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Salvage Recording of Romano-British, Saxon, Medieval, and Post-Medieval remains at North Street, Winchcombe, Gloucestershire

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Salvage recording of Romano-British, Saxon, Medieval, and Post-Medieval remains at North Street, Winchcombe, Gloucestershire

By ALAN SAVILLE

Summary

Small-scale archaeological investigations at the rear of premises in North Street, Winchcombe, produced evidence of multi-period activity. The most important results can be summarized as: 1. the confirmation of Romano-British presence at Winchcombe; 2. the location of a pre-medieval, probably Saxon, cemetery; and 3. the demonstration of dense late Saxon/early medieval urban occupation in the 10th – 12th centuries, which included the use of a newly-defined type of 11th-century limestone-tempered pottery.

Introduction

In spring 1977 work began on building operations to extend south-westwards the premises of the Co-op retail store, 12 North Street, Winchcombe (FIG. 1), on to what was previously largely an overgrown garden area at the rear of the store (NGR centred on SP 02514 28366). This work involved the demolition of some existing small structures, the lowering of the ground surface by as much as 1.5 m to provide a level platform for building, and trenching of the subsoil for foundations and services. Owing to the very restricted access to the rear of the store, all building demolition and excavation was undertaken by hand, and the spoil removed by wheelbarrow through the side alley.

No archaeological surveillance was planned in advance in conjunction with this work. However, the contractors at the North Street site, Chelnor Construction Ltd., were also engaged at this time in the removal of spoil from Hailes Abbey, where archaeological excavations were taking place on behalf of the Department of the Environment under the direction of Mr P.J. Brown. When, on 1 May, workmen at North Street discovered a human skull, they showed it with commendable speed to Mr Brown. Realizing the possible importance of this find, coming as it did from an area just to the north-east of the site of Winchcombe Abbey, Mr Brown assigned one of his staff, Mr T.D. Akister, to maintain a watching-brief. This watching-brief was undertaken during the daytime between 2 – 6 May, with some limited recording in the evenings. Mr Brown also informed the present writer, then excavating at Norbury Camp, Northleach, and over the weekend of 7 – 8 May it was possible to organize an intensive salvage and recording exercise using members of the Hailes and Norbury excavation teams, with additional volunteers. After 8 May the site was handed back to the contractors and no further archaeological work took place.

In view of the importance of the archaeological evidence from North Street, the Department of the Environment agreed to fund the necessary post-excavation work through CRAAGS and Western Archaeological Trust, under the supervision of the writer. The present report naturally relies heavily on the site notes and drawings made by the Hailes Abbey team, and in particular

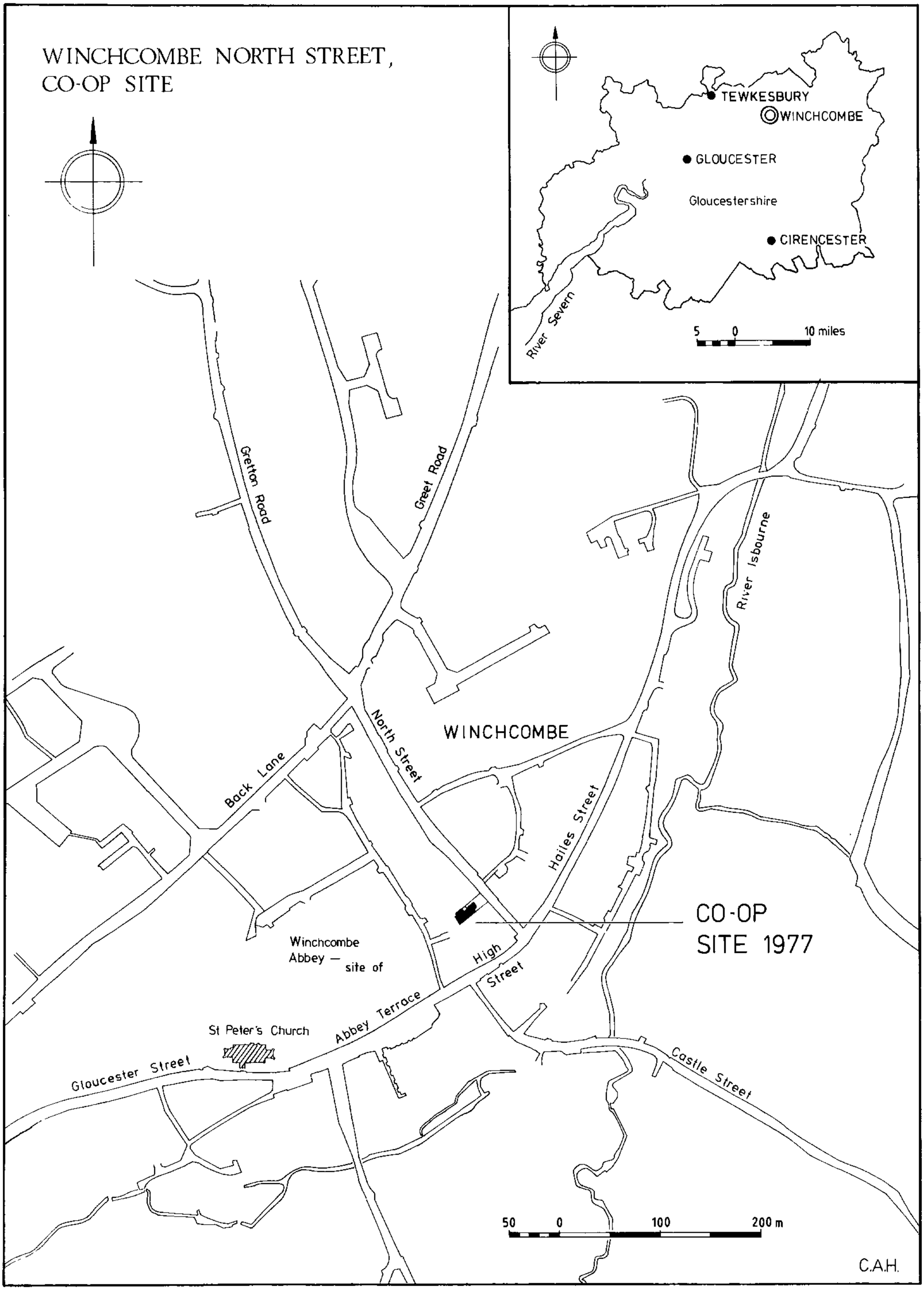


FIG. 1 Location map.

on the work of Tim Akister. The finds and site archive have been deposited in the Cheltenham Art Gallery and Museum.

THE SITE

The area to be built on consisted of a rectangle approximately 10 x 7 m in extent (FIGS. 2–5). During the trenching and levelling it was possible to recover some finds and make record sketches, but excavation was limited to the investigation of some of the features which penetrated the 'natural' subsoil (F9) – a medium brown, slightly clayey, Lias gravel – at which level the building platform was established. The stratigraphy above 'natural' was considerably interrupted by intrusive features (FIG. 3), but comprised an original soil (F8) overlain by horizons of accumulated humic deposits, fairly arbitrarily divided for finds-recording into a lower level (F7), and an upper level (F6), the latter containing numerous dumps of modern material. No evidence for structural foundations of any kind was observed. A total of 34 contexts were designated during work on the site, and these are summarized in Table 1 (note that the number 21 was not allocated).

Table 1 Summary of contexts recorded

Type/description	Numbers
Inhumation graves	F1*, F2*, F3*, F5*, F17*, F27*
Ditches	F13*+, F33*+
Pits and pit infills	F4*+, F10*+, F12*+, F18+, F25*+, F26*+, F28*+, F29*+, F30*+, F31*+, F32*, F34+, F35*
Dog burial (modern)	F15
General site layers	F6+, F7+, F8+, F9+
Upper horizons of pit infill in the area of F25, F26, F28, F30, and F31 (removed by workmen)	F11, F16, F23, F24*
Finds from the builders' trench in the NE corner of the site	F20
Finds/layers from the builders' trench in the SE corner of the site	F14, F19, F22+

Key
* = contexts visible in plan (FIG. 2)
+ = contexts recorded in section (FIG. 3)

No stratigraphic relationships other than those indicated on the plan and sections were recorded. A subdivision of the contexts according to stratigraphic and artefactual information permitted a crude, fourfold phasing of the site to be established (Table 2), and these phases are summarized below.

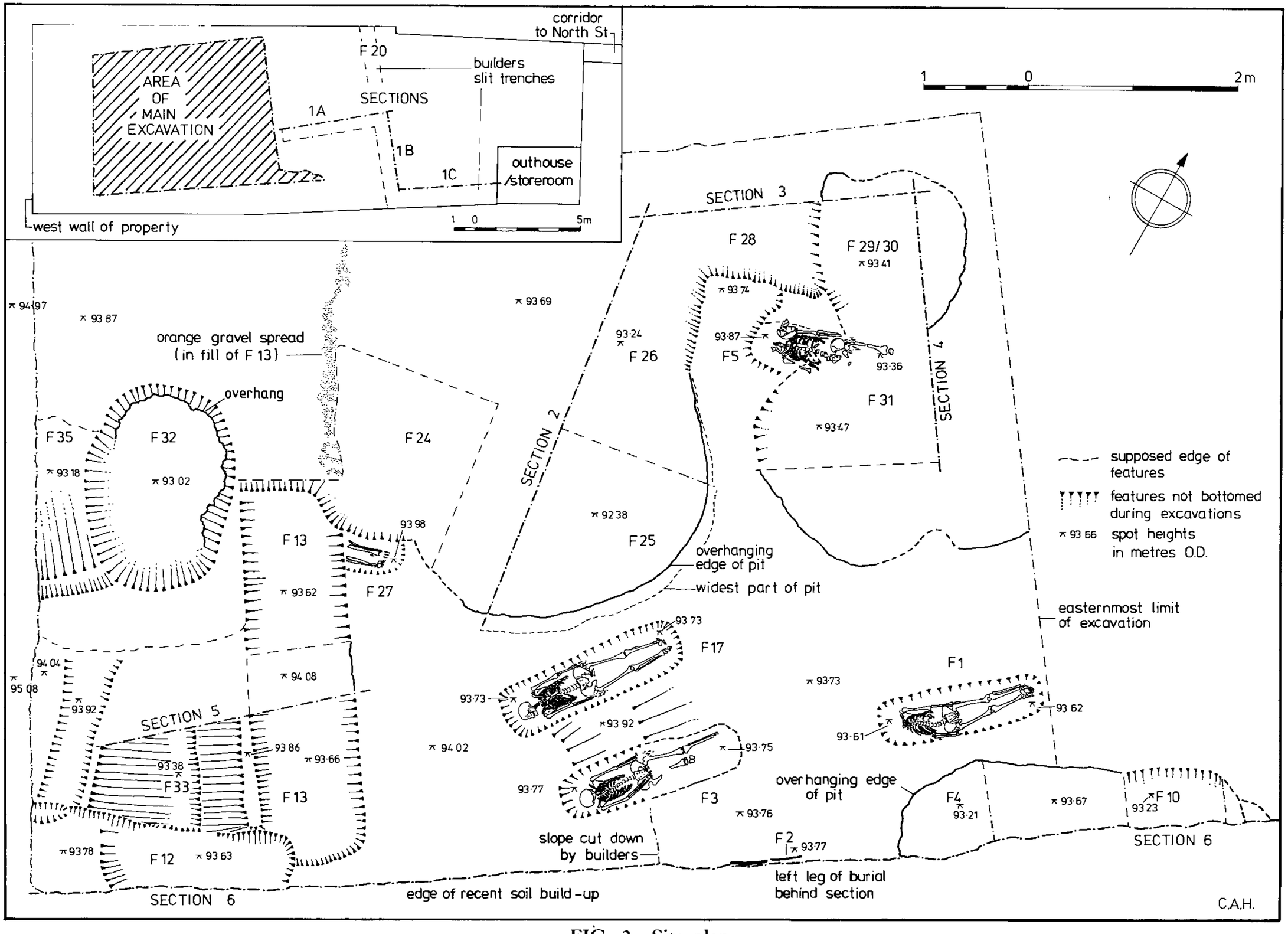


FIG. 2 Site plan.

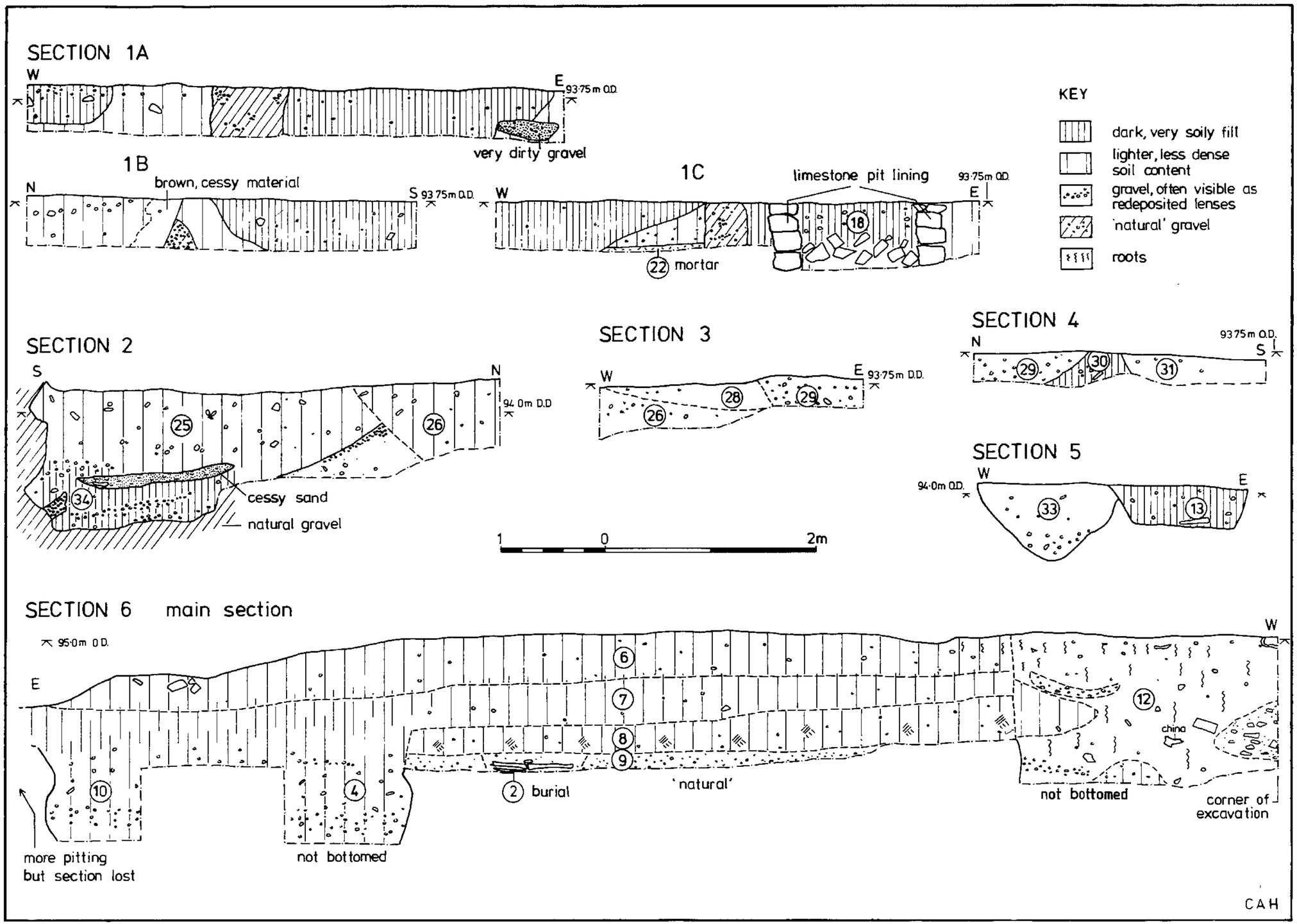


FIG. 3 Section drawings (for locations see FIG. 2).

