

AN EXCAVATION AT HUNTER STREET, BUCKINGHAM. 1974

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with reports on the pottery by D.C. Mynard and the animal bones by D.J. Rackham

SUMMARY

Excavation within the putative area of the Saxon burgh failed to reveal evidence of pre-conquest occupation. A sequence of property boundaries, a 13th-century building, and post-medieval structures were investigated.

INTRODUCTION

When it was decided that the southern part of the promontary through which Hunter Street runs should house the nucleus of the University College of Buckingham, it became obvious that archaeological investigation should precede the proposed development. The site lies within the probable area of the Saxon burgh, founded by Edward the Elder in 914, and as no previous archaeological work had been carried out in Buckingham, it was felt imperative to determine whether traces of the layout of the burgh were present, and, if so, to assess whether their state of preservation warranted more comprehensive investigation. An irregularly shaped area (N.G.R. SP 694 335) was selected near the northern limit of the proposed development, where it was envisaged that evidence for the burgh was most likely to occur (fig.1), and a four week long excavation took place during April 1974, financed by the Department of the Environment, and administered through Buckinghamshire County Museum.

THE EXCAVATION

Whilst a bronze pin (fig.10, 12) and a small amount of pottery (p. 107) attest activity in the area during the later Saxon or Saxo-Norman period, the earliest dated feature encountered was a ditch 180 which was traced right across the site from east to west for a length of 21.7m. (fig.2). It averaged 90cm. in depth, varied in width from 60cm. at the west end to 1m. at the east, and had a steeply sloping profile. Its line approximates to that of the transition from a clay to a gravel subsoil encountered over the site, and both medieval and post-medieval occupation was only found to the south of it, on the gravel 53. After only a very small amount of material weathered from the sides had accumulated in the ditch's base, it had filled uniformly with a soil having a high cess content, 29, in which were quantities of bone, amongst which those of sheep were particularly numerous (infra p. 126), and pottery of late thirteenth-century date. A penny of Edward I minted in 1281, was also recovered.

At its west end the ditch had been widened by a cut 179 whose base rested on the slight build-up of weathered material, and into this cut had been set an unbonded but roughly coursed limestone rubble feature 178, (p. 104). This averaged three courses in depth (1m.) and 50cm. in width. Some of the facing stones at all levels bore a marked reddening, and the gravel at the lip of 179 was also miscoloured, perhaps by heat, but

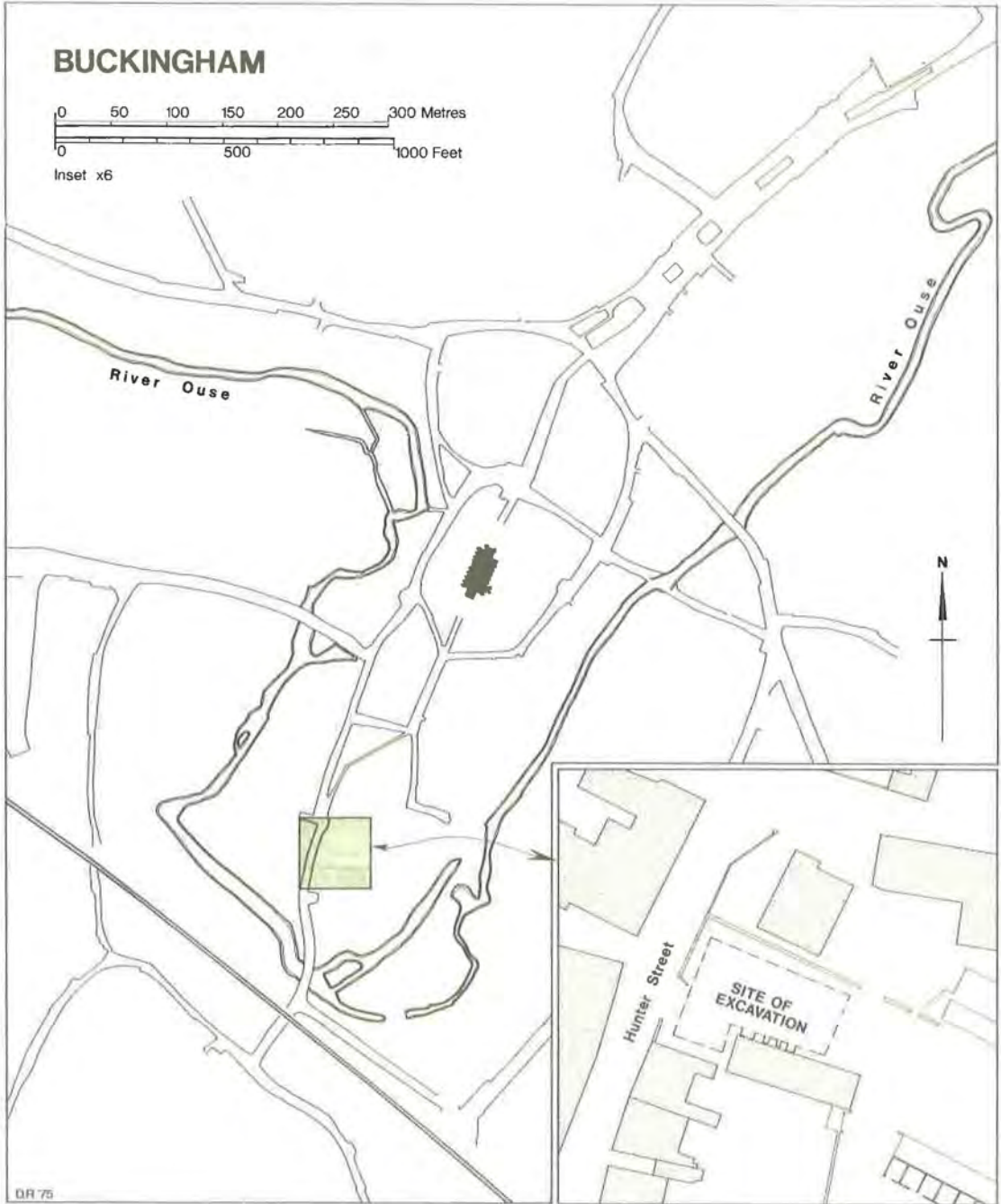


Fig.1. Site Location Plan.

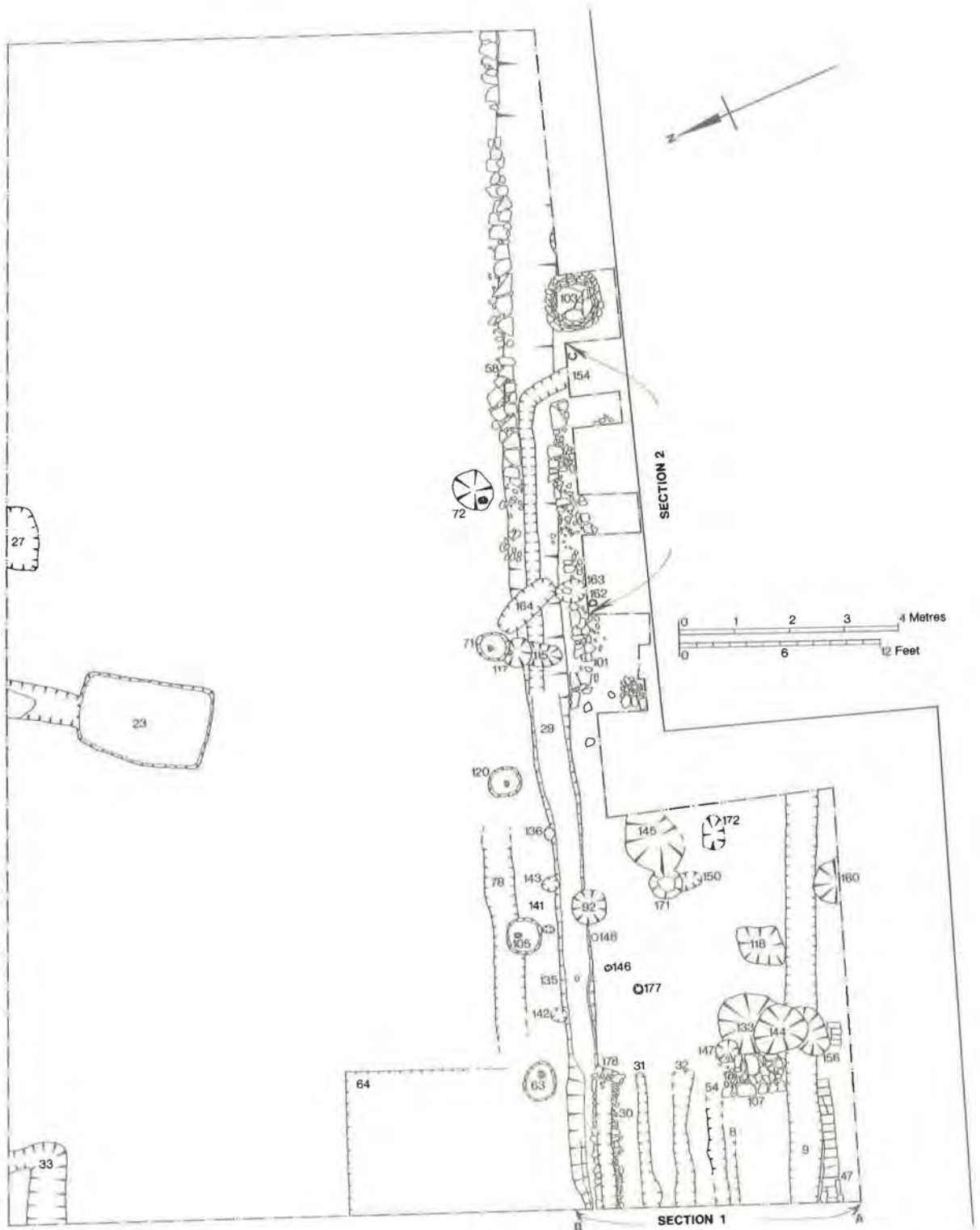
no charcoal or other evidence for burning was present. The upper surface of 178 was covered by approximately 20cm. of dirty clay, 131, some of which had penetrated the upper courses.

Into 131 was cut 30, a slightly irregular depression 9cm. deep and 28cm. wide, with vertical sides. It extended 2.1m. from the western edge of the excavation, and continued beyond that edge. Three further approximately similar depressions were observed, all running eastward from the excavation edge for up to 2.5m, varying in depth from 5-12cm. and in width from 22-30cm, and separated by 30-50cm. from each other. The southernmost, 54, was slightly impinged upon by 8, a trench containing a modern water pipe, but the others, 31 and 32, were undisturbed. From the base of 32, tightly wedged against its side, came a penny of Edward II minted c.1315-18. No comparable features were observed to the south of 8, but since this area was badly disturbed by modern activity this should not be regarded as conclusive evidence that such features never did exist here. 30, 31, 32 and 54 all directly underlay 14, a mixture of sand, clay, rubble and brick 20cm. thick, which formed the basal layer of materials dumped to provide a firm access to modern garages bounding the site. (fig.3).

No recognisable feature curtailing the extent of these features was found at their east end. but both the termination of the limestone rubble feature 178 at this point, and the occurrence of a number of medieval pits almost immediately beyond, mark a sharp dichotomy of function between the area of the depressions and that to the east. Only the bases of these pits were recovered, their upper levels and any medieval occupation layers having been cut away during a later clearance of material eastwards from a line approximating to the east ends of the depressions. Pottery from the various pits showed that the earliest dated to the second half of the thirteenth century, and material recovered from other pits recorded earlier in the excavation at a higher level demonstrated that the sequence continued intermittently into the seventeenth century.

