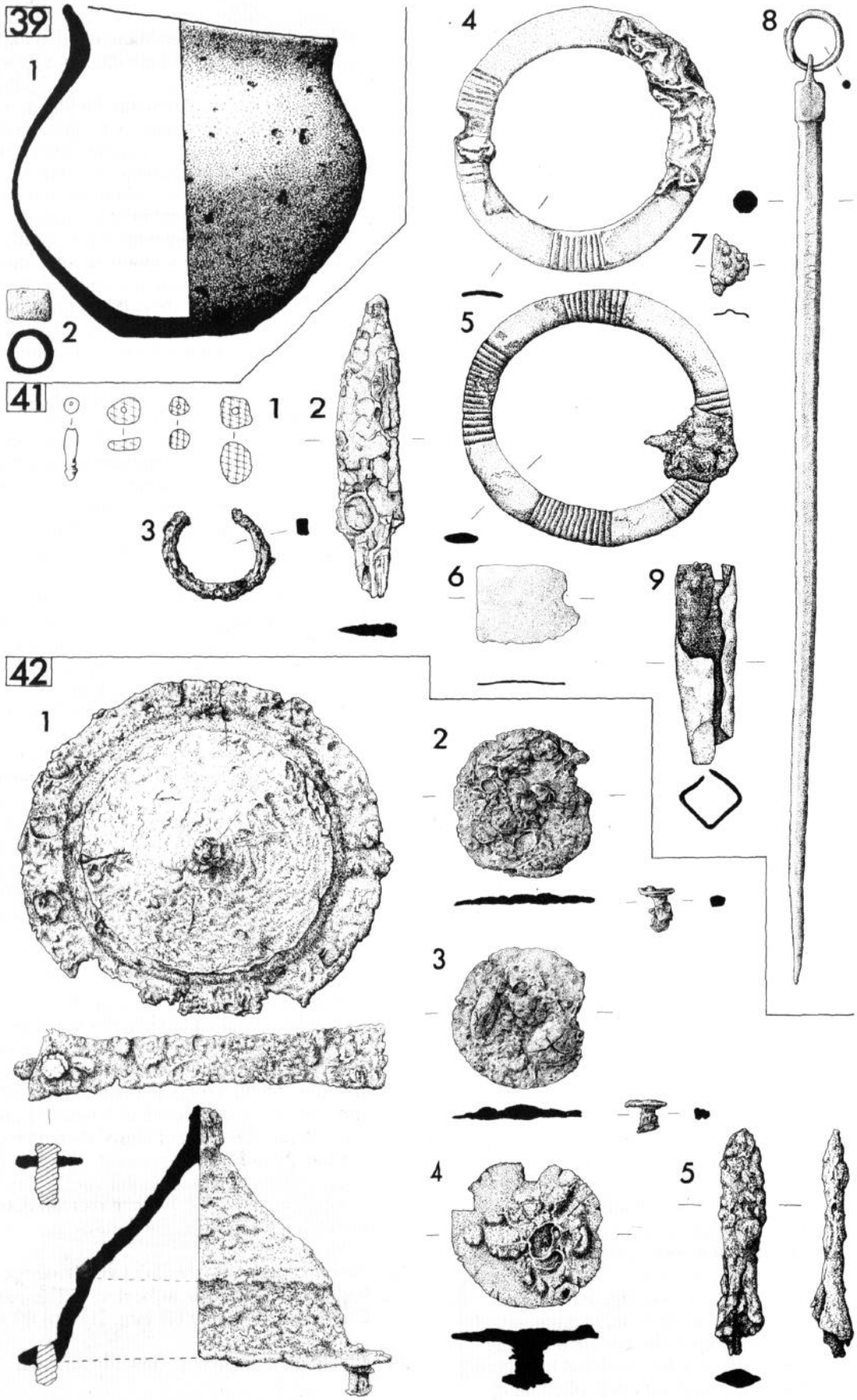


Figure 46 Finds from Graves 39–42

GRAVE 41

Female, age 20–30
Also present bones of secondindividual: Sex?, ?young/middle-aged adult
Alignment NW/SE

A crouched burial in a slight hollow with the skull at the S end facing W. The burial was lying on the left side on top of the gravel subsoil, with the arms bent in front of the chest and the hands pointed S. The vertebrae, ribs and pelvis did not survive well, the knees pointed W and the toes were marginally truncated. The finds comprised a group of eight amber and one gold-in-glass bead (1) from under the jaw. An iron knife (2) lay on the W side of the waist and an iron ring (3) lay beside the left thigh. There were two annular brooches, one (4) on the right shoulder and the other (5) S of the left shoulder. A small fragment of copper alloy sheet (6) was under the jaw, associated with a pin (8). A copper alloy sheet fragment (7) lay beside the second annular brooch (5). A copper alloy pin (8) lay across the clavicle, pointing SW, attached to this was the small copper alloy strip (6). A copper alloy cylinder (9) lay associated with the second annular brooch (5) S of the left shoulder.

1 Opaque gold-in-glass **bead,** B4
Disc-shaped amber **bead,** D1
Four irregular barrel-shaped amber **beads,** D3
Rectangular amber **bead,** D8
Amber bead, fragments only
Two fragments of an amber **bead** of indeterminate shape

2 Iron **knife** with straight back which curves inwards at the tip of the blade, with a curved cutting edge. The short tang is broken and there are mineralised wood or leather fragments adhering to the blade, possibly remains of a sheath. Evison Type 6. Length 104 mm.

3 Iron **penannular ring,** square in section. External diameter 35 mm. Its shape suggests that it is more probably from a brooch than a buckle. External diameter 35 mm.

4 Cast copper alloy **annular brooch,** decorated with two groups of incised lines, one group being around a notch for the pin hinge bar. Mineralised textile adheres to the area at both ends of the iron pin. The brooch is wedge-shaped in section. Leeds Type G. External diameter 46 mm.

5 Cast copper alloy **annular brooch,** similar to (4), above but decorated with four bands of incised lines running across the brooch. The remains of mineralised textile adhere. The brooch differs from (4), in having a lentoid section. Leeds Type G. External diameter 46 mm.

6 Copper alloy sheet **spangle,** a small rectangular strip with two distinct edges and part of a perforation by which it was attached to the ring of pin (8), below. Length 17 mm.

7 Copper alloy sheet fragment decorated with repoussé bosses, possibly a pin spangle or more probably a fragment of a wrist clasp. Length 10 mm.

8 Cast copper alloy dress **pin,** a long pin with a small copper alloy ring attached at the head. The shank is octagonal with a rounded tip. The head is square with faceted edges at the top and bottom. Length 160 mm. Ring diameter 10 mm.

9 Copper alloy sheet **cylinder,** square in shape, possibly a part of a toilet brush. Length 34 mm.

GRAVE 42

Male, age 20–30
Alignment NNW/SSE

An extended burial in a well-defined shallow grave with the skull at the S end. The burial was tilted slightly onto the right side, and the head had tilted back to the S. The bone survival was generally good with the vertebrae, ribs and pelvis intact. The right arm lay at the side of the body and the left was at the side, with the hand on the pelvis. The grave finds comprised a shield boss (1) on the right side of the chest, parallel with the elbow. Two small and three large iron disc-headed rivets lay on either side of the shield boss. Shield disc mount (2) was 22 cm N of the boss and disc mounts (3) and (4) were together 10 cm S of the boss, with (3) immediately W of (4). An iron spearhead (5) lay 10 cm S of the left shoulder.

1 Iron **shield boss** and **handle,** a carinated boss with a medium high wall, a narrow flange and a concave cone terminating in a rod. The handle terminals expand slightly and each contained a rivet, only one being present now. Dickinson Group 4. Diameter 123 mm. Length of handle 120 mm.

2 Iron **shield rivet,** a large thin circular disc with a small rivet attached to the centre on the underside. Diameter 55 mm.

3 Iron **shield rivet,** a large circular disc with slight wood or textile remains on the underside. Diameter 51 mm. Also a small rivet associated, with wood remains on its shank. Diameter of rivet base 11 mm, length of rivet 14 mm.

4 Iron **shield rivet,** a large circular disc with wood remains on the surface. Diameter 50 mm. A rivet associated with this object has wood remains adhering to its shank. Diameter of rivet base 14 mm, length 8 mm.

5 Iron **spearhead** or javelin head, small, spearhead with a rhomboidal profile and a small socket, Swanton Group Cl. Length 78 mm.

GRAVE 43

Sex?, age 6–10

Alignment NNW/SSE

A crouched burial in a shallow grave cutting into clay. The skull was at the S end facing W and the body lay on the left side. The upper ribs survived and all the vertebrae were intact. The arms were at the side of the body and the legs were bent with the knees pointing to the W. The single object associated with this burial was an iron knife (1) on the left side of the body under the ribs.

1 Iron **knife** with very thin narrow blade, with a straight back and curved cutting edge, Evison Type 2. Length 130 mm.

GRAVE 44

Sex? — grave finds imply female, child

Alignment N/S

A much disturbed burial in a shallow grave with the skull at the S end. The fragments of bone comprised the skull, ribs and one arm of a young person. A modern disturbance prevented the direct association of the finds with the skeleton. The grave finds comprise a group of seven glass beads (1), and a round glass pendant (4). An iron buckle (2) lay 10 cm S of the beads and an annular brooch (3) lay to the N. These objects were probably arranged with (1) on the chest, (2) at the waist and (3) on the collar bone. A silver strip (not illustrated) encased pendant (4), and this may have hung from the neck alongside the beads.

1 Opaque mustard yellow glass **bead,** A1a
Opaque small green glass **bead,** A1a
Translucent blue glass **bead,** A1a
Two translucent double segmented green glass **beads,** A1b
Opaque triple segmented blue-green glass **bead,** A1d
Brick red opaque cylindrical glass bead with pale grey decoration, C7b

2 Iron **buckle,** oval, with a tongue wrapped around one side of the buckle and resting on the other side. 31 mm long, 22 mm wide, with the tongue extending 6 mm beyond the edge of the buckle.

3 Cast copper alloy **annular brooch,** irregular in shape, decorated with six irregular groups of transverse grooves alternating with expanded undecorated areas. Leeds Type F. External diameter 43 mm. External diameter 43 mm.

4 Fragment of translucent glass Roman **bracelet,** dark blue with worn cable comprising three narrow bands, with short white lines in a herring-bone design. The ends of the fragment have been cut cleanly; The fragment originally had a silver binding of which only fragments survived. Length 21 mm.

5 Silver **binding** in nine small rectangular fragments (not illustrated). These strips formed two bands which originally traversed the length and width of the glass bangle 4. There are slight traces of solder adhering to two fragments. The longest surviving strip is 10 mm long.

GRAVE 45

Sex? — grave finds imply female, age 12 years ± 30 months

Alignment NNW/SSE

A crouched burial lying on the left side in a shallow grave, with the skull at the S end facing E. The bone was very soft and some of the smaller bones, including vertebrae and ribs; did not survive. The right arm was bent slightly and lay at the side of the body, whilst the left was also bent and lay on the pelvis. The legs were bent with the knees pointing W. The grave finds included two amber beads (1) situated under the jaw. A jar (2) was at the S end of the grave, resting on the skull. The handle of a knife (3) was in the grave fill. An annular iron brooch (4) was E of the skull alongside an iron nail (5). A copper alloy wrist clasp (6) was situated beside the ceramic jar (2) near the skull.

1 Two irregular barrel-shaped amber **beads,** one broken, both D3.

2 Complete pottery **jar,** unevenly made with a flattened base and wide mouth. Fabric 1. Height 14 mm.

3 Iron **knife,** very fragmentary, comprising most of the tang with a small fragment of blade; too small to classify. Length 38 mm.

4 Iron **annular brooch,** a flat rounded form with iron pin. One end of the pin looped around the brooch, on the opposite side the

terminals of the brooch ring overlap. Diameter 40 mm.

5 Iron **nail** with small head and square profile. Length 40 mm.

6 Copper alloy **wrist clasp** consisting of a narrow bar decorated with five transverse grooves and with a hook on one side and five rounded linked plates on the other. Hines Form B18c. Length 38 mm.

GRAVE 46

Sex?, age 12–18

Alignment NNW/SSE

An extended burial set in a slight hollow, much disturbed by ploughing. The skull was at the S end facing E, although only the base of the cranium survived. The arms lay at the side of the body and the legs were slightly flexed. There were many small fragments of bone scattered in the immediate area of the grave. No finds were associated with this burial.

GRAVE 47

?Female, ?middle-aged adult

Alignment E/W

A burial lying on the subsoil surface. This burial is unusual in several respects, it was aligned E-W in a prone position, and there was little of the body surviving above the pelvis. The bone was generally fragmentary, although it was complete below the pelvis. There were no grave finds associated. Directly N lay fragments of a second skeleton, inhumation 116.

GRAVE 48

?Female, age 17–25

Alignment N/S

An extended burial in a shallow grave with the skull at the S end. The skull and the legs extended beyond the grave and had been disturbed and truncated by ploughing. The left arm was slightly bent and lay under the spine; whilst the right arm had been disturbed. Most of the vertebrae and ribs survived, although the pelvis was only fragmentary and the legs were truncated above the knee. The grave finds included five amber beads (l), one from the topsoil and the others around the jaw. An iron buckle (2) lay on the left hip alongside an iron mount (3). Another iron object, a bar (4) lay SE of the skull and a copper alloy scutiform pendant (5) was beside the beads (1) at the jaw.

1 Four irregular barrel-shaped amber **beads,** D3 Fragmentary amber **bead**

2 Iron **buckle,** small, D-shaped with tongue attached and wrapped around the straight bar. On the X-ray strips of copper alloy or silver inlay are visible around the curved edge of the buckle. Width 20 mm and length 25 mm.

3 Iron **mount,** a flat rectangular sheet pierced by a small iron rivet, with the shank projecting 2 mm on one side. Length 29 mm.

4 Iron **bar,** rectangular and broken at both ends. Length 29 mm.

5 Copperalloy **scutiform disc pendant.** Part of a small disc with a central repousse boss and a ring of smaller repousse bosses around the edge. The centre is covered with mineralised textile remains. A second fragment appears to be the sheet copper alloy attachment loop for the pendant. Diameter 20 mm. Length of loop 7 mm.

GRAVE 49

Female, age 20–30

Alignment NNW/SSE

An extended burial lying on the left side, with the skull at the S end facing E. The bone survival was generally good except for the vertebrae and ribs. The arms lay across the chest, with the right arm slightly lower, resting on the pelvis. The legs were slightly bent and crossed at the ankles with the right crossing over the left. The torso and skull were twisted slightly to the left in the grave. An iron knife (1) lay W of the pelvis and an iron buckle (2) lay in the fill of the grave over the chest. An iron pin (3) lay under the jaw and an annular brooch (4) lay beside the right shoulder. A fragment of glass (not illustrated) lay in the grave close to the iron knife (1).

1 Iron **knife** with an angled back and curved cutting edge. On the blade is an area of textile, l/l tabby weave. There are also small amounts of leather or skin remains on the blade and organic remains on the tang. Evison Type 3. Length 128 mm.

2 Iron **buckle,** oval, with tongue. Part of the pin attachment detached. 35 mm long and 25 mm wide. Length of pin is 27 mm.

3 Iron **pin,** comprising a rectangular bar, broken in the middle and with mineralised fabric adhering, with a flat round disc head also covered with mineralised fabric at one end. Length 90 mm.

4 Copper alloy sheet **annular brooch,** a plain flat ring with a hole for a pin in one side. Leeds Type G. External diameter 45 mm.

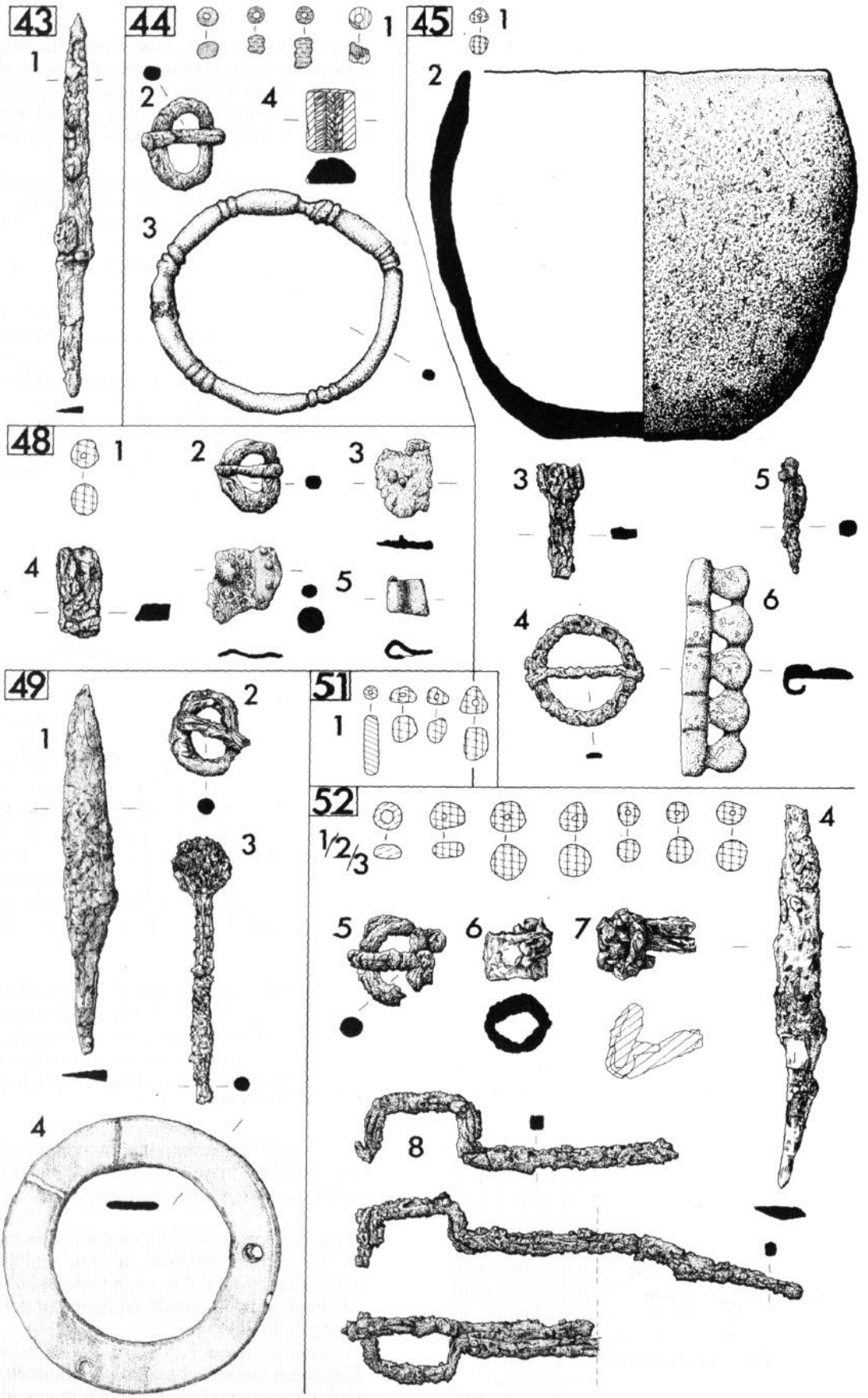


Figure 47 Finds from Graves 43–32

5 Fragment of a glass **vessel,** clear pale green glass, probably modern. Length 35 mm. (not illustrated)

GRAVE 50

Sex?, age 7–11

Alignment unknown

A crouched burial, in a shallow hollow with the skull at the S end facing E. The burial was lying on the right side, with the arms folded in front of the chest. There were no vertebrae or ribs surviving and the pelvis was fragmentary. The knees were bent, pointing to the E. There were no finds associated with this burial.

GRAVE 51

Sex? — grave finds imply female, adult

Alignment NE/SW

A much disturbed burial comprising a scatter of bones, some of which lay on the clay subsoil surface, with others laying in the topsoil. The predominant surviving bones were the ribs and arms. It is probable the skull was at the S end, although there was not enough evidence to suggest any grave position. There were several beads associated with the burial, four of which were amber and one glass (1), all found in the topsoil around the bones.

1 Translucent blue glass cylindrical **bead,** A5a
Two irregular barrel-shaped amber **beads,** D3
Sub-cuboid amber **bead,** D5
Triangular amber **bead,** D7

GRAVE 52

Female, age 25–35

Alignment N/S

An extended burial with the skull at the S end, facing N, in a grave with well-defined and steep sides. The left arm was folded across the chest and the right was extended and lay on the right thigh. The bone survival was very good with vertebrae, ribs and the pelvis all intact. The legs were bent and the knees were slightly raised, leaning to the right. The feet were against the N wall of the grave. There were three groups of beads; on the chest (1), beside the right leg (2) and around the neck (3). An iron knife (4) lay beside the left hip and a buckle (5) lay at the foot of the grave in the fill. An iron ring (6) lay beside the right hand and a key set (7) beside the left hip. Three iron bars and three iron fragments (8) from a key set occur beside the left hip with a ring and three bars (7), and an iron nail (9), lay beside the left collar bone. Fragments of a broken iron buckle (10) and two nails (11) and (12), were found in the fill of the grave during sieving. An annular brooch (13) was found in the skull and a copper alloy ring (14) lay beside the left hip with the key set (7). Two copper alloy spangles (15) attached to an iron ring were found during sieving. Two wrist clasps were found, with clasp (16) on the right wrist and (17) beside it on the right arm. A small copper alloy ring (18) was also found near the right arm.

Group 1
Translucent monochrome blue glass annular **bead,** A1a
Three disc-shaped amber **beads,** D1
Thirty-one amber **beads** with irregular barrel-shaped bodies, D3
Three amber **beads** with cuboid body, D5
Rounded amber **bead** D6
Seven amber **beads** with triangular bodies, D7
Amber rectangular **bead,** D8

Group 2
Nine amber **beads** with irregular barrel-shaped bodies, D3
Amber rounded **bead,** D6
Amber triangular-shaped **bead,** D7

Group 3
Two amber **beads** with irregular barrel-shaped profile, D3
Amber cuboid **bead,** D5
Two amber **beads** with rectangular profile, D8

4 Iron **knife** with an angled back and straight cutting edge, the tip of the blade broken. Probably Evison Type 5. Length 131 mm.

5 Iron **buckle,** D-shaped with tongue and part of an iron belt plate. The belt plate fragment is attached beside the tongue on the straight bar, with faint textile remains adhering. 25 mm wide, 31 mm long.

6 Iron tubular **ring,** a cylindrical iron tube wrapped in mineralised textile both inside and out. Diameter 21 mm.

7 Fragment of an iron **key set** consisting of a ring with three bars attached, the ends of the bars being looped over the ring. The bars are corroded together and have been broken. Length 34 mm.

8 Iron **key set** comprising three iron bars bent at one end and broken at the other, with several smaller fragments. Length 83 mm, 110 mm, 149 mm. Other iron fragments (not illustrated) appear to represent two iron bars and two ends of a key set.

9 Iron **nail,** with a rectangular section- Length 36 mm.

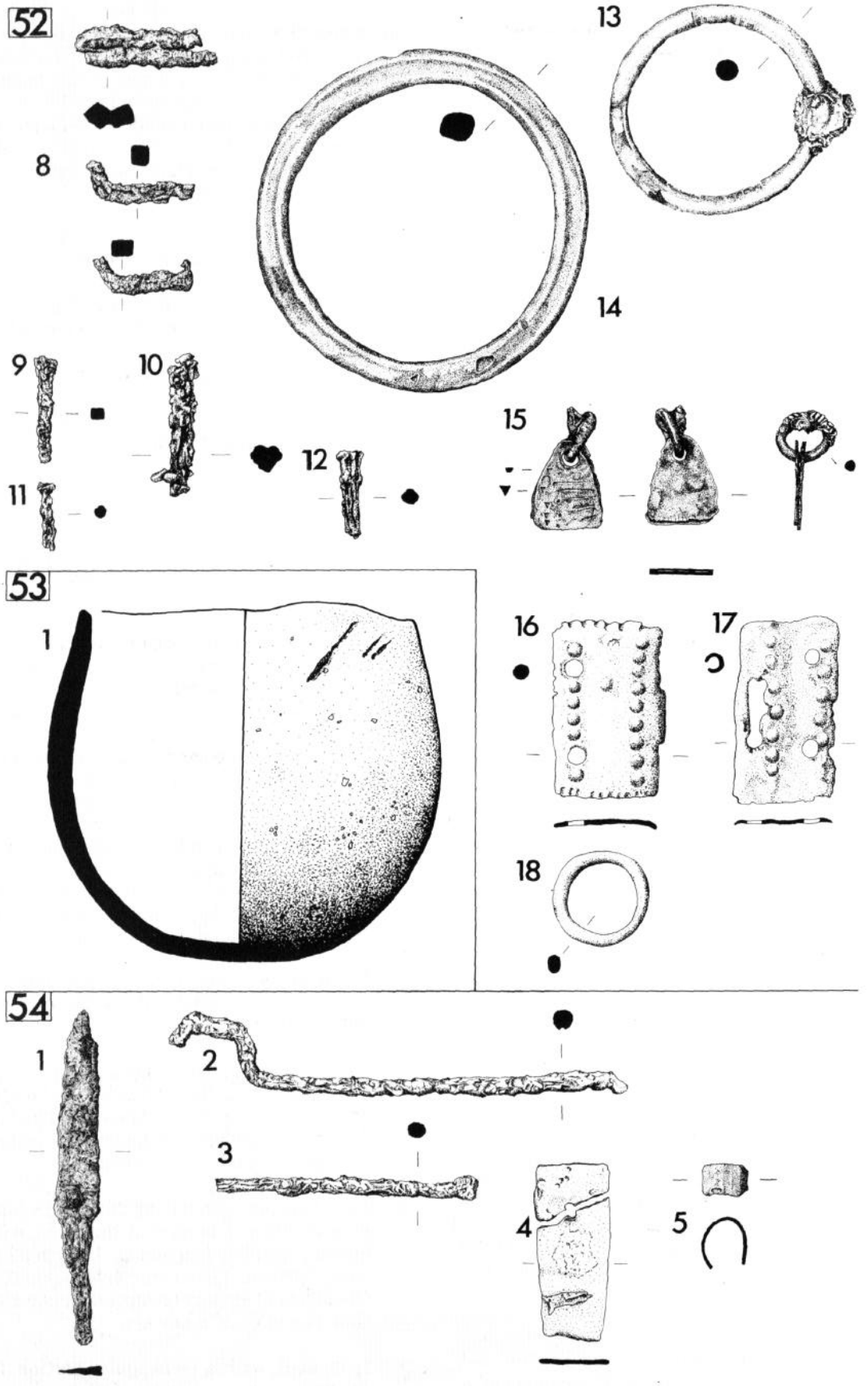


Figure 48 Finds from Graves 52–54

10 Iron **bar** with a circular plate attached at one end. There are traces of fabric adhering to the bar. Length 47 mm.

11 Iron **nail** with a rounded head. Length 23 mm.

12 Iron **nail** with a square head. Length 29 mm.

13 Cast copper alloy **annular brooch,** a plain oval ring with a grooved recess for an iron pin. Mineralised textile and iron remains adhere to the pin hinge, Leeds Type F. External diameter 38 mm.

14 Cast copper alloy **ring,** large diameter, perhaps a bag ring with irregularly shaped varied profile, mostly circular, with traces of textile. Diameter 59 mm.

15 Copper alloy sheet **spangles** and **ring.** Two thin triangular perforated sheets, stuck or welded together and attached to a small ring. One of the tags has triangular punch marks and faint incised lines, the other is plain. The copper alloy has flecks of silvery metallic powder on the surface, possibly the remains of silver/tinning. Length of spangles 16 mm. Diameter of ring 10 mm.

16 Copper alloy sheet **wrist clasp,** hook with two attachment holes. Decorated with two rows of repoussé bosses down the long edges. Fine punched triangles set along the top and bottom edges. Hines Form B7. Length 31 mm.

17 Copper alloy sheet **wrist clasp,** an eye section with two attachment holes and similar decoration to 16 above. Hines Form B7. Length 32 mm.

18 Cast copper alloy **ring,** an irregularly shaped ring with circular section. Diameter 16 mm.

GRAVE 53

Sex?, age 5–9

Alignment unknown

A child's burial in a shallow subcircular hollow. There were few bones surviving, comprising ribs and several teeth. A pottery jar (1) lay in the grave SW of the surviving bone.

1 Complete hand-made pottery **jar.** Fabric 4. Height 120 mm.

GRAVE 54

Sex?, age 12 years ± 30 months

Alignment NNW/SSE

An extended burial in a well-defined grave, with the skull at the S end, facing N. The body was slightly slumped into the grave with the knees and feet at the top of the grave and the left leg lying slightly over the right. The arms were at the sides of the body with the hands on the pelvis. Bone survival was generally good, although the vertebrae and smaller bones were brittle. An iron knife (1) lay beside the right thigh, whilst a latchlifter (2) and key set (3) lay below the left hip. One copper alloy strap end (4) lay under the jaw and a copper alloy ring (5) was on the right side of the chest.

1 Iron **knife** with a straight back which has a pronounced step at the tip of blade and a curved cutting edge. Evison Type 6. Length 114 mm.

2 Iron **latchlifter,** broken at both ends; a straight bar bent into an angle at one end. Length 135 mm.

3 Probable iron **latchlifter,** a straight bar broken at one end, the other widening to a square head. Length 89 mm.

4 Copper alloy **strap end,** a tapering strip with a small round perforation through the wide end. Length 29 mm.

5 Copper alloy sheet **ring** with overlapping ends, one of which has been perforated. Diameter 10 mm.

GRAVE 55

Male, age 25–35
Also present bones of second individual
? Female, age 15–21

Alignment NNE/SSW

An extended burial in a well-defined grave lying on the right side, with the skull at the S end facing E. The right arm was extended and the left arm lay over the waist and crossed the right tibia. The bones were in good condition with the ribs, vertebrae and pelvis all surviving. The legs were bent with the right laying over the left. The grave finds comprised a shield boss (1) lying 10 cm W of the skull. There were two shield disc-headed mounts between the skull and the shield boss with mount (2) S of mount (3). An iron disc-headed rivet (4) was also found with the shield boss. An iron spearhead (5) lay between the skull and shield boss and the ferrule (6) was 10 cm S of the skull. An iron seax (7) lay W of the body beside the vertebrae.

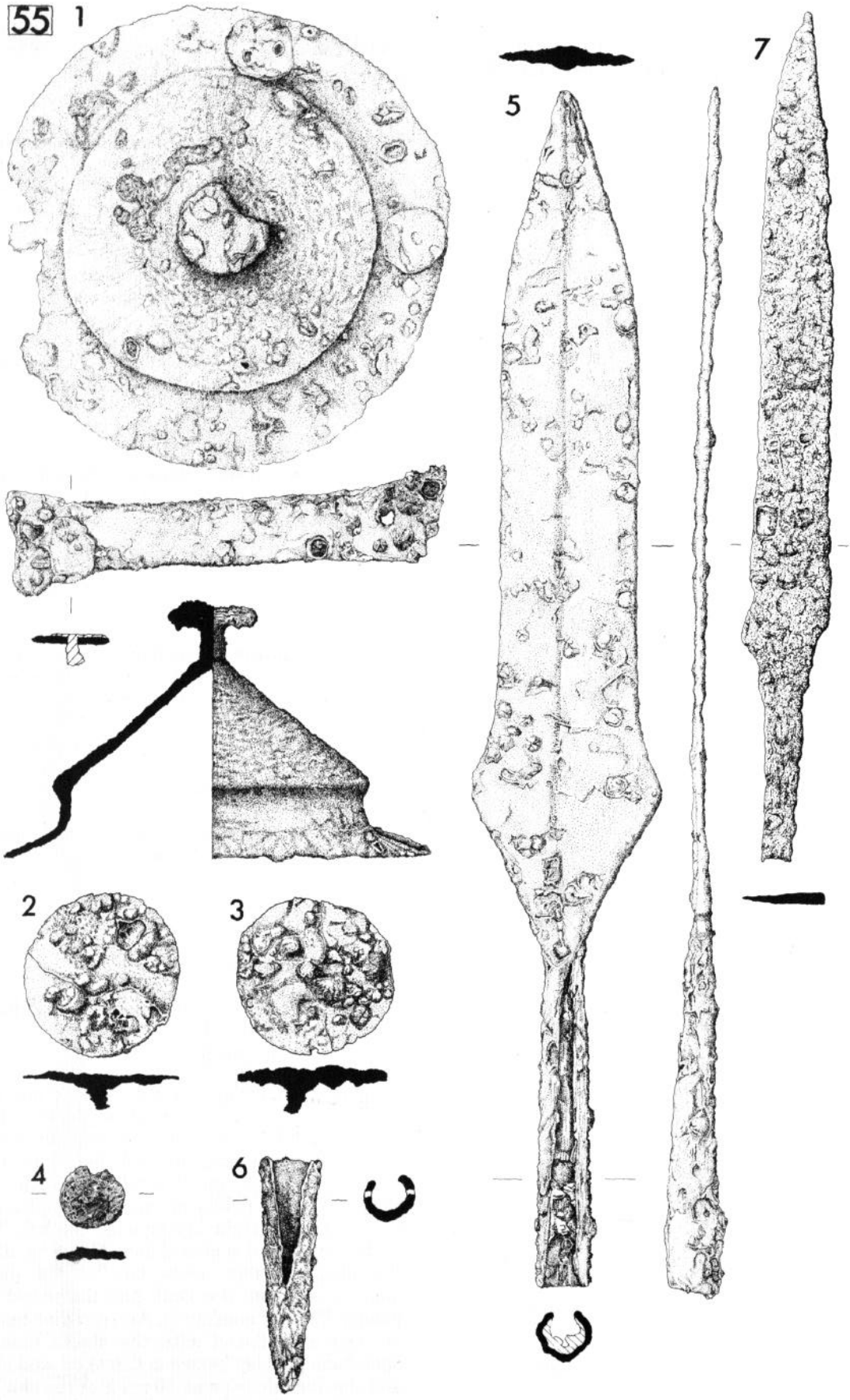


Figure 49 Finds from Grave 55

1 Iron **shield bass** and **handle.** The boss surmounted by a large flat disc has a straight cone a short concave wall, while the wide sloping flange has the remains of three disc-headed rivets attached. The interior of the boss has some mineralised organic material adhering underneath the handle. From the X-ray it appears that the apex had been inserted into the cone. Dickinson Group 5. Diameter 160 mm. The handle has a perforation at each end and slightly expanded terminals, with a rivet at one end of the handle and a perforation at the other end. Length 146 mm.