FIG. 4 General view of the rear of 12 North Street, looking south-westwards; 7 May 1977. Photograph: A. Saville.

Table 2 Dating of the recorded contexts

Romano-British	F9, F30, (? F33)
? Saxon	(? F1, F2, F3, F5, F17, F27)
Late Saxon/early medieval	
10th-11th century	F4, F25, F26, F28, F34, F35
12th century	F10, F24, F29, F30, (?F31)
Post-medieval	
late 16th-early 17th century	F13
late 18th century	F12, F18, F32

Romano-British

The small assemblage of Romano-British pottery indicated activity on or near the site in the 2nd – 3rd centuries AD and possibly in the 4th century. Three contexts produced only Romano-British pottery. One of these, F9, was the top of the 'natural' subsoil, which suggested that Romano-British occupation was primary to the site, as would also be compatible with the predominance of Romano-British sherds among the pottery from the overlying layer F8. Feature 30, which yielded only four sherds, two of which are Romano-British, could also be of this

FIG. 5 Salvage and recording in progress on the pits, ditches, and graves at the south-west end of the site, viewed from the north-west; 8 May 1977. Photograph: A. Saville.

phase. (Originally recorded as a recut pit infill, this context may simply have been an unexcavated pinnacle of 'natural' and therefore identical to F9.)

The other two features with only Romano-British pottery were both graves, F3 and F17, but in both instances there was only a single sherd involved, which was also the case with grave F1 which produced an early medieval sherd. The dating of the graves is discussed in more detail below.

The V-sectioned ditch F33 is undated, except insofar as it was cut by the post-medieval ditch F13, but the possibility of it having been as early as this phase must be considered. F33 was also cut by the post-medieval pit F12. This pit was not fully excavated and it remains unclear whether or not F33 continued southwards as far as section 6.

?Saxon

Radiocarbon determinations (see below) suggest that graves F1 and F17, and by implication the others, are likely to date from after the time of Romano-British activity on or near the site, and from before the first clear use of the site for domestic occupation in the 10th century AD. The radiocarbon evidence itself is somewhat ambiguous, but the site must be interpreted as a cemetery at some stage in the post-Roman period, probably between the 6th – 10th centuries AD.

Late Saxon/early medieval

On the basis of their ceramic contents, the pits in the south-east and north-central areas of the site dated from the 10th – 12th centuries. Further chronological precision was provided by a radiocarbon date on animal bone from F34 of ad 1020 ± 80. Context F31, which was not fully excavated and produced no artefacts, should probably be included with this phase. The superficial and unstratified contexts also produced large amounts of early medieval pottery. The pottery, together with the animal bones and smithing debris from the pits, conveyed a picture of conventional, domestic, urban occupation for this phase, which may have continued into the 13th century. Presumably the structures accompanying this occupation, which can be assumed to have been of timber (cf. Heighway *et al.* 1979, 167–169) were located to the north-east towards North Street, the line of which was probably well-established by this phase (Aldred and Hannan 1981, 97; Bassett 1977, 71).

Post-medieval

The ditch F13 represented the next, dated activity on the site. Its southern limit was defined by an excavated terminal and it was presumed from indications in plan to continue uninterrupted beyond the northern edge of the site, though this was not proven by excavation. F13 was cut by the pit F12, and two other pits, F18 and F32, were of the same phase, possibly a century later than F13 on the ceramic evidence. F18, with revetting walls of limestone, was the only stone-lined feature on this site, and is best regarded as a cesspit, which was probably also the function of F12 and F32. Much post-medieval material also came from the superficial horizons, and domestic occupation similar to the early medieval, though without the evidence for smithing, was implied.

THE BURIALS (FIGS. 2, 6, and 7)

Five of the burials were fully excavated and recorded, while a sixth was left *in situ*. The graves, where well-preserved, as was the case with F1, and in part with F3 and F17, were sub-rectangular depressions just larger than the skeleton they contained, though of course this reflected only the lowest 0.2 m of the grave-pits. The graves were cut into F9, and presumably through part of F8, but no indication of their upper edges was observed during levelling. No trace of grave furniture in the form of coffin stains, nails, or any lining was recorded, and no suggestions of clothing or wrappings were present. The fill of all the graves was a brown, sandy soil.

The burials in F1, F3, and F17 were substantially undisturbed. The F2 grave-pit was visible only in section (FIG. 3), with the femur, tibia, and fibula of the left leg of the contained skeleton protruding. Since the building work did not necessitate full exposure of this skeleton it was left without further disturbance. The cranium of the F5 skeleton was located by the workmen some 0.2 m above the lower jaw and the rest of the skeleton, a circumstance to be explained by post-depositional movement, quite probably as a result of the modern tree which was growing directly above the grave. The lower right part of this skeleton and the corresponding part of the grave were truncated by the cutting of F31, the lower left leg was truncated by the edge of F29, and the remaining skeleton below the middle of the spine had slumped as a result of the adjacent pit-digging. Similarly, in F27, the whole upper skeleton above the knee was removed by the cutting of the ditch F13.

It was initially assumed that the skull taken by the workmen to Hailes Abbey belonged to the headless skeleton in grave F1, but the specialist study by Dr Rogers makes it clear that the sex of

the respective skull and skeleton are at variance. This indicates that the skull came from a seventh inhumation on the site, presumably either from a burial disturbed by the builders without archaeological observation, or from a grave which had previously been disturbed leaving the skull isolated. The disturbance of otherwise unrecorded burials was also suggested by the occasional presence of human skeletal remains in the early medieval pit fills. This leaves the further problem of the headless state of the female burial in F1. Headless burials are, of course, well known, but there was no anatomical indication in this case that the interment was made in a headless state, and the shape of the grave-pit at its west end implied the original presence of a skull. Therefore, it must be concluded that the skull from F1 was removed at some stage prior to, or during, the levelling of the site.

The burials were all extended, supine inhumations, with arms extended alongside the bodies, except for the right arm of the skeleton in F3 which was slightly flexed across the pelvis. The heads of the F5 and F17 skeletons faced south, that of F3 slightly to the north. Three of the burials were female (F1 and F17 adult; F3 teenage), and the other two were probably adult males (F5 and F27), which was also the case with the unlocalized skull. The general orientation of the graves and skeletons was west-east, with the head to the west. F3 and F17 were clearly in a significant spatial relationship, and shared a south-west/north-east alignment, which was more or less the case with F1 and F2. F5 and F27 were on a different, more truly west/east alignment, which could be indicative of a separate phase of cemetery use. The burials were all without grave-goods, except in the case of F2, which apparently contained a small bronze figurine in its fill (see below), but since this is now lost its significance cannot be assessed. Otherwise the three sherds found in three separate grave fills (see above) are irrelevant from the point of view of dating the burials. The only stratigraphic indicators were that F27 predated a post-medieval ditch, and that F5 predated an early medieval pit. In an attempt to pin down the date of these burials the skeletal material from two of them was submitted for radiocarbon determination. The details of the radiocarbon dates are given below, and their implications are considered in the final discussion.

THE HUMAN SKELETAL REMAINS by **Juliet M. Rogers**

Skeletal remains of six individuals from six burials were received for examination in 1978, which is when this note was compiled. The remains were mostly well-preserved and the usual anthropological measurements (Brothwell 1963) were taken. An estimate of stature using the regression equations of Trotter and Gleser (1958) was made for those skeletons with measurable long bones.

The age of the individuals was estimated from the stage of epiphyseal closure where appropriate (Genovés 1969a), and from the stage of eruption and attrition of the molars (Brothwell 1963). Sutural closure, although no longer regarded as a reliable method of age estimation (Genovés 1969a), was used as a tentative guide line as to whether an individual might have been a young adult or one of more mature years. The presence or absence of osteophytic lipping of the vertebral bodies of the spine and arthritis in the joints was also used as an indicator of the approach or attainment of middle age (Bourke 1967).

Sex was assessed from the cranial morphology, the shape of the pelvis (Brothwell 1963), and the size of the head of the femur (Genovés 1969b).

The dental formulae quoted use the notation given by Brothwell (1963) as follows:

\ = tooth missing but socket present
– = tooth present but socket missing
X = tooth lost ante-mortem
C = tooth has a carious cavity
A = tooth has abscess cavity at the root
E = pulp of tooth exposed

Because of the small number of skeletons involved they have to be described individually as no conclusions can be drawn from the information from the group as a whole.

FIG. 6 Skeleton 1 (F1), viewed from the north-east. Scale in 0.5 m divisions. Photograph: A. Saville.

Skeleton 1, (Grave F1, FIG. 6). Female adult – at least 35 years old. Stature: 1516 mm (5 ft approx.), from the lengths of the humerus, femur, and tibia. Post-cranial skeleton present except for the right humerus, fingers, toes, cervical vertebrae, and some ribs. Pathology: arthritic lesions in the left acromic clavicular joint and the proximal and distal ends of the left humerus. Osteophytic lipping of the bodies of the 3rd and 4th lumbar vertebrae.

Skeleton 2, (Grave F3, FIG. 7). Female, approximately 17 years old from epiphyseal fusion. Skeleton fully represented except for both feet. Spina bifida of the sacrum at level L1.

Dental formula:

$$\frac{8\ 7\ 6\ 5\ 4\ \cancel{3}\ \cancel{2}\ \cancel{1}\ .\ \cancel{1}\ \cancel{2}\ 3\ 4\ 5\ 6\ 7\ \cancel{8}}{8\ 7\ 6\ 5\ 4\ 3\ 2\ 1\ .\ 1\ 2\ 3\ 4\ \cancel{5}\ 6\ 7\ 8}$$

The degree of attrition gives an age of 17–25 years; the eruption of molars 18–21 years.

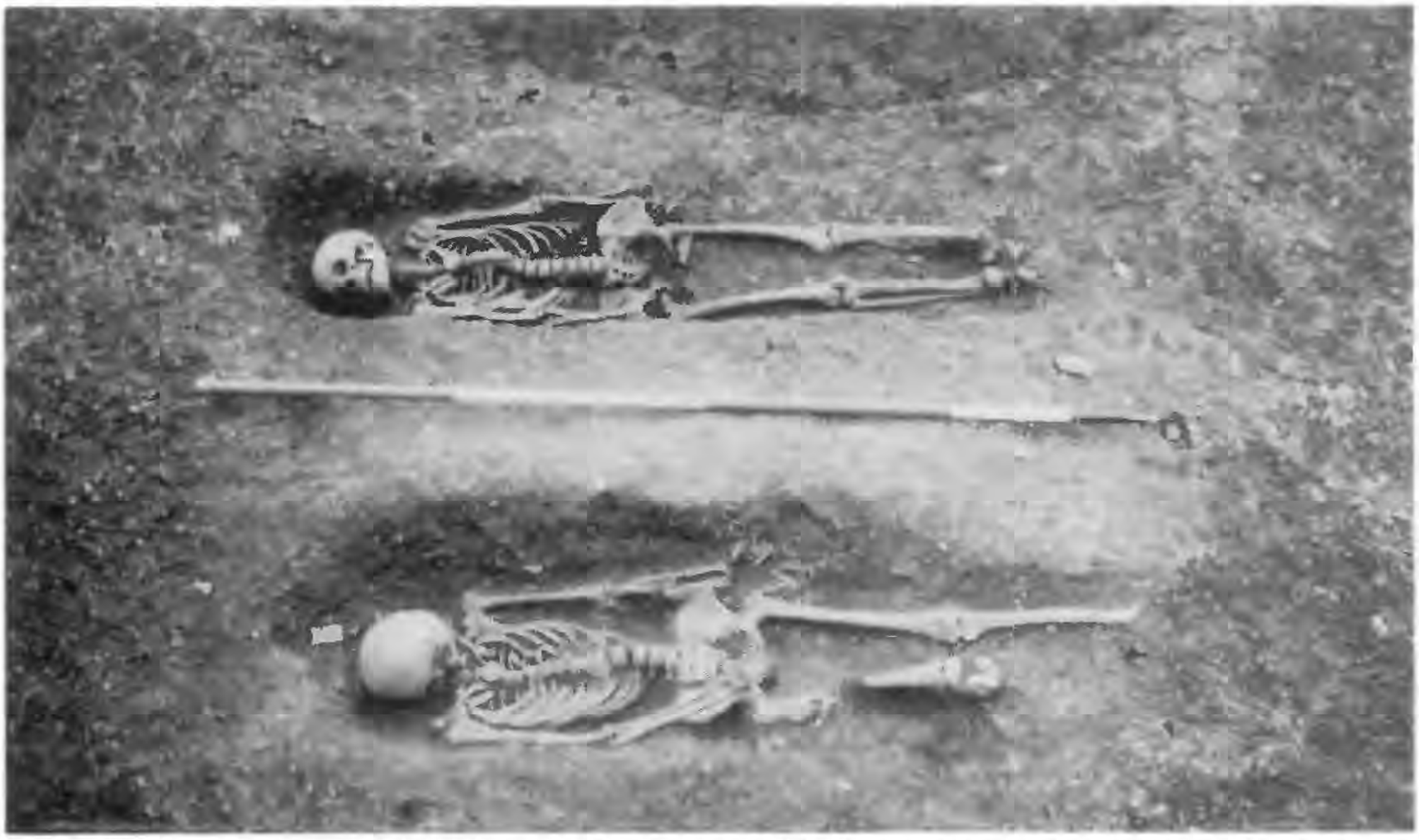


FIG. 7 Skeleton 4 (F17) above, and skeleton 2 (F3) below, viewed from the south-east. Scale in 0.5 m divisions. Photograph: A. Saville.

Skeleton 3, (Grave F5). Male adult approximately 35 years old. Stature: 1663 mm (5ft 6 ins). The whole of the right leg and pelvis and the left lower leg are missing. The rest of the skeleton is fragmented but measurements of the maximum lengths of humerus and radius produced the stature estimate. Pathology: Schmorls' nodes present on the surface of the bodies of the last six thoracic vertebrae; large osteophytes on the first three lumbar vertebrae.

Dental formula:

Area missing		Area missing
~~8 7 6 5 4 3~~ 2 1	.	1 ~~2 3 4 5 6 7 8~~
8 7 ~~6~~ 5 4 3 2 1	.	1 2 3 4 5 6 7 8
		E C
		E
		A

The lower left first molar has carious cavities on the occlusal, lingual, and mesial surfaces. A large abscess cavity is present at the root of this tooth.