Some time after the cut referred to above was made, a substantial post-hole 147, 36cm deep, was cut into 53 at the east end of the depressions, and was in turn sealed by part of a 1.2m. length of unbonded rubble, 107. This feature running north-north-west — south-south-east, was only one course deep, 80cm. wide, and had facing stones along its western edge. This edge had been cut through 106 into the natural gravel 53, but its eastern side lay in a post-medieval accumulation of dirty sandy clay 68, dated by the pottery it contained to the seventeenth century. 68 overlay the earliest material filling the cut, a layer of medium-sized rubble and tiles in a dirty clay matrix 95. Above 68 a later post-medieval layer 19 had apparently had its upper part shaved off during the clearance operation which preceded the erection of the garages bounding the site's south-eastern edge. Mixed layers of rubble, brick, and clinker infill were encountered in the upper 70cm. of this portion of the site.

The only other traces of occupation encountered were also found to the south of the tenement boundary ditch. After this feature had completely filled with the cessy material 29, and a layer of similar material 69 had accumulated above its lip to a height of 20cm, a gully 154 averaging 30cm. in width was cut through 69 and into 29 to a depth of 35cm. (fig.4). The lower part of this was tightly packed with rubble set in two horizontal courses 165, and above this the upper levels had been filled with a fine gravel 158. 154 ran east-west for 5.4m. before its east end curved smoothly southwards beyond the limits of the excavation. Parallel with 154, except at the curve, ran a line of large rubble blocks 58, which were traced for a distance of 8.4m. from the eastern



PM/DR '76

Fig. 2. Plan of Excavated Features.

boundary of the excavation, and lay in part above the northern edge of 180. This feature was not present in the western half of the excavated area, but a shallow trench 78 cut into natural clay may represent its robbed-out continuation here, although this would require 58 to deviate slightly from the line observed further east.

The western end of 154 did not return southwards, but ended abruptly. Within the return at the east end a line of rubble blocks 101, bonded with yellow clay, was observed at the southern limit of the excavation. The blocks had been placed in a trench cut through the lower part of 69. The northern edge of 101 was delimited by large slabs forming a regular edge, but the southern part was composed more haphazardly. At the eastern corner three further slabs were excavated below that initially exposed, bringing their total depth there to 35cm, but elsewhere 101 was only one course deep. A small extension trench cut along the line of a presumed southern return at the eastern end of 101 failed to produce any conclusive evidence for its existence, but a similar extension to the south of its western termination yielded part of what was presumably a return, similarly constructed with large rubble blocks forming a good outer edge.

Pottery from 165 and 69 demonstrated that this group of features should be dated to the seventeenth-eighteenth centuries; this dating also applies to a circular stone-lined and bottomed pit 103 excavated just to the east of 154. This pit was unbonded, cut into the ditch fill 29, and had at its uppermost surviving course an internal diameter of 50cm. It was carefully constructed as a helix, and narrowed slightly to an internal basal diameter of 33cm. at a depth of 50cm. The bottom 10cm. of its fill consisted of pure

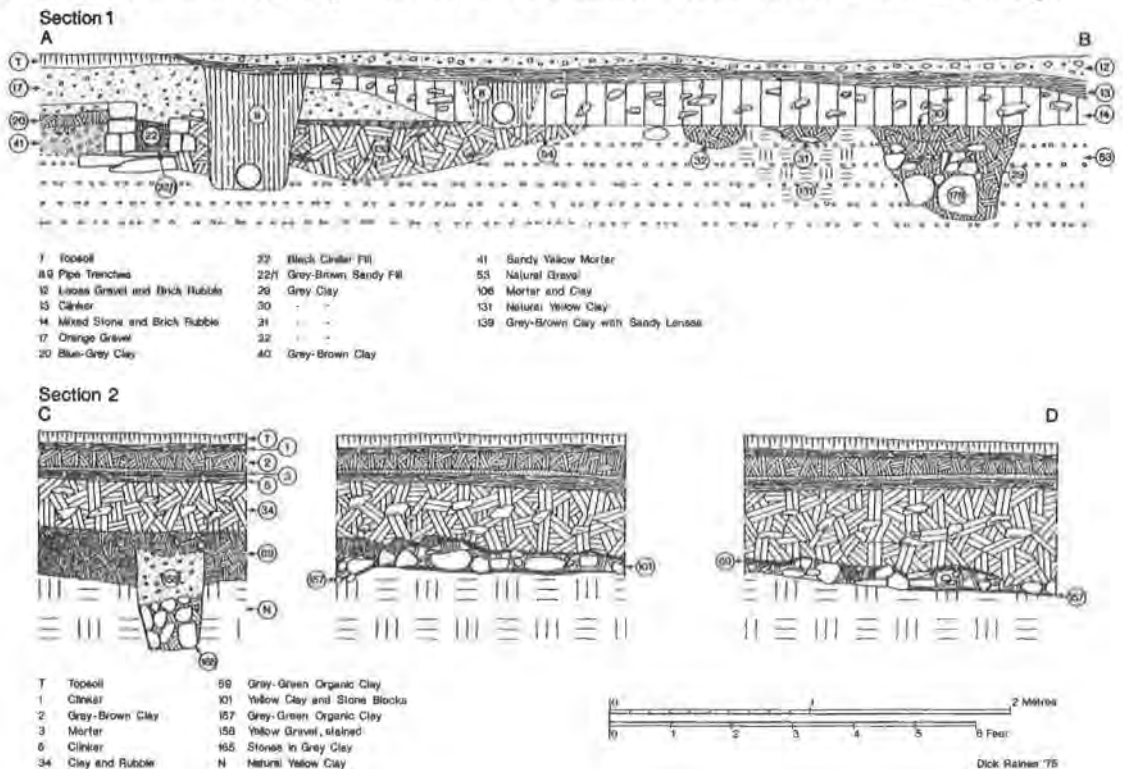


Fig.3--4. Sections 1 and 2 (see Fig.2)

compacted off-white mortar, above which after a further 10cm. of similar but looser mortar came a mixture of stones, tile and grey-green clay. The whole was sealed by the upper levels of 69, as had been the nearby features 158 and 101.

The only other features which call for comment on this part of the site are a series of small post-holes, approximately on the line of 180, including 142, 141, 143 and 136. Few of these contained any datable artifacts, but some, e.g. 142, are definitely post-medieval in date. Finally a series of larger post-pits, 63, 105, 120, 71, 117 and 72 contained the substantial vestiges of wooden posts along with pottery of seventeenth-century and later date.

Over the remainder of the site, to the north of 180, traces of modern occupation excavated in the form of a levelled house platform 64 on the street frontage, and all other features uncovered here proved to be also of modern origin.

DISCUSSION

The area excavated was apparently divided into two separate properties along a line suggested by a change in subsoil. This division, initially made in the second-half of the thirteenth century, was perpetuated by a series of boundaries of varying form. The earliest, 180, was a simple ditch seemingly without any bank or stockade. This filled up and was superseded by a stone wall 58, later largely removed, which in turn may have been replaced by a fence with posts in the holes 142, 141, 143 and 136, the boundary being continued further east by the structure represented by 101 and 154. The most recent boundary incorporated fairly massive posts set in the pits 63, 105, 120, 71/115 and 72.

To the north of this boundary the earliest occupation encountered was of nineteenth-century date, but the southern portion of the site yielded evidence for two major periods of activity in the vicinity, the late thirteenth and fourteenth century, and the mid-seventeenth century onwards, with only two pottery groups representing the intervening centuries. Unfortunately only a limited area of this tenement was available for examination, but nevertheless evidence for two structures was encountered.

The earlier is represented by features 30, 31, 32 and 54, which are interpreted as a series of trenches designed to take joists for the support of a timber floor, and 178 which, bearing in mind its position, cut into the site's boundary ditch, may have served as a foundation for the structure's north wall. The building was presumably on or near the medieval street line, and its frontage may be under the present pavement. Its northern end was delimited by the existence of the property boundary, while the evidence for its extent to the south was obliterated in the area available by more recent features, although it could possibly extend beyond the site's southern limit. No tangible evidence for the position of its east wall was recovered, but there is nothing to suggest that it was ever beyond the east end of the joist trenches, a proposition enhanced by the presence of the group of medieval pits 133, 144 and 156. It is the evidence of the animal bones alone (p. 125) which suggests that this building may have been part of a farm complex.

The other, post-medieval, building was recognised through the vestigial traces of its stone foundation, 101, and through the stone-packed gulley 154, interpreted as an eaves-drip. This seems most likely to have surrounded three sides of the building, leaving the western end unobstructed for access. Only the southern return of 154 at its eastern end showed the limit of the structure's extent in that direction, but a southern return

to the actual foundation was recovered at its western end. It was presumably a mainly timber construction, and had a relatively short life, its foundations being sealed by a further accumulation of the same deposit into which they were cut. Once more the only clue to the function of the building comes from a consideration of the animal bones found associated. These may be taken to indicate either that a farm still occupied the site, or that a non-farming family of some substance owned it.

THE POTTERY FROM HUNTER STREET, BUCKINGHAM

By D. C. Mynard

The pottery is of the following ware types:

- (a) St. Neot's Type 9th-12th century.
Wheel turned, fine, shelly ware with characteristic smooth 'soapy' surfaces ranging in colour from medium to dark grey with red undertones and a grey core.
- (b) Medieval Limestone Tempered Ware 12th-14th century.
Coarser shelly ware than above with a wider range of surface colour, generally more oxidised, with buff to pink-brown surfaces. This ware represents the end of the shelly tradition which here in North Bucks commences in the Iron Age and runs through to the 14th century. The tempering material is limestone grits. These wares have been previously discussed.¹
- (c) Miscellaneous Sandy Wares 12th-13th century.
These are wares not readily attributed to any known kiln source.
 - (a) Dark grey coarse sandy ware with a few white grits in the tempering.
 - (b) Finer sandy ware generally light grey in colour although sometimes red brown.
- (d) Brill/Oxford types 13th-15th century.
A series of fine sand-tempered vessels with characteristic fabric forms and decoration techniques attributed to the little-known kilns at Brill in Bucks.
The fabric ranges from offwhite to orange-buff with a light grey core. The glaze is generally of good quality, rich and shiny and is often a mottled green.
- (e) Late Medieval Sandy Ware 15th-16th century.
Fine buff-brown sandy ware sometimes with pink tones and grey core.
- (f) Tudor Green Late 15th-mid 16th century.
Fine white smooth fabric with rich apple-green glaze.
- (g) Cistercian Ware Late 15th-mid 16th century.
Dark red-brown hard-fired fabric with brown glaze either dull or shiny.
- (h) Unglazed Earthenware 17th and 18th century.
Red brown fine sandy fabric generally oxidised throughout but some sherds have a thin grey core.
- (i) Lead Glazed Earthenware 17th century.
The fabric is the same as 'h'. The glaze is clear but sometimes has green undertones. The most common form of vessel is the bowl with internal glaze.
- (j) Local Slipwares 17th century.
The fabric is the same as 'h' and 'i'. The slip decoration is applied to the vessel before glazing. The local production centres of this ware were Brill, Bucks and the Paulerspury,² Potterspury³ and Yardley Gobion⁴ kiln complex in Northants.

- (k) Imported Slipwares.
 - (a) German 17th century.
Light red-brown fabric with yellow slip decoration on which copper has been added giving green patches and tones.
 - (b) Dutch 17th century.
Red-brown fabric with shiny orange brown glaze and yellow slip decoration.
- (l) Yellow and Green Glazed Ware 17th century.
The fabric is a fine sand tempered white fabric which is clearly related to the "Surrey"⁵ and "Midlands Yellow"⁶ wares although it is most likely of local, perhaps Brill, manufacture.
- (m) Midlands Blackware Early 17th century onwards.
Red-brown hardfired with shiny black glaze. As with fabric 'j' the local version of this ware is made in Bucks (Brill) and Northants (Potterspurty and Paulerspurty).
- (n) Imported Stonewares 16th and 17th centuries.
- (o) English Delft 17th century.

CATALOGUE OF THE POTTERY.