2 Iron **shield mount,** a large flat circular disc headed rivet shank protruding from the centre of the underside. Wood remains are attached to the rivet. Diameter 57 mm.

3 Iron **shield mount,** a large flat circular disc-headed rivet with the shank protruding from the centre of the underside with some wood remains attached. Diameter 55 mm.

4 Iron disc-headed **rivet,** small circular disc-headed with the shank missing. Wood remains attached to the underside. Diameter 22 mm.

5 Iron **spearhead,** a large angular blade with a mid-rib down the centre of the blade. The haft is an open-split socket with a rivet fastened through it. A large quantity of fragmentary mineralised wood remains has survived in the haft, Swanton Group H3. Length 415 mm.

6 Iron **ferrule** with traces of wood surviving in the open split socket, with a rivet hole. Length 79 mm.

7 Iron **seax** with a long curved blade and a straight back, curving to the tip and with part of the tang missing. There are traces of organic and textile remains adhering to the blade and fragmentary wood remains adhere to the tang. Evison Type 6. Length 292 mm.

GRAVE 56

Female, age 30–40

Alignment N/S

A crouched burial in a well-defined grave lying on the left side with the skull at the S end, facing W. There was a poor degree of bone survival with only the skull, ribs, right arm, pelvis and legs remaining. The arm lay on the chest alongside some rib fragments. The knees pointed W and the right leg was slightly over the left. The grave finds comprised a group of four beads (1) under the jaw. An iron knife (2) lay on the left side of the torso and an iron buckle (3) lay N of the left leg. A wrist clasp (4) lay at the rear of the pelvis and a copper alloy brooch fragment (5) was found beside the neck. A bar with two copper alloy spangles (6) lay underneath the jaw. A fragment of copper alloy sheet from beside the right arm and a fragmentary iron pin was found beside the left leg (not illustrated).

1 Two irregular barrel-shaped amber **beads,** D3
Cuboid amber **bead,** D5
Triangular amber **bead,** D7

2 Iron **knife** with a straight back, incurved to the tip of the blade with a curved cutting edge. Traces of bone or horn adhere to the tang, Evison Type 6. Length 123 mm.

3 Iron **buckle** and **plate,** a D-shaped buckle with tongue pin. The belt plate is a long flat sheet of iron wrapped round the buckle loop bar, bent back on itself and retained by a rivet. Textile adheres to one side. Overall length 55 mm.

4 Cast copper alloy **wrist clasp,** a plate with three spatulate lugs with attachment holes. The other side has a hook and a bar decorated with groups of incised lines. The plate has punched circlet decoration, Hines Form B20. Length 35 mm.

5 Fragment of a cast copper alloy **annular brooch** with traces of the incised groove decoration usually associated with the pin rest. Diameter 50 mm.

6 Two plain copper alloy **spangles** attached to an iron bar. Length of bar 54 mm.

GRAVE 57

Male — grave finds imply female, age 17–25

Alignment NNW/SSE

A crouched burial lying on the right side with the skull at the S end facing E. This inhumation is one of two (57 and 58) placed back to back in the same grave. The burial has the right arm extended, whilst the left is slightly bent and pointing S. An iron nail (1) was found in the ploughsoil above the grave. Bone survival was generally good with ribs, vertebrae and pelvis surviving. The legs were slightly bent and pointing E. The grave finds comprised a square-headed cruciform brooch (2) on the shoulder, with two copper alloy wrist clasps (3) and (4). A copper alloy cylinder (5) was at the north end of the grave beside the feet.

1 Iron **nail** with rectangular section, slightly bent. Length 60 mm.

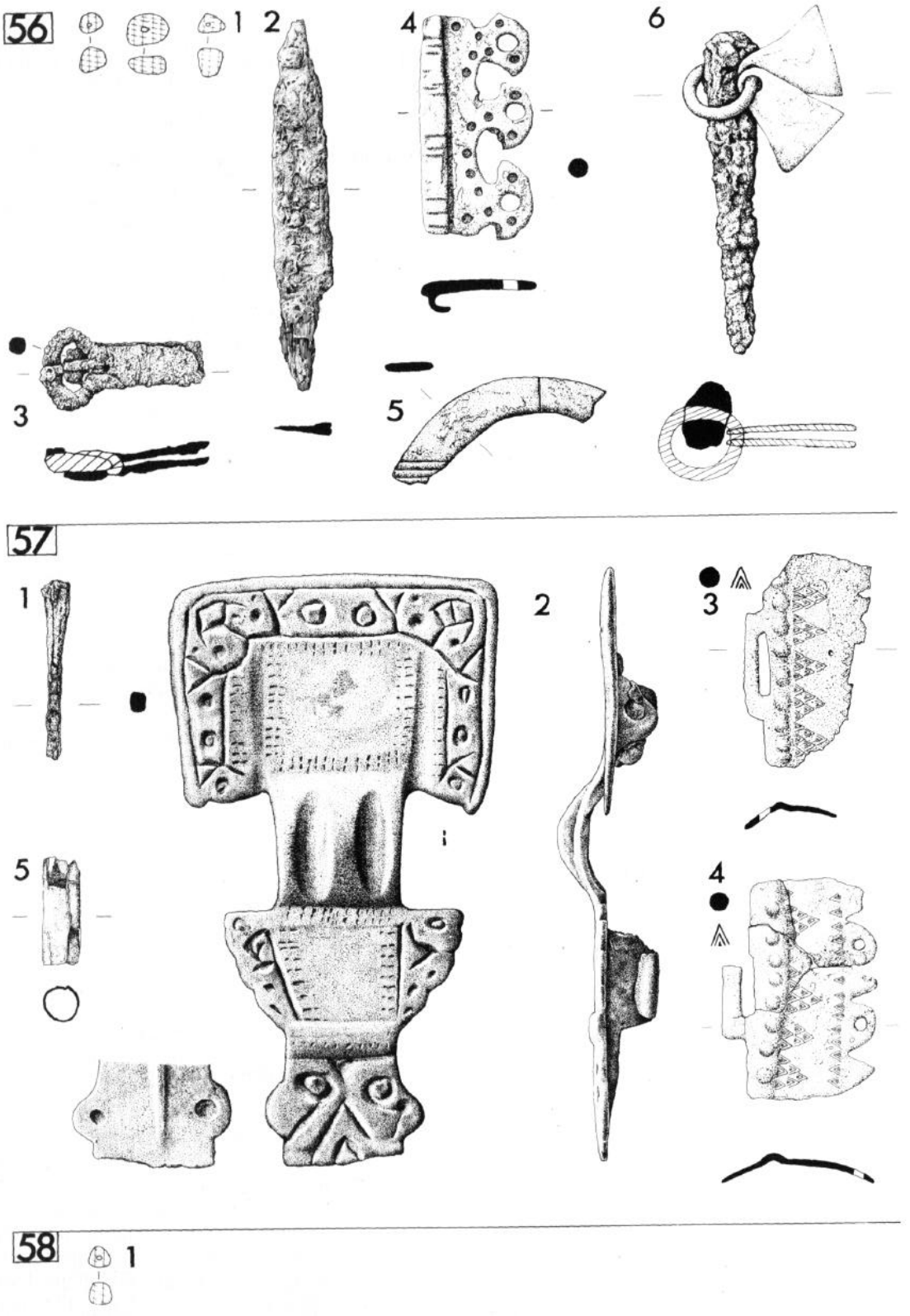


Figure 50 Finds from Graves 56–38

2 Cast copper alloy **square-beaded cruciform brooch** with most of the foot missing, crudely decorated in Salin Style I, with three face-masks flanked in the headplate corners by schematic animal elements, The central panel has a frame comprising, a double row of triangular punchmarks. The bow has two vertical hollows which create the illusion of an upstanding central bar. The footplate lappets have crude outward-facing stylized animals separated by a panel, with a frame of punched triangles. Below this panel there is a collar, again with a row of small punchmarks. Below the collar there is part of a terminal face mask, this is incomplete because the bottom of the brooch is broken. There are abrasion marks from the original finishing process on both sides of the brooch. The hinge on the back of the brooch was fixed through a double perforated lug, with traces of mineralised textile and part of an iron pin. The catchplate also survives retaining another fragment of iron pin, the majority of which is missing, Leeds Class C2. Length 96 mm.

3 Copper alloy sheet **wrist clasp,** a rectangular plate with an eye on one edge, the other edge damaged. The decorated clasp has a row of repoussé bosses and triangles made up of triple V punchmarks. Hines Form B16. Length 35 mm.

4 Copper alloy sheet **wrist clasp,** a rectangular plate with an eye slot on one edge and the other edge indented with two perforations for attachment. Similar decoration to (3) above, Hines Form B16. Length 35 mm.

5 Copper alloy sheet **cylinder** made from a rectangular sheet with traces of incised line decoration. Length 18 mm, diameter 6 mm.

GRAVE 58

Female, age 15–21

Alignment NNW/SSE

A crouched burial, lying on the left side, with the skull at the S end, facing W. This inhumation was alongside inhumation 57. The condition of the bone was generally good, and most survived intact. Both hands were raised up beside the face, the knees were slightly bent. The ankles of 58 were S of the thighs of inhumation 57. The grave finds comprised an amber bead (1), found during cleaning of the skull.

1 Amber **bead** with a triangular profile, D7.

GRAVE 59

Male — grave finds imply female, age 35–45

Alignment NNW/SSE

An extended burial in a narrow, well-defined grave with the skull at the S end, facing NW. The hone survival was generally good, with the arms folded across the chest; the left being over the right. The burial was very close to inhumations 57 and 58, although the relationship was not apparent because of the disturbed ploughsoil. The grave finds comprised an amber bead (1) associated with the skull, and an iron knife (2) below the pelvis on the left side, An iron nail (3) lay beside the left shoulder and an iron ring (4) lay left of the pelvis. Two fragments of a wrist clasp (5) were found in the fill of the grave.

1 Fragments of an amber **bead,** with irregular barrel-shaped profile D3.

2 Iron **knife,** complete, with curved back and blade, Evison Type 2. Length 153 mm.

3 Iron **nail** with a square section. Length 30 mm.

4 Large flat iron **ring** with a rectangular profile. External diameter 55 mm.

5 Two fragments of a copper alloy sheet **wrist clasp,** each has surviving attachment hole and is part of a rectangular plate with repoussé boss decoration. Hines Form B7. Both 16 mm long.

GRAVE 60

Male, age 15–20

Alignment N/S

A crouched burial in a well-defined grave with steep sides. The skull was at the S end facing W. There was a good degree of bone survival, with the right arm on the thigh and the left arm bent and across the body The skeleton was crouched tightly into the grave, with the legs touching the W wall. There was an empty area 50 x 30 cm at the N end of the grave. The grave finds comprised a shield boss (1) laying on the E side of the grave beside the pelvis, whilst a spearhead (2) lay S of the left shoulder.

1 Iron **shield boss** and **handle,** with a straight-sided cone surmounted by a hollow button, which presumably once contained a button disc mount in another metal, probably copper alloy, which appears to be slightly off-centre of the boss. The boss is low with a low wall and a broad flat flange which has three disc-headed rivets. Two further rivets fixed the handle to the shield wood. Mineralised wood remains survive on the rivets. Traces of textile were found with the

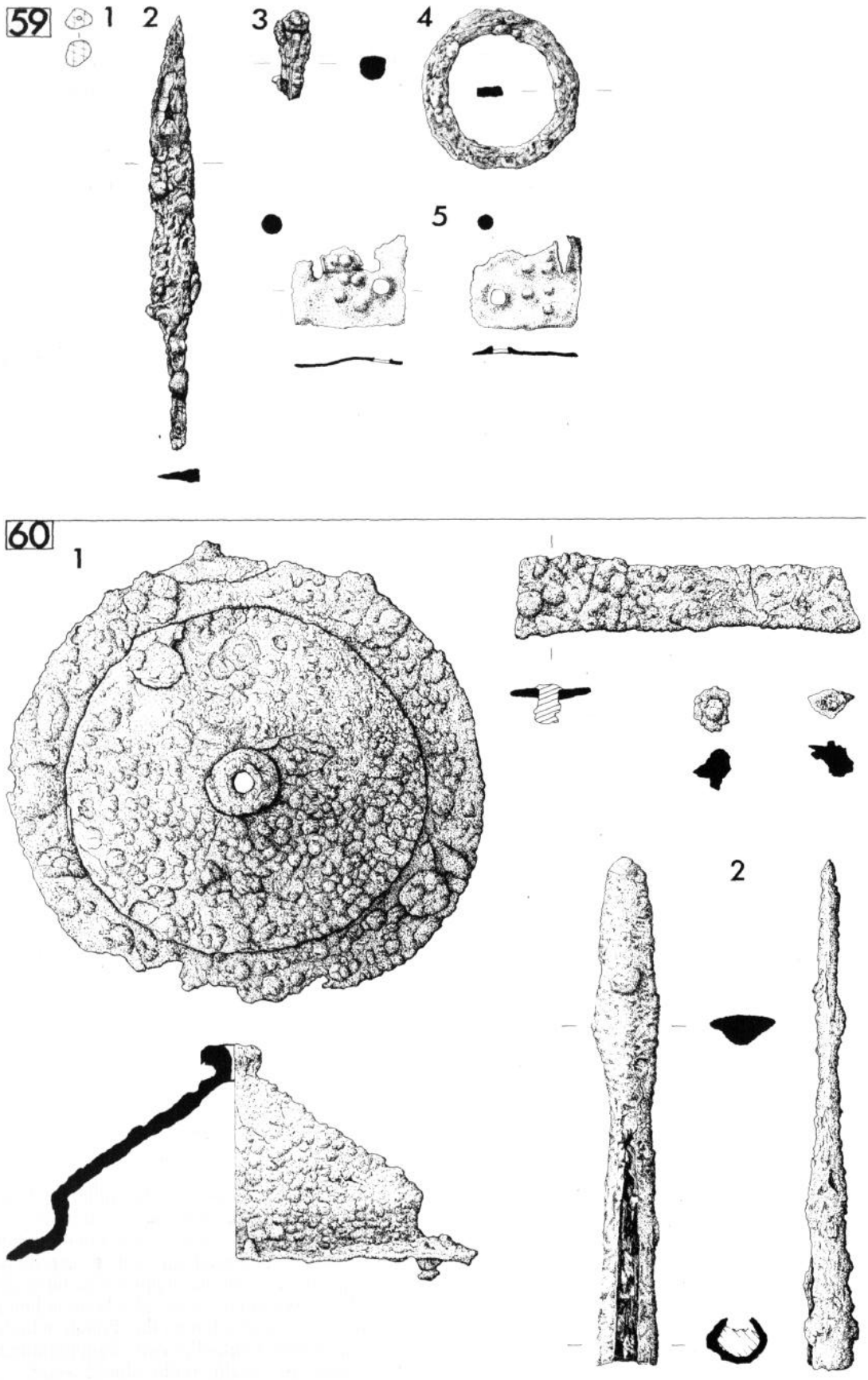


Figure 51 Finds from Graves 59–60

handle, together with some finger bones. The handle is broader at the terminals with traces of fabric adhering. One iron disc-headed rivet and another with copper alloy flattened head. Dickinson Group I.1. Diameter of boss 158 mm, handle length 116 mm.

2 Iron **spearhead,** a short annular blade with a slight concave curve with an open split socket containing extensive wood remains above the angle. There are small patches of textile adhering to the side of and in the socket. Swanton Group H1. Length 177 mm.

GRAVE 61

sex? — grave finds imply female, ?middle-aged adult

Alignment unknown

A much disturbed burial in a shallow grave. The skeletal remains comprised fragments of skull, ribs and thigh, all of which had been disturbed. The skull was probably at the S end and the skeleton may have been crouched, judging by the size of grave. This was a rich grave with two large cruciform brooches, although the artefacts had been disturbed and it was not possible to associate the finds with the skeletal remains.

1 A short length of a wide iron **bar,** bent at both ends. Length 54 mm.

2 Cast copper alloy **square-headed cruciform brooch** decorated in Salin Style I, with a central panel which has a double row of punched circlets around its edges which mark an inner panel. The border has two perforations in each of the upper corners, where the edges of animal heads frame the eyes of three face-masks; these masks are located where the knobs would be on a conventional cruciform brooch. The bow has a central ridge with two incised vertical lines and one central incised dot. The lappets are decorated with downward-looking animals, either side of a central panel with two rows of punched circlets, thus matching the decoration on the headplate. Two incised lines form a collar above a face on the foot of the brooch, the principal features are the eyes and nose which are formed by incised lines. The principal decoration comprising punched circlets continues down each side of the brooch, beyond the flaring nostrils and also marking the edge of the crescentric foot terminal. There are two large perforations at either side and at the bottom of the mask design and these could have been used for attachment. On the back of the brooch a double perforated lug is concealed by mineralised textile remains. The catchplate has been repaired by a small copper alloy strip which is retained by an iron rivet and partially concealed by mineralised textile remains, there is no trace of a pin. Leeds Class C2. Length 142 mm.

3 Cast copper alloy **square-headed cruciform brooch** in Salin Style I with the lower part of the footplate missing. The headplate outer border has the eyes of three face masks flanked by animal heads and the inner panel is decorated with three incomplete double rows of punched crescents. The bow has a central ridge with two incised vertical lines, these terminate in the centre with three incised marks or dots. The lappets are uneven in size with downward-looking animals, whilst in the panel between them, are two rows of punched crescents. Below this a collar of three incised grooves which define a face mask. The foot is broken diagonally across the line of the nose on the mask and this appears to have occurred before burial. On the back there are two copper alloy lugs one partially concealed by mineralised textiles, the catchplate is intact although there is no trace of a pin. Leeds Class C2. Length 110 mm.

4 A short length of copper alloy **wire,** with circular section, bent at one end. Length 32 mm.

GRAVE 62

Sex?, age 1 year ± 4 months

Alignment N/S

A much disturbed burial lying in a slight hollow with the head at the S end. The only skeletal remains were the base of a skull and fragments of ribs and limbs. The only object associated was a small fragment of amber **bead** (not illustrated).

GRAVE 63

Male — grave finds imply female, age 25–35

Alignment unknown

An extended burial in a slight hollow with the skull at the S end facing NE. The right arm was extended, whilst the left was folded across the chest. There were few ribs surviving, the pelvis was intact although the legs had been truncated below the patela. The grave finds comprised glass and amber beads around the neck (1); an amber bead lay beside the W edge of the grave alongside the knee. An iron knife handle (2) lay beside the right thigh alongside an iron knife (3). A latchlifter (4) lay 5 cm from the right thigh close to finds (2) and (3). A cruciform brooch (5) lay under the jaw on the right shoulder beside a single annular brooch (6). A

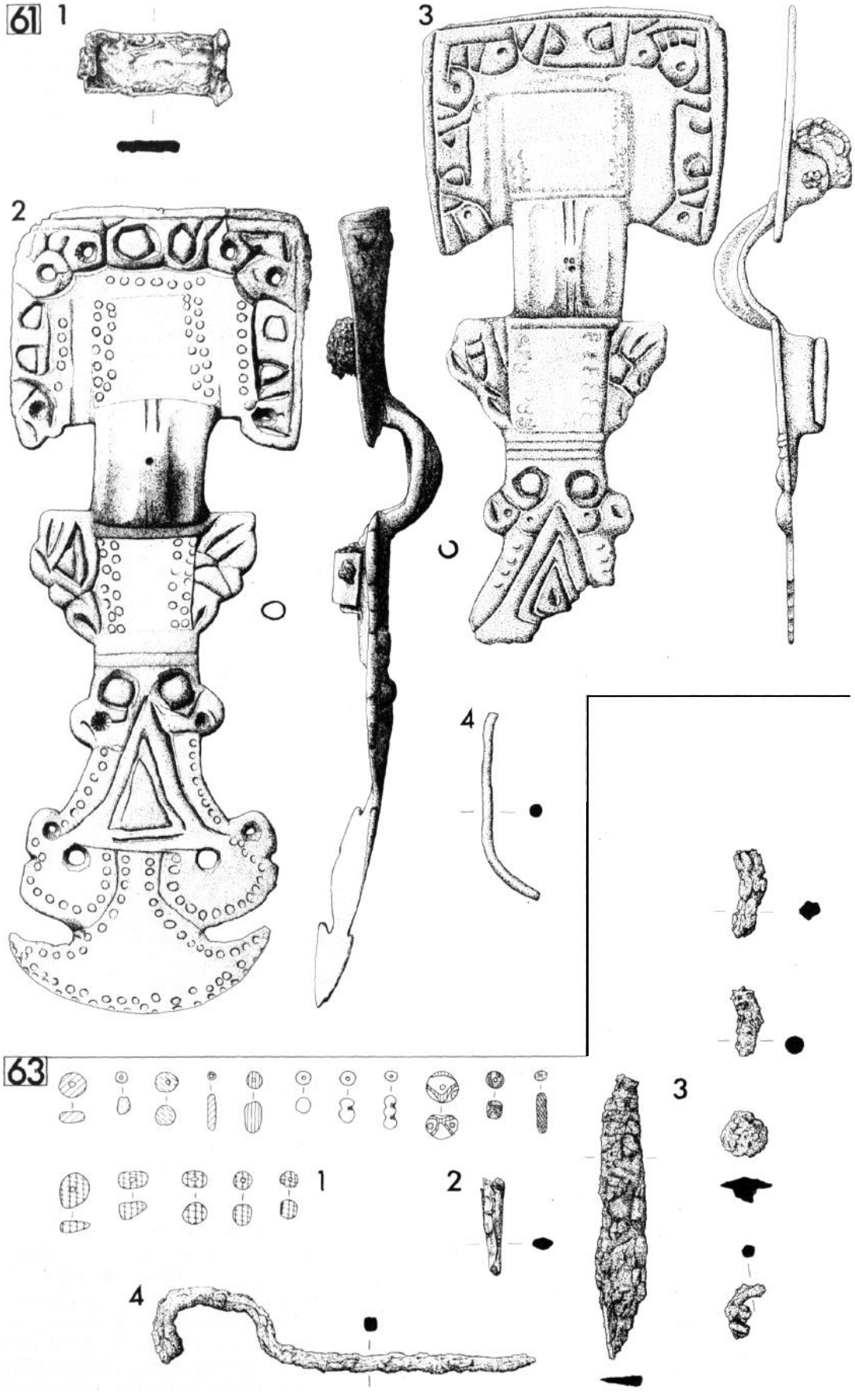


Figure 52 Finds from Graves 61–63

pair of wrist clasps (7) lay on the right wrist and a bucket pendant (8) and ring (9) lay under the right scapula.

1 Two opaque blue glass annular **beads,** A1a
Opaque pale grey glass annular **bead,** A1a
Translucent green glass annular **bead,** A1a
Opaque pale orange glass barrel-shaped **bead,** A2
Translucent pale yellow glass barrel-shaped **bead,** A2c
Translucent green glass barrel-shaped bead, A2c
Opaque dark orange glass barrel-shaped **bead,** A2c
Three opaque cylindrical blue glass **beads,** A5a
Opaque brick red glass cylindrical **bead,** A5b
Three opaque gold-in-glass annular **beads,** B1
Two opaque double segmented gold-in-glass **beads,** B2
Two translucent triple segmented gold-in-glass **bead,** B3
Opaque polychrome glass **bead** with a pale background and brown and green decoration, C3a
Opaque cylindrical yellow glass **bead** with green decoration, C3b
Opaque brick red glass cylindrical **bead** with pale brown diagonal spirals, C7c
Opaque cylindrical glass **bead** decorated with swirls of yellow, green, blue and white, C7c
Fourteen disc-shaped amber **beads,** D1
Four wedge-shaped amber **beads,** D2
Fifteen barrel-shaped amber **beads,** D3
Two rounded amber **beads,** D6
Sub-rectangular amber **bead,** D8

2 Iron and bone or horn fragment of **knife tang,** too small to Classify. Length 23 mm.

3 Iron **knife** with straight back, curved cutting edge, and tip of the blade and the tang missing. Bone or horn remains adhere to the tang end of blade. Evison Type 2. Length 99 mm. Four iron pieces associated with the knife comprisetwo nail fragments, a flat round disc, probably a rivet head, and a fragment of a ring or buckle.

4 Iron **latchlifter,** broken at both ends, a short bar bent at one end with an indistinct patch of textile adhering to one side. Length 132 mm.

5 Cast copper alloy **cruciform brooch.** The headplate with two wings is plain and only the top half round knob with a nipple has survived. The bow is plain, faceted at either end. The semicircular lappets are decorated with incised lines and the central panel is plain. There is a band of ribbing below the lappets and a 'horses's head' at the foot. The 'horse's head' has eyes and scrolled nostrils, each scroll of which is perforated at the centre and terminates in a crescentic curve. The back of the brooch has a spring coil which is covered with mineralised tabby weave ZZ spun textile, which also occurs on the front of the brooch. The catchplate also has traces of mineralised textile sealed under the catch, but there is no trace of a pin. There is wool single yarn thread around the knob and diagonally across the central panel of the headplate, used in a manner similar to that of the thread on the headplate of the cruciform brooch from Grave 1 to fasten the iron pin to the brooch and keep it attached to the dress. Leeds Group IVa. Length 130 mm.

6 Cast copper alloy **annular brooch** with three groups of transverse grooves on the front. A large fragment of folded textile adheres to the brooch, whilst other, smaller, patches of mineralised textile adhere to the sides of the brooch. Leeds Type G. Diameter 40 mm.

7 Copper alloy sheet and cast **wrist clasps,** an odd pair joined together by corrosion. The eye section is decorated in the middle with a row of five repousse bosses, bordered by two rows of small punched dots. This clasp has two attachment holes along a shaped rear edge and a long narrow slot for the eye. Hines Form B16. Length 35 mm. The second clasp is cast in one piece and has a small hook, it is decorated by a strip with transverse grooves and a row of punched triangles. There are three attachment holes along a scalloped rear edge. Both hook and eye have impressions of braid on the underside. Hines Form B20. Length 36 mm.

8 Copper alloy sheet object, a small strip bent into a circle with overlapping ends, possibly a bucket pendant. Diameter 9 mm.

9 A copper alloy sheet **ring** with a rounded profile and overlapping ends. Diameter 10 mm.

GRAVE 64

Male, age 35–45

Alignment N/S

An extended skeleton in a deep grave with vertical sides. The skull was at the S end facing E. The grave had a series of five fills including a cap of clay lying over the torso. The skull was poorly preserved, and the vertebrae and pelvis were fragmentary. The left hand lay against the W side of the grave. The arms and legs lay against the E and W walls of the grave, with the legs extended and the feet at the N wall of the grave. An amber bead (1) was found in the fill of the grave. A shield boss (2) was in front of the left hand, against the W side of the grave. A spearhead (3) was in front of

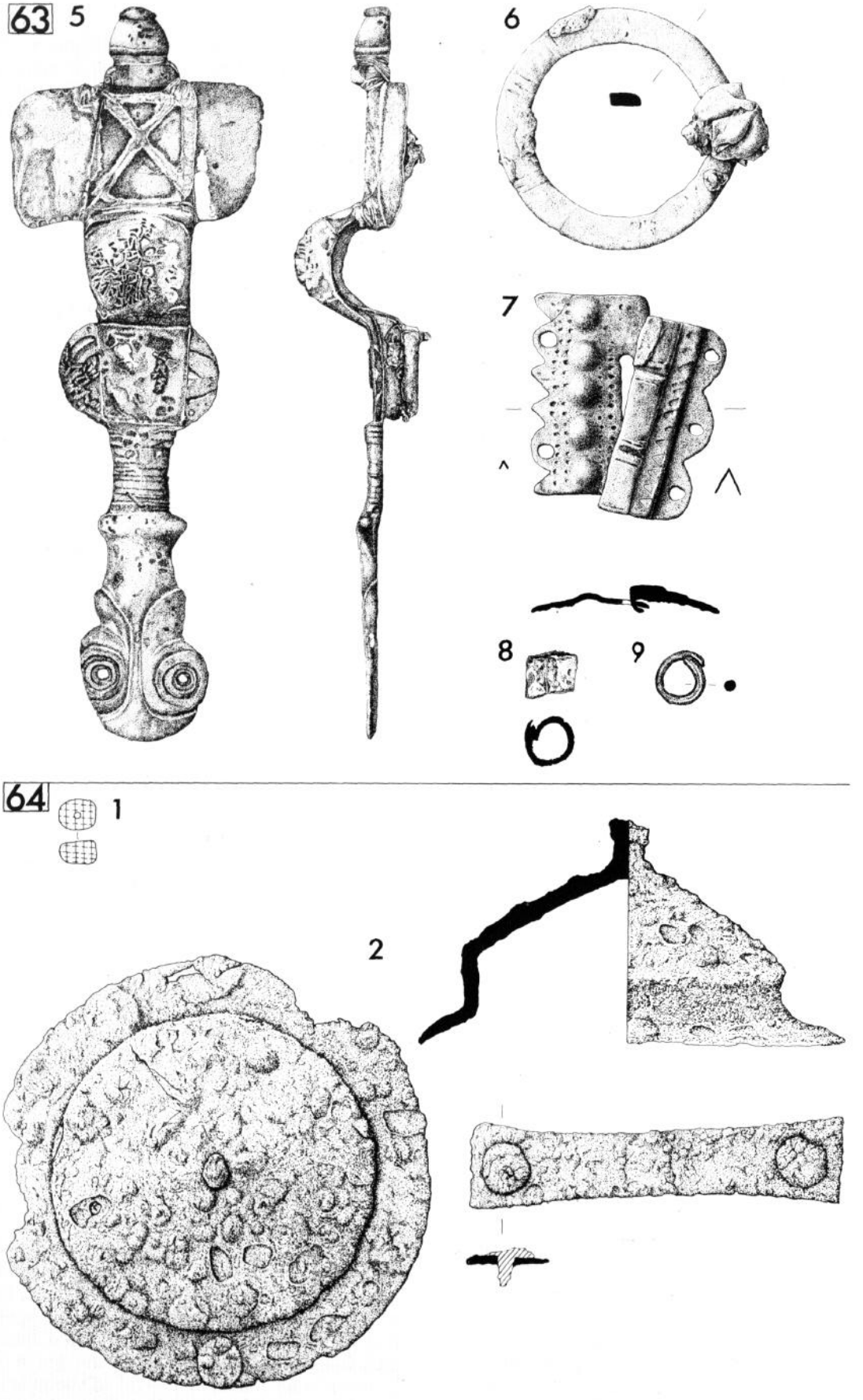


Figure 53 Finds from Graves 63–64

the face and across the right shoulder. The ferrule (4), lay at the N end of the grave beside the left foot. A small iron knife (5) lay beside the waist alongside an iron buckle (6). There were five shield rivets (7) in the area adjoining the boss.