Skeleton 4, (Grave F17, FIG. 7). Female adult approximately 30–35 years old. Stature: 1619 mm (5ft 4ins), from the maximum lengths of the humerus, femur, and tibia. Skeleton complete except for the toes. Pathology: slight osteophytic lipping of the distal ten thoracic vertebrae and the 2nd and 3rd lumbar vertebrae.

Dental formula:

C		C
8 7 6 5 4 3 2 ~~1~~	.	1 2 3 4 5 6 7 8
8 7 6 5 4 3 2 1	.	~~1~~ 2 3 4 5 6 7 8

The right maxillary canine has a carious cavity of medium size in the lingual surface and the left maxillary first molar a small carious cavity on the distal surface.

Skeleton 5, (Grave F27). Adult individual – possibly male. Only the tibiae, fibulae, and feet are present but these bones were all broken so no stature estimation could be made.

Skeleton 6. Male adult – probably over 40 years old. Represented by the skull only (frontal parietal and occiput; ossicle at lambda; mandible, but this is damaged). Six teeth were lost ante-mortem. Two abscess cavities present.

Dental formula:

NO MAXILLA

8 7 ~~6~~ ~~5~~ 4 3 ~~2~~ ~~1~~ . ~~1~~ ~~2~~ 3 4 5 ~~6~~ ~~7~~ ~~8~~

A A stump only

The attrition of the remaining molars suggests an age of over 40 years.

Other human bones. In addition to the above, human skeletal fragments were recovered from other contexts as follows:

F 7 Femur fragment; calcaneal fragment.
F11 Humerus fragment; distal humerus fragment (separate individual); immature metatarsal.
F13 Distal humerus fragment; 5th metatarsal fragment; left talus; calcaneum fragment. (These bones may belong to skeleton 5.)
F24 Ischial tuberosity; rib fragment; cuneiform; 3 metacarpals; 1st metatarsal; 3 proximal hand phalanges.
F25 2 lumbar vertebrae fragments; rib fragment; clavicle fragment; ulna fragment; left mandible fragment; 2 third molar teeth from separate individuals.
F26 Thoracic vertebra fragment.
F29 Tibia fragment.
F32 Humerus fragment.
F34 Ischial tuberosity.

THE ROMANO-BRITISH POTTERY by **Cherry E. Goudge**

A total of 47 sherds was recovered from 15 contexts (Table 3), and these have been sorted into the following types:

Samian ware

One sherd, a worn base from Form Dr 33, Central Gaulish fabric?

Oxfordshire colour-coated ware (Young 1977)

Body sherd from mortarium with reddish-orange colour-coat (types C97–C100). AD 240–400.

Table 3 Romano-British pottery: quantification, pottery type, and distribution

	Pottery types (numbers of sherds)						
Contexts	Samian	C/C	SVW	BB1	Malv H M	W T Sandy	?Late Saxon
F3				1			
F4			1				
F6			1				
F7			1				
F8			9			2	
F9			3			1	
F11						1	
F14	1						
F17			1				
F24			10			2	
F25			2			1	1
F26		1	3		1		
F30			2				
F34			1				
F35			1				

Key
C/C = Colour-coated wares
SVW = Severn Valley ware
BB1 = Dorset black-burnished ware
Malv H M = Malvernian handmade coarse ware
W T Sandy = Wheeltbrown, sand-tempered wares

Severn Valley ware (Webster 1976)
This is the most important type, with 36 sherds. Vessel types present are narrow- and wide-mouthed jars, a flanged-rim bowl (cf. Webster 1976, No. 53), a tankard, and a shallow dish, all standard Severn Valley ware forms. One sherd, from a jar, has burnished diagonal-line decoration. All the sherds are of fine micaceous fabrics, and have oxidized external surfaces; some are oxidized throughout.

Dorset black-burnished ware (BB1) (Farrar 1973)
One small body sherd from a cooking pot, burnt to a light grey colour, 2nd century or later.

Malvernian handmade coarse ware (Peacock 1965–67)
Rim sherd from plain dish, of black burnished ware, with grey core, black surfaces. The fabric is micaceous with scattered fragments of Malvernian rocks and minerals, mainly quartz being visible. Probably 2nd century or later.

Sandy grey wares
A total of 7 sherds, in hard micaceous fabrics with fine quartz sand temper. All from wheelthrown vessels, probably jars. One sherd has oxidized surfaces.

Romano-British ceramic tile?
Small chip of tile fabric; oxidized, micaceous iron-rich fabric with scattered limestone inclusions.

The above material includes sherds of second- and third- century date, and possibly some of the fourth century.

Shell-tempered ware
A sherd from a wheelthrown bowl with an inturned rim may be of late Romano-British (south Midland shell-gritted ware) or late Saxon date (St Neots-type ware). The fabric is fairly hard, fired dark grey, and contains finely-crushed shell. There are traces of sooting on the exterior. The form would be possible for both wares.

THE LATE SAXON, MEDIEVAL, AND POST-MEDIEVAL POTTERY by **Alan G. Vince**

The pottery from Winchcombe has been compared with the Gloucester Excavation Unit type series and form catalogue, and where appropriate the Gloucester type fabric (TF) numbers are used here to avoid repetition of fabric and form descriptions. The full fabric series has been published (Vince 1979a), and the form series will be published in due course. (The reference collection and form catalogue may be consulted by application to Gloucester City Museum.)

Late Saxon and early medieval (Table 4)
Over 15 kg of pottery dating between the 10th and 12th centuries were found, but only about one third of this pottery was usefully stratified. Parallels for all but three of the Winchcombe fabrics could be found at Gloucester, enabling an approximate sequence and a rough chronology for the contexts to be established. However, the most common ware present, the limestone-tempered fabric, has not been recognized in Gloucester. The only significant context which contained exclusively such ware was F34, a lower pit-fill stratified below fill containing ?early 11th-century pottery. A starting date for this limestone-tempered ware in the early 11th century or earlier is thus suggested, even though on the form of the cooking pots an 11th- or 12th- century date would normally be given (Jope and Threlfall 1959). Confirmation of this is provided by the radiocarbon date of ad 1020 ± 80 (HAR-4262) obtained on animal bone from F34 to test this point.

Four contexts (F4, F25, F26, and F28) contained rare sherds of 10th- or 11th- century wares known from other late Saxon sites. At Hereford TFs 41A and 119 were found together in early 11th-century contexts (Vince forthcoming), while at Bath, TF 93 (Winchester-type ware) and TF 48 (Bath fabric A) occurred together in what were probably early 11th-century pits (Vince 1979b). Context F35 may be slightly later, since it contained a sherd of TF 41B, which replaced TF 41A sometime in the 11th century. Contexts F10, F24, F29, and F30 contained sherds of Malvern Chase cooking pots, Worcester-type cooking pots, and Minety-type tripod pitchers (TFs 40, 91, and 44 respectively), all of which should be 12th century in date, since the starting date for Malvern Chase ware at least is quite secure. At Gloucester the earliest dated context is *c.* AD 1107,

Table 4 Early medieval pottery: quantification, pottery type, and distribution (all weights given in grams)

	Limestone-tempered ware		TF 41A		TF 119		TF 51		TF 93		TF 48		TF 41B		Wheelthrown ? East Midlands ware		TF 40		TF 91		TF 44		Gravel-tempered ware		Limestone- and quartz-tempered ware		TF 52		TF 108		TF 90		Unidentified glazed wares		Total	% By Context
Context	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	%	Wt	
F1	10	100																																	10	0.1
F34	665	100																																	665	4.3
F28	105	91	10	9																															115	0.7
F4	190	90	10	5	10	5																													210	1.4
F26	500	96	10	2	5	1					5	1																							520	3.4
F25	990	94	10	1	10	1			5		35	3																							1050	6.8
F35	175	68									25	10	10	4	45	18																			255	1.7
F10	95	90															5	5		5	5														105	0.7
F29	75	65													5	4	35	31																	115	0.7
F30	10	29															25	71																	35	0.2
F24	2295	86.3	10	0.4			30	1.1			10	0.4					45	1.7	20	0.7	220	8.3	25	0.9	5	0.2									2660	17.2
F6, F7 and F8	725	70															150	15	25	2	135	13													1035	6.7
Other Contexts	5640	65			5	0.1					5	0.1	10	0.1			455	5.2	640	7.4	1695	19.5	20	0.2	30	0.3	40	0.5	10	0.1	110	1.3	15	0.2	8675	56.1
Totals	11475	74.3	50	0.3	30	0.2	30	0.2	5	–	80	0.5	20	0.1	50	0.3	715	4.6	690	4.5	2050	13.3	45	0.3	35	0.2	40	0.3	10	0.1	110	0.7	15	0.1	15450	100

Table 5 Post-medieval pottery: quantification, pottery type, and distribution (all weights given in grams)

Context		TF 52	TF 80	TF 59	TF 60	TF 54	TF 62	TF 74	TF 67	TF 66	TF 96	TF 103	TF 69	TF 72	TF 75	TF 77	TF 94	TF 61	TF 55	TF 95	Black basalt	Black-glazed ware	Totals
F13	weight	275	20	5	10	5																	315
	%	87	6	2	3	2																	3
F18	weight		330		5		1135	190	20	5	60												1745
	%		19		–		65	11	1	–	4												19
F32	weight		90					60			40	20	340	390	160	10							1110
	%		8					5			4	2	31	35	14	1							12
F6, F7 and F8	weight	230	140					35		15	890	940	480	670	1540		30	190	60	5	300	15	5540
	%	4	3					1		–	16	17	9	12	28		1	3	1	–	5	–	61
Other Contexts	weight	95	30						25		60	55	10		25			5	80			30	415
	%	23	7						6		15	13	3		6			1	19			7	5
Totals	weight	600	610	5	15	5	1135	285	45	20	1050	1015	830	1060	1725	10	30	195	140	5	300	45	9125
	%	7	7	–	–	–	12	3	0.5	–	12	11	9	12	19	–	–	2	2	–	3	0.5	

while late 11th-century groups there contain no examples (Vince 1983, 126). At Worcester and Droitwich too, late Saxon pit groups have been found without Malvern Chase ware. The general soil levels F6, F7, and F8 contained a higher proportion of these 12th-century wares than the pits and all three also contained post-medieval pottery. Later pit-fills and unstratified pottery collected from the site (shown on Table 4 as 'other contexts') included a few types not otherwise represented. The Malvern Chase tripod pitchers are of probably 12th-century form, while a small collection of glazed jug sherds are probably 13th century. There was a lack of any later medieval pottery with the possible exception of some Malvern Chase jug sherds.

Late 16th to early 17th century (Table 5)

The assemblage from the ditch F13 can be dated to the late 16th or early 17th century. It is characterized by Malvern Chase glazed ware, including sherds from a large jar and two conical bowls. There was also one bowl rim of Ashton Keynes ware (TF 80), which first appears at Gloucester in assemblages of this date, a sherd from a Surrey ware bowl (TF 59), and sherds from three tygs (two of TF 60, and one possibly of Herefordshire manufacture, TF54). The remaining sherds are residual early medieval.

Late 18th century (Table 5)

Two pit groups, F18 and F32, probably date from the late 18th century. The assemblages are small although F18 contained large parts of two tin-glazed vessels, a blue-painted plate and an undecorated chamber pot. The presence of white salt-glazed stoneware dates the deposition of the group to the mid-to-late 18th century or later. Apart from mass-produced English wares the group contained a small sherd of Chinese porcelain and two sherds of Ashton Keynes ware. Context F32 is dated to the late 18th or early 19th century or later by sherds of cream-ware plates and a moulded plate with sliptrailed decoration, a sherd of an agate teapot, and a handle from a ?Fulham stoneware bottle. This group contained not only sherds of Ashton Keynes ware (including flower pots), and the base of a Staffordshire large, coarse, black-glazed vessel, but also sherds of Cranham ware (TF 103). The Cranham potteries are first documented in the early 19th century (Cranham Parish Register; Allan Peacey pers. comm.), but may have been operating earlier.

The general soil levels F6, F7, and F8 contained post-medieval pottery, as did the unstratified collections. These contained few new types, except for a small group of early 18th-century wares (a Westerwald stoneware tankard, Staffordshire black-glazed redware vessels, and a Staffordshire stoneware tankard), and some late 18th- or early 19th- century types (a buff-bodied Mocha ware, a black basalt teapot, and a black-glazed redware teapot). The absence of transfer-printed wares makes a 19th-century date unlikely.

CATALOGUE OF MEDIEVAL WARES (See Table 4)

Limestone-tempered ware (FIG. 8, 1–19; FIG. 9, 20)

Hard, light grey with oxidized surfaces. The main inclusions are angular and rounded limestone fragments. In thin-section these are mainly fine-grained limestone with smaller quantities of fossiliferous limestone with fine-grained and sparry cement, a little oolitic limestone, shell fragments, pisolithic limestone, and calcite. The limestone fragments can be up to 2 mm across. Other inclusions are varying amounts of subangular quartz and quartzite up to 0.7 mm across and subangular iron ore up to 0.5 mm across. The clay matrix contains a little angular quartz, varying amounts of finely divided limestone, and scattered specks of angular, opaque, iron ore up to 0.02 mm across.