The pottery from the site has been divided into four main groups:

- I Late Saxon - Early Medieval, which is residual and not apparently related to any of the excavated features.
- II 13th and 14th century, from the tenement boundary ditch and features associated with the medieval occupation of the site.
- III 15th-17th century, associated with later occupation of the site.
- IV 18th-20th century, associated with modern occupation and disturbances of the site. Pottery of this group is not published.

GROUP I – LATE SAXON - 9th-11th century.

Fabric (a) Fig.5, 1-5

Pottery of this ware was found in the following features; 29, 51, 110, 113, 119 and 145.

The largest amount came from 29 which produced four rims and eighteen wall sherds. From 31 came a rim and three wall sherds. The other features produced one sherd each.

Cooking Pots

1. Small pot, diam. 13.8cm. dark grey with smooth soapy surfaces. From 29, Cat.363.
2. Larger example, diam. 18cm. rim hollow internally, buff fabric. From 29, Cat.203.
3. Small pot, diam. 16cm. from 51. Cat.367.

Bowls

4. Part of inturned rim, diam. circa 24cm. From 29, Cat.437.
5. Flat topped rim overhanging both internally and externally, diam. 24cm. purple-buff colour with smooth surfaces. From 29, Cat.363.

None of these forms need be pre-conquest in date. At Bradwell⁷ in Milton Keynes, an earthwork called "The Bury" produced similar forms in mainly post-conquest deposits.

GROUP II – MEDIEVAL, Mainly 13th and 14th century.

Fabric (b) Fig.5, 6-8

Pottery of this type was found in the following contexts: 29, three base and two wall sherds; 51, three rims and four wall sherds; 106, one wall sherd; 110, two wall sherds; 119, two wall and two base sherds; 133/144 three wall sherds; 150, 1 wall sherd; 158, one rim and one wall sherd; 160, two wall sherds; and 165, one small sherd perhaps from a base.

Cooking Pots

6. Sharply everted rim, diam. 20cm. dark red-brown blackened externally. From 51, Cat.389. The form was common during the 12th century at Bradwell Bury and at the Gorefields Grange, Stoke Goldington.⁸
7. Heavy rim with slight internal rebate, dia. 28cm., pink-buff with grey core. From 51, Cat.367. 12th-13th century.

Bowl

8. Large bowl with simple thickened rim, dia. 44cm. From 51, Cat.367. 12th-early 13th century.

Fabric (c) (i) Fig.5, 9-12

Sherds of this ware came from 29, two rims; 51, one wall sherd; 110, one wall sherd; 116, one rim; 144, one rim and two wall sherds; 162, one wall sherd.

Cooking Pots

9. Small pot with simple everted rim flattened externally and with slight internal hollow, diam. 18cm. From 29, Cat.363. This form is current during the 12th century and perhaps into the 13th.
10. Squared and undercut rim slightly hollow on top, diam. 18cm. From 144, Cat.387. At Thornton,⁹ Bucks. this rim type was found in deposits of the late 13th and 14th centuries.

Bowls

11. Small bowl with rounded rim slightly thickened and overhanging internally and undercut externally by a shallow groove which creates a slight shoulder, diam. 28cm. Very dark almost black surfaces and very hard fired. From 116, Cat.221. This is a developed rim form and may date from the mid 13th century.
12. Larger bowl with simple thickened rim, diam. 36cm. Sandy with some shell inclusions. From 29, Cat.203. Mid 12th-mid 13th century.

Fabric (c) (ii) Fig.5, 13-16

Sherds were found in the following provenances:

- 29 – twelve wall sherds.
- 51 – three rims and six wall sherds.
- 119 – a jug handle and nine wall sherds.
- 133/144 – thirteen wall sherds.
- 149 – three wall sherds.

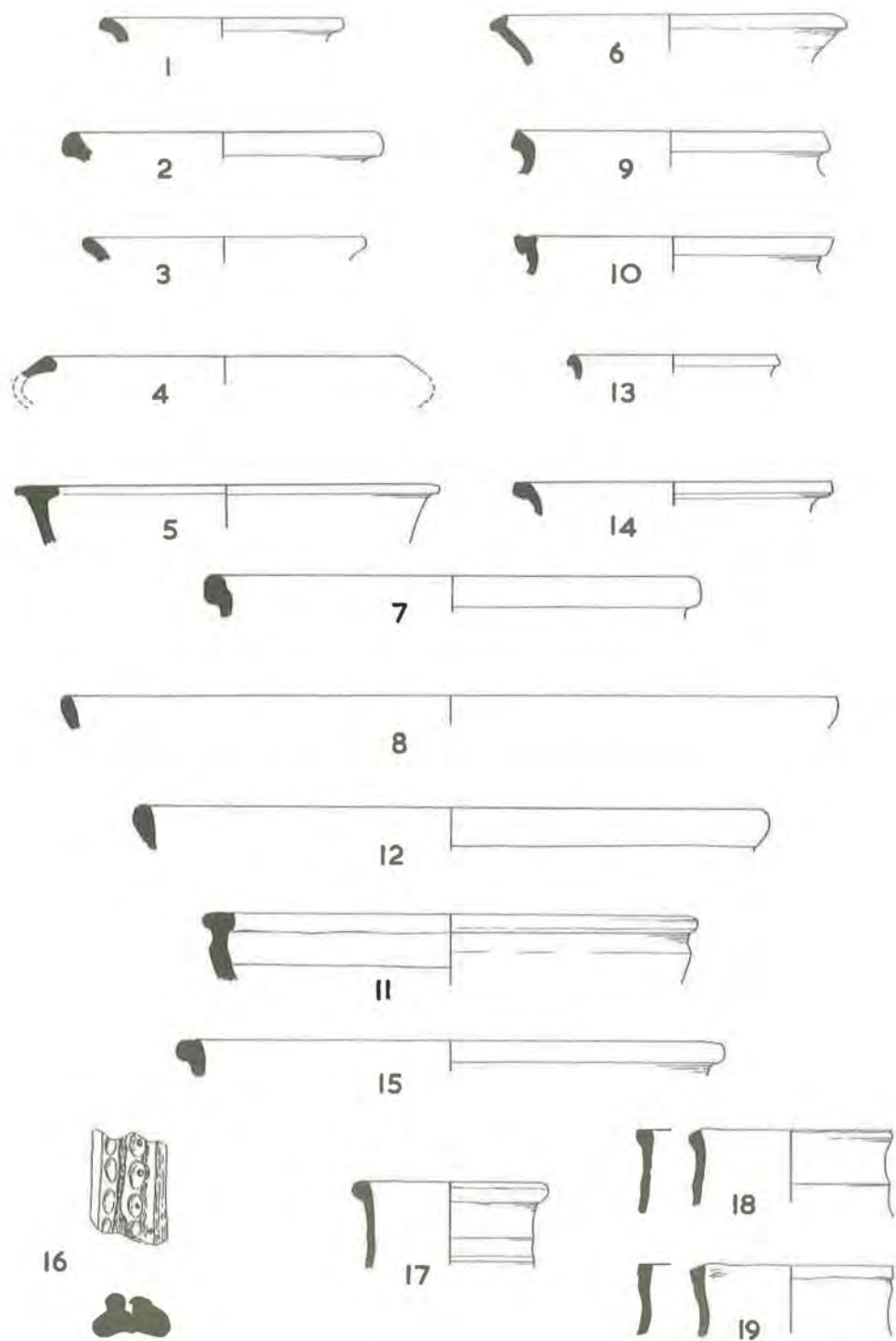


Fig 5. Pottery Scale (¼)

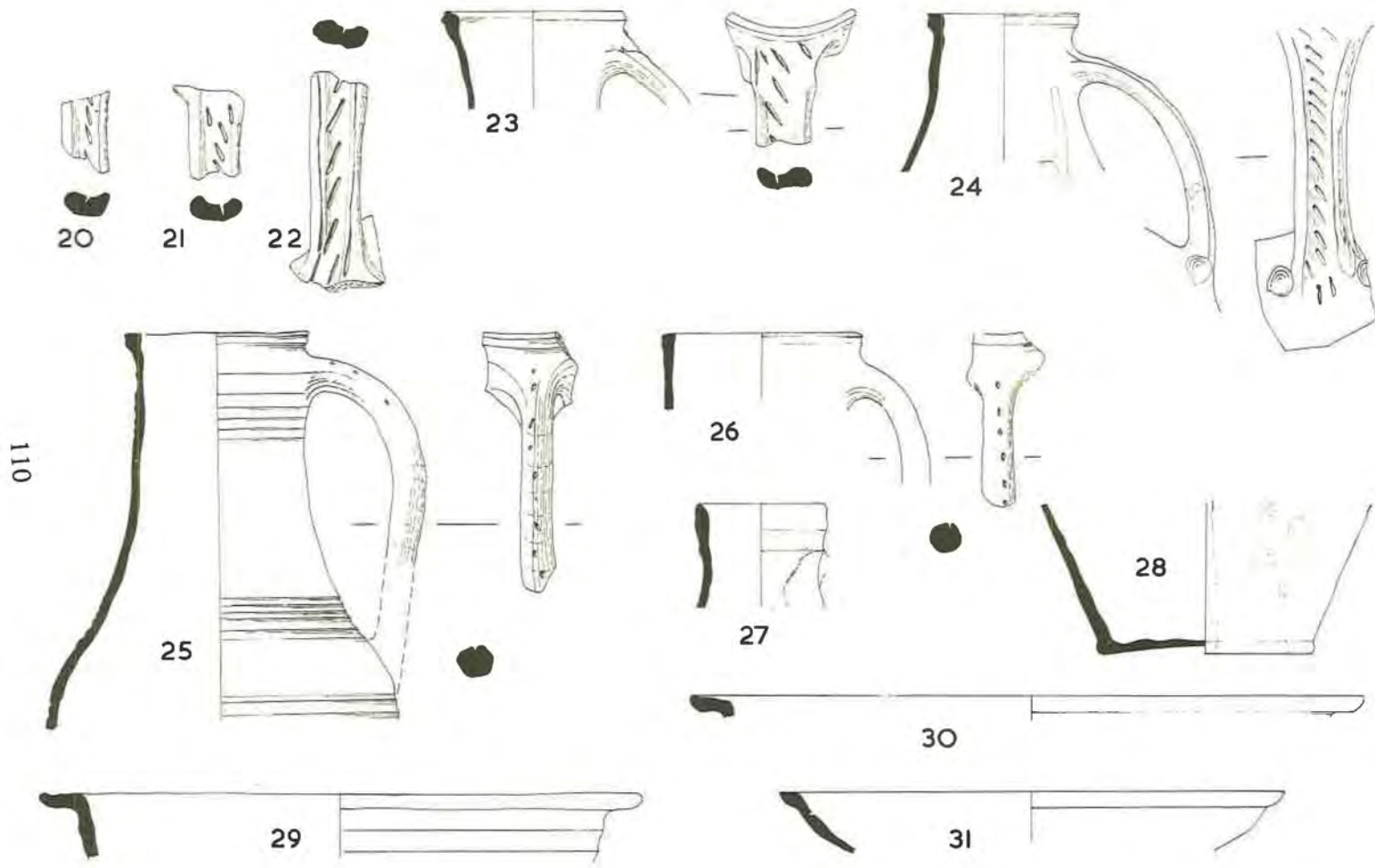


Fig 6. Pottery Scale (¼)

