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THE WILTSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY MAGAZINE
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Change of Title

The journals issued to volume 69 as parts of *The Wiltshire Archaeological and Natural History Magazine* (Part A Natural History; Part B Archaeology and Local History) were from volumes 70 to 75 published under separate titles as *The Wiltshire Natural History Magazine* and *The Wiltshire Archaeological Magazine*. With volume 76 the magazine reverted to its combined form and title.

We acknowledge with thanks a special grant from the Council for British Archaeology towards the cost of publishing C.T. Barker's paper, 'The Long Mounds of the Avebury Region', in our last volume.

Contributions for the Magazine are always welcome, whether longer contributions to be printed as papers, or shorter items – equally valuable – to be printed as notes. There is no fixed maximum length, but space is always at a premium, so contributors should try to use no more words than they need. All contributions and proposals should be sent to the editor at, in the first instance, The Museum, 41 Long Street, Devizes, Wiltshire SN10 1NS. The editor is happy to advise and discuss with intending contributors at any stage during the preparation of their work. The style for footnotes, references and so on should be that found in this number.

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The Society was founded in 1853. Its activities include the promotion of archaeological and historical work within the County and the study of natural history; the issue of a Magazine, and other publications; excursions to places of archaeological and historical interest; and the maintenance of a Museum, Library, and Picture Gallery.

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Old *printed* material and photographs of Wiltshire buildings or other objects of interest will be welcomed by the Librarian at the Museum. The repository for records, e.g. old deeds, maps, plans, etc., is the Wiltshire Record Office, County Hall, Trowbridge.

THE WILTSHIRE RECORD SOCIETY

This Society was founded, under a slightly different name, in 1937 to promote the publication of the documentary sources for the history of Wiltshire. It is now one of the leading societies of its kind in the kingdom and is required by its rules to publish one volume in respect of each year's subscription. Forty volumes have already appeared; the fortieth was published in 1985; nine others are in preparation. An annual meeting is held each year with an address and discussion, usually at some place of historical interest in Wiltshire.

The annual subscription is £10.00. New members are *most urgently* needed.

Full particulars about membership may be obtained from Dr John Chandler, 27 Park Street, Trowbridge BA14 0AU.

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The annual subscription is £4.00 for individual members, £8.00 for institutions, £6.00 for families, and £3.00 for pensioners and students on request. Membership forms are obtainable from The Secretary, Wiltshire Buildings Record, c/o the Museum, 41 Long Street, Devizes, Wiltshire, SN10 1NS.

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 7–22.

The Excavation of Two Long Barrows by F. de M. and H.F.W.L. Vatcher

by PHILIP HARDING* *and* CHRISTOPHER GINGELL*
with a contribution by I.W. CORNWALL†

This report describes the total excavation of two small long barrows of oval plan, Kingston Deverill G1 and Woodford G2, by the late F. de M. and H.F.W.L. Vatcher in 1964 and 1963 respectively. Both had been extensively damaged by ploughing, and neither mound was reconstituted after excavation.

At Kingston Deverill G1 the mound had been destroyed, and amongst underlying features the excavators reported a timber mortuary structure and a timber façade, with some replacement of timbers. Antler and animal bones were found in the primary ditch silts and Beaker pottery above the secondary fill. No burials were recorded.

At Woodford G2 five phases were proposed by the excavators. These included possible flint-digging and two timber structures pre-dating the flint cairn and chalk mound, an inhumation in the E ditch and two cremations E of the barrow. Neolithic pottery and fragmentary human bone were found in and beneath the mound.

An oval barrow, Kingston Deverill G1, on Cold Kitchen Hill

by PHILIP HARDING

INTRODUCTION

Cold Kitchen Hill (Figure 1) is an outlier of Upper Chalk which rises to a height of 845 ft (257 m) OD. It lies in the parishes of Kingston Deverill and Brixton Deverill, Wiltshire, at the SW end of Salisbury Plain. The scarp slope on Brimsdown Hill dominates the clay vale to the W, while to the E the chalk has been dissected by the valley of the River Wylye. The dominant position proved attractive to a succession of early communities. Visible evidence of the earliest activity on the hill is indicated by the massive Brixton Deverill long barrow (G2), which caps Cold Kitchen Hill 500 yards (457 m) to the NW of the barrow described in this report. A series of bronze-age round barrows were later sited along the S-facing skyline of the hill (Hoare 1810: 41). Continued activity is demonstrated by a series of iron-age cross-dykes on the hill and a Roman temple site at its W end.

The site of the oval barrow (Kingston Deverill G1) is at the SE end of Cold Kitchen Hill (NGR ST 84903795) at approximately 700 ft (213 m) OD. It is aligned E–W across a spur which slopes gently E to the Wylye valley. The spur has been constricted at this point by converging combes and has been subsequently cut off by an iron-age cross-dyke. There are no early written descriptions of the barrow. Grinsell (1957: 179) recorded it as a bowl barrow 14 paces in diameter and 2 ft 6 ins (0.76 m) in height. It was seen to have a slight surrounding ditch and a central depression, but there was no record of any early excavation.

At the time of its excavation in 1964 the barrow had been reduced by ploughing to a slightly elongated mound less than 1 foot (0.30 m) in height near the centre. As a result F. de M. Vatcher and H.F.W.L. Vatcher were requested to excavate the barrow totally on behalf of the Ministry of Public Buildings and Works (now English Heritage) (1965: 132). The following account is written from the photographic record, the plans and the drawn sections, which have been deposited with the finds in Devizes Museum (Acc. No. 1985.183).

EXCAVATION

The excavation (Figures 2A and 3) was recorded using imperial measurements, which are retained for this report. It was laid out from a main axial baulk with

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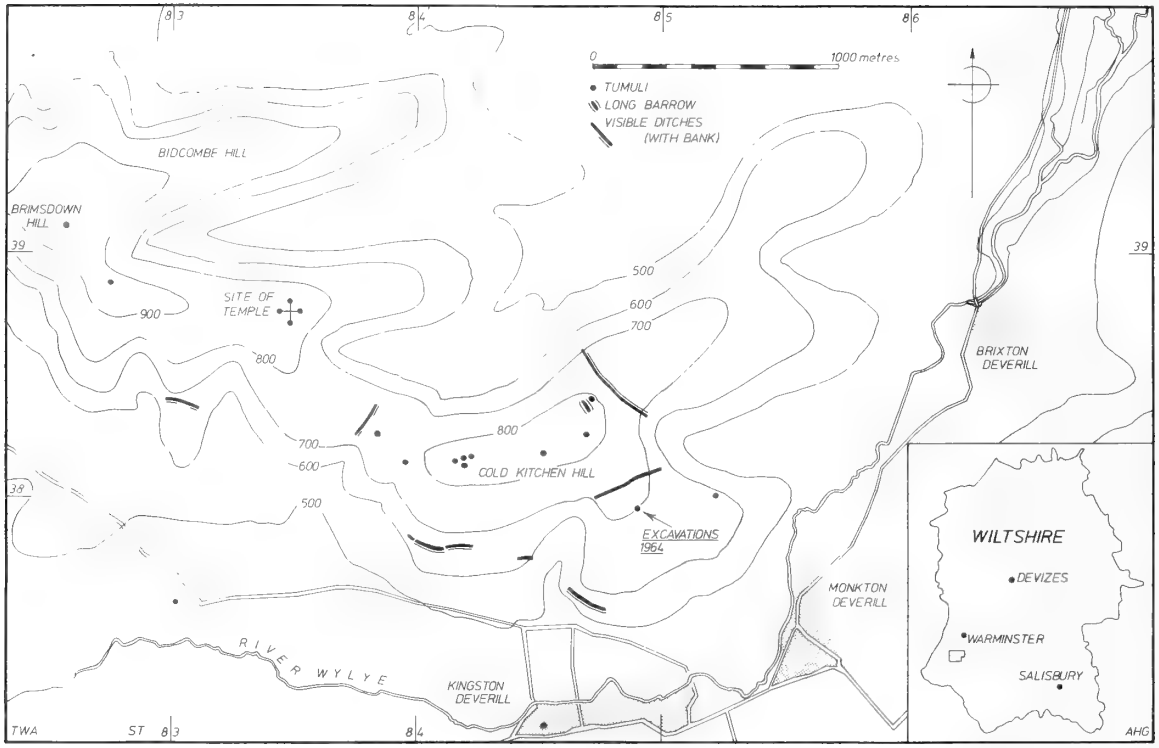

Figure 1. Kingston Deverill G1. Site Location. Contours in feet OD.

cross-baulks 20 ft (6 m) apart. Temporary sections were added where necessary. Further details of the recording system are described under Woodford G2 (page 15 below).

Pre-barrow surface

All traces of the pre-barrow soil had been removed by ploughing. A surface of upstanding weathered chalk, however, 52 ft (15.8 m) E–W by 24 ft (7.35 m) N–S, which had been protected by the mound, indicated its approximate original level (Figure 2A). The W end of the surface was ill defined, but appeared to coincide with the terminal of the N ditch. At the E end, the surface enclosed a mortuary chamber and extended 10 ft (3.04 m) beyond both ditch terminals to a façade. The surface was separated from both ditches by a weathered berm approximately 4 ft (1.21 m) wide.

The mortuary chamber

Evidence for a mortuary chamber (Figure 2B) was slight, but was suggested on the basis of two post-holes, 11 ft (3.35 m) apart, at the E half of the mound. They were oval in plan, and both measured approximately 5 ft (1.52 m) by 3 ft (0.91 m). The post-hole at the W end (Figure 3B) aligned N–S, was 11 ins. (0.28 m) deep. It is described on the site plan as having a 'flint filled line over the post hole', although there are no further details. This may represent the only residual evidence for a stone cairn or pavement similar to those associated with other mortuary chambers, for example Waylands Smithy I (Atkinson 1965), Winterbourne Stoke G53, Tilshead G2 (Ashbee 1970: 126–9), or Woodford G2 (page 18 below). However, the apparent absence of a nodule scatter within the ploughsoil, as at Woodford, suggests that the flints were probably post-hole packing. The E post-hole was aligned E–W and was 16 ins. (0.40 m) deep (Figure 3D). It had been disturbed by rabbits.

Any contents of the mortuary chamber had been destroyed by ploughing.

The timber façade

An arc of five post-holes (Figure 2B) was found at the E end of the former mound. Two on the S side were spaced 15 ft (4.57 m) apart, while the remainder were on average 10 ft (3.04 m) apart. Ploughing has removed all relationships of the façade with the mound. The façade included a pair of well-cut post-holes spaced 10 ft (3.04 m) apart, which faced NE. They measured 2 ft (0.60 m) in diameter and had been cut to an average

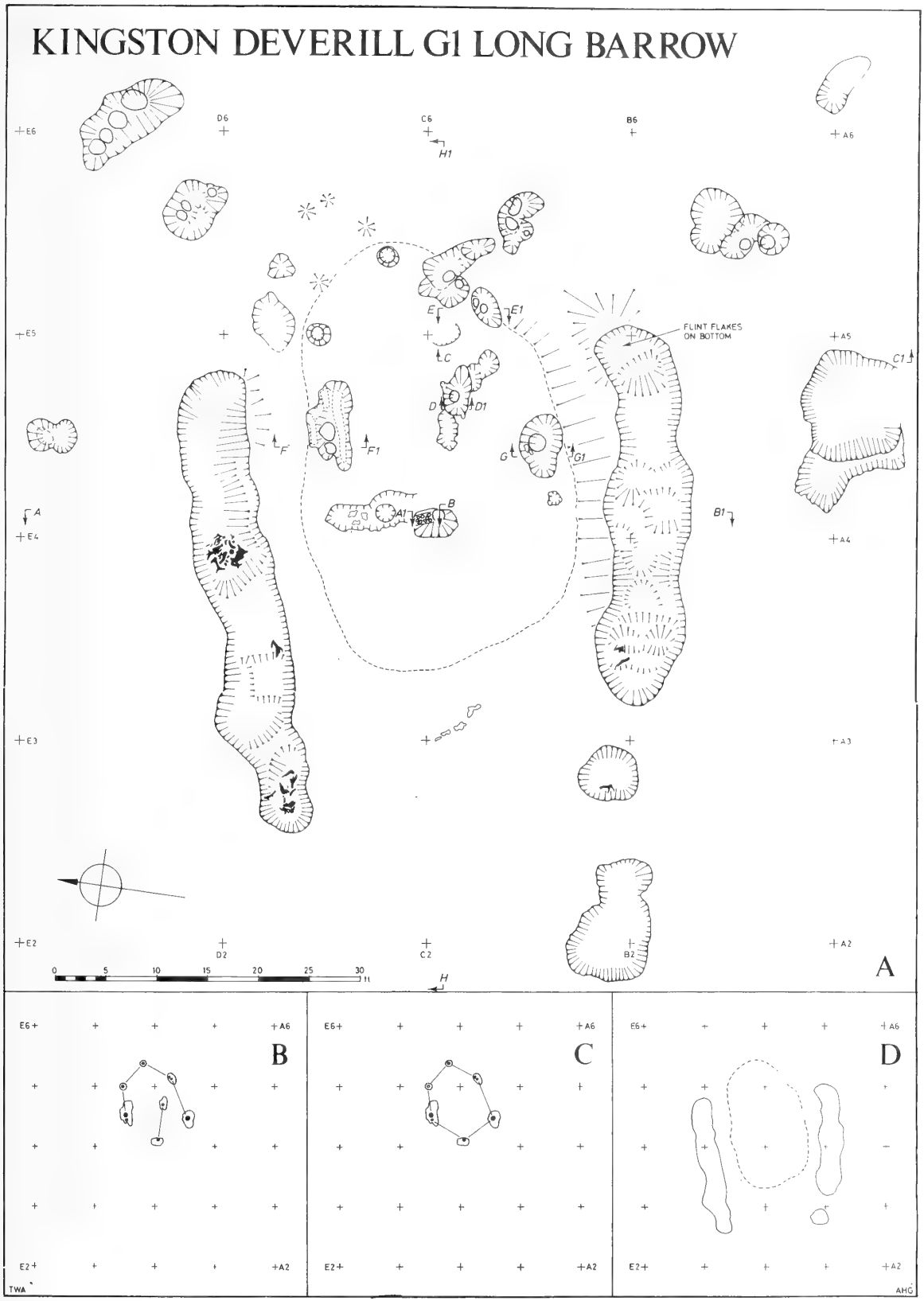

Figure 2. Kingston Deverill G1. Site plan showing all recorded features (A) and construction plans (B, C and D).

depth of 1 ft (0.30 m) into the chalk. The remaining post-holes included two large, irregular post-holes set on the N and S sides of the mound (Figures 3F, 3G). They measured approximately 8 ft (2.43 m) by 4 ft 6 ins. (1.37 m) and had steep sides with a rounded base.

Although rabbit activity had caused considerable disturbance to some post-holes, most apparently showed traces of post positions, including some with horizontal timbers (Figure 3F). The majority were packed with 'chalky soil', although at least one of the well-cut post-holes contained large numbers of flint nodules.

Two other post-holes were located to the E of the mound. One lay on the circuit of the façade, while the other lay 9 ft (2.74 m) to the SE. Both were thought to have been recut, the former into a double post-hole 7 ft 6 ins. (2.28 m) by 3 ft (0.91 m). They may have formed part of the façade, but their function within it is uncertain.

The above description is based on the interpretation of the excavators. However, it is possible to interpret the post-holes differently. The W post of the 'mortuary chamber' may be added to those of the 'façade' to form a hexagonal setting of six posts, 23 ft (7.01 m) by 18 ft (5.48 m), aligned towards the NE (Figure 2C), and off-set to the main axis of the barrow. The two well-cut post-holes may mark an entrance, while the remaining post-holes form diagonally opposed pairs which are of similar size. The E post of the 'mortuary chamber' has been omitted from the plan, as its position just S of centre in the setting makes its function uncertain. The two recut post-holes are also not included.

The mound

Ploughing had destroyed the mound (Figures 2D, 3H), and all traces of its construction, internal divisions or any turf-built structure similar to that found at Thickthorn Down (Drew and Piggott 1936), which may have been present. Roman pottery found in the ditch may indicate that degradation of the mound began at an early date. The central depression noted by Grinsell had been cut into the mound and underlying chalk from the N side. It produced a medieval iron key, 1 ft 3 ins. (0.38 m) below the chalk surface. There was also considerable rabbit disturbance which had penetrated the protected chalk surface.

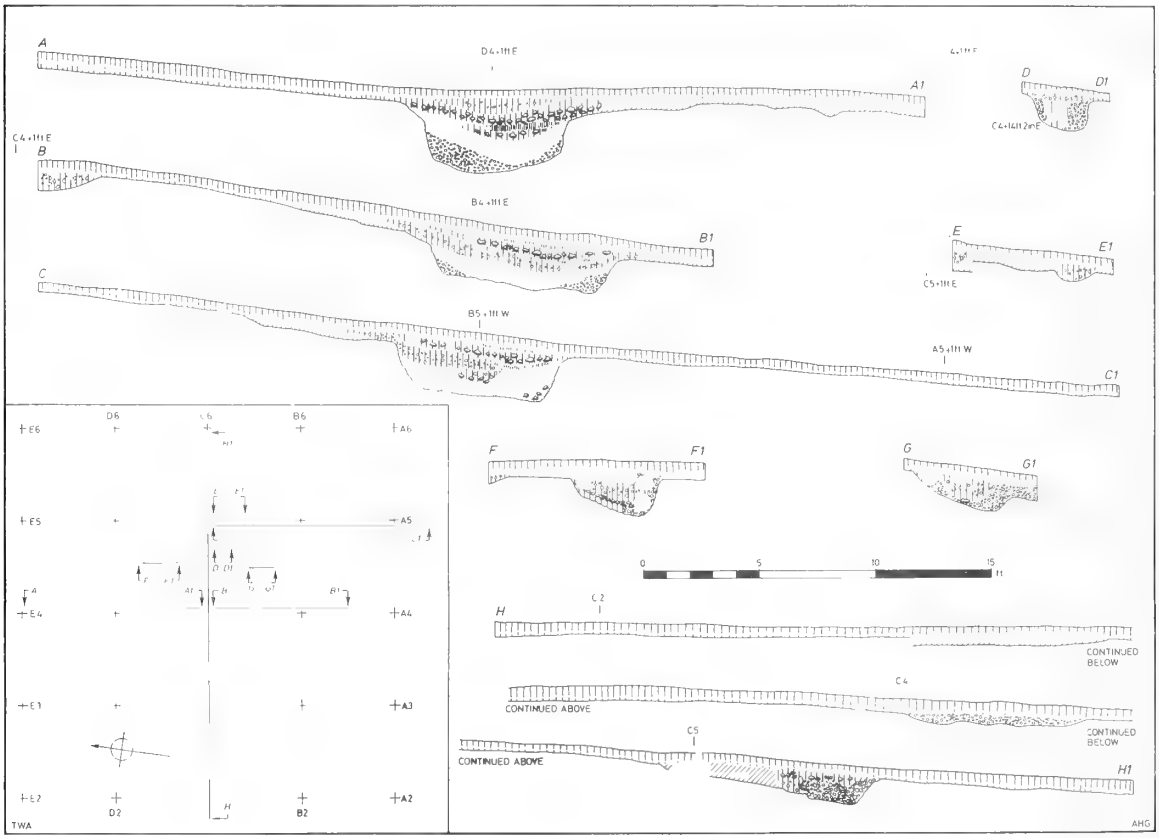

Figure 3. Kingston Deverill G1. Sections and location key.

Ditches

The two continuous flanking ditches (Figures 2, 3), 45 ft (13.71 m) long on the N and 37 ft (11.27 m) long on the S, were visible as surface hollows before excavation began. They were 34 ft (10.36 m) apart internally at the E end and 28 ft (8.53 m) apart towards the W. Their irregular plan suggests that they were gang-dug as a series of linked pits approximately 8 ft (2.43 m) across at the top by 6 ft (1.82 m) at the base, with centres 13 ft (3.96 m) apart. An additional pit with its centre 13 ft (3.96 m) from the W terminal of the S ditch extended the line and length of the ditch to the equivalent length of the N ditch. This may suggest that the S ditch was dug from the E and was never fully completed. A second irregular feature further to the W, which produced a small sherd of pottery near the base, may also have formed part of the construction of the S ditch.

The upper edges of both ditches were weathered, in the N ditch to a depth of as much as 1 ft (0.30 m). The lower protected parts showed that the ditches had been originally cut with steep sides and broad, stepped bases. They varied from 4 ft (1.21 m) to 6 ft (1.82 m) across and from 2 ft 2 ins. (0.66 m) to 2 ft 10 ins. (0.86 m) in depth below the present surface of the chalk. The terminals were rounded, although the E end of the N ditch has sloping ramped sides.

Both ditches were filled with natural silts derived from the ditch sides and barrow mound (Figures 3A, B, C). Asymmetrical weathering has resulted in all ditch sections showing some degree of eccentricity in their fills; however, both ditches have a broadly similar ditch fill sequence. Initial weathering of angular chalk rubble from the ditch sides occupied the basal corners of both ditches. This extended across the N ditch and contained a large deposit of cattle bones. A number of antler picks were found in both ditches. Fine compacted chalky silts and fine earthy chalk silts overlay the rubble. This phase was more marked in the S ditch, where more material had derived from the mound. The silts were capped by a stone-free horizon, possibly a turf line, about 1 ft (0.30 m) from the ditch base; this was less well represented in the N ditch. Irregularities in the upper surface of the turf line may indicate that it was disturbed during the deposition of the overlying material, a flint and soil layer capped by a second turf line. This was probably a sorted ploughsoil. It contained pottery which ranged from Beaker to post-medieval. Some of the Beaker sherds may therefore have derived from the underlying turf line. Truncation of the upper turf line by modern agriculture similarly preceded the deposition of the present ploughsoil in the ditch hollows.

Miscellaneous sub-soil features

A series of other features were examined around the periphery of the barrow. A small group immediately NE of the façade are probably natural features. The limited records of the remainder make it difficult to be certain about their construction, date or function.

FINDS

Flint

No flint was recorded from the mound or ditches, with the exception of three scrapers and a core (see below). However, a collection of 37 pieces of flint, which included re-fitting flakes, was found at the base of the E terminal of the S ditch in the primary chalk rubble. The material was found together, although there is no accurate record of its distribution. It is from a single flint nodule which has a hard, white pitted cortex of varying thickness, and flint which has patinated to mottled grey. It is in mint condition.

The waste is the product of a flake industry. Despite the absence of cortical flakes it is likely to have resulted from core preparation and trimming. The end products are not known, although the character of the flakes (see below) and the absence of multi-directional flake scars suggest that they were probably blades (not necessarily regular blades). No cores or tools were found with this material.

There are 19 complete flakes, 9 broken flakes and 8 miscellaneous chips. The under-representation of broken material and of more re-fitting pieces argues that the flint may not be *in situ* but represents dumping of waste produced in the immediate vicinity. Chips may have been absent or not retrieved during excavation.

The complete flakes range from 21 mm to 57 mm (average 35 mm) in length and from 11 mm to 38 mm (average 24 mm) in breadth. They have an average breadth:length ratio of 4:5. There are no regular blades, although 5 pieces have a breadth:length ratio of less than 2.5:5. Only 4 pieces exceed a 5:5 ratio of breadth: length. The flakes are dominated by ridged flakes (Gingell and Harding 1979) struck from a single direction.

Technologically the flakes show no clear dominance by hard or soft hammer mode, as defined by Ohnuma and Bergman (1984). If a single hammer was used, it was probably of flint. Flint is readily available and can produce both hard and soft hammer characteristics, according to whether flint (harder) or cortical (softer) surfaces were used during percussion (Ohnuma and Bergman 1984: 166). Three *Sirets* (accidents of debitage) (Tixier *et al.* 1980: 103, Figure 45) substantiate the impression that harder hammers were used.

The flake platforms are uniformly small (average 3 mm) and show no regular use of platform preparation. A reconstructed core platform, however, does suggest that faceting to modify the flaking angle was used when necessary. Similarly, one flake has an abraded platform which indicates that some platforms (possibly those on the flake blanks) were strengthened by the removal of overhang before percussion.

No firm conclusions should be drawn from the chips; half undoubtedly originate from the front of the core. Most, however, are formed upon impact at the point of percussion rather than being the product of platform abrasion.

The following unstratified pieces were found:

47 Exhausted flake/blade core. 35 g. Found on south edge of southern ditch below modern ploughsoil.

39 End scraper made on a flake by direct, abrupt retouch. Length 53 mm. Found in flint layer of northern ditch.

93 Possible scraper made on natural fragment. Found in flint/soil layer at the edge of the mound on the north side.

117 End scraper made on a flake by direct, abrupt retouch. Length: 54 mm. Found in top of a post-hole of timber façade.

Red-deer antler

Eleven pieces of red-deer antler were found in the primary rubble of the side ditches, of which 7 were found in the N ditch. An additional antler, probably derived from the old ground surface or mound, occurred in the secondary silt of the S ditch. Two antlers from the N ditch were associated with a deposit of cattle bones. The remainder were found in the W terminal, where bone was also present. The antlers in the S ditch were also found in the terminals, with an additional pick in the W extension pit.

The assemblage consists of 2 'conventional' antler picks, both from the S ditch, which use the brow and bez tines. Three other picks are made on broken or truncated beams and utilize the trez tines. Unlike the 'conventional' picks this group retain the crown. There are also 5 detached crowns, 1 miscellaneous beam and a complete antler from which antler tool blanks have been removed by the groove-and-splinter technique.

The picks are all made from the shed antlers of mature deer. One has the coronet heavily worn by hammering, a feature often found on antler picks. Most of the tines have split or chipped ends, which could have resulted from natural damage or from utilization.

The crowns which are often classified as rakes each have an average of 3 points. None show signs of having been deliberately truncated and none show obvious signs of wear to the tips of the tines.

A number of antlers have been modified, the most notable example being of groove-and-splinter technique. The Cold Kitchen Hill antler (Figure 4, find number 130) is sufficiently well preserved to allow a reconstruction of the technique and the tools used. Two grooves were cut from opposite directions but were abandoned before completion. Variations in the cross-section of the grooves imply that different or re-sharpened tools were used. This splinter was then truncated at one end and the grooves extended to form a second splinter which was also truncated. Neither splinter had been removed, although chips from flint wedges which were embedded in the walls of the grooves show that removal had been attempted. The tip of a broken flint tool was also found in the antler marrow. A detailed description of this will be published elsewhere. Evidence of this technique was also found at Thickthorn Down, Dorset (Drew and Piggott 1936: 87).

The beam of a second antler was detached below the trez tine to produce a pick. The antler was sawn through to the marrow by cutting around the circumference with a sharp implement, probably a flake, and then broken by a snap (Semenov 1964: 152, Figure 76.7; Smith 1965: 125, Plate xixa).

At least 3 antlers show signs of burning. One is charred in the notch between two points of the crown. It is associated with a highly polished surface which may have been caused by friction. Charring also occurs as small patches on some broken surfaces of other antlers.

A total of 85 identifiable sherds were recovered, of which 70 pieces were found in the sorted ploughsoil of the ditches (Table 1). The pottery was therefore mixed; in the few instances where it was stratified in the ditches or features, the size of the sherds combined with probable animal disturbance suggests that it may not be in a primary position. The pottery therefore provides no firm construction date for the barrow or other features. Although there was more pottery in the

Pottery

	Beaker	*Late/Middle Bronze Age*	*Roman*	*Post-Medieval*	*Total*
N ditch, sorted ploughsoil	23	–	1	1	25
S ditch, sorted ploughsoil	27	4	12	3	46
features and ditch base	4	–	1	–	5
unstratified	4	–	3	2	9
total	58	4	17	6	85

Table 1. Pottery by type and provenance.

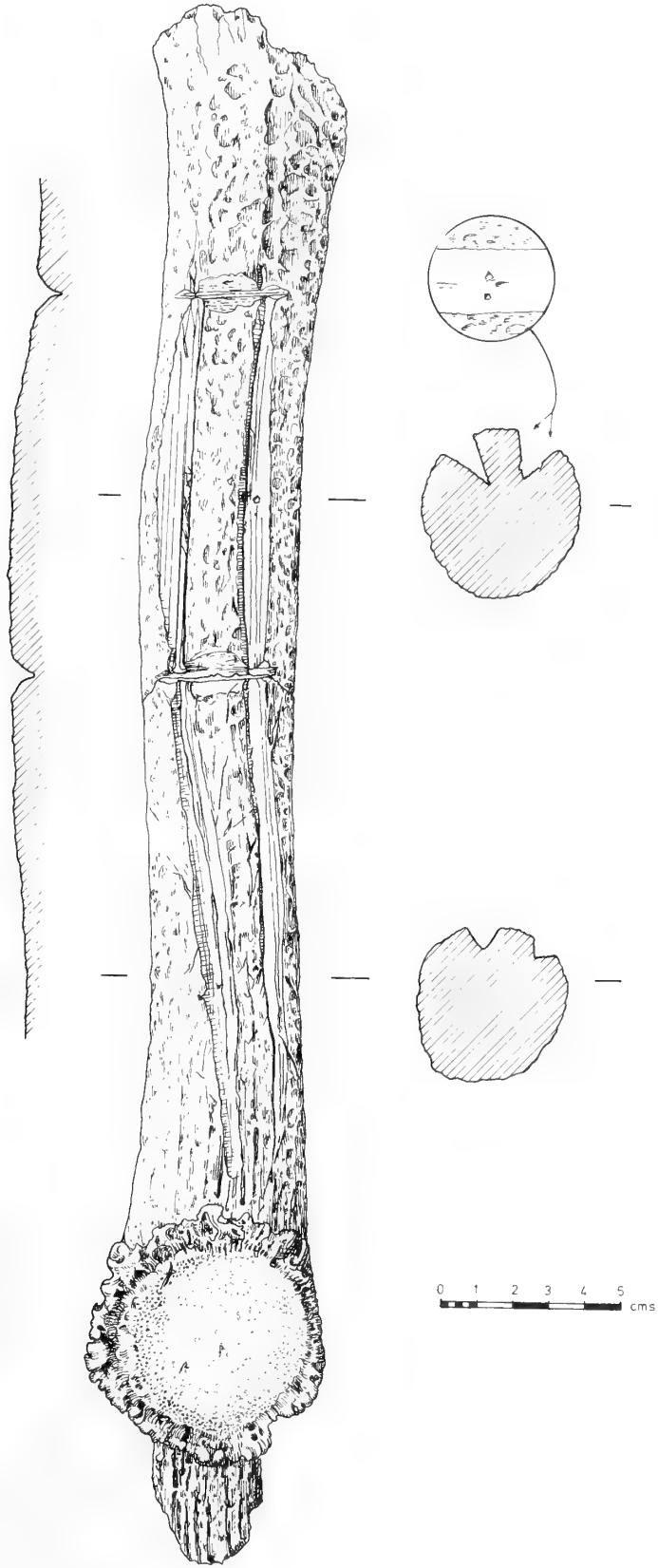

Figure 4. Kingston Deverill G1. Antler, showing groove-and-splinter technique

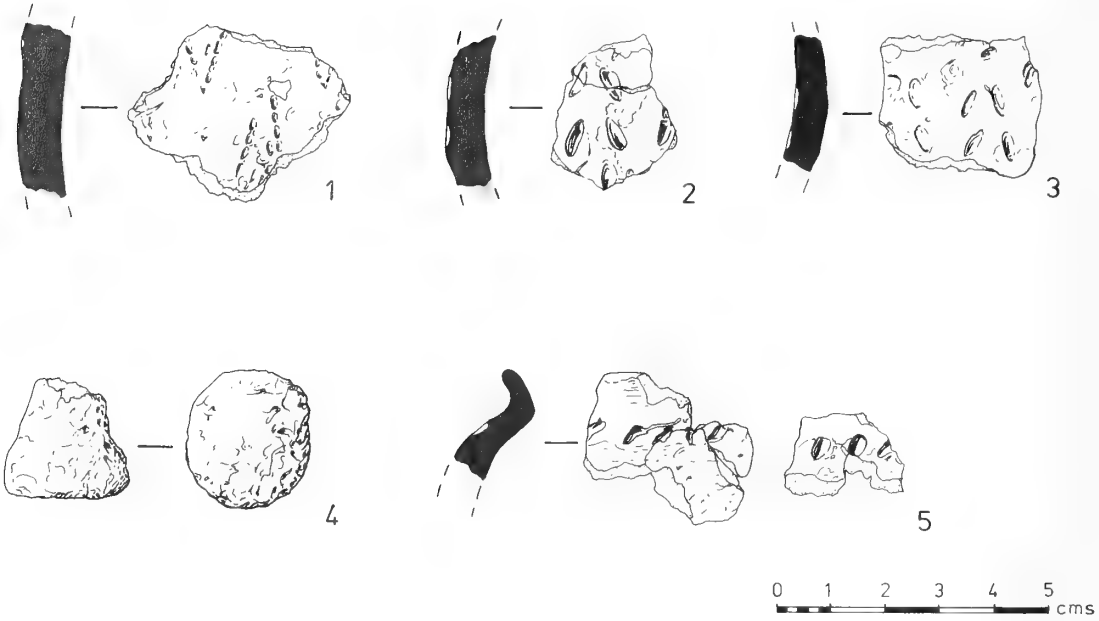

Figure 5. Kingston Deverill G1. Beaker (1–4) and late-bronze-age (5) pottery.

S ditch, no concentrations were noted. Much of the pottery has been reduced in size by ploughing and is fragmentary with abraded surfaces.

Beaker

Fifty-eight sherds, composed of 43 body sherds, 1 rim and 5 bases, were found. The majority, 51 pieces, are from undecorated domestic wares. Exterior surfaces vary in colour from orange to dark red with dark grey/black interiors; some sherds are dark grey throughout. Most contain sparse, small flint grits, grog or vegetable matter as filler. Neither the number nor the form of vessels is known.

The Beaker pottery (Figure 5) includes:

1 Wall sherd of compact paste with fine grit filler. Red externally, black internally.
Decoration: Alternate filled comb impressed chevrons. Find no. 34.

2 Wall sherd of compact paste with sparse fine grit filler. Red externally, brown internally with dark grey core.
Decoration: Vertical finger-pinched columns. Find no. 37.

3 Wall sherd of compact paste orange externally and internally with dark grey core.
Decoration: Vertical finger-pinched columns. Find no. 75.

4 Conical fired clay object, probably pottery, compact paste with grogged filler, orange externally with dark grey core; function unknown. Find no. 22.

Late Bronze Age

Four sherds were found in the sorted ploughsoil of the S ditch. They have a hard flint-tempered fabric which is generally dark grey throughout. A single diagnostic sherd was present (Figure 5):

5 Rim sherd of hard dark grey fabric with flint filler. Probably a small open bowl with out-turned rim.
Decoration: Short vertical impressions around the shoulder. Find no. 123.

Romano-British

A number of Romano-British sherds were also found, including some from the sorted ploughsoils of the ditches. They comprise 4 small pieces of Samian, including a scrap from a post-hole in the façade, 8 hard, thin-walled orange-brown sand-tempered coarseware sherds, 4 grogged grey sherds of Savernake ware, including 2 rims, 1 from a bead-rim storage jar, the other from a flagon, and 3 miscellaneous sherds.

Post-medieval

There were 4 green-glazed sherds, plus 2 fragments of tile.

A long barrow, Woodford G2, south of Druids Lodge

by CHRISTOPHER GINGELL

INTRODUCTION

A long barrow, now levelled, stood beside the Devizes Road (SU 101376) S of Druids Lodge. It was situated *c.* 350 ft (107 m) OD on the end of a slight spur on the S slope of a deep combe, and had a N–S orientation (Figure 6). The barrow appears as Long Barrow 60 on the map of neolithic Wessex (Ordnance Survey 1933), and the code LB 60 was used by Major and Mrs Vatcher in their site records in place of the conventional Goddard/Grinsell number used in the title of this report.

Mrs Cunnington (1914: 407) observed that the side-ditches were 'fairly distinct'. Grinsell (1957: 146) gave the length of the mound as 67 ft, width 45 ft, height 4 ft (20.4 m × 13.7 m × 1.2 m). A vertical aerial photograph taken in 1946, before modern ploughing of the piece of chalk downland, shows signs of earlier disturbance in the form of a hollow *c.* 15 ft (4.6 m) in diameter towards the S end. This photograph also indicates damage by traffic ruts to the W side ditch, and traces of rig to the N, but no evidence of Celtic fields around the barrow.

The excavations of September/October 1963 were undertaken before the mound, which was already eroded by ploughing since 1948, was to be levelled to facilitate cultivation, and were directed by Major and Mrs Vatcher on behalf of the Ministry of Public Buildings and Works.

EXCAVATION METHODS AND ARCHIVE

The excavations were carried out with a work-force of labourers and some volunteers. Although the barrow surface was not contoured before excavation, levels were taken at intervals along grid lines 20 ft (6.1 m) apart. These levels were drawn up by the writer as profiles, but comparison with the sections drawn at the same intervals showed that the levelling contained no additional information. The recording system is de-

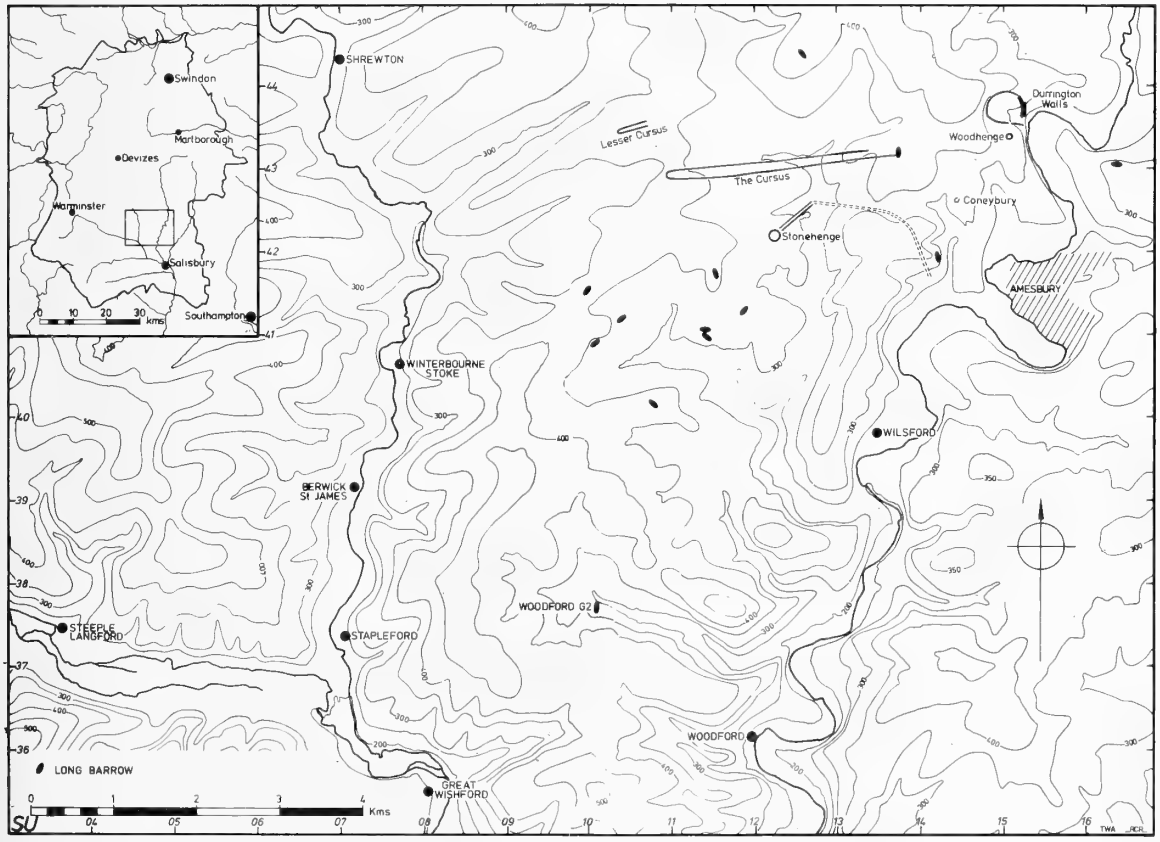

Figure 6. Woodford G2. Site location. Contours in feet OD.

scribed in the site notebook as a grid system. In fact the finds, numbered individually, are recorded by offset measurements from pegs at 20 ft (6.1 m) intervals numbered as in Figure 7A, and depths, usually below ground surface.

A plan of excavated features was produced together with the sections indicated in the key on Figure 9. No feature numbering was used, nor was layer numbering in sections or finds recording. Features were referred to by off-set measurements. As was the excavators' normal practice, a list of soil samples is included, numbered retrospectively in a stratigraphical sequence from the base upwards. Baulks 2 ft (0.6 m) in width were left in place until a late stage in the excavation. No plan survives of the limits of the excavation, which was extended N at the end of the excavations, on the evidence of photographs. The only descriptive record extant (apart from the descriptions of the soil samples referred to above) is that published as a summary note (see below). The paper and photographic archive has been deposited with the finds in Salisbury Museum. This archive consists of site and finds notebooks, a plan and a number of sections, correspondence and numerous photographs, both monochrome prints and colour transparencies.

EXCAVATIONS

The whole barrow was excavated after harvesting of a barley crop, together with some limited areas of the surrounding ploughsoil. The full extent of the excavations can only be judged from photographs. Photographs also show that the areas between baulks were excavated first, then the cross-baulks at 20 ft (6.1 m) intervals were removed, and finally the median baulk. In the last stages some further possible postholes and other features in the chalk subsoil were examined.

In this report the one plan has been closely reproduced (Figure 7A), together with the section of the E face of the median baulk and the N face of one cross-baulk (Figure 8A, B). The remaining sections are reproduced as profiles, with the exception of some short section lengths (Figure 9). A key (Figure 9) indicates the relative positions of these sections and profiles.

Imperial measurements are retained throughout this report, followed by their metric equivalents.

The excavators identified five phases of activity, 'each separated by a considerable gap in time' (Vatcher 1964: 185).

Phase 1 'Six large pits were dug, probably in the course of open-cast flint mining. After partly silting-up the pits were filled in and the area levelled, material being obtained from a quarry on the E side of the barrow.'

'Two separate successive timber buildings were then constructed.

Phase 2 'rectangular, 36 ft by 12 ft [10.9 m × 3.7m].

Phase 3 'irregular trapezoidal, 16 ft by 16 ft [4.9 m

Phase 4 'construction of the barrow . . . rectangular flint cairn covering a few weathered human bones, afterwards capped by a chalk mound, the mound material being supplied from the flanking ditches'.

Phase 5 'dated to the Late Bronze Age, was marked by the re-cutting of the barrow ditches, an inhumation on the edge of a newly-dug ditch, and two pits outside the latter containing unaccompanied cremations'.

These proposed phases will be examined in chronological order. Phases 1 to 3 are tentatively identified in key plans (Figures 7B–D).

Phase 1: pre-barrow pits

It is not clear which of the larger features shown in Figure 7B are to be counted as the 'six large pits' of phase 1. Only four large pits in the central area, nos. 1, 2, 3 and 5, are labelled as such on the site plan. In Figure 7B these are shown with other possible pits, including some which may have been cut through by the barrow side-ditches (Phase 4). Some at least of these features are later than the construction of the barrow. The S-most two large pits, nos. 1 and 2, appear on the evidence of photographs to have been cut through the flint cairn and other mound material. Although the drawn sections are less than clear on this point (e.g. Figure 8A, lower half), the photographs and the indications of disturbance to the S end on aerial photographs suggest that these two pits may well represent 19th-century barrow-digging. M.E. Cunnington (1914: 407) remarked that there was no recorded opening of the barrow, 'but it looks as if it has been dug into in more than one place'. Some others (Figure 9E) do clearly pre-date the flint cairn. The extreme scarcity of nodular flint in the sides of these pits, however, when contrasted with the abundance of large nodules on the surface of the chalk throughout the combe S of Druids Lodge, makes interpretation as deliberate open-pit flint mining difficult. The suggestion first appears in a letter from the late Norris Thompson to the excavators (in archive, dated October 1963), but more cautiously suggesting opportunistic removal of nodules from holes dug for a structural purpose.

Phases 2 and 3: structures beneath mound

Apart from the statements in the brief report quoted

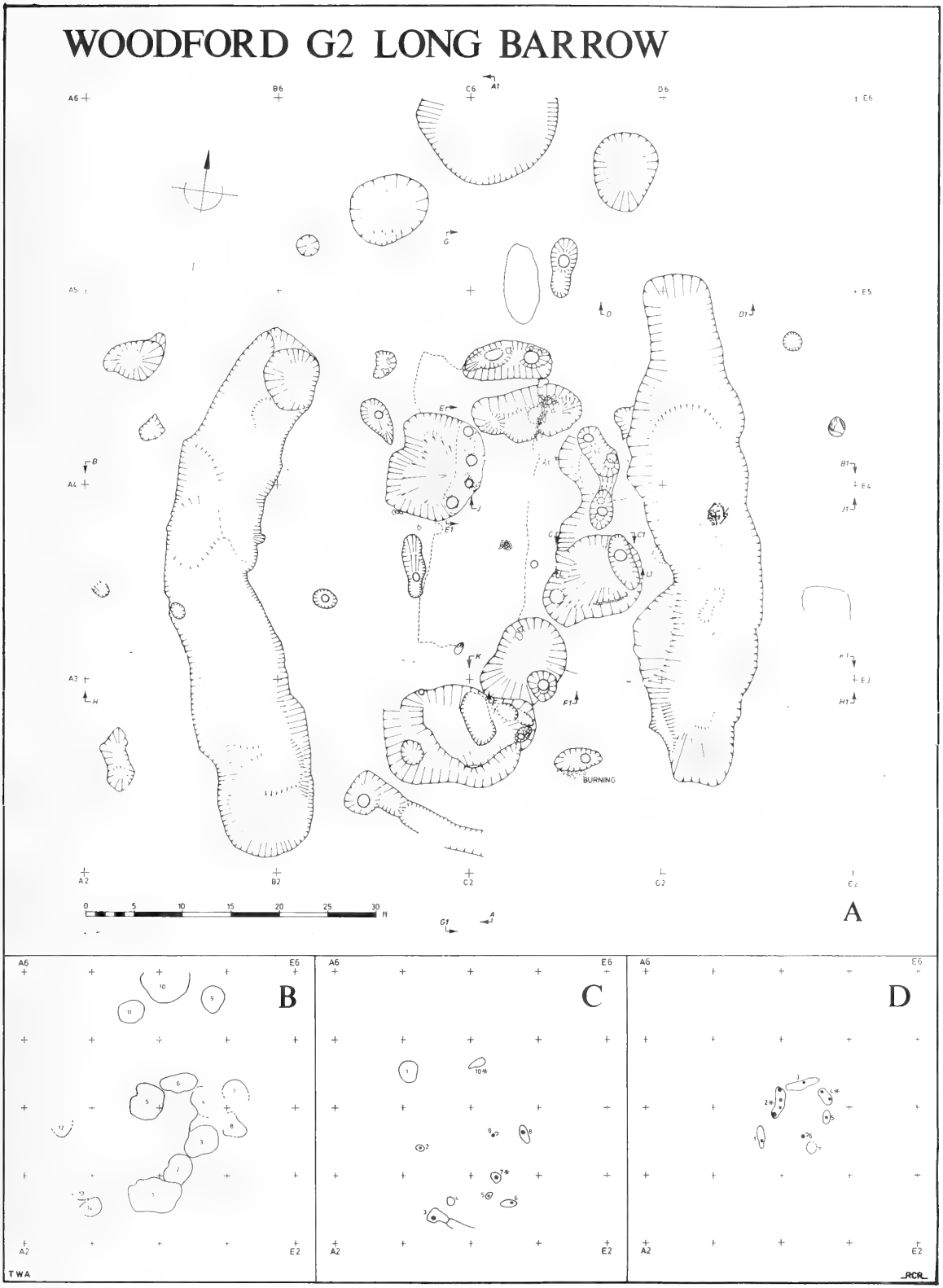

Figure 7. Woodford G2. A: Site plan showing recorded features and position of illustrated sections; Key plans: B: Pits of excavator's Phase I; C: Post-holes of Phase 2 structure; D: Post-holes and trenches of Phase 3 structure.

above, the only general indication of which post-holes were allocated to these phases can be found in a number of photographs taken at the end of the excavation. Here the larger structure appears to be marked with ranging poles in post-holes, while thin canes were erected in the post-positions in gulleys which may be wall-trenches of a smaller Phase 3 structure, as well as in un-phased post-holes. Figures 7C and D represent the post patterns indicated on the photographs. Two post-holes from each proposed structure recorded in a list of soil samples are asterisked. The larger Phase 2 structure is quite inconclusive. There is some coherence about the slots with post-positions which represent the Phase 3 structure (Figure 7D). However, as the main plan shows, horizontal cavities are marked in one of these (no. 2 on Figure 7D) which have been planned as if representing horizontal timbers (cf. Nutbane: Morgan 1959). In this instance these are almost certainly rabbit burrows which, together with the fact that no cut for this slot was planned, makes its value in the reconstruction uncertain. Although not central beneath the later barrow mound, this smaller structure might be a small mortuary building.