1 Irregular disc-shaped amber **bead,** D1

2 Iron **shield boss** with most of the knob remaining, comprising a convex dome, short wall and an almost complete flange with three rivets still in place. The handle consists of iron bar, slightly curved, with a rivet at each expanded end. Dickinson Group 2. Diameter 152 mm. Length 125 mm

3 Iron **spearhead** with a long angular blade with a slight concave curve down the angle and an open split socket. Extensive wood remains in the socket, which is perforated with two iron rivets. A patch of smooth organic material adheres, possibly leather. The wood identified as ash/birch/maple or hazel. Swanton Group H3. Length 514 mm.

4 Iron **ferrule,** the closed socket perforated by one rivet, filled with compact sand. Length 168 mm.

5 Small iron **knife** with a straight back, incurved at the tip of the blade. The cutting edge is curved and there are the remains of a ridge where the tang joins the blade. Traces of bone or horn on the tang may be the remains of a handle, Evison Type 6. Length 100 mm

6 Iron **buckle,** a D-shaped loop which has a section missing. The radiograph shows faint banding round the edge, possibly inlay. Length 28 mm, width 22 mm

7 Five iron disc-headed **rivets** associated with the shield boss (2), but not attached. to the shield boss. One has only the wide disc top remaining, diameter 23 mm, the others are complete with shanks, their diameters vary between 18–20 mm, one has a head 13 mm square.

GRAVE 65

Female, age 30–40

Alignment N/S

An extended burial in a shallow grave; with the skull at the N facing SW. The bone survival was generally good with the right arm across the lower chest; and the left arm bent double. There were several vertebrae surviving and the complete pelvis. The legs were extended. The grave finds comprise a fragment of amber bead on the chest (not illustrated) and an iron knife (1) beside the left hip. A penannular brooch (2) lay underneath the jaw.

1 Iron **knife** with curved back and cutting edges. Fragments of bone or horn and other organic remains adhere to the tang, Evison Type 1. Length 113 mm.

2 Copper alloy **penannular brooch** with wide flattened rectangular terminals, in the centre of each terminal a small indented dot. One side of the brooch is flattened at the point where the pin is attached The copper alloy pin is attached to the brooch by a ribbed loop. Some organic remains survive around the pin and its loop attachment. Dickinson Type G1.7. Diameter 40 mm.

GRAVE 66

Sex? — grave finds imply female, age 10 years ± 30 months

Alignment NNW/SSE

An extended burial in a shallow grave with the skull at the S end facing NE. Bone survival was poor; there were no vertebrae or ribs, although the arms survived, extended. The left side survived better than the right, with the left pelvis, femur, tibia, fibula remaining. Only the fibula survived on the right. The feet were crossed at the ankles, left over right. The grave finds comprised a group of three amber beads (1) around the neck and an annular brooch (2) lay on the left shoulder. An iron object (3) lay against the W wall of the grave beside the elbow and an iron brooch (4) was under the jaw. A fragment of a copper alloy sheet loop (5) lay under the jaw alongside the beads.

1 Disc-shaped amber **bead,** D1
Irregular barrel-shaped amber **bead,** D3
Cuboid amber **bead,** D5

2 Iron **annular brooch** with a small section of ring missing. The pin is looped around the side of the brooch. There are traces of textile on the pin and brooch. External diameter 45 mm.

3 Iron object, an undiagnostic fragment- Diameter 34 mm.

4 Iron **annular brooch** slightly smaller than 2 above, with a pin. Diameter 41 mm.

5 Copper alloy object which has been bent into a circular ring. This loop is probably too large to form a handle for a bucket pendant. Diameter 8 mm.

GRAVE 67

Male, age 17–25
Also present bones of second individual: Sex?, age 3–5

Alignment NNW/SSE

A crouched burial lying on the right side in a well-defined grave, with the skull at the S end facing E. The burial did not fill the grave; there was an empty area to the N of the body. Bone survival was poor, with many of the surviving bones soft and

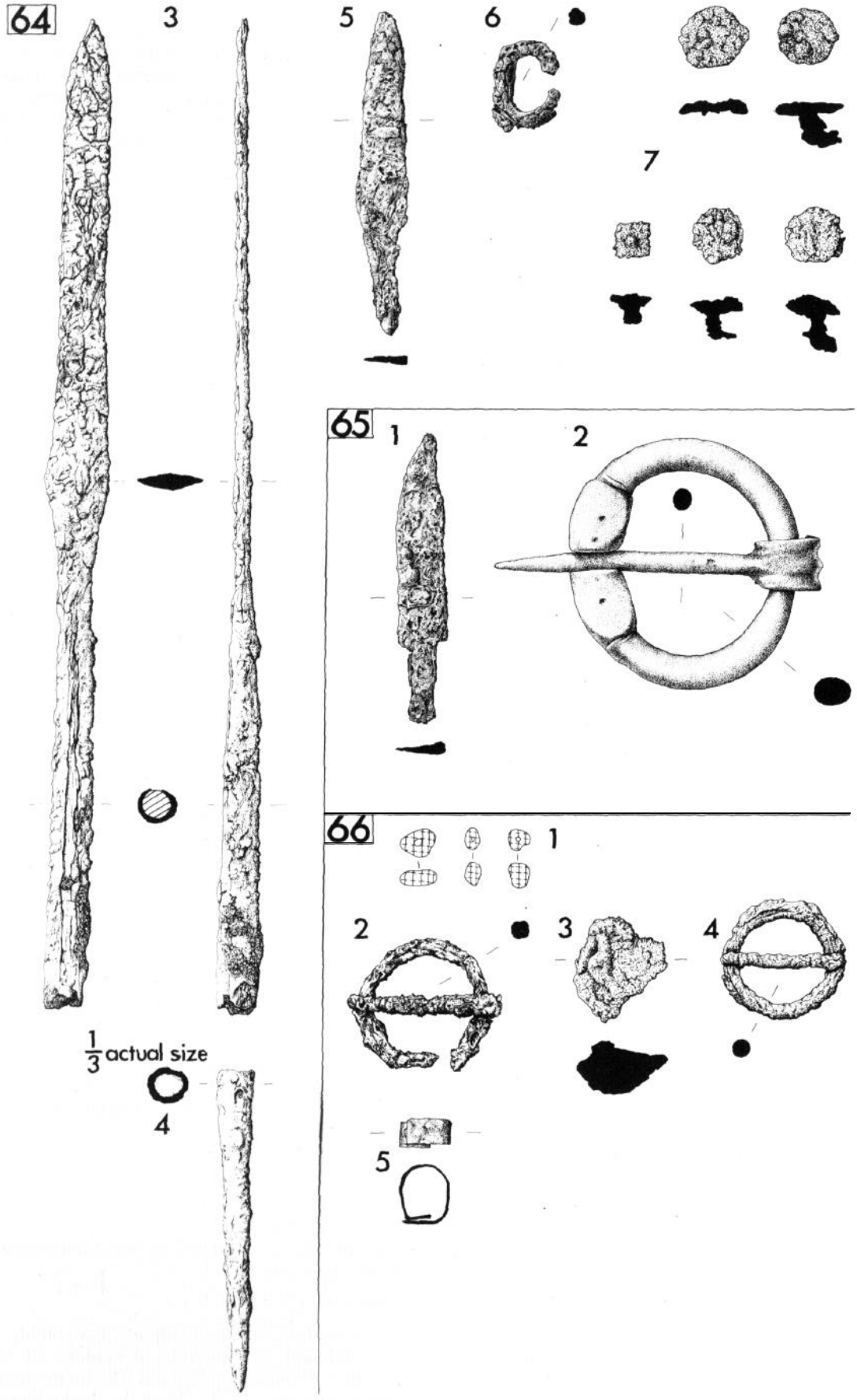


Figure 54 Finds from Graves 64–66

spongey. The surviving bones comprised vertebrae, pelvis, femur, tibia and fibula. There were no grave finds.

GRAVE 68

Female, age 35–45

Alignment NNW/SSE

An extended skeleton in a well-defined shallow grave which had the skull at the S end and was much disturbed. The left arm was extended beside the body whilst the right was bent double. There were no ribs or vertebrae surviving and the pelvis was very fragmentary The legs were extended, with the left crossing the right on the femur. The grave finds comprised glass and amber beads (1) under the jaw and an iron knife (2) on the left leg. A latchlifter (3) lay across the right leg and two clasps were found, one under the jaw with the beads (4) and a second (5) on the pelvis.

1 Opaque brick red glass barrel-shaped **bead** with a central yellow band overlain by green lines, C1e
Disc-shaped amber **bead,** D1
Three disc-shaped wedge amber **beads,** D2
Three irregular barrel-shaped amber **beads,** D 3

2 Iron **knife** with angled back and curved blade. There are remains of bone or horn on the tang, Evison Type 3. Length 136 mm.

3 Iron **latchlifter** with the top bent over to form a suspension loop and a short twisted section midway down the shank, which terminates in a U-shaped loop with the end bent outwards at a right angle. Length 230 mm.

4 The eye section of a copper alloy sheet **wrist clasp** comprising a flat rectangle which has two attachment holes on one side and a slot on the other. The clasp is firmly decorated with transverse incised lines. Hines Form B7. Length 31 mm.

5 The hook section of a cast copper alloy **wrist clasp** which consists of a strip with three attachment holes on protruding lugs on the opposite side to the hook. The hook is broken and there are silver metal or solder marks at either end of the strip. Hines Form B12. Length 32 mm.

GRAVE 69

Male, age 17–25

Alignment NNW/SSE

An extended burial in a deep well-defined grave with good bone preservation. The skull was at the S end facing N, the arms were slightly bent, whilst both hands lay on the pelvis. The vertebrae and ribs survived and the legs were bent with the knees pointing E. The grave finds comprised a bead (1) in the topsoil and an iron spearhead (2) situated against the S wall of the grave above the skull. An iron buckle and plate (3) lay on the E side of the lower vertebrae and a copper alloy nail (4) lay behind the skull.

1 Opaque red glass annular **bead** with a central yellow band, C1e

2 Iron **spearhead** with a long angular blade slightly concave above the angle and an open split socket. The tip of the blade is missing. The socket contains extensive mineralised wood remains, and contains a rivet, Swanton Group H2. Length 230 mm.

3 Iron D-shaped **buckle** and **plate,** with the tongue surviving and traces of fabric adhering to one side. Diameter 24 mm. Length 42 mm.

4 Copper alloy **nail,** bent at the end, with a round head and a square shank becoming round towards the point. Length 29 mm.

GRAVE 70

Sex? — grave finds imply female, age 15–21

Alignment N/S

An extended burial in a well-defined grave with the skull at the S end facing E. The arms lay across both the chest and waist, although no vertebrae or ribs survived. The legs were extended with the right leg crossing the left at the ankle. The grave finds comprised two groups of beads, (1) one around the neck and (2) a group of 42 glass and amber beads on the chest. There was a group of iron objects beside the left thigh, these comprised an iron knife (3), latchlifter (4), ring (5) and an iron bar (6). An iron ring (7) lay on the left side of the waist beside the pelvis. A further iron ring (8) was W of the left knee; and an iron buckle and plate (9) lay on the left side of the waist. A copper alloy annular brooch (10) was situated on the left side of the chest associated with bead group (1) and a copper alloy toilet set (11). There were two complete wrist clasps in the grave, (12) was N of the feet whilst the second clasp (13) was S of the left knee. A fragment of a third clasp (14) was found in the fill of the grave. Three scutiform disc pendants (15) were on the left side of the chest, associated with toilet set (11).

1 Irregular barrel-shaped amber **bead,** D3
Two triangular amber **beads,** D7

2 Two translucent light blue glass annular **beads,** A1a

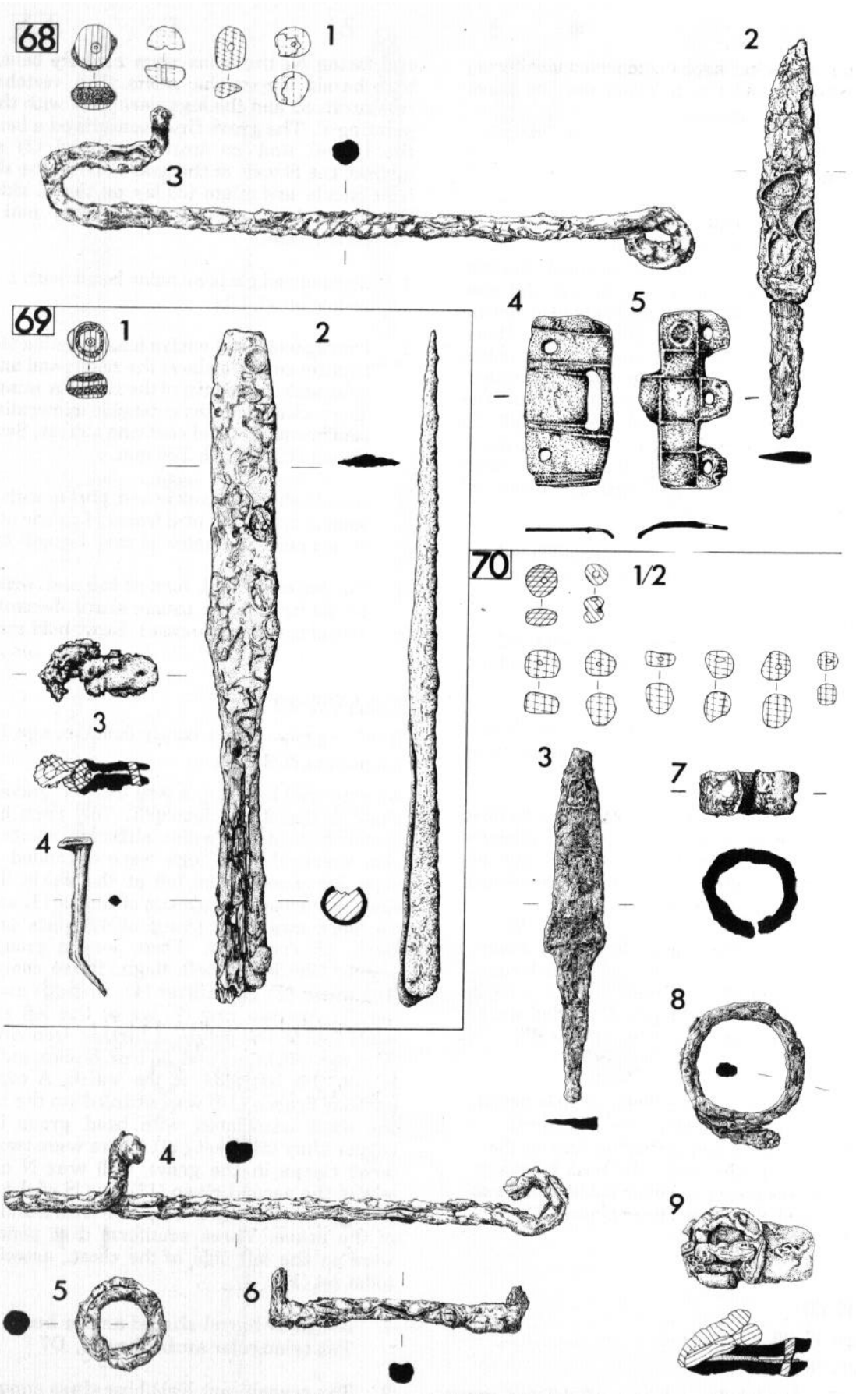


Figure 55 Finds from Graves 68–70

Translucent double segmented blue glass **bead,** A1b
Disc-shaped rectangular amber **bead,** D1
Thirty-two irregular barrel-shaped amber **beads,** D3
Cuboid amber **bead,** D5
Rounded **bead,** D6
Three triangular amber **beads,** D7
Rectangular amber **bead,** D8

3 Iron **knife** with a straight back, incurved at the tip, and with a curved cutting edge, Evison Type 6. Length 127 mm.

4 Iron **latchlifter** with one end bent over to form a suspension loop. The other end bent back on itself in a U shape, then bent outwards at a right angle. Length 198 mm.

5 Iron **ring** associated with the latchlifter. Diameter 33 mm.

6 Iron **key,** short flattened and turned up at either end. Length 90 mm.

7 Iron **ring,** a small wide ring with textile remains on both sides of the top edge. Diameter 31 mm.

8 Iron **ring** with overlapping ends. Diameter 45 mm.

9 Iron **buckle** and **plate.** The circular buckle loop is now fixed back over the plate. The belt plate consists of a strip of iron bent round the loop, with the two sides of the plate fastened together by a rivet. There are possible wood remains between the two of the plates and extensive textile remains over the whole object. Length of strap end 46 mm. Width of buckle 25 mm. Length of buckle 32 mm.

10 Copper alloy sheet **annular brooch.** With plain underside, the top decorated with a double ring-and-dot motif. The top of the pin tapers and its widest end is wrapped around a narrow hinge bar section of the ring. A fragment of mineralised textile wrapped over the front of the brooch is a tablet woven braid S-plied in warp with no twist in the silk brocaded weft. Below the tablet braid is a mineralised (?) twill ZZ spun textile. A further mineralised (?) tabby ZZ spun textile occurs on the back of the brooch. Leeds Type G, External diameter of brooch 48 mm.

11 Copper alloy toilet set consisting of an **earscoop** and **pin** on a ring. The earscoop has a wide flattened top with a perforation for suspension and a knotted wire ring attached. The shank is twisted in the middle and has a small depression at the other end. There are shallow transverse lines above and below the twisted section. The pin is flattened at the ring end tapering to a point at the other end. Length of pin 81 mm. Length of earscoop 72 mm. Diameter of ring 22 mm.

12 Copper alloy sheet **wrist clasp,** a rectangular plate with a shaped rear edge and a slot, decorated with a line of repoussé bosses in the centre, and punched circlets around the edge. There are two attachment holes and traces of mineralised textile. Hines Form B16. Length 35 mm

13 Copper alloy sheet **wrist clasp,** a rectangular plate with a shaped rear edge and a hook. The decoration is identical to (12) above, this clasp has a slot forming an eye. Hines Form B16. Length 35 mm

14 Cast copper alloy bar from **wrist clasp,** decorated with a series of transverse incised lines. Length 30 mm.

15 Three silver **scutiform pendants,** two small, one large, all three have a repoussé boss in the centre. One small pendant has V-shaped punchmarks round the central boss and stamped circlets extending across the pendant. The second small pendant has a punched motif double V with a circlet at the apex of the V. The large pendant has a ring of stamped circlets round the outside edge. All three pendants have a small patch of copper alloy corrosion at the edge, probably where base silver suspension loops were attached, only small fragments of which survived. Diameters 21 mm and 32 mm.

GRAVE 71

Male — grave finds imply female, age 15–21

Alignment NNW/SSE

An extended burial in a well-defined grave with the skull at the S end. The skeleton had slightly twisted in the grave. Bone survival was generally good. The left arm lay folded under the ribs whilst the right lay down the side of the body, with the forearm also under the ribs. The skeleton was lying slightly on the left side and the cocyx was detached and laying on the right side. The legs were slightly bent at the knees, which pointed W. The grave finds comprised sixteen beads (1) around the neck and several bucket pendants. Bucket pendants (2), (3), (4), and (6) were found around the head in a loose arc, copper alloy object (5) was associated with them.

1 Opaque single barrel-shaped segmented gold-in-glass **bead,** B1
Eleven irregular barrel-shaped amber **beads,** D3
Rounded amber **bead,** D6

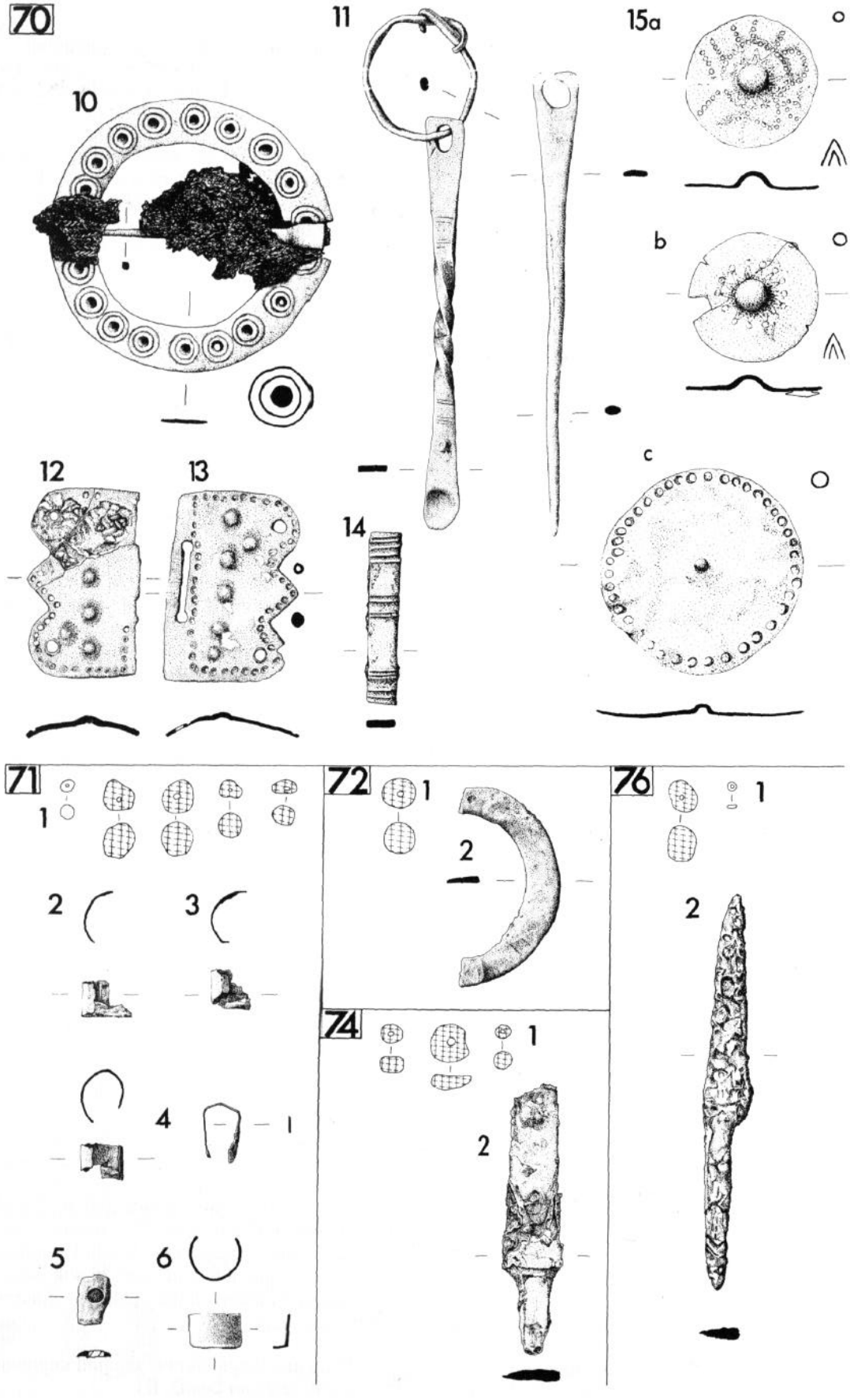


Figure 56 Finds from Graves 70–76

Two triangular amber **beads,** D7
Rectangular amber **bead,** D8

2 Copper alloy sheet **bucket pendant** in five pieces, with the two larger pieces forming part of the side and base of the bucket. The three ring pieces have a silver/white metal coating, as does the inside of the pendant. The base and body are soldered together. Only the largest fragment is illustrated. Diameter 9 mm.

3 Three fragments of a copper alloy **bucket pendant** one with part of the base attached. On the inside of the fragment is a silvery grey metal. Only the largest fragment is illustrated. Diameter 9 mm.

4 Two fragments of a copper alloy **bucket pendant,** part of the body and a complete handle. Most of the base is missing. The metal on the handle and base fragments is silver/white. The handle was soldered to the body, which itself was soldered to the base. Diameter 9 mm, length of handle 10 mm.

5 Copper alloy sheet fragment with an iron rivet through the centre, and a tiny patch of silver/white metal on one surface. Length 9 mm.

6 Copper alloy **bucket pendant** with the base and sides are in one piece, and perforated with a hole in the base. Diameter 9 mm.

GRAVE 72

Sex? — grave finds imply female, age 2 years ± 8 months

Alignment unknown

A fragmentary burial in a well-defined grave with the skull at the S end facing E. The bone survival was very poor, with only the skull surviving. The grave finds comprised an amber bead (1) situated NW of the skull. A fragment of a copper alloy annular brooch (2) lay on the NW edge of the grave.

1 Rounded amber **bead,** D3

2 Copper alloy sheet **annular brooch** fragment. Very worn. Traces of decoration comprises two shallow incised lines across one terminal. Leeds Type G. Width of the band 5 mm.

GRAVE 73

Female, age 17–25

Alignment N/S

A crouched burial in a shallow disturbed grave. The skull was at the S end of the grave facing W. The bone survival was poor with only the limbs remaining intact and a fragment of the pelvis. The arms were extended, whilst the legs were tightly crouched, with the right on top of the left. There were no grave finds associated with this burial.

GRAVE 74

Sex? — grave finds imply female, ?middle-aged adult

Alignment N/S

A much disturbed burial lying on top of the clay subsoil, comprising the fragmentary remains of arms and legs. The alignment of these bones suggested that the skull was at the S end and the arms were crossed. The body may have lain on the left side with the legs bent. The grave finds comprised two amber beads (1) in the area of the chest. An iron knife (2) lay in the vicinity of the pelvis.

1 Two irregular barrel-shaped amber **beads,** D3

2 Iron **knife** comprising a tang and most of the blade. The cutting edge and back appear to be straight. There are some bone or horn remains surviving on the tang. Broken at the tip and therefore difficult to classify although it is probably Evison Type 2. Length 94 mm.

The four beads listed below were found to the E of inhumation 74:
Disc-shaped amber **bead,** D1
Wedge-shaped amber **bead,** D2
Irregular barrel-shaped amber **bead,** D3
Amber **bead** in eight fragments; probably Type D3

GRAVE 75

Sex? age?

Alignment NNW/SSE

A well defined shallow grave with several fragments of bone at the S end. The shape and size of the feature allied with the fragments of bone led to this being recorded as a grave, although there were no grave finds.

GRAVE 76

Male, ?middle aged adult

Alignment N/S

An extended burial in a shallow hollow which had the skull at the S end. Bone survival was poor, with only soft small fragments of vertebrae and ribs remaining from the upper body. The pelvis was intact and the legs were bent and pointing E. The grave finds comprised two beads, an amber bead (1) at the S end of the grave in the vicinity of the neck and a small stone bead was in the grave fill. An

iron knife (2) lay at the disturbed N end of the grave.

1 Rectangular amber **bead,** D8
Opaque minute stone **bead** with a disc shape, H.

2 A thin iron **knife** with a long tang and a small and narrow blade. The blade has a straight back and a curved cutting edge, some mineralised bone or horn remains adhere to the tang, Evison Type 2. Length 140 mm.

GRAVE 77

Female, age?

Alignment NNW/SSE

A much disturbed burial in a very slight hollow. The skeletal remains comprised small fragments of scattered bone. In the vicinity of the bone was a group of diagnostic finds but no skeletal association.

1 Five fragments of a disc-shaped amber **bead,** D1

2 Iron **nail** with a round head. Diameter 13 mm, length 22 mm.

3 Two fragments of a cast copper alloy **square headed cruciform brooch.** The two fragments almost fit together, the pin is worn and corroded. One fragment is the central plate of the foot from below the bow, including the top of the lappets and partly across the face motif. The bottom of the lappets and the panel between is decorated with punched dots. Below this panel there is a collar above the top part of a mask. There is an iron rivet through the mask between the eyes. There are traces of mineralised tabby weave ZZ spun textile adhering to the panel which continue onto the back covering all of the brooch except the catchplate. The catchplate is intact, but there is no trace of a pin. On the lower brooch fragment there are prominent extensions and one circular perforation is visible although much of the brooch is covered with mineralised textile. The brooch has a plain crescentic foot and there is no detail visible on the back of the brooch because of mineralised textile remains. Leeds Class C2. Length of 1st fragment 40 mm, 2nd fragment 50 mm.

4 Cast copper alloy **annular brooch** with a lentoid section. The reverse is plain, and the front is decorated with a row of punched arcs along either edge. Traces of mineralised textile adhere to the surface, there is no pin surviving. The two pieces were found separately. Leeds Type F. Diameter 45 mm.

5 Copper alloy sheet **wrist clasp,** a long rectangular plate with a double row of repoussé bosses and in between triangular punch marks. There are two attachment holes on one side and a hook on the other. Hines Form B7. Length 38 mm.

6 Copper alloy sheet **wrist clasp** fragment, folded, with repoussé bow and triangle punchmarks decoration. Too small to classify. Length 19 mm.

GRAVE 78

Male, age 45–61

Alignment N/S

An extended double burial in a well-defined grave. This grave contained an adult male with an infant placed beside the right arm. The sides of the grave bowed slightly to allow the infant burial. The skull of the adult was at the S end facing N. The arms were extended at the side of the body and the feet were fully extended. The vertebrae survived but there were very few ribs. The grave finds comprised an iron knife (1) beside the pelvis on the left side. An iron buckle and plate (2) lay beside the waist. A pair of copper alloy tweezers (3) was in the grave, but had been disturbed. Beside the right arm lay the bones of an infant skeleton, designated as inhumation 117.

1 Iron **knife** with a straight back and a curved cutting edge. Bone or horn remains adhere to the tang, Evison Type 2. Length 180 mm.

2 Iron **buckle and plate,** D-shaped loop with a broad tongue, the belt plate is iron and there are traces of fabric on the back and inside the strap. Length of buckle 20 mm, length of belt plate 32 mm.

3 Copper alloy **tweezers,** with a loop at one end. On one side there are faint traces of transverse grooves and a faint patch of organic material below the grooves. Length 64 mm.

GRAVE 79

Male, age 25–35

Alignment unknown

A fragmentary double burial lying on the clay subsoil surface. The burials comprised a disturbed burial, 79, with the very fragmentary remains of a second interment alongside, designated as inhumation 118. Inhumation 79 was lying on the left side with fragments of the skull at the S end. The right arm lay across the chest whilst the left was extended alongside the body. The ribs and vertebrae survived although they were disturbed. The legs were slightly bent and the knees pointed W. The

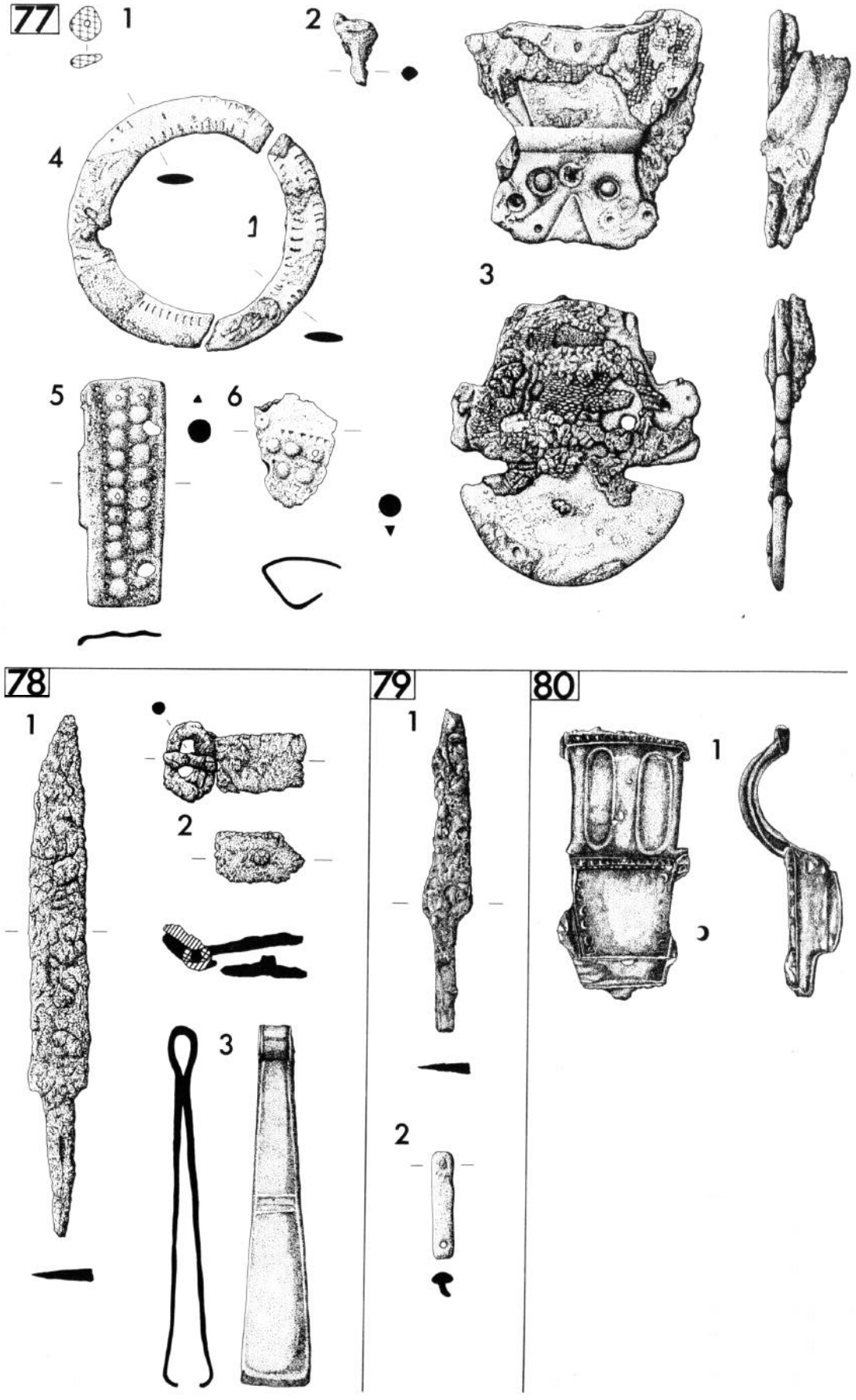


Figure 57 Finds from Graves 77–80

grave finds comprised an iron knife (1) beside the pelvis on the right side and a small copper alloy strip (2) found with the finger bones in the topsoil.