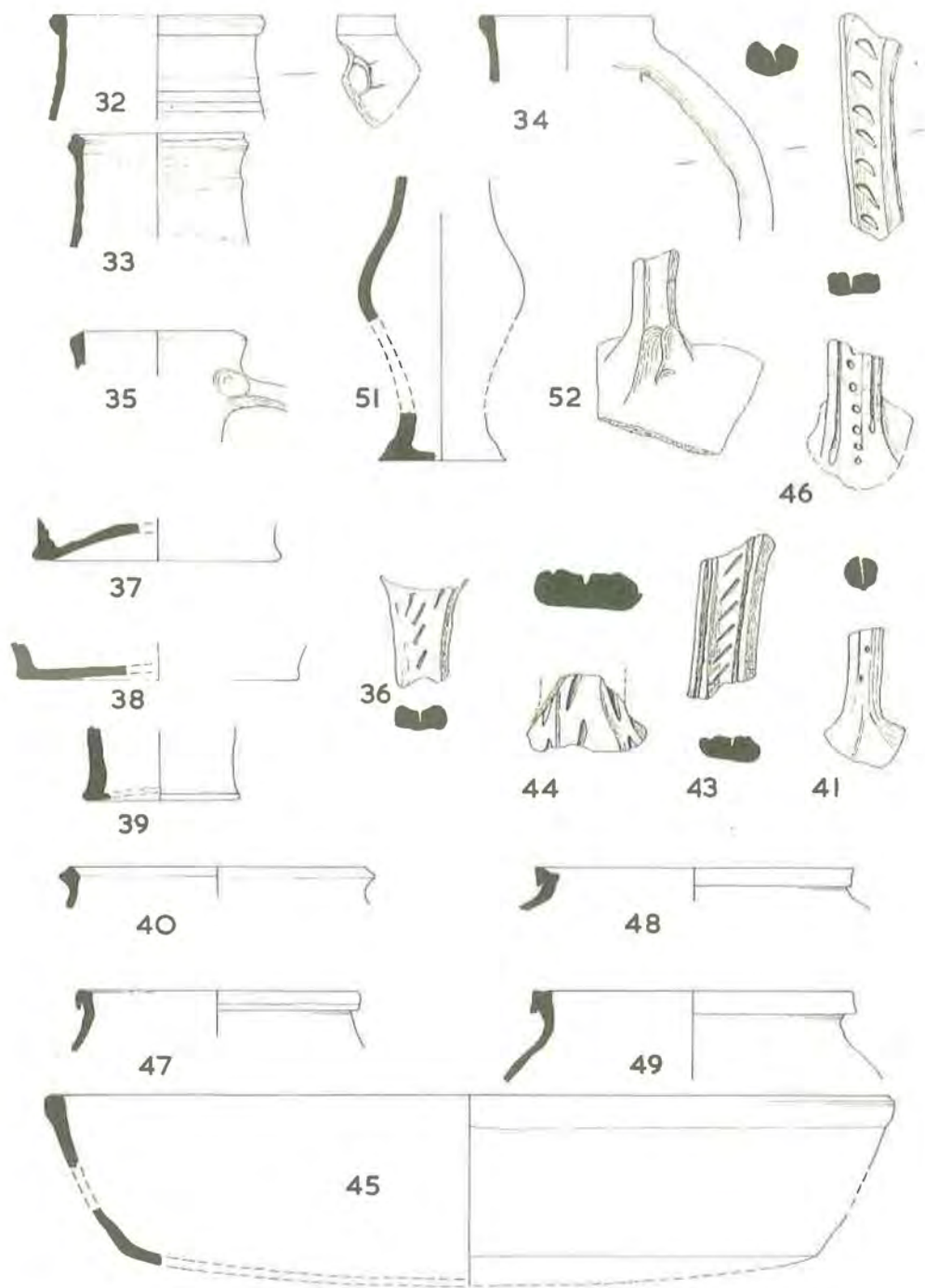


Fig 7. Pottery Scale (¼)

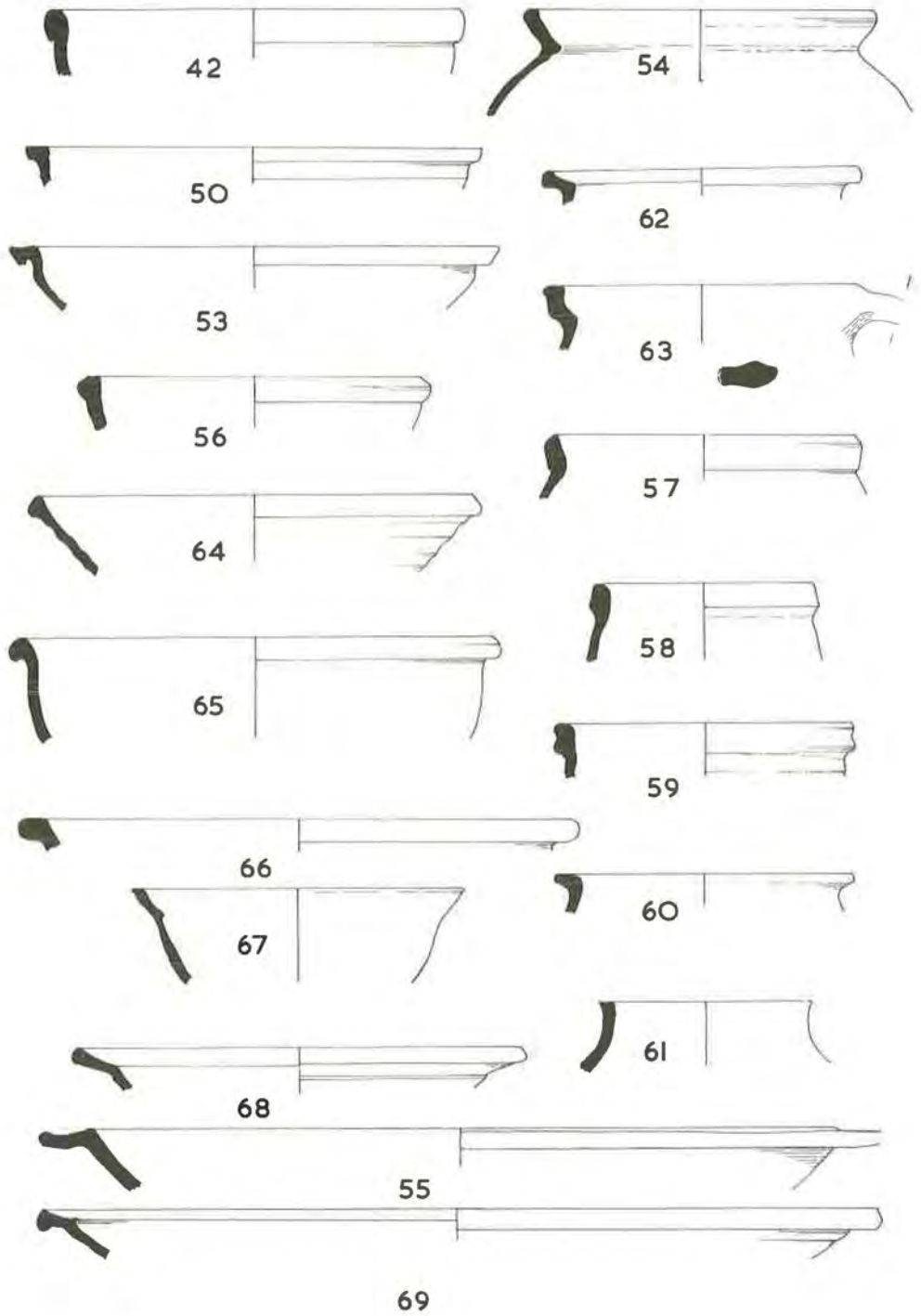


Fig 8. Pottery Scale (¼)

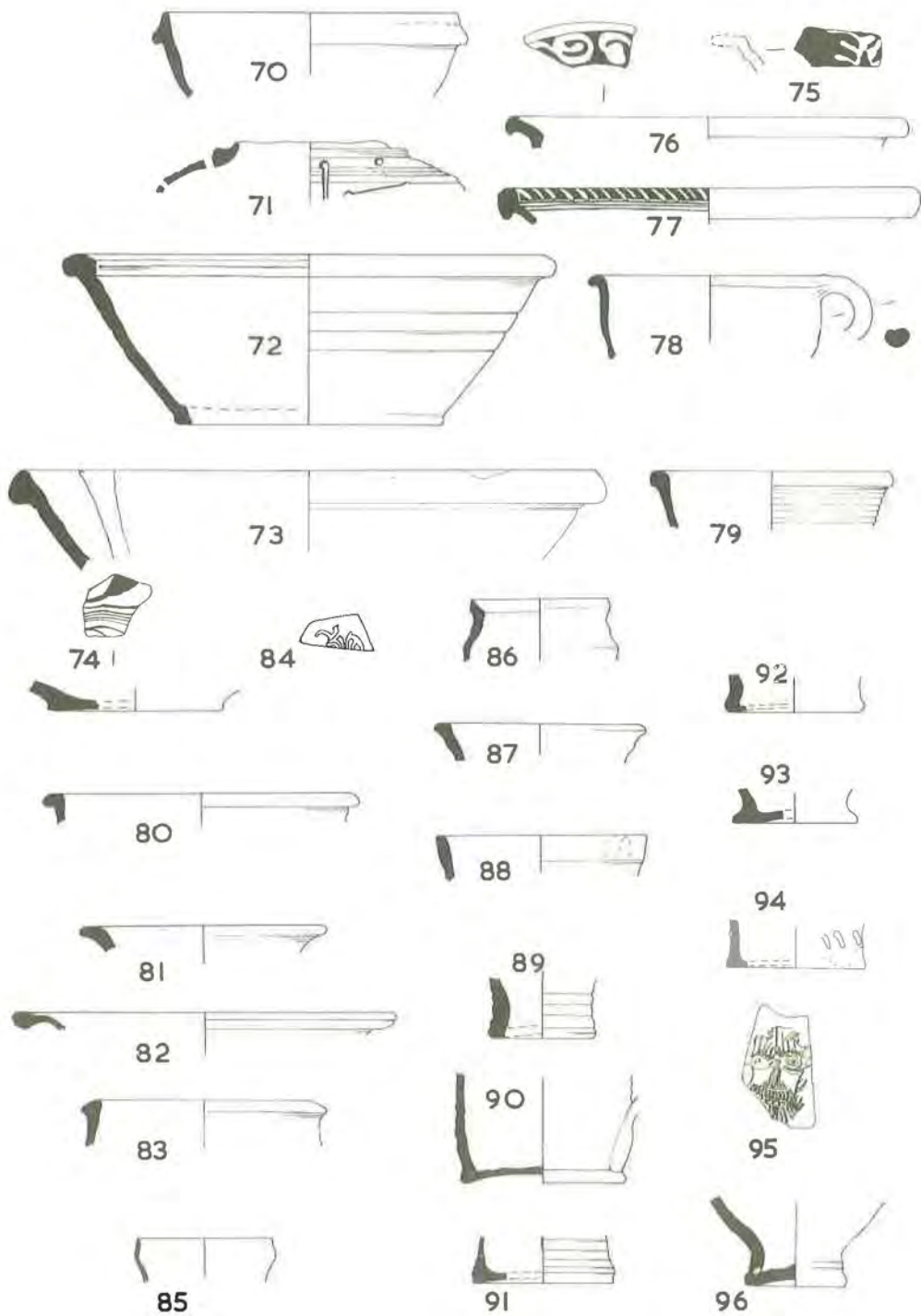


Fig 9. Pottery Scale (¼)

Cooking Pots

13. Small pot with thin walls in fine grey sandy ware, simple thickened rim 12cm. From 51, Cat.197.
14. Thickened everted rim squared on top and outer edge. diam. 18cm. From 51, Cat.389.

Bowl

15. Heavy flanged rim, diam. 46cm. From 51, Cat.367.

Jug

16. Strap handle with central groove and a line of thumb impressions down either side. Red brown fabric with thick grey core. From 119, Cat.355. The decoration is not common at either Brill or Potterspur. This handle may therefore be a non-local product.

Fabric (d) Brill/Oxford type

29 and 51 contained large groups of this ware. From 29 Fig.5, 17-19; Fig.6, 20-31.

Jugs.