Phase 4: barrow construction

The rectangular broken line reproduced in Figure 7A shows the extent of a cairn of flint which forms the core of the mound immediately overlying the pre-barrow land surface. This must have been the first stage of construction prior to the cutting of the side ditches. The side ditches were very irregularly cut both in outline and depth. They may have been partly cut through earlier pits, although there is no evidence for this beyond their appearance in plan (Figure 7A).

The ditches formed the quarries for the chalk mound material. Little trace survived at the time of excavation of such a chalk mound. The only surviving weathered chalk rubble surrounded the flint cairn. Traces of a chalk-free loam still covered part of the cairn beneath the modern ploughsoil, and there was little chalk in the large interstices of the cairn construction. It is possible, then, that the cairn remained uncovered, except at its

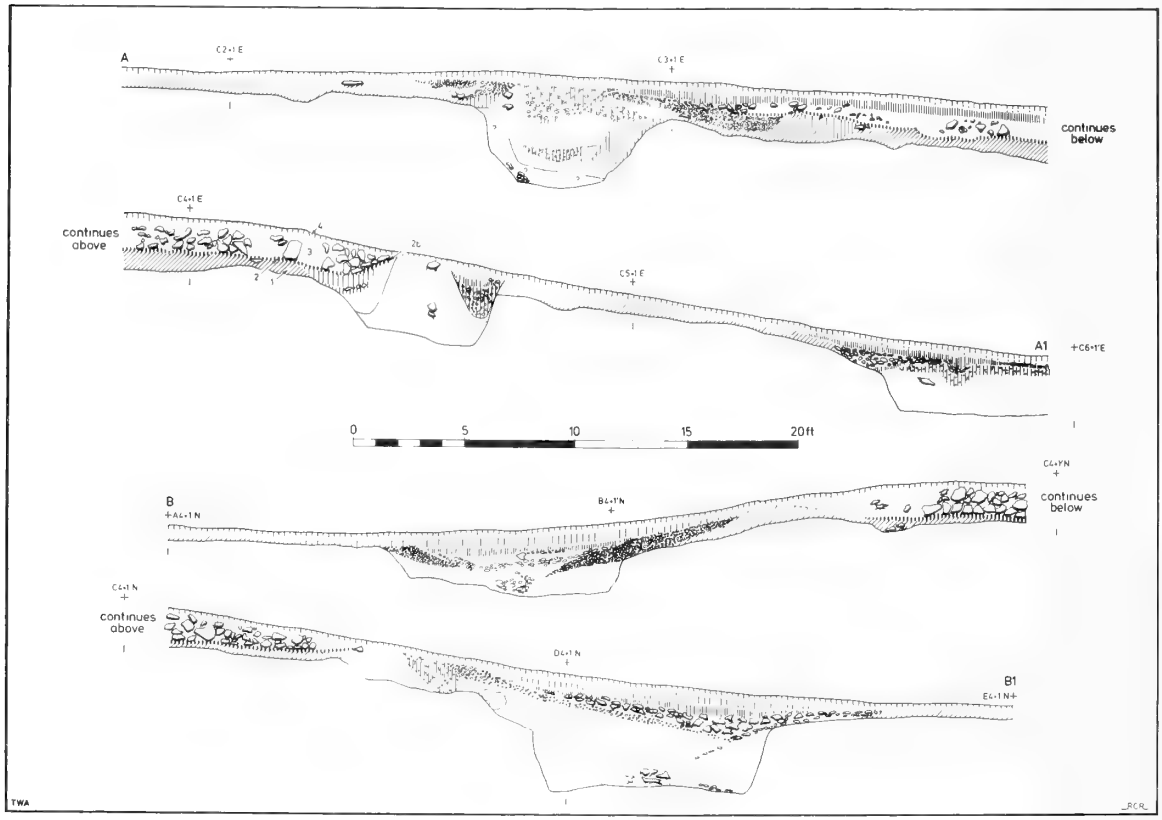

Figure 8. Woodford G2.
A: S–N section of long barrow;
B: W–E section.

edges, and that the quarried chalk was ramped from the inner edges of the ditches against the cairn. Alternatively the cairn may have been capped by a turf core or bank.

The ditch filling (Figure 8B, lower), although drawn in several styles, shows a characteristic sequence of tips in the primary fill with frost-shattered and rain-washed material from the erosion of the ditch sides and the development of a weathering cone. Overlying this is a thick deposit of fine chalk which eroded from the sides of the chalk mound. This slumping of mound material may be seen in Figure 9D (layer 3). Above this chalk fill in the W ditch and at both ends of the E ditch is what appears from photographs to be an unsorted ploughsoil of unknown date. In the middle sections of the E ditch, this is replaced by what appears to be a dump of flint nodules, perhaps cleared from cultivated fields, perhaps from the surface of the mound itself. A thick turf-line fills the upper level of the ditch below modern ploughsoil. A list of soil samples taken and numbered as in Figure 9D is described in the records as follows:

1 Hard chalk base.
2 Chalk silt.
3 Small chalk nodules and soil.
4 Dark soil and flint in base of re-cut.
5 Dark layer (Romano-British, etc.)
6 1948 ploughsoil.
7 Modern ploughsoil.

Phase 5: possible re-cut ditch

The excavators proposed that both ditches had been re-cut in the Late Bronze Age. To the writer only the N end of the E ditch appears in drawings (Figure 9D) and photographs to have been partially re-cut. Its fill again appears to consist of ploughsoil. A number of sherds recorded from this fill and from similar levels in both ditches are of middle-bronze-age character (e.g. Figure 10.4). Also at an equivalent level, 1 ft 10 ins. (0.5 m) below surface and beneath the flint dump, was found an incomplete human skeleton (Figure 7A) in a supine position with knees drawn up, probably buried in a small shallow grave or pit, although there is no evidence on this point. A report on this burial appears below (page 21).

Cremations E of the barrow

Two small circular pits outside the E ditch (Figure 7A)

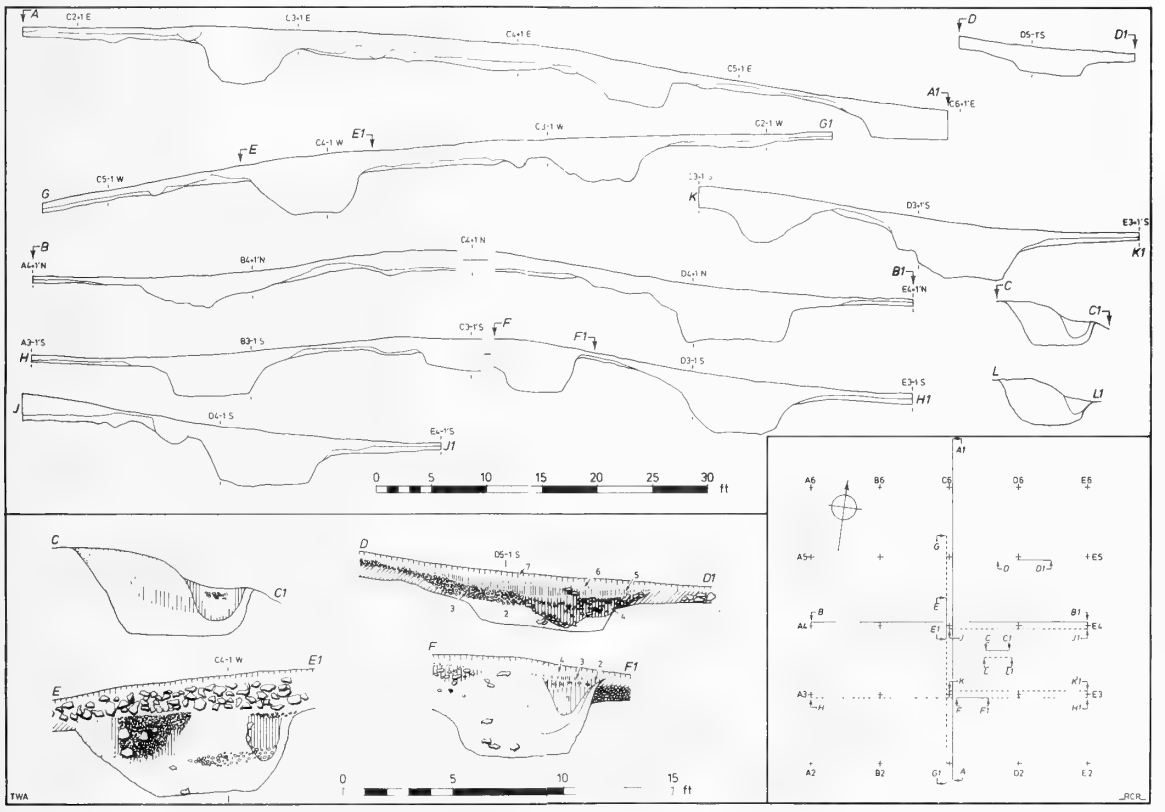

Figure 9. Woodford G2. Profiles and sections of long barrow. Location key to sections.

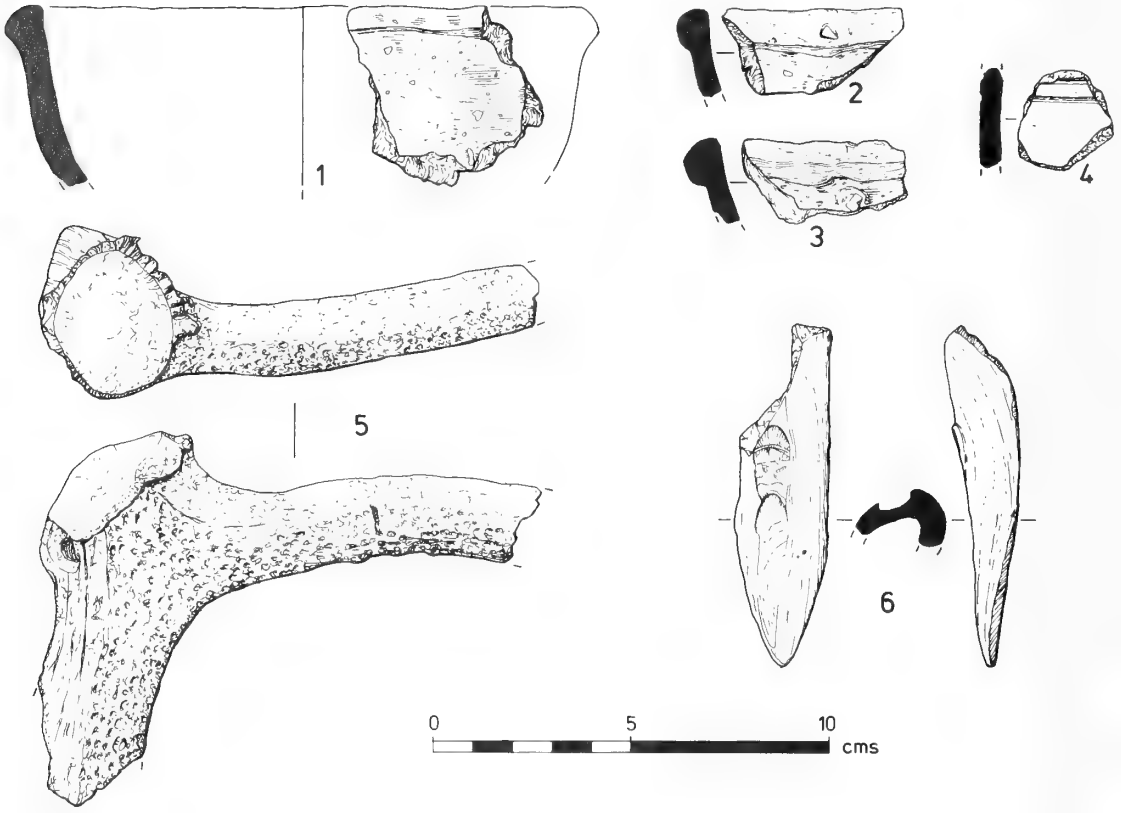

Figure 10. Woodford G2. 1–3 neolithic pottery; 4 middle-bronze-age potsherd; 5 antler pick; 6 bone point.

contained cremated human bone. No traces of an urn were found in either case. However, the S example contained large pieces of charcoal with horizontal grain apparently beneath the cremation.

FINDS

Pottery

Twenty recorded finds of pottery were made, containing about 30 sherds in all. Many are in a very friable and fragmented state. Four are medieval sherds from the upper ditch fill. Seven are Romano-British sherds from similar levels in the ditches. One is of probable early-iron-age fabric from the 're-cut' level of the ditch. Another of late middle-bronze-age date (Figure 10.3) came from the upper chalk fill of the E ditch level with the inhumation. Five neolithic sherds and a number of fragments came from the edge of the ditch, from 'under flints of structure' – probably beneath the cairn (Figure 10.1), from the cairn (Figure 10.3) and from the turfline beneath the barrow mound (Figure 10.2).

Four sherds are illustrated (Figure 10):

1 Rim sherd of neolithic bowl. External lipping to rim. Reduced firing; exterior black; break, black; interior, dark brown. Friable paste, laminar breaks, large sparse flint temper. Find no. 48.

2 Rim sherd of neolithic bowl similar to above in form and firing. Very uneven wall thickness; platey fabric with very large flint temper. Find no. 121a.

3 Rim sherd, probably of same vessel as last example. Find no. 122/3.

4 Decorated sherd, probably middle-bronze-age globular urn. Reduced firing; exterior, black; break, dark brown; interior, black. Hard smooth paste with very fine and dense flint temper. Both the fabric and the shallow groove decoration closely resemble many examples of globular urns. Find no. 13a.

Worked bone

Antler pick, incomplete (Figure 10.5). Part of the beam and brow tine of small, shed red-deer antler. Friable chalk condition with no wear traces, but characteristic battering of rear edges of coronet found on picks. Found at S end of W ditch, depth 1 ft 9 ins. (0.54 m). Find no. 6.

Bone point (Figure 10.6). Splinter of bovine tibia; modern damage to proximal end and surfaces eroded; flattish point worked and smoothed on distal end. Length 89 mm. Found in the flint dump in the E ditch. Find no. 2c.

Flint

Very few flints were retained from the excavations, and no tools or utilized pieces are recorded from stratified levels. Two topsoil finds recorded as possible scrapers are not re-touched, nor is a 'possible shaft scraper'. One bag of 7 very fresh flints is marked 'sample of flakes from ditch'.

Faunal remains

Very few animal bones were recovered from the excavations, and are insufficient to form the basis of a report. An unused fragment of red-deer antler was found near the base of the E ditch.

A large number of molluscs were kept and recorded, all of large species and recovered by hand. The collection consists entirely of *Cepaea*, very varied in its habitat, and the calcicole *Pomatia elegans*.

Human Bone: skeleton from E ditch

The following report was prepared shortly after the excavation by Dr I.W. Cornwall, Institute of Archaeology.

Mandible and post-cranial bones only – no skull.

Mandible with teeth of young adult, probably male, was broken in two places, mended and the teeth replaced. All teeth present, save the second and third molars on the left and the third molar on the right. The M_2 may well have been lost in life, for the margin of the jaw had receded as if healed following its loss. There was no evidence that the third molars had ever been present. Unerupted third molars are a not uncommon anomaly in modern man. The remaining teeth were in good order – only slightly worn, with no calculus and no caries. There was a supernumerary first upper incisor, presumably of the same individual.

Most of the post-cranial skeleton was in a very poor state. Fragments of the pelvis showed no sign of a pre-auricular sulcus, thus confirming the male sex. Vertebrae were healthy. Only two long bones were complete enough for measurement: right humerus 31.2 cm; right tibia, 34.4 cm.

Using the only two regression-formulae applicable, an average figure for the height in life was calculated as 165.1 cm (5 ft 5 ins.), the difference between the two calculations being 2.4 cm, suggesting that the humerus was long relatively to the modern average. A young adult male, probably in his early twenties, at most.

Discussion

by PHILIP HARDING *and* CHRISTOPHER GINGELL

The distinction between oval barrows and long barrows was first made by Colt Hoare (1810: 22). Thurnham (1870: 296), dismissing this distinction, retained oval barrows within a general long barrow class, while Grinsell (1957) chose to amalgamate them with enditched multiple round barrows of the Bronze Age. In 1975 Drewett restated the case for oval barrows and claimed that, in Sussex, a separate class of barrow could be justified within the Neolithic. Barrows which were classified by Drewett as oval did not exceed 120 ft (36.5 m) in length. However, I.F. Smith (RCHM 1979: xiv–xv) regards such reclassification as premature, and groups these barrows within the conventional definition of long barrows. The excavations of Kingston Deverill G1 and Woodford G2 show that they can be regarded as members of this group of long barrows.

Grinsell's lists contain 36 which fall into this category, among the 82 long barrows in Wiltshire. They conform to the overall distribution of long barrows which have foci around Avebury and Stonehenge with an additional dispersed group near Warminster, of which Cold Kitchen Hill forms a part (Gingell 1976: Figure 5). Woodford G2 and Kingston Deverill G1 were the first to be excavated.

The excavation of Kingston Deverill G1 has shown that it is of comparable shape, size and design to similar, but better-preserved, excavated long barrows in southern England. These average 66 ft (20.1 m) in length by 36 ft (11.2 m) wide and have side-ditches. However, variations occur. At Waylands Smithy I, Oxfordshire (Atkinson 1965), a complex mortuary structure covered a mass of human bones laid on a sarsen pavement; at Thickthorn Down, Dorset (Drew and Piggott 1936) there was evidence of a turf mortuary structure preserved in the mound but no burials; at Alfriston, Sussex (Drewett 1975), a ploughed barrow

contained a single inhumation placed in a grave. Although no two sites have produced similar structures, their presence has been better demonstrated on unploughed sites where the structure has been preserved within the mound. The identification of a structure at Cold Kitchen Hill has consequently been made more difficult by the removal of the mound. The interpretation of the form of the structure has been based on a series of disturbed unrelated subsoil features which are also unparalleled at any of the other sites. The absence of burials may be due to plough erosion or to the burial rite which has also been shown to be inconsistent at the other sites.

In plan the Woodford long barrow G2 is also paralleled at Alfriston, Thickthorn and Waylands Smithy I. Nearer to hand, apart from its obvious resemblance to Kingston Deverill G1, a number of Hampshire barrows display similar character. Moody's Down West, Moody's Down South-East, Barton Stacey ph., and Duck's Nest, Rockbourne, are typical examples of what Dr Smith describes as long barrows of ovoid plan (RCHM 1979: xxi and Figure 3). Unlike Kingston Deverill G1, sufficient mound survived at Woodford to show something of its internal structure. The flint cairn, which may have been capped by a turf core, has possible parallels at Rockbourne Down and Manor Down, Longstock (RCHM 1979: xxii). However, although less eroded than Kingston Deverill G1, the pre-mound structures are too ephemeral to afford close comparison with other examples.

Barrows of this class have often been paired with larger long barrows. At Waylands Smithy I the oval barrow was capped by a larger barrow while those at Alfriston and Stoughton, Sussex, and Thickthorn Down, Dorset, all have larger barrows in the immediate vicinity. At Moody's Down, Hants an ovoid long barrow is closely associated with a rectangular example (RCHM 1979: Figure 7a). The Kingston Deverill G1 can be similarly paired with its larger neighbour, Brixton Deverill G2, which lies 500 yards (457 m) to the NW.

This class of monument is imprecisely placed in the chronology of funerary monuments. Waylands Smithy demonstrates a firm relationship, while at the others the contents of the ovoid long barrows suggest that they have been constructed late in the long-barrow tradition (Drewett 1975: 138). Unfortunately in the absence of excavated material from Brixton Deverill G2, the Cold Kitchen Hill barrows do nothing to resolve this problem. At Kingston Deverill G1 the only firm dating evidence rests on the fact that both ditches were silted up by the Beaker period, while at Woodford G2 early-neolithic pottery was found in a primary position. Radiocarbon dates are at present unavailable for either barrow, although suitable material is available from Kingston Deverill G1.

Acknowledgements. The authors wish to thank Alan Graham for preparing the plans and sections of Kingston Deverill G1, Liz James for the object drawings from that site, and Robert Read for the drawings for the report on Woodford G2.

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The Excavation of Milton Lilbourne Barrows 1–5

by PAUL ASHBEE
with contributions by ALISON CAMERON,* D.M. DAVIES,† CAROLINE ELLIS,‡ JOHN EVANS,¶ CAROLINE GRIGSON,§ DAVID HADDON-REECE,** BEVERLEY MEDDENS†† *and* GEORGINA SHAW††

Five barrows at Milton Lilbourne, on the chalk high-plain bordering the S side of the Vale of Pewsey, were examined in 1958. A discrete linear group comprised an oval double disc-barrow and two bell-barrows, conjoined by a small bowl-barrow; and there was also a detached bowl-barrow.

Within the near-razed disc-barrow was one intact grave with an awl-furnished cremation. No grave was found beneath the N bell-barrow, and the one at the centre of the small bowl-barrow had been emptied. Beneath the S bell-barrow was a cremation, furnished with a miniature vessel and housed in a monoxylous timber coffin which lay, flanked by a substantial carbonized timber, in an area of burnt soil and spread charcoal. Beneath the detached bowl-barrow was a cremation under an inverted collared urn in a circular grave.

The mounds of the bell-barrows and detached bowl-barrow provided exemplary sections through their loam cores, which had been massively augmented by occupation material, and their chalk-rubble envelopes. The occupation material contained broken pottery and flint artefacts and waste, together with such a quantity of domestic animal bones as to allow important inferences about early bronze age husbandry.

The barrows stood within ancient fields, with a field-bank beneath one of them.

A series of radiocarbon dates is broadly concurrent with dates from similar contexts at Durrington Walls and in the Stonehenge area.

The burned remains beneath the bell-barrow appear to be those of a large specially-designed structure.

Special studies report on charcoal and on human, animal, small-mammal and molluscan remains.

Contents

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Introduction

These five barrows were excavated between 28 July and 11 September 1958.

Milton Lilbourne 1 (NGR SU 19935790) is a disc-barrow; Milton Lilbourne 2 (NGR SU 19995789) and 4 (NGR SU 19995784) are bell-barrows with outer banks, conjoined with Milton Lilbourne 3 (NGR SU 19995787), a small bowl-barrow; Milton Lilbourne 5 (NGR SU 20075789) is a bowl-barrow. They comprise an isolated Group (Figures 1, 2) on the higher plain chalk, above the Vale of Pewsey and contiguous to the eastern sources of the river Avon. The *Giant's Grave* long barrow (Milton Lilbourne 7) lies about $\frac{3}{4}$ mile[1] to the NW (NGR SU 18935820), on the high chalk summit of the block of downland bounded by the rivers Bourne and Avon (Ashbee 1970: 118); it is distinctive in its exceptional length.

M.E. Cunnington (Mrs B.H. Cunnington) observed in 1913 that all except disc-barrow 1 seemed to have been opened. Otherwise, they had been damaged only

1. Excavation records used imperial units, as was usual at the time, and these are retained in this report.

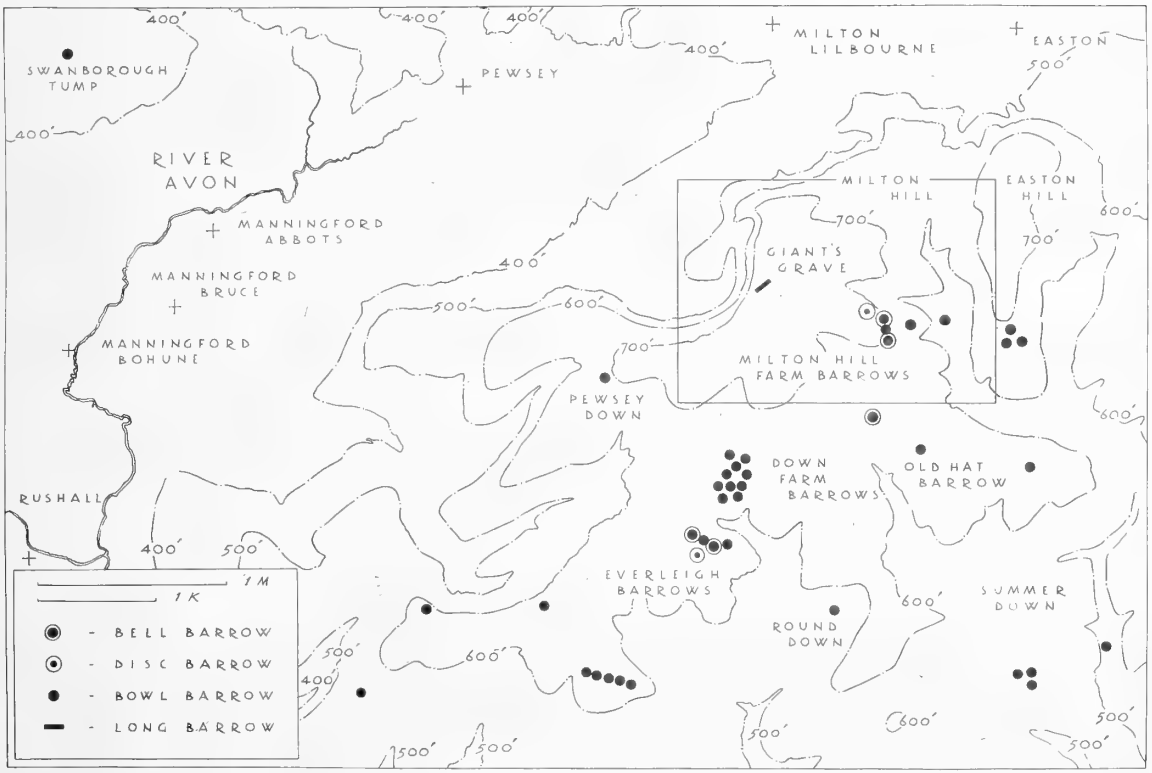

Figure 1. The Milton Hill Farm, Pewsey Down, and Everleigh barrows.

by rabbits, when seen and photographed by L.V. Grinsell in the 1930s (Grinsell 1933; 1936). Ploughing during the 1939–45 war (Grinsell 1953: 172; 1958: 110) largely destroyed disc-barrow 1 and the outer banks of bell-barrows 2 and 4. By 1958, the disc-barrow had been near-eradicated, the outer banks of the bell-barrows obliterated and their ditches infilled, while the conjoining bowl-barrow 3 had been effaced. The ditch of bowl-barrow 5 had been infilled and its mound damaged.

Because of sustained damage and the Milton Hill farmer's insistence that the large bell-barrows constituted an insufferable impediment to agriculture, excavation was sponsored by the Ancient Monuments Inspectorate of the Ministry of Works (latterly the Department of the Environment, now English Heritage, the Historic Buildings and Monuments Commission for England). Thurnam's (1871: 295, fn. b) investigation of the disc-barrow was the sole record of disturbance. It was requested that all the barrows be examined during the time available and that partial excavation techniques should be employed.

Summary notices of the excavations were published (Annable 1958–9: 230–1; Longworth 1959: 274) and certain of the results included in general works (Ashbee 1960: 45, 55, plates VIIIa, VIIIb, XIIb, XIIc; Annable and Simpson 1964: 115; Grinsell 1974: 110).

Earlier records of the barrows

The name of the parish of Milton Lilbourne – 'Middle Farm', perhaps so named because it is midway between Pewsey and Easton; William de *Lilebone* held the manor in 1236 – is of some antiquity. Milton Hill Farm, or Milton Farm, as it was termed by Colt Hoare (1810: 190), is a recent appellative (Gover, Mawer and Stenton 1939: 349–50). Like its neighbouring parishes, Milton Lilbourne bestrides the embryo river Avon and embraces a measure of high chalk downland: Milton Hill is a bastion distinguished by its spectacular W-facing combes of the escarpment system which defines the S skirt of the Vale of Pewsey. William Cobbett (1762–1835) crossed Milton Hill Farm in 1826 when collecting material for his celebrated *Rural Rides* (1830): 'In steering across the down, I came to a large farm, which a shepherd told me was Milton Hill Farm. This was upon the high land, and before I came to the edge of this Valley of Avon.' The farm was, even then, making inroads into the upland landscape of sheep-walks.

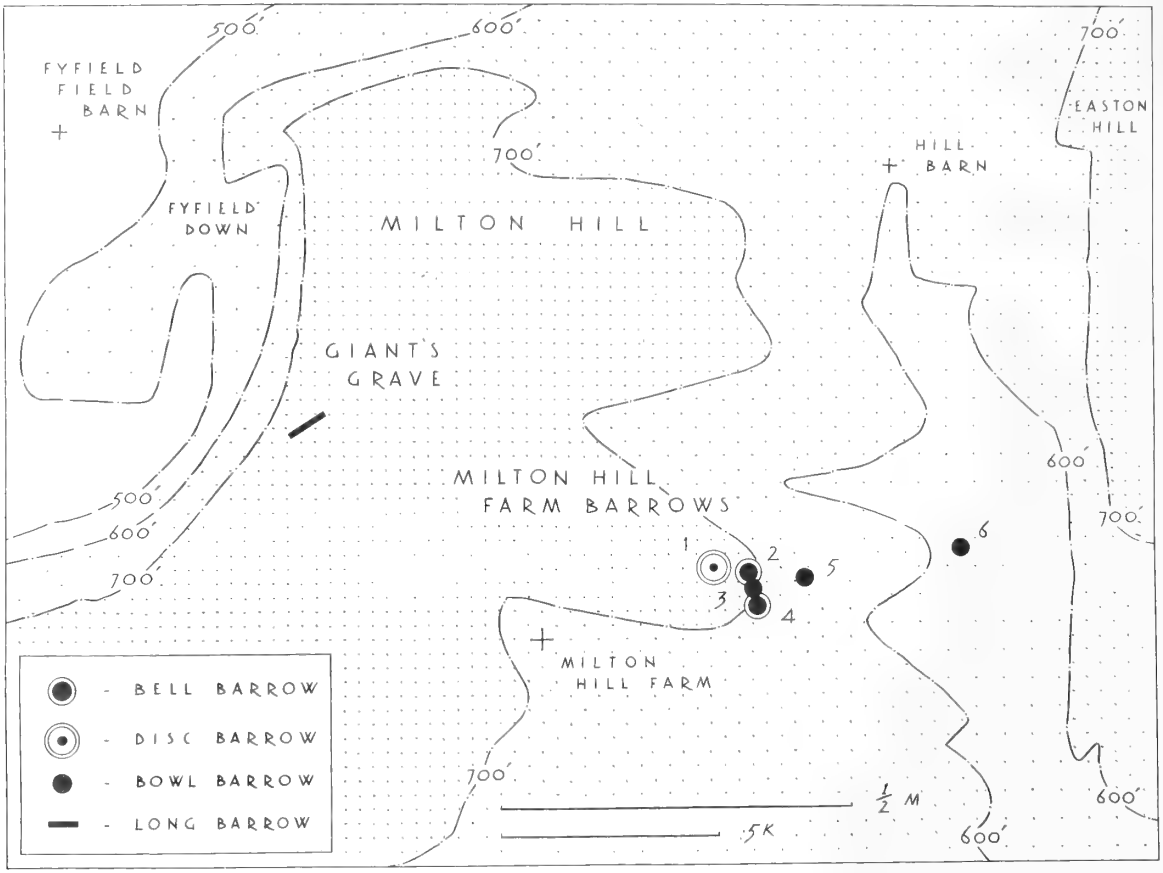

Figure 2. Siting of the Milton Lilbourne barrows 1–5.

In his *Ancient Wiltshire*, Sir Richard Colt Hoare (1810: 190, Station VI, Iter. 3) only mentioned the barrows in passing. Hoare's notebook (Anon. 1885: 236) is more specific:

> On the declivity of the down, see an immense irregular long barrow, called vulgarly the Giant's Grave. Beyond this tumulus and between it and Milton Farm-house, we evidently found the site of British habitations and picked up a great deal of pottery. From hence crossed over to Easton Hill, where we discovered irregular earthen works and excavations denoting ancient habitation. Returned to Milton Hill – a group of five tumuli very near each other, and another on the declivity of the hill. In our way back to Everley saw others detached, but no earthen works or excavations exciting curiosity.

John Thurnam (1871: 299; Briden 1984) defined a triple barrow as 'three tumuli, that in the centre of much smaller size than the others, the whole standing on a common platform, and surrounded by a ditch of a figure-of-eight, or hour-glass shape'. He cited Milton Down as one of three examples (the others were Shepherd's Shore [Bishop's Cannings 29/30/31] and West Kennet Hill [West Overton 23]), and commented:

> That on Milton Down differs from the two others, in the small central mound not being included within the ditches which respectively surround the two principal bell-shaped barrows. The three evidently form an associated sepulchre, but scarcely constitute a true triple as defined above.

Thurnam (1871: 293), who defined disc-barrows, dug into nine which included the 'one at Milton Down, with two central mounds, one of these affording an interment of burnt bones in a small circular cist' (Thurnam 1871: 295, fn. b). The 1958 excavation showed that this grave had been beneath the SE mound and that the burned bones had been removed.

The Rev E.H. Goddard included the Milton Lilbourne barrows in his *List* (Goddard 1913: 292):

> Group of barrows (1–5) close together ⅓ mile NE of Milton Hill Farm . . . OM, 42 NW; AW, I [*Ancient Wiltshire*, vol. I], 190, Station VI.; *WAM*, xxii, 236 (Group in good condition,

not ploughed. All except the disc-barrow (1) seem to have been opened. 1913. M.E.C.)

(1) Fine disc-barrow with two mounds within the vallum, at NW corner of group.
(2) Fine bell-shaped barrow almost touching E side of last.
(3) Small bowl-shaped barrow (impinging on banks of both bell-barrows (2 and 4) and obviously thrown up after them. M.E.C.)
(4) Fine bell-shaped barrow on S side of 3.
(5) Small bowl-shaped barrow a little E of 1–4.

Grinsell (1933: 220, 229) noted the outer banks of the bell-barrows, which had not been mentioned by earlier investigators:

2 – NE of Milton Hill Farm. A fine example, with sloping berm and outer bank – features that are extremely rarely present in the same barrow, the outer bank is 5 yards wide and 1½ ft high.

4 – South of last, a small bowl-barrow separating them. There may be a vague suggestion of outer bank on E.

Grinsell's list in the *Wiltshire Victoria County History* (vol. 1, part 1 (1957): 184, 215, 222) gives details:

1 Among Milton Hill Farm Group; 19935790; Mound N 26 ft, S 22 ft; Height N 1 ft, S 1 ft; Berm width 20–27 ft; Ditch, width 13 ft, depth 1 ft; Outer Bank, width 13 ft, height 1 ft; Overall measurements: 152 ft from N to S, 114 ft from W to E. Measured before 1939. Ex. JT: one of the tumps had a primary cremation [Figure 3].
2 Milton Hill Farm; 19995789; Mound diameter 71 ft, height 10 ft; Berm width 10 ft; Ditch width 12 ft, depth 1½ ft; Outer bank width 15 ft, height 1½ ft. Beaker sherds found on mound by OM. Outer bank in good condition 1932, ploughed 1939–49 [Figure 4].
3 Among Milton Hill Farm Group; 19995787; Diameter in paces 17; Height in feet 4. Between but prob. coeval with two bell-barrows [Figure 4]

Figure 3. Disc-barrow 1, photographed from the S in 1939 by L.V. Grinsell.

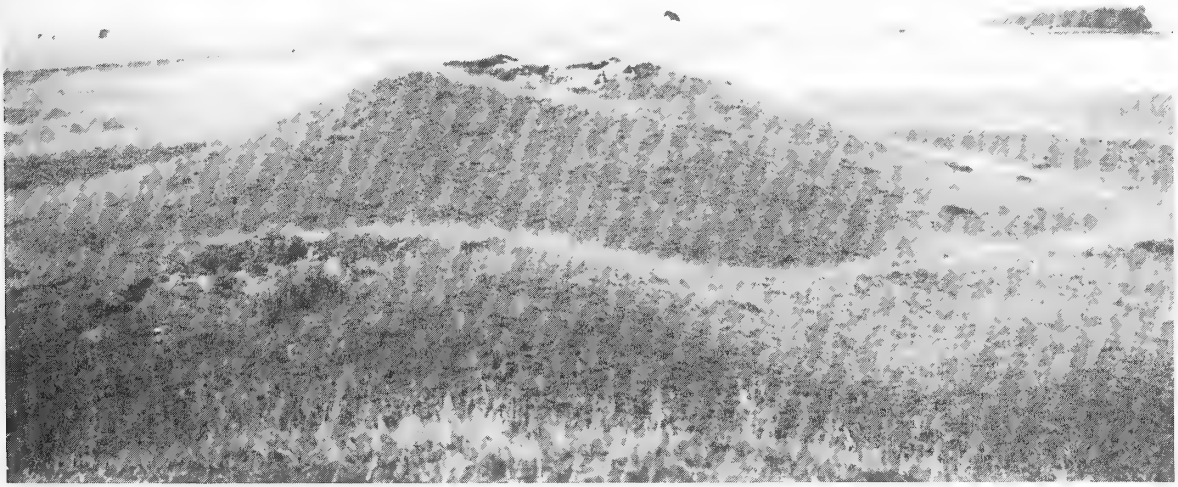

Figure 4. Linking bowl-barrow 3 and bell-barrow 2,photographed from the top of bell-barrow 4 in 1939 by L.V. Grinsell.

Figure 5. The barrows in 1953. Aerial photograph by J.K. St Joseph, University of Cambridge Committee for Aerial Photography.

4 Ditto; 19995784; Mound diameter 69 ft, height 10 ft; Berm width 14 ft; Ditch width 16 ft, depth 2 ft; Outer bank width 15 ft. Outer bank was very vague even in 1932, and since then ploughed out. (Barrows 2 and 4, with 3, a bowl-barrow, have been regarded as a triple barrow, and all three may well be coeval.)

5 Ditto; 20075789; Diameter in paces 12; height in ft 4. MBA sherds found by OM [Owen Meyrick].

5a 30 paces NW of 5; 20025793; v. small. Found by L.V.G. 1936.

No trace of this additional mound, 5a, was found in 1958.

Grinsell (1974: 83, 110) placed the Milton Lilbourne example in category 9 of his disc-barrow classification: oval, comprising an oval ditch with outer bank, on the platform within which are two mounds usually placed symmetrically in relation to the oval – in short, oval twin disc-barrows. They vary from slight ellipses to marked ovals.

Grinsell also mentioned the Milton Lilbourne barrows in his general works (1936, 145; 1953, 172; 1958, 958).

A 1946 vertical aerial photograph (5139, CPE/UK1821, 4 November 1946, F/36, Royal Air Force, MULTI (7)58SQDN) shows that disc-barrow 1 had been razed, as well as the linking bowl-barrow 3, and the outer banks of bell-barrows 2 and 4. The outer bank of the disc-barrow can be seen to abut that of bell-barrow 2 at one point, indicating that thereafter its oval plan had been modified to avoid it.

Oblique aerial photographs taken by Professor J.K. St Joseph early in 1953 (University of Cambridge Committee for Aerial Photography, LK65 and 66, of 22 April; LP49 and 50, of 2 May) record the barrows substantially as they were encountered in 1958 (Figure 5). There is dramatic evidence of the levelling of barrows 1 and 3, the removal of the outer banks of barrows 2 and 4 and the infill of the ditch of barrow 5.

Erosion has continued since the excavation reported here. An Ordnance Survey visit on 23 October 1972 (report in Wiltshire Sites and Monuments Record) found the upstanding mounds (2, 4 and 5) reduced to a height of little more than 1 ft and the ditches scarcely visible. Aerial photographs taken in 1977 (University of Cambridge Committee for Aerial Photography, CES 13, 14, of 13 September) show the barrow group only as a number of indistinct ring-ditches.

Excavations

Trenches to explore the relationship between barrows 1, 2, 3 and 4 were made as broad as was consistent with the resources available. Barrow 1 was examined by cross-trenches: one trench bared the ploughed bank and infilled ditch, besides providing a section where the bank had almost impinged upon the outer bank of barrow 2; another recorded any remnant of the razed mounds. These trenches were then extended to uncover the central area. Angled trenches, extended in the central area, were dug through barrow 2. One trench linked with that across barrow 1 and the other with barrow 3. From the central area of the site of barrow 3, further trenches provided a diametric section across barrow 4. Extensions bared much of the site of barrow 3 and revealed the character of its ditches. A further extension allowed examination of the burial beneath barrow 4. A diametric trench, extended to reveal the urn burial, was the only course of action possible for barrow 5 (Figure 26).

Although ploughing had all but destroyed disc-barrow 1, obliterated bowl-barrow 3 and infilled and levelled their ditches, subterranean features survived; ditch fillings had been masked by plough-soil, while truncated graves and pits remained under barrows 1 and 3. The mounds of barrows 2, 4 and 5 were, however, largely undamaged, and complete sections were obtained. For the past three decades, most barrow excavation in Wessex has been of plough-reduced examples, and such an insight into undamaged mounds is a rarity.

It was shown that barrows 2, 3 and 4 are not a triple-barrow in Thurnam's (1871: 299) terms (page 71, below).

1 The barrows and their burials

DISC-BARROW 1 (*Figures 3, 6–9*)

Excavation (Figure 6)

Although the barrow was plough-reduced and growing rank grass, its ditch and bank were visible, and its oval shape clear. A slight flattening of outline on the E side was visible, where the outer bank had almost touched that of bell-barrow 2. The interior, however, had been so completely levelled that no surface trace of its twin mounds remained. It was thought that excavation to the base of the loose chalk beneath the plough-soil might reveal their limits, because mounds and banks

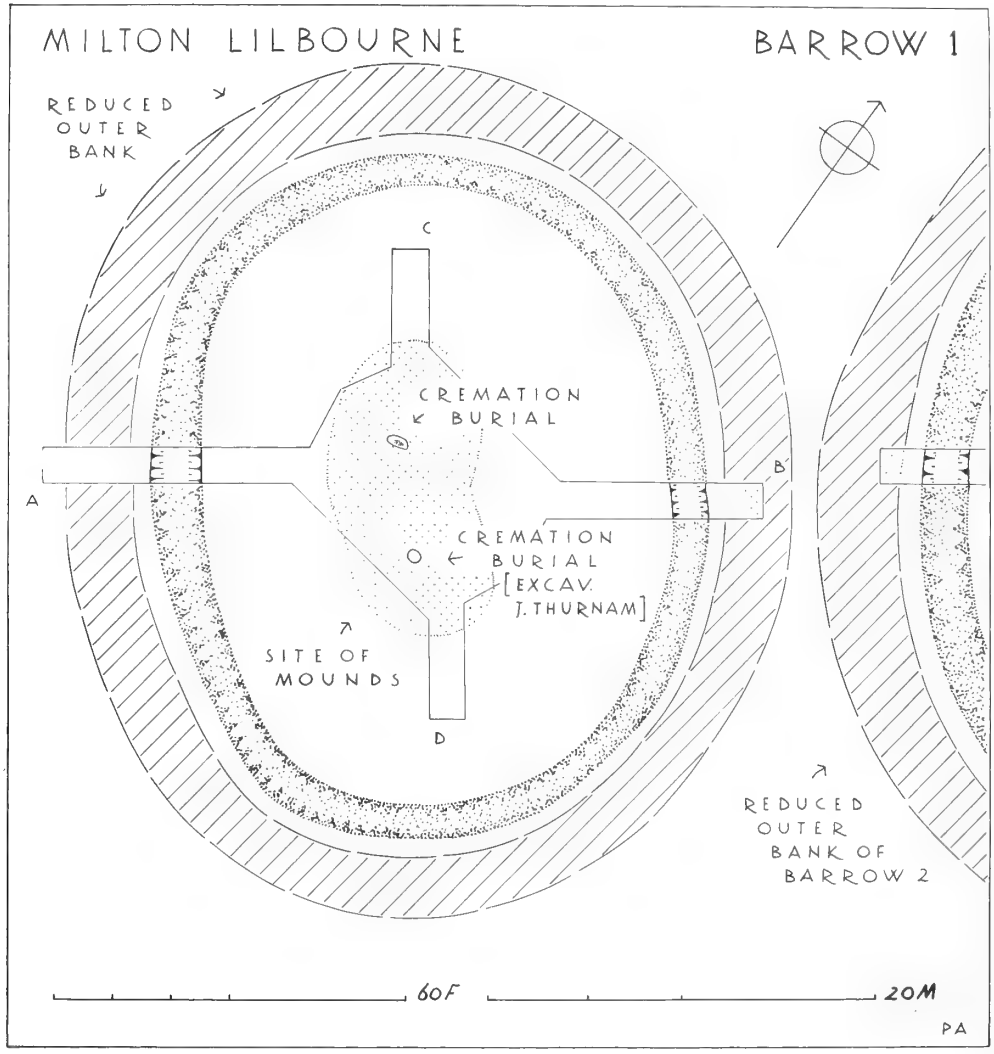

Figure 6. Disc-barrow 1: plan showing reduced outer bank, ditch, graves and site of mounds.

arrest weathering (Atkinson 1957: 228–33; Ashbee 1960: 59, figure 19) of the ancient soils and chalk beneath them. Excavation showed that the plough-scarred chalk surface on the sites of these destroyed mounds was slightly higher than its surround.

Ditch and exterior bank (Figures 6–8)

The ditch was broad and shallow, with a trumpet-mouthed profile (Jewell and Dimbleby 1966: 339). When the accumulations of cemented chalky rainwash (layer 5) were removed, its smooth bottom was seen to be coated with a fine greasy layer, perhaps from periodic standing water. On the E side these indurated deposits contained humus and had a dark, ferric, appearance. On the W side they were white and viscid in texture. These inwash accumulations were succeeded by coarse chalk rubble (layer 4), some pieces adhering one to another. Finer chalk rubble, mingled with dark chalky loam (layers 3, 3a), covered the coarse chalk rubble and was overlain by a depth of fine, stone-free humus (layer 2). A mass of broken turf, chalk and dark soil (layer 1) which infilled the top of the ditch (which had been 1 ft in depth when seen by Grinsell *c.* 1931) had been pushed in when the bank was bulldozed in 1940. Nothing suggested that the lower infill of the ditch (layers 2–5) was other than from natural weathering processes acting upon the sides (Ashbee 1966: 29–30).