1 Iron **knife** with the tip missing, with straight back and a curved cutting edge. On blade and tang there are areas of mineralised bone or horn and organic remains adhering. Evison Type 2. Length 110 mm.

2 Small copper alloy **strip** with a rivet hole through both ends and one rivet surviving in position. Length 17 mm.

GRAVE 80

Sex? — grave find implies female, age 25–35/adult

Alignment unknown

A very fragmentary skeleton with the skull fragments being the only bones *in situ*. The pathology of this skeleton is somewhat confused because some of the scattered bones were male and some female. There was a further spread of bones mixed through the topsoil and no grave position or orientation can be ascribed to this burial. The single artefact present was the bow of a fragmentary square-headed cruciform brooch (1) in the topsoil beside some of the bones.

1 Fragment of a cast copper alloy **square-headed cruciform brooch.** With only the bow and the central panel between the lappets surviving. On the bottom of the main brooch panel there is a row of punched dots, these also occur below the bow on the lower panel. The bow has a central ridge with a groove on each side, the lappets are missing and the panel is decorated with a row of punched circlets on both sides. The brooch was broken in antiquity and the edges are smooth, on the back a simple catchplate survives. Leeds Class C2. Length 50 mm.

GRAVE 81

Sex? juvenile, 12 years ± 30 months

Alignment unknown

A disturbed infant burial with the skull at the S end, lying on the subsoil surface. The skull was fragmentary, some of the ribs survived and there were fragments of long bones mixed in the topsoil. One amber bead (1) was found beside the skull.

1 Amber **bead,** broken (not illustrated)

GRAVE 82

Sex? — grave finds imply female, ?adult

Alignment unknown

A much disturbed burial in a shallow grave, apparently crouched on the left side with the skull at the S end facing W. The only bones surviving *in situ* were the legs; some fragments of ribs were found in the surrounding topsoil. The grave finds comprised three amber and one glass bead (1) all S of the leg bones in the area of the neck. An iron latchlifter (2) was situated under the thigh. An iron knife (3) was E of the thighs; an iron pin (4) lay W of the legs in the area of the knees.

1 Opaque cream and orange polychrome glass barrel-shaped **bead,** C7d
Three irregular barrel-shaped amber **beads,** D 3

2 Iron **latchlifter** with a suspension loop at one end, bent in a 'U' shape at the other, with a small ring attached. Length of latchlifter 246 mm. Diameter of ring 34 mm.

3 Fragmentary iron **knife,** with a straight back and curved cutting edge, probably Evison Type 2. Length 44 mm.

4 Iron **pin,** bent, with a round section. Length 37 mm.

GRAVE 83

Sex?? adult

Alignment unknown

A fragmentary burial which comprised a scatter of bones mixed through the topsoil. The remains included fragments of pelvis and vertebrae which lay on the sandy subsoil. There were no grave finds.

GRAVE 84

Female, age 35–45

Alignment NNW/SSE

A prone burial lying in a shallow, well-defined grave, the skull was at the N end facing W. The majority of the bones were still *in situ* although they were fragile. The arms were slightly bent outwards and the hands lay at the side of the pelvis. The thighs were extended, with the knees at the S end of the grave, whilst the femur and tibia stood against the S wall. The grave was overlain by a 4 cm thick cap of clay which may have formed part of a mound. The grave finds comprised a glass bead (1) from the grave fill, an iron ring (2) lay beside the left thigh. An iron knife (3) lay with five copper alloy bindings from a leather sheath (4) beside the left thigh. A copper alloy florid cruciform brooch (5) was face down on the left side of the

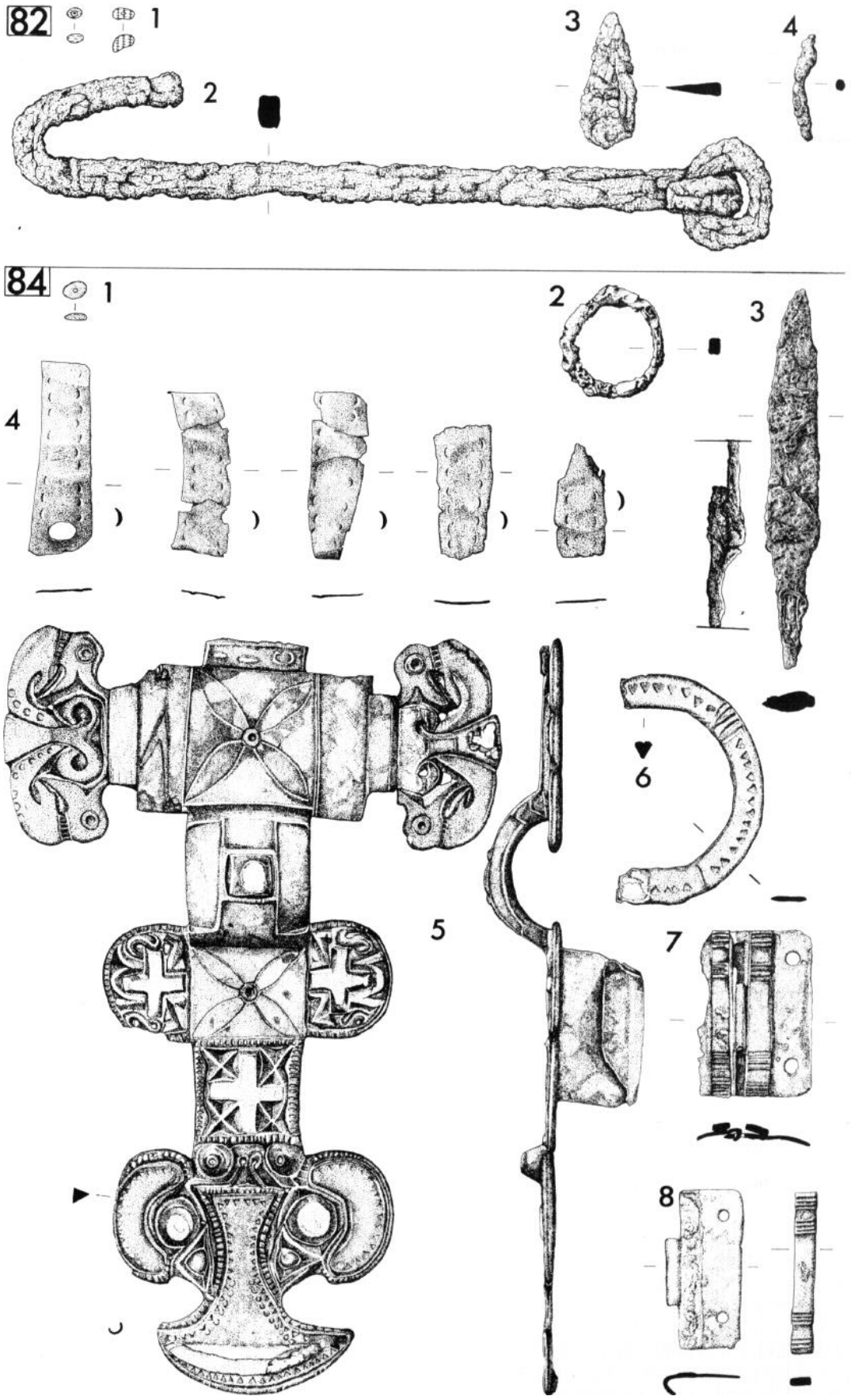


Figure 58 Finds from Graves 82–84

chest, lying approximately E-W. An annular brooch (6) lay E of the right shoulder. There were two fragmentary wrist clasps, one (7) beside the E wall of the grave and the other (8) under the pelvis beside the left arm.

1 Opaque grey-white monochrome annular glass **bead,** A1a

2 Iron **ring,** possibly associated with the knife and sheath (3) and (4) below. Circular in section with mineralised textile remains adhering to the surface. Exterior diameter 39 mm.

3 Iron **knife** with an unusual repair. The blade has been broken below the handle, and the broken blade has then been pushed into the handle, This has left an overlap between the knife and the handle. This join has corroded in place very firmly. A piece of bone or horn adheres to the full length of the tang. The cutting edge is curved, the back is straight but curves inwards at the tip of the blade, Evison Type 6. Length 132 mm.

4 Five copper alloy knife **sheath mounts,** sheet metallic bindings apparently from a leather sheath. One fragment has a perforation in one terminal and tapers from that end. Another fragment is folded over at one end. All are decorated with punched arcs along both edges. Longest fragment 38 mm.

5 Cast copper alloy florid **cruciform brooch** decorated in Salin Style I with the uppermost knob missing. The headplate has a central panel decorated with a quatrefoil motif, similar to that in grave 22 (brooch 5). The two flattened knobs are each decorated with a stylised mask framed by a pair of inward facing animal heads with open mouths. One of the two knobs appears to have broken off and then been resoldered. The bow has a central cast ridge with a raised square in the middle. The lappets are semicircular and each has a simple cross at its centre, enclosed by chipcarved ornament. The panel between the lappets has a quatrefoil matching that on the headplate. The panel below these has a cross design resembling that on the lappets and enclosed by chipcarved diagonal crosses. A stylised mask below the cross and the margins of the foot terminals are decorated with triangular and circlet punchmarks. The brooch has apparently been cast in four pieces with the main brooch body and the three headplate knob terminals made separately. There are remains of solder on the crosses, the lappets and where the knobs join the headplate. Traces of silver were observed on the foot of the brooch and on one of the knobs on the headplate. On the back of the brooch there is a double copper alloy lug for the pin hinge. The catchplate is present although the pin is missing. Åberg Group V. Length 139 mm.

6 Copper alloy sheet **annular brooch** fragment, a narrow ring decorated with a row of triangular punchmarks broken only by a group of transverse grooves. There is a slight indentation for a pin. Leeds Type G. Width 5 mm.

7 Copper alloy sheet **wrist clasps,** a complete eye section and part of the matching hook section. These have an applied cast bar decorated with two groups of transverse lines. Some mineralised textile remains adhere to the backs. Hines Form B13a. Length 28 mm.

8 Copper alloy **wrist clasp;** a hook section consisting of a rectangular plate with two attachment holes. There is a strip of solder onto which a decorated cast bar was applied. The bar has become detached and has a similar decoration to wrist clasp (7) above. Hines Form B13a. Length 20 mm,

GRAVE 85

Female, age 16–20

Alignment N/S

An extended burial in a well-defined grave, with the skull at the S end facing N. There was a good degree of bone survival; the arms were slightly folded, with the hands crossed right over left at the waist. The feet were extended in the grave. The grave finds comprise eight amber beads (1) lying in a group under the jaw and on the top of the chest. An iron knife tip (2) lay E of the right knee, whilst a knife tang and blade (3) lay behind the left shoulder. An iron ring (4) was on the right side of the chest, and an iron latchlifter set (5) lay beside the left thigh. A buckle and fragmentary belt plate (6) lay in the area of the chest parallel with the right humerus. An iron object (7) lay on the chest beside the beads (1). An iron rod with a copper alloy ring (8) lay beside the left thigh. An annular brooch (9) lay in the SE corner of the grave beyond the skull. A copper alloy strap end (10) lay on the right side of the chest, close to an iron buckle and plate (6).

1 Disc-shaped amber **bead,** D1
Be-used amber **bead,** D2
Four irregular barrel-shaped amber **beads,** D3
Two rectangular amber **beads,** D8

2 Iron **knife,** a blade fragment with an angled back and curved cutting edge, Evison Type 3. Length 32 mm.

3 Iron **knife,** part of the tang and blade from same knife as (2). Length 48 mm.

4 Iron **ring,** roughly oval with small patches of mineralised textile adhering the ring. Length 37 mm. Width 30 mm.

5 Two iron **latchlifters** and a fragmentary **bar.** One latchlifter comprising a bar with part of a suspension loop at one end and bent into an angle at the other. Length 150 mm. The second has one end bent over and the other end broken. Length 95 mm. Also a small fragment of iron bar bent at a right angle.

6 Iron rectangular **buckle** loop with fragments of a copper alloy **belt plate.** Diameter 29 mm.

7 Iron **bar,** 34 mm long, 7 mm wide.

8 Iron rod and copper alloy **ring.** The rod has traces of fabric adhering. One end is broader, with an eye in which is set an incomplete copper alloy ring. Length of rod 27 mm, diameter of ring 13 mm.

9 Copper alloy sheet **annular brooch,** a sub-rounded ring, decorated with crescentic punchmarks along inner and outer edges. Thinner and flatter beside the hinge. The iron pin has mineralised textile at both ends, some also survives on the brooch. Leeds Type G. External diameter 40 mm.

10 Copper alloy **strap end,** comprising two rectangular plates with one rounded end. The straight end has a row of small facets on the edge, and two rivet holes, one retaining a copper alloy rivet, the other rivet concealed by corrosion. At the rear, to centre of the mount, is a small round perforation. There are solder marks on the back and on the rounded end. The second plate is similar to above, with a rivet set at the end. Length 36 mm.

GRAVE 86

Male — grave finds imply female, age 35–45

Alignment NNW/SSE

An extended burial in a well defined grave, with the skull at the S end facing N. Bone survival was poor, with only fragments of the arms remaining. There were no vertebrae, ribs or small foot bones. The pelvis was intact but friable. The grave finds comprised five amber beads (1) underneath the jaw, and an iron knife (2) which lay beside the W wall of the grave, parallel with the left pelvis. A fragment of an iron key set (3) lay beside the left thigh. An iron pin (4) was found beside the right shoulder. There were two annular brooches associated, one (5) lay on the left shoulder and the second (6) lay on the right shoulder. Some pieces of mineralised textile were found beside the left shoulder. Several sherds of pottery lay together on the right side of the pelvis.

1 Wedge-shaped amber **bead,** D2
Three irregular barrel-shaped amber **beads,** D3
Broken amber **bead,** D3
Broken amber **bead**

2 Iron **knife** with tip missing, with an angled back and straight cutting edge, Evison Type 5. Length 122 mm.

3 Fragment of an iron **latchlifter.** Length 34 mm.

4 Iron **pin** with a round section, the point surviving but broken at the other end. Length 76 mm

5 Copper alloy cast **annular brooch,** decorated with a row of punched dashes along each edge. There is a narrow bar for the pin which does not survive. A fragment of iron corrosion survives on the reverse. Leeds Type G. External diameter 45 mm.

6 Copper alloy cast **annular brooch,** very similar to (5) above, with part of the iron pin surviving. With textile remains in the corrosion product, Leeds Type G. External diameter 45 mm.

7 Fragments of mineralised **textile,** one piece corroded onto a shoulder bone. Diameter 24 mm (not illustrated)

8 Eleven bodysherds of a hand-made **vessel.** Fabric 4 (not illustrated).

GRAVE 87

Female, age 17–25

Alignment N/S

A crouched burial lying on the left side, with the skull at the S end facing W. The burial lay on the subsoil surface and had been disturbed; bone preservation was poor. The surviving remains comprised the skull, left arm, pelvis and legs. Most of the skull was distributed through the ploughsoil, with only fragments remaining *in situ.* Only the left arm survived, this lay extended beside the body; the right side of the pelvis was slightly disturbed and the knees were bent pointing to the W. The grave finds comprised six glass and amber beads (1) situated under the jaw and around the neck. An iron ring (2) lay beside the left thigh and an iron knife (3) was beside the right hip. A small iron object (4) lay on the E side of the grave 20 cm S of the vertebrae. A lead ring (5) was subsequently

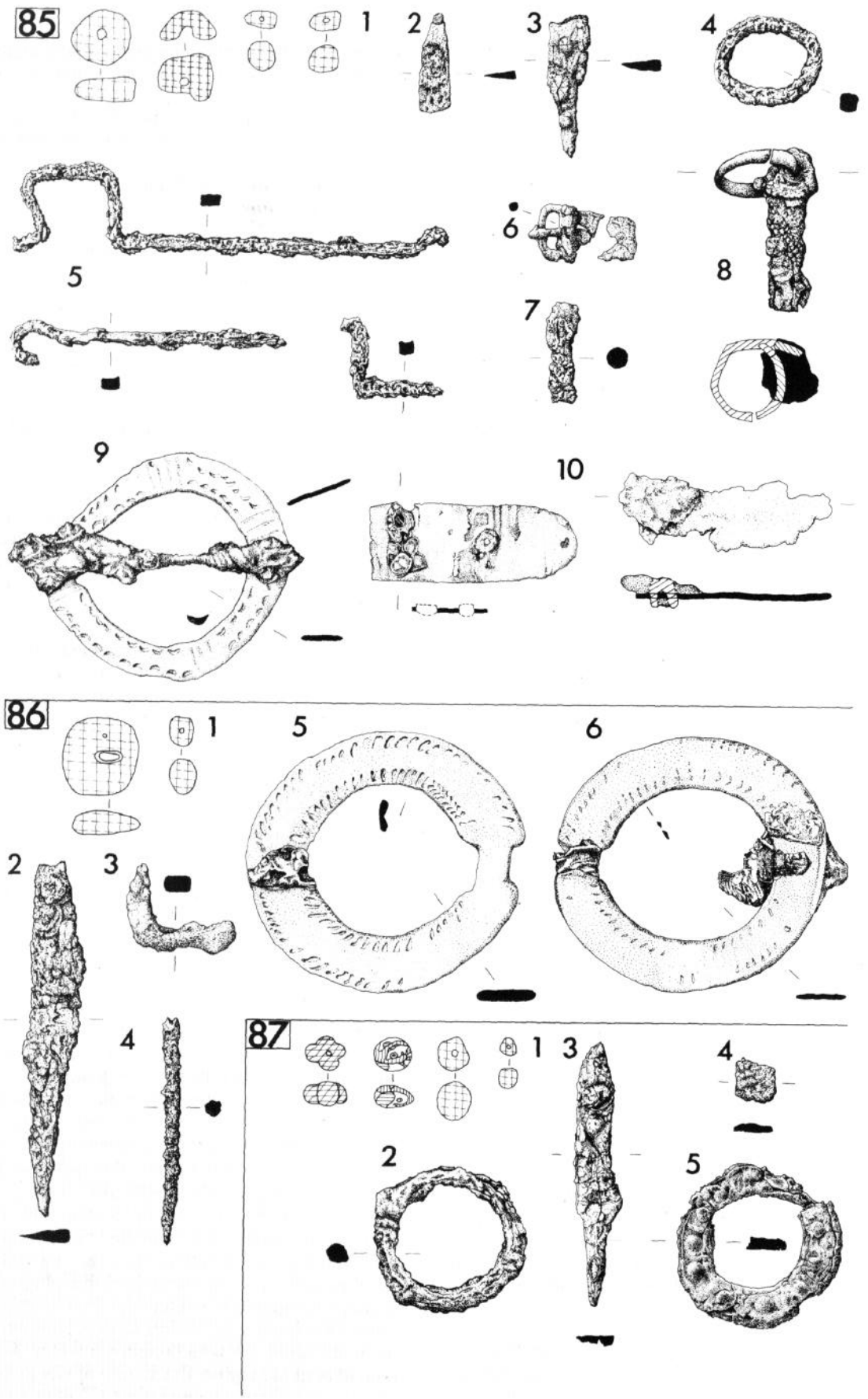


Figure 59 Finds from Graves 85–87

found when the skull was being cleaned in the laboratory.

1 Translucent blue glass sub-melon **bead,** A4e
Opaque pale annular glass **bead** with light brown and green waves, C2d.
Three irregular barrel-shaped amber **beads,** D3
Triangular amber **bead,** D7

2 Iron **ring,** more oval than round, with a circular profile. Diameter 50 mm.

3 Iron **knife,** with straight back and slightly curved cutting edge, Evison Type 2. Length 93 mm.

4 Iron object, a small thin lozenge-shaped fragment. Length 16 mm.

5 Small lead **ring** with flat rectangular section. Diameter 28 mm

GRAVE 88

Female, adult

Alignment unknown

This burial comprised two distinct scatters of bone, almost 1m apart. The bones were lying on the clay subsoil and may have been disturbed by a modern feature. Surviving bones were primarily ribs, although there were several fragments of the skull and collar bone. There were no grave finds.

GRAVE 89

Sex?, age 12–18

Alignment N/S

A disturbed burial lying in a slight hollow, with the skull at the S end. The skeleton had been disturbed by ploughing. The remains comprised skull fragments, the left ribs and arm and the complete pelvis. Fragments of the right hand were found 35 cm N of the pelvis. An iron knife (1) was the only artefact found; this was under the left arm.

1 Iron **knife** with a straight back, curving inwards at the tip, with a curved cutting edge. Evison Type 6. Length 104 mm.

GRAVE 90

Male — grave finds imply female, age 25–30

Alignment N/S

An extended burial in a well-defined grave with the skull at the S end facing W. Bone survival was generally good, with ribs and vertebrae intact. The arms were extended at the side of the body and the right hand was missing. The pelvis had survived and the knees were bent slightly and pointing W. The skull had been detached from the skeleton. Grave finds included an iron knife (1) between the right forearm and the pelvis. An iron ring (2) lay at the left side of the pelvis beside an iron rivet (3). There were two annular brooches, one of which (4) was situated on the right collar bone under the jaw, whilst the second (5) lay beside the left collar bone at the top of the chest. A small amber bead was found during the sieving of the grave fill.

1 Iron **knife** with a curved back and blade, Evison type 1. Length 113 mm.

2 Iron **ring** with a lentoid section, no pin surviving. Diameter 27 mm

3 Iron disc-headed **rivet.** Length 15 mm. Diameter 15 mm.

4 Cast copper alloy **annular brooch,** a small wide ring decorated with a row of punched triangles with apices pointing inwards. The iron pin survives with some mineralised textile at both ends, and around the brooch. Leeds Type G. External diameter 40 mm.

5 Cast copper alloy **annular brooch,** similar in size to 4 above, but decorated with a row of stylised reverse S-shaped punchmarks. The iron pin is in place; wrapped around one side and laid across the brooch are traces of mineralised textile, similar material also adheres to the pin hinge area. Leeds Type G. External diameter 43 mm.

6 Fragmentary amber **bead,** too small to classify (not illustrated).

GRAVE 91

Male, age 17–25

Alignment NNW/SSE

A prone burial in a well-defined deep grave which had the skull at the S end, face down. Bone survival was good; the left arm lay underneath the body whilst the right was bent against the W wall, with the hand at the base of the grave. The knees were at the N end of the grave and the legs extend up the N wall. The ankles and feet did not survive, possibly because of plough damage. The state of preservation shows that the absence of grave finds was an original feature of this burial.

GRAVE 92

Sex? — grave finds imply female, age?

Alignment NNW/SSE

A well-defined shallow grave with no bone surviving. There was, however, a group of grave finds

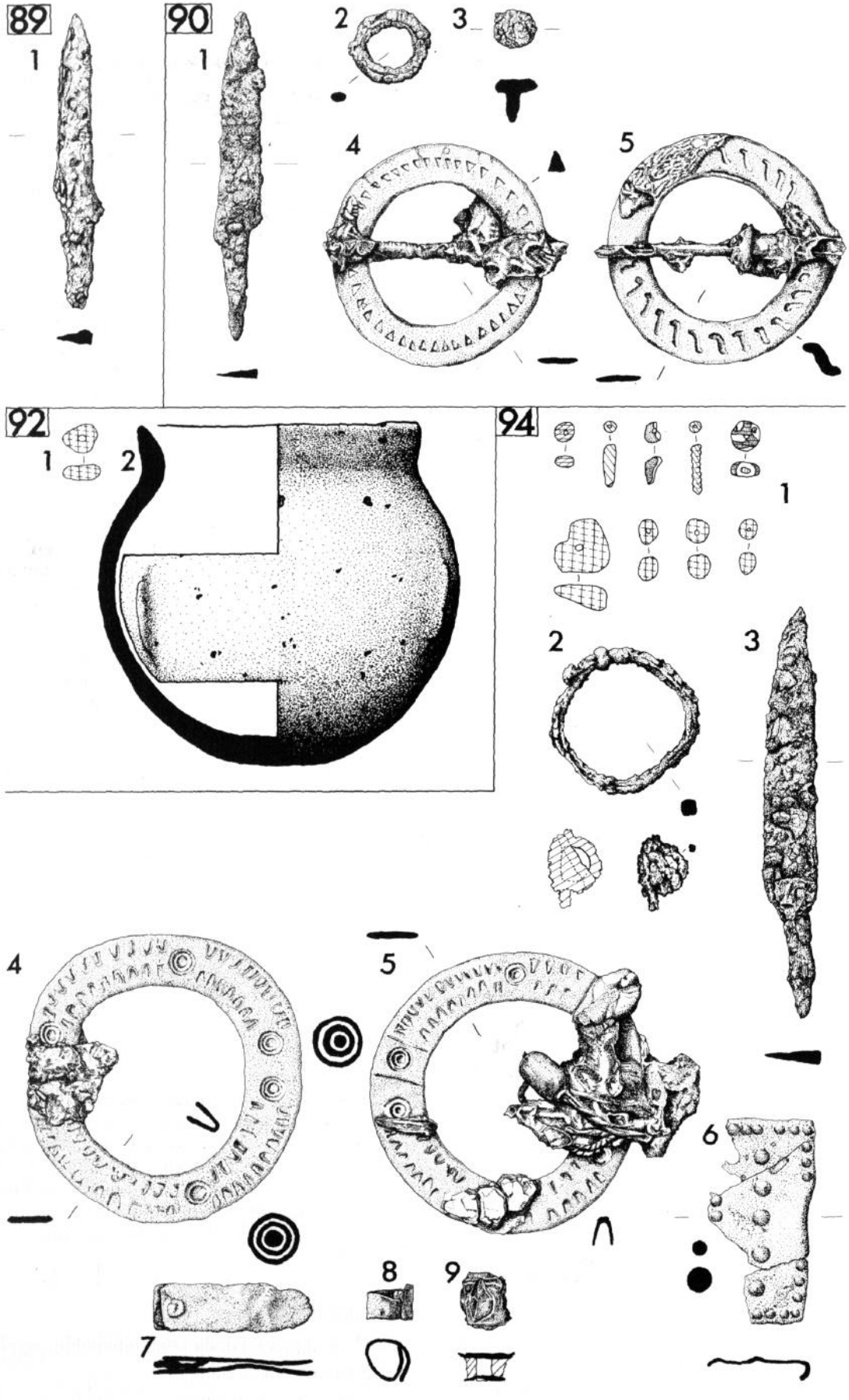


Figure 60 Finds from Graves 89–94

comprising four amber beads (1) and a pottery vessel (2).

1 Four disc-shaped amber **beads,** all fragmentary, D1

2 Complete handmade globular **vessel** with three equidistant vertical applied thin bosses. Fabric 1. Height 12 cm.

GRAVE 93

Male, age 25–35

Alignment NNW/SSW

An extended skeleton in a shallow grave, with the skull at the S end facing W. The humerus was at the side of the body, with the right tibia across the chest and the left missing. The vertebrae, ribs and pelvis had survived, although in a generally poor and fragile condition. The legs were slightly flexed; these were raised slightly, with the knees pointing W. There were no grave finds.

GRAVE 94

Female, age 25–35

Alignment NNW/SSE

An extended burial in a narrow well-defined grave, with the skull at the S end facing W. Although extended the skeleton was lying slightly on the left side. The arms were bent double with the left arm bent back against the sternum and the right hand over the left at the elbow. The small bones did not survive well; the vertebrae and ribs were missing and the pelvis was only fragmentary. The legs were extended with the feet against the N wall of the grave. The grave finds comprised a group of 26 glass and amber beads (l), strung together around the neck; this group also extended over the left arm. An iron ring (2) lay beside the left thigh alongside an iron knife (3). There were two annular brooches, (4) beside the right shoulder and (5) under the jaw on the left shoulder. A fragment of a copper alloy wrist clasp (6) was found with the knife (3) and strap end (7) beside the left thigh. A copper alloy bucket pendant (8) and copper alloy mount (9) was associated with a string of beads (1). Fragments of a sheep's tooth (not illustrated) were found in the area of the neck with objects (1), (8) and (9).

Two translucent annular blue glass **beads,** A1a
Translucent cylindrical blue glass **bead,** A5a
Opaque cylindrical pale green glass **bead,** A5b
Opaque cylindrical blue glass **bead,** A5d
Opaque pale grey annular **bead** with red and green bands, C3a
Wedge-shaped disc amber **bead,** D2
Fifteen irregular barrel-shaped amber **beads,** D3
Rounded amber **bead,** D6
Three triangular section amber **beads,** D7

2 Iron **annular brooch,** with fragments of a copper alloy ring adhering to a separated iron pin. The brooch is subcircular in shape and square in section. External diameter of 49 mm. Pin length 26 mm.

3 Iron **knife** with straight back, incurved at the tip and with a curving blade, Evison Type 6. Length 142 m.

4 Cast copper alloy **annular brooch,** a wide ring decorated on one side with U-shaped punchmarks located along the inner and outer edges, with the base of the U facing inwards. Punched double circlets at the cardinal points, paired on either side of the pin's resting point. Fragmentary remains of mineralised textile overlie the remains of the iron pin. Leeds Type G. External diameter 50 mm.

5 Cast copper alloy **annular brooch** with similar decoration to brooch (4). This has a narrow hinge bar for the pin attachment, visible on the X radiograph. Fragments of leather adhere to one side, with a large area of mineralised textile. A small amber bead was located at the pin hinge and a further bead is attached to a fragment of cord surviving from the string of beads. Leeds Type G. External diameter 50 mm.

6 Copper alloy sheet **wrist clasp** fragment, a long rectangular plate with part of a hook on one side, but largely damaged on the other. Decorated with a row of repoussé bosses down the centre, and shallow repoussé bosss around the outer edges. Hines Form B7. Length 36 mm.

7 Copper alloy **strap end** consisting of two narrow plates rounded at one end. A copper alloy rivet is attached to one plate, the second having a perforation for the rivet. Faint remains of textile adhere to the end of the strap. Length 28 mm.

8 Copper alloy **bucket pendant,** a small strip of metal bent into a cylindrical shape, with overlapping ends. White powdery material on the surface of the copper alloy with grey/black organic mineralised material inside the object. Diameter 9 mm.

9 Copper alloy **mount** comprising a rivet attached to two small, thin square plates. Length 9 mm.

10 Fragment of a **sheep's tooth,** length 15 mm (not illustrated).

GRAVE 95

Sex?, age 4–8

Alignment NNW/SSE

A very fragmentary burial in a well-defined grave, with the skull at the S end. The only surviving bone comprised small fragments from the skull and the right arm. There were no grave finds.

GRAVE 96

Female, age 45–61

Alignment N/S

A fragmentary skeleton in a well-defined grave, with the skull at the S end facing W. The skeletal remains comprised only the skull and thighs. None of the smaller bones survived except for five teeth found under the knee. The grave finds included fragments of pottery (1) in the area where the sternum would have been located. An iron knife (2) lay N of the legs. A cruciform brooch (3) was underneath the jaw with the headplate at the W end. An annular brooch (4) lay underneath the cruciform brooch (3). A second annular brooch (5) was underneath the skull. There were fragments of wrist clasp (6) and (7), beside the area of the left shoulder, associated with bone fragments (8).

1 Two rim **potsherds** from a small hand-made globular vessel. Fabric 2 Diameter 90 mm.

2 Iron **knife** in two pieces, with a straight back and curved cutting edge. The short tang has bone or horn remains adhering. Evison Type 2. Length of tip 40 mm. Length of blade 88 mm.