17. Bead rim, diam. 11.2cm. fine orange buff with almost clear glaze with green speckles. Cat.437.
18. Rim with smaller bead, and traces of simple pulled-out lip, diam.11.5cm. Fabric and glaze as above. Cat.363.
19. Similar rim but with more flattened bead, and pulled-out lip, diam. 11.5cm. Fabric more pink than 17 and 18. Cat.363.
20. Slashed strap handle, fabric as 17 and 18. Cat.363.
21. Lower part of similar handle. Fabric and provenance etc. as above.
22. Large part of stabbed and slashed strap handle, the vertical grooves running down on either side of the slashes are characteristic of Brill products. Pink surfaces and good quality shiny green glaze. Cat.363.
23. Rim and upper part of slashed strap handle, rim diam. 11cm. The fabric is coarser than usual, it is pink buff with a grey core and has some small white (stone) inclusions. This may not be a Brill product. Cat.363.
24. Upper part of jug with neatly finished 'squared' bead rim, diam. 9cm, and slashed strap handle which has a single finger impression at either side of its lower junction with the body. On the body is an applied vertical strip of red brown clay; the glaze is a dark olive green. Cat.363.
25. Upper part of jug with rod handle, rim diam. 11cm., squared and neatly finished. The neck and upper body is decorated by fine rilling. The rod handle is stabbed. Creamy grey fabric with grey brown surface and olive green glaze with brown speckles. Cat.203 and 204, 431.
26. Part of rim diam. 11.5cm. and handle of similar type and fabric as 25. Cat.423.
27. Rim of small jug diam. 8cm. The fabric is a hard fired, with a brown internal surface, grey core and grey surfaces externally. This may not be a Brill product. Cat.363.
28. Base of jug. diam. 12.8cm. Pink buff with a trail of thick green glaze running down the body. Cat.363.

Bowls

29. Bowl with wide slightly upturned flange, diam. 36cm. Grey reduced fabric. Cat.437.
 30. Bowl with similar but smaller flange, diam. 40cm. Buff grey fabric. Cat.437.
- These two bowls are similar to examples 25 and 27 from a 14th century group at Thornton.¹⁰
31. Smaller vessel with neat pointed flange, diam. 29.5cm. Pink buff in colour with some white inclusions, traces of thin olive green glaze internally. Cat.363.

From 51. Fig.7, 32-40.

Jugs

32. Jug rim diam. 12.1cm. with handle scar. Creamy buff fabric with clear shiny glaze with occasional green speckles. There is a thumb press at the side of the handle scar. Cat.389.
 33. Unusual rim almost trefoil shape in section with pulled-up bead around the top edge and fine rilling on the neck. Diam. 10.1cm. pink sandy fabric with a splash of glaze on the neck. Cat.389.
- This 'trefoil' shaped rim occurred at Stantonbury¹¹ and is also published in my paper on Pottersbury Products.¹² It also occurs on Cooking Pot No.49 below.
34. Jug rim diam.9.8cm. and part of slashed strap handle. Dull orange brown fine sandy fabric with small white grits. Splashes of olive green glaze. Cat.367 and 389.
 35. Simple jug rim diam. 9.8cm. with upper part of strap handle with a thumb press at either side of the junction of the handle and body. Cat.367.
 36. Slashed strap handle, creamy buff in colour. Cat.367.
 37. Jug base diam. 14cm. pink buff sandy with grey core. There are traces of olive green glaze externally. Cat.367.
 38. Jug base, diam. 16cm. fabric and glaze as 37. Cat.367.
 39. Base of jug or bottle, diam. 9cm. The fabric is grey brown with a grey core. Cat.367.

All of the strap handles and the slashing and stabbing treatment is paralleled at Thornton. The rod handle 34 is less common but not a rarity.

Cooking Pot.

40. Rim of 'trefoil' type, see No.33 above. Offwhite with a grey core, diam.18cm. Cat.367.

Also a sherd from a Fish Dish, Cat.367.

In the absence of dateable Cooking Pot rims these two groups, from 29 and 51, cannot be dated any more precisely than to the late 13th-mid 14th century, the bowl rims suggesting the latter end of that period. Which is, perhaps, confirmed by the coin evidence. A silver penny of c.1281 was found in 29, its condition suggested that it was lost c.1310-40.

From Miscellaneous Features Fig.7, 41, 43-52. Fig.8, 42, 50 and 53.

41. Jug handle of rod type with a line of stab marks running down it. Pink-buff with mottled green glaze. From 153, Cat.348.
42. Bowl rim, dia. 24cm. Buff sandy fabric with grey core. The top of the vessel has been turned over and down to form the rim, which was then smoothed over to form a flat bead. From 119, Cat.355.

Also in 119 were nineteen wall sherds from jugs.

From 145

In addition to the three illustrated rims there were 250 grammes of wall sherds.

Jugs

43. Strap handle with oblique slashes and vertical groove down either side. Cat.378.
44. Lower part of similar handle, buff sandy. Cat.378.

Bowl

45. Large bowl with simple thickened rim, diam. 40cm. Cat.378. Late 12th-mid 13th century.

From 133/144

Jugs

46. Lower part of stabbed and slashed strap handle, pink-buff with mottled green glaze. Cat.422.

Cooking Pots

47. Small pot with roughly squared undercut rim, dia. 16cm. Offwhite with grey core. Cat.422.
48. Larger pot with similar rim, diam. 18.0cm. Buff-pink with grey core. Cat.422.
49. Similar rim but with a definite neck, diam. 18.4cm. Offwhite with grey core. Cat.387. (Pit 144).

Bowl

50. Bowl with flanged rim dia. 26cm. Pink-buff. Cat.372. (Pit 133).

The Cooking pots are of late 13th to mid 14th century date.¹³ The bowl from 133 is of late 13th century date and clearly illustrates the relationship of these two pits; 144 must have been cut into the fill of 133.

From 165.

51. Sherds of a bottle or jug, red-brown sandy fabric similar to excavated examples of late 14th century date from Olney Hyde,¹⁴ Bucks. Cat.407 and 409.
Also 1 Glazed sherd.

From 103

52. Lower part of plain strap handle with thumb presses at the base. Hard red-brown fabric lighter in section, grey surface internally. Also two other wall sherds. Cat.261.

Other features produce a few sherds of Fabric D. as follows:

- 38 – two sherds
- 106 – one sherd
- 108 – one sherd
- 110 – eleven sherds
- 158 – one base sherd with internal glaze
- 156 – fourteen sherds

- 166 – one sherd
- 167 – three sherds
- 172 – one sherd
- 178 – three sherds

GROUP III – 15th-17th centuries

Two pits, 171 and 92, are of 15th or 16th century date; 171 contained sherds of Brill ware (Fabric D) and one of Cistercian ware (Fabric G) must be of late 15th century date. 92 contained eight sherds of Brill ware (Fabric D) including the Bowl No.53, three sherds of Fabric E, hard pink-buff sand-tempered fabric with a darkened exterior surface, probably from a Pipkin. There was also a sherd of Tudor Green, (Fabric F), a sherd yellow glazed ware (Fabric L), two sherds of Cistercian ware (Fabric G) and two sherds of a Brown glazed earthenware (Fabric I). The wider variety of wares in this pit suggest a mid to late 16th century date.

53. Bowl with undercut flanged rim diam. 28cm. Buff-pink with grey core blackened externally. This may be a residual fourteenth century sherd. Cat.165.

138 A Post-hole containing seven tiny sherds of two Cistercian ware vessels. Cat.349, and must be of 15th-16th century date.

Many of the Post Medieval features contained residual medieval and late medieval sherds. The dating evidence provided by coins is of little significance since 68 which contained two 16th century coins and the pipkin (fig.8, 54) was above 95 which was of 17th century date, and which sealed the pit 118 which was clearly of 17th century date. Therefore, the 16th century material in 68 is all redeposited.

54. Pipkin with hollow rim, diam. 20cm. Buff-brown sandy ware with grey core (Fabric E). From 68, Cat.225.

95 This contained residual sherds of the Cistercian Ware Cup (fig.9, 85). More Cistercian ware came from 79, Cat.157, which also contained medieval sherds.

Sherds of a Rhenish Frechen Jug of mid-16th century date came from 91 which was of 17th century date. 69 produced sherds of Cistercian ware and 17th century brown-glazed Staffordshire ware. Cat.198.

Fabric (g) – Cistercian Ware, Fig.9, 85.

85. Several sherds of a small cup, probably of type 4¹⁵ diam. 7.5cm. Dark red-brown fabric. From 95, Cat.245.

Although many of the 17th century features sealed or were in turn cut by other features, the pottery seems to be all of mid 17th century date.

91 and 95 were sealed by 52 which in turn was under 19. 118 was under 95, which was under 68, which was below 82, but as there was no variance in the forms the whole assemblage can be treated as one large group.

Therefore the pottery from 19, 51, 52, 65, 68, 69, 77, 82, 90, 91, 95, 96, 105, 118, 142, 161, 162 and 166 has been combined for the purpose of this report.

Fabric (h) – Unglazed Earthenware, Fig.8, 55 and 56.

Bowls

55. Large flanged bowl, diam. 48cm. From 19, Cat.325.

56. Small bowl with bead rim, diam. 20.2cm. Lighter red than usual with thin grey core. From 68, Cat.225.

Neither of these rims are paralleled amongst the large series from the two local 17th century kiln sites, Paulerspury¹⁶ or Potterspury.¹⁷

Fabric (i) – Lead Glazed Earthenware Fig.8, 57-69, Fig.9, 70 and 71.

Many of the illustrated forms are paralleled at Paulerspury and Potterspury, in which case the references are quoted to avoid multiplicity of footnotes.

57. Simple rim, diam. 18cm. green glaze externally. From 68, Cat.222. cf Paulerspury Fig.3, 55 and 57.
58. Similar rim, diam. 13cm. reduced purple brown surface with dark shiny purple-brown glaze internally. From 19, Cat.325.
59. Similar rim but with groove externally. Diam. 17cm. Fabric and glaze similar to 59 but glaze on outside only. From 118, Cat.235.
60. Simple out-turned flange rim, diam. 17cm. Clear-brown internal glaze. From 95, Cat.245. cf Paulerspury Fig.2, 40.
61. Unusual rim, knife cut top edge, diam. 12cm. Pink-brown fabric with thin internal glaze. From 68, Cat.225.
62. Out-turned flanged rim with internal hollow for lid, diam. 18cm. Fabric as 58. Glazed? From 19, Cat.325.
The rim form is common on both bowls and pots at both Paulerspury and Potterspury.
63. Rim with internal hollow, diam. 18cm. and upper part of strap handle. Splashes of clear glaze externally. From 91, Cat.145. cf Potterspury, Fig.28, 1-3.

Bowls

64. Thickened bead rim with rilling on body. Orange brown with thick grey core and splashes of glaze internally. Diam. 26cm. From 95, Cat.268. Possibly a 16th rather than 17th century bowl.
65. Simple rim formed by turning over the top edge of the bowl, diam. 28cm. rich shiny internal glaze. From 118, Cat.235.
Although drawn as a bowl this may be a lid. The rim form being similar to examples from Basing House, Hampshire.¹⁸
66. Heavy flange rim, diam. 32cm. Clear internal glaze. From 19, Cat.325. cf Potterspury, Fig.2, 31 and 32.
67. Small bowl with steep sides, diam. 19cm. Very fine finish and rich shiny internal glaze. From 142, Cat.345. Unusual form related to Paulerspury, Fig.3, 64 and 65. Potterspury, Fig.30, 8.
68. Flanged bowl, diam. 26cm. From 19, Cat.325.
69. Larger example, diam. 48cm. From 68, Cat.225.
The rim form of 68 and 69 is of common type, see note re 62 above.
70. Small bowl with external bead below rim, diam. 18cm. From 68, Cat.225.

Fuming Pot.

71. Upper part of fuming pot with perforations in the form of holes and slots. Rim diam. 8cm. Shiny brown glaze both internally and externally. From 52, Cat.248 and 314.
The example from Potterspury, Fig.30, 17 is pierced by holes only.