A slight elevation of the natural chalk surface above its surround indicated the whereabouts of the disc-

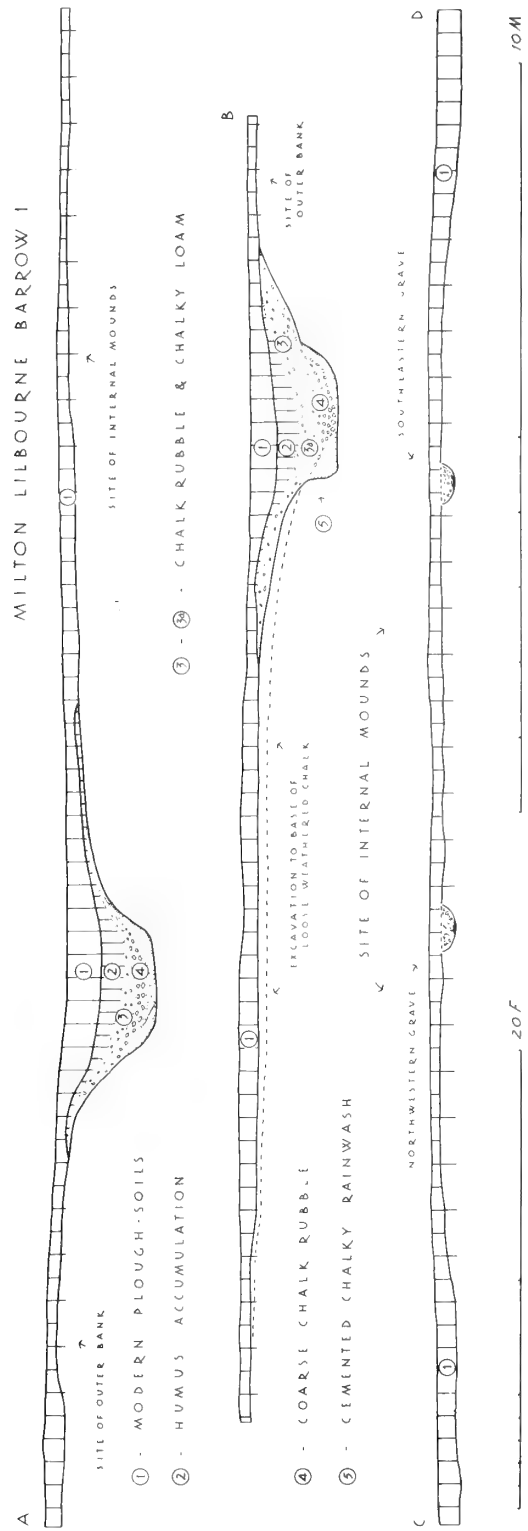

Figure 7. Disc-barrow 1: sections of interior, ditch and reduced outer bank.

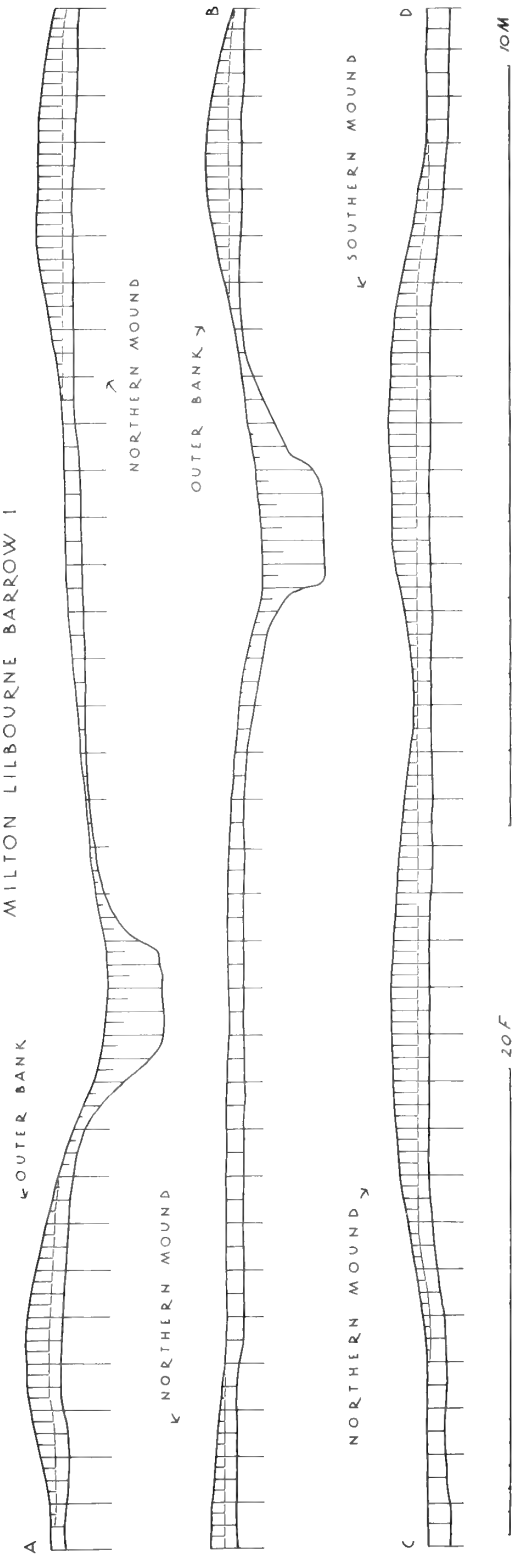

Figure 8. Disc-barrow 1: restored profiles of mounds, ditch and outer bank.

barrow's destroyed bank. Only a thin skin of plough-soil (6 ins. as against 12–15 ins. elsewhere) concealed the plough-scarred chalk. The outer lip of the ditch indicated the position of the inner border of this razed bank.

Internal graves and their burials (Figures 7–9)
An elongated and more-or-less oval area of slightly elevated chalk, approximating to the position of the destroyed mounds, reflected the contiguity recorded in early photographs (Figure 4). Ploughing, as well as destroying the mounds and ancient soil beneath them, had so reduced the upstanding chalk that the graves had been truncated by at least 8 ins., perhaps as much as 12 ins.

The dark filling, impregnated with charcoal, of the oval NW and the circular SE graves lay at the base of the plough soil. As far as could be judged, they had been dug beneath the centres of their mounds.

Oval NW grave (Figures 9, 10)
Only the lower part of this oval grave remained. The plough had bitten deep in this area; the heaped cremation was only about 5 ins. below the top of the grave infill, the base of the ploughsoil. Its sloping sides and bottom were irregular; the large protruding, sometimes loose, lumps of chalk were worn, probably by periglacial processes. No antler-pick marks were found.

The female cremation (Special Studies, page 88 below) was in an oval heap (Figure 10), covering the lowest part of the grave; a small bronze awl (Figure 30.1) lay by its S edge (Figure 9, upper). The heap was about 12 ins. long and 4 ins. deep. The pit's infill of dark charcoal-impregnated loam contained fragments

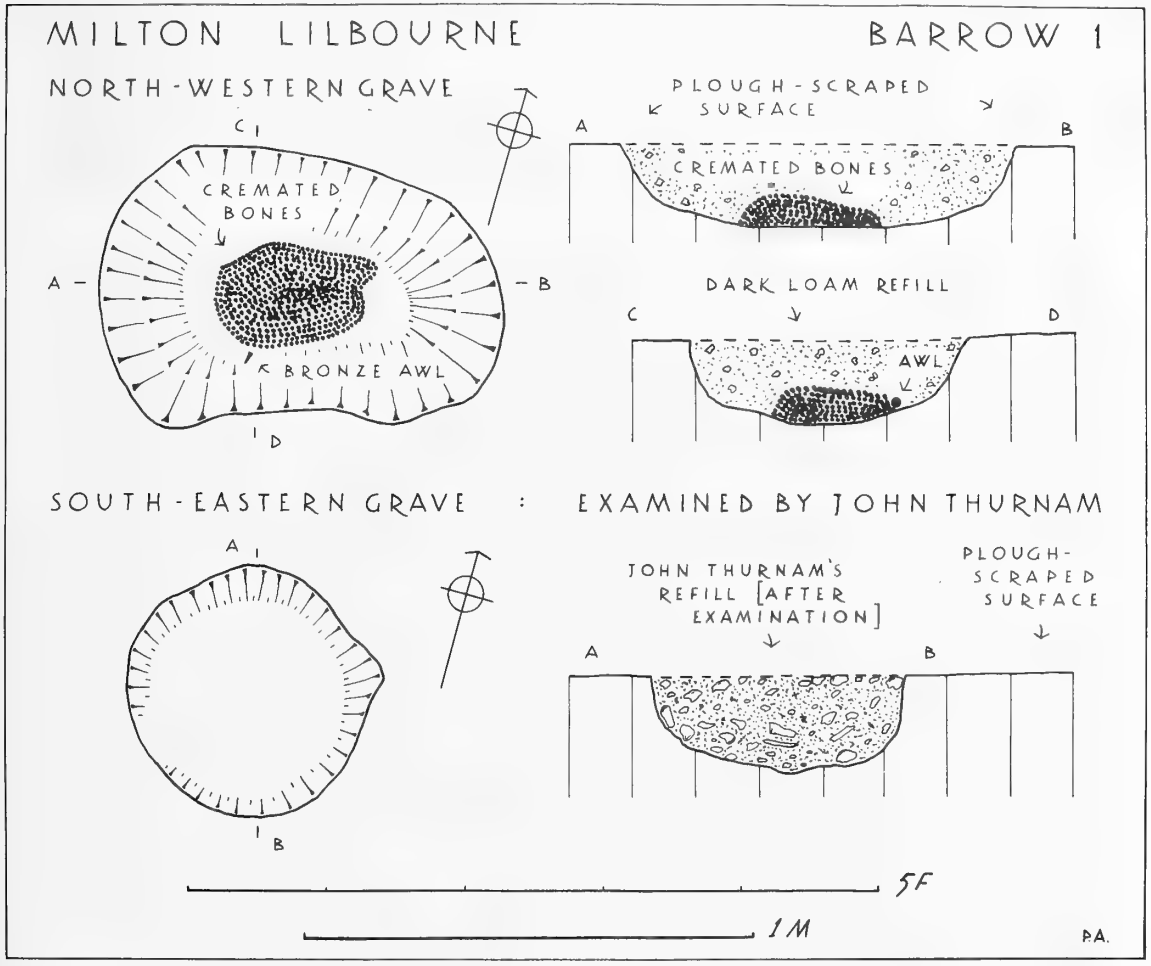

Figure 9. Disc-barrow 1:
(above) *Oval NW grave, with cremation accompanied by bronze awl;*
(below) *Circular SE grave examined by John Thurnam.*

Figure 10. Disc-barrow 1: Oval NW grave, with cremation burial in situ.

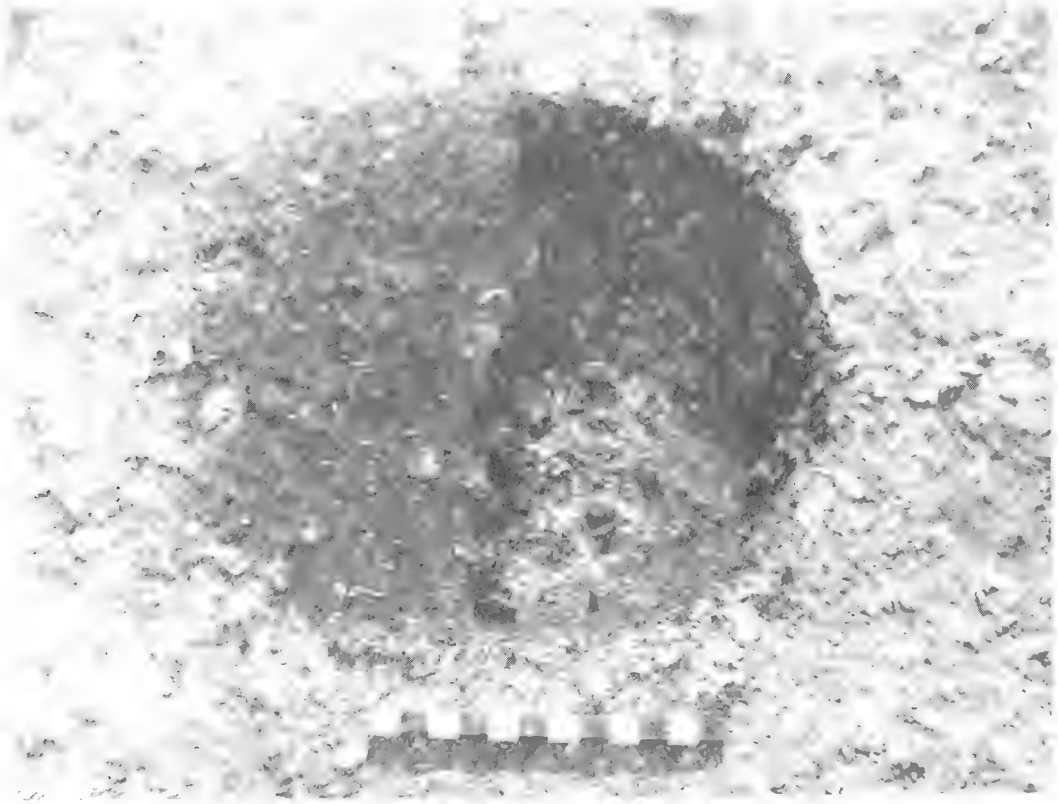

Figure 11. Disc barrow 1: Circular SE grave examined by John Thurnam.

of burned bone, 2 pieces of iron pyrites, including fragments, 145 pieces of fire-crackled flint, and 35 pieces of worn, besides yellow-burned, chalk.

Circular SE grave, examined by John Thurnam (Figures 9, 11)

Sufficient of the bottom of the grave survived to suggest that its sides had been vertical and its base concave. Although irregular, worn, chalk lumps protruded into its otherwise smooth interior, it had been cleanly and precisely finished. Antler-pick marks were absent, implying it had been scraped smooth.

When John Thurnam (1871: 295, fn. b) examined this circular grave *c.* 1865, presumably by a shaft dug through the crown of its covering mound, he removed the cremation burial and carefully replaced its infill. Evidence of this was the charcoal-impregnated soil, containing fired flints and chalk, which was similar to, although much darker than, the infill of the undisturbed NW grave. Indeed, this infill was so black, fine and tenacious that it had pigmented the sides and bottom of the grave. Besides a few pieces of charcoal and some amorphous scraps of burned bone, presumably from the abstracted cremation burial, the infill held fragments of belemnites (? *Belemnitella mucroriata*), fossils common in the chalk, 918 pieces of fire-crackled flint, and 29 small lumps of yellow-burned chalk.

Natural cavities

When the plough-abraded and reduced surface inside the ditch was bared, irregular abbreviated cavities, mostly small, were found. Their infill was brown granular loam or a stiff chalky wash, and their irregular nature made them difficult to define. The largest, comparable to the plough-truncated graves, was to the E of the NW grave, at the margin of the elevated chalk which marked the site of its destroyed covering mound. They are considered natural.

The mutilated monument

The excavation could do no more than examine such features as had partially escaped plough destruction. Because this disc-barrow had been scrutinized, measured and photographed when intact (Grinsell 1957: 222; 1974: 110) (Figure 3) it was possible to restore the profiles of external bank, silted ditch and internal mounds (Figure 8).

BARROWS 2, 3 AND 4, THE OSTENSIBLE TRIPLE-BARROW

Excavation (Figure 12)

Radial trenches were used, and extended to explore the central areas of the barrows. A radial cutting into barrow 2 was set in line with the principal cutting across disc-barrow 1. Another embraced the relationship between barrows 2 and 3, conjoining with the trenches transecting barrow 4. These cuttings provided optimum sections and, with extensions, revealed the surviving subterranean features of barrow 3, the plough-destroyed bowl-barrow linking 2 and 4.

Coarse grass cloaked the two near-intact barrows, while extra-luxuriant sown grass marked their surrounding ditches. Ploughing had, here and there, bitten into their skirts but had not measurably mutilated their berms. Although rabbit burrows marked their crowns, there were no overt signs of disturbance.

As a triple-barrow (Figure 12)

Thurnam (1871: 299, fn. d) considered the three barrows to be associated but not to constitute a triple-barrow, because the central mound (3) was not *within* the ditches surrounding the two bell-barrows (2 and 4). Triple barrows are properly considered as those with a continuous ditch surrounding three mounds (Crawford and Keiller 1928: 202–5; Grinsell 1957: 214–15). This trio clearly began as two bell-barrows, which were subsequently conjoined by the small bowl-barrow; the two ditches, bracketing the space between them, were visible before ploughing. L.V. Grinsell (1957: 214–15) did not consider the three as a triple-barrow *sensu stricto*, and their separate character was confirmed by excavation. A new category of 'conjoined barrows', double and triple, is clearly needed.

Barrow 2, the N bell-barrow: its structure and features (Figures 12, 13, 15)

Modern pit (Figures 12, 13)

This pit, about 5 ft in diameter and 6 ft in depth, was filled with loose brown, crumbly loam, which was riddled with rabbit burrows, mostly collapsed and silted. Fragments of chalk and weathered flint were in the fill, as were an iron gin-trap, at the depth of about 2 ft, and a recent bone-and-iron knife-handle (page 70). The pit was first taken as an attempt to open the barrow by a central shaft (Ashbee 1975–6: 2), but the absence of positive sides and bottom and the presence of the trap allow that it might have been dug to clear the

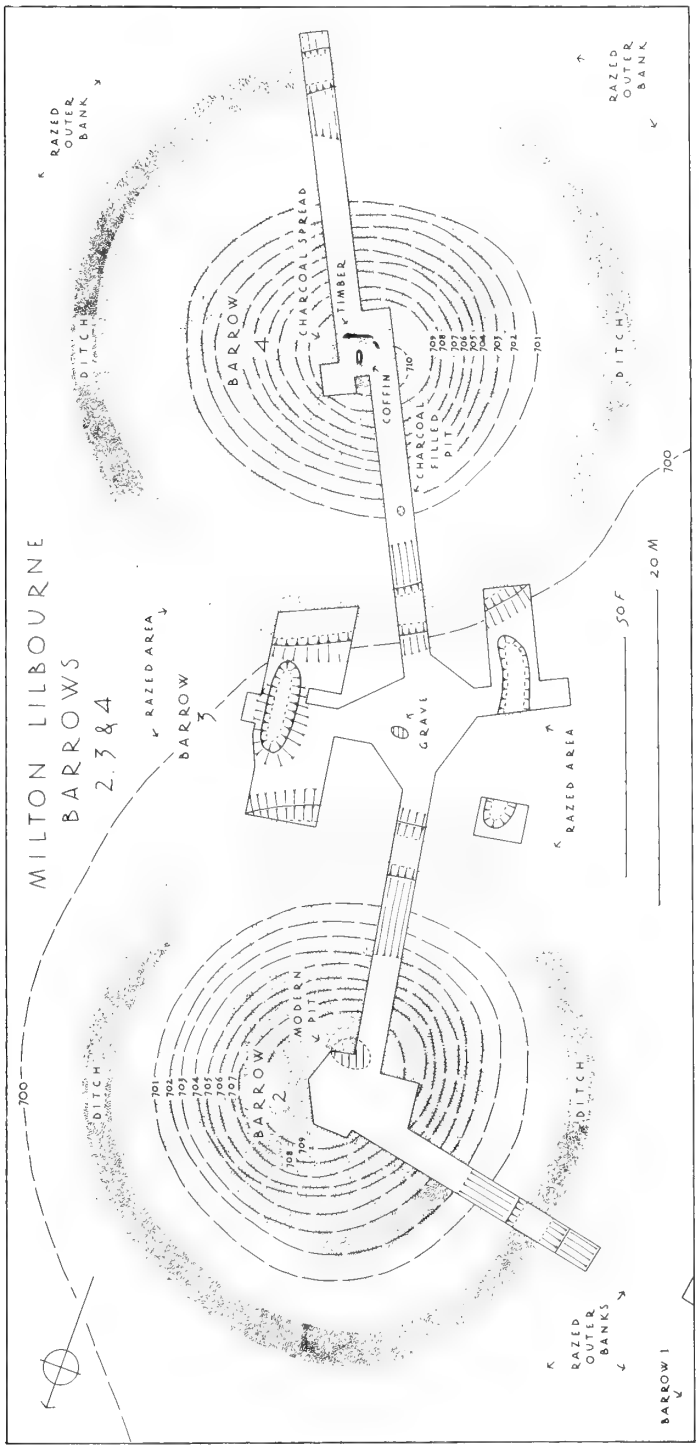

Figure 12. Bell-barrows 2 and 4 linked by small bowl-barrow 3: plan.

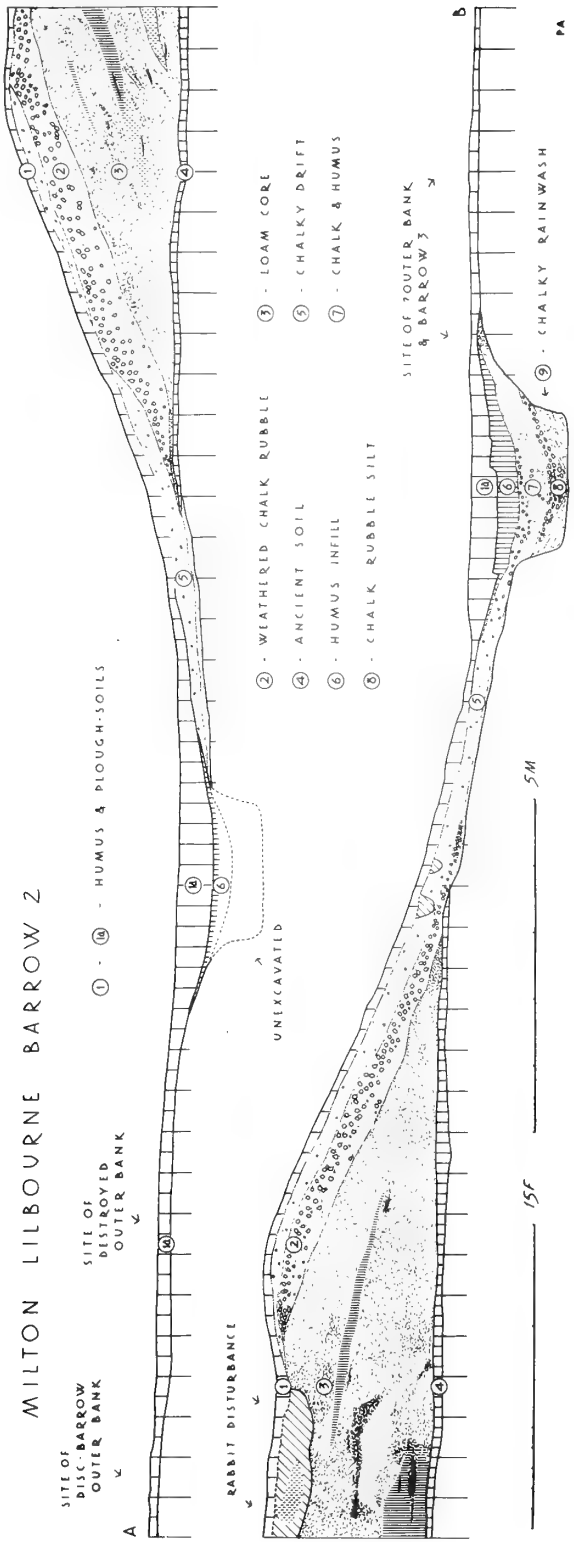

Figure 13. Bell-barrow 2: radial sections.

rabbit warren (Southern 1964: 254). In past centuries, artificial mounds were thrown up for rabbit warrens, and barrows would have been ideal for this purpose (Simpson 1893: 81; Crawford and Keiller 1928: 22–5; Ashbee 1963: 5).

Ancient soil (Figure 13)

The ancient soil (layer 4), light brown and granular, was frequently difficult to define. Even including the loose weathered chalk at its base, it was, except where it concealed palpable hollows, rarely more than 6 ins. deep, and had been considerably compressed by the bulk of the barrow above it (Jewell and Dimbleby 1966: 318). Throughout its profile it contained fewer pieces of chalk, small weathered lumps of flint and charcoal flakes, than the loam core (layer 3) which covered it. This dispersion may have resulted from tillage, for, when such soil has been undisturbed for a period, earthworm action normally takes such pieces to the base of humus (Atkinson 1957: 221–4). Removal of this ancient soil revealed a soft, worn, pitted surface on the chalk beneath it, marked by irregular patches of ferric staining.

The general height of the buried soil above the modern surface, allowing for the ground-slope (Figure 2), was about 1 ft 10 ins. (Atkinson 1957: 232; Ashbee 1960: 59, Figure 19). On the NW side, it stopped beneath the tail of the chalk envelope (layer 2) and above the base of the chalk drift that cloaked the berm (layer 5). On the S side, the tail of the chalk envelope continued on to the berm as far as the point where the berm began to slope. Buried soils at the margins of chalkland barrows normally become extinct at a depth of about 1 ft 9 ins. below the tail of their slope. This was no exception.

Absence of a central burial (Figures 12, 13)

Careful investigation of the ancient soil, and, after its removal, of the chalk surface beneath it, disclosed neither traces of a burial upon its surface nor a central grave beneath it. The modern pit did not penetrate below the rabbit-disturbed cap of the loam core (layer 3), so it could not have removed a central burial. To confirm the absence of a grave, the apparently natural chalk was removed, to a depth of 1 ft 8 ins., to ascertain beyond doubt that it was, indeed, the bedrock. The natural pipes and small irregular pits, containing soft, buff-stained chalk and light brown granular loam, proved to be surface phenomena, for clean white chalk lay beneath them.

Loam core (Figure 13)

A barrow's loam core is normally considered to be the topsoil stripped at the outset of ditch-digging. In this instance the core (layer 3) also contained occupation material, dark charcoal-blended soil, crumbs of charcoal, worn fragments of bone and pottery, as well as quantities of loam characterized by uniformly moderately sized pieces of weathered chalk and flint. This added material, as in the case of barrow 4 (page 000, below), undoubtedly contributed to the bulk of the loam core (about 4,950 cu. ft) and its inordinate height. About 1,700 cu. ft of topsoil would have been provided by the ditch, indicating that about 3,250 cu. ft of occupation and plough-soil had been added.

Intermixed, but with pronounced tip-lines (Figure 14), within the loam core were seven similar, but distinguishable, ingredients. At the base, a light chalk-indurated loam had been tipped, followed by a mass of occupation material with a considerable charcoal content. Above this were quantities of light loam, with lenses of lighter and chalky loam, and then more loam, but with charcoal-leavened occupation soil and chalky soil inclusions. A chalk-and-loam compound followed which was, again, covered by dark, charcoal-permeated, brown loam. Finally, the loam core had been capped with quantities of light chalky loam, later disturbed by rabbits.

Figure 14. Bell-barrow 2: section showing layered construction of the loam core, and its augmentation by occupation earth. Scale in feet.

Discounting the irregularities caused by tipping, a general constructional sequence was seen. Topsoil from the ditch, a mixed loam from tillage, was sandwiched with occupation soil and more plough-soil.

Chalk envelope (Figure 13)
Ploughing has reduced many barrows to no more than a chalk rubble collar surrounding a truncated loam core (Ashbee 1960: 29, Figure 5). This barrow, less reduced, retained the chalk deposit (layer 2) completely enveloping the loam core (except where broken by the rabbit warren). Clean chalk rubble, few lumps of which were larger than a fist, comprised the lower, unweathered, zone; the upper weathered portion, largely broken down to a granular texture, had developed a chalky humus. It had slipped at its margins, sealing the ancient soil (layer 4), and spilling on to the berm, where it met and united with the chalky drift (layer 5) cloaking the berm.

Berm, surrounding ditch and outer bank (Figures 12, 13, 15)
A bell-barrow's sloping berm results from physical weathering and expresses the relationship between the ancient surface beneath it and the modern surface around it (Ashbee 1960: 59, Figure 19); in this example a vertical interval of about 2 ft resulted. There was, below its humus, weathered mingled chalk and humus, which covered an almost yellow chalky drift (layer 5), bedded upon the undisturbed, loose, weathered chalk surface. These layers, the lower horizons of a natural weathering soil profile, are an extension downwards of the weathered horizon of the barrow's chalk envelope (layer 2), which continued and merged with the upper humified chalky ditch silts (layer 7).

Only one ditch section, on the S side of the barrow, was excavated in its entirety (Figure 13, centre-B). Here the bottom was just slightly wider than its original depth below the surface of the ancient soil (about 6 ft), while weathering had provided a characteristic trumpet-mouthed profile (Jewell and Dimbleby 1966: 316). The bottom was smooth, the adhesion of fine chalk pieces pointed to periodic standing water, and the initial deposits were humic-streaked rainwash (layer 9), the humus indicating the recurring nature of the process (Jewell and Dimbleby 1966: 316). Confined mostly to the middle, coarse chalk rubble (layer 8) covered this rainwash, which was overlain by finer humified chalk rubble (layer 7); on the inside, the finer rubble united with the berm's weathering horizons (layer 5) and, on the outside, overlapped on to the lip. These deposits were sealed by dark, almost black, humus (layer 6), which, despite plough mutilation, could be seen to have extended almost on to the berm. On the outside, weathering, although initially inhibited, had almost entirely destroyed the outer bank, and even lowered the natural chalk surface. Outside the ditch, on the NW side (Figure 13, A-centre), a slight elevation of the chalk betrayed its site.

On the S side of the Barrow (Figures 13, 15), the perimeter of barrow 3, the bowl-barrow that linked barrows 2 and 4, giving them the semblance of a triple-barrow, had partially covered a portion of the ditch. Clearly this (like the corresponding portion of the ditch of barrow 4) had weathered and silted, to the extent that it was infilled, and a considerable humic deposit had formed, before barrow 3 was raised. Indeed, the two bell-barrows may have stood apart for more than two centuries.

Linking bowl-barrow 3: its remaining features (Figures 12, 17)

Plough destruction
All above-ground traces of the barrow, about 50 ft in diameter and 4 ft in height (Figure 17), had been removed, and even the elevated chalk beneath it reduced. This, besides the broken turf and chalk levelling the ditches of the adjoining larger barrows, reflects deliberate destruction rather than plough attrition.

Central grave
A plough-truncated cavity at the centre was infilled with loose soil and chalk containing an undecorated, weathered body-sherd of pottery, a scrap of bone and a flint flake. It is considered to have been the central grave. Its conical shape and the patent marks of hacking and scraping, as well as its infill, suggested that it had been located and emptied by an earlier investigator.

Natural pit
A pit adjacent to the W ditch had irregular sides and was filled with a fine, hard, chalky wash, containing small unweathered nodules of flint; it may well have been of natural origin.

Ditches
The infill of the ditches that bracketed the space between the two bell-barrows 2 and 4 substantially remained, although truncated. Their profiles were of the trumpet-mouthed variety (Jewell and Dimbleby 1966: 316); although their upper margins were lacking, they were, when initially dug, probably of about equal width and depth.

Silting had begun with modest quantities of humus-streaked rainwash (layer 5), covered by coarse chalk

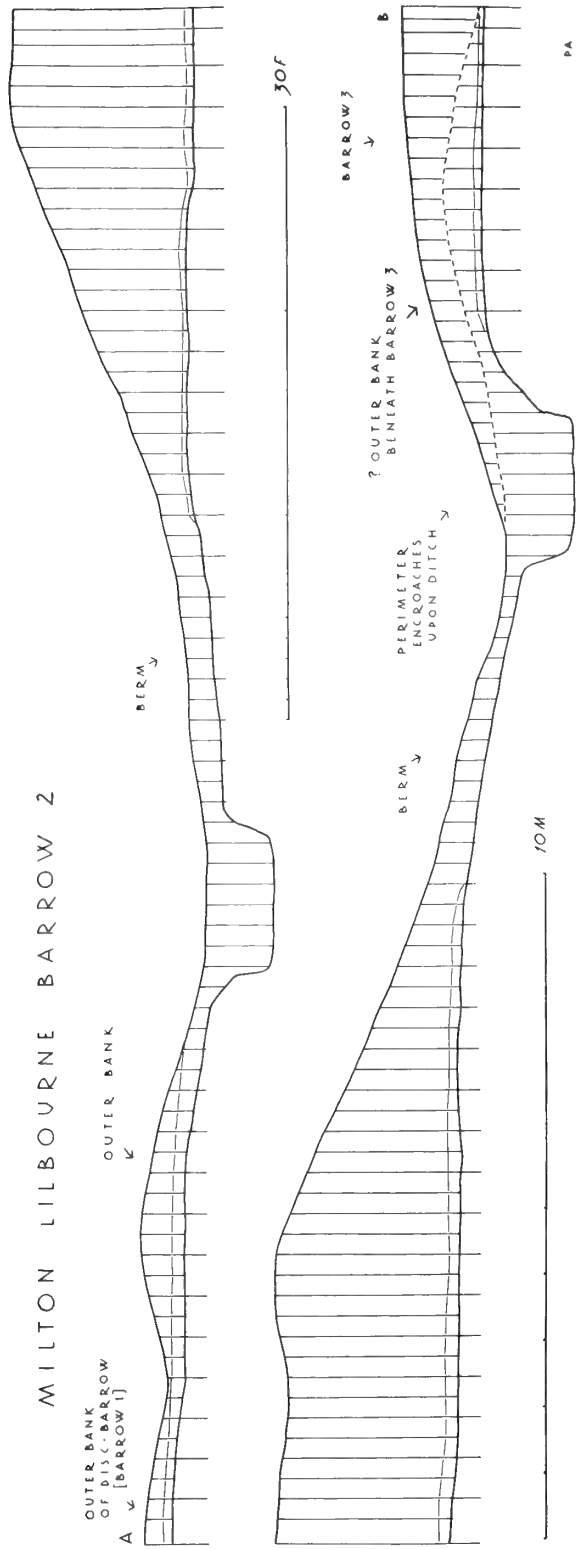

Figure 15. Bell-barrow 2: restored profiles.

Figure 16. Linking bowl-barrow 3: E ditch segment photographed from the top of bell-barrow 4.

rubble (layer 4). The process continued with humified chalk (layer 3), which was stabilized and concluded by a considerable depth of humus (layer 2). This last may have been supplemented by blown soil from cultivated fields in the vicinity. Sherds of pottery, broadly contemporary with the barrow, were in the lower ditch silts, and Romano-British sherds were in the final humus accumulation (layer 2). At the ends of each ditch, the lower silts were markedly finer while the humus accumulation may have been deeper.

Barrow

Before destruction (Figure 16), it could be seen on the surface that the bracketing ditches intruded into the outer banks of bell-barrows 2 and 4. This resulted from weathering; the original intrusion may have been minimal. Indeed, the ditches had clearly been disposed with reference to these outer banks. It is likely that this barrow had beneath it minor arcs of these outer banks in the condition that obtained when it was raised (Figure 17, A–B): the bell-barrow ditches had silted (Figure 13, centre-B; Figure 18, A–A) and the outer banks had spread and largely stabilized. Moreover, these minor arcs of outer bank may have had beneath them ancient soils related to those beneath the major mounds.

S bell-barrow 4: its structure and features (Figures 12, 18, 19, 20, 21)

Barrow

Preliminary survey (Figure 12) showed that the barrow did not stand at the centre of the area enclosed by its ditch. This, partly due to the many rabbit burrows that had mutilated its crown and E flank, may nonetheless also have reflected original construction – an apparent anomaly whose investigation resources did not allow.

Ancient soil (Figure 18)

The ancient soil (layer 4) under barrow 4, like that under barrow 2 (Figure 13, layer 4), was often less than 5 ins. deep. Its disturbed, apparently tilled, character made it difficult to distinguish from the loam core (layer 3) above, although it was readily separable from the

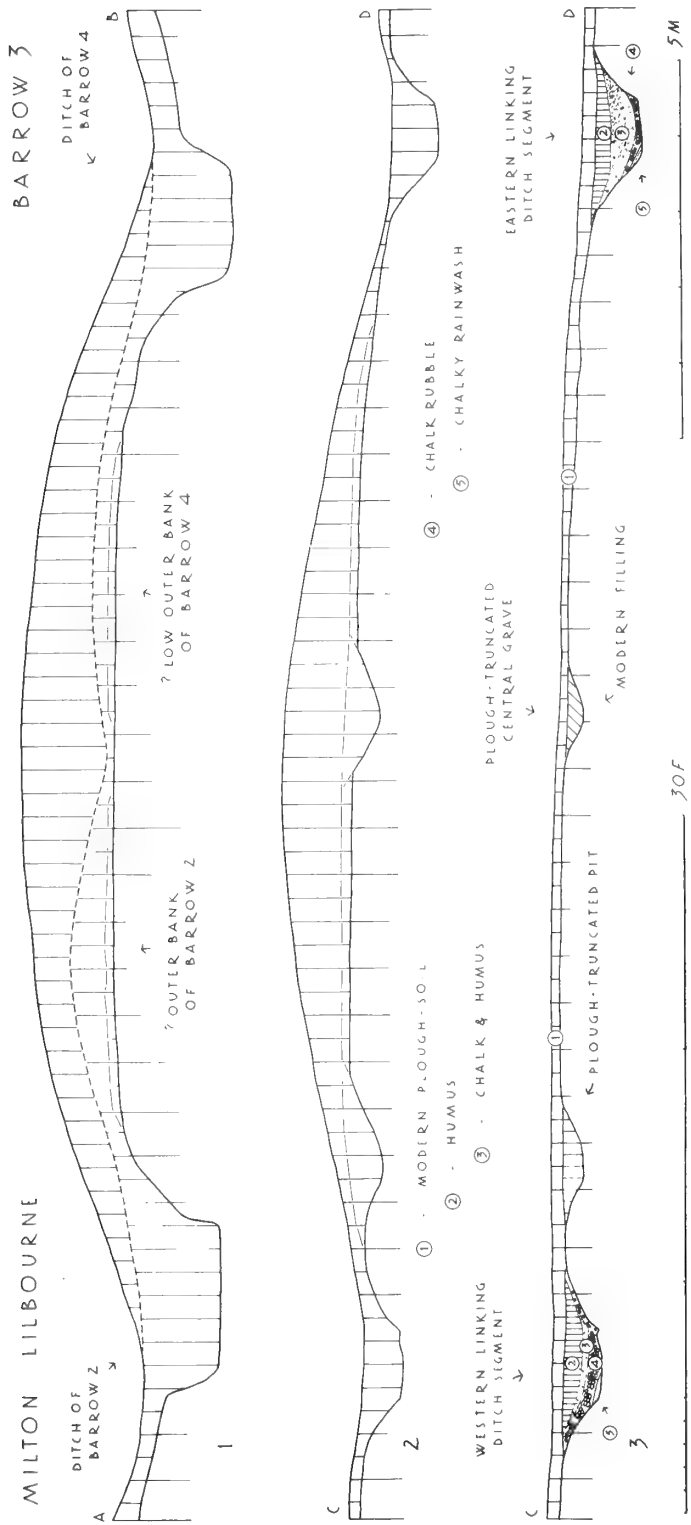

Figure 17. Linking bowl-barrow 3: sections showing ditch and disturbed grave, together with restored profiles.

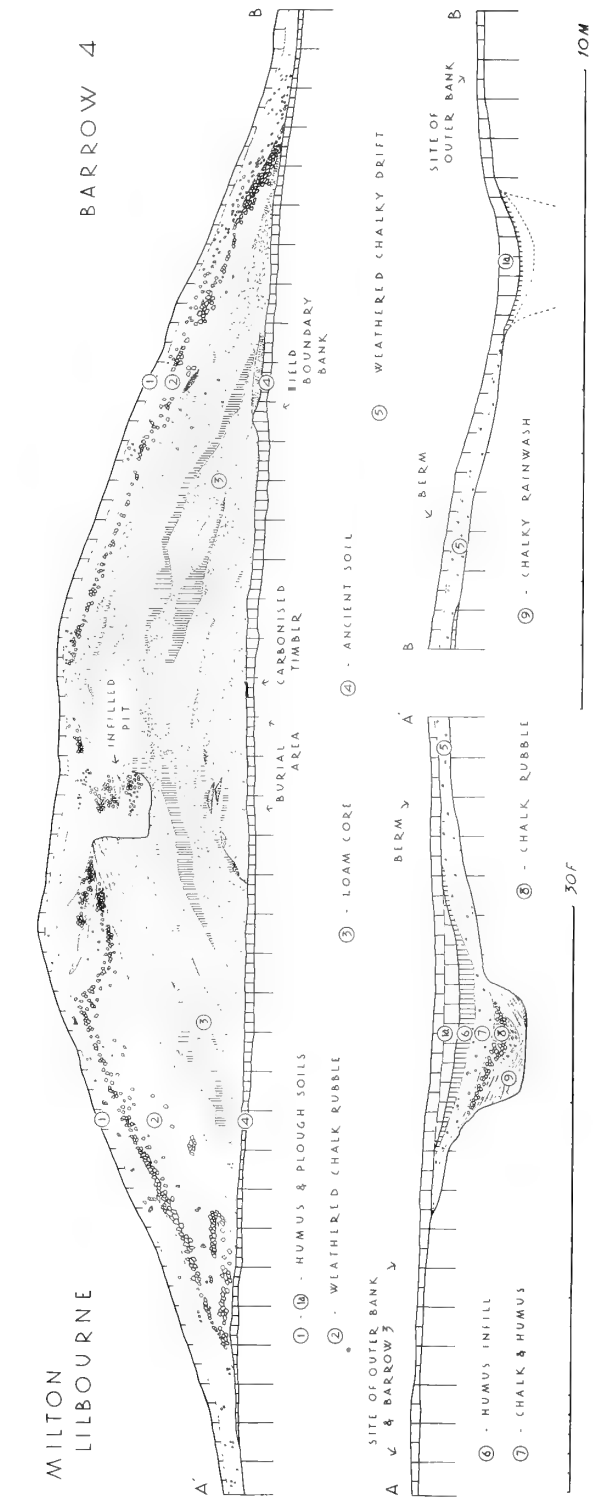

Figure 18. Bell-barrow 4: diametric section.

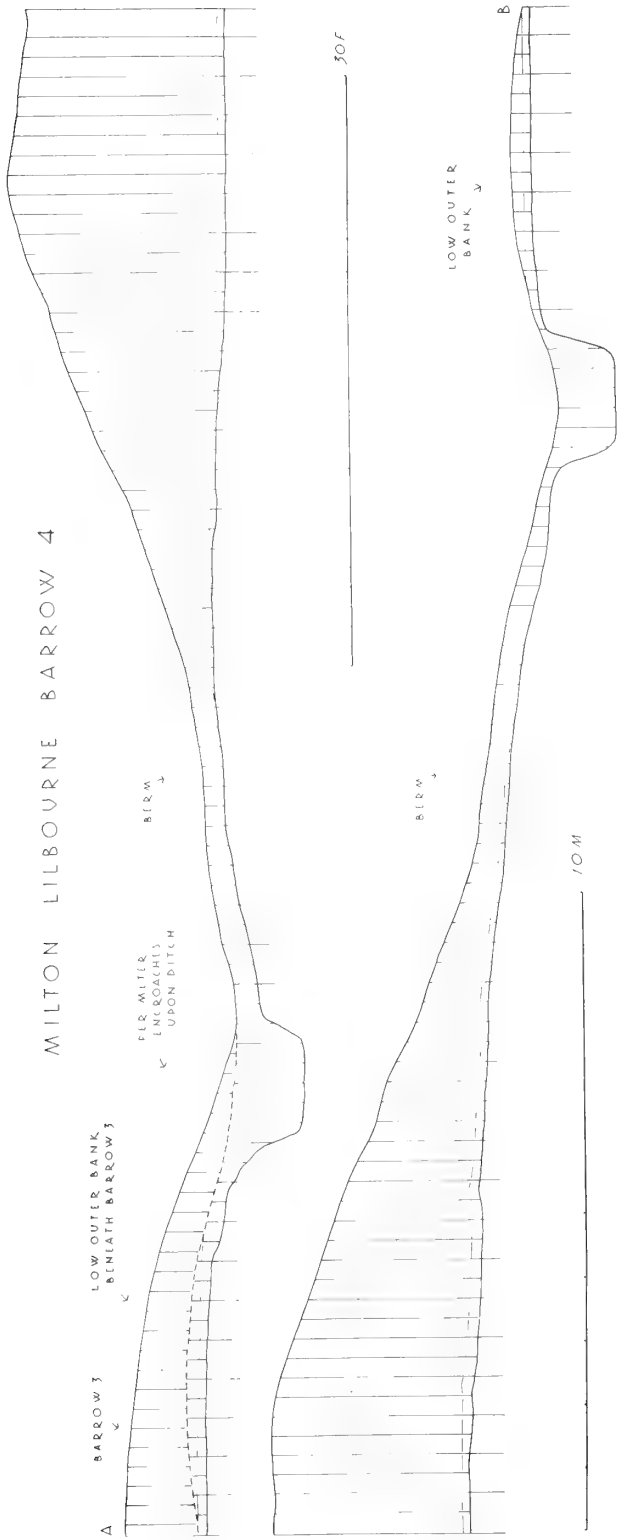

Figure 19. Bell-barrows 4: restored radial profiles.

natural chalk subsoil. It was granular and brown in colour, lighter towards the margins of the mound and correspondingly darker where there was a greater degree of compression at the middle. Throughout its profile were worn pieces of chalk, weathered scraps and small nodules of flint, besides flecks of charcoal. Its removal revealed that the undisturbed chalk subsoil was banded, ridges of solid chalk alternating with softer, sometimes light brown, solidified chalk sludge. On the N side of the barrow the surface of the ancient soil was loose and irregular; beneath the loam core (layer 3) and around the central burial (Figure 20) it was firm and even. This chalk subsoil ridging might have resulted from prolonged pre-barrow cultivation, which view could be supported by the stones throughout the humus profile, although a natural explanation seems more likely. A pronounced ridge of soil beneath the S flank of the barrow, and a lesser one closer to the barrow's central area, were considered to be barrow-compressed field boundary banks (Figure 18, A′–B′).

The average height of the ancient soil above the general modern surface, with appropriate allowances for shelving ground and plough erosion, was about 1 ft 10 ins. (Atkinson 1957: 232; Ashbee 1960: 59, Figure 19). On the N side of the barrows it ceased at the junction of the weathered mantle of the chalk envelope (layer 2) with the chalky drift (layer 5) that clothed the berm; on the S side, it extended for some distance beneath that layer of decomposition and erosion.

Central burial and its surround (Figures 20, 21, 22, 23) The central burial, a mature male's cremated bones, was furnished with a miniature vessel and housed in a monoxylous timber coffin. It was the focus of discrete,

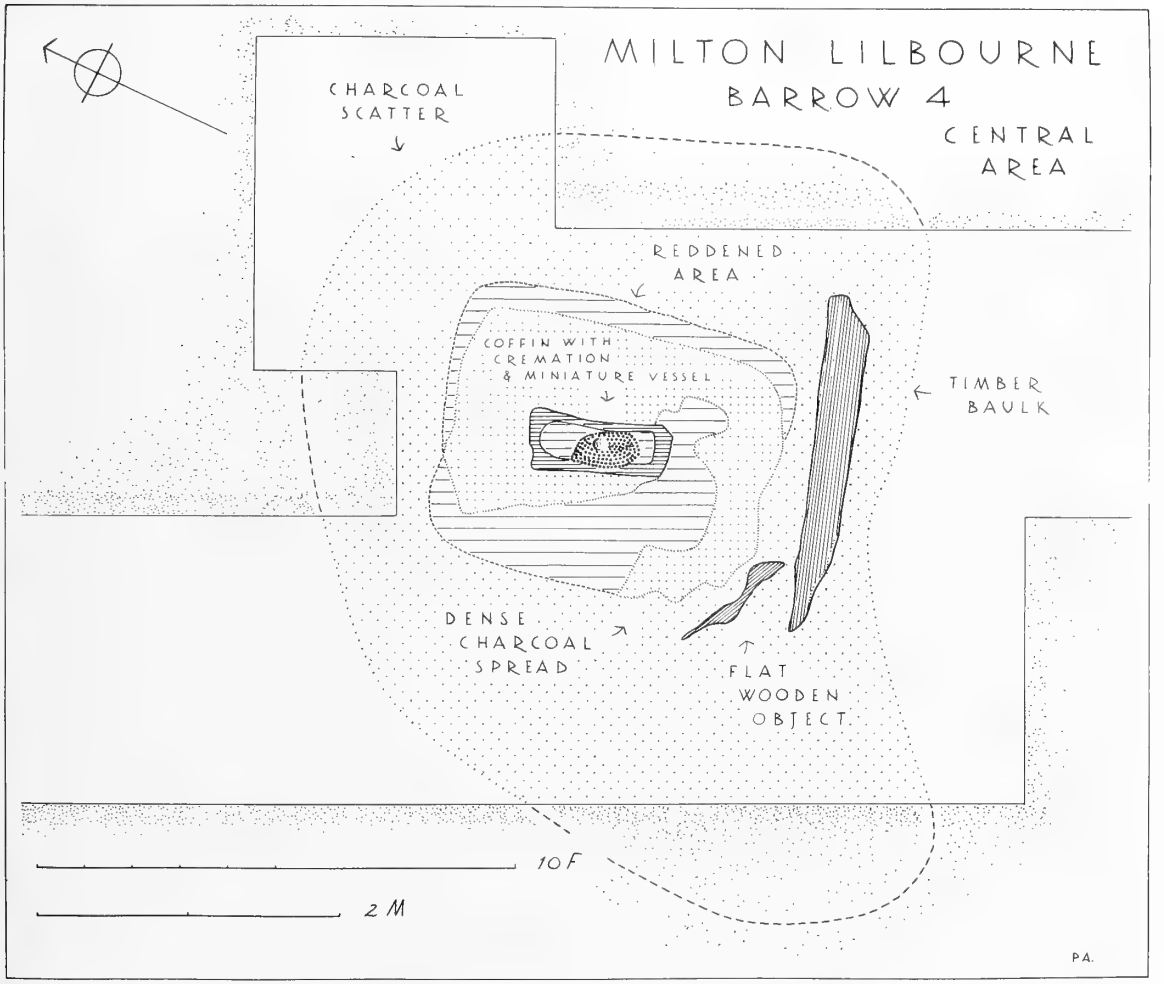

Figure 20. Bell-barrow 4: plan of excavated central area, showing the timber coffin, timbers, burned area, charcoal spread and charcoal scatter.

related, elements. On the even surface of the ancient soil, a timber baulk and a smaller wooden object lay over a charcoal scatter. The scatter surrounded a rectangular reddened area, partly blanketed by a dense charcoal spread which conformed to its lineaments, with the timber coffin at its heart. The five features, compressed and consolidated by the mass of the mound above, were nevertheless clear and unambiguous. They are described in detail below.