3 Cast copper alloy **cruciform brooch** which has a plain rectangular headplate with one simple half round knob and hollow back. There are polishing scratches on the headplate and the bow is plain apart from facets at both ends. The lappets are simple stylised downward looking animal heads, although these are not symmetrical as a result of a casting fault. The panel between the lappets is plain and below it are three transverse grooves which form a collar. The foot has a 'horse's head' terminal, a slightly ribbed area above the eyes and its nose runs the length of the face, protruding beyond the foot and terminating in a perforation for attachment of a bead string, The brooch terminates with an outward curl on each side which form nostrils. On the back of the brooch there are poorly preserved remains of mineralised ZS spun textile around the pin hinge, the catchplate survives intact although there is no pin. Leeds Group IVa. Length 132 mm.

4 Cast copper alloy **annular brooch,** a flat, rather uneven ring, decorated with a row of punched dots around the outer edge. The pin hinge bar is flanked by raised ribs and the point where the pin rests has the outlines of a pair of animal heads. Some patches of textile and organic material, possibly leather, adhere to the back. Leeds Type G. External diameter 40 mm.

5 Cast copper alloy **annular brooch,** an unevenly shaped ring with three sets of paired facets associated with a pair of transverse incised lines. There are remains of textile around the hinge bar and a patch of leather or skin also survives. Leeds Type G. External diameter 40 mm.

6 Copper alloy sheet **wrist clasp** fragment with one attachment hole, apparently plain. Hines Form B7. Length 30 mm.

7 Copper alloy sheet **wrist clasp** fragment. Length 10 mm.

8 Two fragments of bone, possibly worked, perhaps used as spacers on a bead string. Length 60 mm and 51 mm.

GRAVE 97

Sex?, middle-aged adult

Alignment N/S

A much disturbed burial lying on the subsoil surface. The skull was at the S end facing E and the body lay crouched on the right side. The outline of the skeleton was visible, although most of the bones had been broken into small fragments. The left arm was bent double across the chest and the legs were also bent with the knees pointing E. There were other fragments of bone scattered through the topsoil. No artefacts were present.

GRAVE 98

Male — grave finds imply female, age 20–30

Alignment N/S

One of two burials in a well-defined grave, with inhumation 98 to the E of inhumation 99. Inhumation 98 was lying on the left side, crouched with the head at the S end facing E. Bone survival was very good with the body lying on the arms, the left arm was across the chest and the right pointed towards the pelvis. The ribs and vertebrae were intact and the legs were bent with the knees pointing W, with the right leg bent slightly over the left. The grave finds comprised an annular brooch (1) on the left shoulder under the jaw and a bucket pendant (2) S of the skull. A small copper alloy strip (3) was found whilst sieving soil from the skull.

1 Copper alloy sheet **annular brooch,** a plain band bent in the middle with overlapping ends

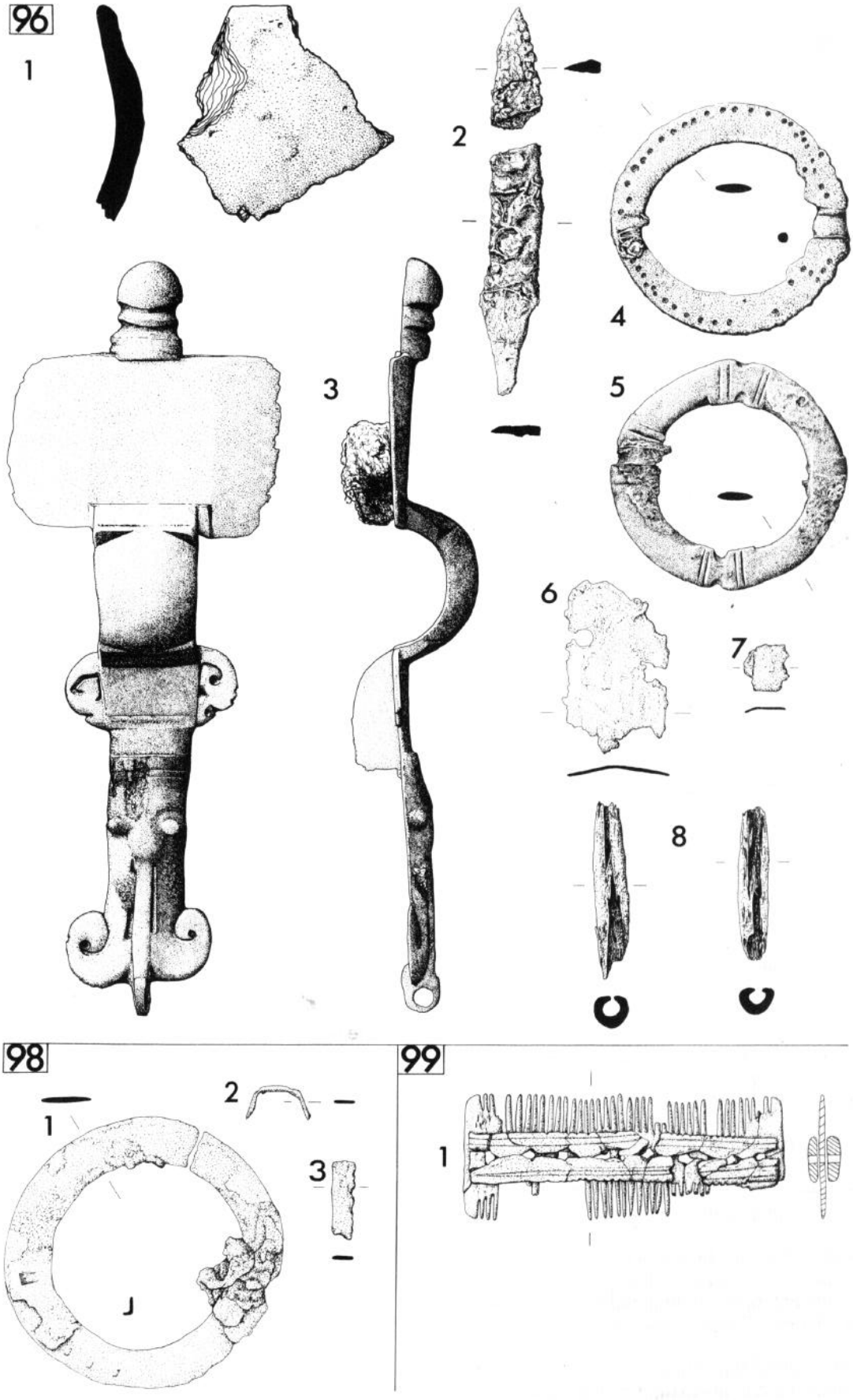


Figure 61 Finds from Graves 96–99

and some evidence of solder. Part of an iron pin and textile adhere around the join. Leeds Type G. External diameter 50 mm.

2 Copper alloy **strip,** a small curved piece of metal, possibly a bucket pendant handle. Diameter 13 mm.

3 Copper alloy fragment. Unidentifiable. Length 13 mm.

GRAVE 99

Female, age 17–25

Alignment N/S

A prone burial in the same grave as inhumation 98. This burial was W of 98 and lower in the grave, although the fill was uniform. This burial had the head at the S end of the grave, face down. Bone survival was good. The arms were extended S of the skull. The vertebrae, ribs and pelvis were intact. The legs were bent double with the knees pointing N and the feet pointing S. The left leg crossed over the right leg at the ankle. The grave finds comprised a sherd of pottery (not illustrated) 10 cm above the right scapula and a fragmentary bone comb (1) on the E wall of the grave, parallel with the ribs.

1 Double-sided bone **comb,** double ended and simply decorated, with two parallel incised lines along each edge of the central bar and fasened by eight iron rivets. Length 105 mm.

2 **Potsherd,** no fabric information (not illustrated).

GRAVE 100

Sex? age 35–45

Alignment E-W

A very fragmentary burial in a grave aligned E-W with the skull at the W end. The skeletal remains comprised fragments of the skull facing N, and the thighs aligned N-S. There were no other bones associated, the burial may have been crouched on the left side. The grave finds included an amber bead (1) with an upright pottery jar (2) 56 cm S of the grave. A small spherical jar (3) was approximately 2 m N of the grave and an iron buckle (4) was found under the jaw.

1 Disc-shaped amber **bead,** D1

2 Near complete hand-made straight-sided pottery **vessel.** Fabric 2. Height 142 mm.

3 Complete small hand-made globular **vessel** with rounded rim and slightly worn base. Fabric 2. Height 74 mm.

4 Oval iron **buckle,** with part of the ring missing, the tongue surviving. Diameter 34 mm.

GRAVE 101

Sex?, age 0.5 ± years

Alignment N/S

A well-defined grave which contained few human remains, comprising only two human teeth. A single find, a crinoid ossicle (1), was in the grave fill and may have been used as a bead.

1 Crinoid ossicle, possibly a **bead,** H

GRAVE 102

Sex? — grave finds imply female, age?

Alignment E/W

A grave which contained no human bones. The grave pit was aligned E/W, with the majority of the finds at the W end. The grave finds included over 100 glass and amber beads which divided into two groups. The first group (1), comprised 14 beads in a circular arrangement E of the main assemblage. The main group of 88 beads lay in a row, probably as they had been strung. These were overlain by a cruciform brooch (4). An iron ring (2) and a knife (3) lay SE of the main bead group. The cruciform brooch (4) lay across the large string of beads with the headplate at the W end. One knob (5) from the cruciform brooch lay to the E, 5 cm higher in the grave fill. A pair of wrist clasps (6) lay under the bow of the cruciform brooch. There were two annular brooches, one (7), was associated with bead group 2, and a second (8), in an animal burrow on the NW side of the grave.

1 **Group 1**

Eight translucent monochrome blue glass annular **beads,** A1a
Translucent monochrome blue glass sub-melon **bead** with 10 segments, A4f.
Two opaque polychrome brick red glass **beads** with yellow bands and green wavy lines, C1f
Two opaque polychrome brick red glass annular **beads** with swaggers, C2c
Opaque polychrome glass **bead** with green swags and red dots, C3a

Group 2

Seventy-three translucent monochrome blue glass annular **beads,** A1a
Opaque monochrome brick red glass annular **bead,** A4e
Two opaque light brown glass barrel-shaped **beads,** A2c
Two opaque brick red glass annular **beads** with yellow bands and green swaggers, C1f
Opaque pale grey glass barrel **bead** with blue swags, C2c

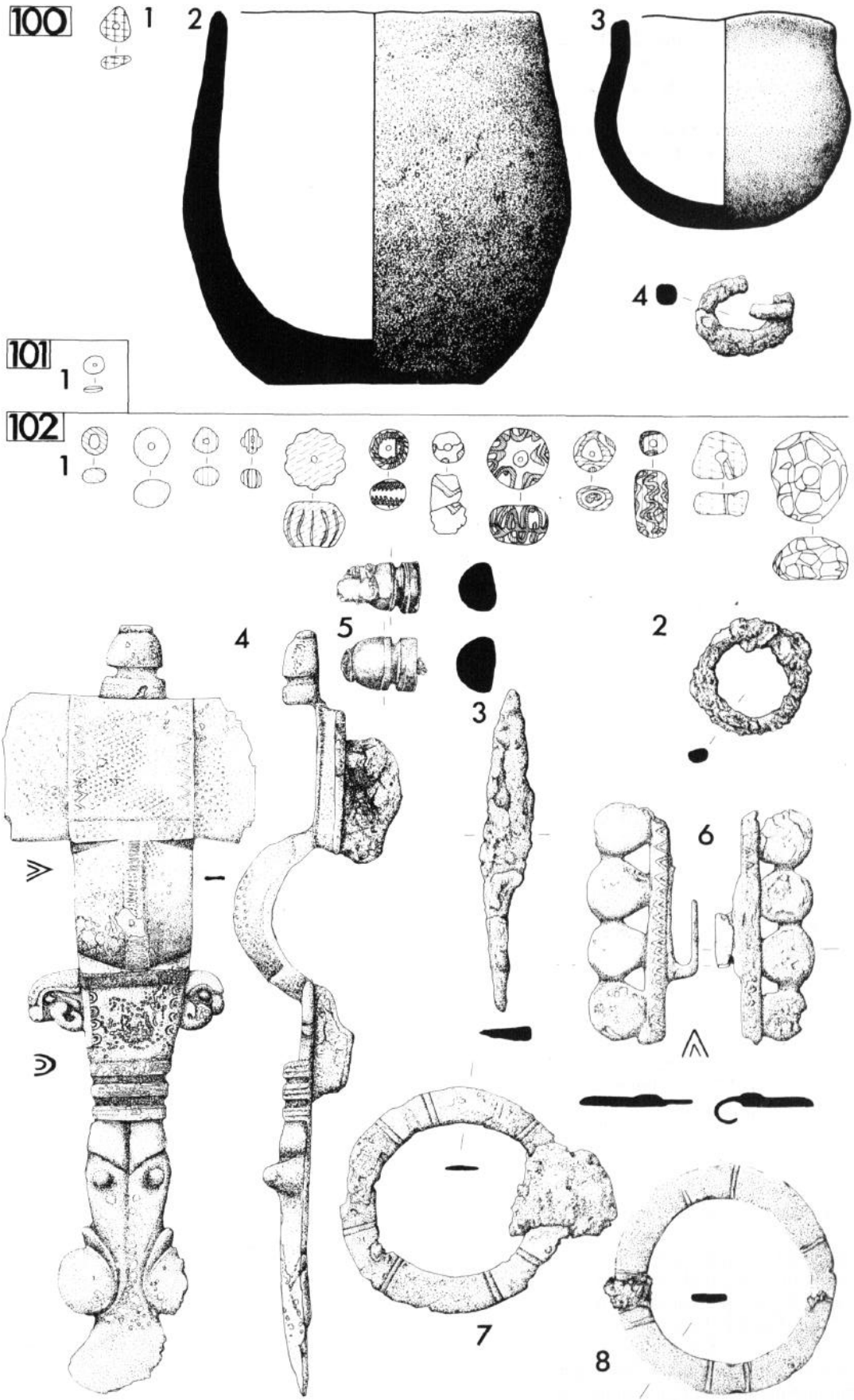


Figure 62 Finds from Graves 100–102

Opaque pale grey glass annular **bead** with blue and red wavy lines, C2e
Two opaque brick red glass cylindrical **beads** with yellow and green swags, C2f
Three opaque pale grey glass **beads** with green swags and red dots, C3a
Disc-shaped amber **bead,** D1
Quartz **bead** with six facets, H
Opaque grey-blue circular stone **bead,** H

2 Iron **ring** with sub-rectangular profile, no pin surviving. Diameter 41 mm.

3 Iron **knife** with angled back and curved cutting edge, Evison Type 3. Length 110 mm.

4 Cast copper alloy **cruciform brooch** with edges of the head plate and foot terminal damaged. The headplate has a single half round knob with a nipple which has a slightly hollowed back set at the top. The two side knobs 102/5 had been separated from the brooch, The sides of the central panel are decorated with V-shaped punchmarks. The bow has linear punchmarks down a central ridge. The lappets are decorated with downward-facing animal heads in Salin Style I, the panel between has a row of U shaped punchmarks along each side. The foot has a marked collar above the horse head which has prominent eyes, brows, and scroll nostrils terminating in a shovel-shaped foot. The face of the brooch is pitted finely and evenly, possibly the result of fabric lying over the brooch. On the back the iron spring coil is concealed by mineralised tabby weave ZZ spun textile and the catchplate survives although it is partially broken, there is no trace of a pin. The back of the brooch also reveals fragments of the crossbar underneath the mineralised textile and the hollow back of the single half-round knob can be seen. The same mineralised tabby weave ZZ spun textile seems to occur on the two detached knobs. Leeds Group IVa. Length of brooch 129 mm.

5 Two cast half-round copper alloy **knobs** from the cruciform brooch (4), both are perforated and contain the remains of the iron spring bar. The front is decorated with faint incised lines around a deep groove. Length 17 mm.

6 Pair of cast copper alloy **wrist clasps,** each consisting of a bar decorated with punched double-lined triangles. Four conjoined flattened knobs are attached to each bar, the three gaps forming attachment holes. Hines Form B18c. Length 41 mm.

7 Cast copper alloy **annular brooch,** a flat ring decorated with paired transverse lines and facets. A recessed bar carried the pin, now missing apart from an area of iron concretion on one side. Leeds Type G. Diameter 40 mm.

8 Cast copper alloy **annular brooch,** a flat ring similar to (7) above, with a small fragment of mineralised textile. Leeds Type G. External diameter 39 mm.

GRAVE 103

Sex? adult

Alignment N-S

A burial in a shallow grave which had been much disturbed by ploughing. The remains were very fragmentary and comprised only a scapula and one arm, probably the left. There were no grave finds associated.

GRAVE 104

Sex? — grave finds imply female, age 15 ± 3 Years

Alignment NW/SE

An extended burial in a well-defined shallow grave, with the skull at the S end facing N. Bone survival was generally good, with the skeleton lying partly on the left side. The top of the skull was broken and the jaw had dropped, leaving the mouth slightly open. The left arm was at the side of the body with the hand on the thigh; the right arm was bent double with the hand beside the head. The vertebrae did not survive, although the ribs and pelvis were intact. The legs were extended, with the right laying on the left at the ankle. The grave finds comprised a bone pin (1) behind the skull and a lead annular brooch (2) under the jaw on the right shoulder.

1 Bone **pin** with a small round flattened head. Length 52 mm.

2 Lead **annular brooch** with iron pin. The brooch is a roughly twisted pear-shape with the pin at the narrow end, incomplete. An indentation marks the pin rest. Length 48 mm.

GRAVE 105

Female, age 45–61

Alignment NNW/SSE

A crouched burial in a well-defined grave, lying on the left side with the skull at the S end, facing E. The front of the skull was missing and both arms were bent at 90 degrees in front of the skull. The vertebrae and ribs did not survive; the pelvis was intact and the legs were bent with the knees pointing E. The grave finds comprised a group of 12 beads (1) around the neck and concentrated under the jaw. An iron pin (2) lay at the waist above rings

(5) and (6). An iron ring (3) lay at the top of the pelvis, almost on the hip. A copper alloy annular brooch (4) was in front of the jaw, associated with beads (1). Two copper alloy rings (5) and (6) were at the waist beside the iron ring (3). A copper alloy applied saucer brooch (7) was alongside an annular brooch (4) in front of the jaw. Two rim bands (8), from the saucer brooch were found with the bead-group (1) below the arms at the neck.

1 Opaque blue glass annular **bead,** A1a
Wedge-shaped disc amber **bead,** D2
Eight irregular barrel-shaped amber **beads,** D3
Triangular-sectioned amber **bead,** D7
Sub-rectangular amber **bead,** D8

2 Two fragments of an iron **pin** with round section, broken. Length 75 mm.

3 An iron **ring,** sub-circular in shape, with a circular section. Diameter 35 mm.

4 Copper alloy sheet **annular brooch,** a wide band with overlapping ends decorated with a row of punched circlets around both edges. The ring widens slightly where the overlapping ends join and there are silver/white solder streaks in this area. The iron pin is largely missing, but there is an area of mineralised textile where it was attached. Associated with this brooch was a large piece of black organic concretion and three of the amber heads, two of which have thread surviving through their centres. Leeds Type G. External diameter 56 mm.

5 Copper alloy **ring** with square section. Together with a second ring (6) possibly from a bag. Diameter 20 mm.

6 Copper alloy **penannular ring,** narrowing at the terminals. Diameter 19 mm.

7 Copper alloy applied **saucer brooch,** a concave oval sheet base plate, the front of which has the remains of solder around the edges, with a small rectangle of metal in the centre. The plate has a dished profile and two copper alloy loops perforated lugs for the spring hinge and a catchplate for an iron pin. The catchplate has incised line decoration. The pin is concealed by mineralised textile and other organic materials; there is also a patch of fibrous impressions in the copper alloy corrosion on the plate. Two small fragments of gilt copper alloy associated with this object may be part of the decorated front plate. Diameter 45 mm.

8 Two fragments of a narrow sheet copper alloy band, part of the rim of the applied saucer brooch (7) above. Diameter 46 mm.

GRAVE 106

Female, age 35–45

Alignment NNW/SSE

A slightly crouched burial in a well-defined grave, with the skull at the S end facing E. Bone survival was good; the body lay on its back although the feet were tucked up almost to the pelvis. The left arm was extended along the side of the body with the hand beside the pelvis. The right arm was bent double with the hand touching the humerus. The vertebrae, ribs and pelvis were intact. The knees are at the N end of the grave, with the feet bent back to its W wall. The grave finds comprised a number of sherds of pottery, one of which was E of the skull, and the rest at the S end of the grave, beside the legs. An iron pin (1) lay beside the left pelvis.

1 Short length of iron **pin** or nail with a round profile. Length 79 mm.

2 Twenty-three sherds from a hand-made **vessel,** including one base sherd. Fabric 3 (not illustrated).

GRAVE 107

Male — grave finds imply female, age 15–21

Alignment NNW/SSE

An extended burial in a well-defined grave, with the skull at the S end facing NE. This grave was cut at its N end by grave 110. There was a very good degree of bone survival. The left arm was at the side of the body whilst the right arm lay across the chest and the hand was on the left humerus. The ribs, vertebrae and pelvis were all intact, whilst the legs were extended. The grave had been truncated just below the patela, and the tibia were at the E side of Grave 110. The grave finds comprised a group of glass and amber beads (1) located around the neck. An ovoid pottery jar (2) lay on a slight shelf just S of the skull at the same level. An iron brooch (3) lay beside the left shoulder associated with beads (1) and an annular brooch (4). An iron needle (5) lay under the jaw S of the beads (1). An animal bone was found in the grave fill above the right elbow, and a small iron hook (6) was also in the fill of the grave.

1 Opaque long cylindrical brick red glass **bead,** A5b
Opaque pale grey glass annular **bead** with brown swags and pale spots, C3a
Opaque long cylindrical brick red glass **bead** with a faint yellow spiral, C7a
Twelve irregular barrel-shaped amber **beads,** D3
Cuboid amber **bead,** D5
Triangular amber **bead,** D7
Irregular long convex biconical jet **bead,** E4
Annular smooth polished bone **bead,** J
Annular bone **bead** with five pairs of circles, J

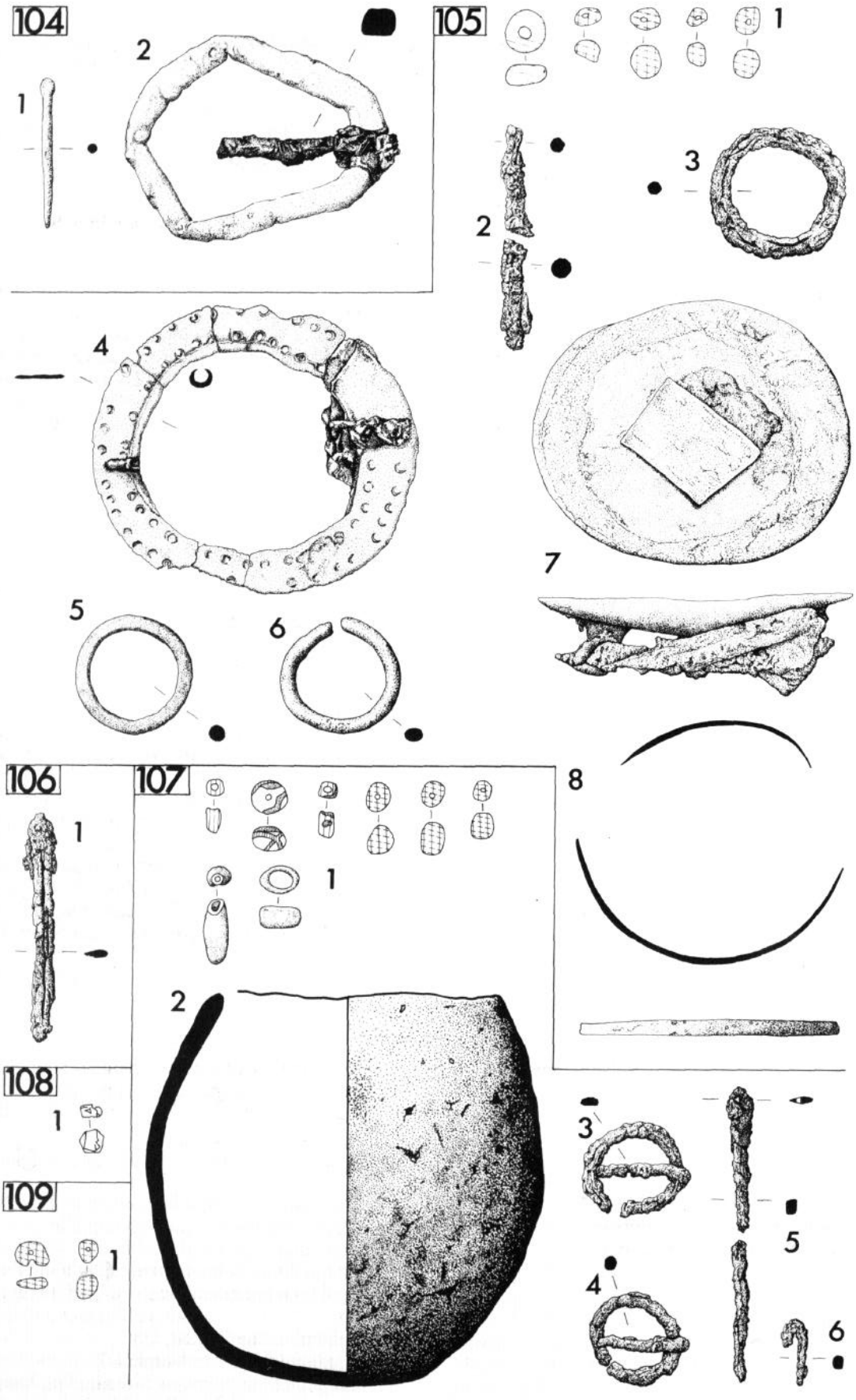


Figure 63 Finds from Graves 104–109

2 Ovoid pottery **vessel.** Fabric 1. Height 150 mm.

3 Iron **annular brooch** with a rectangular profile, the pin and the ring broken. Diameter 35 mm.

4 Iron **annular brooch,** similar to brooch (3). Diameter 30 mm.

5 Iron **needle** broken in two pieces. Total length 94 mm.

6 Iron **hook** bent over at one end, with a square profile. Length 23 mm.

GRAVE 108

Sex? age 3–5

Alignment NNW/SSE

Avery fragmentary burial in a small shallow grave. The only bones surviving were fragments of the skull, at the S end facing E. There were some milk teeth W of the skull. The only find was a quartz bead (1), W of the skull.

1 Quartz rock crystal **bead,** F

GRAVE 109

Sex? — grave finds imply female, age 5–9

Alignment NNW/SSE

A flexed burial in a well-defined grave, with the skull at the S end facing NE. The child lay on its back, and the skull had fallen, slightly forward onto the collarbone. The arms were bent double, with the left on the chest beside the sternum and the right bent double onto the right collarbone. The vertebrae, ribs and pelvis all survived intact. The legs were bent double, with the knees pointing E. The grave finds comprised three amber beads (l), two of which were situated on the chest beside the left hand, fragments of a third were found beside the left shoulder.

1 Disc-shaped amber **bead,** broken, D1
Irregular barrel-shaped amber **bead,** D3
Amber **bead** in fragments, unclassifiable

GRAVE 110

Sex? age 5–9

Alignment NNW/SSE

An extended burial in a well-defined grave which cut Grave 107. The burial was lying on the left side with the skull at the S end, facing W. Bone survival was generally good, with most of the vertebrae, ribs and pelvis surviving. The left arm was under the body pointing NW, whilst the right was bent double over the body, pointing SW. The legs were slightly bent, and the feet were pointing N. The single object from the grave was an iron knife (1) situated behind the right hip.

1 Iron knife, with an angled back and straight cutting edge, Evison Type 2. Length 110 mm.

GRAVE 111

Sex? ?middle-aged adult

Alignment N/S

An extended burial lying in a slight hollow with the skull at the S end, facing W. The skeleton, particularly the skull, had been slightly disturbed by ploughing. The vertebrae has survived although some of the ribs were missing and little of the pelvis survived. The left arm was bent across the torso, and the right was extended down the side of the body. The legs were bent, the knees pointed to the NW. There was one artefact associated with this grave, an iron knife (1) which lay on the right side of the waist.

1 Iron **knife** with a straight back and blade, broken before the tip. Possibly Evison Type 2. Length 76 mm.

GRAVE 112

Female, age 17–25

Alignment NNW/SSE

A crouched burial lying on the left side in a well-defined shallow grave. The skull was at the N end, facing E. Bone survival was generally very good except for the jaw which had been displaced and was E of the skull. The body was lying on the left side and had twisted, leaving the chest facing downwards. The arms were lying underneath the body, and the vertebrae, ribs and pelvis had survived. The legs were bent double with the knees pointed to the E. The grave finds included a copper alloy annular brooch (1) just above the thighs, beside the chest. There were two further annular brooches, the second(2) on the left shoulder with a fragment of iron, possibly a pin, and the third (3) on the right shoulder.

1 Cast copper alloy **annular brooch** decorated with groups of incised transverse lines. Faint traces of an organic strip, possibly leather or textile. Leeds Type F. Diameter 30 mm.

2 Cast copper alloy **annular brooch** with a D-shaped section, a complete ring with transverse ribbing all the way round. A small area of textile survives over the pin hinge area. Leeds Type F. Diameter 35 mm.

3 Cast copper alloy **annular brooch** fragment with similar transverse ribbing to (2) above. The brooch has a flatter D-shaped profile and a narrow bar for the pin to be attached. Leeds Type F. Diameter 40 mm.

GRAVE 113

?Male — grave finds imply female, age 32–38
Also present bones of second individual: Sex?, age 12–18

Alignment NNW/SSE

A crouched burial lying on the right side in a well-defined shallow grave with the skull at the N end, facing W. Bone survival was generally good, although the burial had been slightly disturbed by tree roots. Most of the vertebrae and ribs were missing, although the pelvis had survived. The arms were bent double with the right arm underneath the body and the left lying on the chest. The knees were also bent double and pointed to the W. The grave finds comprised a group of glass and amber beads (1) which were around the neck. A sherd of pottery (not illustrated) was situated at the S end of the g-rave in the fill above the feet. An iron knife (2) was just outside the grave, NW of the skull. An annular brooch (3) was on the left shoulder, beside the group of beads (1). A copper alloy buckle (4) was at the waist.

1 Opaque double segmented blue green glass annular **bead,** A1b
Opaque turquoise green glass cylindrical **bead,** A5a
Opaque brown glass barrel-shaped **bead,** with an incised spiral, infilled with a mustard yellow trail, C1a
Opaque yellow glass barrel-shaped **bead,** with green swags and red dots, C3a
Opaque brick red glass barrel-shaped **bead** with pale grey white swags, C3b
Opaque pale grey glass barrel-shaped **bead** with yellow swags and red spots, C3a
Opaque brick red glass double segmented bead with a yellow spiral, C8
Six irregular barrel-shaped amber **beads,** D3
Cuboid amber bead, D5
Triangular-section amber **bead,** D7
Long cylindrical amber **bead,** D8

2 Iron **knife** with an angled back and straight cutting edge, Evison Type 5. Length 91 mm.

3 Cast copper alloy **annular brooch** with an oval section and incised linear decoration. A patch of mineralised textile adheres to the iron pin hinge area. Leeds Type F. Diameter 40 mm.

4 Cast copper alloy **buckle,** D-shaped with a slight groove for the tongue rest. Length 28 mm, width 25 mm.

5 Thick **potsherd,** pinkish white brown in colour with seed impressions on the external surface, probably Iron Age. (not illustrated).

GRAVE 114 Cremation

Sex? age probably over 21

A fragmentary cremation contained within an urn which had been buried in a shallow cut in the gravel subsoil. The urn contained the remains of one adult, a person aged 21 and possibly more than 35. Only the bottom third of the urn survived, in very poor condition. There were fragments of cremated bone scattered throughout the topsoil. No finds were associated with this burial.

Fragments of hand-made pottery **urn.** Exterior surface. Fabric 1 (not illustrated).

GRAVE 115 Cremation

Sex? age?

A fragmentary cremation contained within an urn buried in a slight hollow cutting into the gravel subsoil. The urn had been disturbed by ploughing and only the lowest third survived. The vessel had collapsed outwards and there was a spread of cremated bone extending 20 cm. The cremation comprised the remains of one adult. No finds were associated with this burial.

Fragments of hand-made pottery **urn.** Fabric 1 (not illustrated).

GRAVE 116

Sex? age?

Alignment E/w

The fragmentary remains of an infant buried beside inhumation 47, and lying on sandy subsoil. The remains comprised fragments of two pieces of human bone aligned EW, similar to 47 and situated N of the thigh and pelvis of 47. The remains were very fragmentary, but it is thought that this was a prone burial. There were no associated finds.