The most common form is the cylindrical, club-rimmed cooking pot (FIG. 8, 11 and 17; FIG. 9, 20). These vessels are hand-made and invariably fired brown with a grey core and a black skin (a similar feature was noted on the

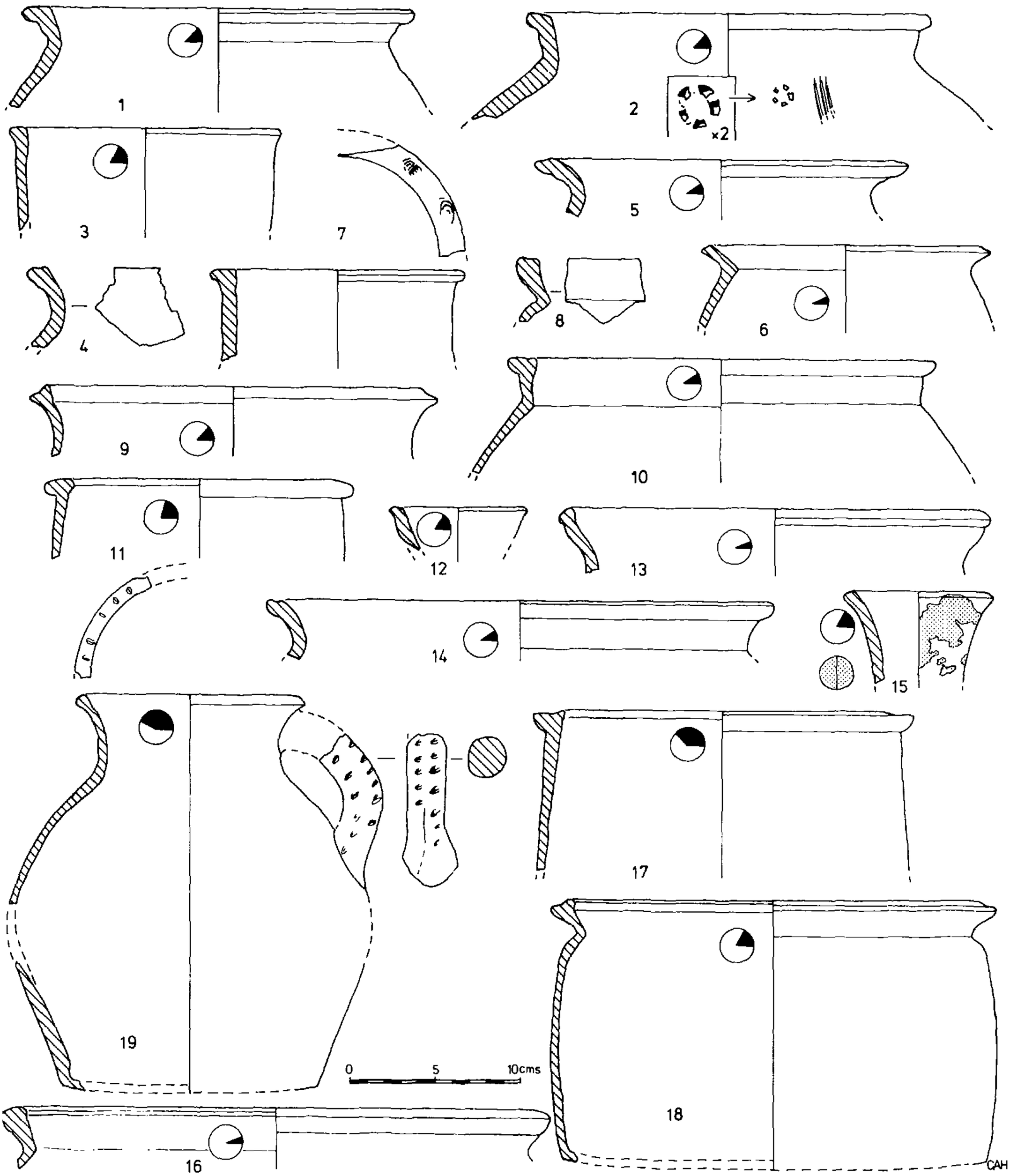


FIG. 8 Late Saxon and early medieval pottery. Scale 1:4. Fabric: Limestone-tempered ware (1–19). Contexts: F6 (13); F7 and F10 (19); F11 (1, 9, 10, 15, 16); F14 (5); F24 (2, 3, 4, 6, 8, 14, 18); F25 (11); F26 (7); F34 (12, 17).

limestone-tempered cooking pots from Upton: Hilton and Rahtz 1966, 131). Rims of this form were found in all but one of the ?11th- and ?12th-century contexts. The next most common form is the everted-rim cooking pot with a roughly cylindrical profile (FIG. 8, 18). The rims are invariably thickened, sometimes hy infolding. A distinct variant has no neck angle but a smoothly curved rim profile (FIG. 8, 4,5,9 and 14). Rims of this form were found in two of the ?11th-century contexts (F34 and F35) and in F10 and F24. At least five examples of globular-bodied cooking pots were found. They have cylindrical necks and thickened rims (FIG. 8, 10). One example, which might be a spouted pitcher, was decorated on the shoulder with stamp impressions, and is the only stratified piece of this form (FIG. 8, 2). Five contexts produced sherds of unglazed pitchers (representing an unknown numher of vessels). These vessels have globular bodies and a curved rim profile. Rod handles and a tuhular spout have been found and the vessels were decorated on the rim and handle with fingernail impressions. The only stratified example comes from a 12th-century context (FIG. 8, 19). A sherd from a lamp (FIG. 8, 12) comes from F34 (11th century).

Gloucester TF 41A (FIG. 9, 21–22)

A limestone-tempered ware made in Gloucester. The examples found here are all wheelthrown with lid-seating. This ware is replaced during the 11th century by Gloucester TF 41B. Examples come from three 11th-century contexts and F24.

Gloucester TF 119 (FIG. 9, 23)

Hereford-type ware. A micaceous late Saxon glazed ware, represented hy sherds of wheelthrown pitchers from three 11th-century contexts and one unstratified context.

Gloucester TF 51

Stamford ware. Three sherds from glazed vessels, including one with a thumbed applied clay strip, all from context 24. Identified by Kathy Kilmurry as her Fabric G, glaze 6.

Gloucester TF 93

Winchester-type ware, represented by a single sherd from F25.

Gloucester TF 48

A micaceous, globular, cooking-pot ware from west Wiltshire, present in three 11th-century contexts (F25, F26, and F35), F24, and in two unstratified contexts.

Gloucester TF 41B (FIG. 9, 24–25)

A limestone-tempered ware, made in the Vale of Gloucester. Only two identified examples, one from F35 (FIG. 9, 24), the other unstratified (FIG. 9, 25). The fahric, however, is similar to the main limestone-tempered ware found here and body sherds may have heen missed.

Wheelthrown ?East Midlands wares

i) Three sherds, possibly from one vessel, from a wheelthrown cooking pot with an everted rim and a band of roller-stamping on the shoulder (FIG. 9, 26 and 27). The fabric is hard, very pale hrown (Munsell 10 YR 7/3) with a light grey core. It is tempered with fine, angular, quartz sand and sparse inclusions of more rounded quartz up to 0.5 mm across, rounded limestone fragments, rounded iron ore fragments, and white clay pellets, all up to 1 mm across, and fine, white mica flakes. Contexts F24, F29, and F35.

ii) The sagging hase of a wheelthrown cooking pot, dished out and knife-trimmed after throwing. The fabric is hard, red (2.5 YR 5/6) with moderate inclusions of rounded quartz and iron ore between 0.25–0.5 mm across and an abundant fine angular quartz sand with sparse white mica flakes of the same size. Context F35.

Both groups of sherds were submitted to Kathy Kilmurry, who comments that they are not Stamford ware but probably come from an unidentified East Midlands source.

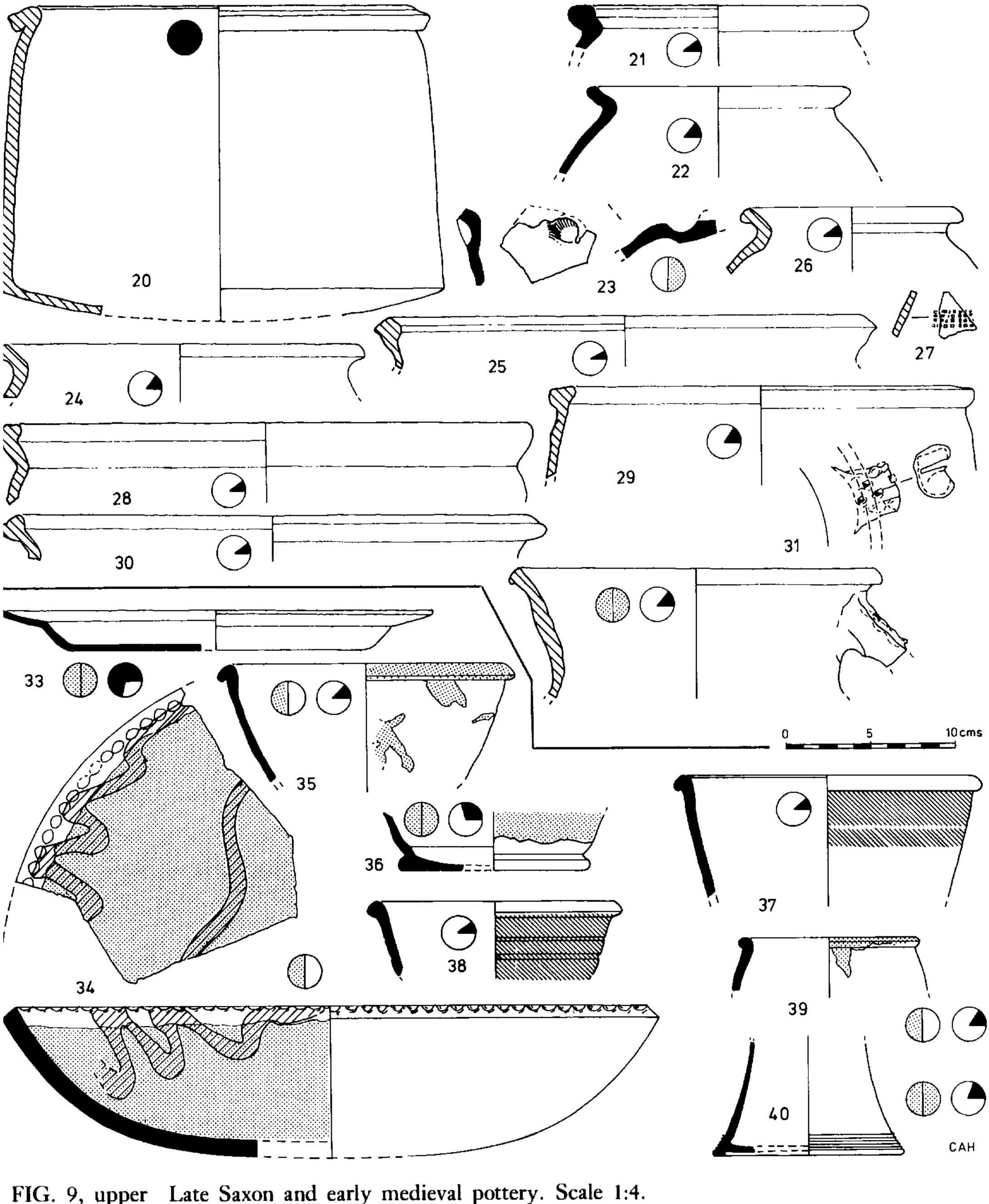


FIG. 9, upper Late Saxon and early medieval pottery. Scale 1:4.
Fabrics: Limestone-tempered ware (20); TF40 (28); TF41A (21, 22); TF41B (24, 25); TF44 (31); ?East Midlands ware (26, 27); TF91 (29, 30); TF119 (23).
Contexts: F4 (23); F7 (31); F11 (20, 30); F14 (25, 28, 29); F24 (21, 27); F25 (22); F35 (24, 26).

FIG. 9, lower Post-medieval pottery. Scale 1:4.
Fabrics: TF69 (33, 40); TF72 (34); TF74 (36); TF75 (35); TF80 (37); TF103 (38, 39).
Context: F32 (33–40).

Gloucester TF 40

Malvern Chase ware. Unglazed cooking pots of 12th- and early 13th-century type (FIG. 9, 28: dated by method of manufacture and rim form). One cylindrical cooking pot has a cordon rim (a rare variant also found at Hereford: Vince forthcoming). From 12th-century contexts (F10, F29, F30) and unstratified.

Gloucester TF 91

Sand-tempered, handmade cooking pots (FIG. 9, 29 and 30), probably from Worcester (F10, F24, and unstratified contexts). This ware, like that of the Malvern Chase cooking pots, is thought to begin in the early 12th century.

Gloucester TF 44

An oolitic limestone-tempered ware from Minety, north Wiltshire, in the form of fragments of handmade tripod pitchers of 12th-century date. There are two examples of complex handles, made from two rods of clay with a third strip wrapped around them (FIG. 9, 31). A number of sherds come from an unusual vessel or vessels, with a globular body and cylindrical neck (FIG. 10, 32). A thumbed clay strip is wrapped around the neck join and a rod handle and tubular spout have also been found. Sherds of a flat base with applied strips on the underside may be from the same vessel. The only stratified examples of this ware come from context F24.

A gravel-tempered ware and a limestone- and quartz-tempered ware

Small body sherds from unstratified contexts only, not examined in detail.

Gloucester TF 52

Malvern Chase ware. Early tripod pitchers of 12th-century date, including here a rod handle stub and a roller-stamped rim.

Gloucester TF 108

A sand-tempered glazed ware, represented by a single sherd from F13.

Gloucester TF 90

Sand-tempered wheelthrown jugs, probably from Worcester, represented by two unstratified sherds.

Unidentified glazed wares

Two medieval glazed sherds from unstratified contexts, one possibly of Ham Green ware (Barton type B, with horizontal grooves).

Discussion of the medieval and post-medieval pottery

Comparison of the stratified groups of pottery from Winchcombe with the Gloucester sequence enables a rough date to be applied to all of the groups, with the exception of the two groups containing only limestone-tempered ware. The 11th-century pottery is of considerable interest. Firstly we are now able to define another ware being used in the Severn Valley in the 11th century to add to those recognized at Gloucester and Bristol (Vince 1979a). Secondly the quantity of late Saxon glazed-ware sherds from the site is remarkable. All these wares look superficially like late or post-medieval fabrics and it may well be that now that their existence is known we will find that they were in relatively common use on late Saxon sites. At present Winchcombe is one of only two sites in Gloucestershire to have produced stratified 11th-century pottery and we cannot, therefore, draw many conclusions from the differences between the Gloucester and Winchcombe pottery at that time.

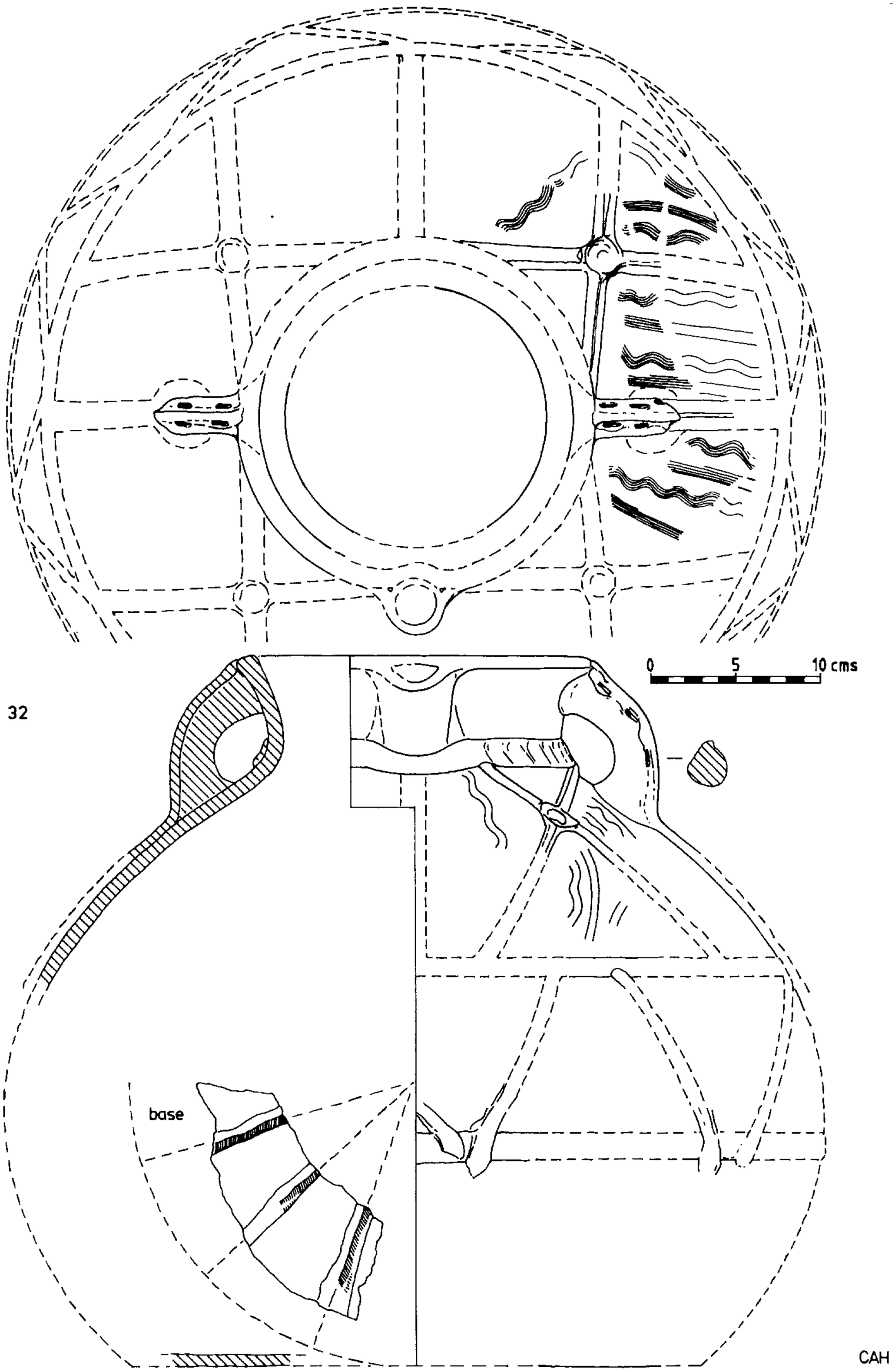


FIG. 10 Medieval pottery. Scale 1:4. Fabric: TF44 (32). Contexts: F11 and F16 (32).