Fabric (j) – Local Slipware Fig.9, 72-76.

72. Bowl, diam. 28cm. yellow slip internally with green (copper) speckles under a clear lead glaze. From 68, Cat.225.
Other wall sherds of similar internal yellow slipped vessels from 19 and 105, Cat.325 and 209.
73. Bowl, diam. 34cm. with internal green-brown glaze and vertical lines of yellow slip running down internally to the base where they are mixed together by tilting the bowl in various directions. From 68, Cat.435. This type of decoration is common at Brill¹⁹ and Potterspurty.²⁰
74. Base of bowl showing type of decoration described above. From 19, Cat.325.
75. Rim of bowl, from 68, Cat.225. The slip decoration is in the form of a fir tree, and was found at Paulerspury, Fig.1, 2.
76. Rim of bowl, diam. 23cm., from 95, Cat.245. The decoration is common at Potterspurty, Fig.27, 1,2 and 4.

Fabric (k) – Imported Slipwares Fig.9, 77.

77. (a) German (Wanfried-an-der-Werra, near Bremen).²¹
Rim of bowl with horizontal lines of slip under the rim internally and vertical lines up and over the rim. Diam. 24cm. From 95, Cat.245.
Also part of the base of a bowl with typical yellow and green slip decoration. From 65, Cat.83.
- (b) Dutch. A small sherd from 8, Cat.31., and two sherds which are probably of this ware from 68.

Fabric (l) – Yellow and Green glazed White Ware Fig.9, 78-84.

78. Small handled pot, most probably a cup, diam. 14cm. Shiny yellow glaze internally with occasional splashes externally, simple rod handle. From 95, Cat.245.
79. Small bowl with rilling on body externally, glaze as on 78. The body is darkened by burning externally. From 68, Cat.225.
Rilling on the body is common on the yellow glazed Surrey wares.²²
80. Rim, diam. 18cm. Yellow green internal glaze. From 19, Cat.325.
81. Rim of jar, diam. 14cm. Green glaze internally. From 19, Cat.325.
82. Rim of bowl, similar form to Surrey products.²³ Glaze and provenance as above.
83. Rim of jar, diam. 13.7cm. Dark green glaze internally. From 68, Cat.225.
84. Sherd from a green glazed base with part of an incised or stamped decoration. Provenance as above.

There were also several other small sherds including one which may have come from a Tudor Green Lobed Cup.

Fabric (m) – Midlands Blackware Fig.9, 86-94.

86. Rim of cup, diam. 8cm. From 91, Cat.325.
87. Rim of Jar, diam. 12cm. From 95, Cat.245.
88. Similar rim, diam. 12cm. From 96, Cat.276.
89. Base of cup, diam. 6.2cm. From 68, Cat.314. cf Paulerspury, Fi3, 81.
90. Base of handled drinking vessel, diam. 9.5cm. From 91, Cat.134.
There are remains of one handle but there may have been more. The form is like the drinking vessels from Potterspurty, Fig.28, 6 and 7.

91. Base of cup, diam. 8cm. From 68, Cat.225.
92. Base of cup, diam. 8cm. From 19, Cat.325.
93. Another base, diam. 7.2cm. From 68, Cat.225. The projecting base is characteristic of the Northamptonshire products.
94. Base of cup with yellow slip decoration, diam. 8cm. From 68, Cat.106.

Fabric (n) – Imported Stoneware Fig.9, 95-96.

95. Face mask from Rhenish Bellamine jug. From 68, Cat.225.
96. Base of Frechen Jug of mid 16th Century date.²⁴ From 91, Cat.145.

Fabric (o) – Delft

Two sherds of English delft were found, neither were large enough for illustration. One from 91, Cat.145, was a sherd of a bowl with yellow and blue decoration. The other from 68, Cat.106 was from a jug with mottled manganese glaze.

SMALL FINDS

THE COINS by Miss M.M. Archibald.

- (a) Penny, Edward I, Fox class IIIg, London mint, 1281. Obverse, late S; reverse, early S. Weight 1.24gm (19.1gr). Unclipped, but has seen considerable circulation: its condition suggests a date of deposit in the period 1310-40, although earlier or later dates cannot be ruled out. Cat.374. From 29.
- (b) Penny, Edward II, Fox class XIII, Canterbury mint, c.1315-18. Weight 1.22gm. (18.8gr). Apparently unclipped, and slightly less worn than (a). A possible bracket for its loss would be 1330-50, with the proviso as above. Cat.112. From 32.
- (c) Penny, Edward VI in the name of Henry VIII, Base Coinage 1547-51, Whilton group C; no initial mark; lozenge stops; forked cross-ends. Canterbury mint. Weight (very corroded and chipped) 0.41gm (6.3gr). This coin is so corroded that it is very difficult to form an opinion of its condition at deposition. There is little evidence about the currency pattern of these late pence, but it is likely that these base pennies had a fairly short life in circulation, and although a late survival cannot be ruled out, a bracket of c.1547-65 may be suggested. Cat.86. From 86.

JETTON by S.E. Rigold.

Nuremburg jetton, with garbled Lombardic legends, and 'normal' types (Reichsapfel in trilobe/3 crowns and 3 lys) in their tired form, with annulet terminals to the crowns, pellets as spandrels, and rather small orb. This type is virtually the last of the 'early' or 'early-middle' Nuremburg jettons, just before makers' names appear c.1550. Jettons in general remain common in England to c.1615 and then seem to stop rather suddenly: the later ones are of different fabric but the 'normal' types persist: However this one would be old if in circulation till then, and shows little wear. Cat.87. From 68.

BUILDING REMAINS.

Tile fragments were found in small quantities in many medieval and post-medieval features. In addition the following should be noted –

- (a) A fragmentary roof-tile, 1.8cm thick, of fossiliferous limestone, a type which may occur locally (identified by J. Royston). From the thirteenth-fourteenth century ditch 29. Cat.339.
- (b) A fragment of shell-tempered tile, 1.9 x 7.2 x 6cm, also found in 29. Cat.399.
- (c) Fragment of brick 4.7 x 11 x 8.7cm, from 69, a late seventeenth-eighteenth century context. Cat.392.
- (d) Fragments of green glazed ridge tiles with knife cut "cockscomb" were found in 51, 119 and 336.

CLAY PIPES. (fig.10)

- 1. Bowl, with circular base. Cat.162. From 68, a context of mid-seventeenth century date.
- 2. Bowl, with heart-shaped heel, and maker's mark AC (or AG?) in relief in a heart-shaped frame. Cat.162. As above.
- 3. Bowl. Cat.316. From 19, a context of seventeenth-eighteenth century date.

VESSEL GLASS by R.J. Charleston. (fig.10)

- 4. Rim fragment from a cylindrical vessel, decorated with stripes and cable of opaque-white lattimo glass. It is extremely unlikely to be earlier than the second quarter of the sixteenth century, and could well be later. Most probably made in Venice, or conceivably the Low Countries, although it is not impossible that it is English. From 95. Cat.352.
- 5. Frilled foot so badly weathered that it is impossible to decide whether it was originally a green or a colourless glass; the former seems more likely from the nature of the weathering, and frilled feet of this character do in fact occur on drinking vessels of German origin made in the sixteenth century and somewhat earlier. From 68. Cat.233.

MISCELLANEOUS GLASS (fig.10)

- 6. Tiny bead of green glass. Cf. a larger but similarly shaped and possibly contemporary example from East Haddlesey, Yorks.²⁵ From 29. Cat.351.

IRONWORK (fig.10: all drawn from x-radiographs)

- 7. Key, with oval bow and symmetrical bit. Cat.213. From 68, a mid-seventeenth century context.
- 8. Approximately one half of a horse-shoe, with three nail holes. Cat.169. From 68, as above.
- 9. Tanged loop. Cat.127. From 68, as above.
- 10. Fragmentary knife blade, with tang and bolster. Cat.142. From 91, a seventeenth century context.
- 11. Buckle. Cat.143. From 91, as above.

COPPER ALLOY (fig.10)

- 12. Pin with irregular faceted head, decorated with incised ring and dot motifs. Slight collar below head, and swelling in shank above point. The type occurs in mid-late Saxon contexts, cf. the groups from Whitby and York,²⁶ Cat.8. From 15, an eighteenth-nineteenth century context.

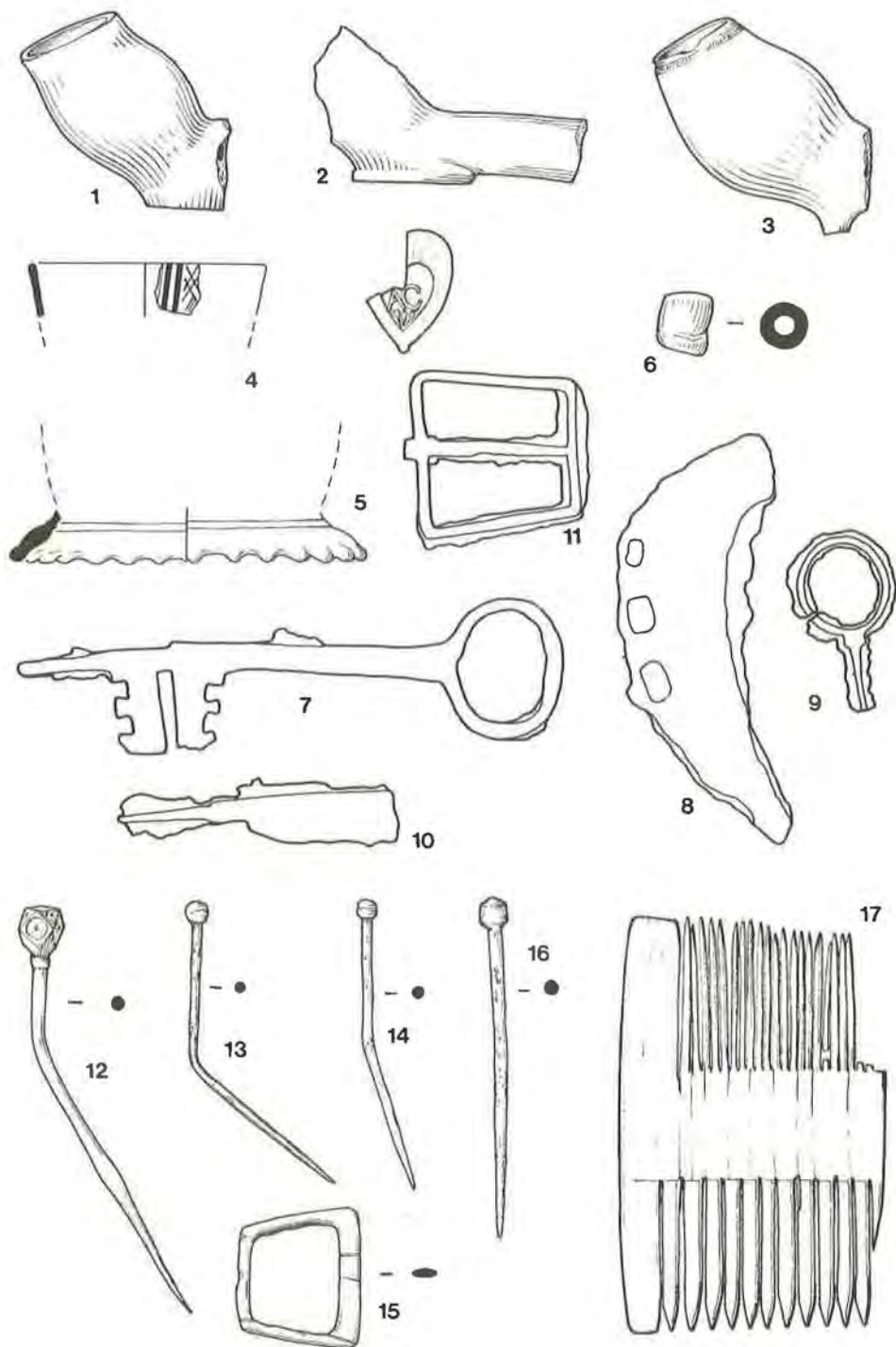


Fig 10. 1-3, 12-17 Scale (1/1) 4-5, 7-11 Scale (1/2) 6 Scale (2/1)