GRAVE 117

Sex? age 4–8

Alignment unknown

A fragmentary burial probably extended, with the skull at the S, in the same grave as inhumation 78. The remains comprise fragments of the skull, ribs and one thigh bone. The skeleton lay E of inhumation 78, it was located beside the right arm. There were no grave finds associated with this burial.

GRAVE 118

Sex? age 7–11

Alignment unknown

This skeleton was very fragmentary, lying on the subsoil surface beside inhumation 79. The skeletal remains comprise fragments of the pelvis, both thighs

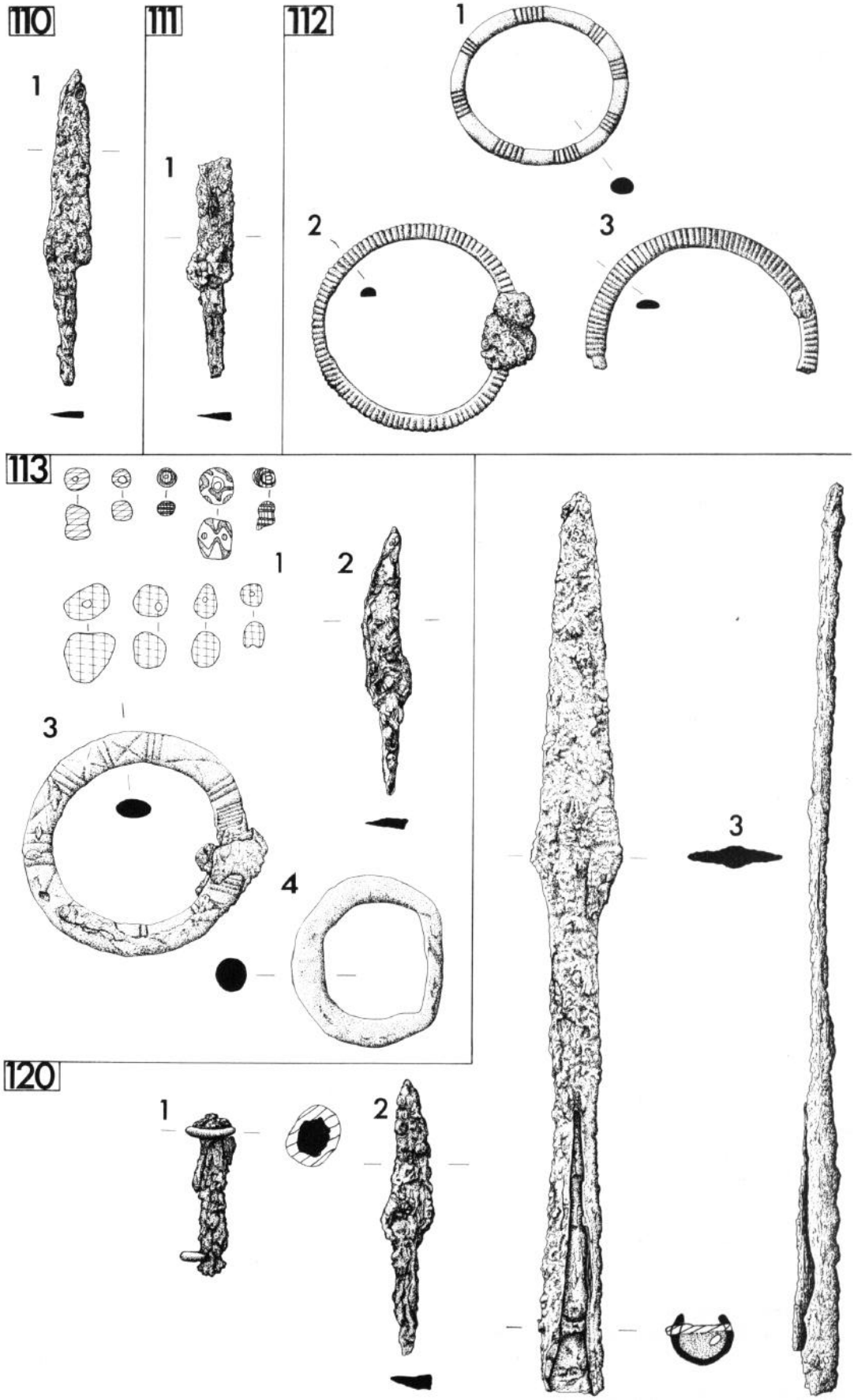


Figure 64 Finds from Graves 110–120

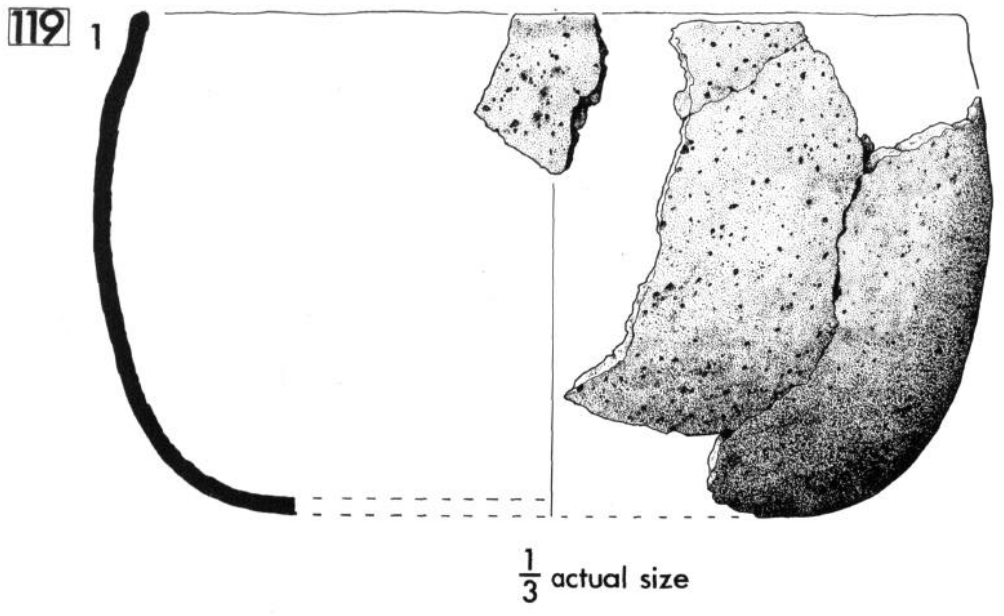


Figure 65 Finds from Grave 119

and the right lower leg. These bones were beside the right thigh of inhumation 79. There were no grave finds.

GRAVE 119 Cremation

Sex? age 10–15 years

An urned cremation at the W extremity of the excavated area. The urn contained soil and the bones of two individuals, a teenager and possibly an adult. The vessel had been placed in a pit (288) on top of some unburnt cow or horse bones.

GRAVE 120

Male, age 25–35

Alignment NNW/SSE

An extended burial in a well-defined deep grave which was cut by curvilinear gully 286. Bone survival was good; the skull was at the S end facing N and was resting slightly on the chest. The vertebrae, ribs and pelvis had survived in good condition and the arms were folded across the chest. The legs were slightly bent in the grave with the left over the right. The grave finds comprised an iron bar (1) in the fill of the grave. An iron knife (2) was at the left side of the waist and an iron spearhead (3) was E of the skull, with the tip at the S end on top of the bucket (4). A copper alloy bound wooden bucket (4) lay beside the skull on the E side.

1 Iron **bar** with a small copper alloy ring around one end. Length 27 mm.

2 Iron **knife** with a-straight back and curved cutting edge. Evison Type 2. Length 94 mm.

3 Iron **spearhead,** angular blade with a slight concave curve above the angle and a long neck between blade and open split socket. Swanton Group H2. Length 310 mm.

4 A wooden **bucket** bound by five copper alloy rings or hoops, of which only three survive completely. The staves are made from yew, being between 12 and 18 mm wide and up to 131 mm long. These survive most of the way around the bucket, although they are not completely intact. There was only a fragment of the base and no trace of a handle. A handle may have been made from an organic material, perhaps a fabric because, a dark stain was observed on either side of the bucket whilst it was being excavated.
The hoops which bound the bucket are referred to as numbers 1-5 in the following text, with hoop 1 at the top of the bucket. Hoop one has two rows of punched decoration to either side. The upper row of decoration is a single wavy line, the lower row comprises two wavy lines separated by crescentic punchmarks. The second hoop is very fragmentary being only 30 mm long and has spaced elongated repoussé bosses. The punchmark is a rectangle with rounded ends. The third hoop which is in the middle of bucket and survives completely, has the same decoration as hoop one. Only a quarter of the fourth hoop has survived, the decoration is not

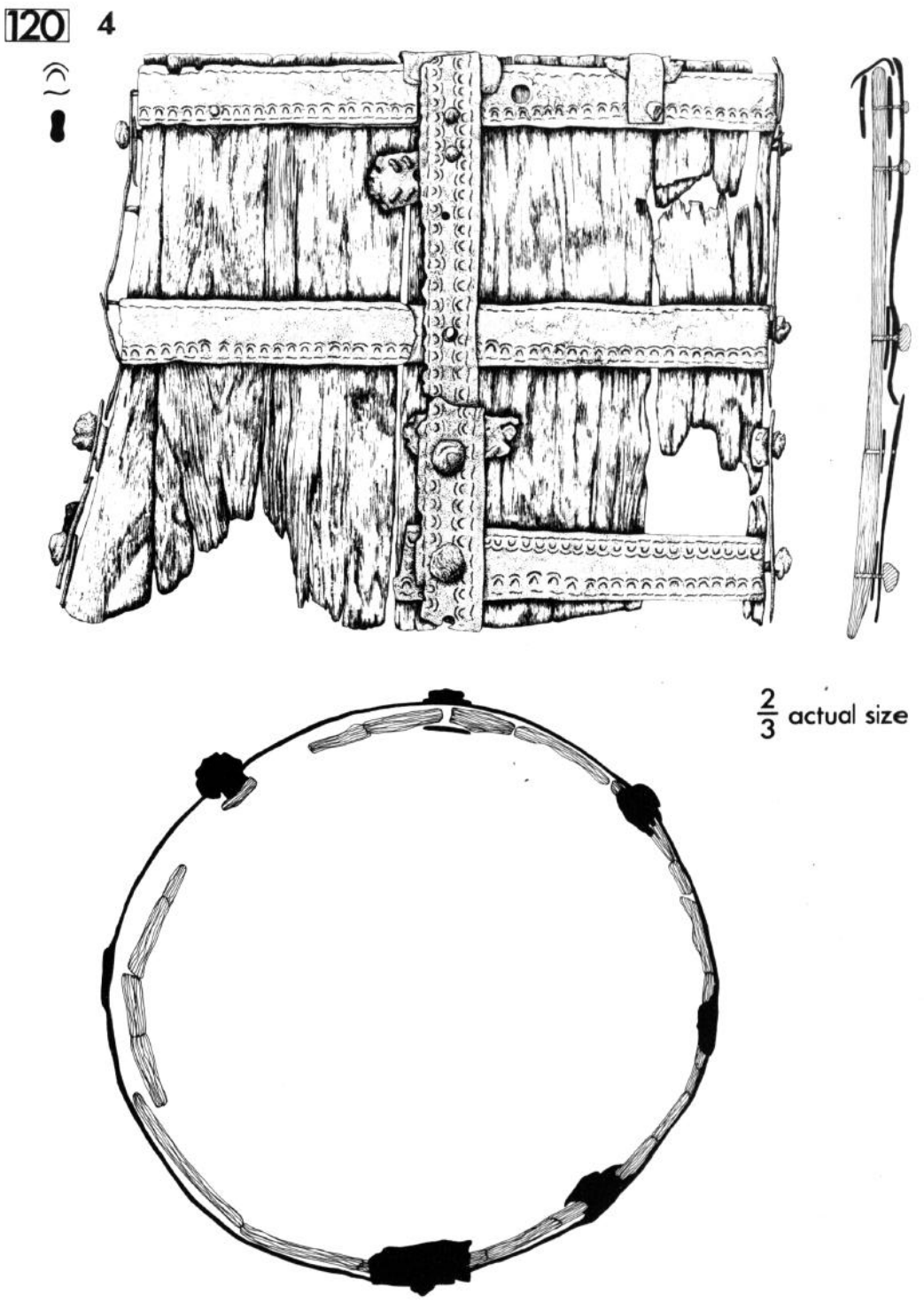


Figure 66 *Finds from Grave 120*

clear because of the condition of this hoop, but it probably matched band 2. The fifth hoop is decorated by two identical rows of two wavy lines separated by crescentic punchmarks. All the hoops are between 15 and 16 mm wide. The hoops are held in position by a series of upright copper alloy bands which are attached to the hoops with copper alloy rivets. These are driven through the wood. The copper alloy strips are decorated with the same punchmark as hoop five. The strips overlie a narrow copper alloy rim at the top of the bucket: there are eight of these rim mounts. One rim mount is found under each strip and the others are located at a point halfway between each strip. There are four copper alloy strips, which are each ? 14 mm wide and 135 mm long. There is no trace of any base for the bucket.

Stray finds catalogue

1 **Beads**
There were twenty one glass, amber and stone beads found in the topsoil. The majority of these beads were probably from graves which had been disturbed by ploughing and a couple of the beads may not be Anglo-Saxon.

Bead no:

755 Opaque polychrome long cylinder glass **bead,** with yellow wavy lines overlain by green lines, C2f

757 Translucent blue glass monochrome **bead,** possibly modern

758 Opaque polychrome long cylinder glass **bead,** with yellow wavy lines overlain by green lines, C2F

759 Chalcedony stone, perforated and used as an annular **bead,** H

760 Opaque polychrome cable decorated glass **bead,** with yellow background and red cables, C6b

761 Opaque polychome brick red barrel-shaped glass **bead** with yellow spots, C5b

762 Opaque polychrome brick red barrel-shaped glass **bead** with yellow spots, C5b

763 Translucent blue annular glass **bead,** A1a

764 Amber **bead,** broken in three pieces, possibly, D3

765 Eight fragments of an amber **bead,** undiagnostic

767 Amber **bead** fragment, undiagnostic

768 Fragmentary amber **bead** with triangular body, D7

769 Fragmentary disc-shaped amber **bead,** D1

770 Fragmentary disc-shaped amber **bead,** D1

771 Fragmentary amber **bead,** probably D3

772 Disc-shaped amber **bead,** broken in 3 pieces, D1

773 Disc-shaped amber **bead,** one flat face, D1

774 Fragmentary amber **bead,** probably D3

776 Amber **bead** with a triangular shape body, D7

777 Translucent monochrome pale blue long cylinder glass **bead,** A5a

778 Translucent blue glass annular **bead,** turquoise in colour, possibly modern

2 Iron **knife** fragment, broken at the top with a curved back and an undiagnostic cutting edge. Unclassified. Length 60 mm.

3 Iron tip of **knife,** a pointed object with a rectangular profile, unfortunately this is too small to classify.

4 Iron **latchlifter** with a suspension loop at one end, bent into a U-shape at the other, with a 90 degree bend at the end. Length 211 mm.

5 Iron **spearhead** with an open split socket and a blade with a slight concave curve above the angle. Swanton Group H1. Length 220 mm.

6 Iron **spearhead** with a split socket, a missing tip and a blade with a slight concave curve above the angle. Swanton Group H1. Length 104 mm.

7 Iron **spear ferrule,** with mineralised wood remains sealed within. Length 110 mm.

8 Copper alloy fragment of cast **annular brooch,** comprising almost one half of a flat ring. The ring is perforated to hold a pin, over this area there are mineralised remains, the brooch is Leeds Type F, undecorated, and has a diameter of approximately 56 mm.

9 Copper alloy fragment of cast **annular brooch,** comprising approximately one quarter of a flat ring. The ring is Leeds Type F, undecorated and broken at a recess for the pin hinge. Approximate diameter 43 mm.

10 Copper alloy fragment of cast **annular brooch,** comprising approximately one third of a ring which has a lentoidal section. The brooch is Leeds Type G, undecorated and has an approximate diameter of 41 mm.

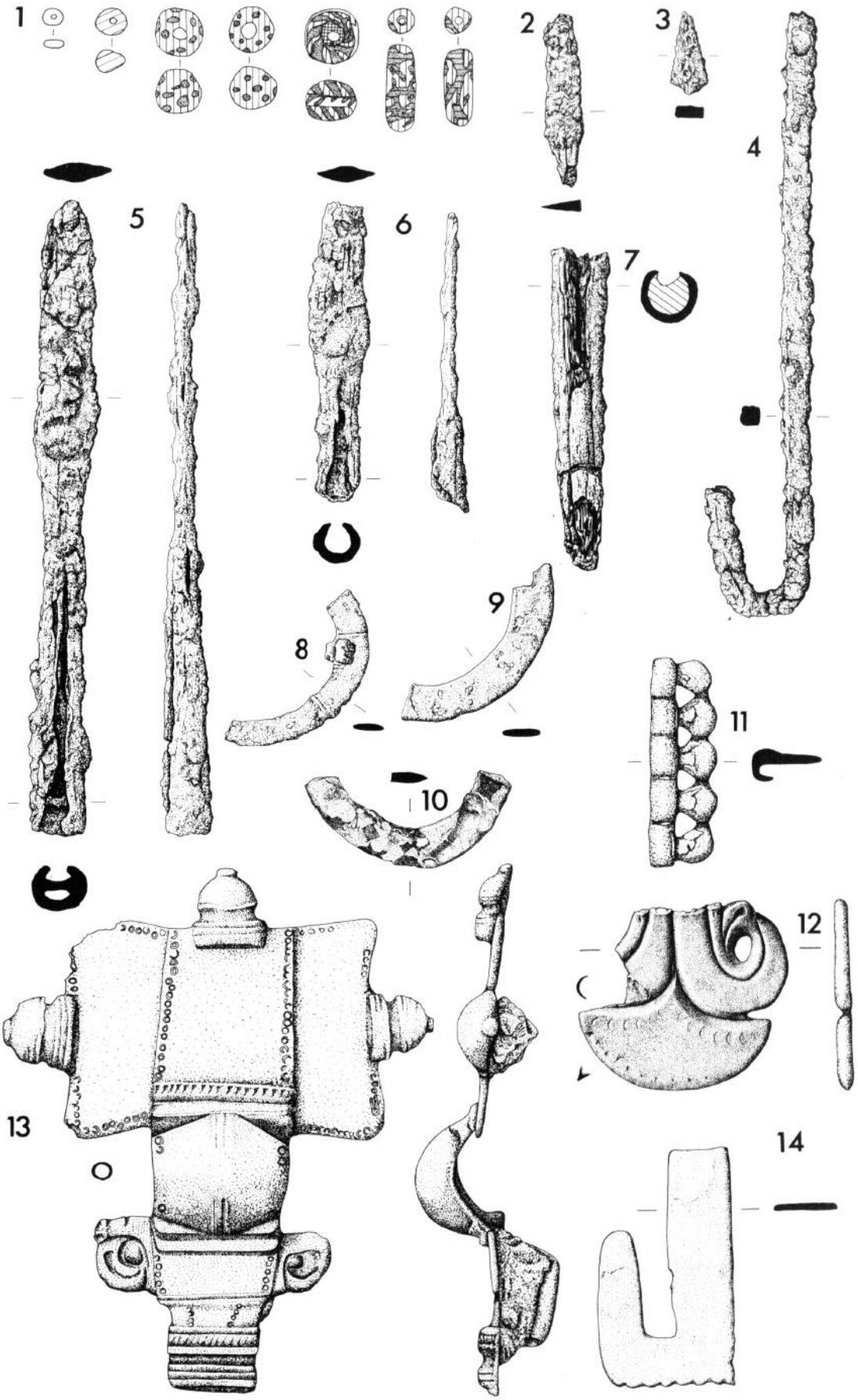


Figure 67 Stray finds from Norton cemetery

11 Cast copper alloy gilded **wrist clasp** comprising a rectangular bar divided by four transverse grooves into five sections. The five sections each have a flat round plate on one side leaving gaps for attachment. On the back of the clasp there is a hook section for attachment to the other half of the clasp. Traces of gilding cover the front, whilst the back is is plain and flat. Hines Form B18c. Length 36 mm.

12 Cast copper alloy fragment of a **cruciform brooch** comprising the foot terminal only. The surviving fragment encompasses the bottom of a facemask and one perforation which would have served to attach this brooch to a garment. There are two curving lines defining the bottom of a facemask, the foot is decorated with two punchmarks in the shape of a crescent and a pointed arrow, The back of the brooch is plain, this is probably a fragment of a Leeds Class C2 square-headed cruciform brooch. Length 32 mm.

13 Cast copper alloy **cruciform brooch** with three half rounded knobs, which have a small nipple on the end. The headplate is decorated around both edges and the central panel with circlet punchmarks and is dovetail in shape with one comer broken. The how is bevelled from the centre and has a row of circular punchmarks down each side. The lappets are uneven in size but each is decorated with a downward-facing animal head. The panel between the lappets has a row of punched circlets which continue down the brooch to a collar, below which the object has been broken in antiquity. The back has two copper alloy lugs; the remains of the iron spring coil is covered in mineralised textile. There are traces of a wool tabby weave ZZ spun textile underneath the catchplate, but no surviving traces of the pin. Leeds Group IVa. Length 88 mm.