SUMMARY CATALOGUE OF POST-MEDIEVAL WARES PRESENT (See Table 5)

Gloucester Fabric No.	*Common Name or description*	*Date* (C=century)
TF 52	Malvern Chase glazed ware	up to early 17th C
TF 80	Ashton Keynes ware (FIG. 9, 37; FIG. 11, 44 and 46)	16th C to 19th C
TF 59	Post-medieval Surrey White ware	17th C in Glos
TF 60	Black-glazed cups	16th C – 17th C
TF 54	Herefordshire wares	17th C
TF 62	Tin-glazed wares (FIG. 11, 41–42)	18th C
TF 74	Staffordshire or Bristol light-bodied ware with a mottled brown glaze (FIG. 9, 36; FIG. 11, 45, 49–50)	late 17th C – 18th C
TF 67	White salt-glazed stoneware (FIG. 11, 47–48)	mid–18th C
TF 66	Chinese export porcelain	18th C
TF 96	Late English stonewares (FIG. 11, 43)	18th C – 19th C
TF 103	Cranham red earthenware (FIG. 9, 38–39)	late 18th C – 19th C
TF 69	Creamware and other white-bodied earthenwares (FIG. 9, 33 and 40)	late 18th C – 19th C
TF 72	Staffordshire or Bristol moulded slipware plates (FIG. 9, 34)	18th C – 19th C
TF 75	Staffordshire coarse black-glazed ware (FIG. 9, 35)	late 18th C
TF 77	Whieldon Agate ware	mid-18th C
TF 94	Westerwald stoneware	late 17th C – 18th C
TF 61	Staffordshire black-glazed redware	17th C – 18th C
TF 55	Buff earthenware, often with mocha decoration	late 18th C – 19th C
TF 95	Staffordshire or Bristol stoneware tankards	early 18th C
Black basalt ware	Teapots	mid-18th C – 19th C
Black-glazed ware	Late black-glazed redware teapots	mid–18th C – 19th C

Winchcombe is the third site at which Gloucester TF 119 has been found (the others being Gloucester and Hereford) and the fourth at which TF 41A has been found (the others being Gloucester, Hereford, and Worcester). As Winchcombe was a Domesday borough it would be interesting to know whether 11th-century rural sites also received pottery from some distance or whether these wares only moved between towns, perhaps as an incidental result of their other commercial links.

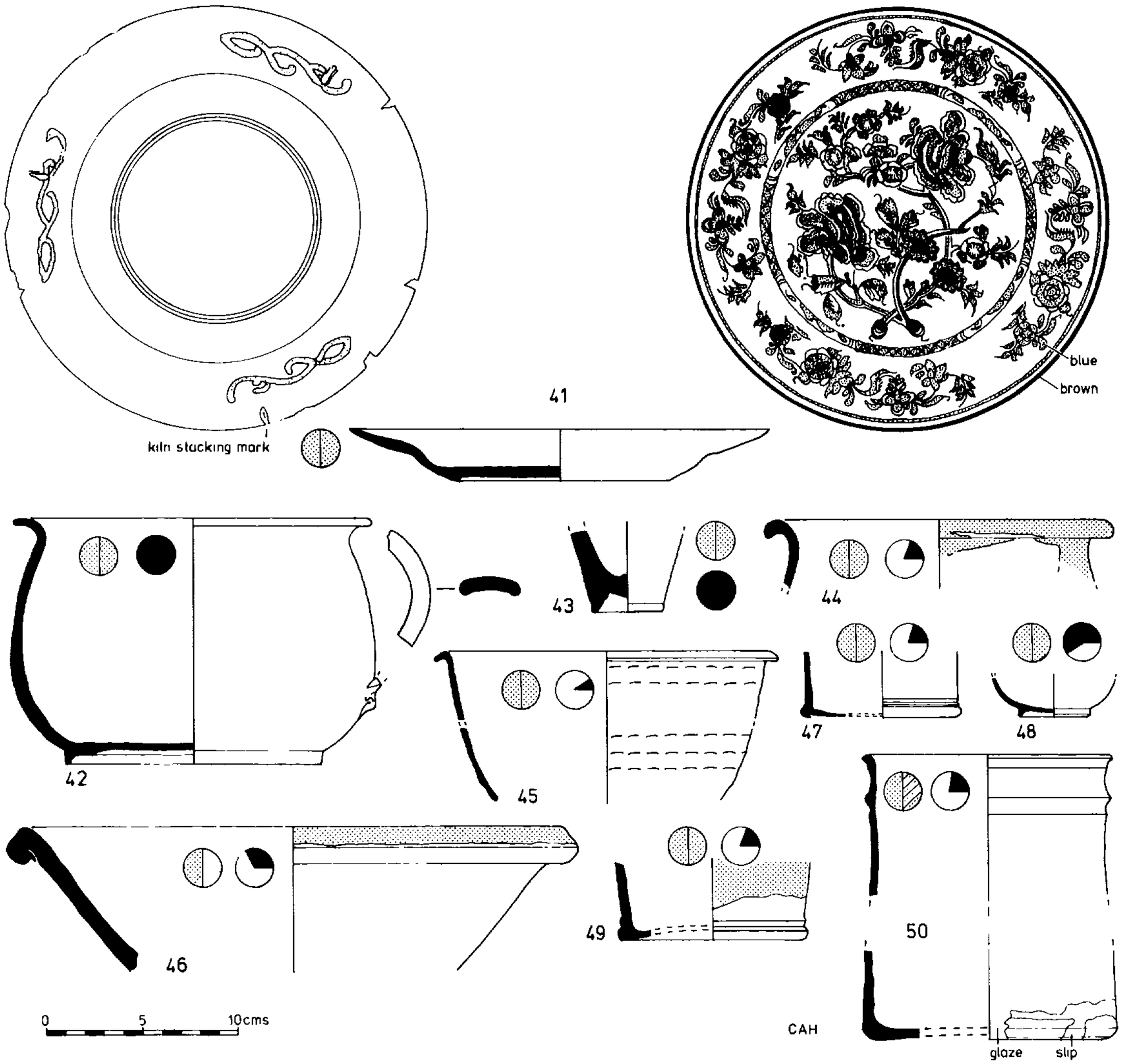
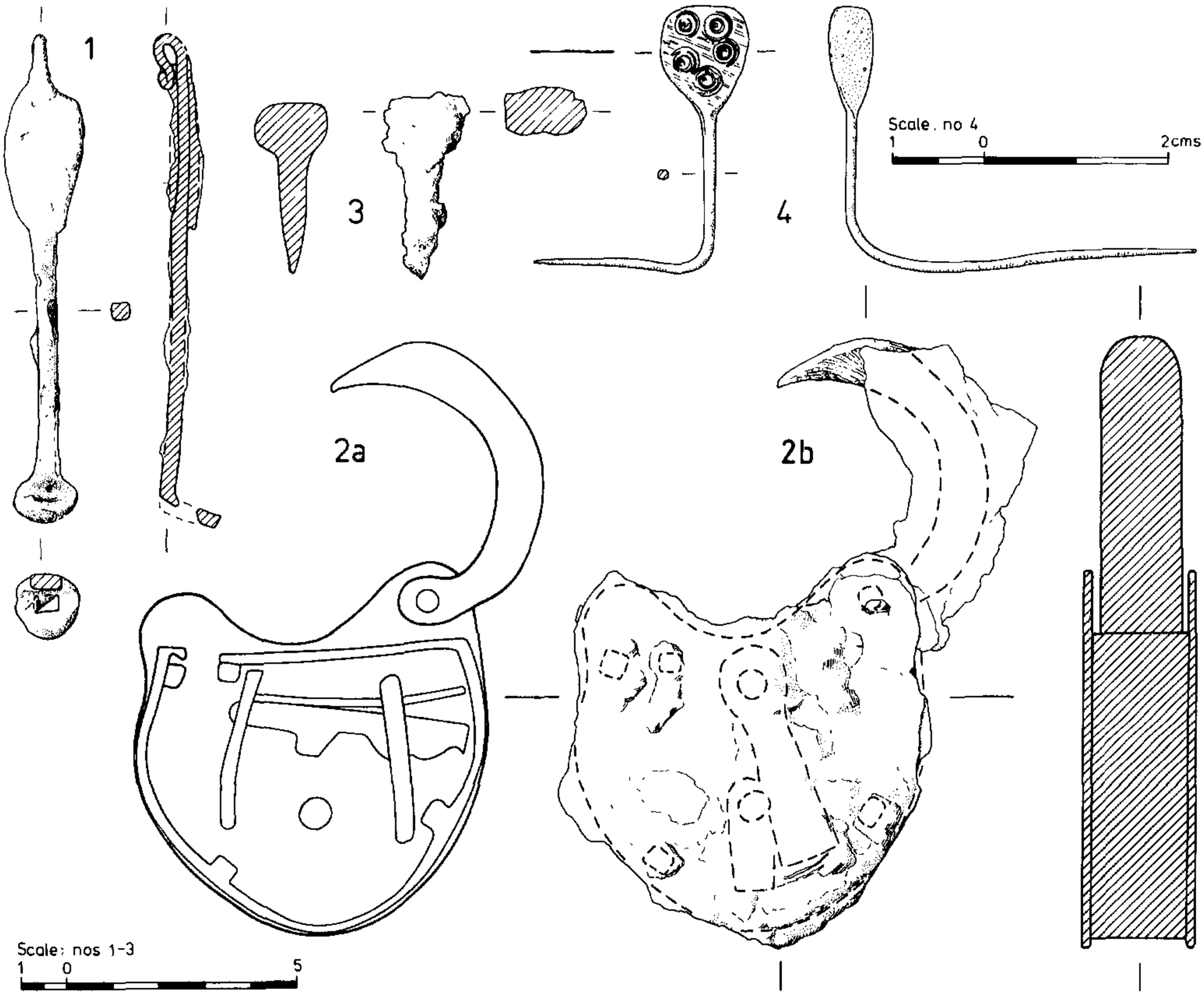


FIG. 11 Post-medieval pottery. Scale 1:4. Fabrics: TF62 (41, 42); TF67 (47, 48); TF74 (45, 49, 50); TF80 (44, 46); TF96 (43). Context: F18 (41–50).

The 12th-century and later pottery from Winchcombe is also interesting, since it appears that the town was still receiving most of its pottery from a source not supplying Gloucester at all, perhaps into the 13th century. However, the late 16th- or early 17th-century groups show that the town was by then receiving the same wares as Worcester, Gloucester, and most other places in the Severn Valley.

Note on the conventions used in the pottery illustrations

A cross-hatched section indicates a handmade vessel, as distinct from the solid black section of the wheelthrown pottery. The pie-diagram indicates the proportion of the rim or base which has survived. The second, stippled circle, where present, indicates glazing on the interior (left half of circle) or exterior (right half of circle) of the vessel.



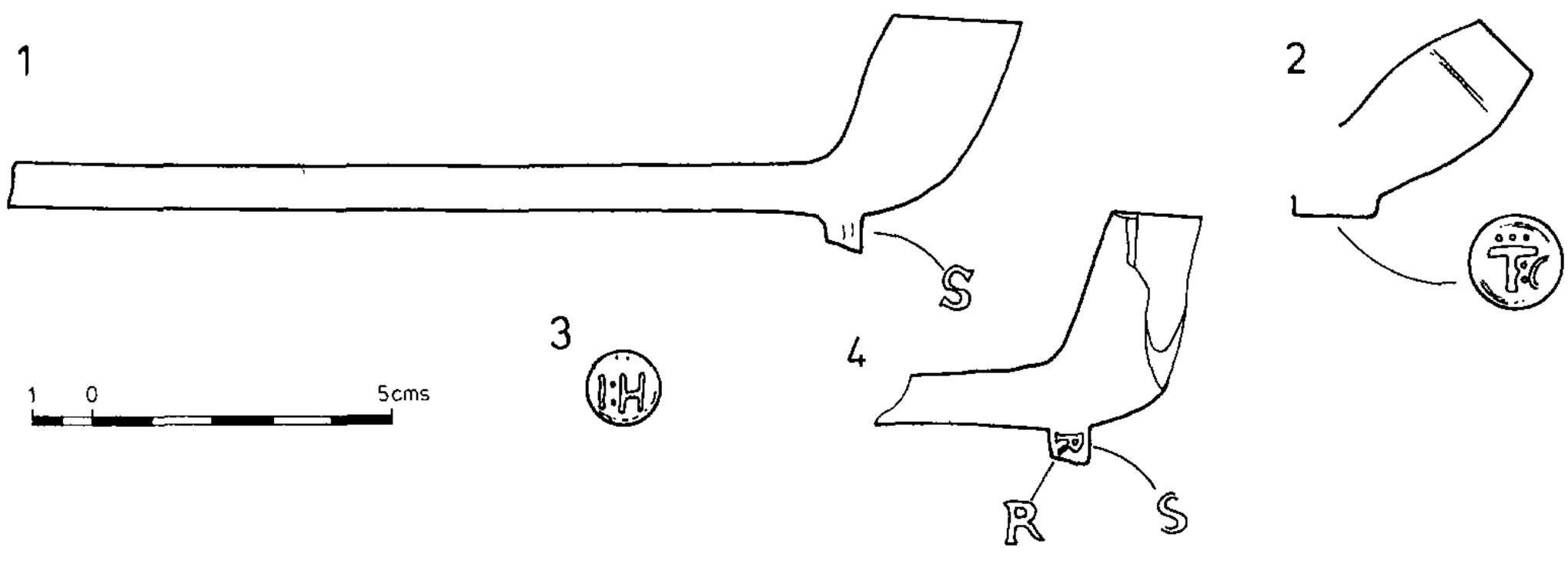


FIG. 12, upper Metal objects: 1–3 iron; 4 bronze.
FIG. 12, lower Clay pipes.