1 *Charcoal scatter*
A continuous scatter of small pieces of charcoal, some mere flecks and few more than $\frac{1}{4}$ in. long, covered, apart from the area occupied by the central features, a rectangular area about 17 ft long and 12 ft broad at a density of sometimes two or three pieces per square inch (Figure 20). Many of the pieces appeared to be the remains of twigs. Indeed, isolated and intermittent concentrations, one or two as much as 4 ins. by 4 ins. in area, could have been from burned, carbonized and crushed hurdling or even wickerwork. For the most part these small, friable pieces were embedded in, rather than lying upon, the ancient surface, and, like the ancient soil, had been compressed by the barrow above them. Where the scatter was less dense, areas of finely comminuted charcoal had pigmented pieces of chalk and the ancient soil with which they were in contact. The boundary of the scatter was distinct; beyond it, the density of charcoal flecks and scraps, about 6 or 8 per square yard, was no more than might have been derived from the charcoal-laden occupation material in the barrow's loam core.

2 *Timber baulk and small timber object*
A baulk of carbonized timber 7 ft long, 11 ins. wide at its broader end and 7 ins. at the narrower end, lay parallel to the long axis of the charcoal scatter and the S end of the rectangular dense charcoal spread and burned area (Figure 20). Before burning, its broader end had been cut obliquely, and its narrower end acutely, from one edge only. Burning had so carbonized it that its upper, flat surface had disintegrated into serried, almost equal, blocks; beneath them was unbroken, but also carbonized, timber.

The smaller flat wooden object, essentially fragmentary, had pieces of chalk and flint pressed into it. Although both pieces may have been compressed by the bulk of the barrow above them, their grain patterns suggest they were more or less in their original form.

3 *Reddened area*
A rectangular expanse of the surface of the ancient soil, which was partially covered by the timber coffin and an irregular, dense spread of charcoal (Figure 20), exhibited signs of intense burning. It left detached pieces of this surface, some as large as about 2 ins. by 2 ins., resembling coarse, friable pottery. Conversion was incomplete, for fragments readily powdered under light pressure. This reddened rectangular area was precisely bounded by manifestly unburned soil upon which was only scattered charcoal.

4 *Dense charcoal spread*
Dense comminuted charcoal surrounded the timber coffin and covered the greater part of the reddened rectangular expanse of ancient soil, but did not extend beyond its confines (Figure 20). Around the coffin, where it presented an inner irregular outline, exposing the reddened soil, it was as much as 2 ins. deep. Numerous pieces of chalk and small, weathered pieces of flint had been compressed into it. An irregular corner more or less mirrored the shape of the flat wooden object.

5 *Timber coffin and its cremation* (Figures 21, 22, 23)
The timber coffin, 3 ft long and 1 ft broad, had been fashioned from a single piece of timber (Figure 18) and thus was of the 'monoxylous' variety (Ashbee 1960: 86, Figure 26). An elongated concavity, semicircular at one end and square at the other, accommodated the cremation. Its underside was convex in both dimensions (Figure 21.1, 2, A–B). It had apparently been partially burned, for its upper edges (Figures 21, 22) survived only as wood-ash, white, compressed and distorted. Iron-pan had formed in patches on the surface beneath it and impregnated its underside.

Inside this coffin lay a sheet of irregular, light grey, woody substance, which readily peeled away; this was thought to have been bark. The cremated bones, in an elongated heap, almost entirely covered this sheet of bark, partially filled the cavity and overlapped on to one edge. They were the remains of a large, mature male (page 88); the larger and more recognizable pieces were at the top and the smaller at the bottom. Among the bones and only partially visible, for it was almost concealed by particularly large pieces, was a miniature vessel (see below; Figure 30.2), so inclined that it almost rested upon its side. It was empty apart from soil-free pieces of burned bone.

Like the timbers and the dense charcoal spread, the soft, yielding condition of the upper edges and other exposed surfaces of this coffin had allowed pieces of chalk and flint, from the loam core of the barrow, to be compressed into them. The cremated bones were in a matrix of soil, presumably from the same source, although earthworm action may have contributed to infilling.

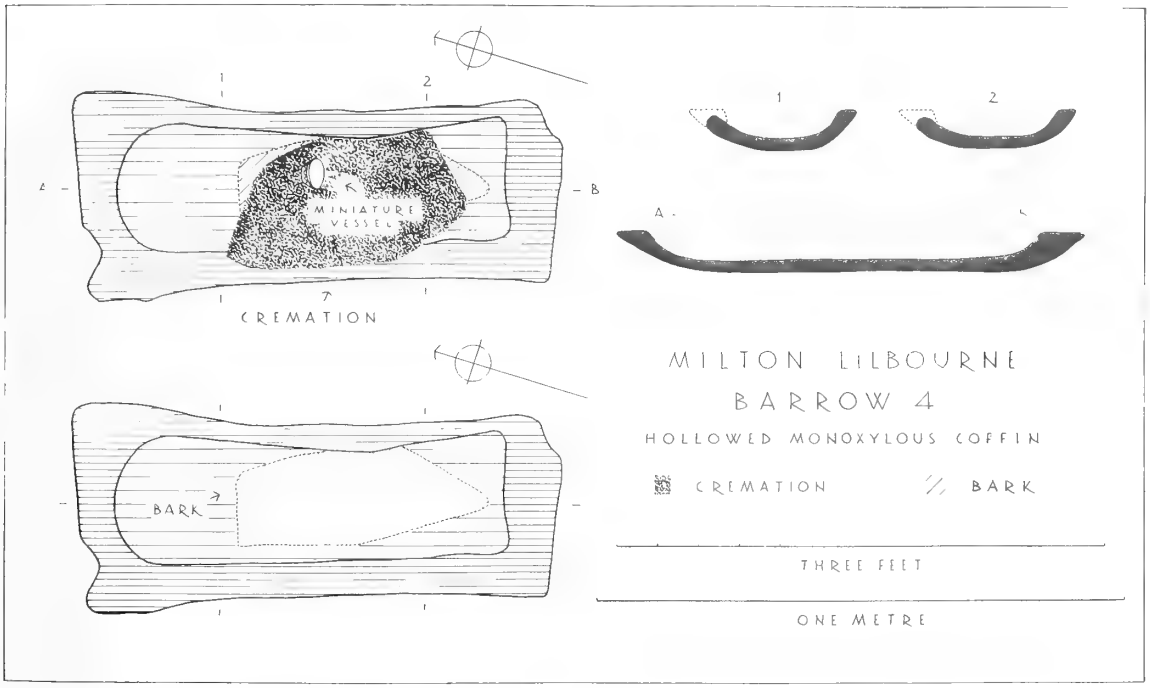

Figure 21. Bell-barrow 4:
(above) *Timber coffin and its cremation with accompanying vessel, sections;*
(below) *With cremation removed.*

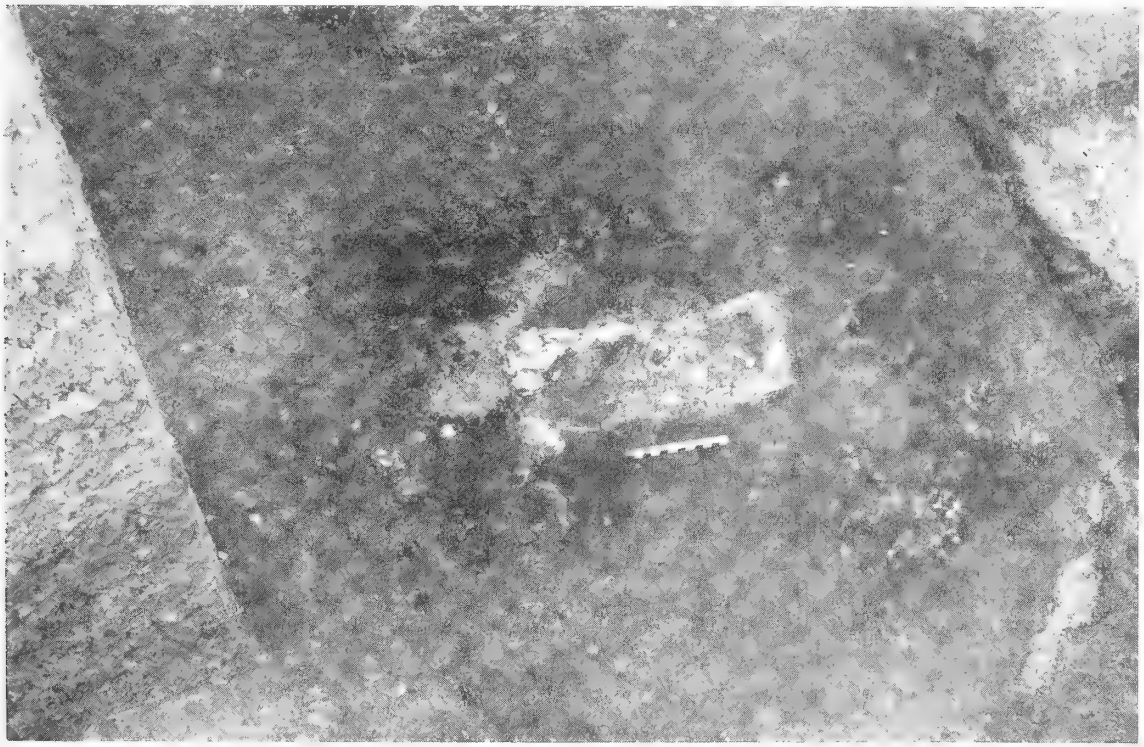

Figure 22. Bell-barrow 4: burned timber coffin, with its burned and charcoal-strewn surround, and the flanking burned timbers.

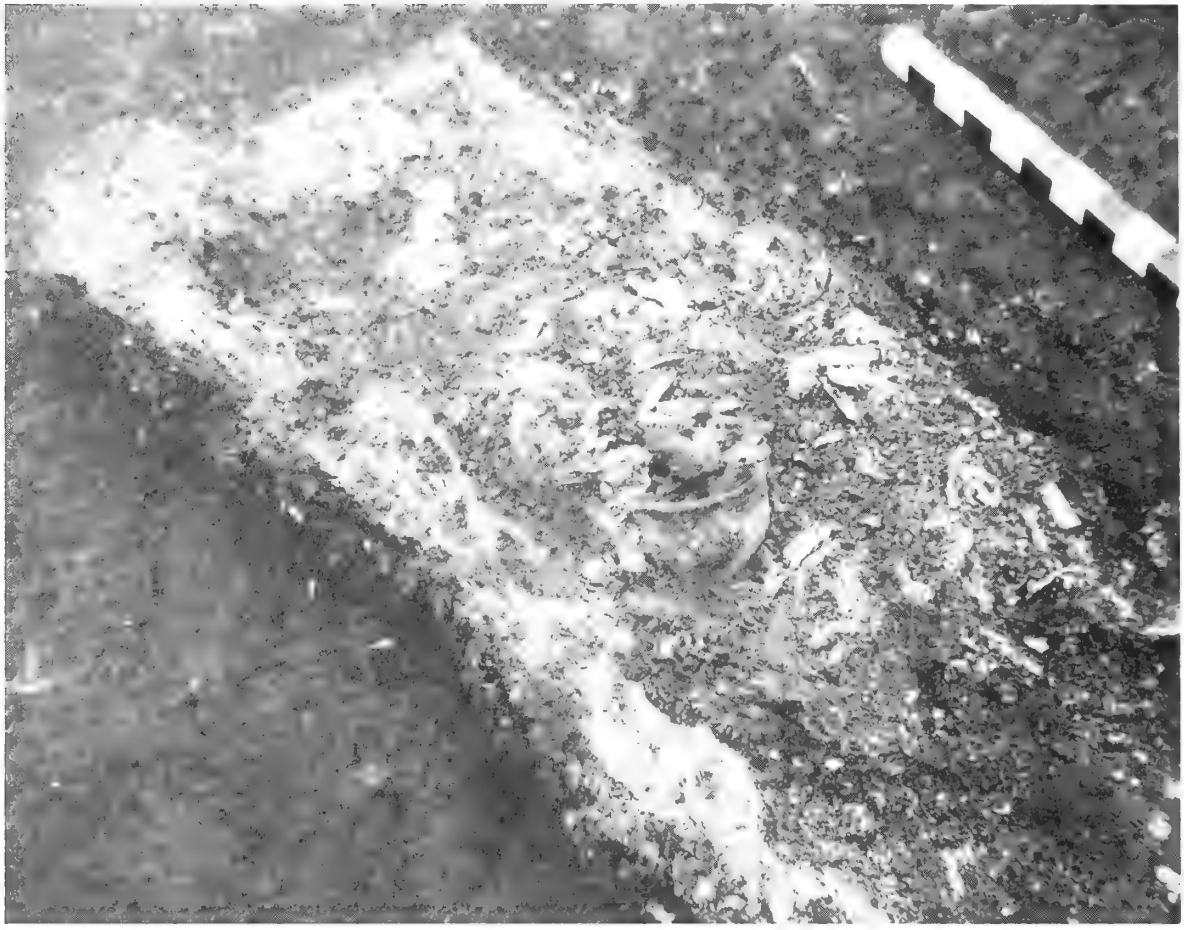

Figure 23. Bell-barrow 4: cremation in its timber coffin with accompanying vessel.

Loam core (Figures 24, 25; Figure 18, layer 3)
The loam core (layer 3) had been augmented by soil and occupation debris, as in barrow 2, additions which account for its bulk (about 6,867 cu. ft) and height 9 ft). The ditch would have produced about 2,640 cu. ft of topsoil, the normal core of a round barrow; some 4,230 cu. ft of various soils and occupation material had been brought from elsewhere to enlarge and heighten it.

Pronounced tip-lines could be seen (Figure 18, A′–B′). It was clear that a precise enmoundment plan had been followed. A modest mound of plough-soil had been raised above the burned area, which was covered with occupation debris and further soil. More soil was followed by more occupation debris some seven times before the requisite height was reached. The sequence of deposits of plough-soil, presumably from the site of the ditch, sandwiched by occupation debris and soil from elsewhere, followed the same constructional pattern as barrow 2. It is possible that this loam core had stood free for a period, since patches of mostly chalky wash were encountered here and there in various minor surface hollows.

On each side of the central burial area the constituents of the augmented loam core (Figure 24) were isolated; in ascending order they were:

N side: ochreous loam; grey-brown loam with some organic material and fine tip-lines; lenses of granular, brown-stained chalk; layers of dark brown and black soil containing much organic matter (charcoal-laden occupation soil); dark grey and brown loams containing pieces of chalk and flecks of charcoal; dark brown, almost black, loam with a few pieces of chalk and flecks of charcoal; a very dark grey loam with pieces of chalk and small lenses of vari-coloured (browns) soils and occupation earth; lenses of dark brown loam; a light, creamy, grey granular soil with small pieces of chalk; a brown loam which varied from dark to light in colour.

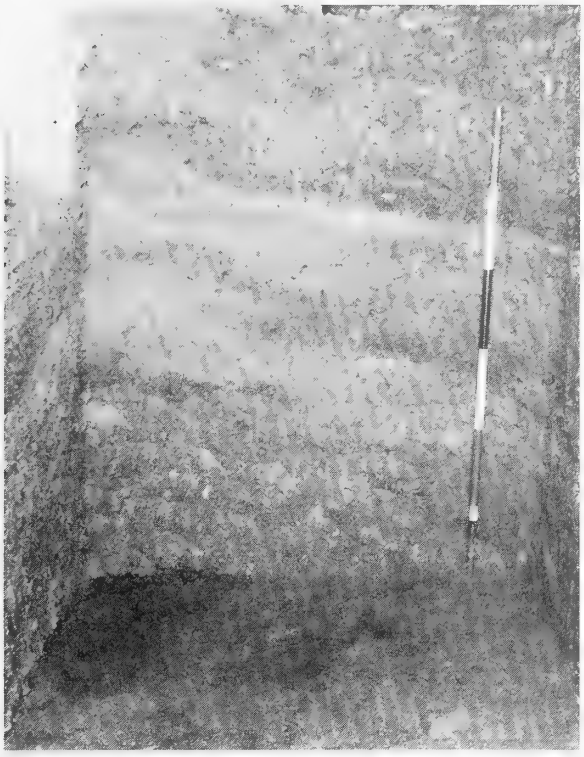

Figure 24. Bell-barrow 4: section showing the layered construction of the augmented loam core. The higher point of this layering is towards the crown of the barrow. Scale in feet.

S side: dark grey, loamy soil, containing streaks of brown and chalky soil; black and dark brown tenacious loam containing considerable quantities of organic material (charcoal-laden occupation soil); a brown loam (? plough-soil); a light yellowish-brown granular soil containing many small chalk particles; dark-brown loam with flecks of charcoal (? plough-soil); fine ochreous loam; brown loam, darker towards the bottom, with lenses and streaks of other darker soils; light grey soil, probably rainwash, immediately below the chalk envelope.

At the top of the loam core was an infilled pit, obviously of some antiquity for it was sealed by the weathered soil mantling the chalk envelope (Figure 18, A′–B′). It had been dug through this chalk envelope and to a depth of 3 ft into the enmounded loam beneath. On its N side its outline was clear; on the S side its clean chalk rubble infill was interleaved with layers of loam which were continuous, and sandwiched, with the loam core. Probably one side had collapsed, or been broken down, during infilling. This infilled pit might have housed a subsequent or secondary interment, but no trace of one was found.

Chalk envelope (Figure 18, layers 1, 2)

Except on the crown of the barrow, where it had been eroded by numerous rabbit burrows, chalk (layer 2) and the weathering soil derived therefrom (layer 1) completely enveloped the loam core (layer 3). Clean chalk rubble, some pieces as much as 4 ins. long and broad, comprised the lower, deeper zone, which in its upper part had weathered down to an almost granular texture. The loam core was not precisely at the centre of the area demarcated by the surrounding ditch; but symmetry had been achieved by giving the chalk envelope about twice the bulk on the N flank as the S (Figure 18, layer 2; Figure 25). This more massive overlaying exhibited, here and there, tip-lines which indicated considerable loads of rubble and smaller material having been deposited, initially at the margin of the loam core, and built up therefrom. Its base sealed the ancient soil (layer 4) although only the upper weathered chalk spilled on to the berm and merged with the chalky drift (layer 5) cloaking it.

Berm, surrounding ditch and outer bank (Figures 12, 18, 19)

A bell-barrow's sloping berm is an adjustment between the ancient surface beneath it and the modern surface around it (Ashbee 1960: 59, Figure 19); the average vertical interval between the ancient and modern surfaces was about 1 ft 8 ins. On this berm, below the humus and its lower horizon (humus and weathered pieces of chalk) (layer 1), bedded upon the undisturbed, fissured chalk, was a loose, yellowish, chalky drift (layer 5); at the margin of the mound, it appeared to be a continuation of the upper, weathered chalk envelope (layer 2). On the N side it merged with the humified chalk (layer 7) of the ditch. On the other, where it had been partially destroyed by ploughing, it may have terminated at the inner lip of the ditch.

Only one ditch section was excavated in its entirety (Figure 18, A′–A′), that on the N side, which had been partially covered by the margin of barrow 3 before its destruction. Unlike the ditch of barrow 2, it had originally been deeper than wide. Weathering had given it the characteristic trumpet-mouthed profile (Jewell and Dimbleby 1966: 316), although its inner solid chalk brink was lower, much more denuded, and with deeper mantling deposits than the outer. Until its recent destruction part of the ditch had been covered, and its weathering arrested, by the tail of barrow 3. The bottom was smooth, and fine muddy material adhering to it may denote periodic standing water. An

Figure 25. Bell-barrow 4: sections showing the augmented loam core and weathered chalk envelope. Scale in feet.

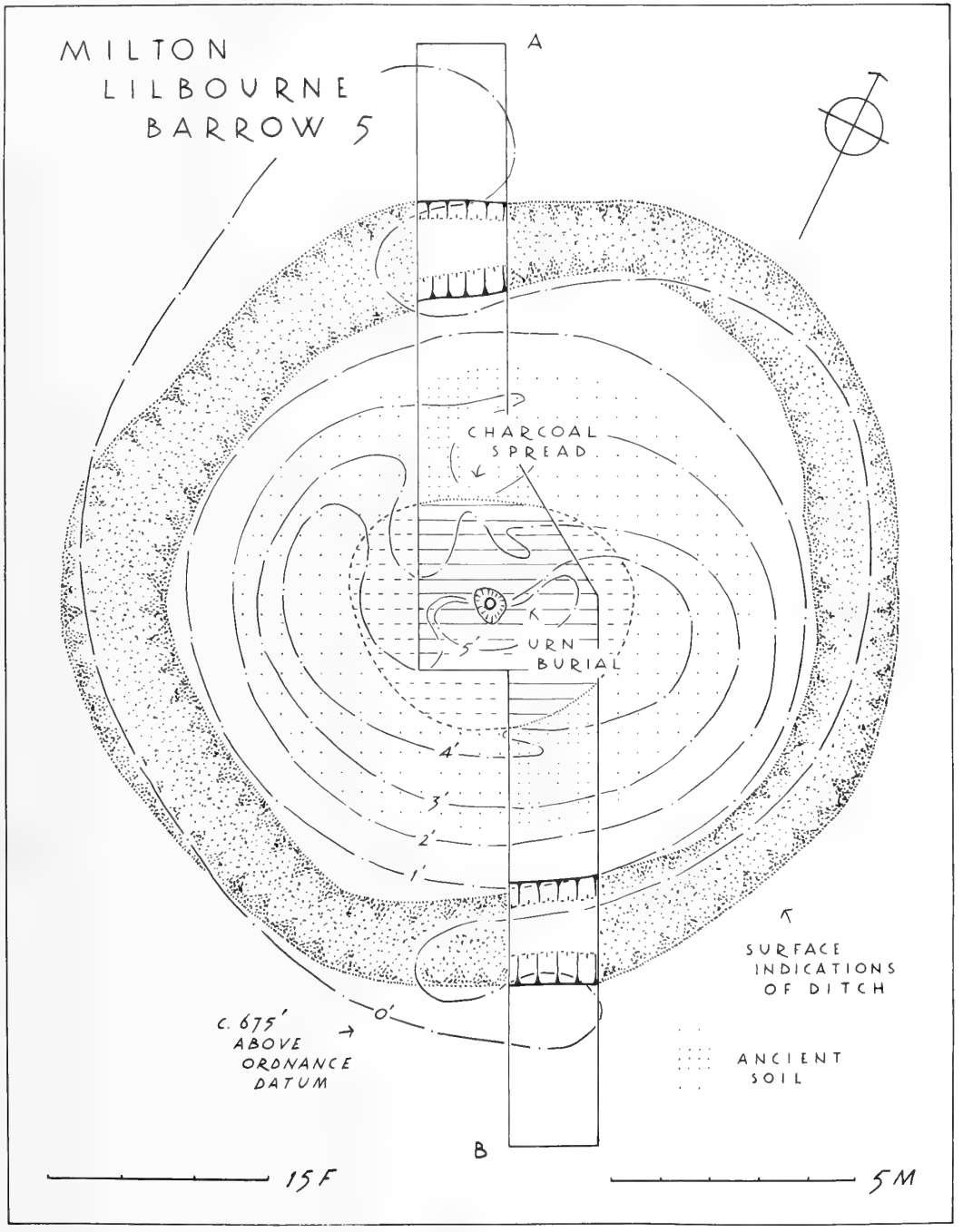

Figure 26. Bowl-barrow 5: plan showing mound, ditch and grave.

initial deposit of humic-streaked chalky rainwash (layer 9) was followed by chalk rubble (layer 8), mostly confined to the middle. This was overlain by chalk and humus (layer 7) which coalesced, on the inner side, with the berm's deep chalky drift deposit (layer 5). Dark, almost black, humus (layer 6), truncated by ploughing, covered the ditch and extended over the berm. Plough-soil and a destruction layer (layers 1, 1a), which included chalky tailings presumably scraped from the site of barrow 3, covered it. At the S edge of the barrow no more than the top of the dark humic ditch silting (layer 6) was exposed. Here plough-soil and the overt signs of material scraped from the outer bank (layer 1a) were intermixed.

Despite destruction, the ditch on the S side of the barrow still exhibited a pronounced declivity. The slight elevation of the undisturbed chalk revealed by excavation and scrutiny of the seeded grass surround gave a hint of the breadth of the erstwhile outer bank, which elsewhere had been obliterated. Radial profiles could be restored (Figure 16), and the relationship between barrows 3 and 4 seen.

At the point of cessation of the ancient soil – that is, at the juncture of that soil and the weathering ramp – was, on the N side, a shallow, charcoal-filled pit (Figure 16), oval in form, 1 ft 8 ins. by 1 ft 6 ins. but no more than about 2 ins. in depth. Its position, just beyond the tail of the mound, suggests it post-dates the barrow.

BOWL-BARROW 5 (Figures 26, 27, 28)

Excavation (Figure 26)
The limits of the in-filled and levelled ditch were visible as an extra growth of the recently sown grass of its surround. Ploughing had, here and there, edged into the barrow's margins, and its intensely rabbit-burrowed surface supported a profusion of lank grass, weeds and brambles. Avoidance of the worst rabbit damage determined the siting of cuttings to obtain optimum sections.

The barrow, its structure and features

Ancient soil (Figure 27)
This ancient soil, except at its outer margins some 8 ins. to 10 ins. deep, was light fawn in colour, and basically powdery in character. Throughout its profile were worn pieces of chalk, weathered scraps and small, broken nodules of flint and flecks of charcoal. Its removal revealed that the undisturbed natural chalk beneath it consisted of vari-sized lumps cemented by wash. Its irregular and pitted nature, and areas that were loose and deeply humified, made it hard to detach the ancient soil from it with exactitude. The barrow's relatively small size caused little compression, as was attested by its profile, depth, and loose quality.

Allowing for the shelving ground (Figures 1, 2), the average height of the ancient soil above the modern surface was about 1 ft 5 ins. (Atkinson 1957: 232; Ashbee 1960: 59, Figure 19). It ran out beneath the tail of the rabbit-wrecked chalk envelope on the upper, N, side and the loam core on the lower. Its equidistant extinction, some 5 ft inside the buried inner lip of the ditch, may point to a berm that was soon blanketed by slide and spread.

Urn burial and charcoal spread (Figures 26, 28, 29)
An urn, inverted over burned bones (page 56, below), was found in an ovate pit at the centre of the area demarcated by the barrow's surrounding ditch. A charcoal spread surrounded the interment, coated the sides of the pit, and permeated its infill.

Some 2 ins. of the urn's base (page 56, below) projected above the surface of the ancient soil. Long-standing waterlogging in the circular pit had softened much of the urn's rim to disintegration. The weight of the barrow had caused telescoping, and its walls had cracked and split laterally in layers.

The rim of the pit closely followed the urn profile, with an all-round clearance of little more than 1 in.; clearly it had been dug to house this particular urn. The pit sides were coated with comminuted charcoal. However, the chalk beneath the urn and the burned bones was clean. The pronounced pigmentation of the infill came about, perhaps, from a combination of in-wash from the charcoal spread and the pit's charcoal-laden infill.

Within the area designated 'charcoal spread', the surface of the ancient soil was overlain with fine charcoal, which blackened and separated it from the remainder of its lighter coloured surface, and few overt fragments were found. The ancient soil surface, unlike that beneath barrow 4, bore no trace of reddening. The pit had been dug through the ancient soil into the chalk, presumably after the fire had been extinguished, for the charcoal spread extended to its edges; but there were few small worn chalk fragments in the charcoal-permeated, black, fine soil which infilled the pit around the urn to the level of the ancient surface.

Loam core and chalk envelope (Figure 27)
From such parts of the loam core (layer 4) as had not been disturbed by burrowing rabbits, about a third in all, it could be seen that its construction was similar to that of the loam cores of the large bell-barrows 2 and 4.

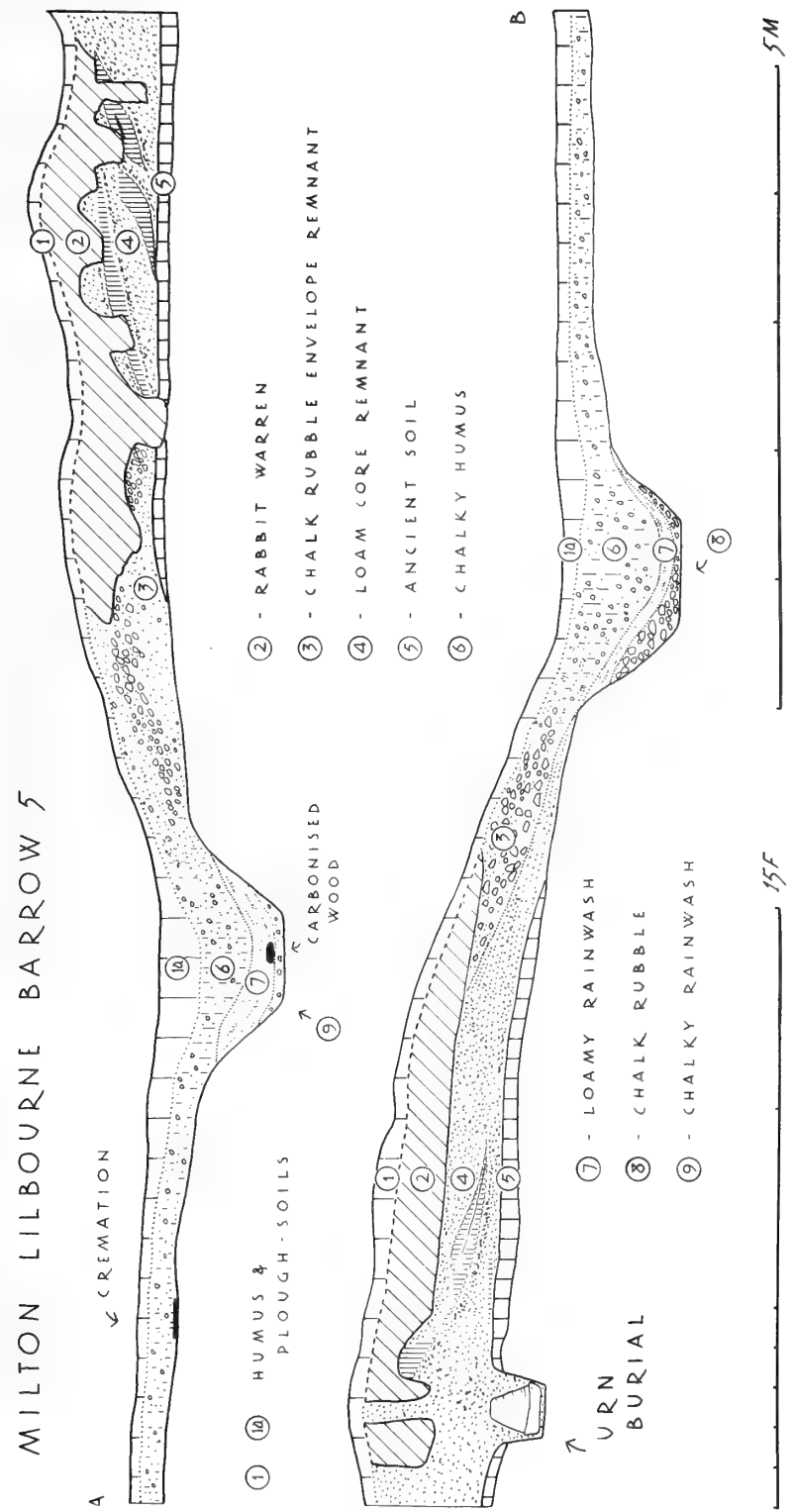

Figure 27. Bowl-barrow 5: radial sections.

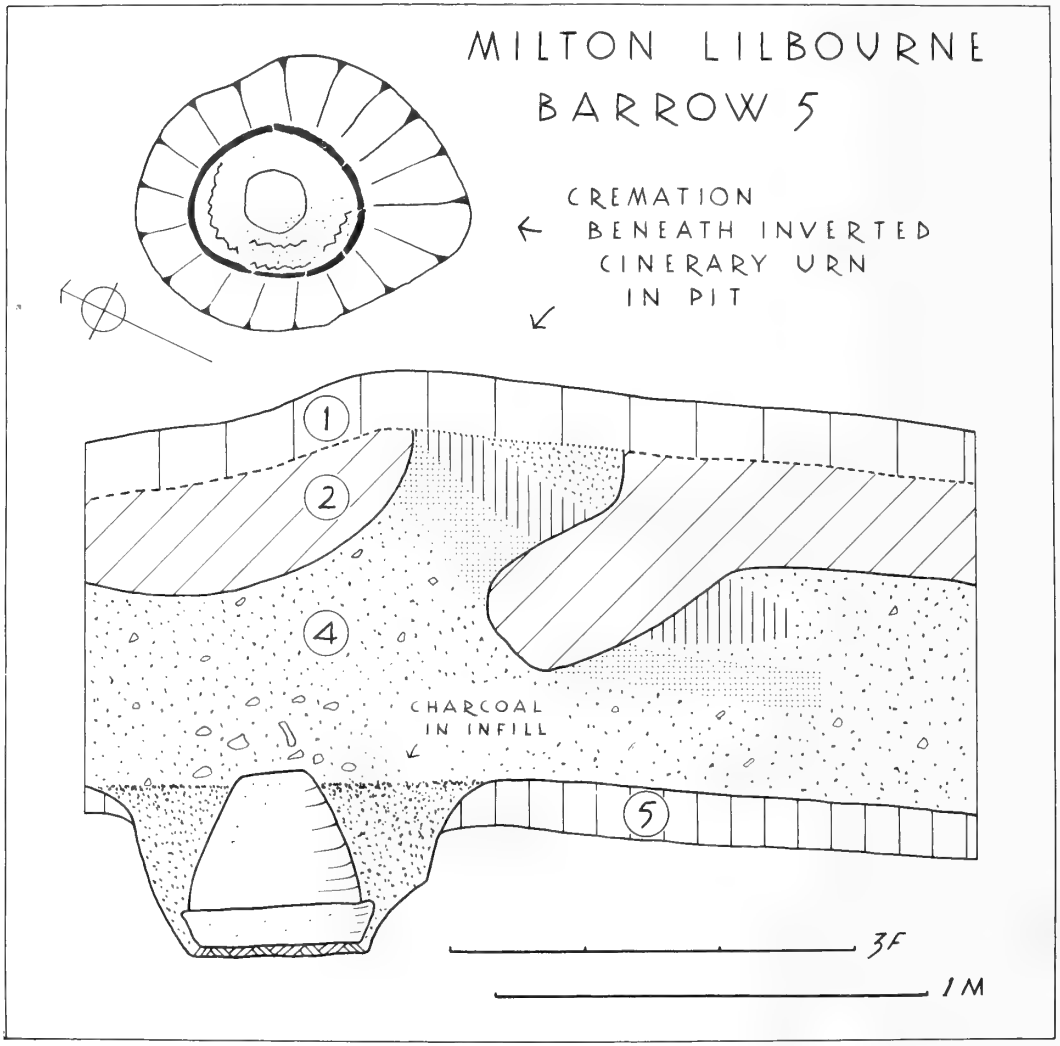

Figure 28. Bowl-barrow 5: plan of grave-pit with inverted urn, and local section.

Occupation earth, and other soils, had been added to the topsoil from the surrounding ditch. The modest amount of topsoil from the ditch (about 360 cu. ft) was little more than a third of the total bulk (about 1,210 cu. ft). Clear tip-lines were visible, and it is likely that an enmoundment plan was followed. At the base was a light brown loam, with small weathered and rolled chalk fragments, then a similar soil with larger, weathered and rolled, lumps of chalk. Above this, and sandwiching an orange-brown fine loam, from which fragments of chalk and flint were almost entirely absent, were tips of dark brown and black soil with a heavy content of charcoal flecks, the uppermost containing pieces of rolled and weathered chalk. On the N side, the tail of this loam core lay beyond the point of cessation of the ancient soil; on the S it extended to the buried, weathered, inner lip of the ditch.

Only remnants of the chalk envelope (layer 3) had survived at the barrow's margins, where they merged with the chalky humus (layer 6) that comprised the greater part of the ditch infills. Its character differed from the chalk envelopes of the bell-barrows in its large pieces of chalk rubble, many of the order of 6 ins. by 4 ins. by 3 ins. On the barrow's crown the chalk envelope had been completely destroyed by rabbits. Projection shows that they had reduced its height by as much as 2 ft.

Ditch (Figures 26, 27)

Although broad, shallow and with a characteristic

Figure 29. Bowl-barrow 5: inverted urn in situ *over cremation in circular grave.*

trumpet-mouthed profile (Jewell and Dimbleby 1966: 339), formed by weathering, the width at the bottom, between 2 ft and 2 ft 6 ins., suggested that it had been narrow, and about 4 ft deep, when dug. The decomposition of the sites and resultant silting had followed the usual chalklands pattern, although the final humus accumulation stage was absent and the sequences on the N side of the barrow differed from those on the S.

On the N side of the barrow (Figure 27, A-centre), a chalky rainwash (layer 9) was followed by a loamy rainwash (layer 7), in which was found a substantial piece of carbonized wood (page 89, below) and a massive accumulation (layer 6) of small chalk rubble and humus, some of which was slide from the chalk envelope remnant (layer 3). A deep plough-destruction layer (layer 1a) infilled the ditch at this point, and there had been paring of the upper deposits. On the S side (Figure 27, B-centre), the initial infill of chalk-rubble (layer 8) was followed by the loamy rainwash (layer 7); on this was a similar substantial accumulation of chalk rubble, mostly small, and humus (layer 6), much of it deriving from the barrow's residual chalk envelope.

In the pursuit of a possible outer bank, excavation was continued beyond the outer bounds of the ditch. Below the plough-soil (layer 1a) was a remarkable depth of loose, weathered, humified chalk rubble above the solid, wash-cemented, irregular natural chalk bedrock. In character layer 1a was indistinguishable from the upper ditch infill (layer 6), with which it coalesced. On the N side of the barrow, some 6 ft from the ditch, a

deposit, 4 or 5 ins. deep, of worn and, with the exception of three human teeth, featureless burned bones was found. It was spread over an area about 1 ft in diameter of the solid chalk underlay.

2 Description of the grave furniture from the barrows

This section only describes the objects. They are discussed, and comparative material is presented, in section 4 (pages 71–3).

DISC-BARROW 1 (*Figure 6*)

NW cremation grave (Figures 6, 9)
A bronze awl lay by the cremation, at the bottom of the grave beneath the destroyed NE mound. Thurnam's remarks (1871: 295, fn. b) regarding the cremation beneath the SE mound suggest that one was unfurnished.

Bronze awl (Figures 30.1, 31)
This small, slender awl is 1 in. long. Its point is broken, its blunted, proximal basil-end is $\frac{1}{16}$ in. broad. At the basil-end flattening, presumably to facilitate hafting, extends for $\frac{3}{8}$ in. of the awl's length. One side of this flattening is flanged by hammer-folding, and the other is abraded. Its irregular shaft bears traces of the hammering by which it was forged. Its point had been broken in antiquity, and there are neither overt use-marks nor polishing. The surface of the shaft at the distal end has a matt texture, perhaps from deterioration.

BELL-BARROW 4 (*Figure 17*)

Cremation burial in timber coffin (Figures 20, 21)
A miniature vessel was partially concealed among the upper bones at one side of the cremation burial. It was inclined, almost resting upon its side, and only contained soil-free pieces of the cremation.

Miniature vessel (Figures 30.2, 32)
The miniature vessel has a mouth diameter of $3\frac{1}{2}$ ins., a maximum girth diameter of $3\frac{1}{4}$ ins., a base diameter of $1\frac{5}{8}$ ins. and a height of just under $2\frac{1}{2}$ ins. It is of a fine, smoothed ware, dark brown-black in colour, but with a yellow appearance because of a superficial calcareous deposit. There are fingernail impressions around the rim bevel, and the line-bounded unfilled triangular upper exterior body ornament is incised. Below the maximum girth are further vertical fingernail impressions bounded by incised lines. Just below the maximum girth, and in the middle of the zone of vertical fingernail ornament, there are two, almost circular, perforations through the wall of the vessel with centres $\frac{3}{4}$ in. apart.

An illustration and details of this vessel were included in the *Devizes Museum Guide Catalogue of the Neolithic and Bronze Age Collections* (Annable and Simpson 1964: 60, no. 462); its museum accession number is Devizes Museum 1634.

BOWL-BARROW 5 (*Figure 26*)

Inverted urn burial (Figures 27, 28)
The urn was in an ovate pit, inverted over burned bones. Its base projected just above the surface of the ancient soil, although waterlogging of the pit had softened and partially disintegrated the rim, causing body-cracking, splits and partial telescoping.

Urn (Figures 30.3, 32)
The urn has a mouth diameter of $11\frac{5}{8}$–$12\frac{1}{2}$ ins., a base diameter of $5\frac{3}{4}$ ins. and a height of $16\frac{3}{4}$ ins. It is of a light ochreous, well-smoothed ware that has been evenly gritted. The broken pieces, before reconstruction, showed that its body fabric was about $\frac{5}{8}$ in. in thickness and had a dark interior. Its collar decoration consists of multiple opposed groups of diagonal lines or, perhaps, infilled triangles, executed by twisted cord impress, enclosed above and below by twin horizontal lines, also of twisted cord impress. On the shoulder is a row of diagonal twisted cord impress lines.

An illustration and details of this urn were included in *Collared Urns of the Bronze Age in Great Britain and Ireland* (Longworth 1984: 287, no. 1692, Secondary Series, Form I/IV); its museum accession number is Devizes Museum 9.1960.

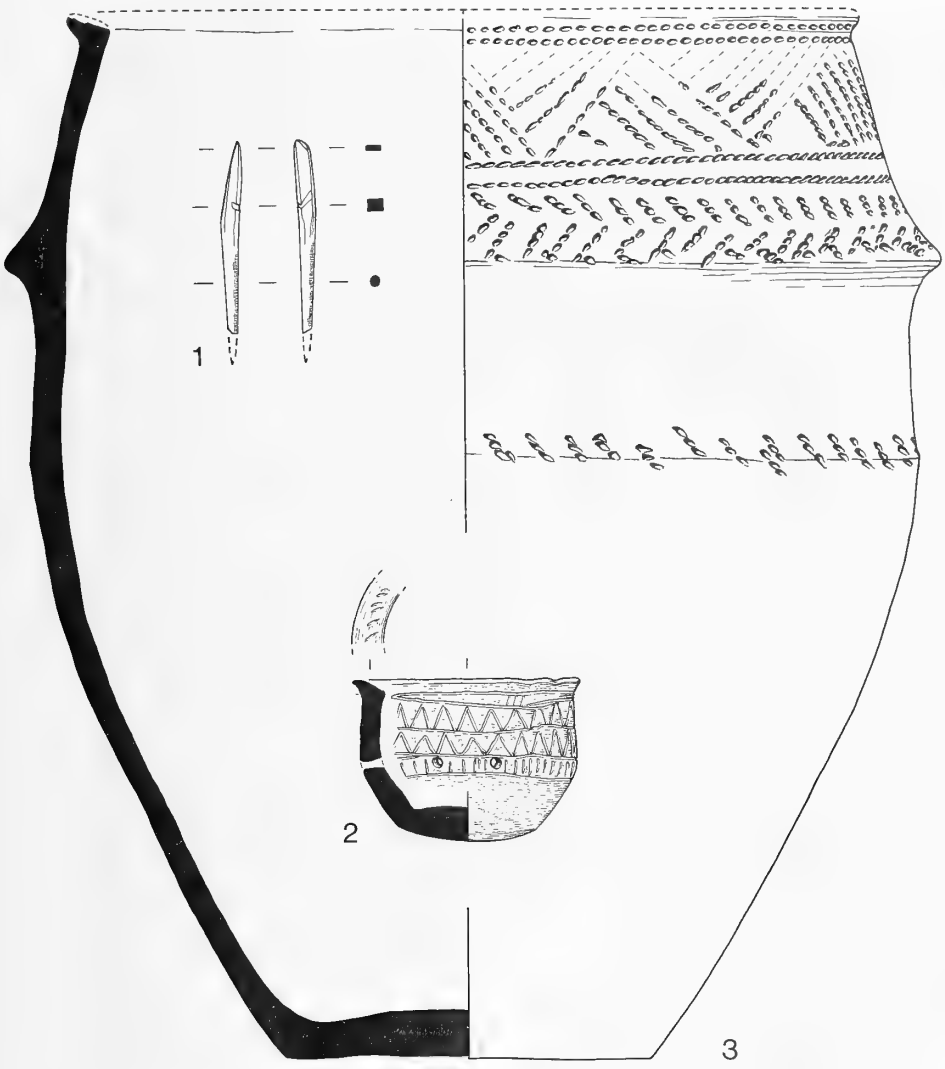

Figure 30. Grave furniture:
1 Bronze awl from disc-barrow 1, NW cremation grave (1:1).
2 Miniature vessel from bell-barrow 4, cremation in timber coffin (1:3).
3 Collared urn from bowl-barrow 5, inverted over cremation (1:3).

3 Other artifacts from the barrows

PREHISTORIC POTTERY (*Figures 7, 9, 11, 14, 15, 20*) A total of 555 sherds of pottery were recovered and recorded during excavation; a further 11 were found on the spoil-heaps after rain. Of these, 210 were decorated or could be assigned to particular ceramic traditions. The remaining 356 were plain body sherds. This assemblage has a clear chronological span; certain fine, flint-gritted pieces are from plain bowls of earlier neolithic appearance, while others are characteristic of the earlier Bronze Age.

A large majority, 460, of the sherds came from the loam cores of the barrows, as a component of the quantities of occupation material which augmented them. Many of the 47 sherds from the ancient soils may

Figure 31. Bronze awl from disc-barrow 1: wear- and manufacture-scoring (18:1).