14 Fragmentary copper alloy **girdle hanger.**

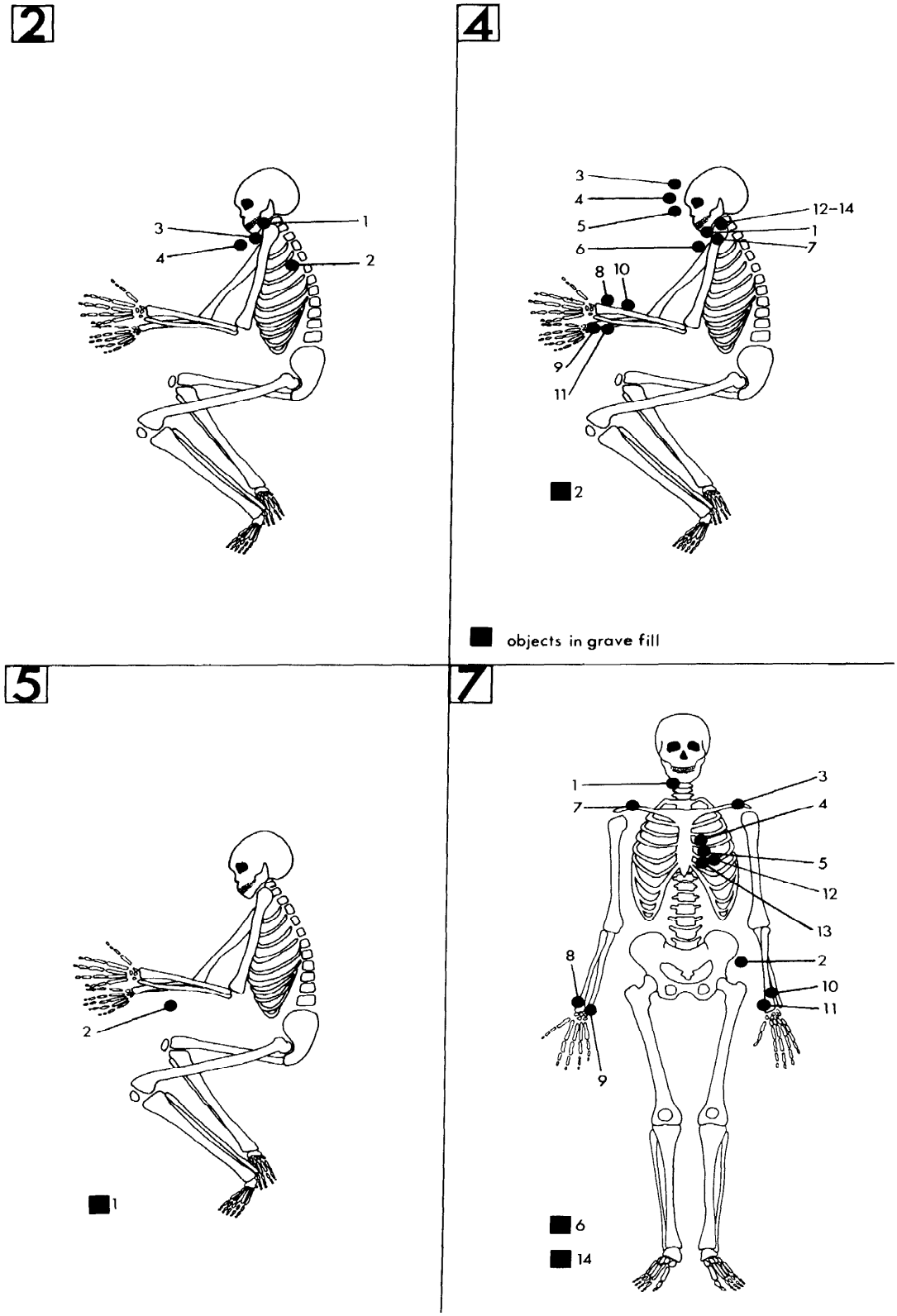


Figure 68 Location of artefacts in Graves 2-7

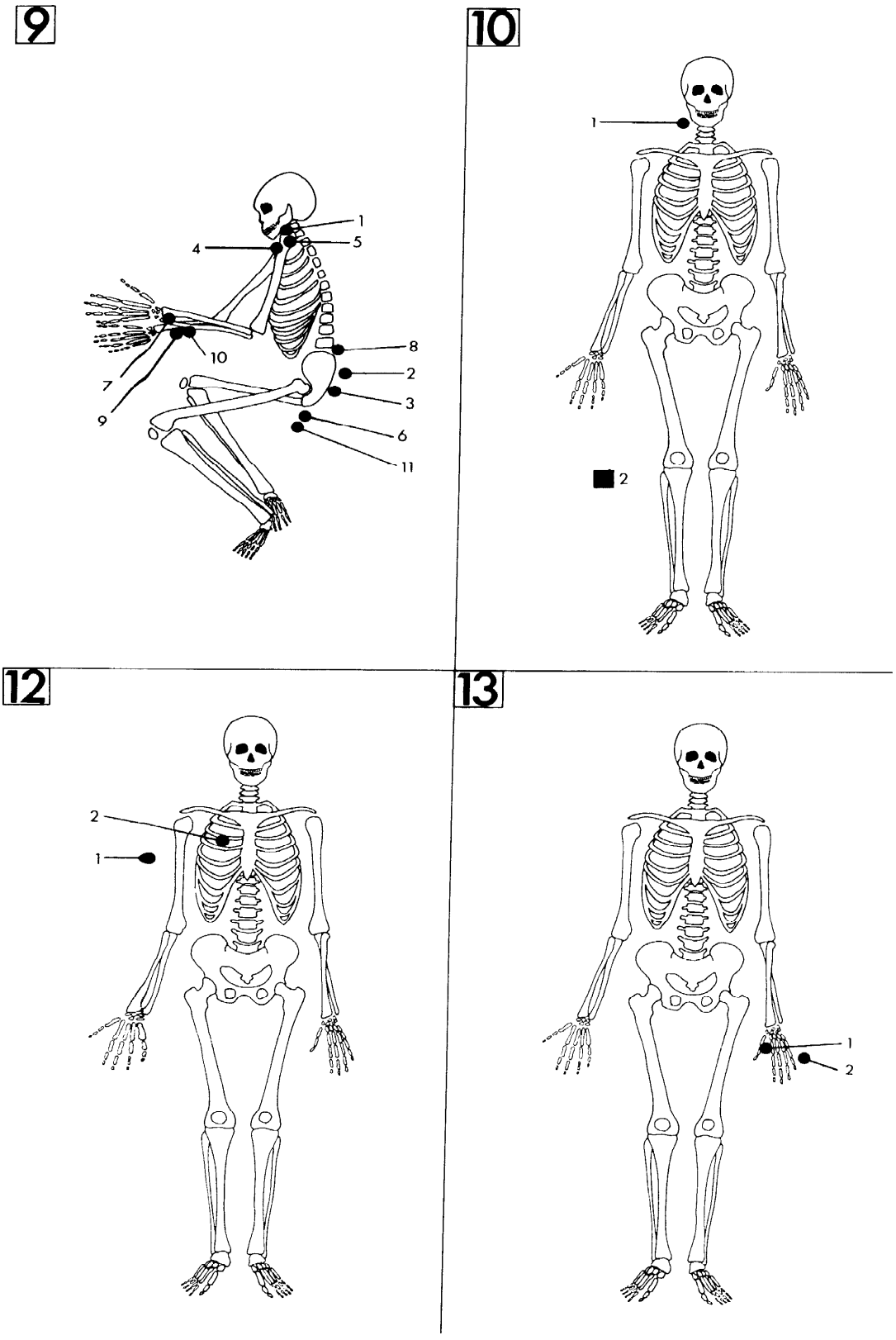


Figure 69 Location of artefacts in Graves 9-13

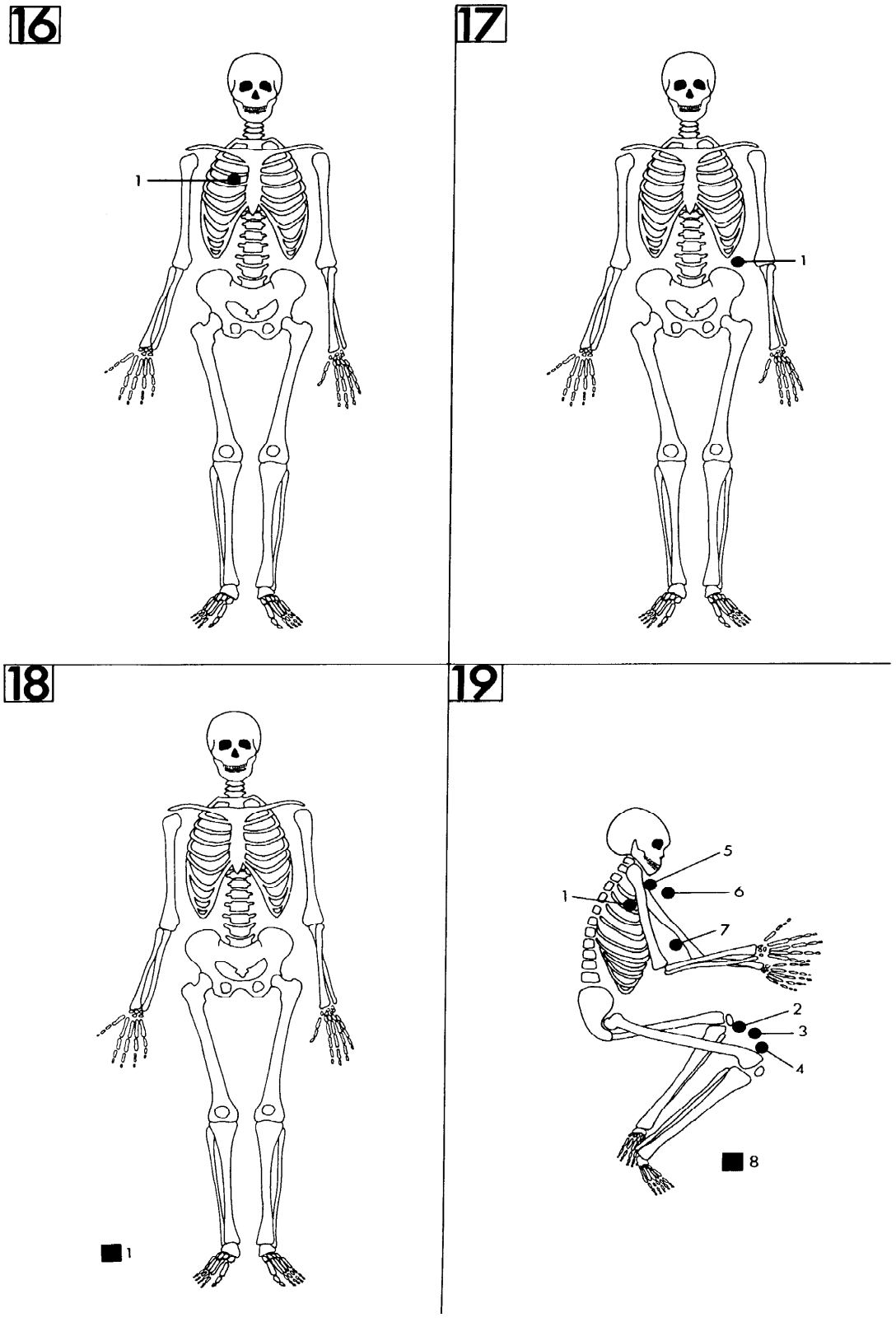


Figure 70 Location of artefacts in Graves 16-19

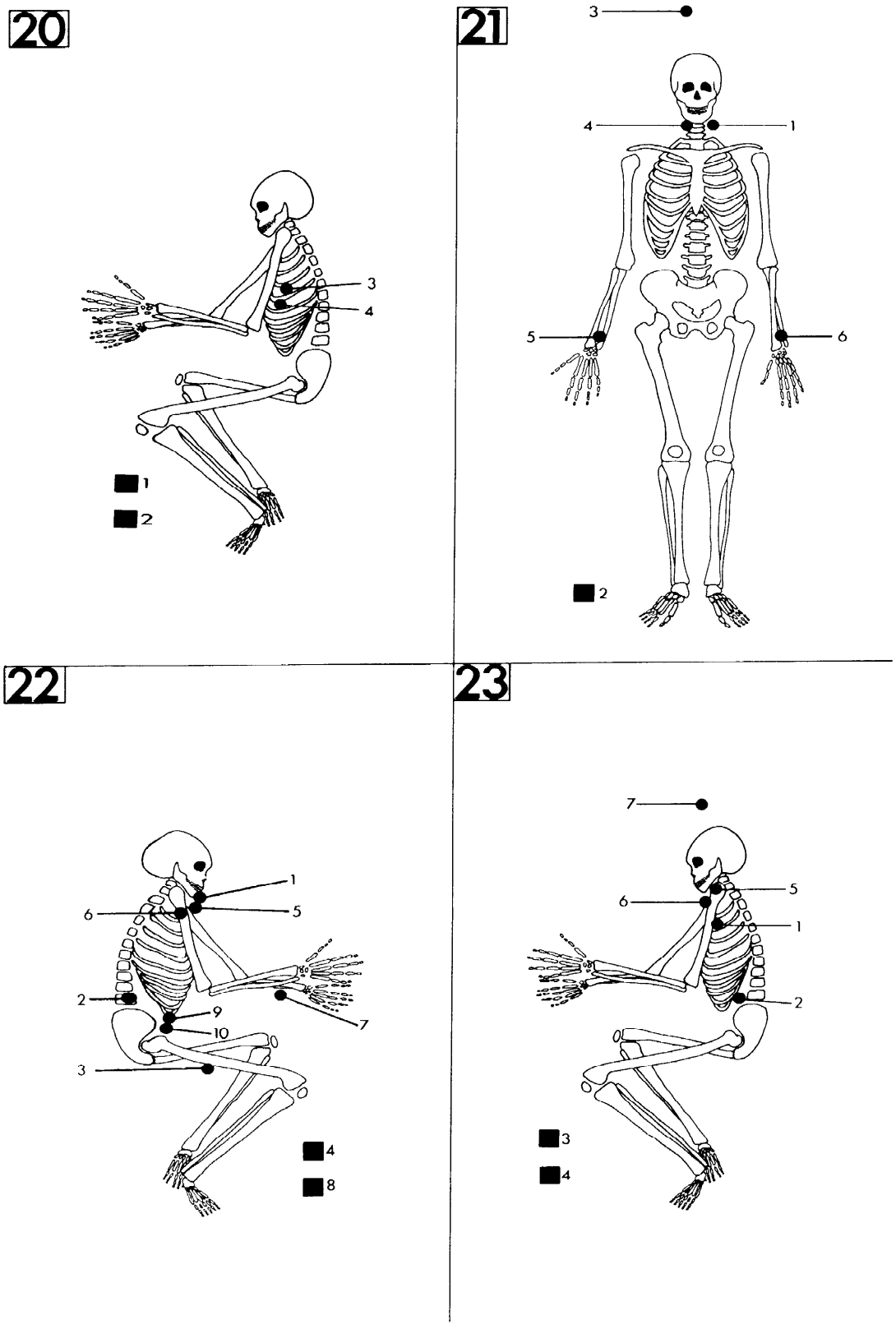


Figure 71 Location of artefacts in Graves 20-23

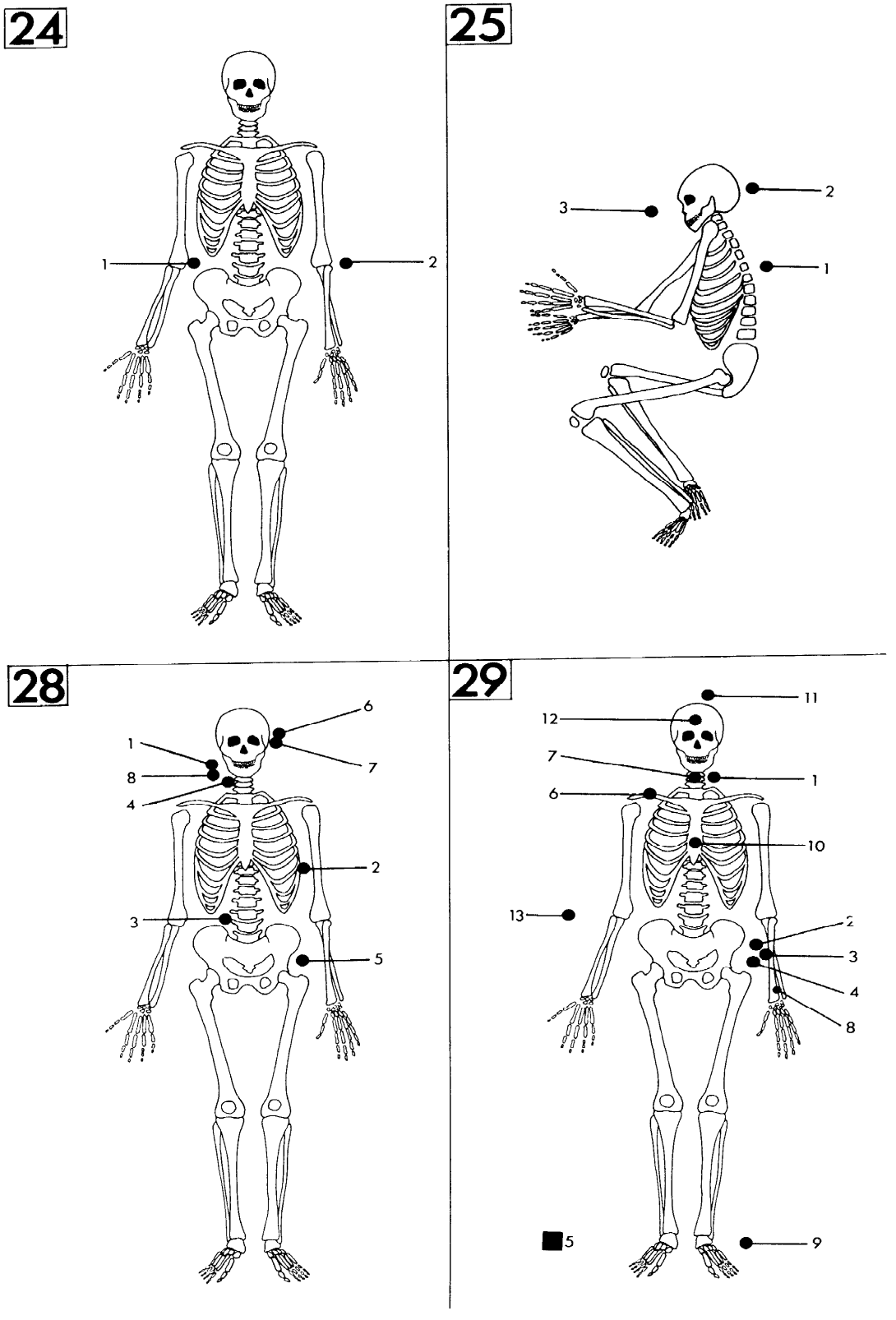


Figure 72 Location of artefacts in Graves 24-29

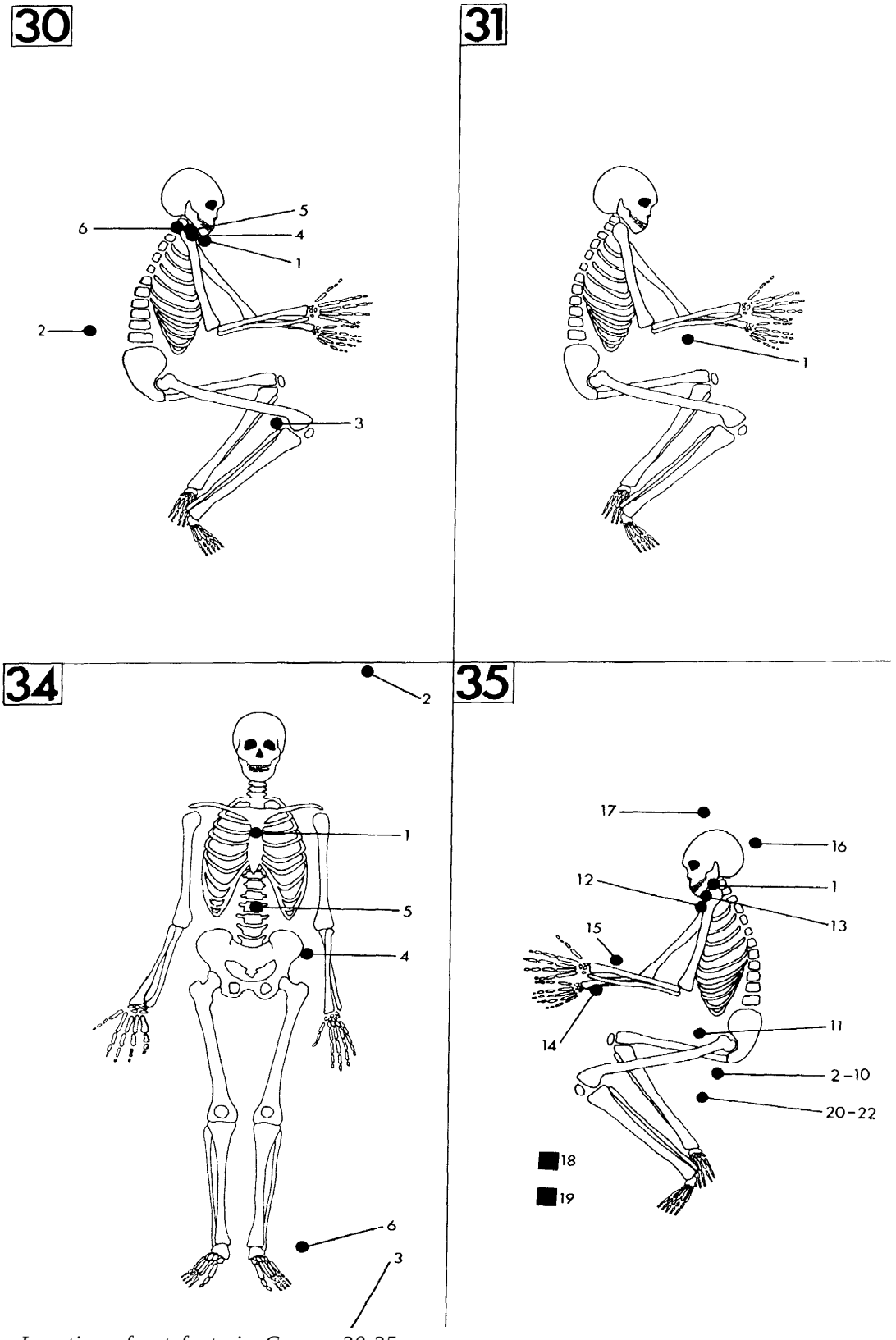


Figure 73 Location of artefacts in Graves 30-35

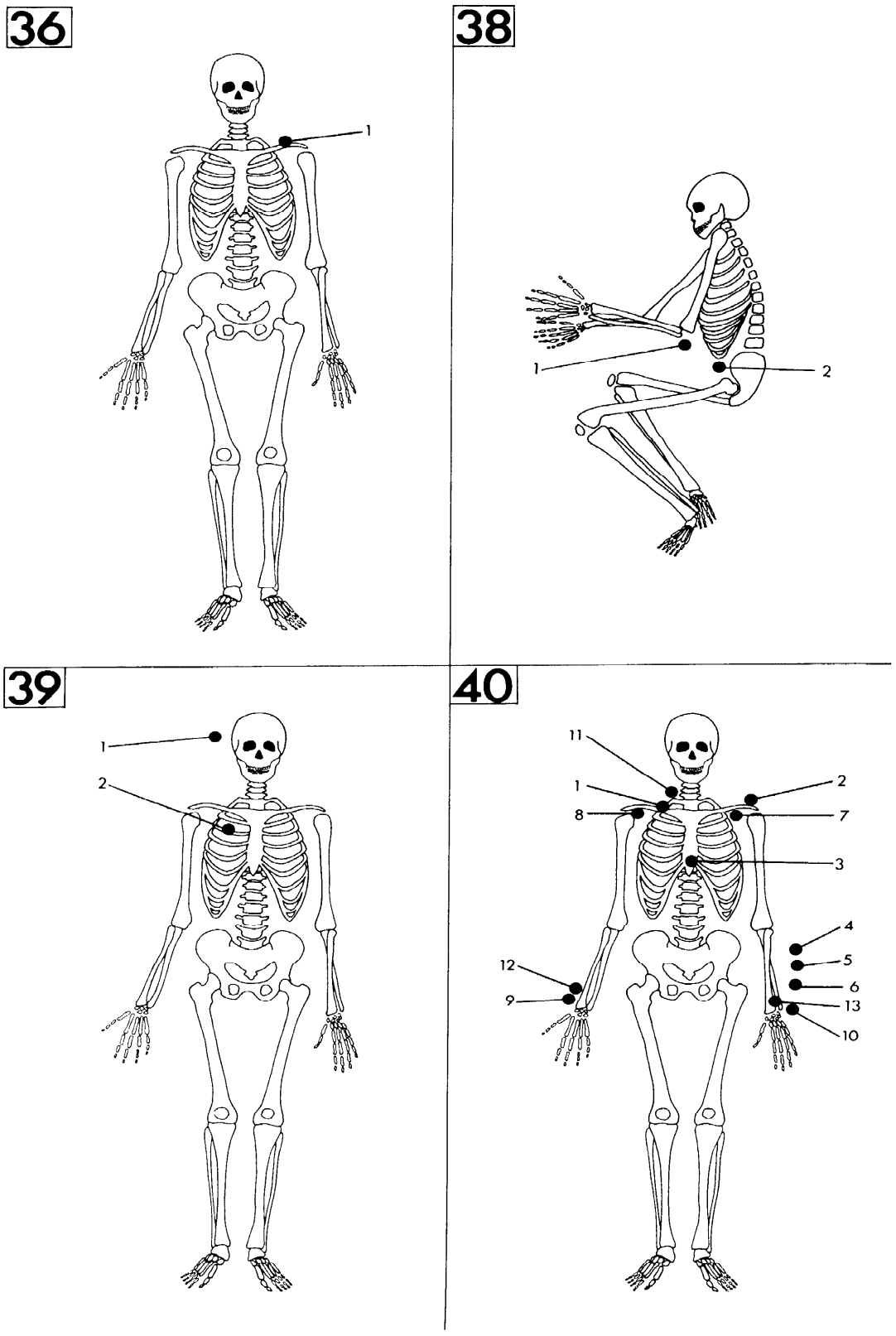


Figure 74 Location of artefacts in Graves 36–40

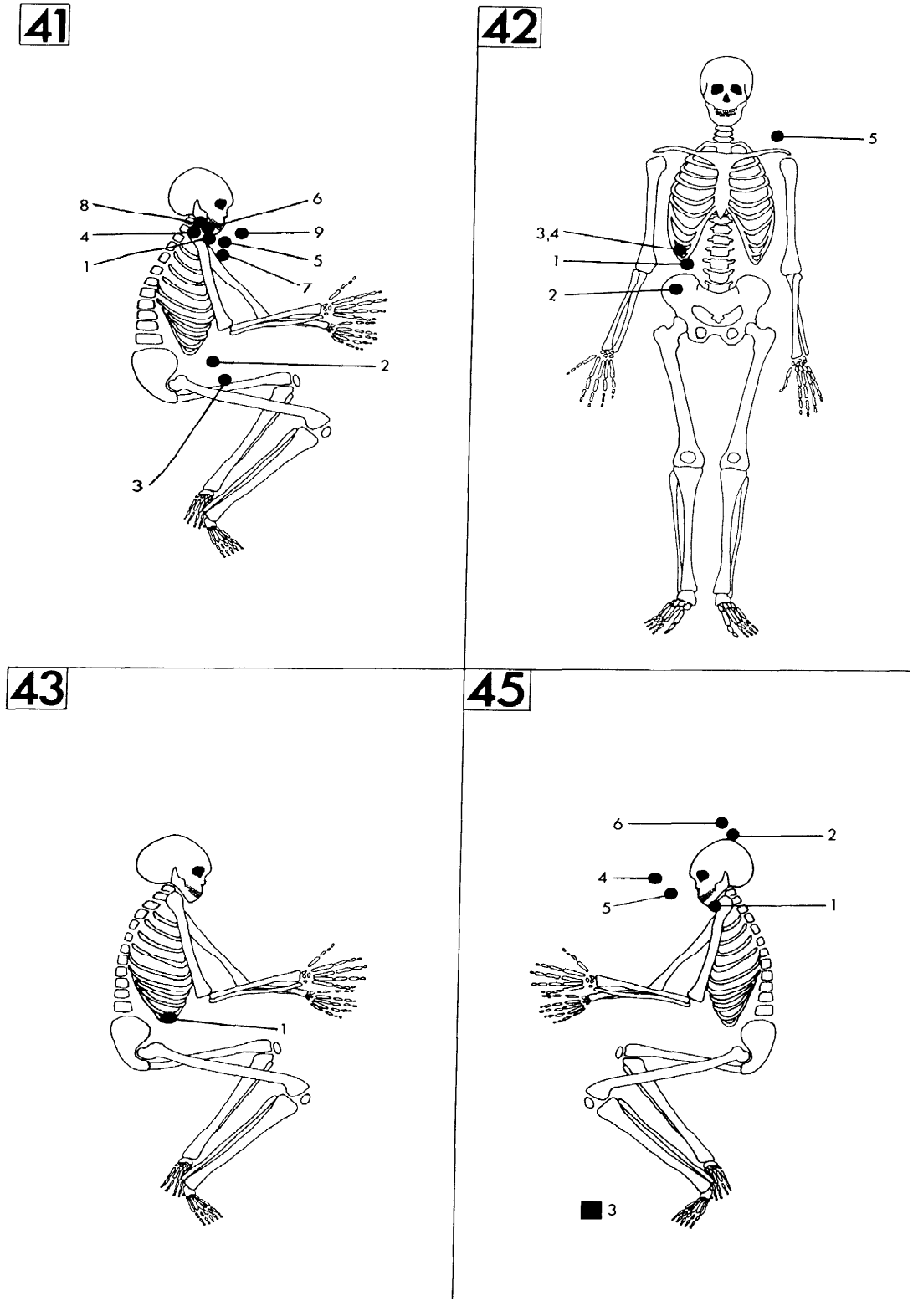


Figure 75 Location of artefacts in Graves 41-45

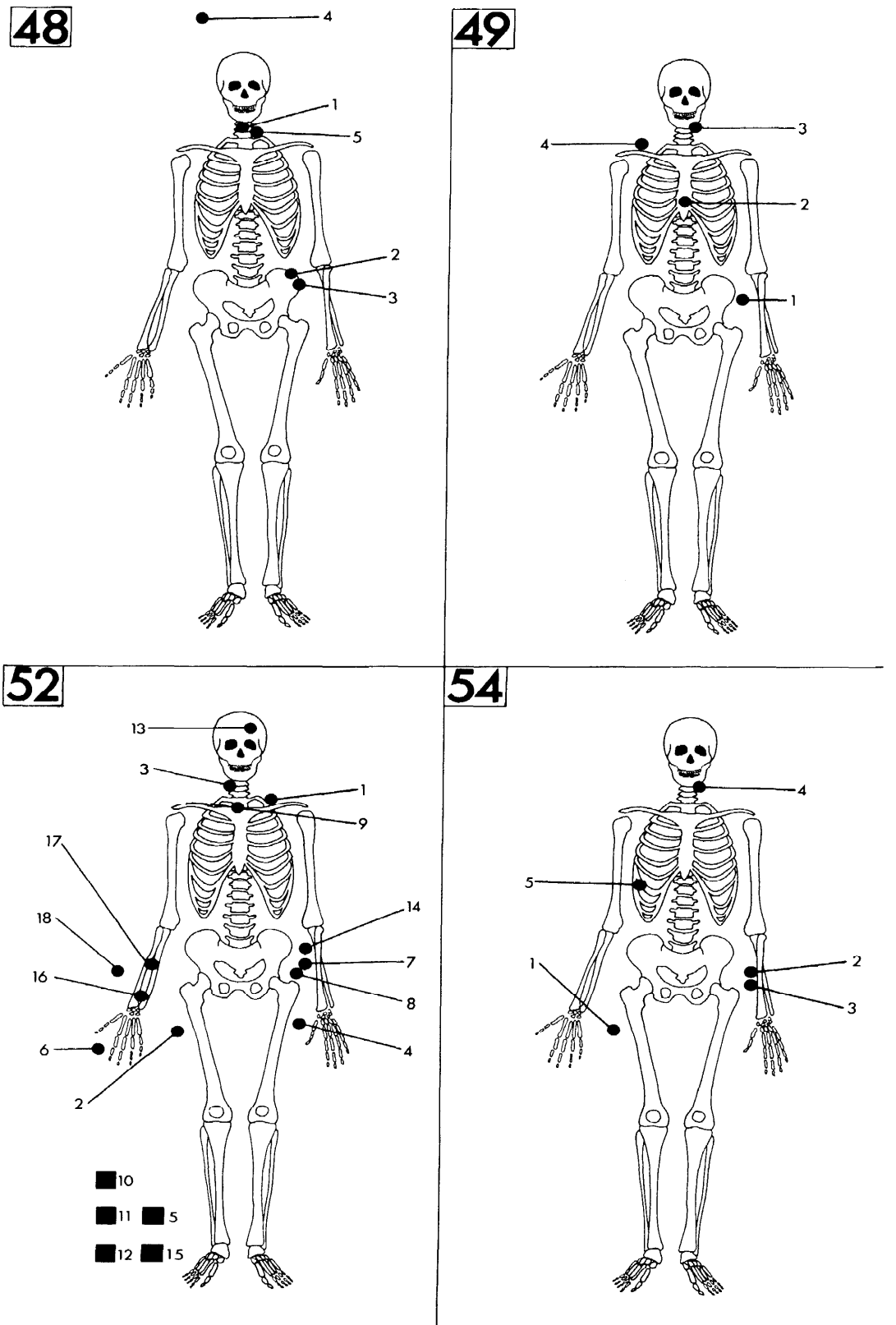


Figure 76 Location of artefacts in Graves 48–54

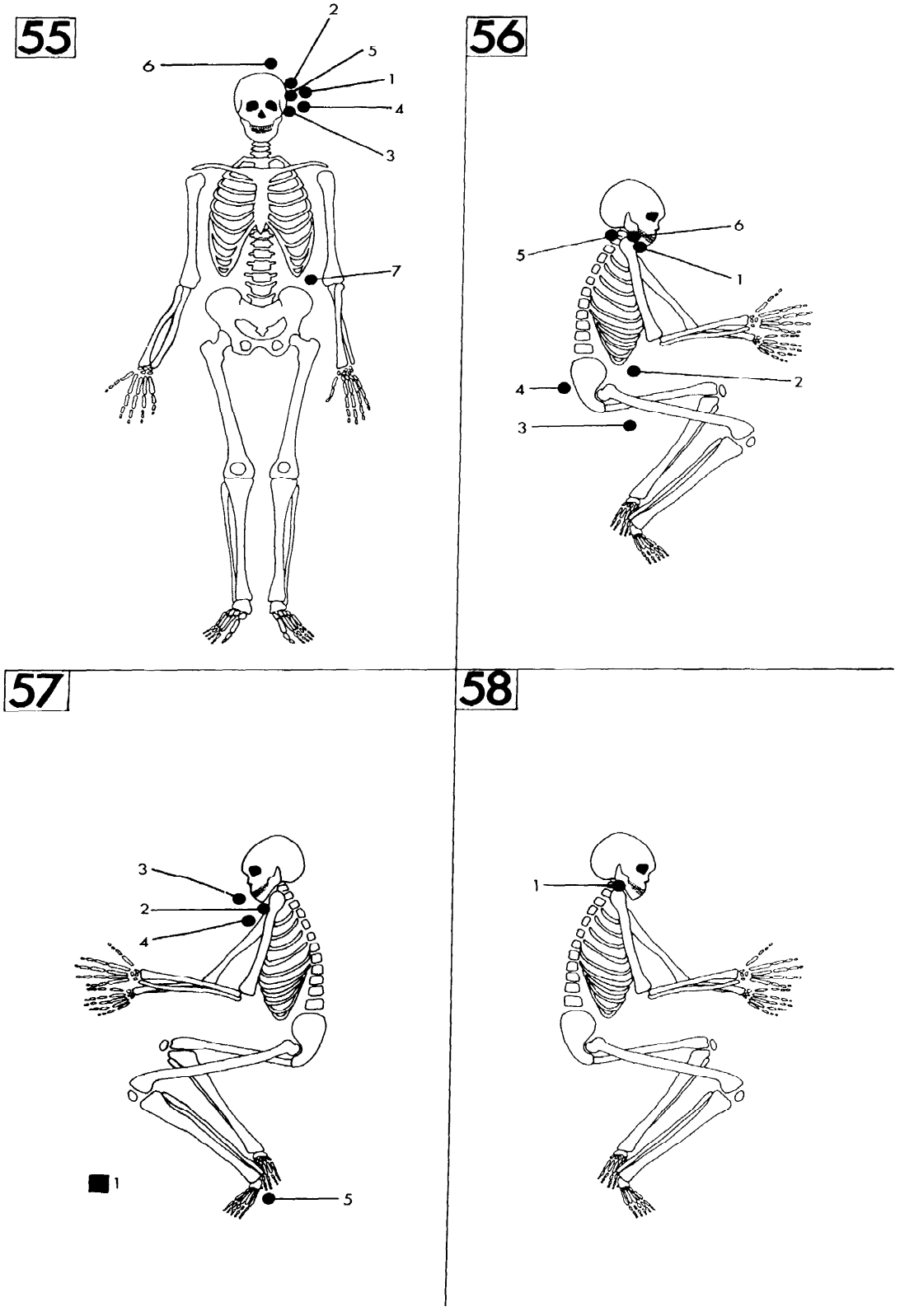


Figure 77 Location of artefacts in Graves 55-58

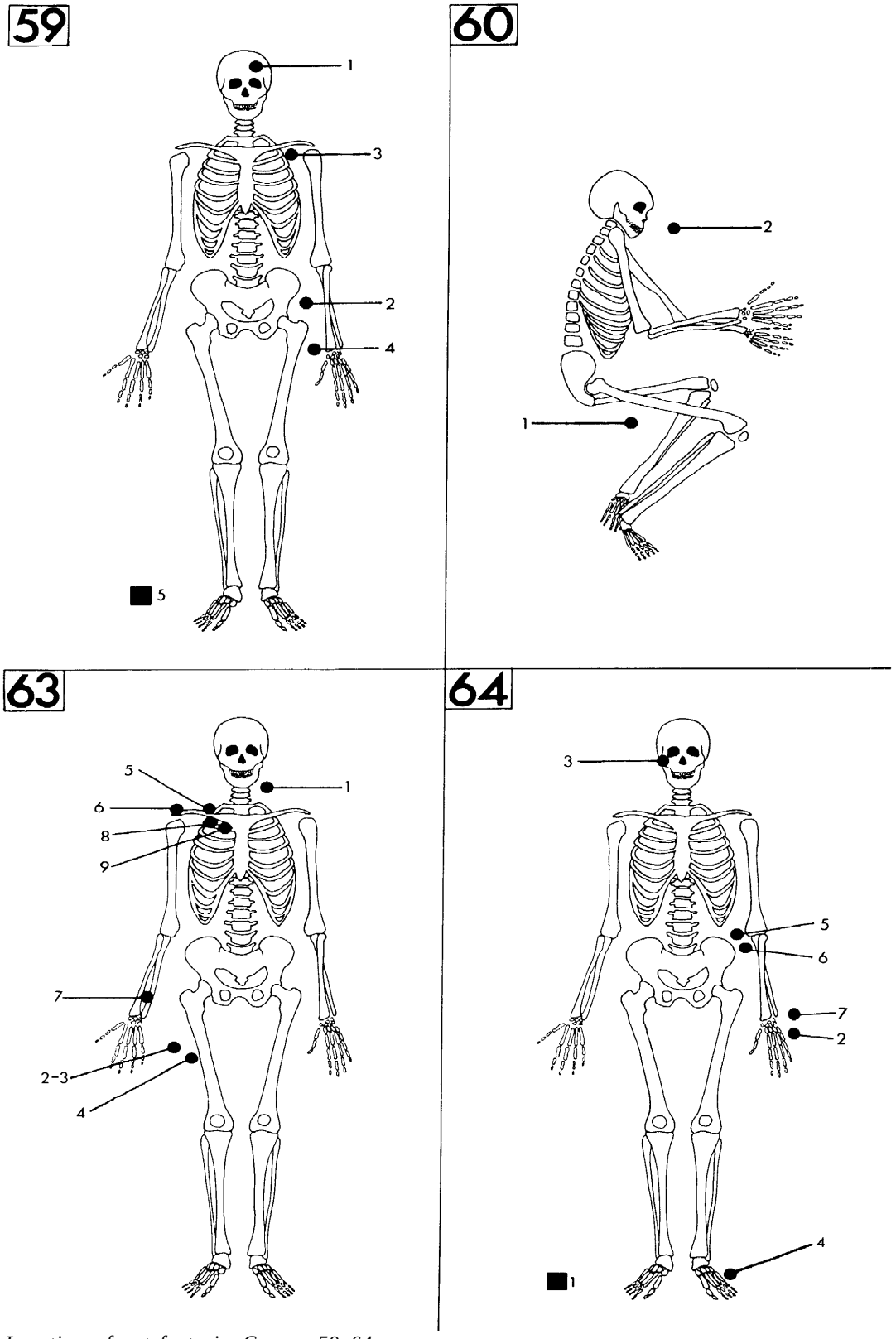