THE CLAY PIPES by **Allan Peacey**

A small collection of identifiable pipes was recovered from a few of the excavation contexts and is described below. Reference is made to the following typologies: Broseley (Atkinson 1975), Gloucester (Peacey 1979), and Hailes Abbey (Peacey manuscript).

General soil levels F6 and F7
Gloucester type 1 (AD 1600–1640) 1 example.
Gloucester type 4 (AD 1670–1700) 1 example.
Gloucester type 8 (AD 1670–1700) 2 examples.
Broseley type 2 (AD 1660–1680) 1 example, marked I.H. on the heel (FIG. 12 lower, 3).
Broseley type 4 (AD 1690–1720) 1 example.
Hailes Abbey type J (AD 1670–1700) 2 examples, one with milling around the rim.

Pit-fill F12

This small assemblage of five bowls and 18 stem fragments is of particular interest in containing local material. Clay tobacco pipes were produced at Chipping Campden, ten miles north of Winchcombe, throughout the 18th century. The stem fragment marked TS (incomplete and not illustrated: see Peacey 1979, fig. 15, 185 for a complete example) is the work of Thomas Smith of Chipping Campden, who took an apprentice, John Howson, in 1719. Thomas Smith was deceased by 25 September 1777, when his widow Mary made her will.

The five bowls, typologically datable to the second half of the 18th century, are almost certainly products of the Smith family. They are all marked with a S on the left-hand side of the spur (FIG. 12 lower, 1), while the letter on the right has been deliberately obliterated. One spur also retains traces of an R. No R. Smith is known, but the next documented member of the family who may have produced these altered pipes is Edward, son of Thomas, who is described as a retired pipe-maker in a land agreement of 1813 (Gloucester City Library Gloucestershire Collection 7455).

Pit-fill F18

A single example of a Broseley type 2 (AD 1660–1680). Marked T.C. or T.G. (FIG. 12 lower, 2), and presumably a residual find in this context.

Pit-fill F32

Twelve of the 13 bowls from this context are, as in F12, later 18th-century examples marked on the left-hand side of the spur with an S, the right-hand side being obliterated. The other is from the same mould but on the right-hand side of the spur is a clearly moulded R (FIG. 12 lower, 4). As we are dealing with a pit-fill, the pipes being in good condition and probably deposited over a very short period, it is worth mentioning the total length of the combined stem fragments recovered: 6.888 m. There are 15 mouth pieces as well as the 13 bowls, and assuming that the complete group was of 15 complete pipes the original stem length would not have been less than 0.46 m (18 ins). If 10 per cent of the broken stem fragments were lost, as one must assume with two of the bowls, then a length of 0.5 m (19½ ins) would result.

THE IRON OBJECTS by **Ian H. Goodall**

F34 (10th – 11th century)

Padlock key with laterally-set bit and expanded and hooked terminal (FIG. 12 upper, 1). A common pre- and post-Conquest type, early examples include one of *c.* 840 – *c.* 1000 from North Elmham Park, Norfolk (Goodall 1980, fig. 265, 1), and more than twelve from 10th- to 11th-century contexts at Winchester, Hampshire (Goodall forthcoming).

Strap fragment (not illustrated)

F24 (12th century)

Fiddle-key horseshoe nail with worn head (FIG. 12 upper, 3). Date range for this type is 10th – 13th century.

F32 (mid-late 18th century)

Bag–shaped padlock with pivoting keyhole cover and shackle, the latter with a broken tip (FIG. 12 upper, 2b). X-radiographs reveal (FIG. 12 upper, 2a) that in use a hollow-tipped key fitted over a pin behind the keyhole and operated a mechanism comprising a toothed sliding bolt held in place by a pair of elongated staples and a horizontal spring. The sheet-iron case is strengthened by several rods running between the front and back faces of the case.

Similar padlocks are known from North America in 18th-century contexts, their cases becoming taller and pointed in the later part of the century (Hume 1969, fig. 80). An incomplete 18th–century padlock from Tutter's Neck, Virginia (Hume 1966, fig. 16, 4) is of similar form and has a similar mechanism, and the method of case construction recalls that of contemporary box irons, including some from Chingley Forge, Kent (Goodall 1975, fig. 39, 134–137).

F12 (late 18th century)

Nail with square head, 47mm long (not illustrated).

F23 (Unstratified, but probably early medieval)

Nail with broken, rectangular, faceted head and distorted but near-complete shank, 172 mm long (not illustrated).

THE OTHER METAL OBJECTS by **Alison R. Goodall**

F23 (Unstratified, but probably early medieval)

Saucer-shaped object of iron with a cap of sheet ?tin, decorated with raised concentric rings. Diameter 46 mm (not illustrated).

F6 (Unstratified)

Disc of copper alloy sheet with a rolled rim. Diameter 57 mm (not illustrated).

F11 (Unstratified)

Pin of copper alloy with a flattened pear-shaped head decorated on one face with five rings-and-dots (FIG. 12 upper, 4). This is a Saxon form and other pins with flattened heads and similar decoration have been found, for example, on sites at Southampton (Addyman and Hill 1969, fig. 26, 11) and Whitby (Peers and Radford 1943, fig. 13, 1, 7, and 7a).

Note (A.S.)

In addition to the above it must be noted that a small (*c.* 60 mm long), anthropomorphic, bronze figurine was recovered during levelling from the fill of context F2, and was apparently a contemporary grave-good accompanying the unidentified burial left *in situ* (FIG. 2). It is unfortunate to have to record that this figurine was lost soon after being taken off-site, before any specialist examination or illustration was possible, and therefore no further comment can be made on this potentially important find.

THE GLASS (FIG. 13)

F29 (12th century)

1 fragment of flat glass, thickness 2 mm, probably intrusive.

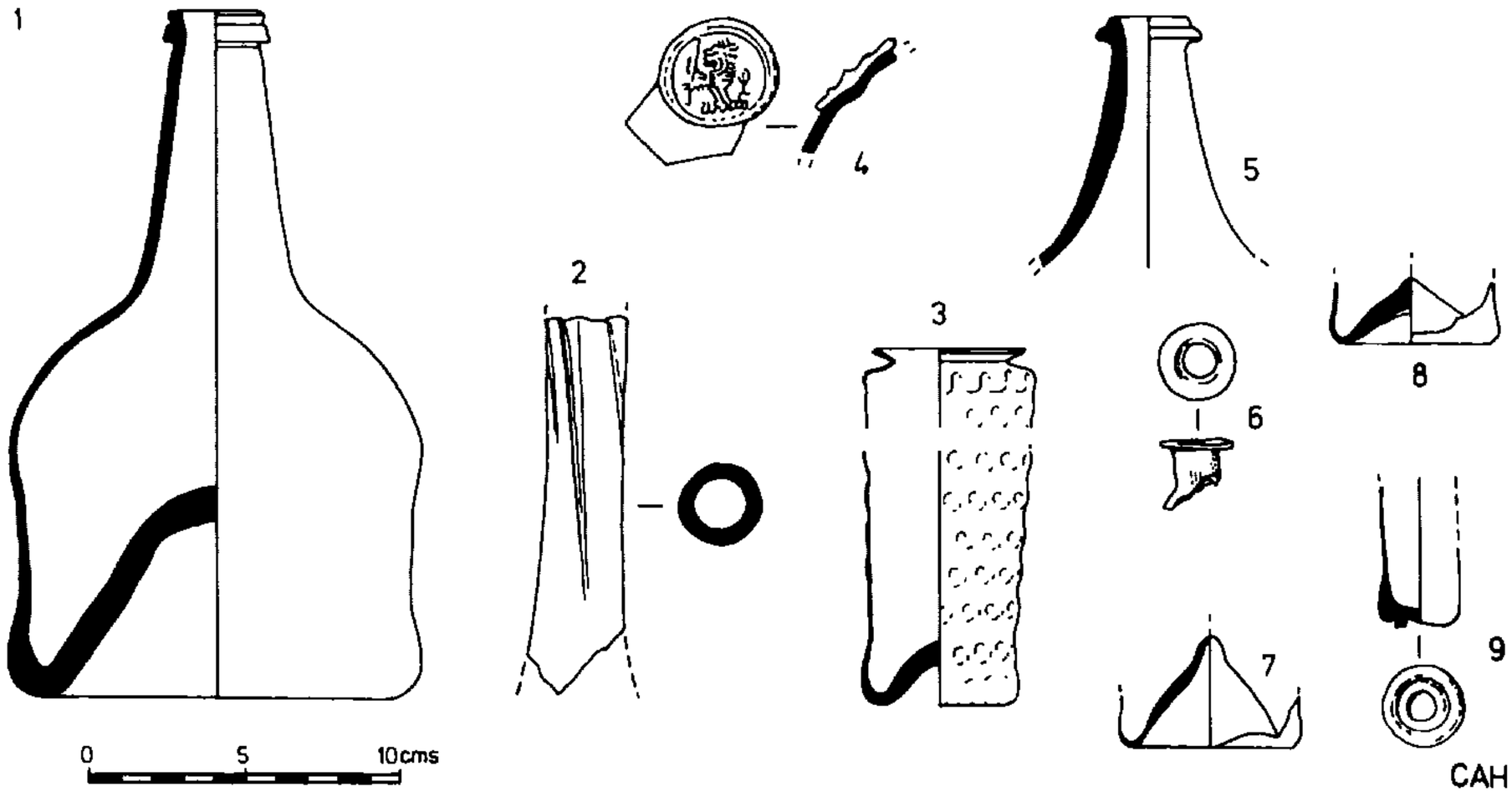


FIG. 13 Glass objects. Scale 1:4.

F13 (late 16th – early 17th century)

1 fragment of flat glass, thickness 2 mm.

F18 (late 18th century)

1 reconstructable wine bottle, *c.* AD 1750 (FIG. 13, 1), 2 wine-bottle necks (FIG. 13, 2 and 5), and 9 small fragments of wine-bottle glass.
1 base of a cylindrical vessel with dimpled glass body, which is probably from the same vessel as an unlipped neck with similar decoration (FIG. 13, 3).
1 base of a narrow, cylindrical, pharmaceutical bottle (FIG. 13, 9), and 2 dimple hases of thin-walled, clear glass bottles (FIG. 13, 7 and 8).
2 fragments from a pharmaceutical vessel and 3 fragments of flat window-glass, thickness 1.5–2.5 mm.

F12 (late 18th century)

1 fragment of flat window-glass, thickness 2 mm.

F32 (late 18th century)

1 lip from a clear glass phial (FIG. 13, 6).
1 fragment of flat window glass, thickness 2 mm, and 1 fragment of glass with a rounded edge.

Unstratified contexts

2 small ink bottles, one cylindrical, one eight-sided, both 19th-century types.
1 wine-bottle heraldic seal depicting a demi-lion rampant holding staff (FIG. 13, 4).
1 fragment of a white glass vessel, 1 wine-glass base, 5 fragments of wine-bottle glass, and 1 fragment of glass with a rounded edge.

MISCELLANEOUS FINDS (FIG. 14)

F25 (10th – 11th century)

Whetstone, elongated type, broken at proximal end across the 'hourglass' perforation. The raw material is a hard, slatey,

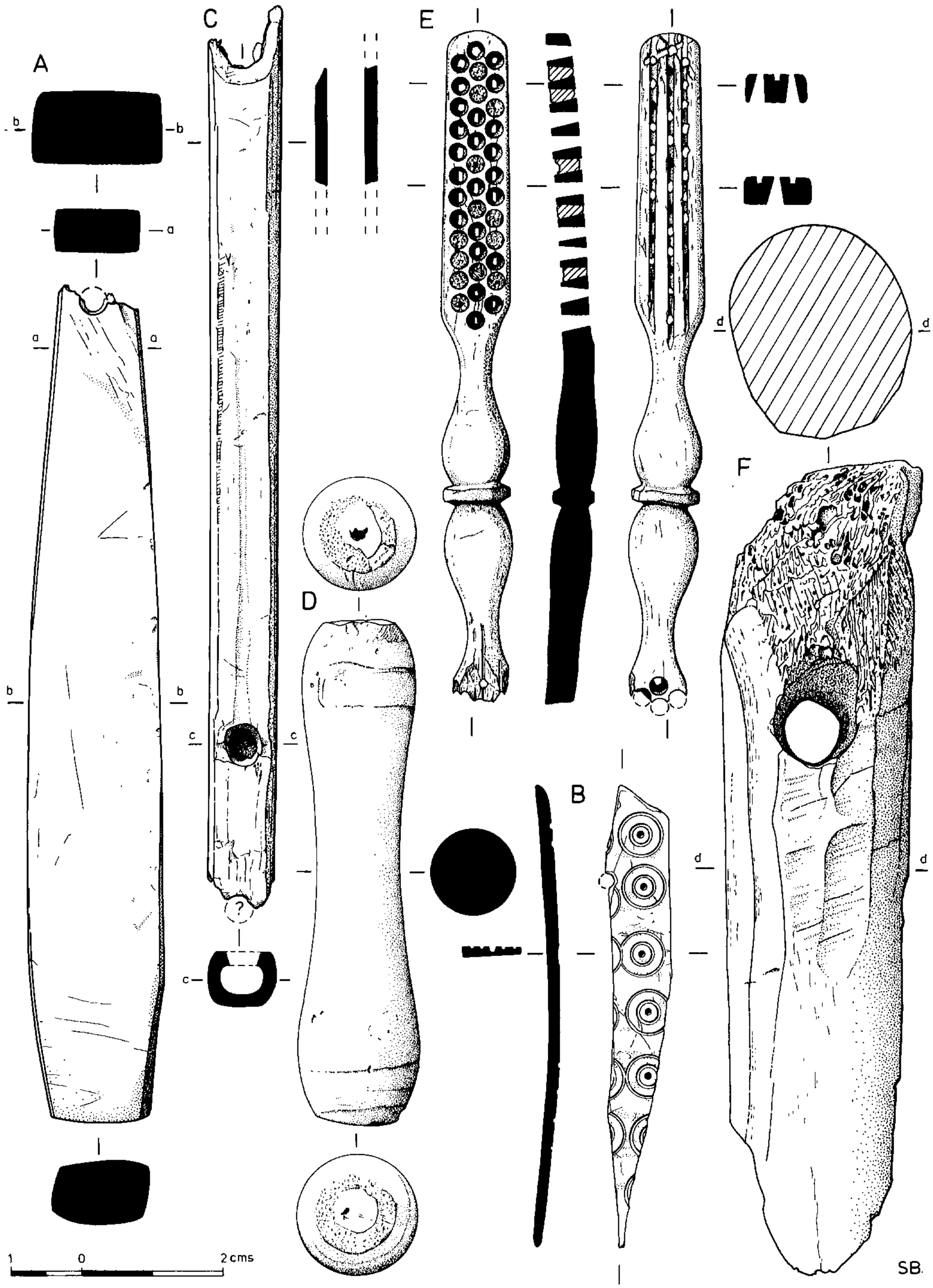


FIG. 14 Miscellaneous objects of stone (A); bone (B–C, E–F); and pipe-clay (D). Scale 1:1.

micaceous siltstone. Present length 119 mm, maximum width 19 mm, maximum thickness 11 mm. (FIG. 14, A.)
Two pieces of fired clay, 1 fragment of slagged clay, and 1 clay crucible fragment.