Figure 32. Miniature vessel from bell-barrow 4. Height 2½ ins., maximum girth 3¼ ins.

have been trodden in or otherwise incorporated while the mounds were being raised, as may 21 from the various ditch silts. The pieces of pottery, their provenances and general ceramic traditions can be summarized as:

Topsoil and plough-soils, 6 sherds:
Barrow 2: 1 fingernail impressed
Barrow 3: 4 plain body
Barrow 5: 1 from fine, flint-gritted plain bowl
Chalk envelopes, no sherds.
Loam cores, 460 sherds:
Barrow 2: 3 from fine, flint-gritted plain bowls; 5 with circular pits etc; 4 with fingernail impressions etc; 2 Beaker; 21 with cord impress; 1 with looped cord impress; 28, abraded and decorated, of uncertain character; 1 plain collar; 5 base angles; 140 plain body.
Barrow 4: from fine, flint-gritted plain bowls; 1 with circular pits etc; 2 with fingernail impressions etc; 11 Beaker; 3 incised; 17 stroke-ornamented; 27 with cord impress; 4 with looped-cord impress; 1 with oblique lines; 12, abraded and decorated, of uncertain character; 2 plain collars; 4 base angles; 115 plain body.
Barrow 5: 2 cord impress; 4 looped-cord impress; 1 oblique lines; 7, abraded and decorated, of uncertain character; 1 plain collar; 32 plain body.

Ancient soils, 47 sherds:
Barrow 2: 2 with circular pits etc; 9 cord impress; 3, abraded and decorated, of uncertain character; 1 plain collar; 1 plain shoulder; 29 plain body.
Barrow 4: 2 plain body.
Graves, 1 sherd:
Barrow 1, from the infill of the NW grave: 1 fingernail impressed.
Ditches, 21 sherds:
Barrow 1:
from the humic infill (layer 2a): 1 plain body;
from the chalk rubble silt (layer 4): 3 from fine flint-gritted plain bowls; 1, abraded and decorated, of uncertain character.
Barrow 2, from the humic infill (layer 6): 1 Beaker
Barrow 3:
from the undisturbed humic infill (layer 2): 4 from fine, flint-gritted plain bowls; 2 cord impress; 6 plain body;
from the chalk rubble silt (layer 4): 1 plain body.
Barrow 4, from the chalk rubble silt (layer 8): 1, abraded and decorated, of uncertain character.
Barrow 5. from the chalky humic silt (layer 6): 1 from a fine, flint-gritted plain bowl.

As an assemblage, these sherds of pottery, possibly some from domestic vessels, deliberately broken when fouled, provide insights into use and disposal procedures (Table 1). Excluding the fine, flint-gritted pieces of plain bowls, 347 unornamented body sherds included: 185 which were relatively fresh and unabraded; 53 markedly worn; 67 more than $\frac{3}{8}$ in. thick; 56 oxidized externally and internally, 76 externally only; and 114 carrying traces of internal residues. Table 1 summarizes their character and condition, with a single sherd often displaying several traits.

	number of sherds					
barrow number	*1*	*2*	*3*	*4*	*5*	*total*
oxidized externally and internally	1	30	4	13	8	56
oxidized externally only	–	34	1	29	12	76
internal residues	–	51	5	50	8	114
unabraded	–	115	7	42	21	185
abraded	–	23	5	12	3	43

Table 1. Character and condition of undecorated sherds.

Pottery types

Plain bowls tempered with considerable amounts of grit (Figure 33.1; Table 2)
The 19 sherds of plain-bowl pottery, associated with all five barrows, are characterized by their quantities of flint or quartz grits, often water-worn and of even size. All but four pieces are undecorated body sherds, dark-faced and given a speckled appearance where smoothing had brought their grits to the surface. Four had been burned and reddened, and all were moderately abraded.

	number of sherds					
barrow number	*1*	*2*	*3*	*4*	*5*	*total*
	3	3	5	4	5	20

Table 2. Provenance of plain bowl sherds.

	number of sherds					
barrow number	*1*	*2*	*3*	*4*	*5*	*total*
later-neolithic and Beaker pottery						
circular pits and various impressions (Figure 27.2)	–	7	–	1	–	8
fingernail impressions and fingernail or fingertip rustication (Figure 27.3–9)	1	5	–	2	–	8
incised (?Grooved ware)	–	2	–	3	–	5
Beaker (Figure 27.10–23)	–	3	–	11	–	14
Collared-urn and allied pottery						
stroke ornament (Figure 28.24–7)	–	–	–	17	–	17
cord impress (Figures 28.28–45, 29.46–55)	–	30	2	25	2	59
looped-cord impress (Figure 29.56–7)	–	1	–	4	4	9
oblique-line lattice Figure 29.58–9)	–	–	–	1	1	2
abraded decorated sherds of uncertain character	1	31	2	13	7	54

Table 3. Decorated pottery.

Decorated pottery (Figures 33, 34, 35; Table 3)
The 176 sherds of decorated pottery comprise eight groups; 54 abraded sherds are of uncertain character. Four groups – those ornamented with circular pits; with oak (*Quercus*) cupules and other impressions; with fingernail impressions and fingernail or fingertip rustication; and with incised motifs – as well as the Beaker wares could be of later-neolithic affinity, although occurring in collared-urn contexts. The other four – with stroke ornament; with cord impress; with looped-cord impress; and with oblique line embellishment – are unambiguously of collared-urn affinity. This collared-urn pottery is supplemented by six plain rim, collar and neck pieces to be described below. Prominent

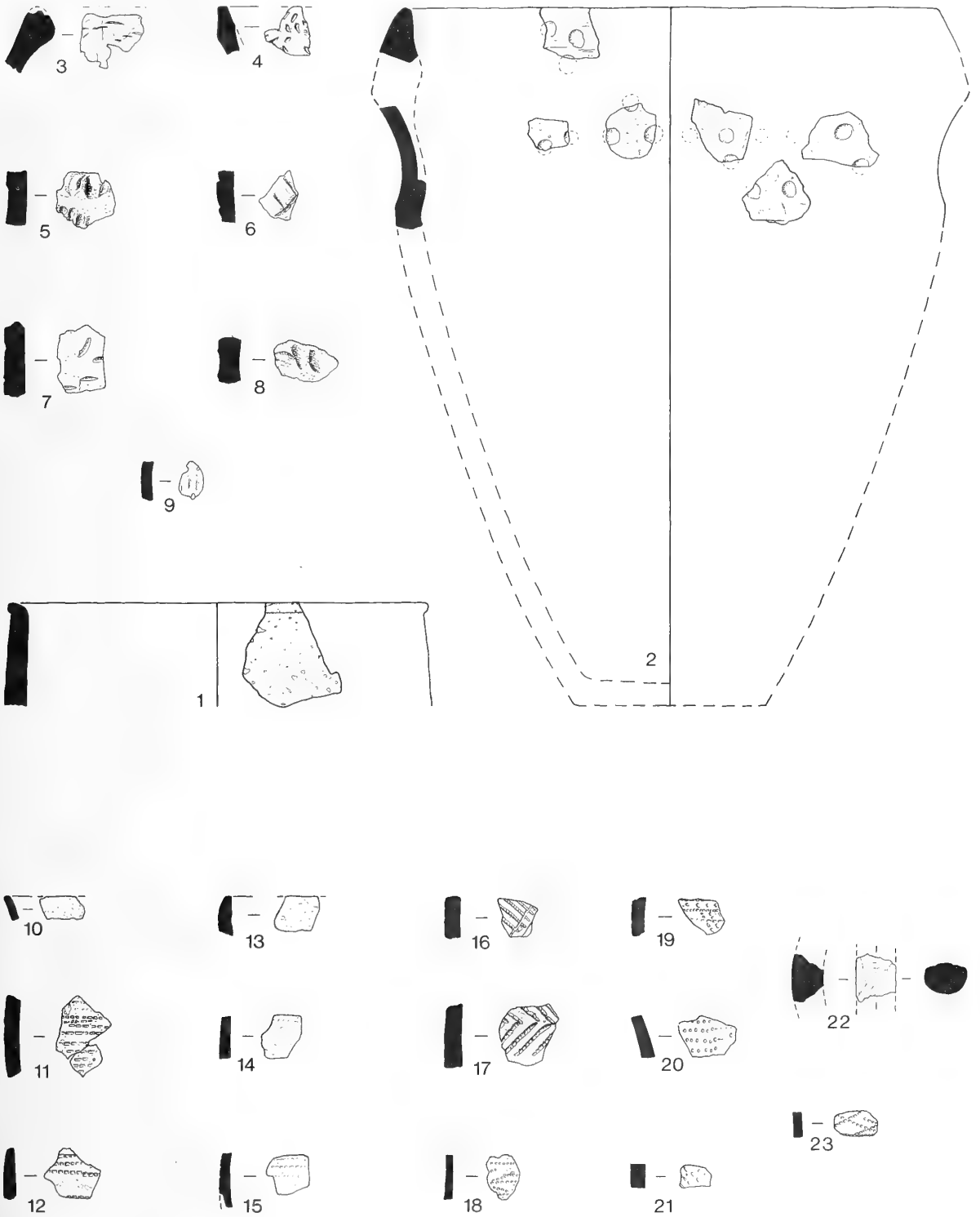

Figure 33. Pottery: earlier and later neolithic, and Beaker (1:3).

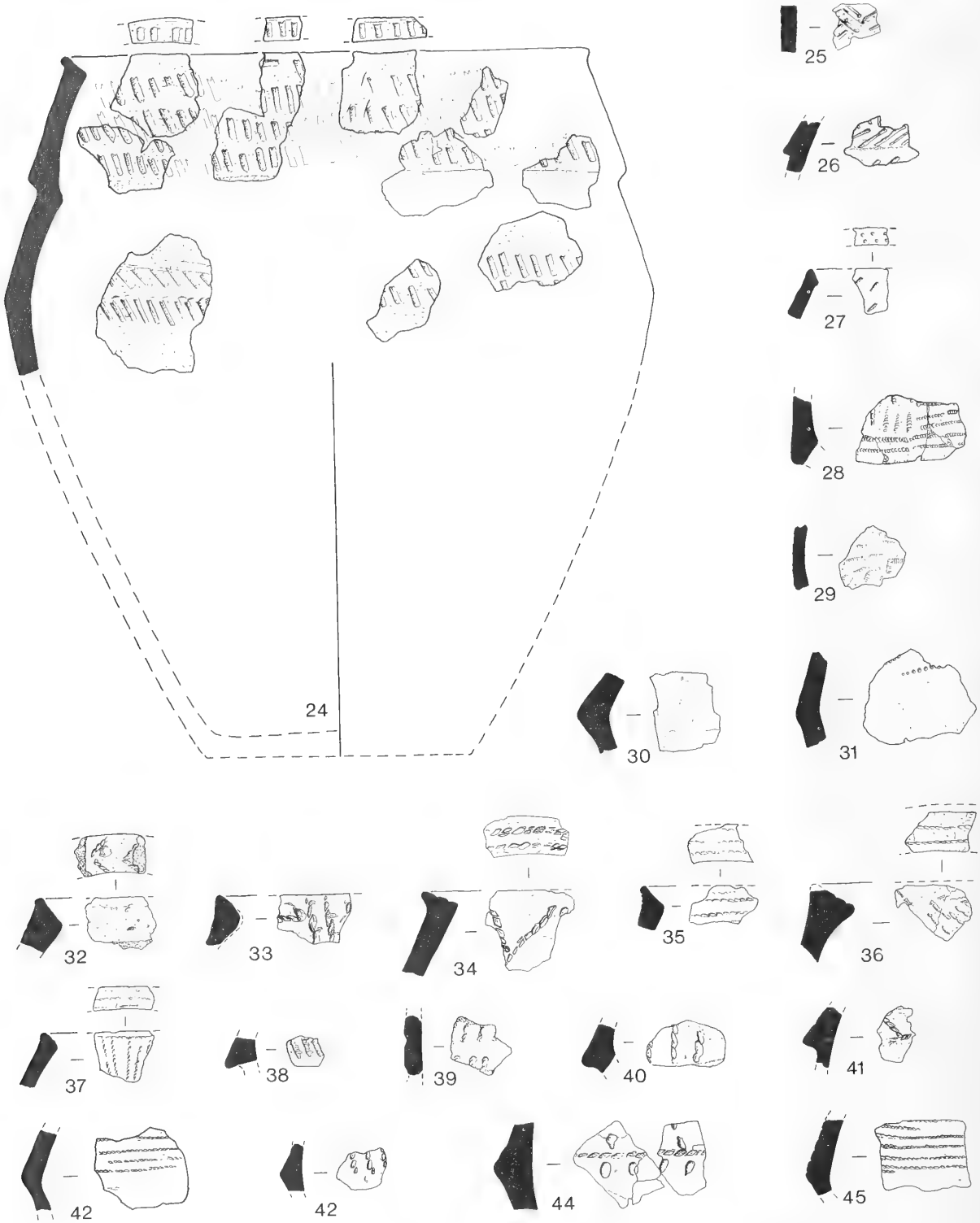

Figure 34. Pottery: stroke, impress and cord ornament (1:3).

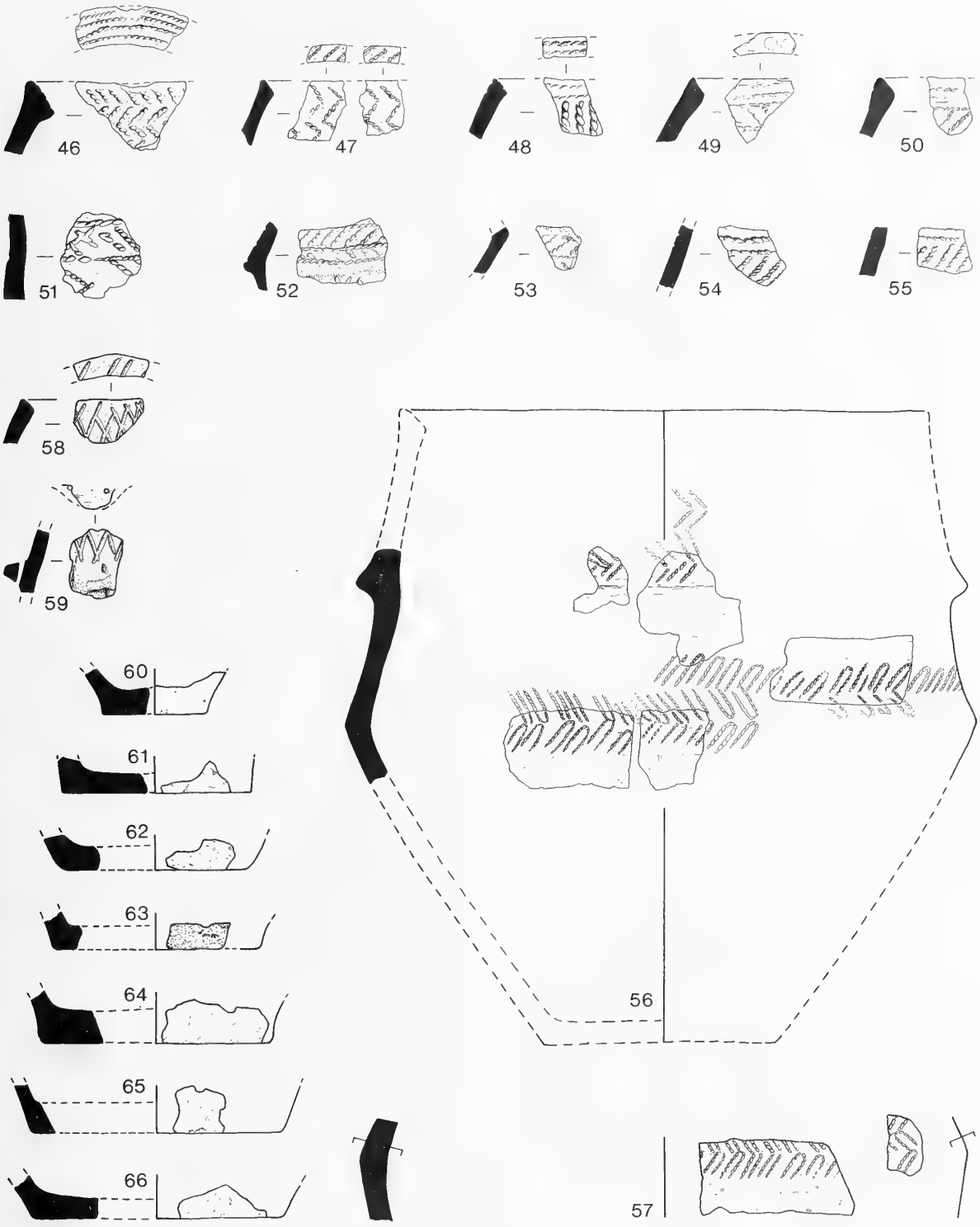

Figure 35. Pottery: cord and line ornament, and bases (1:3).

in the collection are the 59 sherds carrying twisted and whipped cord ornament, which comprise almost half the readily identifiable pieces. Excepting the 54 abraded sherds, the state of preservation of the pieces was good, and limited reconstructions were possible. Table 3 tabulates provenances, and Figures 33–5 illustrate the sherds.

Plain, undecorated pottery (Table 4)
Apart from rim, collar, neck and base-angle fragments, the bulk of the plain pottery consists of body-sherds. They are two kinds: 347 are of a normal thickness, about $\frac{1}{4}$ in.; 67 are of a heavy type, more than $\frac{3}{8}$ in. thick, some as much as $\frac{7}{16}$ in. thick.

Most of these massive, heavy, sherds were neither re-burned nor marked by residues, although sometimes abraded; many were from vessels of some size, one or two as much as 1 ft 3 ins. high and of commensurate diameter.

	number of sherds					
barrow number	*1*	*2*	*3*	*4*	*5*	*total*
rim, collar and neck	3	–	–	2	1	6
base angles (Figure 27.60–6)	–	5	–	4	–	9
body sherds	1	178	11	124	33	347
heavy sherds	–	18	2	39	8	67

Table 4. Provenance of plain pottery.

Fired-clay fragment (Figure 36)
A fragment of a fired-clay object of regular shape, perhaps a weight, with traces of secondary burning upon its base, was found among occupation material in the loam core of barrow 2 (layer 3). It seems to have been pear-shaped.

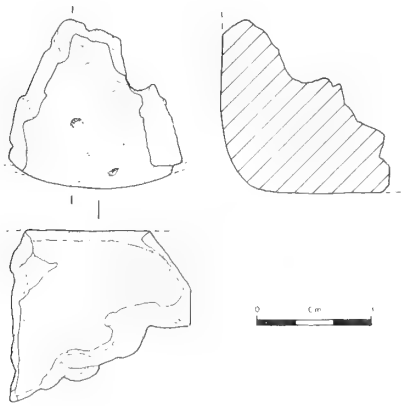

Figure 36. Fired-clay fragment from bell-barrow 2 (1:2).

FLINT (*Figures 37, 38, 39; Tables 5, 6*)
During the excavations 394 struck flints were found and recorded. Of this total, 21 were artifacts, 17 utilized flakes and the remaining 356 waste products. Two artifacts were from the ancient soils beneath barrows 2 and 5; 2 from a ditch of barrow 3; 3 flakes were from the ditch of barrow 1; 1 from the ditch of barrow 2; and 1 from the ditch of barrow 3. The remaining 384 struck flints were from occupation debris in the loam cores of barrows 2, 4 and 5. The raw material used was nodular flint of fair quality. Many pieces were heavily patinated and had clearly been exposed for some time.

The artifacts and waste material are listed in Table 5. Flake scrapers, the *petit tranchet* derivative arrowhead, the plano-convex knife and the cores follow J.G.D. Clark's (1932; 1934; 1960) classifications, and the utilized flakes that of I.F. Smith (1965).

Of the utilized flint, about 5 per cent were artifacts of specific kinds, about 4 per cent were flakes utilized, presumably, for particular tasks, while the remaining 91 per cent consisted of inutile material. These proportions are based upon pieces from a partial excavation which examined only about a tenth part of the bulk of the two large bell-barrows, 2 and 4, and no more than a fifth part of the isolated bowl-barrow 5.

The lengths and breadths of 284 flakes were recorded, 93 from bell-barrow 2, 127 from bell-barrow 4, and 64 from bowl-barrow 5. The figures coincide closely with those obtained for the much larger sample, of 3,033 pieces, from the late neolithic industries from Durrington Walls and the West Kennet Avenue (Wainwright and Longworth 1971: 163).

Scrapers (Figures 37, 38), the most common type, contribute 15 of the 21 artifacts. The other 6 are: 2 knives (Figure 39.17–18); 2 spurred implements (Figure 39.19–20), one with an area of use-gloss (Figure 40); 1 *petit-tranchet* derivative arrowhead (Figure 39.16); and 1 heavy point (Figure 39.21). Three artifacts came from special contexts in barrow 2: the broken plano-convex knife (Figure 39.18) from topsoil of the disturbance on the crown; the heavy point from the surface of the ancient soil beneath the barrow; and a scraper (Figure 38.11) from the ancient soil. The other artifacts came from the barrows' loam cores and were associated with, or a part of, the added occupation debris.

Table 6 shows the patination of flakes, blade-flakes and blades in the flint assemblage.

SARSEN
Four of the barrows contained pieces of sarsen stone:

Barrow 2, base of the loam core (Figure 11, layer 3): a large burned and splintered flake.

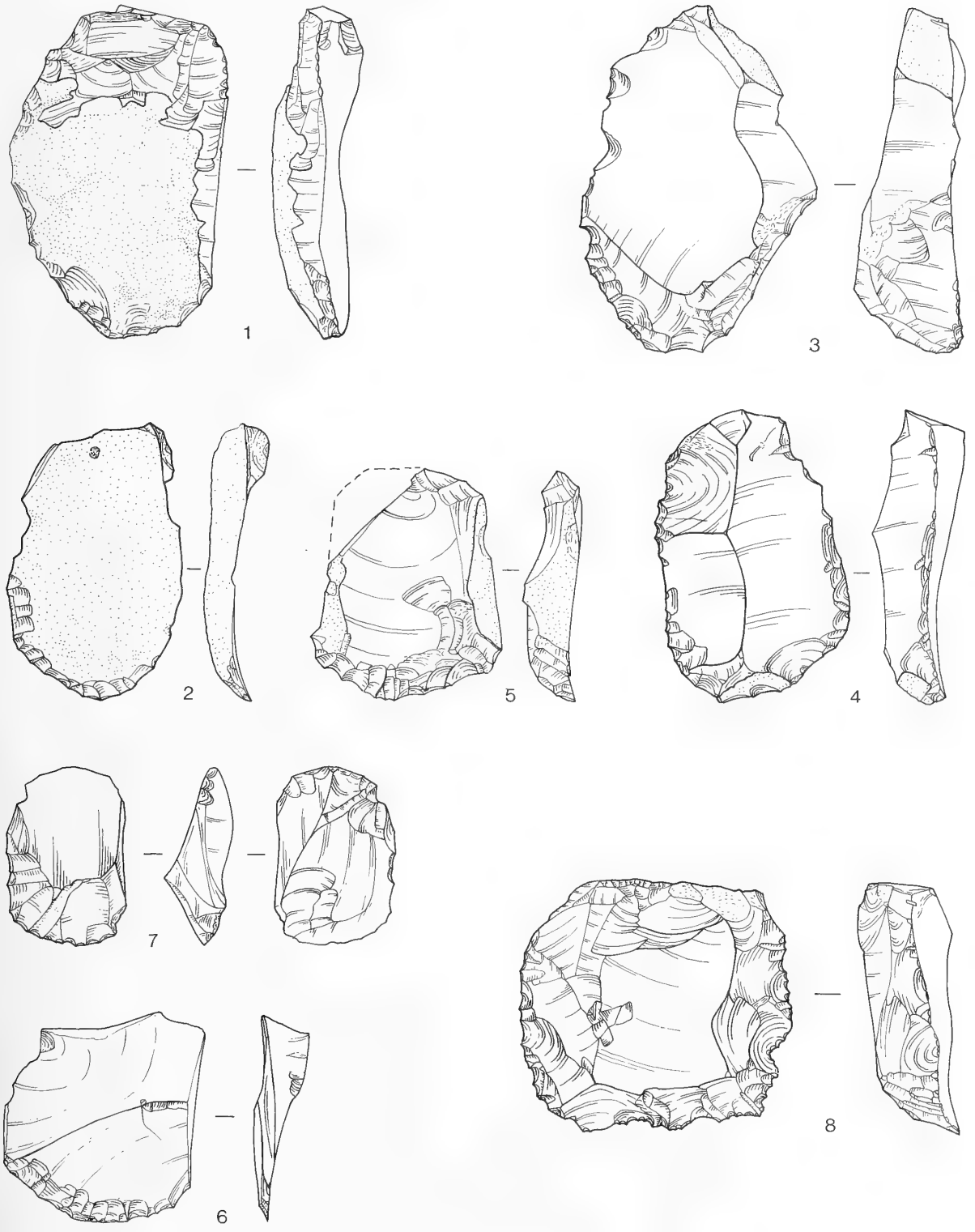

Figure 37. Flint: scrapers 1–8 (1:1).

	numbers of struck flints					
barrow number	*1*	*2*	*3*	*4*	*5*	*total*
ARTIFACTS						
flake scrapers						
A1 (long end) (Figure 31.1–5)	–	1	1	1	2	5
A2 (short end) (Figure 31.6)	–	1	–	–	–	1
B1 (long double-end)	–	–	–	–	–	–
B2 (short double-end) (Figure 31.7–8)	–	–	–	2	–	2
C (disc) (Figure 32.9–11)	–	1	–	1	1	3
D1 (long side) (Figure 32.12)	–	1	–	–	–	1
D2 (short side) (Figure 32.13–15)	–	1	–	2	–	3
E (bulbar end snapped off)	–	–	–	–	–	–
arrowheads						
petit tranchet derivative (Figure 33.16)	–	–	–	1	–	1
knives (Figure 33.17–18)	–	1	–	–	1	2
'spurred' implements (Figure 33.19–20, Figure 34)	–	1	–	–	1	2
heavy points (Figure 33.21)	–	1	–	–	–	1
TOTAL	–	8	1	7	5	21
UTILIZED FLAKES						
A (removal of squills etc.)	–	1	1	2	–	4
B (chipping and spalling from use)	–	3	2	6	2	13
TOTAL	–	4	3	8	2	17
WASTE MATERIALS						
cores						
A (1 platform)	–	5	–	1	–	6
B (2 platforms)	–	1	–	2	–	3
C (3 or more platforms)	–	–	–	–	–	–
D (keeled)	–	–	–	2	–	2
E (keeled with 1 or more platforms)	–	–	–	–	–	–
flakes and blades						
cortical flakes	–	57	2	6	2	67
non-cortical flakes	–	33	4	90	36	163
cortical blade-flakes	–	–	1	1	–	2
non-cortical blade flakes	1	10	1	6	1	19
cortical blades	1	–	–	–	–	1
non-cortical blades	1	3	–	9	5	18
other						
burnt lumps	–	1	–	–	–	1
burnt flakes	–	3	–	3	6	12
spalls	–	14	–	32	5	51
plunge fractures	–	4	–	3	1	8
core-rejuvenation flakes	–	2	–	–	1	3
TOTAL	3	133	8	155	57	356
OVERALL TOTAL	3	145	12	169	64	394

Table 5. Flint, by type and provenance.

	number of flakes, blade-flakes and blades					
barrow number	*1*	*2*	*3*	*4*	*5*	*total*
deep white	2	31	3	10	6	52
mottled	1	51	5	91	35	183
unpatinated	–	23	–	11	3	37
TOTAL	3	105	8	112	44	272

Table 6. Flint, by patination and provenance.

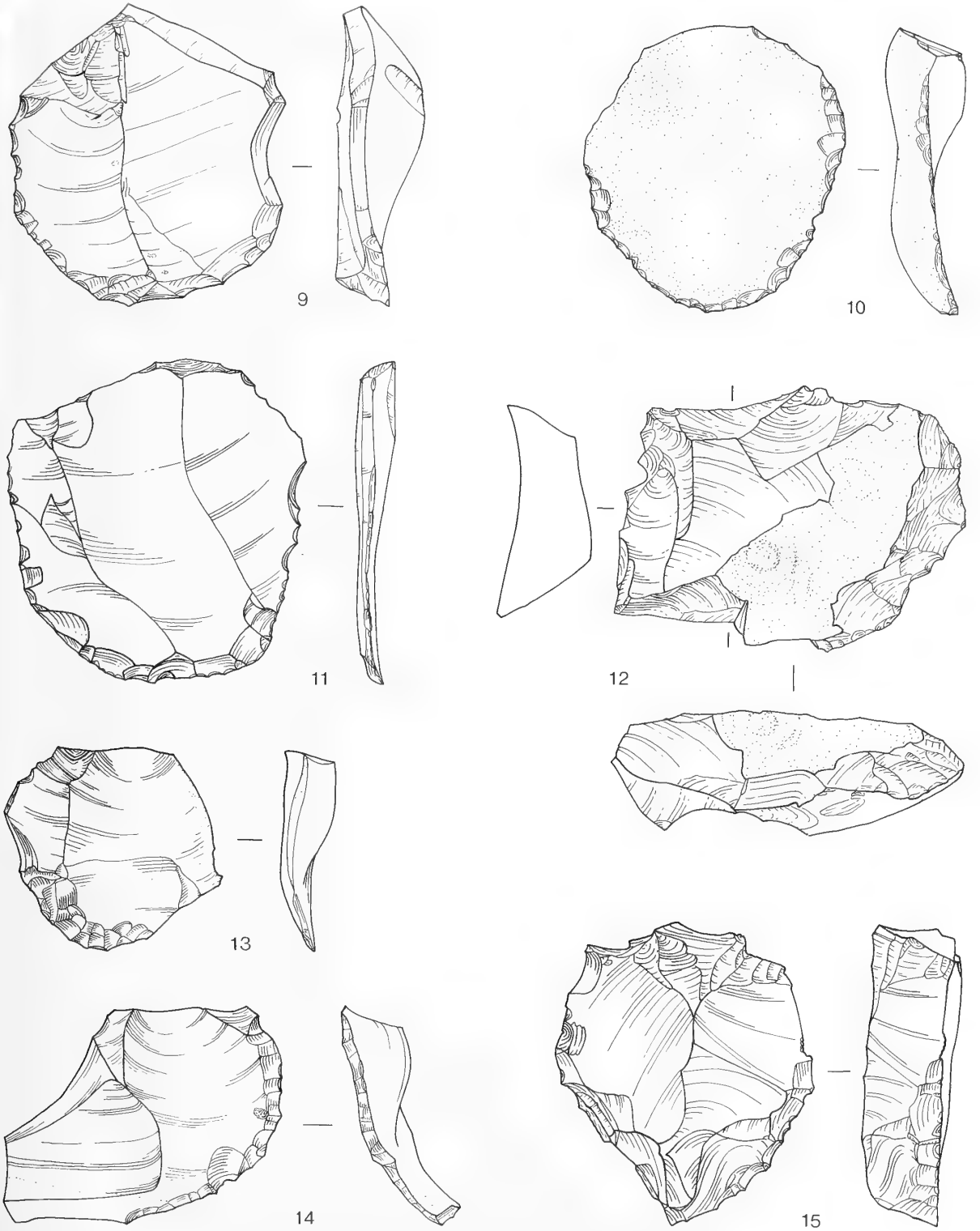

Figure 38. Flint: scrapers 9–15 (1:1).

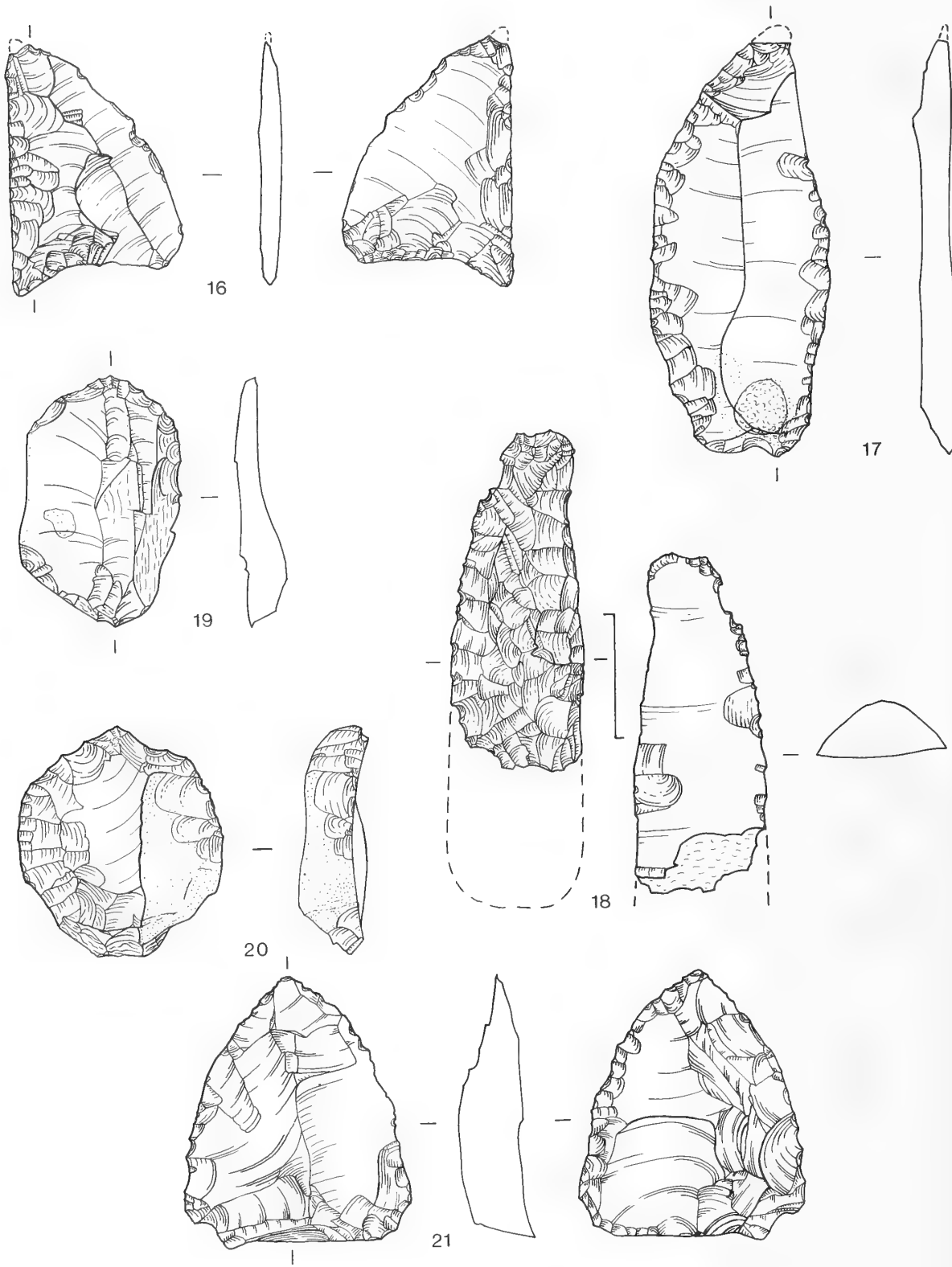

Figure 39. Flint: artifacts 16–21 (1:1).

Figure 40. Flint point from bell-barrow 2: use-gloss area (10:1)

Barrow 3, remnant humic silt of the ditch chord on the SW side (Figures 10, 14, C–D, layer 2): a much-weathered and battered hammerstone.

Barrow 4:

loam core: a large, much-weathered, ovate flake or lump; a smaller, weathered, perhaps burned, ovate lump; a small, burned and weathered tabular lump; and 2 small burned flakes.

from the humic silt of the ditch on the SE side (igure 15, layer 6): a large, sharp-edged, tabular flake.

Barrow 5, loam core (Figure 18, layer 4): a much-weathered, elongated flake.

ANIMAL REMAINS

Animal bones and teeth, complete, broken, fragmentary or in splinters, were recovered, for the most part from the loam cores of the upstanding barrows, where they were associated with occupation debris, the charcoal-laden soil and fouled, broken, pottery. Full details are in Section 5, pages 74–81 below. Numbers of bones (fine splinters and small weathered pieces excluded) associated with particular features were:

Barrow 1:
- humic silt (Figure 7, layer 2) of the ditch on the SE side: 6.
- chalk rubble (layer 4): 1

Barrow 2:
- humic silt (Figure 11, layer 6) of the ditch on the S side: 8.
- humic chalk rubble (layer 7): 3.
- loam core (layer 3): 411.
- ancient soil (layer 4): 14.

Barrow 3:
- remnant dark humic silt (Figure 14, C–D, layer 2) of the W chord of the ditch (Figure 10): 42.
- remnant dark humic silt of the E chord of the ditch: 43.

Barrow 4:
- chalk rubble silt (Figure 15, A–A′, layer 8) of the ditch on the NW side (Figure 10): 5.
- top of the soil mantle of berm (layers 1, 5): 1.
- chalk wash at tail of chalk envelope (layers 2, 5): 2.
- loam core (layer 3): 324.

Barrow 5:
- plough-soil (Figure 20, layer 1a) mantling the ditch on the side (Figure 19): 8.
- loam core (layer 4): 88.
- ancient soil (layer 5): 8.

MISCELLANEOUS MATERIALS

Objects in other materials are:

Antler

Barrow 4, chalk envelope (Figure 18, layer 2): a broken strip or splinter cut from a red deer (*Cervus elephas* (L.)) antler beam, retaining much of its spongy cancellarious inner tissue. It bears signs of cutting and trimming at the unbroken end.

Chalk

Barrow 2, infill of recent pit in barrow crown (Figure 12): chalk cylinder, with an unworked irregular base, $1\frac{5}{8}$ ins. long. It is coated with a calcareous deposit, which presumably conceals traces of cutting and scraping.

Iron pyrites

Barrow 1, infill of grave beneath destroyed NW mound (Figures 6, 9): 2 part-nodules, displaying the mineral's characteristic radiating structure.

Barrow 4, loam core (Figure 18, layer 3): small concreted nodule of the crystalline mineral.

Tufa

Barrow 4, loam core (Figure 18, layer 3): 3 fragments of a concretion.

Barrow 5, infill of pit with urn-burial (Figure 28): deeply burned fragment.

MATERIAL OF POST-BRONZE-AGE DATE

Romano-British pottery by GEORGINA SHAW

During the excavations 64 Romano-British sherds were recovered from the humus, plough-soils and upper ditch-loams:

Five different fabrics could be distinguished, but the sherds were too abraded for forms to be identified. There were no rims.

Fabric A is a hand-made, medium hard, black or dark brown grog-tempered ware. Inclusions of grog are red or grey, 1 mm or less in diameter, occasionally crushed quartz or shell appear as temper. The ware is roughly finished on the exterior. The fabric is very similar to Hampshire's grog-tempered pottery (Fulford 1975), which dates from the late 3rd to the early 5th century AD.

Fabric B comprises the grey ware sherds which can be divided into two, a coarse sandy fabric and a fine sandy fabric. Neither of these is slipped.

Fabric C is a medium-soft, coarse grey-black, wheel-thrown composition, with angular quartz inclusions up to 2 mm in diameter and roughly finished on the outside.

Fabric D is very similar in appearance to C but is hand-made with slightly larger inclusions of quartz and mica.

The remaining coarseware sherds are hard and sandy in texture, with colours ranging from pink to black, and do not appear as related to the four fabric categories. There are also four badly abraded Samian ware sherds

from central Gaul, dating to the 2nd century AD, and an indeterminate abraded flint-gritted sherd.

Iron

Four iron objects were recovered:

Barrow 2, infill of recent pit in barrow crown (Figure 12): strip or plate, of truncated triangular outline, 2 ins. long, 1 in. wide at the broader and $\frac{1}{2}$ in. at the narrower end, possibly part of a strip or hinge.

Barrow 3, remnant final humic infill of W ditch chord (Figures 1, 17, C–D, layer 2):
small, curved, carefully forged object, probably part of the bow of an iron brooch, $\frac{7}{8}$ in. long and $\frac{1}{16}$ in. maximum diameter.
nail, lacking its head, $1\frac{1}{4}$ in. long and approximately $\frac{3}{16}$ in. square in section, finished to a narrow chisel-end.
nail of similar character and dimensions, but with a flat, circular head.

Knife handle

In the infill of the recent pit in the crown of barrow 2 (Figure 12) was a knife handle. Mr D. Joutell, of the Norwich Castle Museum, who kindly examined it, considers it unlikely to be earlier than the 19th century.

4 Comments on the barrows and artefacts

THE BARROWS AND THEIR ARRANGEMENTS

The disc-barrow 1, distinctive by its plan and twin interior mounds, is one of a small category of 'oval twin disc-barrows' (Grinsell 1974: 109–10). Only six are known in Wessex, either in isolation or, like the present example, as components of clusters. One isolated Dorset example (Gussage St Michael 17a) is at no great distance from the long barrows on Gussage Cowdown (Gussage St Michael 3, 4: Crawford and Keiller 1928: 112, plates XV, XVI), but the other (Wimborne St Giles 8) is a component of the Oakley Down group of barrows (Crawford and Keiller 1928: 174–83; Grinsell 1959: 143–5, plate IIb), notable for its uniquely large number of disc-barrows (Grinsell 1974: 88). The other three in Wiltshire are: Amesbury 10, by the barrow group just SW of Stonehenge; a possible example, Amesbury 61a (Ashbee 1985: 46–52, Figure 8), which lies on the E side of the river Avon, adjacent to the New Barn Down triple barrow (Grinsell 1957: 214; Ashbee 1985: Figure 2); Bishops Cannings 95, among the barrows SW of Avebury, a cluster which includes the Beckhampton Road long barrow (Bishops Cannings 76; Ashbee, Smith and Evans 1979: 228–50) and other disc-barrows (Thurnam 1871: 307, fn. b; Grinsell 1974: 102).

Awl-accompanied cremation burials have been regularly found in disc-barrows (Grinsell 1974: 85), almost always in small graves dug into the chalk (Ashbee 1960: 83). Bronze daggers are lacking; the beads and small bronze knives sometimes encountered have been thought to indicate female burials.

Ditches encircled the bell-barrows 2 and 4; the linking smaller bowl-barrow 3 had a ditch that was no more than two disconnected lobes (Figure 12). Thurnam's (1871: 299) impression of 'three tumuli . . . the whole standing on a common platform, and surrounded by a ditch of a figure-of-eight or hour-glass shape' can no longer be entertained – they are no more than linked barrows. Our examples belong to a small group of bell-barrows with outer banks (Grinsell 1957: 215); Grinsell's photographs, taken in 1939 (Figures 3, 4), show that the ditch-lobes of the linking bowl-barrow were also delineated by insubstantial outer banks. The triple bell-barrow with outer bank on Amesbury Down (Crawford and Keiller 1928: 205, plate XXXV; Grinsell 1957: 215) is comparable, although that has a clear, oval, surrounding ditch. Again, two possible bell-barrows were linked by a saucer barrow at Popham in Hampshire (Grinsell 1939: 209, Figure 3). At Aldbourne, in NW Wiltshire about 10 miles from Milton Lilbourne, two of the bell-barrows of the 'Four Barrows' group are linked by a subsequent mound (Grinsell 1933: plate XV).

The plough-damaged multiple-barrow on New Barn Down, Amesbury (Grinsell 1957: 214; Ashbee 1985: Figures 2, 44) gives another example of linked barrows: the N mound, Amesbury 60, surrounded by its ditch, had another, Amesbury 59a, built close by its S side, and, subsequently, yet another, Amesbury 59, set beyond it. These two later barrows (59a, 59) were then enclosed by a common ditch, joined up to that of the initial barrow (Ashbee 1985: Figure 44; also aerial photograph *c.* 1938 by Major G.W.G. Allen (Ashmolean Museum, Oxford)).

No burial was found in the area excavated beneath barrow 2, although one may have existed in the unexcavated portion. (The often extensive endeavours of early antiquarians sometimes failed to find burials beneath certain barrows (e.g.Hoare 1810: 51; Thurnam 1871: 329–30; Greenwell 1877: 755, sv).)

The grave covered by barrow 3 had been emptied.

Beneath barrow 4 a cremation furnished with a miniature vessel was housed in a timber coffin; this augments the recorded number of cremations in modest coffins known from the region (Ashbee 1960: 86; Piggott 1973: 357).

Barrow 5 held a cremation under an inverted urn.

In Great Britain and Ireland 23 per cent of primary and 25 per cent of secondary collared urns have been found *inverted* over cremation burials, the bones of which had sometimes been cleansed and sorted (Longworth 1984: 47, 141, n. 15). In Wiltshire only 18 of about 125 urn burials (about 14 per cent) have been under inverted urns, and only 7 of these were beneath bowl-barrows. Only one instance of an urn inverted over a cremation beneath a bowl-barrow, and that in a stone cist, has been encountered in the vicinity of Milton Lilbourne, at Winterbourne Monkton 17d, 10 miles distant. The greater concentration of recorded burials beneath inverted collared urns is on Salisbury Plain, and its vicinity, reflecting the activities of the early antiquaries there (Annable and Simpson 1964: 1–6; Cunnington 1975).

GRAVE FURNITURE

Since Stukeley (1740: 45) found 'a sharp bodkin, round at one end, square at the other where it went into a handle' beneath a barrow near Stonehenge, Amesbury 44, awls have been considered to have had handles and to have been intended for piercing wood, bone, fabric or leather (Bateman 1848: 105; 1861: 67, 107, 155; Thurnam 1871: 464–67; Greenwell 1877: 138–9; Evans 1881: 188; Abercromby 1912: vol. 1, 59; Childe *et al.* 1944: 111; Annable and Simpson 1964: 58, 415–31; Smith and Simpson 1966: 134; Cunliffe 1970: 11; Fleming 1971: 160). Some awls were not hafted, however; a square-sectioned, double-pointed example has been found lying upon a slip of antler clearly intended for its protection (Ashbee 1978: 15, 20, 41). Indeed, some elements taken as handles may actually have been to protect the point (Smith and Simpson 1966: 129).

Double-pointed awls, the earliest, have been found with earlier- and later-stage Beakers as well as Wessex grave groups; round-sectioned awls, with flat tangs, were found also with Wessex assemblages and collared urns (Piggott 1953). Subsequent discoveries (Smith and Simpson 1966: 130, Figures 3,5; Ashbee 1978: 22, Figure 12.1) and assessments (Simpson 1968: 200; Longworth 1984: 59) have shown this sequence's direction and substance. The awl, with the cremation in the NW grave of disc-barrow 1, is almost identical in size and character to one accompanying the primary cremation beneath a bell-barrow on Oakley Down, Dorset (Parke 1953: 41, Figure 2). The flattened tangs were, presumably, to facilitate hafting. Both can be assigned to the Wessex earlier Bronze Age stage.

The incised decorated miniature bowl from the cremation beneath bell-barrow 4 recalls the Wessex bowls, sometimes handled, found with inhumation burials (Piggott 1938: 98, Figure 23; Smith 1965: 229, Figure 78; Clarke 1970: vol. 2, nos. 408–9, 1028, 1031, 1033, 1035). Devizes museum holds a miniature bowl of the same size and character, excepting the rim (Annable and Simpson 1964: 58, no. 435), from an unknown location, presumably a Wiltshire barrow. A squat bowl from the primary cremation beneath the bell-barrow West Overton 2 is similar except for twisted-cord impressions on its body, flat top of rim and base (Grinsell 1957: 211; Annable and Simpson 1964: 59, no. 446; Piggott 1973: 347, Figure 20a). The smaller undecorated food vessels, three of which furnished cremations beneath saucer and bowl-barrows are also of the same lineaments (Annable and Simpson 1964: 62, nos. 491, 492, 494, 495).

The inverted urn covering the cremation beneath bowl-barrow 5 is considered by Longworth (1984: 287) to belong to his Secondary Series, Form I/IV, 'vessels not attributed to either the North Western or South Eastern styles represent the general trend in the tradition, exhibiting traits held in common with no marked regional emphasis in their use' (Longworth 1984: 40); comparable examples come from Rutland (Longworth 1984: plate 211, b, 871) and Drimnagh, Co. Dublin (Longworth 1984: plate 212, a, 2229). The closest counterpart in Wiltshire comes from the bell-barrow Collingbourne Kingston 8, in the next parish to Milton Lilbourne (Annable and Simpson 1964: 64, nos. 515–18; Longworth 1984: plate 186, c, 1673). Secondary-series urns, like other pottery forms of the period, were made in miniature form; one from Durrington 36 (Longworth 1984: plate 246, 1, 1682), with Form I/IV characteristics, was only about 3 ins. high.