Figure 78 Location of artefacts in Graves 59–64

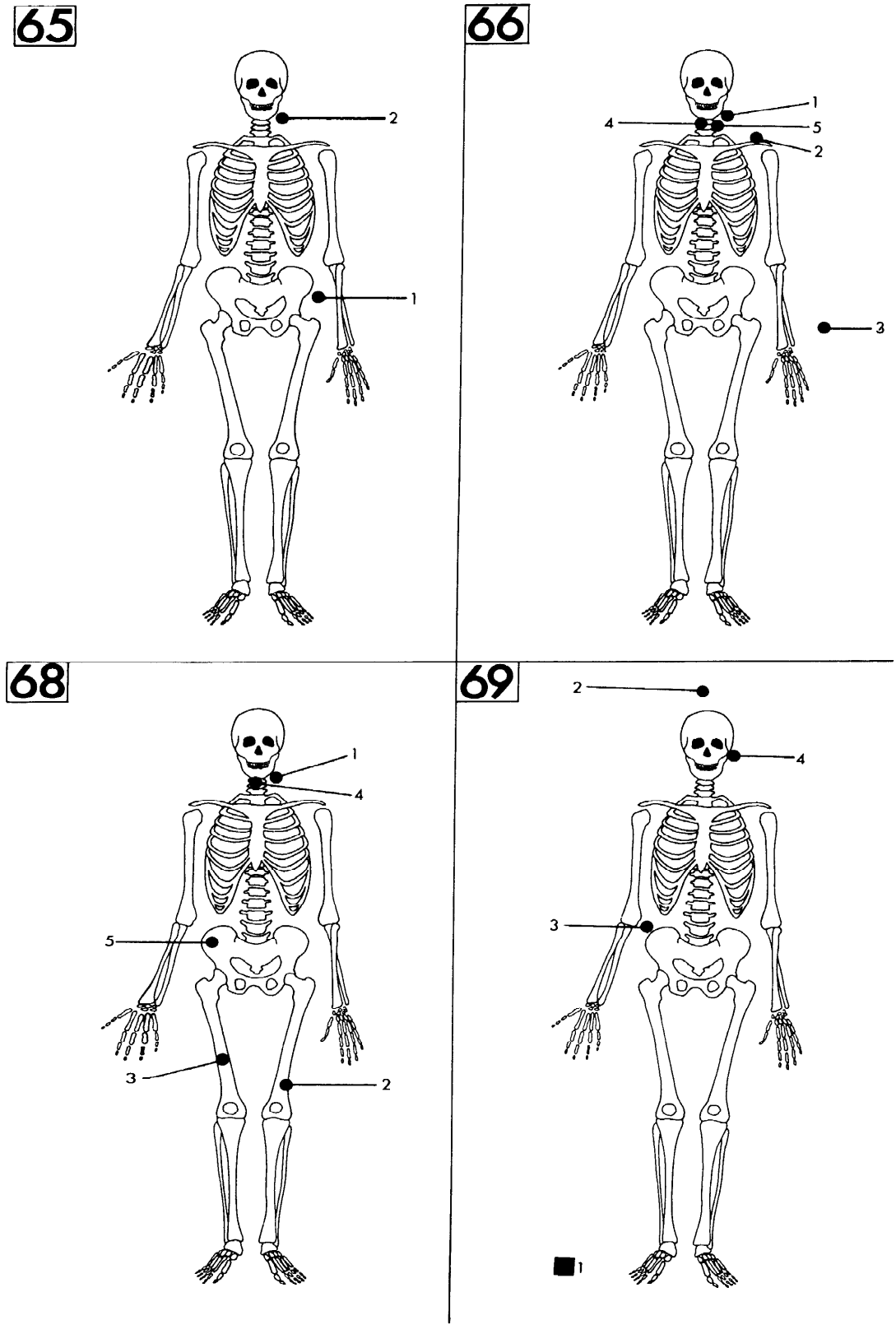


Figure 79 Location of artefacts in Graves 65–69

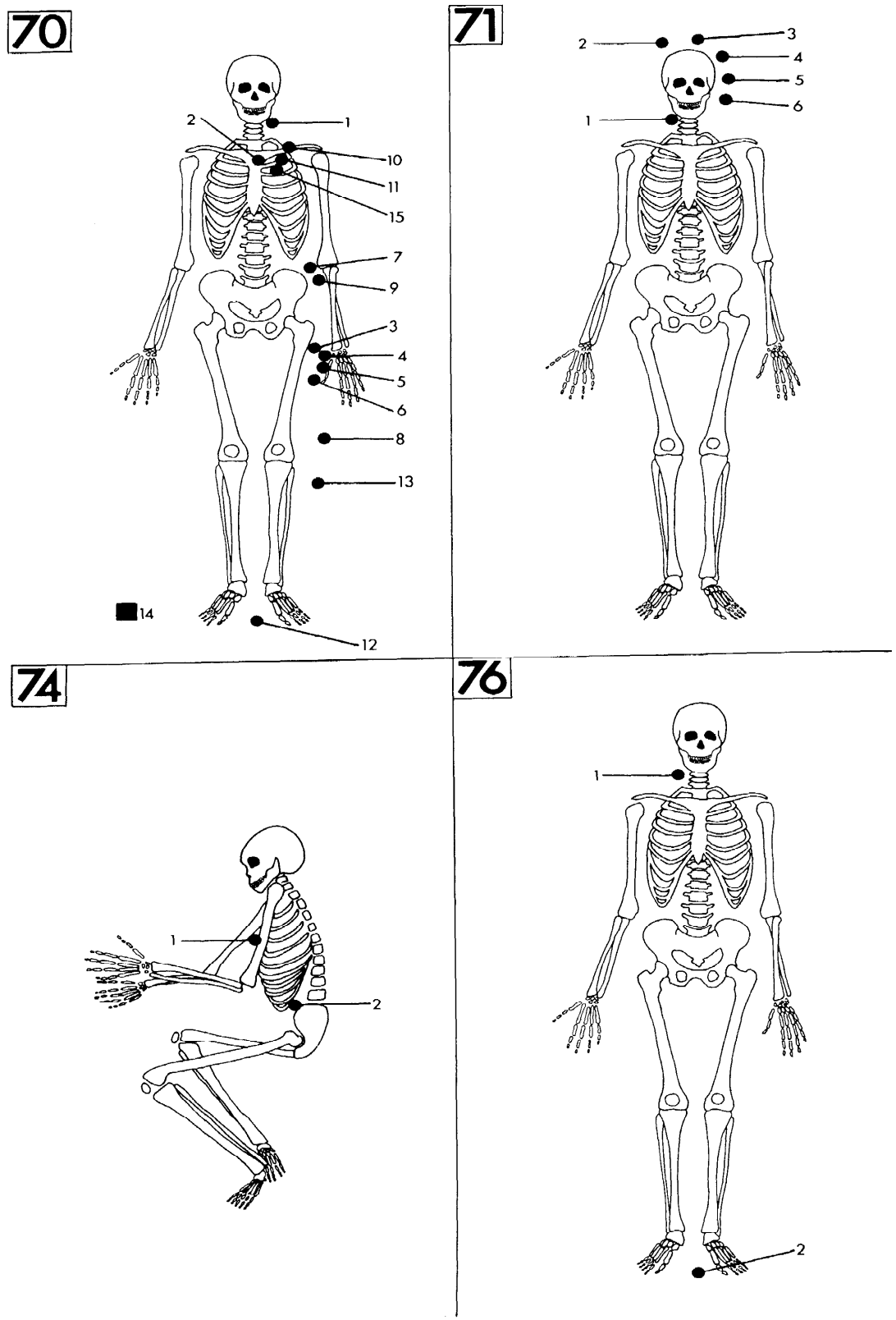


Figure 80 Locution of artefacts in Graves 70-76

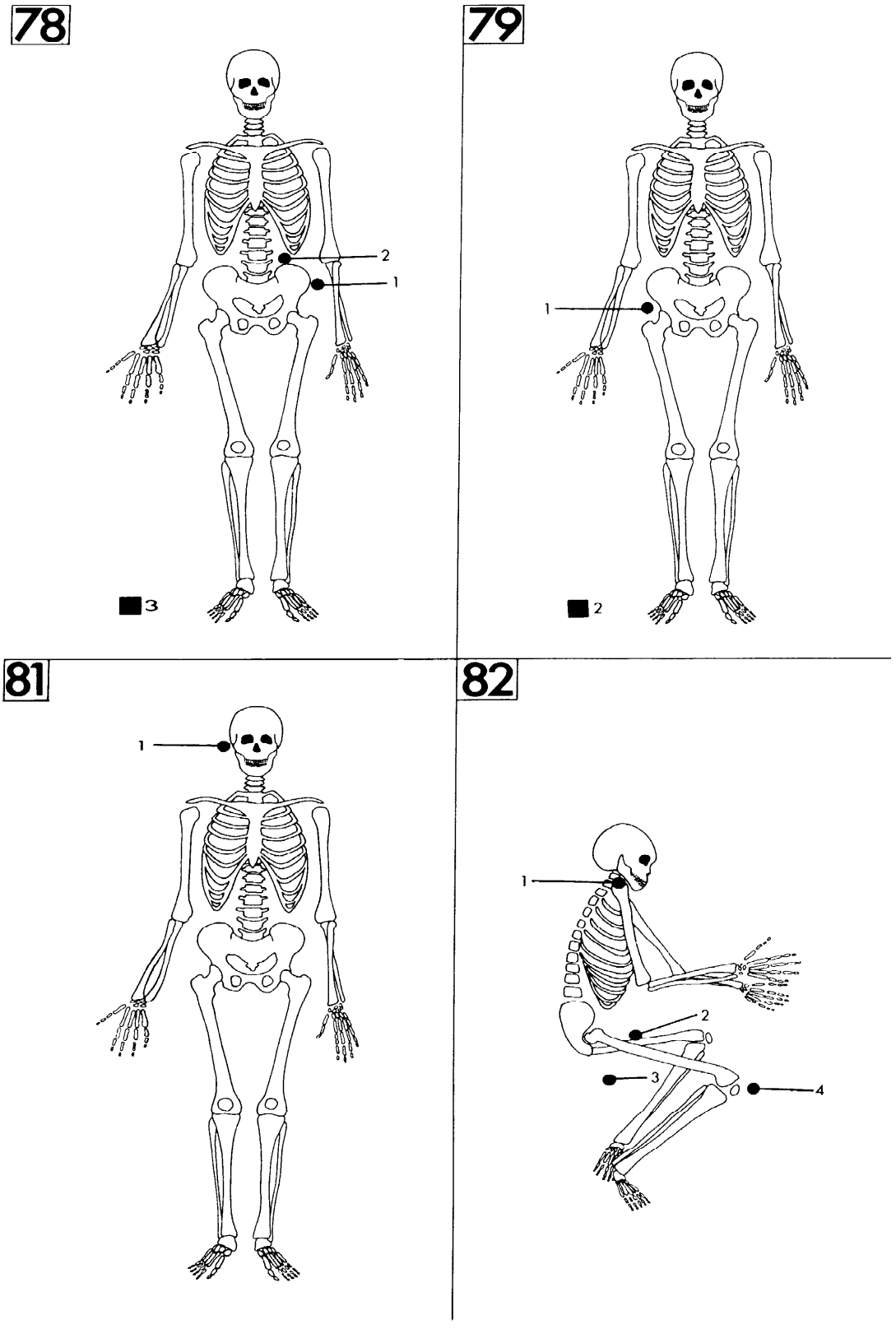


Figure 81 Location of artefacts in Graves 78–42

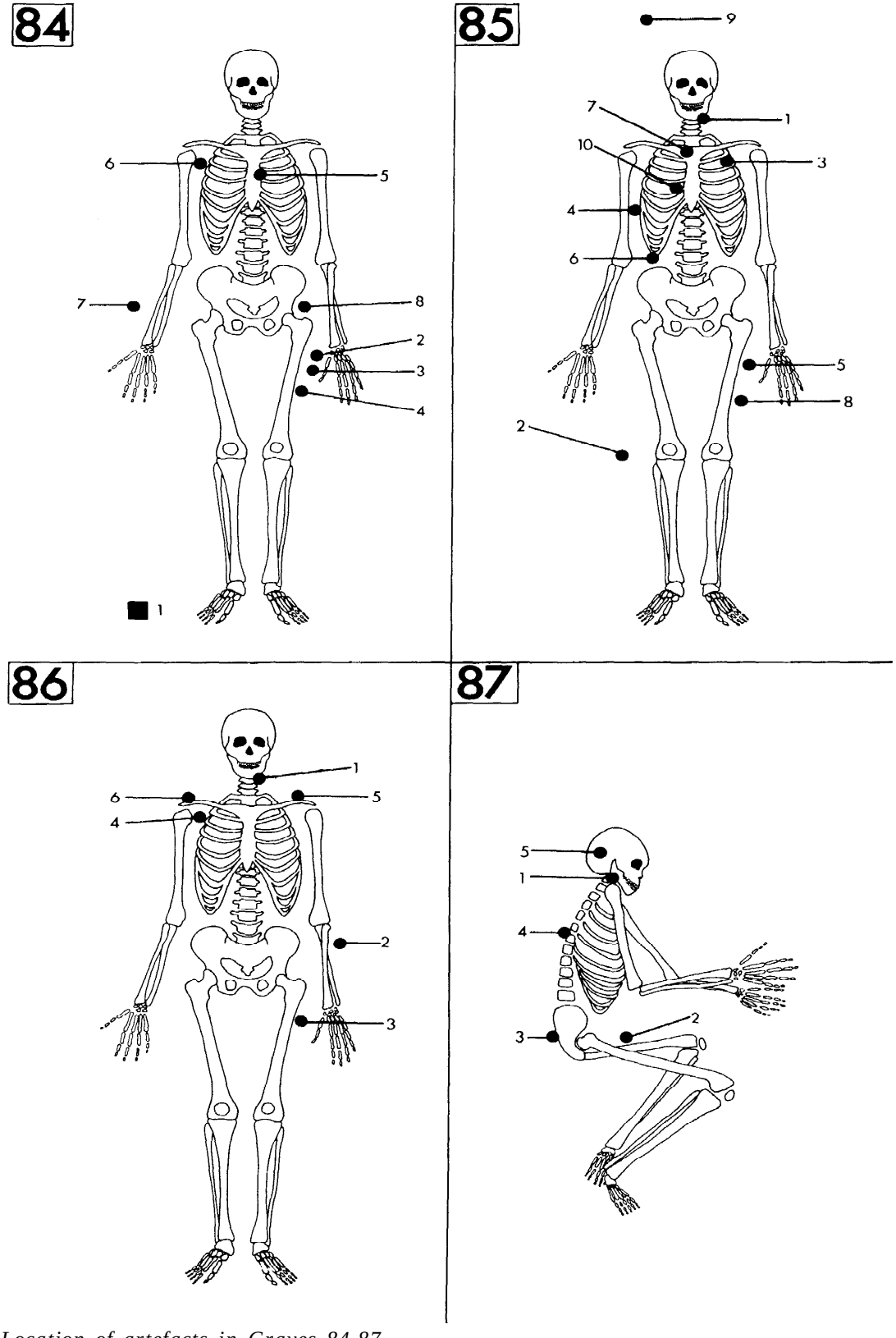


Figure 82 Location of artefacts in Graves 84-87

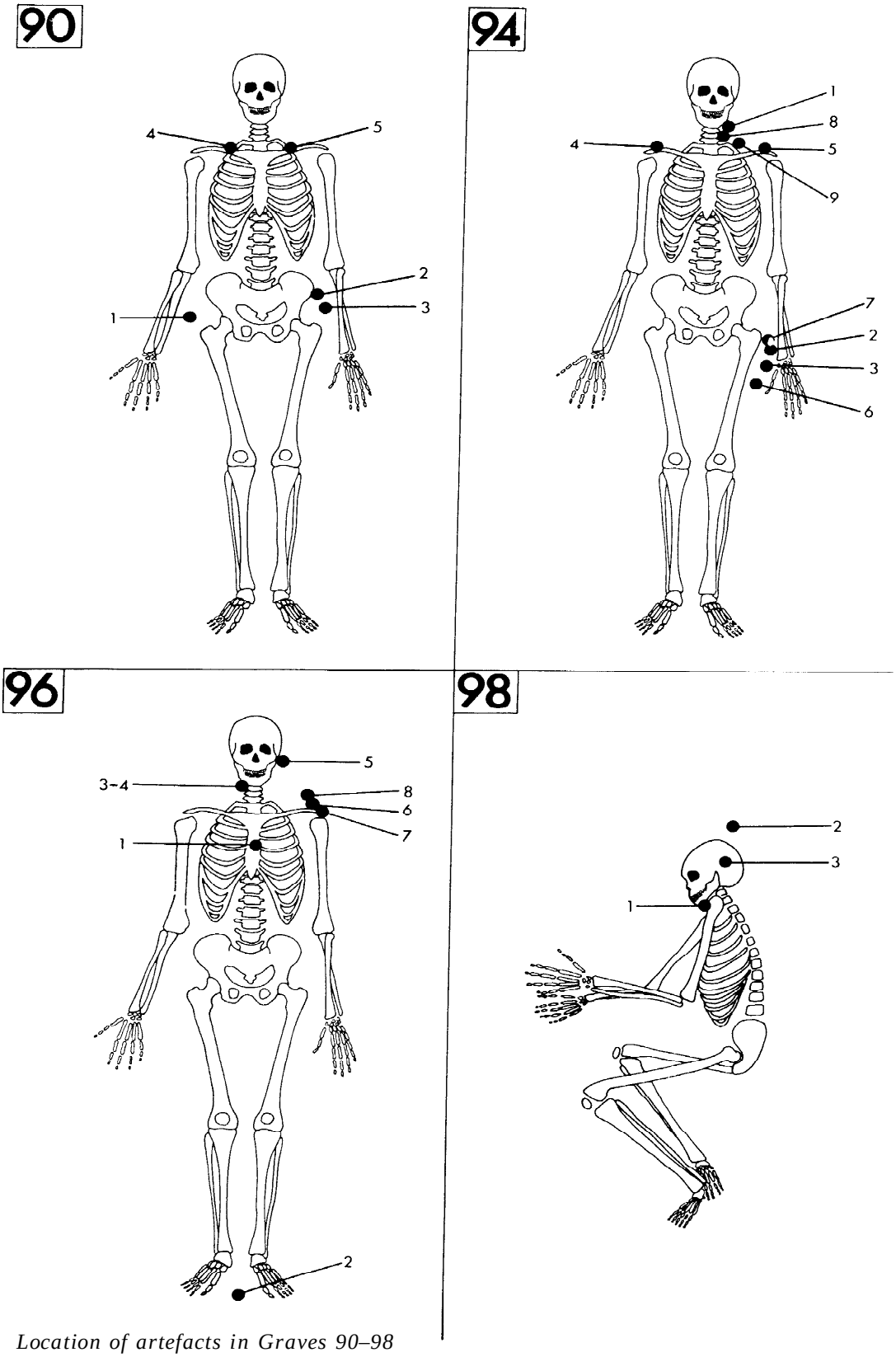


Figure 83 Location of artefacts in Graves 90–98

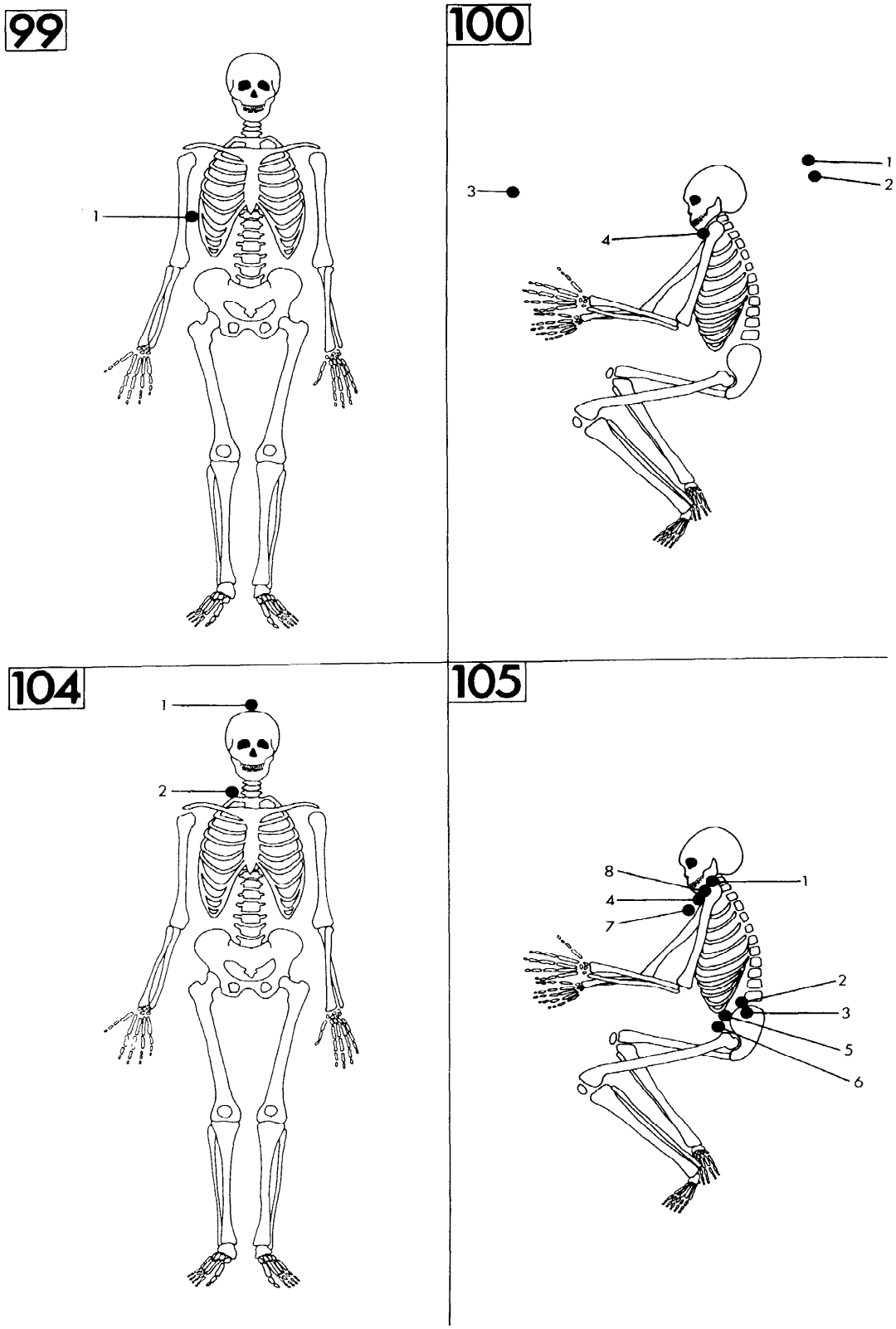


Figure 84 Location of artefacts in Graves 99-105

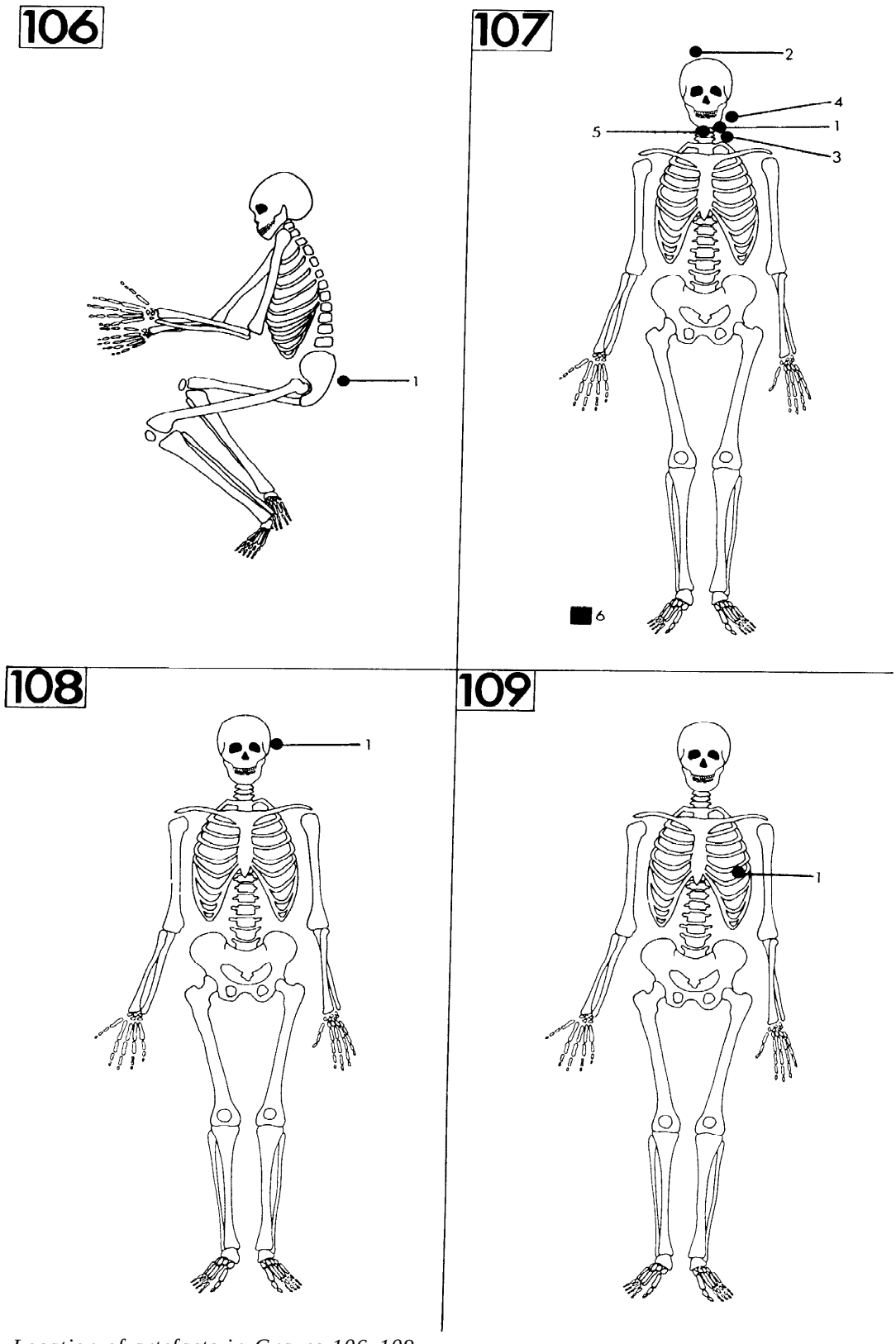


Figure 85 Location of artefacts in Graves 106–109

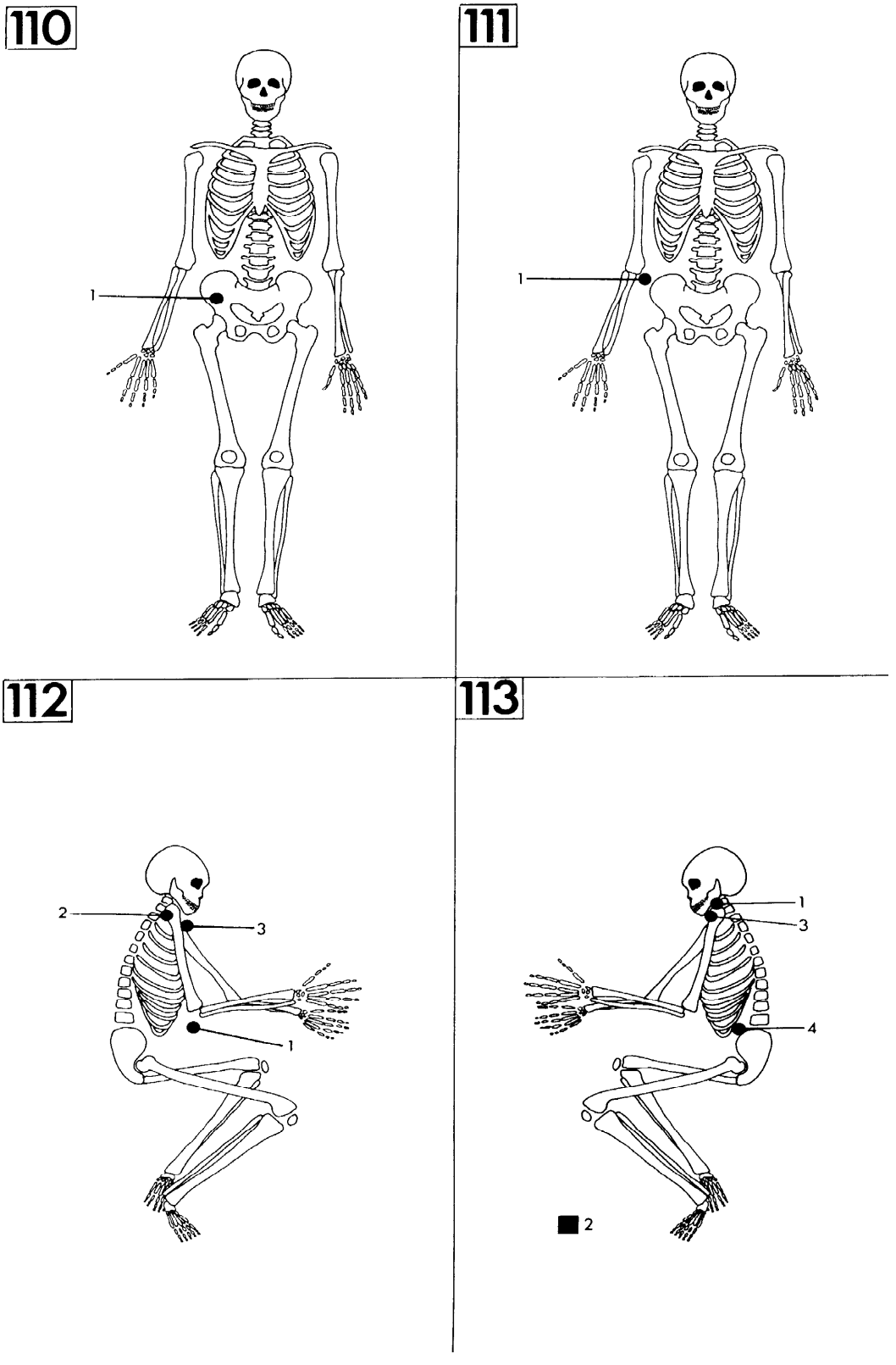


Figure 86 Location of artefacts in Graves 110-113

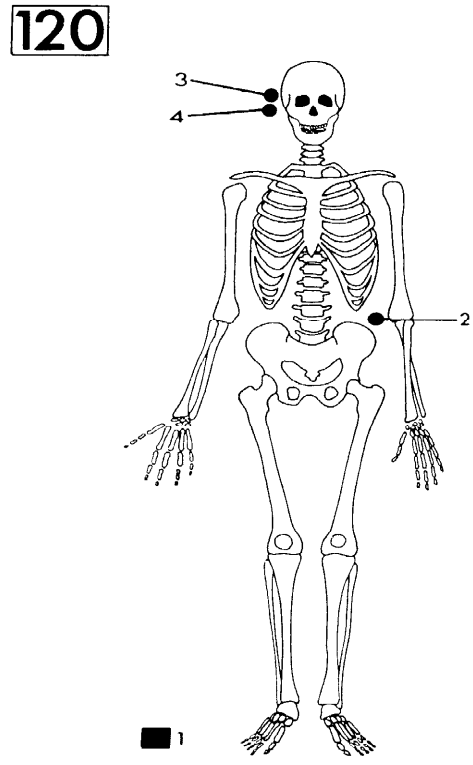


Figure 87 Location of artefacts in Grave 120

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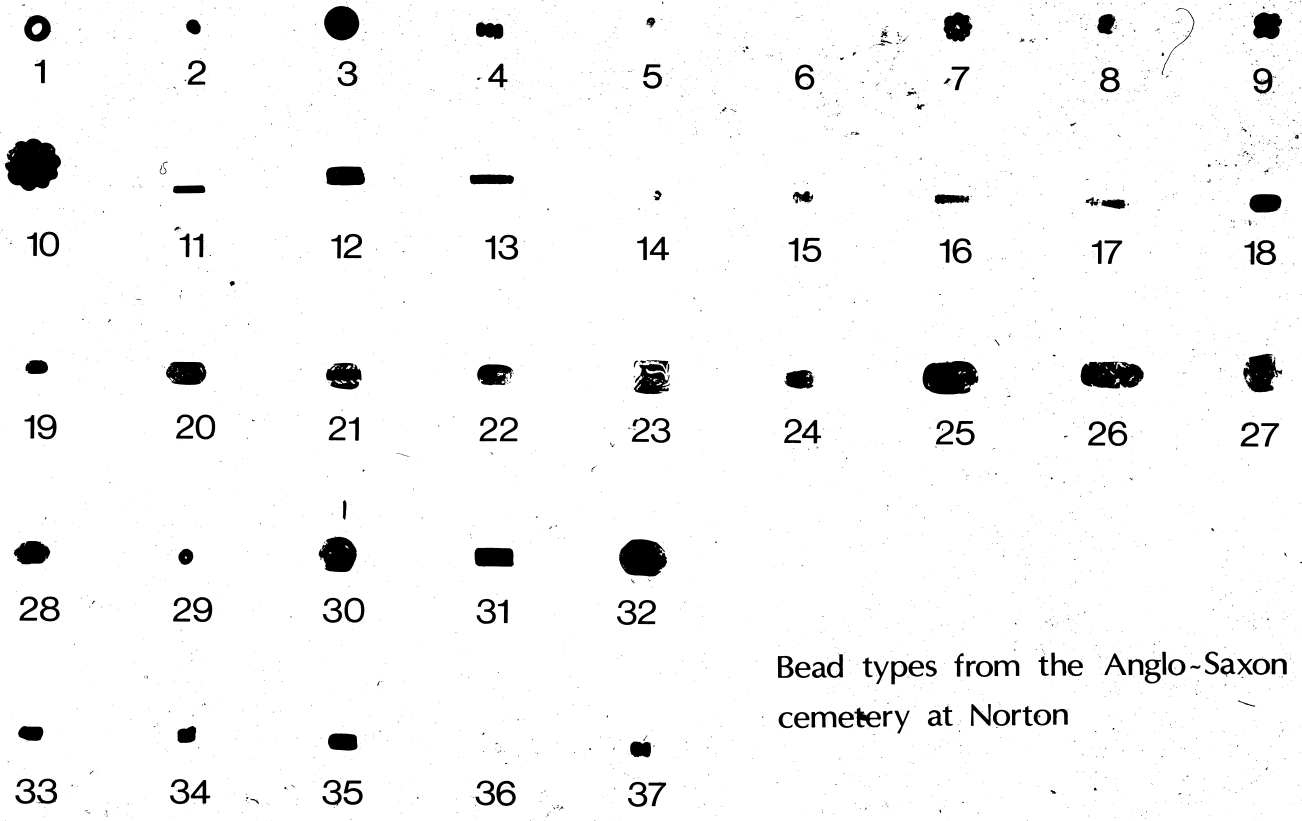

Bead types from the Anglo-Saxon cemetery at Norton