F4 (10th – 11th century)

One piece of fired clay and 2 fragments of slagged clay.

F10 (12th century)

Sliver from bone object decorated with incised recurrent dot-and-double-ring motif. Diameter of outer ring 6 mm. (FIG. 14, B.)

F24 (12th century)

Worked bone object, probably a simple musical instrument of the pipe or penny-whistle type (Megaw 1975). Metatarsal of sheep/goat/small deer (identified by B. Levitan), trimmed as a mouthpiece at the broader end, and with at least one circular part-perforation at the other. Now damaged at both ends. Present length 128 mm. (FIG. 14, C.)
Fragments of a quernstone of quartzitic sandstone. Thickness at rim 27 mm, diameter estimated at 0.4 m.
Four pieces of fired clay.

F32 (mid-late 18th century)

Pipe-clay wig-curler. Length 71 mm. (FIG. 14, D.)

F22 (No associated pottery, but probably 18th – 19th century)

Head and part of shaft of a toothbrush-style brush of polished bone. The stubb ends of some bristle tufts remain, linked on the back of the head by gut cord. The shaft is broken at a point where perforated decoration occurs. Present length 95 mm. (FIG. 14, E.)

F23 (Unstratified, but probably early medieval)

Shaped and perforated bone object, on the distal metatarsal of a horse (identified by B. Levitan). Present length 116 mm. (FIG. 14, F.)

F11 (Unstratified)

One piece of fired clay.

METALWORKING DEBRIS

In addition to the crucible fragment and a few pieces of slagged clay from F4 and F25, both early medieval contexts, the following amounts of ferrous slag residues were recovered (Table 6).

Table 6 Quantification and distribution of ferrous slag residues

Context	Weight in grams	Ceramic date
F4	488	10th – 11th C
F25	2925	10th – 11th C
F26	955	10th – 11th C
F28	88	10th – 11th C
F35	300	?10th – 11th C
F10	41	12th C
F24	1093	12th C
F30	210	12th C
F18	49	18th C
F11	2713	Unstratified
F23	425	Unstratified
Total	9287	

With 6100 g (=65%) from stratified early medieval contexts, and that from F11 and F23 likely to be of similar date, this debris can be assigned to metalworking activity of that date within the immediate vicinity of the site.

THE ANIMAL BONES by **Bruce Levitan**

Introduction

The bones from this site formed five groups:

Phase 1 10th–11th century – 1103 bones
Phase 2 12th century and later – 687 bones
Phase 3 Late 16th–early 17th century – 72 bones
Phase 4 Mid-late 18th century – 41 bones
Phase 5 Modern and unstratified bones – 715 bones

A further group, from F34, consisting of 196 bones, was not dated until after this report was completed. It has now been shown to fall into phase 1, but it is unlikely that the result for this phase would be much altered by the inclusion of

Table 7 Relative proportion of species for the four phases

Bracketed figures are 'cattle-sized' and 'sheep-sized' fragments. Central figures in total rows are percentages of grand total.

Phase	Species	Number of fragments			Identifiable elements			MNI		
		n		%	n		%	n		%
1	Cattle	343	(57)	36.3	141		35.8	20		22.2
	Ovicaprid	512	(59)	54.2	185		47.0	46		51.1
	Pig	76		8.1	55		14.0	15		16.7
	Horse	3		0.3	3		0.8	3		3.3
	Roe deer	2		0.2	2		0.5	2		2.2
	Dog	4		0.4	4		1.0	3		3.3
	Cat	4		0.4	4		1.0	1		1.1
	Total	944	58.3	99.9	394	54.6	100.1	90	56.3	99.9
2	Cattle	280	(48)	48.8	122		44.4	18		34.0
	Ovicaprid	259	(53)	45.1	126		45.8	23		43.4
	Pig	23		4.0	15		5.5	5		9.4
	Horse	2		0.3	2		0.7	2		3.8
	Roe deer	1		0.1	1		0.4	1		1.9
	Deer	1		0.1	1		0.4	1		1.9
	Dog	2		0.3	2		0.7	1		1.9
	Cat	3		0.5	3		1.1	1		1.9
	Rabbit	3		0.5	3		1.1	1		1.9
	Total	574	35.5	99.7	275	38.1	100.1	53	33.1	100.1
3	Cattle	31	(8)	52.5	16		59.3	4		57.1
	Ovicaprid	24	(4)	40.7	10		37.0	2		28.6
	Pig	4		6.8	1		3.7	1		14.3
	Total	59	3.6	100.0	27	3.7	100.0	7	4.4	100.0
4	Cattle	12		29.3	5		19.2	2		20.0
	Ovicaprid	22		53.7	14		53.8	4		40.0
	Pig	5		12.2	5		19.2	3		30.0
	Horse	2		4.9	2		7.7	1		10.0
	Total	41	2.5	100.1	26	3.6	99.9	10	6.3	100.0
1–4	Grand total	1618	(229)		729			160		

Notes

Number of fragments: all bones identifiable to species or genus and assignable to skeletal part.
Identifiable elements: complete bones or bones with diagnostic features present; crania with half or more of the bones present; mandibles with three or more cheek teeth present; vertebrae with half or more of the bone present; ribs with 'heads' present; girdles: half or more present; longbones: epiphyses with third or more of diaphysis intact; other bones: if half or more present.
Minimum number of individuals (MNI): Chaplin's method (Chaplin 1971) has been applied to the most numerous skeletal element.

this group. Neither the bones from F34 nor the phase 5 bones have been included, therefore, in the analysis.

In the absence of any sieving, the bone assemblage must he regarded as hiased in favour of large animals and larger bones from small animals, thus the lack of fish bones (only one was recovered) and the small quantities of small mammal and hird bones may reflect nothing more than collection biases. Ahout a quarter of the bones had suffered new breakages which presumahly occurred during excavation and washing. The bones were generally fairly fragmentary, and less than 9 per cent were complete, or complete enough to provide a useful range of measurements. The bones were generally unweathered and well preserved (if fragmentary) and only 116 fragments (5.9%) had obvious evidence of chewing or gnawing by other animals, so were apparently not submitted to scavenging etc.

The mammal bones

Proportions of species:

Table 7 summarizes the hones present for each species for each of the four periods outlined above. It is notahle that only cattle (*Bos taurus*) and sheep (*Ovis aries*) and goat (*Capra hircus*) – the latter two species grouped as ovicaprids – were present in any great numhers. Together these three species made up from 83 per cent (in phase 4) to 94 per cent (in phase 2) of the total fragments for each phase. Of the remaining species, pigs (*Sus domesticus*) were best represented. FIG. 15 illustrates the changes in relative proportions of these four species during the four phases.

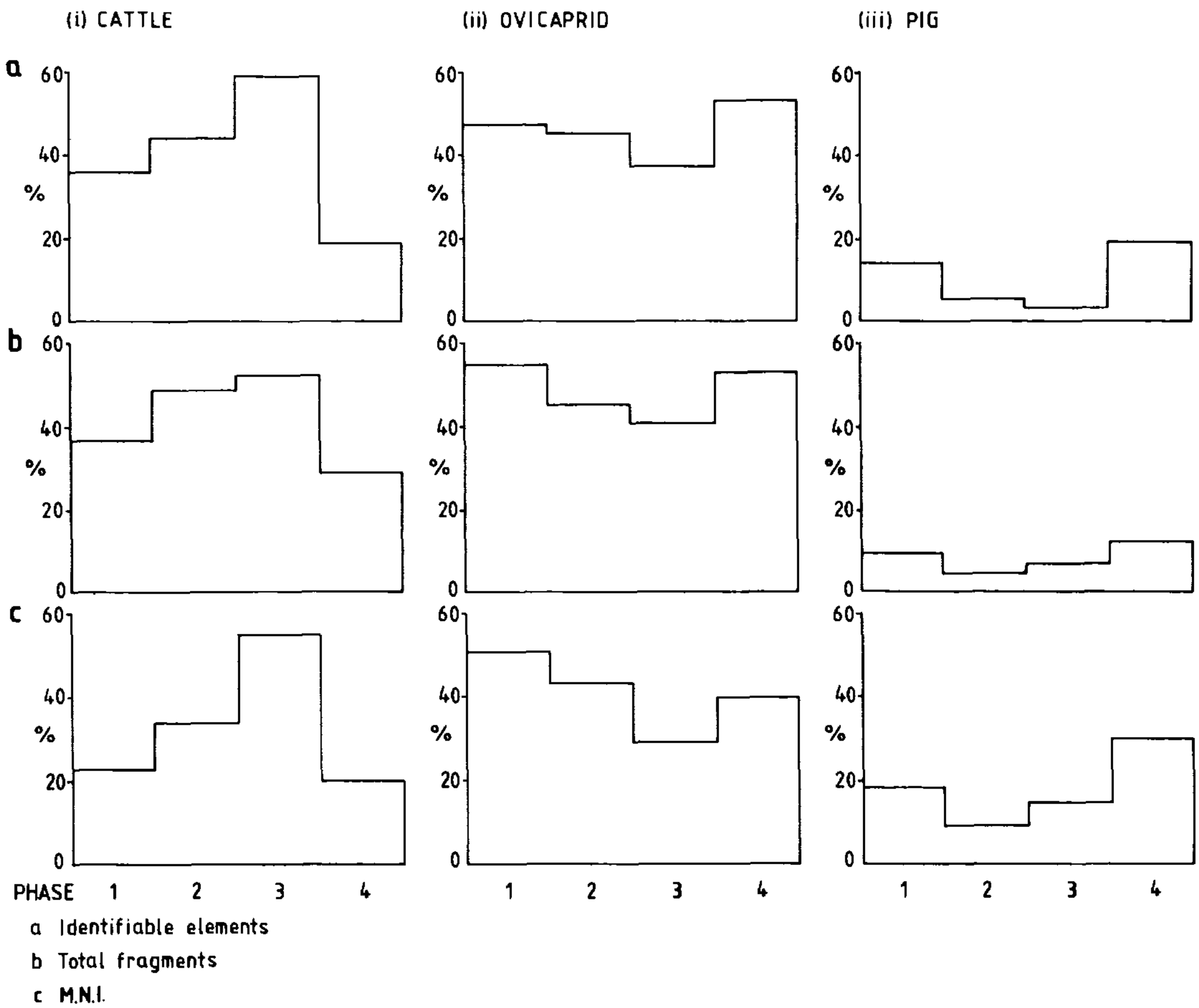


FIG. 15 Histograms showing changes through time in the relative proportions of the main domesticated animal species.

Age at death:
Age at death determination using the method described by Harcourt (1979) was possible for cattle and ovicaprid longbones from Phases 1 and 2. These results are displayed in Table 8. Table 8 also shows the results from ageing ovicaprid mandibles from Phase 1. No further age determinations were possible as specimens were too fragmentary, and too few.

Table 8 Age at death of cattle and ovicaprids from longbones and mandibles

		10–11th century			*12th century*	
Age group		Cattle	Ovicaprid	(Mandibles)	Cattle	Ovicaprid
1	Young juveniles	9.4%	10%	(14.3%)	36.1%	0%
2	Juvenile/sub-adult	6.3	5	(35.7)	8.3	18.5
3	Sub- and young adult	75.0	65	(35.7)	47.2	74.1
4	Mature and senile	9.4	20	(14.3)	8.3	7.4
		n=32	n=60	n=14	n=36	n=37

Notes
Age groups 1–4 calculated after Harcourt 1979.
Bracketed figures derived from mandibles – mandible age groups 1–4 do not exactly correspond to longbone groups: 1 = 1st molar in wear, 2 = second molar in wear, 3 = third molar in wear, up to and including stage f (Grant 1975), 4 = third molar well worn, stage g onwards.

Table 9 Measurements of cattle, sheep, and goat bones

	Range	n	Mean	S.D.	C.V.	Height
i. *Cattle*						
Astragalus t.l.	53–67	8	60	4.6	7.7	–
Metacarpal t.l.	172–183	2	178	5.1	2.9	105–112[1]
Metatarsal t.l.	195–222	4	205	10.6	5.2	106–121[2]
ii. *Sheep*						
Humerus d.b.	25–31	7	29	2.0	6.9	–
Radius p.b.	28–33	8	30	1.9	6.3	–
Radius t.l.	138–153	4	144	5.5	3.8	–
Metacarpal t.l.	117–127	7	121	3.0	2.5	57–62[3]
Metatarsal t.l.	110–143	5	126	10.7	8.5	52–67[4]
iii. *Goat*						
Metacarpal t.l.	124–134	3	129	4.1	3.2	–
Metatarsal t.l.	116	1	116	–	–	–

Notes
t.l. = total length, d.b. = distal breadth, p.b = proximal breadth, n = numbers of specimens, S.D. = standard deviation, C.V. = coefficient of variation. Measurements in millimetres, height in centimetres. Heights calculated using multiplication factors of [1]6.12, [2]5.45, [3]4.86, [4]4.68 (Harcourt 1979).

Size of the animals:
A selection of measurements are summarized in Table 9. These are of cattle, sheep, and goat only, as material from other species was unsuitable for measurement. In all cases coefficients of variation are small enough to indicate that the animals came from populations of similar size.

Butchery:
FIG. 16 illustrates the zones of butchery for cattle and sheep respectively. With the exception of an 18th-century sheep tibia and a cattle radius from the same phase – both of which were sawn through mid-shaft, all bones which had been cut through entirely appeared to have been cleaved with a chopper or similar instrument. Other butchery markings took the form of cut-marks on the surface of the bone. Butchery on the upper limbs of cattle bones was typical of jointing and

boning out, whereas in the case of ovicaprids, the bones were more likely to have been left in the joint (note mid-shaft butchery in radius and tibia). Ribs were cut away from the spinal column and, possibly related to this, so were lumbar transverse processes in cattle. No evidence for cutting the lumbar transverse processes was found in sheep and goats, though in their case ribs were also cut away from the thoracic vertebrae. No transverse cuts to the thoracics were observed for ovicaprids, though a few examples were noted in cattle. If the head was divided from the neck, this was probably done at the junction of the second (axis) and third cervical vertebrae for both ovicaprids and cattle. Horncores were chopped off in cattle, sheep, and goats – especially in the latter. Cut-marks on cattle mandibles were quite common, possibly made in obtaining the masseter muscles. No butchery on the limb extremities was found for ovicaprids, though cattle bones were cut on the lateral, anterior, and posterior surfaces of the metapodia, on the lateral and anterior surfaces of the ankle, and on the distal portion of the metacarpals. Evidence for bone-working was seen on a humerus shaft and a radius shaft of cattle, in which the diaphyses had been chopped in two, obliquely, and the chopped surfaces smoothened. In addition the distal epiphysis of a cattle humerus had been bored through from the lateral to the medial side leaving a hole of about 10 mm in diameter.