POTTERY, FLINT ARTIFACTS AND KNAPPING DEBRIS, AND BONES

Occupation earth, often charcoal-laden, embodying potsherds, flint artefacts, knapping debris and bones, has often been encountered in round barrows (Ashbee 1960: 55). Local excavations (Christie 1964; 1970; Ashbee 1979–80; 1985) have disclosed material which

might have been deliberately added (Grinsell 1953: 37). Two mounds, however, are known to have been built on or by earlier occupation sites, material from which might have been incorporated accidentally (Smith 1965b; Smith and Simpson 1966). Since some barrows have been shown to have contained no occupation material, its inclusion has been seen as a continuation of long barrow usages with a non-material purpose (Piggott 1962: 74–5; Smith 1965a: 212; Ashbee 1979–80: 31). In the relatively undamaged mounds of barrows 2, 4 and 5 the occupation material interleaved with loam from their ditches had added to their mass and height.

The sometimes profuse scatters of sherds of pottery encountered in barrow mounds (Ashbee 1957: 157; 1960: 55) are occasionally in clean soil; often they cannot always be effectively separated from the occupation debris of which they are from time to time a principal component (Longworth 1984: 76). As at Milton Lilbourne, the pottery scatters frequently include sherds partially or wholly representative of almost the entire suite of neolithic and earlier bronze-age pottery, as it has been found at such major Wessex monuments as Maiden Castle (Wheeler 1943: 137–62), Windmill Hill, Avebury (Smith 1965: 43–84, 224, 232), Durrington Walls (Wainwright and Longworth 1971: 48–155), and Mount Pleasant (Wainwright 1979: 75–124). Narrower or more specific combinations and groups of ceramics are regularly encountered when lesser sites are disclosed and investigated, whether their character is earlier and middle neolithic (Smith 1965a; Smith and Simpson 1966); earlier and later neolithic and Beaker (Stone 1933); or Grooved ware (Wainwright and Longworth 1971: 287–97); or Collared Urn (Stone and Hill 1938). Accordingly, the diverse occupation debris in certain barrows, including Milton Lilbourne, could have been gathered from disparate sources, some ancient, when the mound was raised.

Although recognized early (Greenwell 1877: 11, 108; Mortimer 1905: xxv) and described circumstantially (Ashbee 1957: 157; Alexander, Ozanne and Ozanne 1960: 276–84), the sherds recurring in barrow mounds have been only intermittently recorded. Clarke (1970) lists Beaker sherd collections but does not accord them especial mention, although notices of Grooved-ware and Collared-urn sherds from such sources are available (Wainwright and Longworth 1971: 268–306; Longworth 1984: 76).

Because the mounds have usually been nearly destroyed, the records of flint artifacts and waste materials, not always associated with occupation debris, sometimes appear scanty (Ashbee 1979–80: 25–6). Substantial assemblages have, however, been encountered (Ashbee 1957: 154–6; Alexander, Ozanne and Ozanne 1960: 284–96; Christie 1963; 1964; 1967; 1970), and four have been analytically assessed (Saville 1977–8). Scraper- and point-dominated formations were seen, and the first envisaged as the earlier.

Counterparts of the scrapers and other artifacts from the Milton Lilbourne barrows (Figures 37, 38, 39) can be variously identified among the Wiltshire barrow assemblages (Saville 1977–8), and in the collections from Durrington Walls (Wainwright and Longworth 1971: 156–81), Marden (Wainwright *et al.* 1971), and Mount Pleasant (Wainwright 1979). At Stockbridge, a lesser site of Collared-urn affinity, flint artifacts had been included in a heap of occupation material (Stone and Hill 1938), while at Durrington Walls a similar heap had been fenced in (Wainwright and Longworth 1971: 38–41).

Like pottery and struck flints, animals' bones have for long been observed in barrows as a component of occupation debris (Ashbee 1960: 171). Material from partial excavations and denuded mounds (Ashbee 1979–80: 28) does not necessarily proffer an accurate measure of species, although domestic animal remains normally predominate. The massive numbers of bones from Durrington Walls, Marden and Mount Pleasant (Harcourt 1979: 221), quantities of which were in a midden (Wainwright and Longworth 1971: 38), conform to this prescription as do, within their limits, those from lesser habitation sites (Stone and Hill 1938: 256; Bradley and Ellison 1975: 229–30).

In the tips of occupation debris met with in many barrows, broken pottery, struck flints and animal bones normally found in discrete contexts on settlement sites are usually, though not always, associated (Ashbee 1957: 157). They are presumably the results of cleansing particular areas and installations. Similar material which streaked the chalk rubble infilling the chambers of the West Kennet stone-built long barrow was thought of as sweepings, albeit of a ritual nature (Piggott 1963: 26–30, 75). The layers of occupation debris in the Milton Lilbourne barrows (Figures 14, 25) could have been from periodic cleansing and, because of their soil and chalk content, even ditch scouring.

The quantity of animal bone from the occupation material is sufficient to allow a substantial study, which makes up the next section of this report.

5 Animal remains

by CAROLINE GRIGSON

Just over 1000 animal bones and teeth were retrieved, of which about a quarter were identified to species. Most of the bones came from the loam cores of barrows 4 and 5 (Figure 18, layer 3; Figure 27, layer 4). The dark staining, haphazard body-part representation and high degree of fragmentation is commensurate with incorporation into occupation debris, a prominent feature of these loam cores. The bones from the barrow ditches are in much the same condition as those from the barrows, so the identified bones from the two sources are considered together.

The cores of barrows 2, 4 and 5 covered ancient soils which predate construction. The few bones that they contained have been listed separately. The three bones that can be identified are of domestic animals, so the soil cannot be older than the Earlier Neolithic. All are too fragmentary to merit further description.

The animals represented are cattle, pigs, sheep/goats (including some definite sheep), dogs, ponies, red deer and roe deer (Tables 7, 15).

CATTLE *(Bos taurus)* (Table 8, Figure 41)

It has been known since at least the 1920s that the domestic cattle of the Neolithic (both early and late) were quite large, while those of the Middle Bronze Age and later were smaller, though their size ranges overlap (Grigson 1982). These smaller cattle are sometimes referred to as '*Bos longifrons*' (the Celtic ox), but the Latin name is invalid as there is absolutely no reason to consider them to have been a separate species; all

barrow number	*Bos*	*Sus*	*Ovis/ Capra*	*Cervus*	*Capreolus*	*Canis*	*Equus*	*total identifiable*	*unidentified*	*total found*
1	1	1	3	1	0	0	1	7	11	18
2	39	25	15	3	0	4	1	87	384	471
3	7	5	10	0	1	0	2	25	63	88
4	47	13	21	6(+1)	0	2	0	89(+1)	245	335
5	10	14	3	0	0	0	2	29	71	100
total in occupation debris	104	58	52	10(+1)	1	6	6	237(+1)	774	1012
in ancient soils	1	1	0	0	0	1	0	3	22	25

Table 7. Animal bones and teeth identified to species and unidentified in the mounds and ditches of each of the five barrows, and in the ancient soils beneath them. The antler fragment is indicated by (+1).

	lower third molar					*atlas*		*astragalus*	
length at base of crown	36.4	30.3*	40.1	35.5	33.5	BFcr	c102	GL1 Bd	65.3 c39
locus	2/34	4/2	4/29	4/31	5/26	locus	5/25	locus	2/85

	metatarsal			*middle phalanx*		
Bp	–	–	c46	GLpe	37.9	–
Bd	c47	c46.3	–	outer length	31.8	39.2
locus	2/27	2/16	4/113	Bp	26.7	e34.5
				locus	2/43	4/113

Table 8. Cattle tooth and bone dimensions. Measurement abbreviations from von den Driesch (1976). c = circa, *e = estimated, post. = posterior, ant. = anterior, l = length, max. = maximum, y = young, erupt. = erupting, unerupt. = unerupted, sl = slight.*

* Abnormal form.

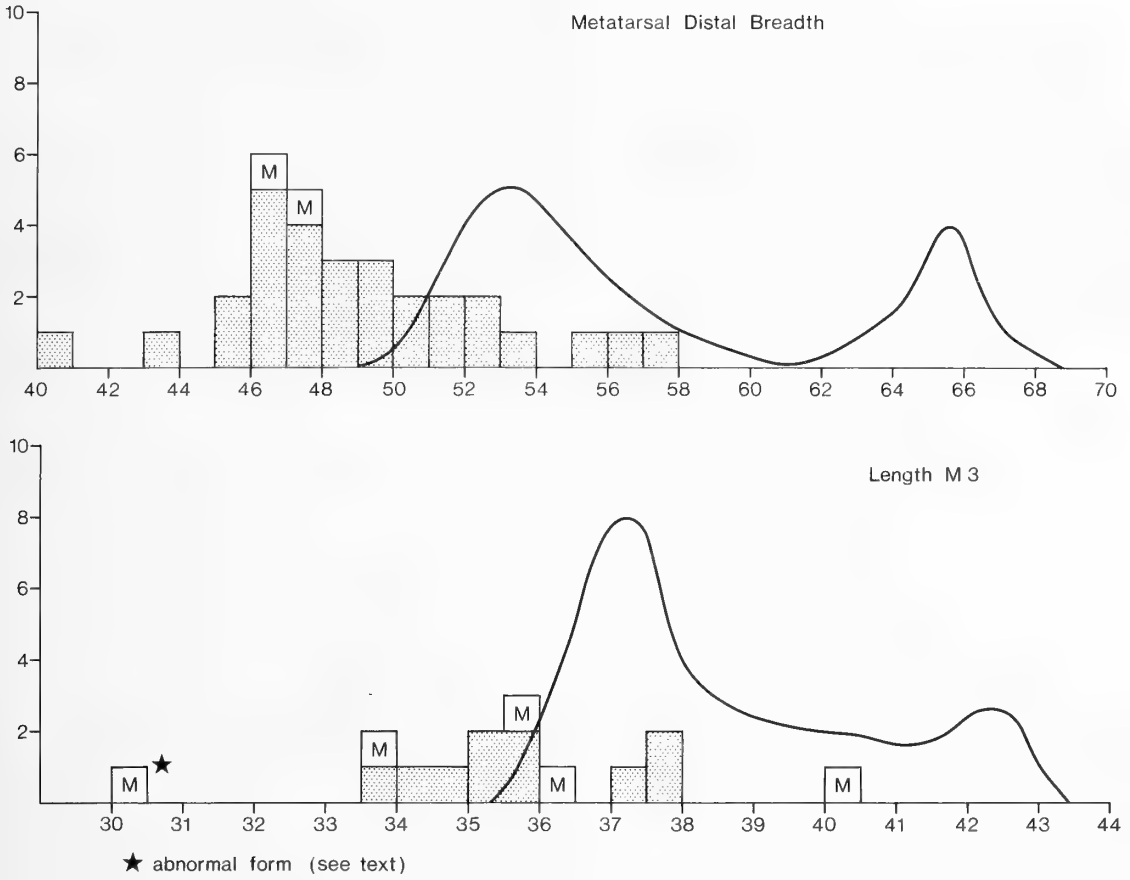

Figure 41. Histograms showing cattle size: (a) metatarsal distal breadth and (b) length of lower third molar. The bronze age cattle (stippled squares) were even smaller than cattle of the earlier and later Neolithic (line). Both histograms indicate smaller cattle; (b) suggests that larger cattle could have been present as well.[2]

non-humped domestic cattle are *Bos taurus*. The main question concerning cattle in the Bronze Age is the origin of these small cattle – were they the result of an autochthonous size reduction of neolithic cattle or did they appear suddenly as imported cattle in the Bronze Age? Were cattle of the two sizes present in Britain at the same time? The critical period is the Early Bronze Age; there are as yet very few published measurements of cattle in this period, so, despite its scantiness, the Milton Lilbourne material is very important.

Figure 41 shows that both large and small cattle were present at Milton Lilbourne. There is little doubt that the smaller bones (two distal metatarsals and one middle phalanx) represent cows of the usual bronze age size, but the identity of the larger bones (one astralagus and one middle phalanx) is more doubtful. They could be from bulls of bronze age size or from cows of neolithic size. It is probable that tooth size is not sexually dimorphic in cattle (Grigson 1974); of the five lower third molars, three are in the usual bronze age range, one is larger (but not large enough for the wild ox), and one is so small that I originally thought it

2. Comparative material comes from the following sites.
Neolithic and Beaker: Windmill Hill, Grigson 1965; Horslip, Higham and Higgs 1979; Whitehawk Camp, Jackson 1936, Grigson forthcoming; Maiden Castle, Jackson 1943a, Grigson 1984a, Grigson forthcoming; Beckhampton Road, Carter and Higgs 1979; Cherhill, Grigson 1983; Ascott-under-Wychwood, Grigson forthcoming; Hemp Knoll, Grigson 1980; Stonehenge Cursus Barrow, Grigson forthcoming; Stonehenge, Jackson 1935; Tilshead Lodge, Grigson forthcoming; Gorsey Bigbury, Wijngaarden-Bakker 1976; Durrington Walls, Harcourt 1971; Woodhenge, Jackson 1929, Grigson forthcoming; Mount Pleasant, Harcourt 1979; Marden, Harcourt 1971; Skara Brae, Watson 1931.
Middle and Late Bronze Age: Grimthorpe, Jarman, Fagg and Higgs 1968; Ogbourne West, Jackson 1942; Rams Hill, Carter 1975; Boscombe Down, Jackson 1937; Minnis Bay, Jackson 1943b; Gwithian, Grigson forthcoming; Grime's Graves, Legge 1981; Arreton Down, Higgs and Biddle 1960; Runnymede Bridge, Done 1980.

might be of red deer. It is definitely of *Bos* but it is very worn and unusual in having no accessory pillar, so its smallness might be an abnormality.

In the middle bronze age site at Grime's Graves, Legge (1981) found many more adult cows than bulls, suggesting a milking economy. The small sample size and problems of identification make a deduction of this kind impossible at Milton Lilbourne, but it is worth noting that the size of two metatarsals falls neatly into Legge's scatter diagram of metatarsal dimensions of cows from Grime's Graves.

(Grigson 1981) is related to the introduction of woolly sheep, but there is as yet no satisfactory link between bone morphology, size and hairiness or woolliness in sheep in Europe.

All that can be said of the Milton Lilbourne sheep is that like other prehistoric sheep in Britain they were small. However, so few measurements have been published that this cannot yet be quantified in terms of neolithic or bronze age size. The measurements are included here in the hope that they will add to the gradually accumulating measurements.

	lower third molar		*humerus*		*tibia*		
	l at top of crown	21.7	bt	24.9	bd	21.2	24.5	25.1
	locus	4/109	locus	4/18	locus	2/117	2/11	2/89

	astragalus		*navicular*		
GL	26.1		27.2	max.	21.1
locus			4/109	breadth	4/114
remarks	? y		♀ sheep	locus	

Table 9. Sheep/goat tooth and bone dimensions. Abbreviations as in Table 8.

SHEEP AND GOATS (*Ovis aries* and *Capra hircus*) (Table 9)

It is uncertain whether any goats were present at Milton Lilbourne, but one metapodial and one astralagus of sheep were definitely identified among the sheep/goat remains. The female astralagus is also the only sheep/goat bone that could be sexed according to the criteria of Boessneck *et al.* (1969).

The main problem concerning sheep in the Bronze Age is whether or not they were of more than one type or size. It has been suggested that two types of sheep, *Ovis aries palustris* and *Ovis aries studeri*, are distinguishable on the basis of horncore size and shape and of body size (Dawkins and Jackson 1917). Some authorities suspect that the difference is merely sexual, but this requires verification.

It is tempting to think that the known increase in sheep numbers in the Late Bronze Age in England

PIGS (*Sus scrofa*) (Table 10)

Figure 42 shows that the pigs at Milton Lilbourne were within the usual neolithic size range. There are so few comparative measurements available that it cannot be ascertained whether domestic pigs suffered any size change in prehistoric Britain, but Noddle's (1980) data from Anglo-Saxon times suggests that they did not. Bronze-age pigs were probably of the same type as neolithic pigs – long-snouted, smaller versions of the wild boar.

PONIES (*Equus caballus*) (Table 11)

The scantiness of horse (or pony) remains in the earlier Neolithic of Britain makes their presence there uncertain (Grigson 1966), but they are definitely present in some later-neolithic sites (Grigson 1981) and at the Beaker site by Newgrange in Ireland (Wijngaarden-

teeth	M_1	M_2	M_2	M_2	M_2	M_3	M^3	M^3
max. length	16.6	22.5	21.0	21.1	22.5	33.2	e28.6	32.3
locus	2/105	2/115	4/109	2/64	5/5	2/87	5/15	4/67
wear	sl	erupt				unerupt		
remarks	same jaw							

	metacarpals		*astragalus*		*middle phalanx*	
no.	3	4	GL	e47.5	GLpe	21.6
bp	15.8	15.4	locus	2/57	bp	16.5
locus	5/8	2/14			bd	14.7
					locus	4/33

Table 10. Pig tooth and bone dimensions. Abbreviations as in Table 8.

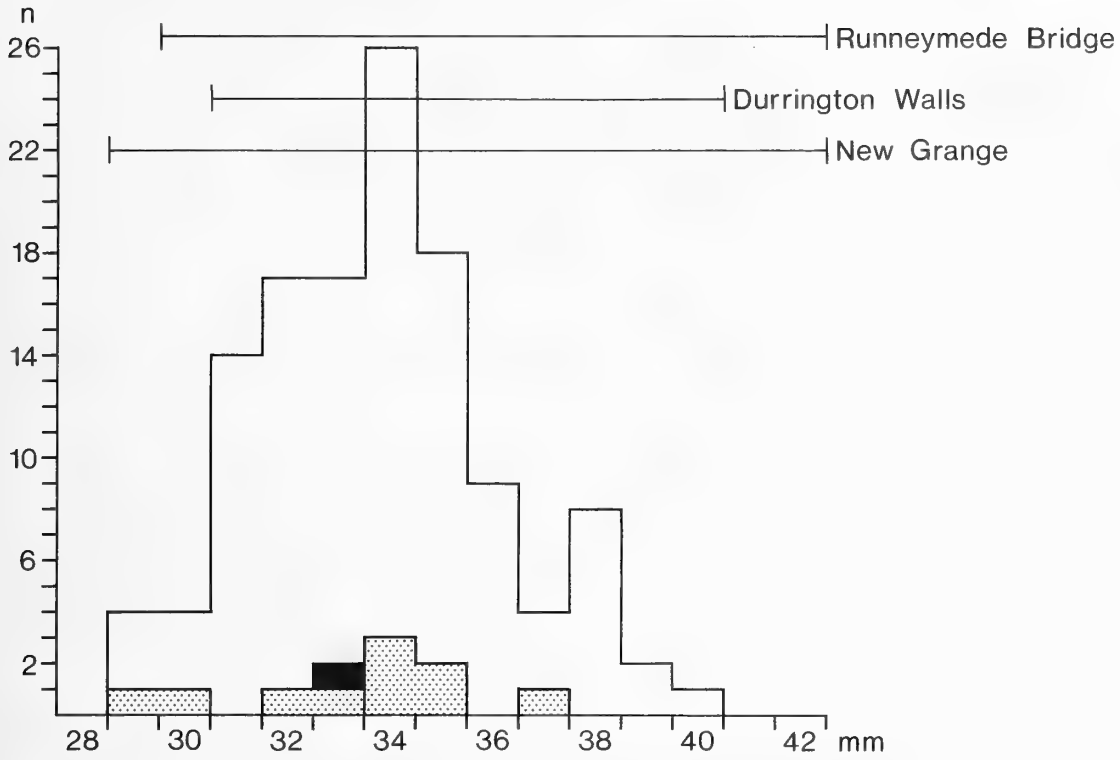

Figure 42. Histograms showing pig size: length of lower third molar. The Milton Lilbourne tooth (black) is the same size as those of domestic pigs of the neolithic (stippled and horizontal rules) and of Anglo-Saxon North Elmham (white).[3]

upper teeth		
tooth type	p^2	$M^{2(?1)}$
occlusal length	34.7	20.7
occlusal breadth	24.4	20.6
1 protocone	8.3	10.1
height crown	47	50
locus	3/17	2/3

lower teeth	
tooth type	M_1
occlusal length	23.6
occlusal breadth	12.9
1 post.-flexid	9.9
b silla	3.2
height crown	.52
locus	5/12

proximal phalanx	
GL	e73.0
Bp	e46.0
Dp	e28.2
SD	29.1
Sd	c38.5
Dd	c21
locus	1/1

Table 11. Pony tooth and bone dimensions. Tooth dimensions from Eisenmann (1980; 1981). Other abbreviations as in Table 8.

Bakker forthcoming). As there were no horses in Ireland prior to this date, this implies the importation of domestic animals in Beaker times to Ireland and presumably to Britain as well. Their remains are found in small numbers in the Early Bronze Age at Poor's Heath (Cornwall 1976) and Snail Down (Clutton-Brock and Jewell forthcoming), but it is uncertain whether they were kept for riding or eating. Horse trappings do not appear until the Late Bronze Age, but horses could have been ridden before then with perishable harness. If they were kept only for food, one would expect their remains to form a greater proportion of the ungulate domestic rubbish than the small numbers suggest. The only equid remains at Milton Lilbourne are teeth and foot-bones which are not meat-bearing. Their presence might be the result of their high durability, or might suggest that horses were not eaten; perhaps they were kept primarily for some other reason.

Very little is known about the size or morphology of these early equids; in fact, it has not yet been definitely established that they are horses or ponies (*Equus cabal-*

3. North Elmham data from Noddle 1980; other sources as in note 2.

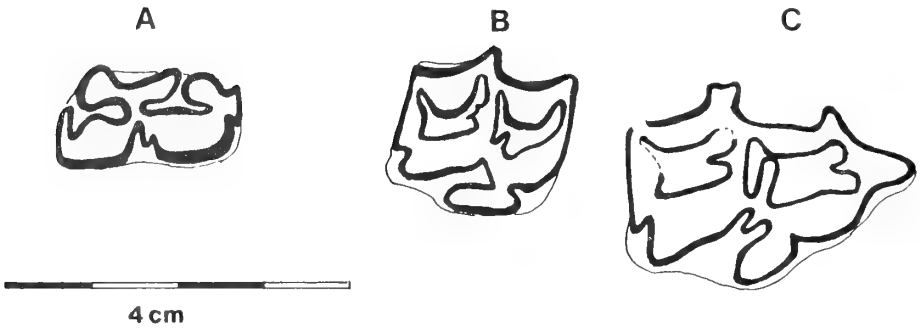

Figure 43. Occlusal surfaces of pony cheekteeth. A. left M_1 (V 12); B. right M^2 (?M^1) (II 3); C. right P^2 (III 17). The elongated protocones of the upper teeth indicate Equus caballus *(horse or pony).*

lus) rather than donkeys (*E. asinus*). The three complete equid teeth are illustrated in Figure 43, and their measurements are given in Table 11. The lower first molar is quite small. The buccal fold comes close to the metaflexid and entoflexid, but does not penetrate between them towards the lingual fold; in this respect the occlusal pattern is caballine, though this character is rather variable (Davis 1980). The same is true of the shape of the lingual fold, supposedly U-shaped in *caballus* and V-shaped in *asinus*, but the fold of the Milton Lilbourne M_1 is L-shaped! The upper first premolar and upper molar from Milton Lilbourne have the very long protocone characteristic of caballines. The premolar has a marked 'caballine fold' normal in both *asinus* and *caballus*, but this is absent from the molar. As two of the teeth have positive indications of *caballus* one can assume that this was the equid present at Milton Lilbourne.

Another element on which criteria for equid distinctions have been established is the proximal phalanx. Using the discriminant analysis developed by Davis (forthcoming), the measurements of the nearly complete proximal phalanx (canonical var I = e3.8, canonical var II = e0.02) show that the Milton Lilbourne equid was *caballus* not *E. asinus* or any other equid. The measurements given in Table 11 are rather small and suggest pony (some are smaller than a New Forest pony) rather than horse.

DOGS (*Canis familiaris*)

It seems unlikely that dogs were eaten in bronze-age Britain; the evidence for this is that they are so often found as complete skeletons and that bones are often entire. Morphological variations in prehistoric dogs are discussed by Harcourt (1974); but the only measurable dog bone from Milton Lilbourne was a metacarpal, with a greatest length (GL) of 65.9, and metacarpal sizes are not discussed by Harcourt.

ROE DEER AND RED DEER (*Cervus capreolus* and *Cervus elaphus*) (*Table 12*)

The single tooth, unmistakably of roe deer, calls for no further comment.

As well as bones of the skull, the fore limb and the fore and hind feet, there was one antler fragment of red deer. It was very eroded and one cannot say if it was shed or unshed, worked or unworked. Three proximal phalanges are almost complete, the proximal breadths of two of them are 19.5 and 22.6, compared with the mesolithic–neolithic range of 20–24 (X = 22.1, s = 1.08, n = 28 (Grigson forthcoming)). The smaller bone is just outside the range, but it is not too small to have come from a population of the same body size.

THE ECONOMY (*Tables 13, 14*)

As in most prehistoric sites from the Neolithic onwards, the animal element in the economy was based

	proximal phalanx			*astragalus*			*mandible*	
GLpe	57.5	54.5	e58.5	GLm	48.5	–	l.P_4	17.2
outer l	54.5	51.6	54.9	bd	–	e32.9	l.M_1	23.0
bp	–	19.5	22.6	locus	4/56	2/36	l.premolar row	46.9
SD	14.9	15.1	17.7				locus	4/18
bd	18.7	18.7	20.6					
limb	?	?post	?ant					
locus	1/5	4/33	2/80					

Table 12. Red-deer tooth and bone dimensions. Abbreviations as in Table 8.

on the exploitation of domestic ungulates, which form 95 per cent of the total identified sample of 237 bone and tooth finds (Table 7). As the ponies were probably not eaten, the main variant is the tripartite ratio of cattle : sheep/goats : pigs. These ungulate proportions vary from period to period (Grigson 1981) and probably also from place to place, but in southern England ratio of sheep plus cattle to pigs may be indicative. Pigs can only be driven with difficulty, so any wide-ranging pastoral system is likely to be dominated by cattle or sheep or both. The increase in sheep and cattle at the expense of pigs in the Middle and Late Bronze Age is supportive of the idea of increased pastoralism. The fairly high proportion of pigs at Milton Lilbourne is indicative of more generalized animal keeping.

	numbers	*per cent*
Bos	104	47.3
Sus	58	26.4
Ovis/Capra	52	23.6
Equus	6	2.7
Total	220	100.0

Table 13. Domestic ungulate proportions.

Ageing and sexing data for the animal remains at Milton Lilbourne are minimal, and the taphonomic history suggests that the softer bones of young animals would anyway have been destroyed after deposition (see below). A little evidence (Table 14) suggests that cattle were killed from an age of about 6 months (presumably for meat) until well into old age (after reaching the ends of their lives as useful breeding or milking animals).

tooth	*eruption time*	*a*	*b*	*b/c*	*c*	*d*	*e*	*f*	*g*	*h*	*i*	*j*	*k*	*l*	*m*
M_1	6 month	1	–	1	1	–	1	–	–	–	–	–	2	2	–
M_2	15 month	–	2	–	–	–	–	–	–	–	–	–	–	–	–
M_3	24 month	–	1	–	–	2	–	–	1	1	–	–	–	–	–

> 1 year (1 fused distal humerus; 1 fused proximal radius)
> $1\frac{1}{2}$ year (1 fused proximal and 1 fused middle phalanx)
> $2\frac{1}{4}$ year (2 fused distal metatarsals)
< 3 year (1 unfused calcaneum)
> $3\frac{1}{2}$ year (1 fused distal radius)

Table 14. Cattle ages. Ageing stages of teeth from Grant (1982).

there was a predominance of cattle in the earlier Neolithic, of pigs in the later Neolithic, Grooved-ware sites, and a rise in sheep in the Middle and Late Bronze Age. Sites with mixed later neolithic, Beaker and earlier-bronze-age pottery tend to have more equal numbers of the three ungulates; Milton Lilbourne is no exception, the ratio being about one half cattle to a quarter each of pigs and sheep/goats (Table 13).

It is sometimes argued that the Late Bronze Age saw an increase in pastoralism. There are problems here that are partly semantic: pastoralism can be used to mean the domestic-animal component of mixed farming, or it can mean the keeping of animals in large flocks or herds that move over a large area of the landscape, usually with some degree of transhumance. An increase in pastoralism could be shown by a shift in the diet towards animal foods, an impossible achievement in the present state of archaeological knowledge, or by evidence for settlement on the uplands and the use of structures there as cattle or sheep compounds (Bradley 1971; 1972; Fleming 1971; 1972). In this context the

TAPHONOMY

Skeletal and element-part representation

Even the most frequent species, cattle ($n = 104$), is not numerous enough for a detailed analysis of element representation. The summary (Table 15) suggests that all parts of the body of cattle (and probably of sheep/goats and pigs) are represented, but that the softer bones (Binford and Bertram 1977), such as horncores, vertebrae, proximal humeri, proximal ulnae, proximal tibiae, ribs and patellae have been largely destroyed, along with the alveolar bone of the jaws which has resulted in many loose teeth. Analysis of all the fragments that can definitely be recognized as parts of particular long bones, humerus, radius, metacarpal, femur, tibia and metatarsal, though not necessarily to species, shows they had been broken. Shaft fragments are the most common (75, or 61.5 per cent), followed by proximal ends (26, or 21.3 per cent, mostly metapodials) and then distal ends (21, or 17.2 per cent, mostly humeri).

bone element	*Bos*	*Sus*	*Ox/Cap*	*Cervus*	*Canis*	*Equus*	*Capreolus*
horncore/antler	–	–	–	(1)	–	–	–
skull frag.	5	–	1	–	–	–	–
mandible	9	2	3	1	–	–	–
upper teeth	14	5	6	–	–	2	–
lower teeth	19	19	7	–	–	1	1
uncertain teeth	2	1	–	–	–	1	–
atlas	1	–	–	–	–	–	–
cervical vertebrae	1	–	–	–	–	–	–
dorsel vertebrae	–	–	1	–	–	–	–
lumbar vertebrae	–	–	–	–	–	–	–
caudal vertebrae	–	–	–	–	–	–	–
uncertain vertebrae	1	–	–	–	–	–	–
scapula	4	2	1	–	–	–	–
humerus, proximal	–	–	–	–	–	–	–
humerus, shaft	2	8	5	–	1	–	–
humerus, distal	1	2	2	2	–	–	–
radius, proximal	–	1	1	–	–	–	–
radius, shaft	–	1	4	–	–	–	–
radius, distal	1	–	1	–	–	–	–
ulna, proximal	–	–	–	–	–	–	–
ulna, shaft	3	1	–	–	–	–	–
carpals	2	–	–	–	–	–	–
m.carpal, proximal	7	2	–	–	1	1	–
m.carpal, shaft	4	–	1	–	1	–	–
m.carpal, distal	–	–	–	–	–	–	–
proximal phalanx	4	1	–	3	–	1	–
middle phalanx	2	3	–	–	–	–	–
distal phalanx	2	2	–	–	–	–	–
pelvis	–	–	1	–	1	–	–
femur, proximal	1	–	–	–	–	–	–
femur, shaft	–	–	1	–	–	–	–
femur, distal	1	–	1	–	–	–	–
tibia, proximal	–	–	–	–	–	–	–
tibia, shaft	4	4	2	–	1	–	–
tibia, distal	–	1	4	–	–	–	–
fibula	–	–	–	–	–	–	–
calcaneum	3	–	–	–	–	–	–
astragalus	2	1	2	2	–	–	–
tarsals	–	–	1	–	–	–	–
m.tarsal, proximal	1	1	3	2	–	–	–
m.tarsal, shaft	2	–	2	–	1	–	–
m.tarsal, distal	3	–	–	–	–	–	–
unc.m.podial, prox.	–	–	–	–	–	–	–
unc.m.podial, shaft	–	–	–	–	–	–	–
unc.m.podial, dist.	1	–	1	–	–	–	–
rib	–	1	1	–	–	–	–
hyoid	1	–	–	–	–	–	–
patella	–	–	–	–	–	–	–
sesamoid	1	–	–	–	–	–	–
TOTALS	104	58	52	10(+1)	6	6	1

Table 15. Animal-bone elements identified to species.

maximum length in cm	less than 2	2–5	5–10	10–15	more than 15
percentage of total (n = 1012)	8.5	58.4	28.8	4.0	0.3

Table 16. Distribution of fragment size of the animal bones.

Human activity

The presence of so many animal bones with other domestic debris in the barrows shows that man was responsible for the initial accumulation and subsequent deposition in the barrows. However, people also contributed to their destruction as is shown by the presence of at least 9 vertically split long bones (Grigson 1984b), 3 bones with chop-marks, and 3 with cut-marks. People were probably responsible for a high proportion of the rest of the breakage, but this cannot be unequivocally demonstrated.

Carnivore activity

Of the 75 definite long-bone shaft fragments, 49 (only 65 per cent) are in the form of cylinders. Binford (1981) has suggested that cylinders indicate carnivore activity; in this case, since their bones are present, activity of dogs is indicated. Indeed, about 17 bones have marks of dog gnawing; one sheep/goat humerus shaft has been gnawed by a rodent. Although there is no reason to think that dogs accumulated the bones, they damaged many of them prior to their incorporation into the barrow, and probably destroyed many others at this stage.

Physico-chemical weathering

Many of the bones are superficially eroded, many are dark-stained, and the alveolar plates have been destroyed. All three facts suggest weathering before and after incorporation into the barrows as one factor in the destruction of bone at Milton Lilbourne, and, indeed, most of the bones were within the humic layers in the barrows.

Fragmentation

Table 16 summarizes the sizes of the fragments comprising the total bone sample. While the high proportion between 2 and 5 cm long is noteworthy, no real interpretation can be made until similar details are available from other sites. It should be noted that the deposits at Milton Lilbourne were, in 1958, not sieved.

6 The radiocarbon dates from Milton Lilbourne, their statistical analysis, and a comparison with the dates from Amesbury

by DAVID HADDON-REECE

DETERMINATIONS

Nine radiocarbon determinations of charcoal fragments from four of the barrows were made by the Isotopes Measurements Laboratory at AERE Harwell. The work was funded by the Ancient Monuments Laboratory of the Historic Buildings and Monuments Commission.

The samples were just sufficient in weight for the large-sample counter, but their relative smallness gave rise to greater than usual counting errors. The features and dates are given in Table 17.

These dates permit both the comprehensive assessment of the four Milton Lilbourne barrows in statistical terms and their comparison with the dates from Amesbury (Ashbee 1979–80; 1985: 83). Here, the methods,

barrow	*sample location*	*Harwell number*	*date b.p.*	*date b.c.*
1	SE grave	HAR-6471	3400±110	1450±110
2	loam core	HAR-6456	3420±80	1470±80
2	loam core	HAR-6472	3590±190	1640±190
4	loam core	HAR-6455	3380±80	1430±80
4	charcoal spread	HAR-6453	3580±80	1630±80
4	timber baulk	HAR-6454	3780±80	1830±80
4	timber baulk	HAR-6457	3590±90	1640±90
4	timber baulk	HAR-6458	3460±80	1510±80
5	ditch branch	HAR-6470	3410±80	1460±80

Table 17. Uncalibrated radiocarbon determinations.

which are easy to apply, afford a good example of their usefulness.

Further radiocarbon determinations are in hand at Harwell, and will make possible a future refinement of the chronology worked out here.

STATISTICAL METHOD

The statistical techniques reported by Topping (1955) and Ward and Wilson (1978) are now widely used for comparing and combining radiocarbon dates. They produce a weighted mean date, test the consistency of the group in relation to it, and then combine the quoted counting errors into a single error term – the variance of the mean – which defines a confidence interval for the mean. This pooled variance is composed only of the counting errors, and makes no allowance for the individual dates themselves.

Topping offers an alternative expression for the variance, which incorporates the variability of the dates themselves as well as that of their counting errors. This he quotes as an 'external' variance and defines a ratio test between it and the 'internal' variance used by Ward and Wilson. He recommends accepting whichever is the larger of the two variances as the safer estimate.

In assessing groups of dates it is important to recognize the two distinct cases which exist, according to whether the dates to be compared are or are not likely to refer to the same event.

In Case I, the dates can be considered as replicate determinations on the same object, or of a single chronological event as evidenced by manifestly coeval deposits. Differences between the results represent no more than random variations in the estimation of the same true age.

In Case II, the dates cannot be expected necessarily to refer to the same event. This case covers, for example, the comparison of dates from separate sites. Allowance has to be made for the variability of the radiocarbon time-scale by adding an extra term to the counting error: for this Ward and Wilson add the R.M. Clark (1975) error term.

Ward and Wilson's test statistic for group consistency, T, is compared with the chi-square (χ^2) distribution; values of T less than chi-square at the appropriate level of significance (usually $p<0.05$, i.e. 95% confidence) are taken to indicate that a real difference exists between the determinations. The Null Hypothesis – that the differences simply reflect random variations in replicate determinations of the same event – is therefore not rejected, and a weighted mean may be calculated.

Using these techniques, the Milton Lilbourne barrows are analysed, starting with the most complicated barrow, number 4, and then incorporating the simpler ones. The Amesbury barrows are treated similarly, and then compared with the Milton Lilbourne results. In every instance, the level of significance for the T test is $p<0.05$, the dates quoted are uncalibrated b.p. (not rounded until the end of each calculation), and the larger value of pooled error is chosen throughout.

The calculations and calibrations were made with Haddon-Reece's Fortran programs (Haddon-Reece 1984a; 1984b).

THE MILTON LILBOURNE BARROWS

Barrow 4

As a single object, the timber baulk falls into Case I, while the scattered charcoal samples, which lack any positive evidence that they come from a single physical source or of contemporancity, must be treated as Case II.

The timber baulk (three determinations)

HAR-6454 + HAR-6457 + HAR-6458: T (Case I) = 8.08, $>\chi^2_2 = 5.99$

The Null Hypothesis (NH) should be rejected. A real difference probably exists between these dates. The likely cause, given the size of the piece of timber, is the inclusion of a sample composed of very early heartwood rings. By inspection HAR-6454 is excluded; and the calculation repeated:

HAR-6457 + HAR-6458: T (Case I) = 1.17 $<\chi^2_2 =$ 3.84

The NH can now be accepted. The weighted mean is 3517±60 (internal), or 3517±65 (external). The larger error then is taken; and the combined date taken as **3517±65** for subsequent calculation.

The barrow as a whole

As the baulk is of one source, and the charcoal fragments probably not, the group must be compared as Case II:

HAR-6455 + HAR-6453 + baulk (HAR-6457 + HAR-6458): T = 2.11 $<\chi^2_2 = 5.99$.

There is no reason to reject the NH. The weighted mean date for the barrow is now 3494±55 (internal) or 3494±57 (external); rounded, **3490±60**.

This acceptable grouping lends weight to the previous rejection of HAR-6454. It suggests also that the charcoal both in the loam core (HAR-6455), and a spread about (HAR-6453), derived from material at least roughly coeval with the baulk; there is no implication that it is ancient (and residual) at the time of its incorporation into the barrow.

Barrow 2

Again the samples cannot be regarded as potentially

from either a single source or a common chronological background. Case II applies:
HAR-6456 + HAR-6472: T = 0.58 $<\chi^2_1$ = 3.84.
The weighted mean date is 3454±89 (internal) or 3454±68 (external). In fact, under Case I, T is also very low (0.68), so that some validity may attach to the hypothesis that the samples are genuinely coeval. The error term of HAR-6472, at ±190, is so large that this date should be treated with the apparent caution of Case II, although in reality Case II gives relatively more weight to samples with initially larger error than does Case I. Under Case I, the mean date is 3446±74 (internal) or 3446±61 (external), which is identical on rounding to the Case II result.

Choosing the greatest error term and rounding, the date for this barrow is **3450±90**.

Milton Lilbourne group as a whole
To avoid problems caused by averaging averages, it is preferable to assemble the individual sample dates, with the exception of the baulk, whose mean may be treated as an entity, rather than to use the coalesced barrow results obtained above. This is again Case II.
HAR-6471 + HAR-6456 + HAR-6472 + HAR-6455 + HAR-6453 + HAR-6470 + baulk (HAR-6457 + HAR-6458): T = 3.56 $<\chi^2_6$ = 12.99.
The fused date now emerges as 3463± 40 (internal) or 3463±31 (external). Rounded, this becomes **3460±40**.

AMESBURY BARROWS
Determinations are available for three barrows:

Barrow 39 HAR-1237
3620±90 b.p. 1670±90 b.c.
Barrow 58 HAR-6226
3310±80 b.p. 1360±80 b.c.
Barrow 61 HAR-6225
3550±80 b.p. 1600±80 b.c.
Barrow 61 HAR-6227
3520±100 b.p. 1570±100 b.c.

Ashbee (1985: 83) discusses the dates from Barrows 58 and 61.

Barrow 61
Testing under Case I:
HAR-6225 + HAR-6227: T = 0.05 $<\chi^2_1$ = 3.84
There is no evidence to reject the null hypothesis. The weighted mean is then 3537±62 (internal) or 3537±15 (external); rounded, the date may be quoted as **3450±60**.

Amesbury group as a whole
The numerical treatment of the barrow 61 dates described in Ashbee (1985: 83) was applied under Case I, on the assumption that the charcoal and bone from the Cremation Grave 2 and the charcoal scattered around the burnt area beneath the barrow were contemporary deposits. Similarly, the comparison between barrows 58 and 61 was made under the same assumption, and strictly, on the failure of the Case I test, the Null Hypothesis should have been tested under Case II. In fact, it would then just fail to be rejected (T = 2.66 $<\chi^2_1$ = 3.84), which would posit the barrows as roughly contemporary, given a non-coeval source for the radiocarbon samples in them.

Testing the three barrows as group under Case II, and adopting the given grouped date for Barrow 61:
HAR-1237 + HAR-6226 + Barrow 61 (HAR-6225 + HAR-6227): T = 5.02 $<\chi^2_3$ = 7.81
This gives a mean date of 3489±56 (internal) or 3489±89 (external). Rounding, the grouped date for the Amesbury barrows is then **3490±90 b.p.**

MILTON LILBOURNE AND AMESBURY DATES COMPARED
Returning to the individual dates, with the exception as before of the timber baulk of Milton Lilbourne barrow 4 and of Amesbury barrow 61, a grand amalgamation can be made and tested. Case II applies:
Milton Lilbourne: HAR-6471 + HAR-6456 + HAR-6472 + HAR-6455 + HAR-6453 + baulk (HAR-6457 + HAR-6458) + HAR-6470, plus
Amesbury: HAR-1237 + HAR-6226 + Barrow 61 (HAR-6225 + HAR-6227): T = 8.88 $<\chi^2_6$ = 18.31.
The mean date is 3474±32 (internal) or 3474±30 (external), from which a rounded date for an assemblage of Wessex barrows emerges as **3470±30 b.p.**

CALIBRATION
The dates of the barrows and their sites, and of the chronological fusion of the sites are calibrated in Table 18; the curve of R.M Clark (1978) has been chosen for consistency with previous publication of Wessex dates. Subsequent application of the recently produced, but as yet unpublished, high precision curves of both Stuiver and Pearson offers future refinement. The calibrated dates are presented graphically in Figure 44.

Milton Lilbourne Sample/ barrow	*Uncalibrated date bp*	*Calibrated dates BC*	
		1 sigma range (68% confidence)	*2 sigma range (95% confidence)*
HAR-6471	3400±110	1915–1640	2060–1525
HAR-6456	3420±80	1900–1695	2010–1605
HAR-6472	3590±190	2275–1770	2550–1560
HAR-6455	3380±80	1845–1650	1960–1565
HAR-6453	3580±80	2105–1900	2215–1795
HAR-6454	3780±80	2400–2160	2505–2060

Milton Lilbourne Sample/barrow	*Uncalibrated date bp*	*Calibrated dates BC* *1 sigma range (68% confidence)*	*2 sigma range (95% confidence)*
HAR-6457	3590±90	2135–1900	2260–1780
HAR-6458	3460±80	1960–1745	2060–1650
HAR-6470	3410±80	1885–1685	2000–1595
Barrow 1	3400±110	1915–1640	2060–1525
Barrow 2	3450±90	1960–1720	2070–1615
Barrow 4	3490±60	1975–1810	2045–1735
Barrow 5	3410±80	1885–1685	2000–1595
Group mean date for Milton Lilbourne barrows			
	3460±40	1900–1795	1960–1745

Amesbury Sample/ barrow	*Uncalibrated date bp*	*Calibrated dates BC* *1 sigma range (68% confidence)*	*2 sigma range (95% confidence)*
Barrow 61:			
HAR-6225	3550±80	2070–1860	2175–1755
HAR-6227	3520±100	2060–1795	2185–1675
mean date	3540±60	2035–1875	2105–2795
Barrow 39:			
HAR-1237	3620±90	2175–1945	2305–1820
Barrow 58:			
HAR-6226	3310±80	1755–1575	1860–1495
Mean date for Amesbury barrows			
	3490±90	2010–1770	2120–1660

Mean date for Milton Lilbourne and Amesbury

Uncalibrated date bp	*Calibrated dates BC* *1 sigma range (68% confidence)*	*2 sigma range (95% confidence)*
3470±30	1900–1820	1945–1780

Table 18. Calibrated dates

COMMENTS UPON THE RADIOCARBON DATES *by* PAUL ASHBEE

These dates, calibrated and amalgamated, are fundamental for the Wessex Culture, to which bell- and disc-barrows are integral (Piggott 1938: 90; 1973: 355). Up to the present most radiocarbon dates have been from outside the geographical focus and thus, because of extrapolation, not fully satisfactory. Nonetheless, they have been, in some measure, supportive of ApSimon's (1954) division.

More than a decade ago, dates from charcoal close by a Camerton-Snowshill dagger at Earl's Barton, Northamptonshire, were, when calibrated, expected to indicate the end of the Wessex episode (McKerrell, 1972: 296). There was, however, hesitancy regarding the radiocarbon separation of the phases, styled Bush barrow and Aldbourne-Edmondsham (formerly Camerton-Snowshill), although a longer chronology was envisaged (Burgess 1975: 188–9). When four dates applicable to Wessex II became available the difficulties regarding Wessex I persisted (Megaw and Simpson 1979: 227–9). However, in the light of the single date from Amesbury Barrow 39 (Ashbee 1979–80: 32) the suggested dates that have emerged for the initial early and the shortlived Bush Barrow phases are *c.* 1700–1450 b.c. and, for the Aldbourne–Edmondsham sequence, *c.* 1450–1200 b.c., which, when calibrated, became *c.* 2000–1500 BC for the Wessex phenomenon as an entity (Burgess 1980: 98–111).

The Milton Lilbourne dates, now consolidated and combined with those from Amesbury Barrows 58, 61 and 39 (Ashbee 1979–80: 32; 1985: 83), have produced a mean date (3470±30 b.p.: 1520±30 b.c.) which when calibrated proffers *c.* 1900–1820 BC (1 sigma range, 68% confidence) or *c.* 1945–1780 BC (2 sigma range, 95% confidence). Factors such as the nature of the samples (Giot 1971: 214), their context and, morever, the processes employed, must naturally be taken into consideration but, notwithstanding, the single date from Amesbury Barrow 39 (HAR-1237 1670±90 b.c.; *c.* 2000 BC (Clark 1975: 264, Table 8)) has been supplemented and earlier trends have been reinforced (Piggott 1973: 374–5; Coles and Harding 1979: 267–8; Ashbee 1979–80: 32). Although, in radiocarbon years, this mean date inclines towards the Aldbourne-Edmondsham group, it is, when calibrated, within the, albeit narrow, limits claimed for the Bush Barrow phase, but, as a muster, the underlying pattern measurably strengthens this hitherto slender sector.