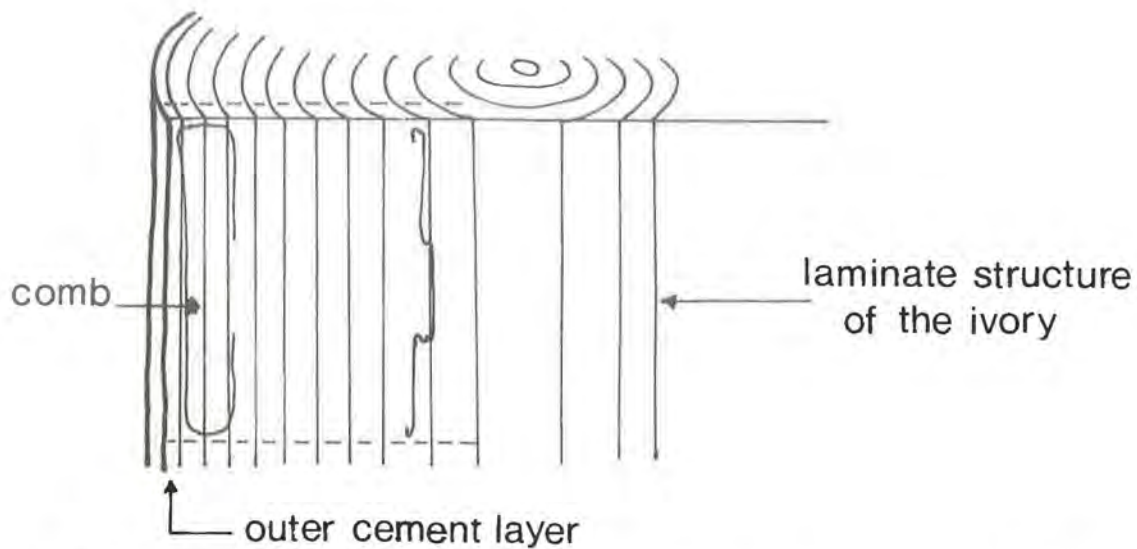


Fig. 11. Diagrammatic Section through an elephant tusk, illustrating that portion used in the manufacture of the comb.

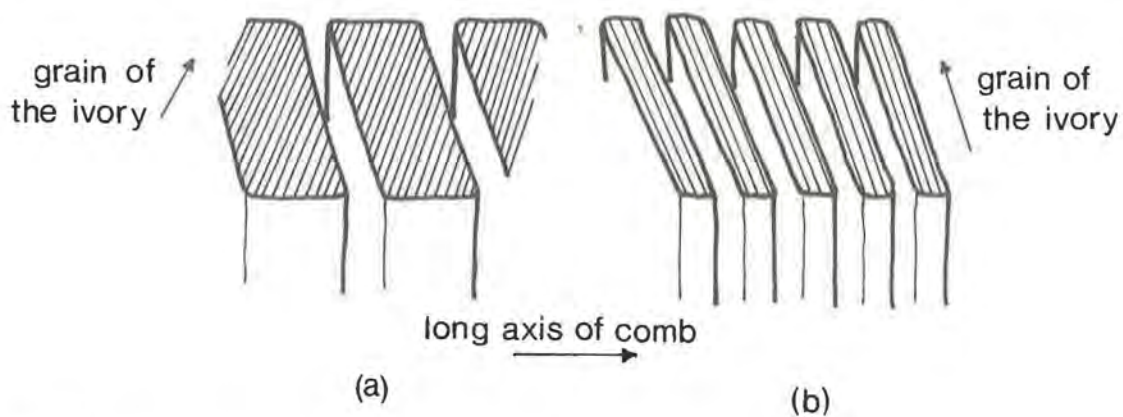


Fig. 12. Diagrammatic representation of a section cut through the thick and thin teeth of the comb.

13. Pin with separately made head. Cat.200. From 72, a context probably of seventeenth century date.
14. As 13. Cat.212. From 95, a seventeenth century context.
15. Buckle, missing its pin. Cat.144. From 91, a seventeenth century context.
16. Pin, its drum head having a pointed apex. Cat.147. From 69, a late seventeenth-eighteenth century context.

IVORY COMB by D.J. Rackham (figs.10,11,12)

17. End fragment of a double-sided ivory comb, the teeth larger on one side; Misgivings about the initial identification of the object as ivory, based partly upon an unsubstantiated impression that ivory would have been rarely used for comb making, were allayed when on comparison with both bone and ivory, the comb was seen to correspond with a longitudinal section of elephant ivory tusk. A number of features can be distinguished, some visible to the naked eye, that show it to be ivory, and these may be worth noting to minimise future mis-identification of badly stained ivory objects. Penniman²⁷ has discussed the identification of ivory objects but his illustrations are more useful for well preserved objects.
 1. The material (dentine) composing the comb is dense and lacks the canals that are visible in sectioned bone (Pl. II(a) and (b)).
 2. The comb is built up of thin lamellae, typical of the bands of dentinal tubules separated by concentrations (strata) of opaque cellules found in ivory. These are unlike the rings or lamina visible in bone sections, which are caused by the sectioning of successive concentrically arranged Haversian canal systems. (Pl. II(b)).
 3. Visible in the photograph (Pl. II(a)) and shown on the drawing (fig.10) are the hairline cracks that have formed along the faces of some of the lamellae. These occur along the strata of opaque cellules and are common on old and buried ivory and ivory objects. Bone shows no comparable lines of weakness.
 4. Microscopic examination of a break along one of the lamella interfaces noted above showed the characteristic fracture of a longitudinal section of a lamella face of ivory, presenting the alternate parallel troughs and ridges.²⁸

Visible on the extreme outer edge of the comb was a small portion of the cement of the tusk, this was much lighter almost white, and may indicate that the comb was made from a section near the base of the tusk.

It is possible to ascertain which portion of the tusk was used in the manufacture of the comb. The angle of the fracture, slightly off the normal to the flat plane of the comb (fig.11), indicates that the portion recovered is a longitudinal slice, six centimetres long and 0.3 centimetres in thickness, just off the centre of the tusk. The piece of comb found represents less than half the possible width of the tusk at this point. (fig.11).

Two features were noted in the arrangement of the teeth of the comb. Firstly, the teeth on each side of the comb were of different thickness and were sawn at an angle deviating markedly from the normal to the flat plane of the comb (fig.12) in contrast to the right angle usually found on bone or antler combs. Secondly the two sets of teeth were cut at opposite angles to each other, the thin teeth with the grain of the ivory and the thick teeth at an angle to the grain (fig.12). It seems likely that this is an intentional method adopted to retain both strength and rigidity in the teeth. By cutting the thick teeth at an angle to the grain so that the grain runs

diagonally across them (fig.12(a), flexing of the teeth either with the long axis of of the comb or at right angles to the flat place of the comb (the two most likely tensions to occur during manufacture and use) is restricted to a minimum and hence the likelihood of breakage and of bending while in use is reduced.

The thin teeth on the other hand are so thin that to cut them at this angle would result in no lamellae actually running the whole thickness of the tooth. This although retaining rigidity (in both planes) would reduce strength to a minimum. The thin teeth are cut with the grain so that at least two or three lamellae run the thickness of the tooth (fig.12(b)) retaining the natural strength of the ivory but loosing some of its rigidity in the direction of the long axis.

The above features of manufacture appear to have been adopted because of the type of section employed to make the comb, and it might be expected that different methods would be adopted for different pieces of ivory, an illustration of the manufacturer's familiarity with the material.

Cat.88 From 68. A mid-seventeenth century context.

THE ANIMAL BONES

By D.J. Rackham

INTRODUCTION

1,288 fragments of animal bone were recovered from the excavation; these were generally in a very fragmented state, and only 51 per cent were identifiable. Two contexts contained more than one hundred identifiable bones, the remainder coming from 21 other contexts. The archaeological evidence allows a division of the bone material into two major assemblages, with one small group from a pit of intermediate date.

The earliest occupation on the site is dated to the later 13th and the 14th centuries. Bone of this period was collected from occupation layers, pits and a tenement boundary ditch running the length of the site (p. 100). During excavation this latter feature was given a variety of context numbers which in the following report have been considered en bloc, together with other material of this date, except for one group (context 137) which contains an unusually large number of sheep bones.

With the exception of the pit of intermediate date mentioned above, the remainder of the bone was collected from pits and occupation layers of the 17th and 18th centuries. Context 68, an occupation level of the 17th century, was the second feature to yield over one hundred identifiable bone fragments.

The fact that only part of the southern tenement could be investigated may well have produced a bias in the bone material as a result of incomplete collection, as well as indicating that the limited nature of the occupation material between the 14th and 17th centuries may not reflect the actual situation.

I have attempted to compare the collections from each period because of a lack of comparable material from local sites of similar period, but the sample sizes are small and the conclusions must be viewed with circumspection.

TABLE 1

Species list and the occurrence of finds of their bones in each period and major context.

	17-18th centuries	17th(68) century	15-16th centuries	13-14th centuries	13-14th(137) centuries
Horse	1	2		2	
Cattle	24	33	7	17	1
Sheep/goat	42	65	15	28	370
Sheep	1			2	14
Pig	1	8	2	7	3
Red deer		1			
Fallow deer	1				
cf. Fallow deer	1				
cf. Roe deer	1				
Dog				5	
cf. Dog			2	3	
Cat				1	
cf. Rat or Water vole	1				
Fowl		2		3	
cf. Fowl		1			
Goose cf. domestic		1	1		
Fish			1		

TABLE 2

The representation of the bones of sheep (or goat) in the collections.

	17-18th centuries	17th(68) century	15-16th centuries	13-14th centuries	13-14th(137) centuries
Phalanges		3			1
Calcaneum	1				
Astragalus		1			
Metacarpus	4	10	1	1	65
Metatarsus	8	11	2	3	63
Radius	4	5	2	2	
Ulna		2		2	
Tibia	5	2	1	1	
Humerus	3			1	1
Femur	2	1			
Scapula	4			1	2
Pelvis		2	1	2	
Mandible	2	2	1	3	86
Mandibular molars	5			3	25
Premaxilla			1		3
Maxilla		1	1	1	25
Maxillary molars	2			4	32
Molars		13	4		
Premolars & incisors	2		10	2	27
Skull fragments	1	2	1	4	54

Late 13th and 14th-century occupation.

This is treated as one assemblage except for context 137. The latter group, besides being relatively large, is peculiar in that it contains mostly sheep bones. The main assemblage from this period is derived from 12 different contexts. The estimates of the minimum number of individuals (Table 3), upon which the meat weight percentages are calculated (Table 4), are based upon the total of the minimum numbers within each context rather than within the whole collection. This is likely to be a more accurate reflection of the actual numbers involved.

TABLE 3

	17th century		15th century		13th century	
	Actual	%	Actual	%	Actual	%
Horse: No. of frags.	3	1.7	—	—	2	3.1
Minimum No.	2	6	—	—	2	8.7
Cattle: No. of frags.	57	32.2	7	30.5	18	28.2
Minimum No.	10	30.4	2	40	7	30.5
Sheep No. of frags.	108	61	14	60.8	34	53.1
or Goat: Minimum No.	18	54	2	40	9	39
Pig: No. of frags.	9	5.1	2	8.7	10	15.6
Minimum No.	3	9.1	1	20	5	21.8
Ratio of the percentage of Ox:Sheep (or Goat):Pig only	33: 62: 5		30.5: 60.8: 8.7		29: 55: 16	

Table 3 does not include the sheep bones from context 137 (Table 5). The remaining species are listed in Table 1, but are not considered here since they are not major contributors to the diet.