Pig bones also had evidence of butchery with cuts on mandibles (horizontal ramus), humerus, radius, and tibia (all on the anterior part of the distal portion of the shaft). A roe deer (*Capreolus capreolus*) metatarsal had several cut marks in the mid-shaft region on the anterior and medial surfaces. A horse (*Equus caballus*) humerus had had the medial portion of the distal epiphysis chopped away, and a fragment of acetabulum had been cut in the pubic region. A dog (*Canis familiaris*) radius had been chopped in half in the mid-shaft region.

Pathology:
Four cattle bones showing pathological lesions were recovered. 'Lipping' occurred around the proximal epiphysis of a metacarpal and the joint surfaces of a calcaneum. The latter also had eburnation and grooving on the articulation surfaces: these three characteristics are listed by Baker and Brothwell (1980), so may have been associated with early stages in the development of osteoarthritis. The diaphysis of a first phalanx IV bore extra bone growth (exostosis) which did not appear to be associated with either joint surface, and since it appeared on the lateral aspect of the phalanx, could not have been associated with its neighbouring phalanx. No immediate explanation is apparent for this specimen. A rib had suffered a fracture but had rehealed and the callus formation appeared smooth and well advanced. 'Lipping' also occurred on the lateral tuberosity of the proximal epiphysis of a sheep radius.

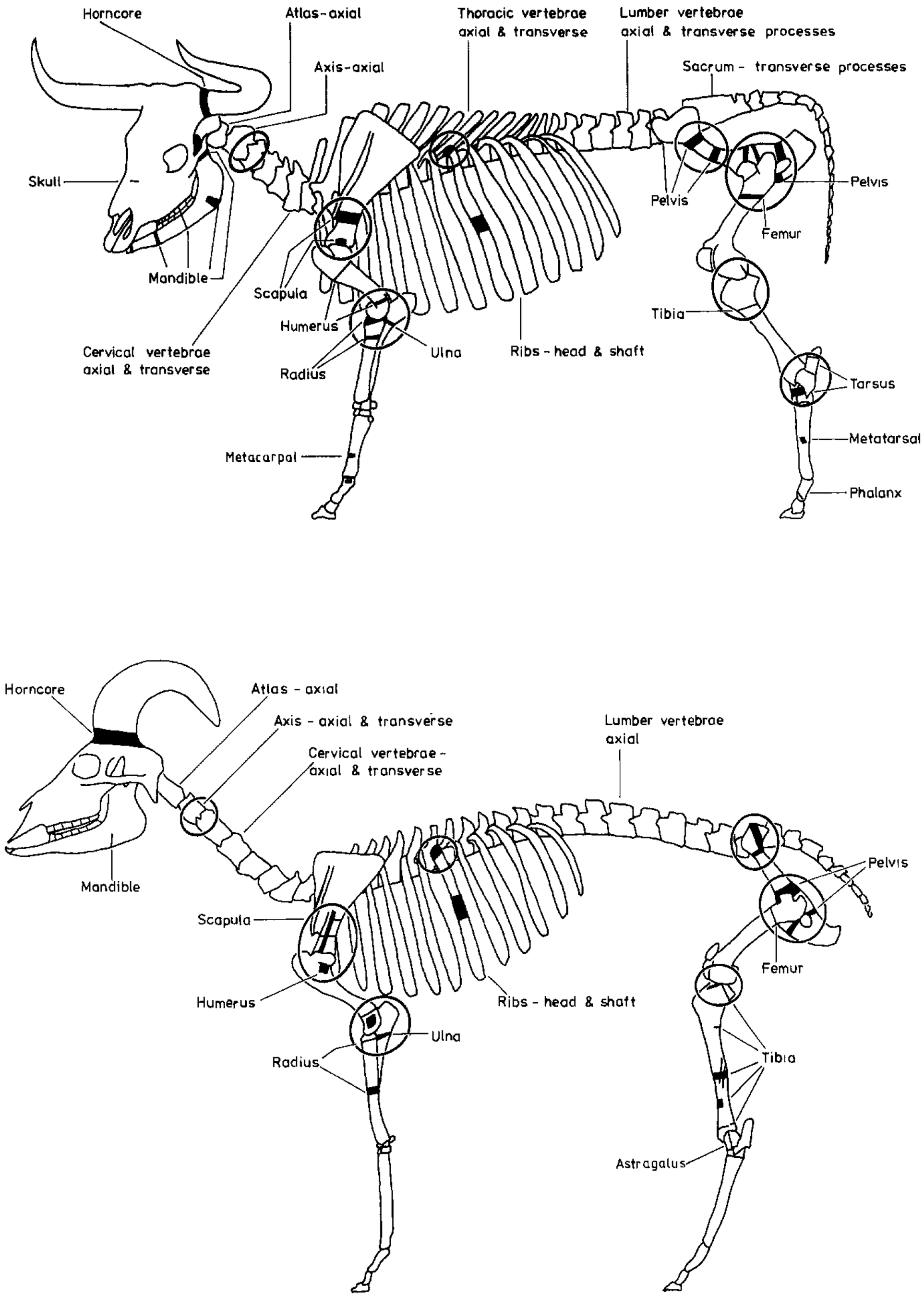
Sex:
Too few specimens were complete enough to allow sexual determination, and results are thus likely to be unrepresentative.

The bird bones

Table 10 summarizes the bones present in each phase. Only four species were represented (but see the comments on sieving above). Of these, domestic fowl (*Gallus gallus*) was by far the commonest, and with goose (*Anser sp.*) represents food remains. Woodcock (*Scolopax rusticola*) (which may also have been eaten) and goshawk (*Accipter gentilis*) were represented by only one bone each. The fowl tibiotarsi had cut marks, both on the distal portion of the shaft; one had been chopped through obliquely in an anterior – posterior direction. The other bore a cut-mark on the anterior of the shaft. Measurements of the fowl bones are summarized in Table 11. Fairly high coefficients of variation for ulnae and tibiotarsi may indicate more than one size of bird was present (possibly due to sexual dimorphism).

Table 10 Relative proportions of birds present for the four phases

Phase	Species	Total Identified		MNI	
		n	%	n	%
1	Fowl	36	83.7	10	62.5
	Goose	5	11.6	4	25.0
	Goshawk	1	2.3	1	6.3
	Woodcock	1	2.3	1	6.3
	Total	43	99.9	16	100.1
2	Fowl	11	100.0	4	100.0
3	Fowl	1	100.0	1	100.0
1–3	Grand total	55		21	



Encircled areas indicate main disjointing & joint preparation areas

Thickness of line indicates relative amounts of butchery

CAH.

FIG. 16, upper Cattle butchery zones.
FIG. 16, lower Sheep butchery zones.

Table 11 Measurement of fowl bones (10th–11th century)

	Range	n	Mean	S.D.	C.V.
Humerus t.1.	63–66	3	64	1.4	2.2
Ulna t.1.	60–76	3	67	6.9	10.3
Femur t.1.	71–82	3	76	4.6	6.1
Tibiotarsus t.1.	97–127	3	114	12.6	11.1

Note
For explanation of abbreviations see Table 7.

Discussion of the animal bones

Bearing in mind the small size of the assemblage and lack of sieving, it is difficult to draw any conclusions about the site economy from these bones. In general, the proportions of species present and size of the animals are similar to other sites in the South-West during the medieval period (e.g. Ilchester, Levitan 1982; Taunton, Levitan 1984) and elsewhere in the country. The main souce of meat must have been beef, supplemented with mutton and lamb, and pig meat. Fowls and geese were also eaten, but would have played relatively minor roles in the diet. Wild birds (e.g. woodcock) may also have provided the occasional meal. Butchery markings on horse bones are more likely to represent knackering than food preparation. The dog radius with a cut-mark is more puzzling, for though dogs are sometimes eaten this is uncommon in the author's experience of sites of this period in Gloucestershire and Somerset. Other food animals included rabbit (*Oryctolagus cuniculus*) and deer. The high coefficients of variation in fowl bones may indicate sexual or breed differences.

FIG. 15 suggests that there was a steady increase of beef as a staple from the 10th to the 17th century, at the samc time accompanied by a fall in the use of sheep and pig meat. In the 18th century, however, this situation suffers a reversal with the relative proportions of cattle bones falling to below 10th-century levels, and sheep and pig increasing – in the latter case, to the highest levels for pig for the site. This may reflect changing fortunes and prosperities of the site, or simply sample biases. Such a pattern is puzzling if compared with the general background of cattle exploitation during the medieval and early modern periods (Armitage 1982). The quality of cattle husbandry suffered a great set-back during the 11th – 15th centuries and the size of cattle was smaller during this period than during any previous period since prehistoric times. Dwarfing of cattle during the medieval period was experienced throughout Britain and Europe and may have been related to the arable expansion of these times. Cattle improvement underwent a revolution during the later Tudor (16th century) and early modern (18th century) periods. This evidence is seemingly at odds with the evidence from Winchcombe, but since one of the main reasons for improvement of cattle in the 18th century was the huge expansion of the London market, it may be that most of the cattle were going there and the Winchcombe markets were impoverished as a result.

RADIOCARBON DATING by **A. Saville, D. Haddon-Reece, and A.J. Clark**

Three bone samples were submitted to the Isotope Measurements Laboratory at Harwell for age determination. Two of the samples were of human bone, from skeletons 1 (F1) and 4 (F17). The third sample was of cattle bone from an early medieval pit-fill (F34).

The determinations were as follows:

HAR no.	Context	Age bp	Age ad*	Calibrated** date range AD	
4352	F1	1530 ± 70	420	420–610	1 sigma
				350–650	2 sigma
4263	F17	1280 ± 90	670	650–870	1 sigma
				580–980	2 sigma
4262	F34	930 ± 80	1020	1000–1220	1 sigma
				980–1270	2 sigma

* age ad = 1950 – age bp
** calibrated on the Stuiver (1982) curve
The 1 and 2 sigma ranges represent 68% and 95% confidence limits respectively.

HAR–4262 provided an entirely acceptable confirmation of the late Saxon/early medieval date of pit-fill context F34 anticipated on ceramic grounds. The other two samples were from contexts with no independent dating evidence other than that they were stratigraphically early, that is pre-medieval, and potentially Romano-British. The dates these samples produced were individually acceptable, but were problematic in terms of their wide divergence, since archaeologically it was expected that the two burials being dated formed part of the same phase of cemetery activity. With the assistance of Miss A.J. Walker of Harwell the measurements on these two samples were repeated, therefore, in the hope that this divergence would he clarified. The replicate determinations are listed below together with the originals:

HAR no.	Context	Age bp	Age ad
4352	F1	1530 ± 70	420
5922	F1	1330 ± 80	620
4263	F17	1280 ± 90	670
5921	F17	1100 ± 70	850

Although these dates appear unacceptably different, it must be remembered that the error terms represent a confidence band in which the date might be expected to he found with 68% confidence. Comparing the results expressed with 95% confidence limits, i.e. 2 sigma, the dates in each pair are seen to overlap:

F1	HAR–4352	ad 280–560
	HAR–5922	ad 460–780
F17	HAR–4263	ad 490–850
	HAR–5921	ad 710–990.

It is possible to use the method described by Ward and Wilson (1978) to compare these results statistically, and then, if they show no evidence of a real difference, to combine them. The test assumes that the dates derive from the same chronological event, and that any apparent differences represent no more than random variation in determinations of that event. If the test fails, then this assumption has to be abandoned and a real difference accepted. Applying the test, it is found possible (Jill Walker, pers. comm.) to combine the dates within each pair, but not the pairs themselves, to produce the following weighted means:

Context	Weighted mean		Calibrated* date range AD
	Age bp	Age ad	
F1	1445 ± 55	505	560–650 1 sigma
			430–670 2 sigma
F17	1170 ± 55	780	770–980 1 sigma
			680–990 2 sigma

*Stuiver (1982) calibration

These two means still differ significantly, implying that burial F1 is most likely to belong to the mid-6th to mid-7th century AD, and burial F17 to the late 8th to 10th century AD. Thus burials could have been spread out at least from the 6th to 10th centuries.

DISCUSSION

The scatter of Roman pottery from North Street, together with previous hints of Roman activity within the town (Adlard 1939, 34; Davison 1964; RCHM 1976, 130; see also GADARG Record Card: Winchcombe 7), suggests that some kind of Romano-British settlement existed on the site of the later town during the 2nd – 4th centuries AD. To this evidence must be added the slight possibility of a sub-Roman cemetery, which would clearly be of importance with regard to the known correlations between such cemeteries and the key foci of Saxon and early medieval towns (cf. Heighway 1980, 61).

The absence of associated evidence for dating the North Street graves has been described

above. The lack of grave-goods, and the orientation of the graves towards the west, do not necessarily indicate a Christian burial rite (Rahtz 1978; Thomas 1981, 232–33), but they do make this a strong possibility. Taking account of all the attributes of these burials, of the early medieval use of the site for domestic activity, and assuming the graves to be part of a single cemetery, their most likely dating would be either late/sub-Roman or mid-late Saxon. This being so the divergence of the C–14 determinations is potentially confusing. The two dated burials (F1 and F17) would appear to be part of the same grave cluster, yet the dates obtained are significantly different: approximately mid–6th to mid–7th century AD (F1) and late 8th to 10th century (F17). These dates are, nevertheless, broadly consistent with the cemetery being associated with the Saxon settlement at Winchcombe, which was certainly well established by the earlier 8th century (Bassett 1977), and the assertion of the Anglo-Saxon Chronicle that the Mercians became Christians in 655 is brought to mind. The presence on-site of a mid-Saxon pin (FIG. 12 upper, 4) should also be noted. However, taken to extreme lower limits, the dating of F1 might suggest that the cemetery was originally late Roman or sub-Roman, and further clarification could perhaps be provided by radiocarbon dating of the remaining burial deposits and by fresh excavation in the vicinity . Even so, the existence of this early cemetery reinforces the utmost archaeological importance of Winchcombe, and must raise speculation about the proximity to this site of the ecclesiastical predecessor of the Benedictine abbey.

The bulk of the artefactual evidence from North Street testifies to the kind of domestic occupation to be expected within the centre of the early medieval town in the 10th – 12th centuries. There is also evidence for a similar kind of occupation later on in the late 16th – 18th centuries, reflecting the historically documented evidence for at least 29 tenants in North Street by 1550 (Donaldson 1978, 63–64). The lack of evidence for the intervening centuries need not be considered remarkable in view of the small size of the excavation site, and the temptation to equate this lacuna with the historically attested decline of the Abbey from the 13th century, and the suggested decay of the town by the 16th century (Aldred and Hannan 1981, 96) should be avoided pending further archaeological information.

The significance of the work in North Street is that it allows for the first time a glimpse of the archaeological potential of Winchcombe for urban studies. Despite the historical importance of the town as a Mercian centre, the archaeological attention it has received since the 19th-century work on the abbey has been minimal. The completely unplanned opportunity in 1977 to investigate an example of the infilling and extension process, which steadily has been removing the archaeological deposits remaining within the historic core-area, must serve as an indicator of what has been lost, and hopefully as a spur to what could be achieved in the future by archaeological work at Winchcombe.

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