Because these bell-, disc- and other barrows, have yielded radiocarbon dates relevant to the earlier stages of the Wessex phenomenon, the wider considerations must be commented upon. Like the Amesbury Barrow 39 date, they concur with the middle and late Beaker phases (Case 1977: 80–84: mid 3rd millennium BC to earlier 2nd millennium BC) and are significantly different from the Aldbourne-Edmondsham dagger-grave dates (Earl's Barton, Northamptonshire, BM-680 1219±51 b.c., BM-681 1264±64 b.c.; Edmondsham, Dorset, BM-708 1119±45 b.c., BM709 1527±52 b.c.; Hove, Sussex, BM-682 1239±46 b.c.: when calibrated they comprise *c.* 1400 BC). They are also not too far removed from the charcoal accumulations at Durrington Walls (BM-285 1610±120 b.c., BM-286 1980±110 b.c.: *c.* 2030 BC), from the massive works at Stonehenge (I-2384 1620±110 b.c., BM-46 1720±150 b.c.: *c.* 2000–2120 BC) and the modification of Mount Pleasant (BM-662 1687±63 b.c., BM-668 1680±60 b.c.: *c.* 2070 BC). Beaker and other round barrows in the vicinity were also being developed at about this time (Amesbury 71, NPL-75 1640±90 b.c.: *c.* 2020 BC, the Food Vessel phase; Bishops Cannings 81

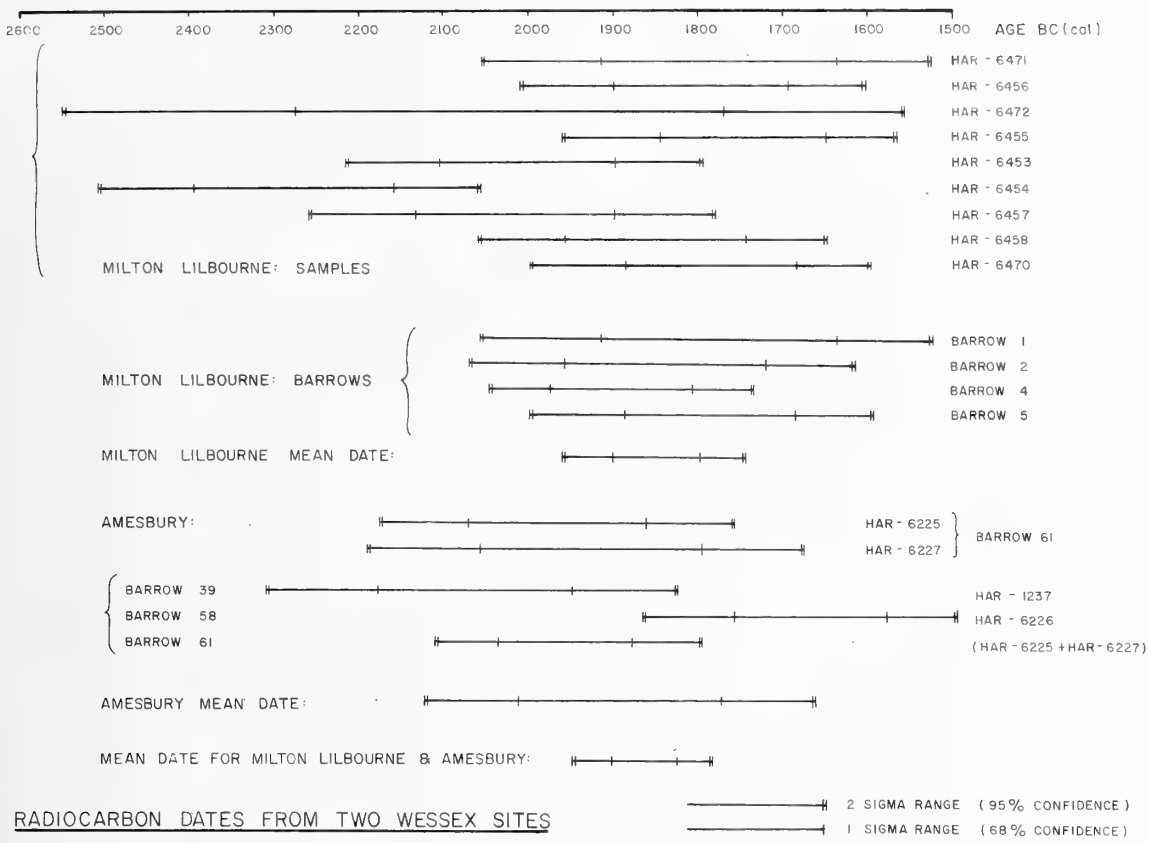

Figure 44. Calibrated radiocarbon determinations for Milton Lilbourne and Amesbury barrows.

(Hemp Knoll (Robertson-Mackay, 1980), HAR-2998 1590±70 b.c., NPL-139 1795±135 b.c., BM-1585 1810±60 b.c.: *c.* 2130 BC).

Like the V-perforated jet button from Amesbury Barrow 39 (Ashbee 1979–80: 16, plate IV), the Amesbury Barrow 58 knife dagger (Ashbee 1985: 68, figure 33) and the miniature vessel from Milton Lilbourne 4 suggest that the Wessex aggrandisement began during the currency of later Beakers and food-vessels and that the short-lived Bush Barrow zenith, marked by distinctive daggers and the master craftsmen's flimsy funerary gold (Coles and Taylor 1971) was later. The extrapolated date (*c.* 1650 b.c.: 2035 BC) for graves with halberd pendants (Piggott 1971: 54; 1973: 374–5) is not inconsistent with the pattern, although these attractive trinkets may reflect the bound square-sectioned shafts of such weapons in our own western world (Ó Ríordáin, 1937), rather than the metal-shafted styles of eastern Germany. In general terms the Bush Barrow material, especially the daggers, displays, as was long ago observed (Piggott 1938: 64), an affinity of design, denoting presumably taste, with Brittany. Indeed, they have since been termed 'Armorico-British' (Gerloff 1975: 70). On the other hand much of the later Aldbourne-Edmondsham material has a marked similarity to the Swiss Reinecke A2/B1 stages and the Sögel contexts of the northern European mainland. This change of connection, reflected by the groups of radiocarbon dates, has the semblance of a complete hiatus. Eventually change may have been rapid and comprehensive. As was stressed more than a decade ago (Piggott 1971: 55), we sorely need radiocarbon dates for the major Wessex burials. Selective re-excavation, as at Amesbury Barrow 39, or even the examination of small samples from carbon-encrusted grave furniture would undoubtedly enlighten us.

7 General considerations

RESEARCH AIMS

Apart from the general considerations appertaining to barrow excavation during the 1950s (CBA 1948: 91–2; Ashbee 1960: 184–5), two prime research objectives were envisaged. The first was to consider the group of barrows as an entity and, if possible, set them in order; the second involved the employment of radiocarbon dating, then in the first decade of its development (Renfrew 1973: 46–68), to this end. The difficulties inherent in such notions were perceived, but the possibility of a measure of substantiation by a statistically satisfactory number (at least 5) of dates from each barrow was seen as a potential counterweight. (It should not be overlooked that, in the 1950s, the available radiocarbon dates had not yet disturbed the accepted European bronze age chronologies (Childe 1957: 342).)

With the advantage of hindsight, it is clear that the examination of this group of barrows, especially the two upstanding bell-barrows, should not have been embarked upon. They should have been preserved or, failing this, resources should have been made available for total excavation. However, there is an important positive aspect. Whereas the great number of barrow 'openings' carried out during the 19th century (Marsden 1974) were of intact, sometimes prominent, examples, those of the past four decades have involved damaged mounds. Thus, Milton Lilbourne barrows 2 and 4 provided categories of information that may, perforce, in future be denied to us. The occupation material with its pottery, flints and crucial animal bone content gave information about settlement sites of a character that has generally been lost through weathering and intensive agriculture. (Potterne is a rare – and newly discovered – exception (Gingell and Lawson 1984).)

THE GROUP OF BARROWS

Apart from the Easton Clump disc-barrow (NGR SU 21085930), the Milton Lilbourne disc- and bell-barrows are the most northerly of those groups upon the ascending plateau between the rivers Avon and Bourne. In their proximity to the Giant's Grave long barrow (Milton Lilbourne 7) they are comparable with the bell-barrows (Alton Priors 15, 16, 17) which were attendant upon the Adam's Grave long barrow (Alton Priors 1), on the opposite high chalk which flanks the N side of the Vale of Pewsey. The Milton Lilbourne group was part of a relict landscape of which only a few components have been recognized. Like other groups of barrows (RCHM(E) 1979: xiii; Ashbee 1985: 83, Figure 44), they stood in ancient fields, and bell-barrow 4 covered a boundary-bank.

Disc-barrow 1, contiguous to bell-barrows 2 and 4, conforms to the canons of siting observed elsewhere (Grinsell 1974: 88). The double disc-barrow might match the conversion, by the addition of barrow 3, of these bell-barrows into the semblance of a multiple-barrow. The possible oval twin disc-barrow of Amesbury 61a (Ashbee 1985) was similarly adjacent to the triple bell-barrow of Amesbury 59–59a–60; but the two bell-barrows of Bishops Cannings 29 and 31, conjoined by a bowl-barrow (Bishops Cannings 30), stood in isolation. An oval twin disc-barrow, Bishops Cannings 95, lay almost 2 miles NE of the Milton Lilbourne group.

Although neither the excavation nor the pattern of radiocarbon dating provided positive evidence of the structural sequence of the barrow group, field observation, supplemented by aerial photography (Figure 5), showed something of this. It was not possible to ascertain the chronological order of barrows 2 and 4. After the construction of barrow 2 – either before or after the raising of barrow 4, and the conjunction by barrow 3 – the oval twin disc-barrow 1 was laid out and built. Its ditch and bank were deflected on the NE side to avoid the outer bank of barrow 2. Presumably barrow 5 followed.

Structure and style

The two relatively undamaged mounds of barrows 2 and 4 presented steep sides (about 30 degrees) and flat tops. It seems likely that the sides were initially appreciably steeper and the mounds considerably higher. Excavation revealed the careful loam core construction, layered with occupation material, which gave them a greater bulk and, perhaps, greater stability. These augmented loam cores gave the newly completed barrows an extra height and mass without upsetting a particular ditch-and-berm proportion. The initial results from the Overton Down Experimental Earthwork (Jewell and Dimbleby 1966: 318) suggest that a loam core to a chalk barrow could shrink by as much as 40 per cent, dramatically reducing its height and acclivity. This, particularly the modification of the acclivity from chalk rubble's natural angle of repose, about 45 degrees, could have promoted the stability of the chalk envelope, a process already in train from other factors (Jewell and Dimbleby 1966: 319).

Undamaged bell-barrow mounds are accentuated by

their sloping and naturally symmetrical berms; indeed, the present writer once advanced 'bermed-barrows' as an omnibus term for bell- and disc-barrows, besides the intermediate forms (Ashbee 1960: 26, Figure 2). Although many seeming bowl-barrows proved on excavation to have had a slight berm (e.g. Ashbee 1978: 6, Figure 3; 7, Figure 4), the emphasis on this feature sets bell-barrows apart as a class. All in all, the homogeneity of the chalkland bell- and disc-barrows is most marked. Four millennia of weathering and denudation have left us with monuments which still display an unfailing regularity. The planning and construction must have involved the rigorous maintenance of the appropriate specifications.

Although the disc-barrows have been connected with barrows current in northern Britain (Piggott 1973: 355–6), they might equally echo earlier monuments of the Dorchester series (Atkinson *et al.* 1951) in an expression of institutionalized archaism. The bell-barrows would similarly look back to the circular barrows of the Neolithic (Kinnes 1979). The bell-, disc- and other geometrically circular barrows – 'encircled barrows' as a whole – can be taken, particularly on account of their outer banks, as expressing the principles inherent in henge monuments (Piggott 1973: 355). Particularly when clad with vegetation, they would have resembled, upon a smaller scale, the great henges with their internal timber, earth-lodge-like buildings (de Pradenne 1937; Renfrew 1973: 234–5, plate 10; Wainwright 1979: 224–30). It has long been recognized that long barrows resemble the contemporary timber long-houses of the European mainland (Ashbee 1982); so a resurgence, albeit in altered form, of an earlier principle should not occasion surprise. Indeed, in social terms, arrestive monumental archaism might even have been a reaction against the pan-Europeanism as exemplified by the beakers (Harrison 1980). It would match the explicit intensification and expansion of the later neolithic native ceramic tradition, the unmistakable collared urns (Longworth 1984: 79–84).

THE BARROW 4 BURIAL COMPLEX

Despite burning and covering by the barrow, the arrangement of coffin, timber and spread charcoal had a remarkably regular quadrilateral form. It is likely that a structure with, at least, a rectilinear base was burned, the dense scatter and burned area reflecting the base of what had been burned, while the wider charcoal scatter indicated something of its size. The fine character of the dense charcoal spread, with no pieces which could have come from large timbers, indicated that the fire burned rapidly, partially destroying the massive timber baulk and the smaller piece. Indeed, to produce such an effect, uniform material such as bundled brushwood, or even hurdling, would have had to have been consumed. Presumably it was initially supported and stabilized by a vertical timber baulk, which, with the smaller piece, fell or was laid in the positions in which they were discovered. In summary, a lightweight wooden structure of regular lineaments and with a rectangular groundwork was supported by a massive and a lesser timber and housed the timber coffin; it was efficiently and comprehensively burned in such a way as to leave patent traces of its character.

Such remains are normally construed as burned mortuary houses or the remains of funeral pyres. Square and rectangular mortuary houses have been recognized beneath round barrows, but evidence of their burning is mostly inconclusive (Ashbee 1978: 27–34). Burned areas beneath barrows, which vary dramatically in size and nature, have been regularly reported and thought of as pyres (Greenwell 1877: 14; Mortimer 1905: 449, sv.; Grinsell 1941: 92; Ashbee 1960: 38, 58). A rectangular 'pyre' found beneath Bulford 49 (Hawley 1910: 619) comprised tons of wood ash and the remains of vertical posts and staked logs. Clearly the vestiges of a structure of some magnitude – one of the workmen was almost buried by a falling mass of charcoal – it would have been, before burning, of towering proportions, to judge from the size of the vertical supports. Under Amesbury 71 was a rectilinear area, 10 ft by 8 ft, of grey ash, soot-like material and burnt soil, with a post-hole and burnt timber close by (Christie 1967: 345, Figure 3). A high phosphate content, coupled with the burning-out of organic matter, led to the belief that animal matter had been burned. An oval area of fine charcoal and burning, associated with a rectilinear stake setting and numerous incidental stakes, beneath Amesbury 61 (Ashbee 1985: 54–8, Figures 17, 19) may come from a structure contrived expressly for a conflagration.

The uniformity of bell- and disc-barrows indicates that particular people would have been responsible for the design and organization of the, presumptively, ceremonial and socially satisfactory burning of the structures demonstrated above. Such persons could not be other than the precursors of the Druids (Piggott 1975). The accounts given by some Greek and Roman writers were based upon information then already ancient (Ashbee and Ashbee 1981: 25–6), for they detail usages more appropriate to the earlier Bronze Age than to later times.

Relevant to this context are the curious accounts common to Caesar and Strabo (Piggott 1975: 110) of *kolosson*, huge wickerwork (hurdling?), straw and

wooden likenesses, representations or semblances (*immani magnitudine simulacra*) in which people and animals were sometimes burned. However, as Kendrick (1927: 122) observed, there is little indication in the Irish texts that human sacrifice was widespread or frequent. The cumulative effect of subsequent embroidery and exaggerated depiction (Tierney 1960: 224; Piggott 1975: 111) must also be taken into account. Moreover, literary terms, which may not correspond with morphological truth, were involved; the accounts imply no more than the appropriate occasional burning of a specially constructed light wood representation or erection, sometimes very large. The burnt structure beneath Milton Lilbourne barrow 4, and those encountered elsewhere, may be more integral to the egregious early literary allusions to the prescriptions and procedures of our prehistoric past than has hitherto been supposed.

8 Special studies

Human remains

CREMATIONS FROM BARROWS 1, 4 AND 5 *by* D.M. DAVIES

Disc-barrow 1, NW grave

The skull bones have a thin diploe, the sutures are not fused and the remaining teeth are small. The bones are small and finely made but very fragmentary. There is no sign of tooth or bone diseases, nor are there wisdom teeth. The patellae are small.

These characters indicate a young woman of about 18 years.

S bell-barrow 4, timber coffin

The bones are not as broken up as those of the other two cremations. The patellae are large, as are the shafts of the long bones and the heads of the femora and the humeri. Many of the facial bones can be recognized; the mastoid process is large and also the eyebrow ridges. The bones are heavy, in spite of having been fired, and the skull bones are thick. There are jaw fragments and 17 teeth (an appreciable number) including wisdom teeth. The tooth wear may indicate the use of querns, hence a grain-eating people. There is no sign of disease in the teeth, as there is in those of the older woman's cremation from barrow 5. It can be said that the bones of the skull are very thick.

The characters indicate a quite large and mature male of 40–50 years.

Bowl-barrow 5, beneath the inverted urn

Twelve fragments of teeth and also a second molar (right side) set in a piece of jaw bone are present, while there is evidence of the eruption of a third molar. Therefore the person was of mature age but, according to the root structure, not old. The small teeth and other intrinsic characteristics indicate a female. One left second premolar has signs of caries and two incisors show signs of attrition of a specialized kind, indicating a grain diet and the use of, perhaps, a sandstone quern. Signs of calculus also indicate this.

The evidence from the remaining teeth and long bones, as well as the fused sutures and small patellae, suggest a female of about 40 years. There is no evidence of bone diseases, and the body appears to have been of good structure.

OTHER HUMAN REMAINS *by* ALISON CAMERON

Nine small samples of human bone, not reported upon by Dr D.M. Davies, besides pieces found in environmental and other contexts, were examined. They were estimated to be those of 10 individuals, including 2 individuals from the surplus cremated bones of the central burial beneath barrow 5. Preservation was, generally, quite good and the pieces were well-burnt and fragmented. Observations were made only for demography (age, sex and stature).

It was not possible to sex any of the individuals or estimate their stature. One adult and two infants could be discerned but none of the other individuals could be aged. The results may be summarized as:

Disc-barrow 1:

SE grave investigated by John Thurnam: good bone preservation, although very little of the individual was represented. Sex not known. Age, from the size of the bones, an infant.

infill of NW grave: a small collection. No comment possible.

Bell-barrow 2:

occupation material in the loam core: 3 small fragments. No comment possible.

occupation material at the base of the loam core: 5 small fragments, probably human. No comment possible.

Bell-barrow 4:

base of loam core: 1 fragment. No comment possible.

charcoal spread around timber coffin: a little moderately-preserved bone. No comment possible.

associated with the carbonized timber baulk: 4 fragments. No comment possible.

Bowl-barrow 5:

burned bones outside the ditch (Figure 27, A–): 140 g of well-preserved bone, with most of the skeletons represented but no determinations possible.

bottom of pit with urn cremation: small amounts of poorly-preserved pieces representing at least 2 individuals, one adult and one infant.

Carbonized wood and charcoal

by DAVID HADDON-REECE

The following identifications have been possible on wood and charcoal samples:

Disc-barrow 1:

chalk-rubble infill (Figure 7, layer 4) of the ditch: *Ilex aquifolium*,, holly.

infill of SE grave examined by John Thurnam: *Quercus* sp., oak.

infill of NW grave: *Pomoideae*, e.g. hawthorn, crab apple, rowan, whitebeam.

Bell-barrow 2:

occupation soil incorporated into base of loam core (Figure 13, layer 3): *Populus* sp., poplars and aspen.

Bell-barrow 4:

occupation soil at top of loam core (Figure 18, layer 3): *Ilex aquifolium*, holly; *Prunus* sp., e.g. blackthorn, wild cherry.

occupation material incorporated into middle of loam core: a mixture including *Prunus* sp.; *Acer* sp., presumably *Acer campestre*, field maple.

charcoal spread around timber coffin (Figure 20): *Quercus* sp., oak.

timber baulk (Figure 20): *Quercus* sp., oak.

shallow pit beneath N tail of barrow, presumably subsequent to its erection: *Pomoideae*.

Bowl-barrow 5:

rainwash in ditch on N side (Figure 27, layer 7): carbonized branch of *Pomoideae*.

[The monoxylous coffin was found to be too heavily mineralized for identification.]

Small-mammal bones

by BEVERLEY MEDDENS

Small-mammal bones were extracted, by sieving, from occupation debris, burnt-layer and timber samples from barrows 2 and 4. The details, not all identifiable to species, are:

Bell-barrow 2:

lower part of loam core (Figure 14, layer 3): 1 upper tooth fragment, Soricidae, common or water shrew; 1 lower first molar, *Microtus* sp., probably *Microtus agrestis*; 1 tooth fragment, Rodentia; 1 rib fragment, small mammal; 1 unidentified burnt fragment, unidentified mammal.

charcoal-laden occupation material at base of loam core (Figure 14, layer 3): 1 caudal vertebra, small mammal.

Bell-barrow 4:

dense charcoal spread and burnt area around timber coffin (Figure 20): 1 mandible, *Sorex araneus*; 1 unidentified burnt fragment, unidentified mammal; 2 unidentified fragments, small mammal; 1 humerus, Rodentia (mouse or vole).

timber baulk flanking S end of coffin (Figure 20): 4 incisor fragments, Rodentia (mouse or vole); 1 skull fragment, small mammal; 3 long bone fragments, small mammal; 1 tooth fragment, Crecetidae (vole); 2 phalanges, small mammal; 3 long-

bone fragments, small mammal; 1 rib, small mammal; 2 tooth fragments, Rodentia (mouse or vole); 1 upper incisor, Rodentia (mouse or vole); 1 lower first molar, *Apodemus* sp./*Mus* sp. (wood or house mouse).

Apart from the two burnt pieces, the remains were fragmentary because of breakage and not particularly abraded. Those identified as Rodentia could have come from any rodent, but not from shrews. Insectivora. Those pieces from small mammals could, theoretically, have come from any small mammal such as voles, mice, rats, squirrels, shrews, bats, hares, moles, &c. Nonetheless, the small-mammal (Rodentia) fragments were all of the same size as *Microtus agrestis*, *Sorex araneus* and *Apodemus sylvaticus* (field vole, common shrew and wood mouse). The mouse tooth, however, is definitely not dormouse but either house mouse or wood mouse: the tooth could not be identified more closely than *Apodemus* sp. *Mus* sp. (dormouse is *Muscardinus avellanaricus*).

There is no evidence that human selection might have accounted for the pattern presented by the remains and the assemblage can be considered as a natural one.

Molluscs

by CAROLINE ELLIS

Eight samples were analysed for molluscan remains. They were dried, weighed and then were placed in a bowl and water added. The floating shells were decanted, a procedure repeated seven or eight times. The remaining material was then washed through an 0.5 mm sieve (BS 30). These 'floats' and 'sinks' were thereafter oven-dried, and the shells and shell fragments extracted, identified and counted: the results are given in Table 19.

Bell-barrow 2

Lower loam core (Figure 13, layer 3, context 79)
Occupation material, a chalky soil containing abundant flakes of charcoal, contained 49 molluscs. The dominant species was *Vallonia costata*, a snail that prefers dry, grassy substrates. The overall fauna is in agreement with this type of environment, but there is a small, but significant, element of shade-loving types, for example *Discus rotundatus*, *Aegopinella nitidula* and *Clausilia bidentata*. These might point to scrub or light woodland nearby, but could have been in the soil when it was incorporated into the barrow.

Base of loam core (Figure 13, layer 3, context 103)
This sample, richer in molluscs, contained 129 individuals. *Vallonia costata* was again dominant, which, in association with *Vallonia excentrica* and *Helicella itala*, suggests dry, open-country conditions. The presence of *Pomatias elegans* implies patches of loose rubbly soil as it needs a broken, friable substrate in which to burrow. There was also a small number of shade-loving kinds, as in the sample above.

Bell-barrow 4

Burnt area surrounding the timber coffin (Figure 20, context 97)
This sample held only 600 g (dry weight) of sediment for analysis. Despite this, 122 individuals were recovered from a burnt layer containing very large amounts of charcoal. The dominant molluscs were the open-country species, especially *Vallonia costata* and *Vallonia excentrica*. Shade-loving species were also present in low numbers.

In another sample, also from the burnt area surrounding the timber coffin, 169 individuals were recovered. These were almost entirely open-country species, with *Vallonia costata* dominant, totalling 99. Again the main faunal elements suggest dry, open-country conditions. Also present were a small number of shade-demanding forms, *Discus rotundatus* and *Aegopinella pura*.

Soil surrounding and adhering to the timber baulk (Figure 20, context 125)
This sample, from the ancient soil preserved beneath the barrow, was almost entirely charcoal and contained very few molluscs. Those preserved had been burnt, making identificaton very difficult, but 45 individuals were recovered. They were predominantly species with open-country ecological requirements. Another sample from the same deposit (context 126) contained only a very small number of shells and shell fragments but, nonetheless, 5 individuals were recovered. A further sample (context 94) contained much less charcoal and many more snails. In total 217 individuals were extracted and identified. The dominant ecological

barrow number	2	2	4	4	4	4	4	4
context number	79	103	95	119	125	126	94	31
(kg)	1	1	0.6	1	1	1	1	0.45
Pomatias elegans	1	6	2	2	4	x	5	–
Carychium tridentatum	1	7	2	–	1	–	3	–
Cochlicopa spp.	4	7	3	–	–	–	8	–
Vertigo pygmaea	–	–	5	–	–	–	–	–
Vallonia costata	11	45	65	99	9	1	78	6
Vallonia excentrica	–	5	22	29	5	–	34	1
Acanthinula aculeata	1	4	2	–	1	–	2	–
Punctum pygmaeum	1	–	–	2	–	–	–	–
Discus rotundatus	2	3	3	2	3	–	15	–
Vitrina pellucida	1	–	–	–	–	–	–	–
Vitrea contracta	–	1	–	–	–	–	–	–
Vitrea crystallina	–	1	–	–	1	–	–	–
Nesovitrea hammonis	–	–	4	–	3	–	5	–
Aegopinella pura	–	–	–	1	–	–	1	–
Aegopinella nitidula	1	2	2	1	5	–	11	–
Oxychilus cellarius	1	1	2	–	–	–	2	–
Clausilia bidentata	1	3	1	1	–	–	2	–
Helicella itala	–	9	3	14	3	–	6	–
Trichia hispida	4	15	6	11	5	2	29	x
Trichia striolata	–	1	–	–	–	–	–	–
Arianta/Cepaea spp.	x	2	x	–	3	x	3	–
Deroceras/Limax spp.	18	16	3	2	2	–	13	–
TOTAL	48	129	122	169	45	5	217	9

Table 19. Molluscan remains. Context numbers refer to the excavation archive. x = diagnostic shell fragment.

group was of the open-country varieties, with the *Vallonia* being the most frequent. Also present were eight species that require shade. These occurred in larger numbers than in the loam-core material, and suggest that woodland was cleared prior to barrow-building.

Comment

Molluscs, present in all the samples, were predominantly open-country species. In the samples from the ancient soils shade-demanding kinds were present in significant numbers.

Slug remains

Slug plates from *Deroceras* and *Limax* species were recovered from six samples and have been included in the totals. *Arion* granules, the rudimentary internal shells in Arinoid species of slug, were recovered from all the samples.

Ostracods

Four ostracods were recovered from bell-barrow 2, lower loam core (Figure 13, layer 3, context 79).

The identification of residues on sherds of pottery

by JOHN EVANS

PROCEDURE

After the removal of its outer surfaces, the sherd was gently crushed; the material was passed through a 100-mesh sieve, and the fine material placed in a soxhlet apparatus. Then the sample was extracted, sequentially, with hexane, chloroform, 2-propanol and water and each extract was evaporated until dry. Thereafter, any residues were examined by infra-red spectroscopy. These extracts, when sufficient, were then separated by thin-layer chromatography (TLC). This technique

is especially useful for the hexane (oils and fats) and chloroform (resins) extracts, as it enables the components to be detected. For example, fats and oils are composed partially of triglycerides unique to a particular fat or oil.

In the next stage the extracted residues were examined by gas (GC) and high-performance liquid chromotographies (HPLC). Procedure depended upon the nature of the extract. For instance, the hexane extracts were hydrolized and free acids methylated and, or perhaps, naphthacylated depending upon their quantity. Methylated systems were subjected to GC, and naphthacylated esters by HPLC. Thus it was possible to identify and quantify the levels of fatty acids present. This information, when coupled with that from the TLC, enabled fats and the like to be identified with reasonable certainty. Examination of the aqueous extract for sodium chloride levels was always carried out and thus the use of salt, perhaps for preservation, might be inferred.

The sample was divided into two, after extraction. One part was refluxed with 6M hydrochloric acid to release amino acids from any proteinaceous material present. The liberated acids were then identified by chromotography (sometimes the protein can be isolated by extraction with a buffer and investigation by electrophoresis). The acid solution was also examined for traces of calcium and magnesium, an indicator of the original presence of aqueous systems. The second part was refluxed with alcoholic potassium hydroxide to decompose any 'dried' oils or fats present. Any resulting fatty acids were then scrutinized as before.

Certain substances can be identified without difficulty. Beeswax is stable and its infra-red spectrum characteristic. Fish products contain relatively large quantities of palmitoleic acid.

When sufficient of a sample was available it was scanned by electron microscopy (SEM) for the presence of biological debris. This was particularly useful for carbonized and charred materials as their colouration made them difficult to examine by optical microscopy.

RESULTS

Twenty-one small sherds of pottery were examined; nine gave indications of organic compounds. The results are below (numbers refer to the Milton Lilbourne Barrow Excavation archive).

Bell-barrow 2

26, 29 Very high levels of sugar were detected and no trace of any other organic substance. It is possible that the sherds are from wine, or some other fermented liquid, containers.

77 Traces of beeswax were found, plus low levels of sugars. These might point to a drink rather than honey.

81 A degenerate fat system, possibly adipocea, which may have resulted from decaying flesh, was disclosed.

97 Fatty acid systems suggested the container of a milk product.

Conjoining bowl-barrow 3

14 An oil–fat system, dominated by oleic and linolenic acids appeared. It could be from linseed or flax-seed.

Bell-barrow 4

112 High levels of palmitoleic and C_{20}+ (high molecular weight) acids indicated that the vessel may have had a fish product in it.

Bowl-barrow 5

11 High levels of palmitoleic and C_{20}+ acids show that the vessel may have contained a fish product.

35 Low levels of sugar were detected, together with traces of a polybasic acid system. One was tentatively identified as tartaric acid, which can be associated with wine.

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Alison Cameron (University of Bradford) carried out a study of the supplementary human remains, the cremations having been examined by Dr D.M. Davies (Royal College of Surgeons) in 1971. Caroline Ellis (Department of Geology, Imperial College, University of London) detailed the molluscs, Dr John Evans (Department of Science, North East London Polytechnic) the nature of the residues upon particular sherds of pottery, while Dr Caroline Grigson (Odontological Museum, Royal College of Surgeons) studied and delineated the characteristics of the animal bones. Dr David Haddon-Reece (Ancient Monuments Laboratory, Historic Buildings and Monuments Commission for England) identified the charcoal samples and assessed their suitability for radiocarbon assay, which process was carried out by Miss Jill Walker (Isotopes Measurements Laboratory, Harwell). The small mammal bones were scrutinized by Beverley Meddens (Ancient Monuments Laboratory, Historic Buildings and Monuments Commission for England), as were the small sherds of Romano-British pottery by Georgina Shaw (Department of Archaeology, University of Leicester).

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Processual and special studies involve intricate exchanges with individuals and institutions. Courteous formulae sometimes obscure, rather than stress, one's obligations to the skilled investigations and aid of contributors and colleagues. These debts are substantial and sincerely appreciated.

Storage. The pottery, other artifacts, human and animal bones from Milton Lilbourne barrows 1–5, together with a list of those identified, are housed in the Museum of the Wiltshire Archaeological and Natural History Society, 41 Long Street, Devizes.

In Tables 8–12 *locus*, e.g. 3/34, refers to barrows and numbers in the excavation archive.

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Preliminary Report on Excavations of the Late Roman Villa at Castle Copse, Great Bedwyn, 1985

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In the summer of 1985 the Program in Classical Archaeology of Indiana University, Bloomington, conducted the third season of excavation and survey on the large Romano-British courtyard villa of Castle Copse, Great Bedwyn.[1] *This report intends primarily to describe the excavations; interpretations of stratigraphy, architecture, artifacts and chronology, particularly those based on coin and pottery evidence, are tentative and based on incomplete study of the material.*

The principal villa complex consists of at least three wings with precisely the same orientation (*c.* 15 degrees clockwise of true N) arranged around a courtyard on a levelled platform (Figure 1).[2] Part of the fourth (E) side may have been closed by structures as well. Although geophysical survey and evaluation trenches have failed to confirm the existence of an E wing, one shallowly founded N–S wall (Figure 1, at 394/426) and considerable building material were found. Evaluation trenches have also failed to confirm the existence of outbuildings in the fields to the S of the main platform, which were suggested by the 1984 resistivity survey, although scatters of Roman material continue to be found there.[3]

Sector A, the villa N wing

Excavation in Sector A (Figures 2–3) continued to investigate the aisled building which forms the principal structure of the N wing of the villa. In sections, excavation reached the natural soil (Figure 2). The earliest structure preserved on the site now appears to be a small section of a beam-slot building set into the natural clay soil, and it appears to have a slightly different orientation from all later buildings (Figure 2, at 368/520). This has not been excavated, hence there is as yet no associated material. It was sealed by a layer of gravel soil which is tentatively interpreted as the first dump of the make-up of the levelled platform. The first structures to cut into the gravel dump are a series of post-holes in three phases, creating at least one row which lies on the orientation of the later buildings. A silver coin of Septimius Severus (193–211) in the collapsed fill of one of the holes offers a *terminus post quem* for the destruction of the last phase of the post-hole constructions.

This timber construction appears to have been succeeded by the first masonry structure on the site, an aisled structure of almost exactly the same dimensions and orientation as the building excavated in 1983–4, but located some 3.5 m to the NW (Figures 1–2). This earlier aisled barn is preserved in its foundation trenches for the W and S walls, in three of the footings for its interior supports and presumably in some of the masonry of the N half of its N wall (the S half cut away by a large ditch).

This building was replaced by the second aisled barn, whose substantial N wall, W and S foundation

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2. Earlier literature includes: 'The sixth general meeting', *WAM* 6 (1859), 253; J. Ward, 'Great Bedwyn', *WAM* 6 (1860), 261f.; F.C. Warren, 'Excavations on a Roman site in Brail Wood, Great Bedwyn, in 1936 and 1937', *WAM* 48 (1937–9), 318·20; E. Hostetter, 'Preliminary report on excavations at Castle Copse, Great Bedwyn, 1983–4', *WAM* 79 (1985), 233–5.

3. Cf. Hostetter (note 2), 234, Figure 1.

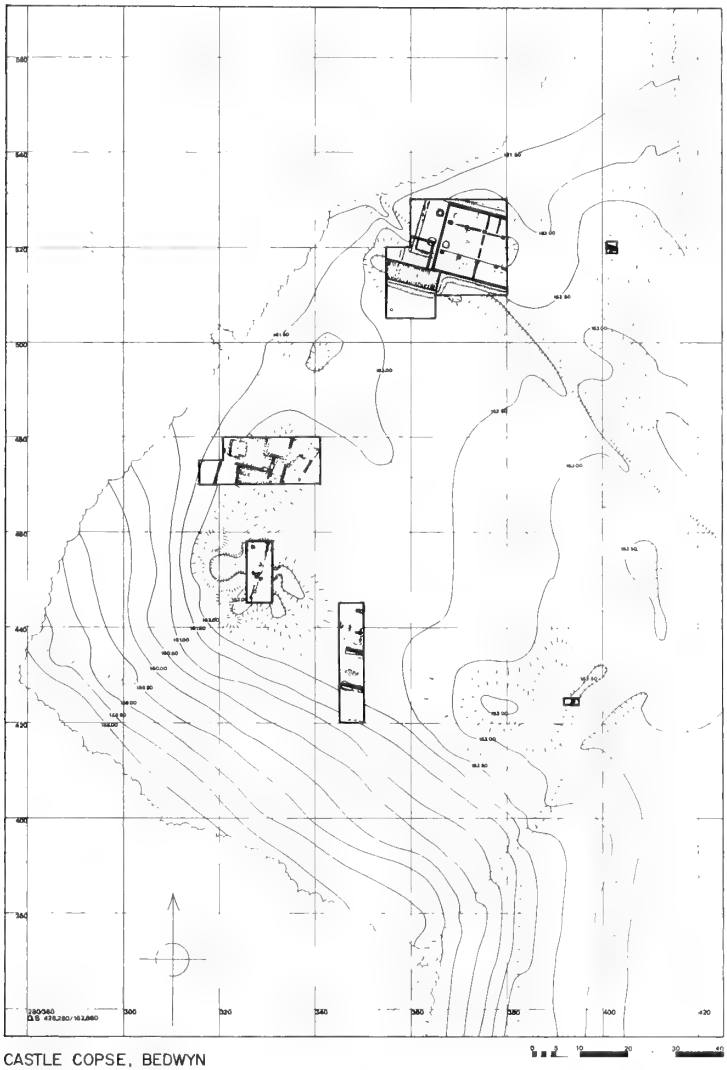

Figure 1. Contour plan of building platform of Castle Copse Roman Villa, with excavation sectors – 1985.

trenches and isolated, interior support footings survive. The interior footings, pits filled with a mass of mortared flints, supported dressed-sandstone plinths, two of which survive. An evaluation trench sunk to the E of Sector A revealed the continuation of the N wall of the building (Figure 1, at 402/520), showing that it was at least 37 m long. The N and S walls of this building then seem to have been partly (N), or completely (S), demolished and reconstructed slightly further apart. This marked the beginning of an extensive series of renovations which transformed parts of the aisled hall into luxury accommodation. The interior was subdivided into separate chambers by walls inserted between the internal supports; the floor of the room in the W end of the nave was cut down for the insertion of a channel hypocaust and was covered by a chequerboard mosaic; and the entire S aisle was cut away to an even greater depth and converted to a *pila* hypocaust of two chambers. Both seem to have been served by the same *praefurnium*, probably located outside the W end of the building. A coin of Constantine I provides a *terminus post quem* for the beginning of these renovations.

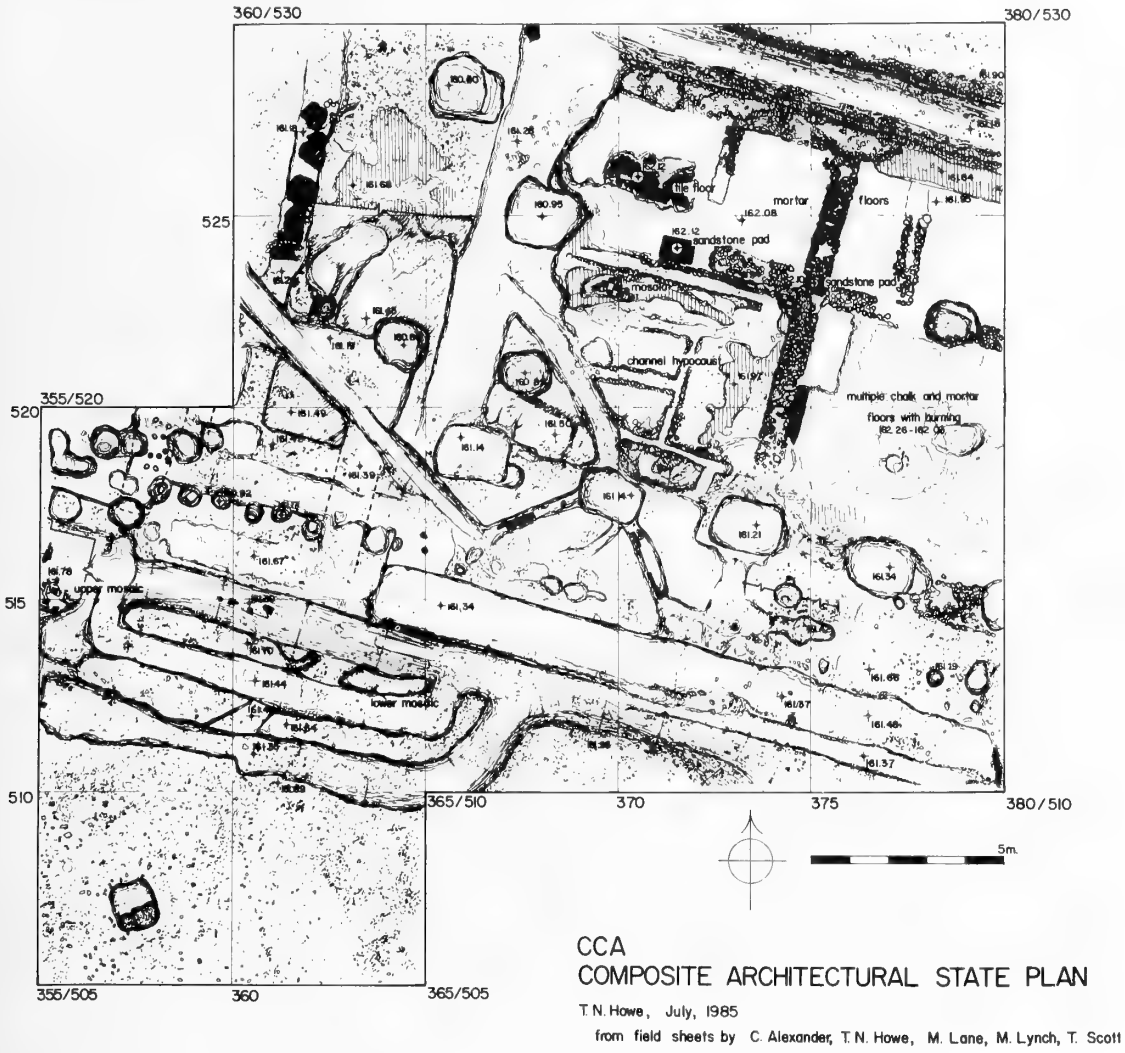

Figure 2. Castle Copse Sector A – 1985 plan.

In the later phases of the building's use, these hypocausts were subsequently backfilled. The room in the E end of the nave possessed scores of chalk and mortar floor-patches separated by burning, which in a few places preserved stake-holes, presumably for hearths or other industrial purposes. From these floors came large assemblages of pigs' foot-bones and bird bones and, in lesser quantities, a variety of other domestic- and wild-animal bones. Whether these indicate some kind of industrial activity or merely consumption of low-quality material remains to be determined. Datable material from these floors is tentatively assigned to the 4th century; their build-up may, in part, be contemporary with the use of the hypocausts in the other chambers, or may post-date the filling and abandonment of the hypocausts.

To the E of the second aisled building is a small free-standing structure with greensand quoins. This building was later subdivided, and a radial-channel hypocaust was inserted. Possibly at the same time the building was connected with the SW corner of the aisled building by a small corridor which appears to have had a lower mosaic paving preserved in only a small patch of *in situ* tesserae (Figure 2, at 303/513). At a later date this corridor was extended to the W and another mosaic laid over it (Figure 3). This second mosaic was the guilloche mat and double pelta mosaic unearthed by the Rev. W.C. Lukis in 1853–54 and

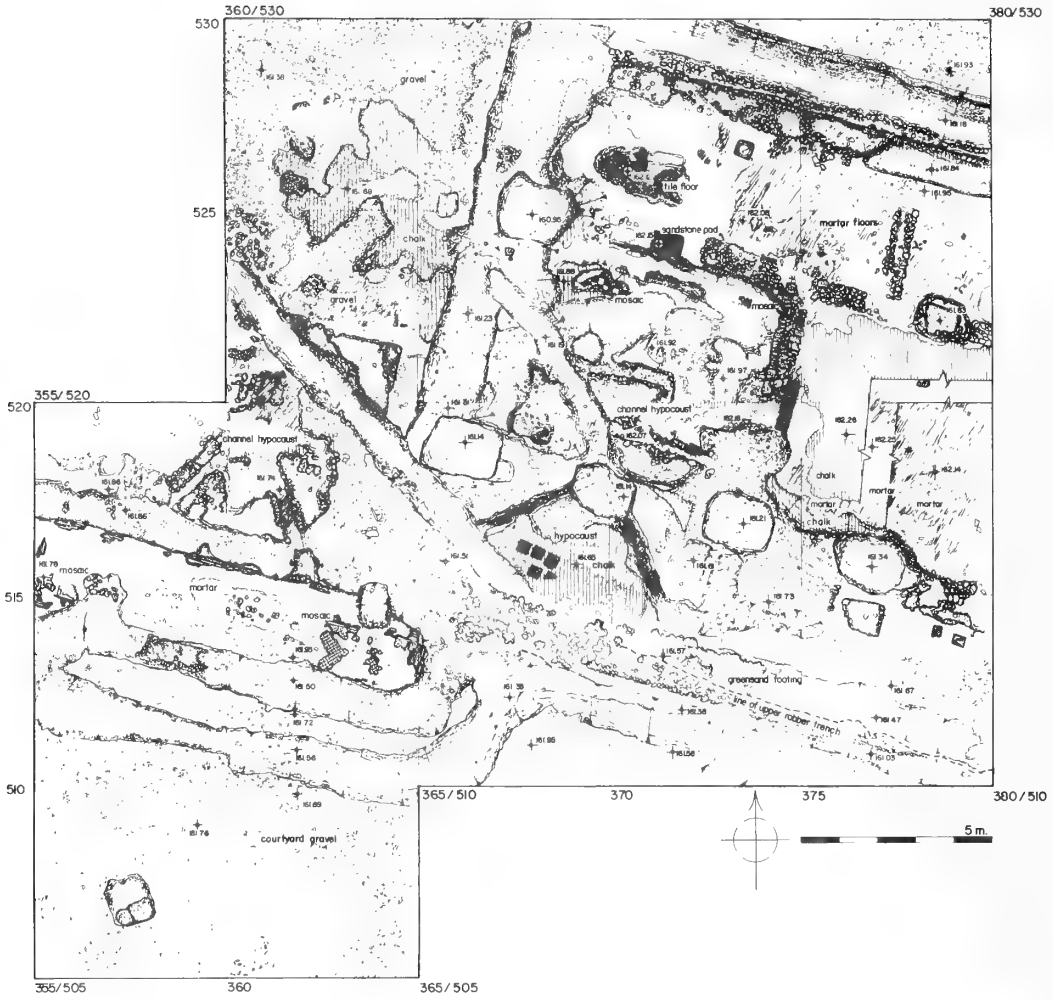

Figure 3. Castle Copse Sector A – 1984 plan.

recorded in a watercolour now in the Devizes Museum. In the ditch which skirts this mosaic corridor to the S was found some of the later material from the site, including a bone dagger-hilt and large quantities of domestic pottery.

Sector B, the villa W wing

Excavation in Sector B (Figures 4–5) further investigated the W residential wing of the villa. The general arrangement of the rooms in the last major Roman phase were clear at the end of the 1984 season: corridor or porticus on the E facing the courtyard with interlace box mosaic; behind to the N, the main chamber with *cantharus* mosaic, entered from the corridor through a double door; to the S, a room with chequerboard mosaic with coarse tile tessellation; and apparently a corridor on the W side as well. A new discovery pertaining to the main Roman phase is a probable hydraulic feature in the *cantharus* mosaic room on axis with the central medallion of the mosaic; it is now preserved only in the large rectangular robbing cut (3.35 × 2.95 m) and flint and chalk footings, and is probably, though not certainly, contemporary with the floor (Figure 4, at 324/477). In its final phase, the E corridor may have been an open colonnade supported by mortar pads laid in front of the E wall.

In a later phase of use in the chequerboard mosaic room, the central mosaic panel was cut away and two slots with numerous stake-holes were cut into the mortar bedding (Figure 4, at 323–6/470–3). These channels were, in turn, cut into by two circular pits ringed with stake-holes and filled with burnt earth and

Figure 4. Castle Copse Sector B – 1985 plan.