Although the sheep occupy the most important position with regard to the number of fragments and the minimum number of individuals (Table 3), percentages of meat weight based upon these figures show cattle to be the most important contributor to the diet (Table 4). The figures are based upon meat weight estimates of 1000 lbs for cattle, 200 lb for pig, and 100 lbs for sheep²⁹ and 1000 lbs for horse. These estimates for ancient animals are largely arbitrary, although some workers have based their figures upon average modern weights³⁰ and dressed carcass weights.³¹

TABLE 4

	Meat weight percentage Based on no. of fragments				Meat weight percentage Based on Minimum Nos.			
	Horse	Cattle	Sheep (or goat)	Pig	Horse	Cattle	Sheep (or goat)	Pig
13th century	7.8	71	13.4	7.8	18.4	64.1	8.3	9.2
Ox, sheep & pig only		77	14.5	8.5	79		10.1	10.6
15th century	—	79.5	15.9	4.6	—	83	8.3	8.3
17th century	4.1	78.7	14.8	2.4	13.9	69.5	12.5	4.1
Ox, sheep & pig only		82	15.5	2.5		80.6	14.6	4.8

The sheep bones from context 137 (Table 5) are not included in this Table.

The age structure of the sheep and cattle bones are figured in Table 7. Only seven of the ten pig bones were ageable; four were under one year and only two were definitely over one year.

Context 137

Eight bones which obviously are not associated with the main body of this group have been included in the discussion above. Ninety-nine per cent of the identifiable bones from this context were referable to sheep (or goat), and a further 184 fragments, although not certainly identified as sheep (or goat), probably are.

TABLE 5

Representation of the bones of sheep (or goat) and the minimum number of animals indicated by each element, from context 137.

	Left	Indet.	Right	Minimum No.
Humerus	1			1
Scapula	2			1
1st phalanx		1		1
Mandible	40	10	36	29
Mandibular frags.		9		
Maxilla	10	4	11	11
Maxillary frags.		4		
Metacarpus	35	1	29	27
Metatarsus	31	2	30	21
Molars	22		33	9
Premolars	7		13	5
Incisors		7		
Skull fragments	17	11	11	10
		+ 6 both		

A large number of other fragments from skulls, mandibles and metapodials were present but could not be specifically recognised.

(Indet. = indeterminate).

An analysis of the age structure of the group based upon the mandibles, maxillae and the distal ends of the metapodial bones, shows that the animals were all adult.

TABLE 6

	No. of bones	Estimated ages	Percentage ages
Metacarpus	49	All greater than 18 mths.	
Metatarsus	42	All greater than 20 mths.	
Maxilla	21	All greater than 18 mths.	86% 21 mths, 38% 3 yrs.
Mandible	41	All greater than 18 mths.	98% 21 mths, 82% 3 yrs.

One specimen only was definitely below 3-4 years of age. Although only the following percentages could actually be aged — 100% over 18 months, 65.6% over 20 months and 30% over 3 years — it can fairly certainly be assumed that there was only one individual in the group under 3-4 years, since only five of the twenty-nine ageable left mandibles could not be aged at 3-4 years and these latter, except in the case of the specimen noted, were fragments and lacking the posterior end of the tooth row.³²

Owing to the fact that every single metapodial bone has been broken in the shaft region and only twenty proximal ends have been found in the group of 125 metapodial fragments, of which only four can be matched to distal end, it is not possible to gain an impression of the representation of the sexes based on their length and proportions.³³

Furthermore, mandibles are not considered to be sexually dimorphic, and the skulls are too fragmentary. It is hoped to be able to find an index on the distal ends of the metapodials but this has not yet been carried out. The fracture of all the metapodial bones is presumably a result of butchering, the distal ends having very little meat, and the legs therefore being chopped half-way up the hock.

Both horned and polled individuals were identified, and the horncores and parietal features of the skulls suggest that only sheep are present. Similarly the metapodials exhibit those characters that Boessneck³⁴ uses for the differentiation of this species from the goat. The fragmented state of the skulls prevented any conclusion upon the sexes of the polled and horned specimens.

Apart from four bones it can be seen that the group is entirely made up of the metapodial bones, skulls and mandibles (Tables 1 and 5) from a minimum number of twenty-nine adult sheep, and a probable maximum of only one or two more individuals. The evidence collected during excavation showed this group to be a discrete collection of bones and the excavator was of the opinion that it may have been a single dumping. The results of the study support this, although there are other possible interpretations. Two explanations for such a group are, the single slaughter of some thirty adult sheep and their subsequent butchering with the skull and feet bones minus phalanges, which may have been retained with the skin, being thrown into the ditch; and the occasional slaughter of a single or small number of adults from the flock for domestic food and the subsequent dispatch of the skull and metapodial bones into the same ditch. The former would appear to be the most likely because of the consistency of the group. The presence of these bones on what is possibly a farm site a scant half mile from the centre of Buckingham calls for further comment. The farmer would normally take his stock to market on the hoof, and the slaughter on the site suggests a large number of moribund (?diseased) animals unable to walk into town; but it seems unlikely that such a condition would be restricted to the adult animals. On the other hand it could represent a local confiscation (compulsory purchase) or slaughter for some unknown reason.

15th and 16th-century occupation

Although represented by only a very small group of bones (Table 1) from a single pit (context 92), the group is potentially important as an indication of any development or change in animal husbandry, diet or use in the area. Unfortunately its size precludes any but the most tentative remarks. Sheep still occupy the position of the most frequently found species (Table 3) although they by no means represent the highest meat producer (Table 4).

17th and 18th-century occupation

Context 68 and the rest of the material from nine other contexts are considered together although there are apparent differences in the age structure of the bones within context 68 (Table 7) and it was noted that whereas the bones from the period generally show an even distribution of elements, context 68, certainly with regard to the sheep (or goat) bones, (Table 2) shows an apparent selection, 32.3% metapodials, and 43% teeth and skull fragments, the group largely being composed of elements lacking meat.

The 17-18th-century collection of bones has a greater variety of species than was recovered from the earlier periods. The occurrence of deer bones, possibly of all three species (Table 1), is perhaps a little unexpected in a post-medieval group, since the

availability of wild and park deer would be generally restricted.

The age groupings of the cattle and sheep (or goat) bones are listed in Table 7. Of the nine pig bones only four were ageable, three being definitely over one year. The one cattle bone under one year was a mandible from a calf about one month old.

Comparison of the material derived from each period.

On the basis of the sample recovered the species ratios have varied little (Table 3) except in the group from context 137 which can be treated as extraordinary. Similarly the relative proportions of meat represented by the bones (Table 4) have not altered significantly. There is a slight trend in both sets of figures that suggests an increase in cattle and sheep (or goat) at the expense of pig.

Apart from context 137 and the case mentioned above (context 68, *infra* p. 129) there appears to be no apparent selection of bone type in any one period and no real variation between periods, (illustrated for sheep (or goat) in Table 2). This might be expected on a farm site where the whole carcasses would be available, (but the limiting factor of size of sample must be borne in mind).

There is little material for a comparison of the age structure of the cattle bones (Table 7), but ignoring the group from context 137, the age structure of the sheep (or goat) bones shows an increase in percentage over one year by 7 per cent for the 17th-century groups in comparison to the 13th-century material and a drop of 8 per cent over two years (Table 7). But it must be pointed out that there are no marked changes, in the age structure, between the main assemblages from the 13th and 17th centuries (Table 7).

TABLE 7

Age ratios for cattle	17th-18th centuries	17th(68) century	15th-16th centuries	13th-14th centuries
No. ageable	11	18	2	6
Percentage under 1 year	9.1(1)	—	—	—
Percentage over 1 year	63.7(7)	88(15)	50(1)	50(3)
Percentage over 2 years	9.1(1)	23.5(4)	50(1)	33.3(2)
Percentage under 3 years	18.2(2)	5.6(1)	50(1)	16.6(1)

Age ratios for sheep (or goat)	17th	17th(68)	Total	15-16th	13-14th	13-14th(137)
No. ageable	23	41	64	10	18	163
% under 1 year	4.3(1)	—	1.6	—	—	—
% over 1 year	56.5(13)	66(27)	62.5	50(5)	55.5(10)	99(161)
% over 2 years	21.7(5)	9.8(4)	14	10(1)	22.2(4)	29.5(48)
% under 3 years	13(3)	7.3(3)	9.4	10(1)	5.5(1)	0.6(1)

(The 13-14th-century group, 137, cannot be considered on these figures for the reasons stated above, p.). Nos. in brackets are the actual number of bones.

There are therefore some slight indications of a change in availability, but no definite changes in slaughter practice, in the different periods represented.

There is a certain amount of metrical information available from the 17th and 13th-century collections for sheep (or goat) bones. More is available for the 13th-century material; one specimen of the 3rd maxillary molars of the 17th-century has a length that falls below the 13th-century range of variation but all the 3rd mandibular molar lengths fall within the 13th century range of variation (Table 8). The metatarsus proximal width shows an extension above that found in the 13th century (based upon 14

specimens) for two 17th-century specimens (out of a total of 6), and the proximal width of the metacarpus shows a wider range of variation in the later material (17th-century) but the anterior/posterior thickness of the proximal end shows a reduced range of variation in the group (based upon groups of 10 and 9 bones respectively), (Table 8).

However there is not enough material to qualify these suggested trends in size and proportion, which could in any case result from the presence of two different breeds rather than from any development or selection of a local breed, or may be an accident of sample size.

TABLE 8

Measurements upon the sheep (or goat) bones from the 13th and 17th centuries.

	Metac.p.w.	Metac.p.ant/post	Metat.p.w.	3rd max.m.l.	3rd mand.m.l.
17th century	22.5	16	19.5	16.5	21
	24.5	16	19	18.5	21.5
	21	15.5	19	17	22
	24.5	16.5	21.5	16	22.5
	22.5	16	20	18	20
	22	15.5	21.5		23
	20	15.5			22
	21	16			
	22.5	16.5			
13th century	24	17.5	20.5	17	21.5
	23	17.5	18.5	16.5	22.5
	23.5	16.5	18.5	19	23.5
	22	17	18	17	21.5
	23	16.5	19	19	23
	21	15.5	21	22	23.5
	22.5	17	19.5	18	23
	24	17	20.5	18	21
	21	16	19.5	18	24
	20.5	15.5	20.5	18	20.5
			20	16.5	22.5
			18	19.5	22
			19	19.5	21.5
			19.5	17	20.5
				18.5	20.5
				19.5	

Measurements are to the nearest half millimetre.

Metac. = metacarpus; p. = proximal; w. = width; ant/post. = Anterior/posterior thickness; Metat. = metatarsus;

Max. = maxillary; m. = molar; l. = length; mand. = mandibular.

CONCLUSION

The presence amongst the 13th-century material of a large group of bones from twenty-nine adult sheep that have been slaughtered in one go points to the site being a farm during this period; and assuming a freehold or tenant farmer owning stock, the bone material may reflect husbandry, suggesting the pasturing of sheep and cattle with a few pigs. The slaughter of the large group of sheep suggests a fairly large flock, implying a fairly substantial farm of the period.

The site may still have been a farm in the 15th and the 16th century, but the group of bones is too small to give any indication.

The sample is little better in the 17th-century collection, although the deer bones indicate access to deer, unlikely for a small country farmer; and the occurrence of such a wide variety of bones in such a small group suggests the availability of whole carcasses rather than joints.

Although the figures in a 19th-century count of the number of domestic animals in the county³⁵ show a higher proportion of sheep than those for this site indicate, these will include those grazing on the uplands of the county, and it further notes that the Vale of Aylesbury from Buckingham to Amersham is an area in recent times devoted almost entirely to pasture for cattle. Because of the nature of the strong blue clay substrate in the Vale it is unlikely to have been extensively under plough in Medieval times, and the site, which is situated on the adjacent gravel terrace, may well have been mainly pastoral.

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