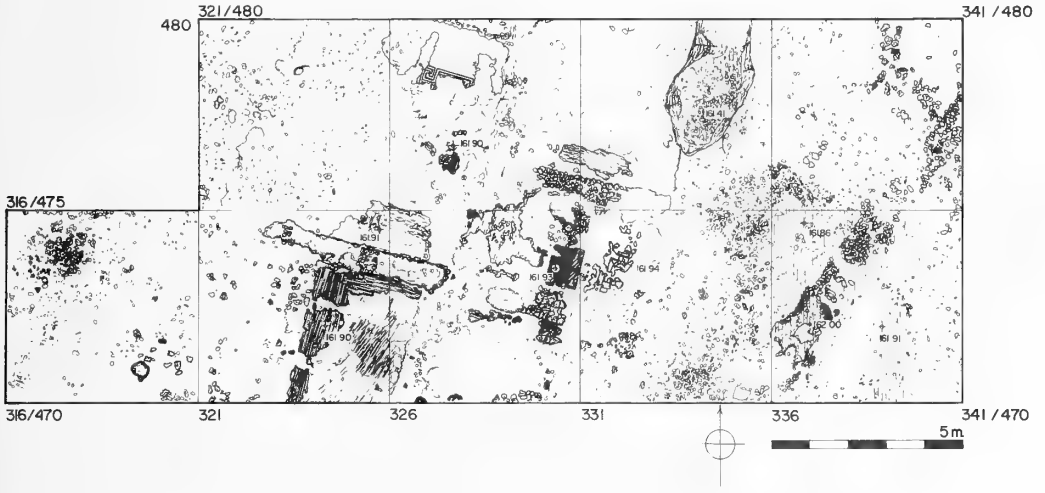

Figure 5. Castle Copse Sector B – 1984 plan.

ferrous material, suggesting some subsequent industrial activity.

The latest structure in Sector B now appears to be the line of small, mud-mortared flints in the courtyard, laid obliquely to the orientation of the main building (Figure 5). This was laid on an irregular patchwork of various materials, including chalk, greensand, pebbles and one or two areas of worn tiles, all of which were remarkably free of mortar or datable objects other than a few fragments of presumably residual pottery. Stratigraphically, these features appear to post-date the destruction and robbing of the front wall of the main villa.

Sector D

Sector D was opened to try to clarify the results of E.R. Pole's trenching in 1936 (Figure 1) in an area which, by Pole's own testimony, was badly disturbed even before his excavations. However, the line of the front wall of the corridor in Sector B was visible and seems to reveal the same sequence of wall with pads for individual columns placed in front of it.

Sector C, the villa S wing

Excavation was completed in Sector C on the S wing of the villa. The N and S walls are solid and well-preserved, but the character of the interior during the main habitation phases could not be clarified as the floors were completely cut away. The final surface was covered with a thin layer of burning, which was cut through by a pit, almost 2 m wide, filled with more burnt material and parts of two bone combs. The front

(N) wall was itself built into a ditch which is the earliest feature of the sector. In the bottom of this ditch fill was discovered a deposit of some of the earliest pottery on the site. A small linear concentration of unmortared flints discovered in the courtyard in 1984 and lying parallel to the front wall proved the latest feature in the sector. Unmortared and slight, the nature of this feature is uncertain.

DISCUSSION

The early timber buildings in Sector A introduce the possibility that the platform was levelled not for a major monumental expansion of buildings to be added to the aisled barn, but for the timber buildings themselves. It would therefore have been the timber buildings for which the platform was built and which determined the near-uniform floor levels and orthogonal orientation of the later villa structures.

The assemblage of datable material from Castle Copse now covers the period from the later 1st century AD to the late 4th, and may include later material. The volume of material from the later Roman phases continues to be unusually small. The earliest coinage from the site is of Hadrian, the latest of Valentinian II, and the bulk from the 4th century. Pottery consists of British and continental wares from the later 1st through to the later 4th centuries. It is possible that several sherds of a crude hand-made fabric may have been identified in one or two late assemblages.

Other objects recovered include metalwork, jewellery, weapons, tools, glass vessels and bone objects, including a bone comb whose metal and bone openwork decoration is, to our knowledge, unparallelled in the Roman period.[4]

The habitation layers have produced large assemblages of animal bones, notably sheep, goat, cattle and birds, but also horse and possibly dog. Wild and game animals are represented by red and roe deer, boar, badger and hare. Both fresh- and salt-water molluscs are present. Water separation and flotation of soil samples has recovered evidence of walnut, hazelnut, barley and spelt.

The stratigraphic, architectural, artefactual and environmental evidence assembled through 1985 from the Castle Copse site now demonstrates extended habitation with several phases at very different levels of material culture. The earliest periods are attested architecturally by the beam-slot and post-hole buildings in Sector A and the ditch in Sector C. The main villa underwent numerous alterations and remodellings and seems to be a typical, although very large, product of the prosperity shared by so many other villas in 4th-century Britannia. The very latest phases, which we hope to date by scientific means, are characterized by constructions not normally associated with the major phases of Roman civilization in the province.

4. We thank Dr A. MacGregor of the Ashmolean Museum for having looked at this comb, and look forward to a study of the piece by Ms R.J. Payne.

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 103–120.

Pagan Anglo-Saxon Burials at West Overton

by BRUCE N. EAGLES*

Five Anglo-Saxon graves, and evidence of others, were discovered in 1962 during the excavation of a barrow of Beaker date and three Romano-British tombs on Overton Hill. The secondary burials were of two warriors, an adult female and two children. One of the warriors was accompanied by an elaborate shield, decorated with silver-plated studs, whose size could be determined from its edge clips which were found in their original position. The female burial is probably of the 5th century, but all the other Anglo-Saxon interments are likely to belong to the 6th century; the loose finds from the prehistoric barrow included a fragment of a bronze cauldron of 5th-century manufacture.

In 1962 Mr (now Professor) D.D.A. Simpson and Dr I.F. Smith excavated four mounds, all of them thought to be prehistoric round barrows, situated at about 175 m (575 ft) above O.D.[1] on the top of Seven Barrow (or Overton) Hill. The hill, of the Upper Chalk, overlooks the river Kennet, which is forced into a wide loop round its S slopes. The barrows were listed by Goddard as West Overton 6 (SU 11936832), 6a (11936834), 6b (11966835) and 7 (11936837) (*VCH Wiltshire*, vol. 1, part 1 (1957): 195).

Colt Hoare and Thurnam had dug into 6, 6a and 7. These three low mounds were shown in 1962 to be early 2nd-century Romano-British tombs with circular settings of oak posts, which held burials after cremation (Smith and Simpson 1964). This group of mounds was aligned N to S, some 30 m to the east of and parallel to the Ridge Way, not to the Roman road whose E–W route from *Cunetio* (Mildenhall) via *Verlucio* (Sandy Lane) to *Aquae Sulis* (Bath) passed a short distance to the S (Figure 2).

Barrow 6b, 34 m to the E of the others, had also been previously disturbed, but not by barrow-diggers. This mound, which was scraped-up and unditched, covered a primary Beaker inhumation and subsequent prehis-

Figure 1. Area location.

* 15 Munks Close, West Harnham, Salisbury.

1. The metric equivalents of the 500 ft (152 m) and 600 ft (183 m) contours are used on Figure 2.

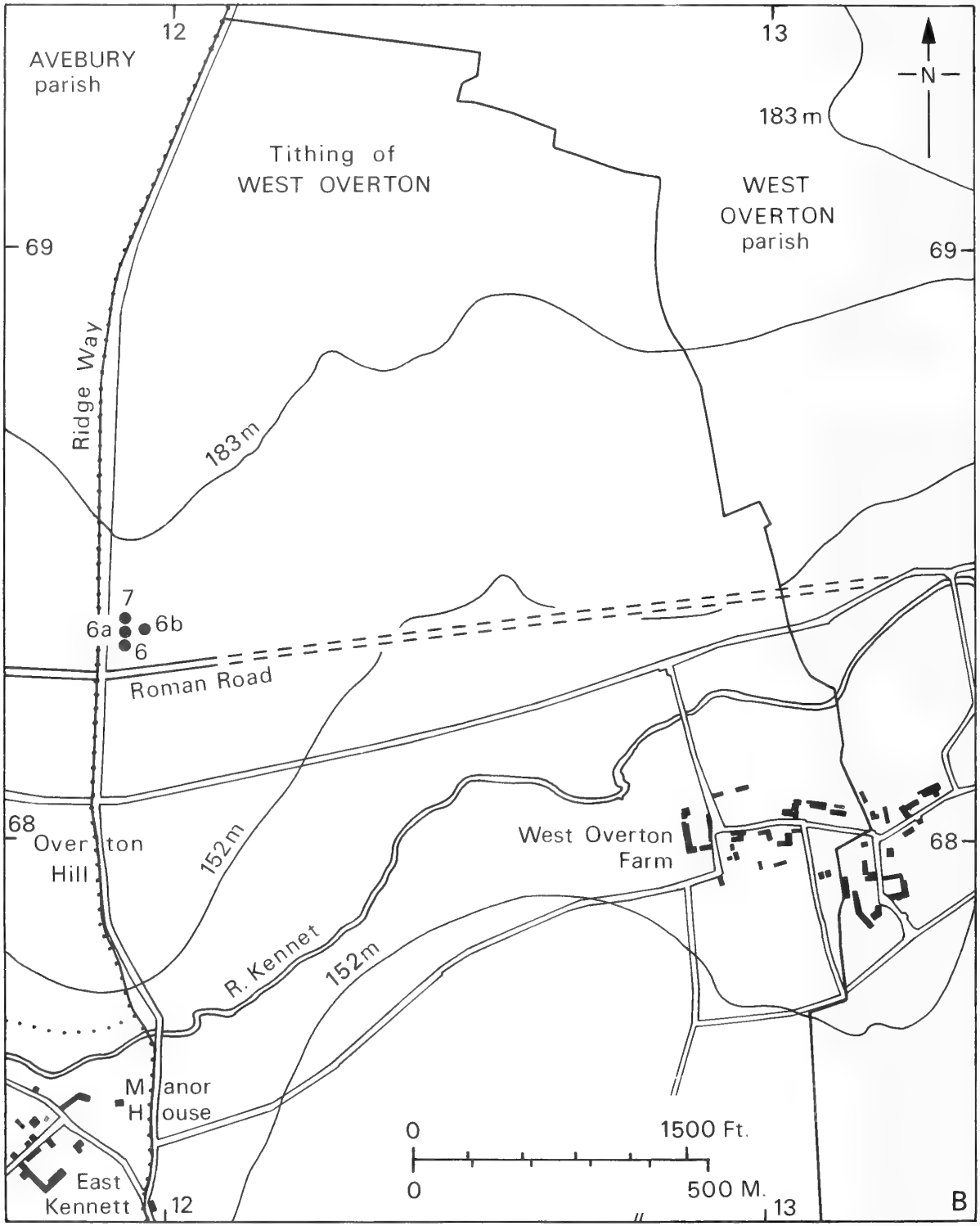

Figure 2. Map showing cemetery and surrounding area.

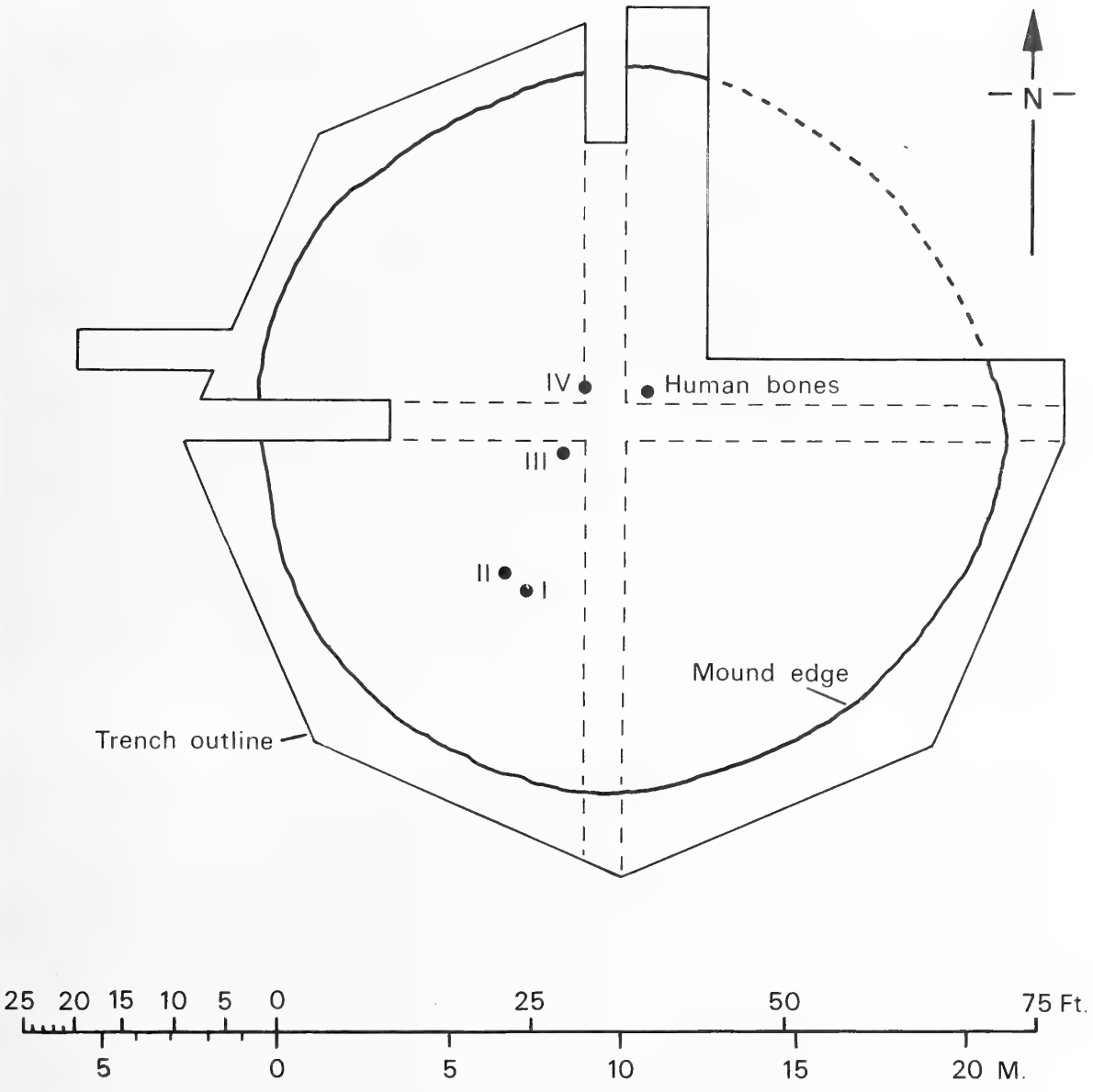

Figure 3. Barrow 6b, position of the Anglo-Saxon burials. Based on Smith and Simpson 1966, figure 1.

toric interments both by inhumation and after cremation (Smith and Simpson 1966).

Inhumations were found in four secondary graves (I–IV) cut in barrow 6b (Figure 3), and there was an unaccompanied secondary child burial on the edge of barrow 7; scattered artefacts and unburnt bones in all four mounds pointed to further pagan Saxon interments. This paper publishes and discusses all the material of pagan Saxon character from the mounds.

THE SAXON MATERIAL

Tomb 6 produced organic-tempered and other potsherds, a disc-headed iron stud (Figure 9(9))[2] and an unburnt fragment of an adult human atlas vertebra

2. The numbers which accompany the drawings of the small finds (Figures 9–15) are those given by the excavators and marked on the objects deposited in Devizes Museum. A separate list was made of the finds from each of the four mounds (i.e. 6, 6a, 6b and 7). The numbers appear within brackets throughout this text.

(page 110). The stud, although smaller, is similar to those belonging to the shield found with the skeleton in grave I in barrow 6b (Figure 10(47)). Tomb 6a also yielded potsherds, some organic-tempered, an iron belt buckle (Figure 9(24)) and an iron bar with ornamental terminal, possibly a latch-lifter (page 111). An unassociated knife, potsherds and an unburnt skull fragment were found in tomb 7 (Figure 15 and page 110).

Barrow 6b held four secondary graves. Two of these (III and IV) and other disturbed human bones (below III, above IV and in the NE quadrant) (page 111) were excavated from the top of the mound, near its centre (pages 109, 113). The layout of grave III was exceptional. The burial was that of a warrior of rank, whose contracted skeleton lay across an elaborately decorated shield[3] with silver-plated bronze studs and bronze edge clips (reconstruction, Figure 11). It appears from the position of a buckle in the grave (page 113) that the belt had been detached and placed on the shield board, the knife having been removed from it and placed apparently with deliberate intention in front of the skull (Figure 7).[4] An adult female (IV) had been buried close by: she wore a penannular brooch and a necklace threaded with 10 amber beads, one of blue glass, and a bronze disc and a ring of bronze wire; at her waist were an iron buckle, a knife and a Roman bronze key and other keys of iron (Figures 13, 14). Graves I and II (page 111) were also close together, lower down the mound. Grave I was that of a warrior, accompanied by a shield, spearhead, knife and an iron finger-ring. Grave II was that of a child, unaccompanied.

Fragments of other skeletons (pages 110–111) and loose finds, which comprised a piece of a bronze cauldron with triangular lugs, two spearheads, an iron ferrule, a disc-headed iron stud, various unidentifiable iron fragments and potsherds, indicated that there had been further secondary inhumations in the barrow (Figure 14).

THE RECONSTRUCTION OF THE SHIELD IN GRAVE III (Figure 11)

The iron boss (68) and the four bronze edge clips (63) were found *in situ*; their relative positions show that the diameter of the shield board was 56 cm.[5] The thickness of the board tapered from approximately 1 cm at the centre,[6] as indicated by the length of the surviving iron rivet through the grip (the boss rivets are not extant), to no more than 4 mm, the length of the rivets through the clips, at the edge of the shield. The four edge clips were found within one quadrant of the board. Clips of this type are normally associated with wooden vessels and have been recorded only rarely as shield fittings. Examples from Kempston, Bedfordshire (in graves 38, 52 and 136) (Kennett 1974) were in each case associated with a metal shield rim, of which there is no trace at West Overton.

The board was decorated with silver-plated studs (65). A pair of these was found *in situ*. Each stud lay on a radius from the centre of the boss to a clip. It is likely that the third extant stud belonged to another pair in a similar position on the opposite side of the boss. Their precise placing and silver finish suggests that the discs may have been part of an overall decoration of the shield, otherwise painted (cf. Kennett 1974: 62). The shanks of the studs are 1.2 cm long. They are thus longer than the rivets through the handle, perhaps because they covered an extra layer of wood or a gathering-up of leather which may have been stretched over the board.

THE DATE OF THE CEMETERY

The triangular lug of a bronze cauldron from barrow 6b (133) (Figure 14)

This type of cauldron belongs to the widely-distributed Vestland-Kessel group, a form which appears to have originated in northern Gaul in the late 4th century and to have been manufactured throughout the 5th (Böhme 1974: 145). Examples have been recorded in later burials, as at Little Wilbraham, Cambs. (Neville 1852: 23), Holywell Row, Suffolk (grave 11; Lethbridge 1931: figure 3) and Bidford-on-Avon, Warwicks. (grave 182; Humphreys *et al.* 1925: 287).

The shield boss in grave I of barrow 6b (48) (Figure 10)

This boss belongs to Professor Evison's low, flat, carinated group with slightly convex dome (Evison 1963: Figure 1b). It probably dates to the 6th century.

3. Crouched burials (even partly so) with shields are unusual (Cf. Swanton 1973: 3). Mr Härke has drawn my attention to several other examples. They include Abingdon (Berks.) graves B4 and B44; Nassington (Northants.) grave 27B; Holywell Row (Suffolk) grave 38; and Bidford-on-Avon (Warwicks.) grave 53. References to published accounts of all these burials are given in Meaney (1964). Burials on top of a shield also occur at Abingdon grave B33 and at Worthy Park (Hants.) grave 24 (unpublished: information kindly given by Mrs S.C. Hawkes and Mr Härke).
4. Mr Härke has suggested to me that the three small iron rivets (64) (page 113) from this grave may have belonged to a wooden container of some kind.
5. The long grip of the shield in Finglesham (Kent) grave G2 indicates that that shield-board was at least 60 cm (24 ins.) in diameter (Chadwick 1958: 22–4).
6. The shield-board in grave I was also 1 cm thick at the centre (page 113). The wood remains on the shanks of the grip rivets are too slight to indicate the type of handle construction, and the thickness given assumes it was not composite (cf. Härke 1981).

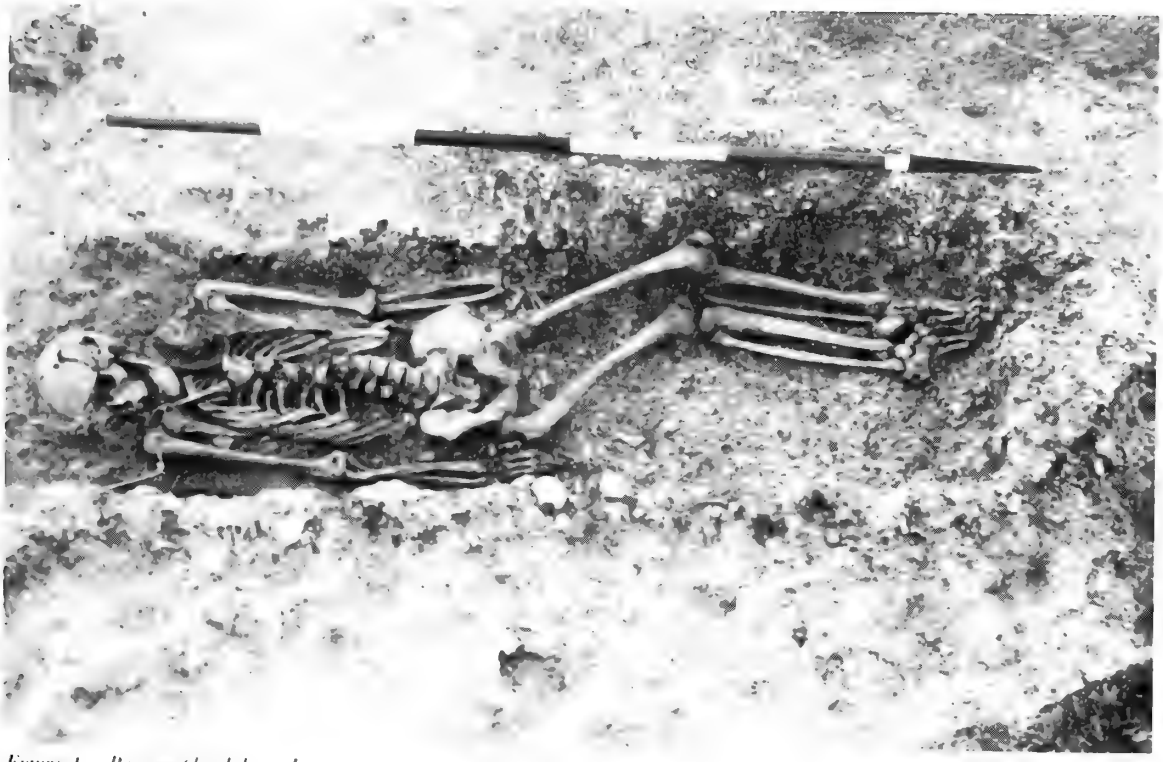

Figure 4 Barrow 6b, skeleton 1

Figure 5. Barrow 6b, skeleton 1, showing shield boss and spearhead.

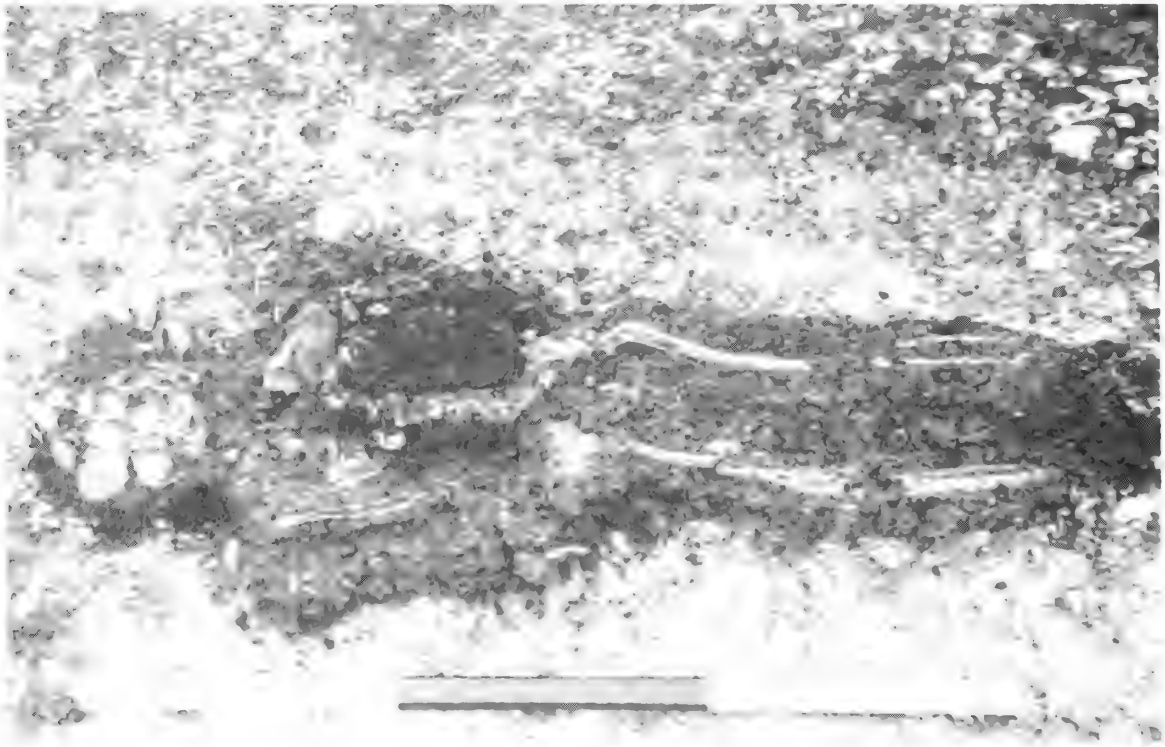

Figure 6. Barrow 6b, fragmentary skeleton of child, II.

Figure 7. Barrow 6b, skeleton III, showing buckle, knife and underlying shield boss in position.

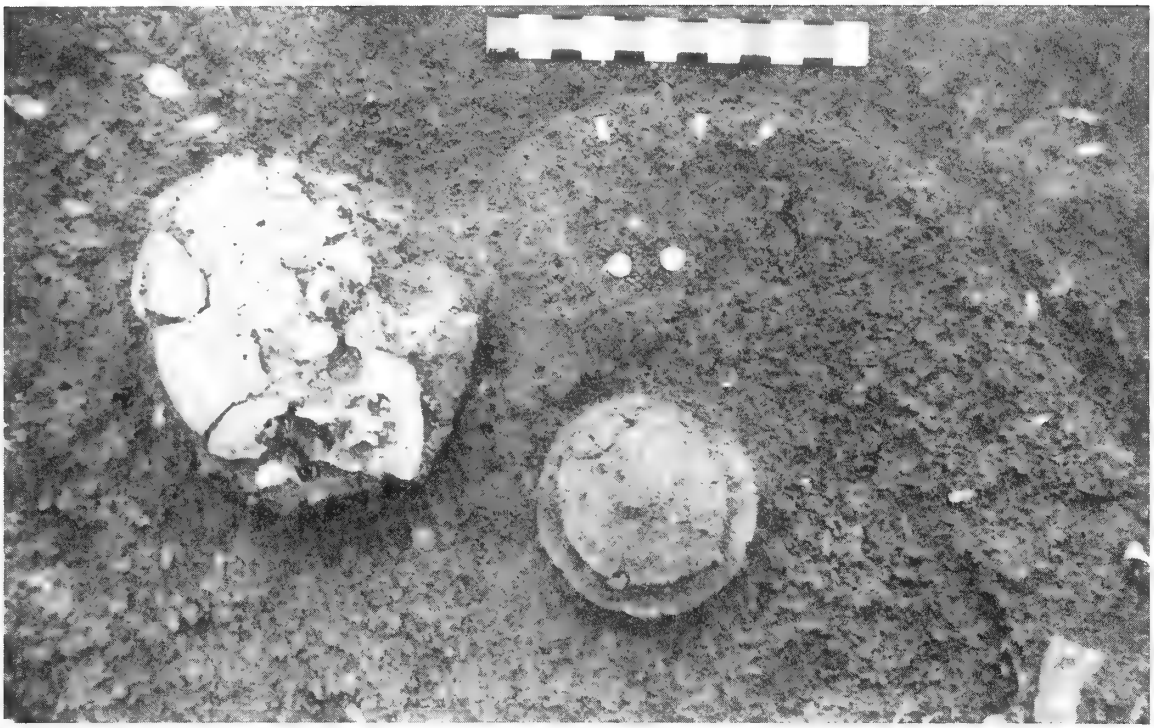

Figure 8. Barrow 6b, grave III, with much of skeleton removed, showing boss, two silver-plated studs and edge clips of underlying shield in position.

A computer analysis by Dr T. Dickinson of shield bosses from the Upper Thames region offers a classification with further subdivisions but remains unpublished (quoted by Welch 1983: 136–40).

The shield in grave III of barrow 6b (Figure 11)
The boss (68) is also of the low, flat, carinated type with convex dome (Evison 1963: figure 1b). It is likely to be of the 6th century but cannot be dated more closely. Bosses with silver-plated buttons and disc-rivets were in use until the mid-6th century on the Continent (Werner 1962: 32), but they appear to have lasted throughout the century in England (Kennett 1974: 62–4). Silver-plated board studs, as found at West Overton (65), are often associated with them. The edge clips (63) are of the same period. Graves 38 and 52 at Kempston, which contained comparable pieces (see above) are also 6th-century. Kempston grave 136 is later but it is a female burial, and the shield rim fragment and edge clip from it had apparently been retained by their owner merely as detached scraps of bronze, kept perhaps in a bag; they do not prove these shields date later.

The spearheads from barrow 6b
Three spearheads were recorded, one in grave I, the others unassociated. That in grave I (49) (Figure 10), with an angular blade and a split socket, belongs to Swanton's widely distributed series H2 (Swanton 1973: 107). The second (67) (Figure 14) falls within his series D1, a small and slender leaf-shaped variety (Swanton 1973: 64), and the third (114) (Figure 14) in his series C1, a broader leaf-shaped form (Swanton 1973: 49). All three pieces are likely to date to the 6th century. Swanton did not list any series D1 spearheads from Wessex.

Iron finger-ring from grave I of barrow 6b (51) (Figure 10)
The writer has not traced any other male Anglo-Saxon burial with an iron finger-ring. Böhme has published such rings from rich warrior graves of the 4th and 5th centuries in the Côte-d'Or, Burgundy (Böhme 1974: 120–2). Another iron ring was found with an early 5th-century cruciform brooch in cremation urn 98 in the cemetery at Borgstedt in Schleswig-Holstein (Genrich 1954: Figure 3C). Meaney (1981: 171) has drawn attention to Dr Genrich's suggestion that the form of the West Overton ring, with a flat bezel of twisted wire, its ends invisible, may be akin to the Hercules knots on Roman rings, which were thought to afford the wearer protection against the Evil Eye. Silver rings with this design are known in England from the 6th century.

DISCUSSION OF THE BURIALS

The female grave (IV) in barrow 6b probably falls within the 5th century (Evison 1965: 40). The penannular brooch (117), (Figure 13), whose notched terminals appear to have a zoomorphic ancestry and late Roman parallels, the Roman bronze key (85), (Figure 13), the blue glass bead (not illustrated, page 113), and a perforated bronze disc (120b), (Figure 14), in the necklace, support this dating. Further, the type of cauldron represented by a triangular lug, found unassociated in the barrow, was in production in the 5th century. Grave III, of a 6th-century warrior of status (as his shield shows) was, like IV, cut in the top of the same mound, in this case disturbing an earlier burial. Graves I and II were also close together. Another soldier, of the 6th century, as shown by his shield and spear, had been laid in grave I, and an unaccompanied child in grave II. All the other loose finds from this barrow, and those from the other mounds, probably relate to other 6th-century interments.

EARLY ANGLO-SAXON SITES IN THE VICINITY OF WEST OVERTON (Figure 2)

Traces of the settlements of the pagan period are known in Avebury village[7] and at East Kennett, where two circular loomweights have been found near the Manor House (*VCH Wiltshire*, vol. 1, part 1 (1957): 67).

The three Romano-British tombs (mounds 6, 6a and 7) at West Overton are aligned N–S with the Ridge Way, not E–W with the Roman road from Mildenhall to Bath. The importance of the Ridge Way as a Herepath (so called in the East Overton charter, see below) after the Roman period is clearly shown by entries in the Anglo-Saxon Chronicle. These annals list battles at Barbury Castle, the iron-age hillfort some 10 km N of the West Overton cemetery, in 556, and in 592 and 715 at Wodnesbeorg, some 5 km S of the burials and 1½ km S of the point where the Ridge Way is intersected by Wansdyke.

The burial ground lies within the N part of the tithing of West Overton (whose bounds appear on the Inclosure award for the tithing and manor of West Overton, 1802; WRO 1/A 61). The antiquity of this land unit is clear from two 10th-century charters. One of 972 records the grant by King Edgar of lands at West Overton (Sawyer 1968: no. 784); the other, of 939, relates to the adjacent estate of East Overton (Sawyer 1968: no. 449). Each charter includes a description, differing only slightly in its detail, of their common boundary marks (discussed by Brentnall 1939). The 'Seven Barrows' on the W boundary of West Overton may relate only to a conspicuous group of bronze-age barrows S of the Roman road. Possible references to pagan Anglo-Saxon burials elsewhere on the West Overton tithing bounds are Colta's barrow, at the point N of the group described in this article, where the boundary leaves the Ridge Way, and the 'heathen burial place' on its S limit.

SKELETAL MATERIAL

The present whereabouts of the child's skeleton from Tomb 7 and of the human remains reported on below is not known.

Tomb 6: upper filling of ditch

An adult atlas vertebra (13). The morphological features are neither sufficiently slender nor robust to suggest the sex of the individual.[8]

Tomb 7: secondary grave, probably pagan Saxon[9]

A child's skeleton. From the developmental condition of the permanent teeth, the child was probably about 5 years old. The skull consisted of parts of a mandible, parts of the left temporal and sphenoid, and pieces of parietal frontal and occipital bones. What remains of the orbits shows the presence of *usura orbitae*. A small area of the left parietal fragment displays changes probably indicative of slight inflammation. The dentition is as follows (mandibular teeth only): *Right:* deciduous teeth missing, all sockets present; first permanent molar possibly erupting; permanent incisors, canine and premolars present, unerupted; second permanent molar missing, unerupted. *Left:* sockets of deciduous incisors and canine only; permanent incisors present, unerupted: permanent canine missing, unerupted.

The post-cranial skeleton is represented by fragmented and very incomplete vertebrae, ribs, right clavicle, right scapula, humeri, right ulna and radius, two metacarpals, the pelvis, both femora, and the right tibia and fibula.

Tomb 7: mound

The individual is only represented by a fragment from the central region of a frontal bone, certainly of an adult. Sex could not be determined with any certainty (25).

7. A probable sunken-floored hut was excavated by Mrs F. de M. Vatcher. Information from Mr P. Harding.

8. Report by R. Powers and D.R. Brothwell, quotation taken from Smith and Simpson (1964: 82).

9. As note 8, quotation from Smith and Simpson (1964: 81).

Barrow 6b

The following notes, kindly provided by Dr I.F. Smith, relate only to the disturbed remains. There is no information about skeletons I to IV, other than photographs (Figures 4–8).

(a) Bones and teeth apparently from interment(s) disturbed by insertion of Skeleton III:
skull fragments, ?child: near legs of III (55).
vertebra fragment; incisor: beneath III (72).
skull fragment, ?child; incisor: beneath III (74).
skull fragments, ?child: around and beneath III (76).

(b) Bones in N baulk overlying tibia of Skeleton IV: mandible, skull fragments, part of atlas, cervical vertebrae (157) (Saxon sherds (113) also in this disturbance).

(c) Bones from a trench-like disturbance cut into turf-stack in NE quadrant:
skull fragments at co-ordinates OE 4.8 ft, ON 2.2 ft; found neatly stacked together, clearly not *in situ*. Also, scattered through disturbance: parts of maxilla, mandible, 10 loose teeth, rib fragment (8).

(d) Bones from lower mound material in SW quadrant (no co-ordinates):
distal ends of two radii; proximal end, lacking head, of one radius; part of proximal end of one ulna (29).

(e) Tooth from mound material, W baulk:
one molar (131).

(f) Bones and teeth from upper mound material in SE quadrant (no co-ordinates):
fragments of mandible and ?maxilla; 4 worn molars; 3 worn incisors; also long bone fragments, not certainly human (140).

The bones in groups (b) to (f) apparently represent Anglo-Saxon burials disturbed by later digging.

CATALOGUE OF FINDS

Tomb 6, unassociated objects

Mound (NW quadrant)

Potsherds (Figure 9). Rim in dark brown gritty ware with some larger flint inclusions and organic tempering (3a). Rim in soft brown organic-tempered ware (3b). Eight other sherds, one in a distinctive black sandy ware with reddened exterior. None illustrated (3).

Ditch

Potsherds. Four in buff/grey organic-tempered ware: 13 others, most of them in a sandy ware with some organic tempering. None illustrated (12).

Upper filling of the ditch (SE quadrant)

Disc-headed iron stud (Figure 9). Diameter 1.7 cm, maximum length 1.1 cm (9).

Upper filling of the ditch (NW quadrant)

Adult atlas vertebra (13) (page 110)

Tomb 6a: unassociated objects

Mound (near centre of barrow)

Oval iron buckle (Figure 9). Diameter 3.4 cm (24).

Pot (Figure 9). Black, with brown exterior: organic-tempered ware, with some fine grit inclusions. Much of pot survived, but profile not restorable (25). The pot (25) and buckle (24) were found close to each other.

Potsherds. Three; two in organic-tempered ware, with brown or buff exterior, third in brown ware with smoothed finish. From different places in mound. None illustrated (9).

Upper filling of the ditch

Iron bar (Smith and Simpson 1964: Figure 6.6). Length 9 cm, twisted corkscrew-fashion, with one terminal coiled and the other, broken off, turned at 90 degrees and perforated perhaps for attachment to a shutter. Similar bars, but longer and without a twist, are known from 9th-century contexts at Portchester (Hinton and Welch 1975: 197 and Figure 130, no. 8, described as 'latch lifter') and Ramsbury (Evison 1980: 39 and Figure 23, no. 29).

Barrow 6b

Four Anglo-Saxon burials had been inserted into the mound. Their approximate positions, calculated from the excavators' field notes in the present absence of the site plan, are shown on Figure 3.

Barrow 6b, grave I (Figures 4, 5)

Skeleton adult. Lay extended on back, legs slightly bent, skull to S (44). Grave dug through mound and into chalk in SW quadrant. Grave contents indicate male.

Grave contents (Figure 10)

Parts of a **shield** (a–c):

(a) **Iron boss** (rested on left clavicle). Height 8.2 cm, diameter (overall) 16.6 cm, flange 2.1 cm. Carinated, with straight waist and low and slightly convex

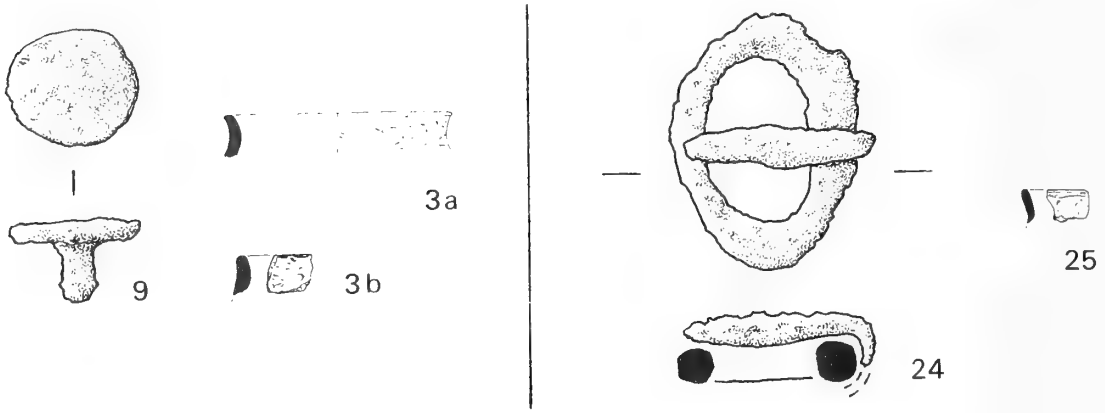

Figure 9. Tomb 6; pottery (3), iron stud (9). Tomb 6a; iron buckle (24), pottery (25). Scale: 9, 24, 1/1: 3, 25, 1/4.

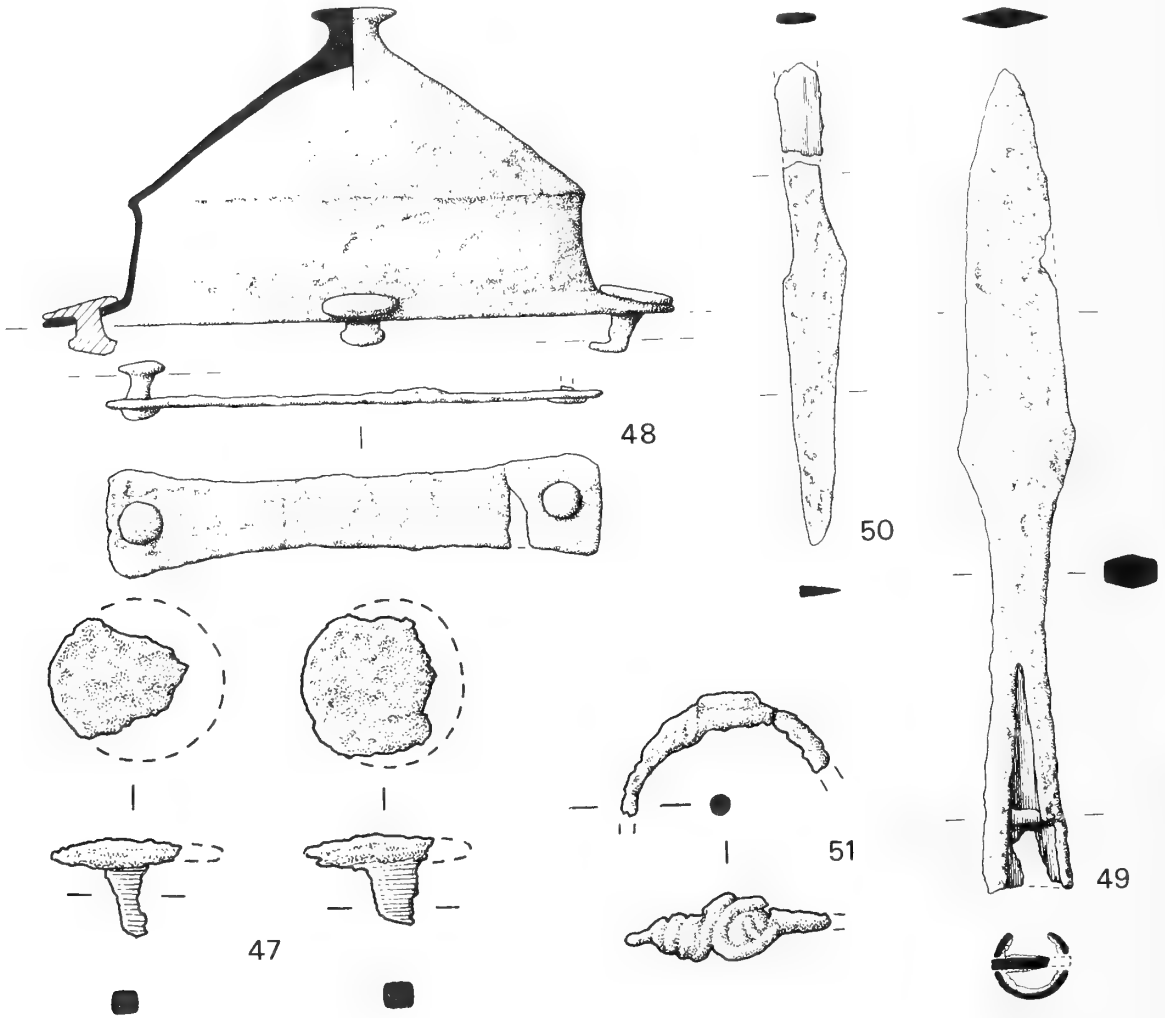

Figure 10. Barrow 6b, skeleton I; two iron studs (47), iron boss and grip of shield (48), iron spearhead (49), iron knife (50), iron ring (51). Scale: 47, 51, 1/1; 48–50, 1/2.

dome, disc knob;[10] 5 disc-headed iron rivets on flange. Length of bent-over rivet shanks indicates shield board thickness of 1.0 cm (48).

(b) **Iron strap-grip**. Length 12.9 cm, with spatulate ends. An iron rivet at either end; one intact, the same length (1.0 cm) as the boss rivets (48).

(c) Two **disc-headed iron studs** (on thoracic vertebra). Diameter 2.1 cm (but incomplete); shanks of square section, maximum length 1.0 cm (47). Probably from the shield board.

(d) **Iron spearhead** (spear, its point towards head of grave, laid along left edge of pit). Length 21.3 cm. Angular blade; transverse iron rivet through split socket (49).

(e) **Iron knife** (between left elbow and ribs, its point towards head of grave). Length 12.6 cm, with straight back and cutting edge possibly originally curved. Mineralized wood on tang (50).

(f) **Iron ring** (on third finger of left hand). Fragmentary. Ring itself and spiral loop of flat bezel, of wire of circular section, wound around with flattened wire to make the other parts of the bezel (51).

Barrow 6b, grave II (Figure 6)

Skeleton child. Lay extended on back, skull to S (225). Grave in SW quadrant. Unaccompanied. Sex not determined.

Barrow 6b, grave III (Figures 7, 8)

Skeleton adult. Lay on right side, legs flexed, skull to E (54, 58). Grave cut into turf-stack in central area of mound and in SW quadrant. Grave contents indicate male.

The insertion of this burial had disturbed an earlier interment, probably Saxon and of a child (page 111).

Grave contents (Figures 11, 12)

Parts of a **shield** (a–d):

(a) **Iron boss** (beneath humeri). Height 7.1 cm, diameter (overall) 15.5 cm, flange 2.1 cm. Sharply carinated, with upright waist and convex low dome, disc knob (now missing); five disc-headed iron rivets, all fragmentary, on flange (68).

(b) **Iron strap-grip**. Length 11.5 cm, with spatulate ends. Disc-headed iron rivet at either end, one intact and indicating shield-board thickness of 1.0 cm (68).

(c) Three **disc-headed bronze studs covered with thin silver sheet**[11] (two beneath vertebrae between (a) and (d), third on opposite side of boss). Diameter 1.8 cm; shanks of octagonal section, maximum length 1.2 cm (65). From the shield board.

(d) Four **bronze clips** (three beneath ribs and *in situ* at edge of shield, fourth (fragmentary) below right elbow). Length of complete examples varies from 1.4 cm to 1.9 cm. Each decorated with repoussé dots. Wood remains inside clips mineralized and more precise identification impossible: no staining nor other traces of a metal shield rim (63). Length of bronze rivets through clips indicates thickness of edge of shield board was approximately 4 mm.

(e) Three **small disc-headed iron rivets** (from within the area of the shield). Maximum diameter 1.2 cm; shanks of square section, maximum length 1.1 cm. Traces of bronze on one of them (64).

(f) **Iron buckle** (approximately 6 ins. (15 cm) left of skull and within the area of the shield). Diameter (maximum) 3.4 cm. Flat loop (69).

(g) **Iron knife** (approximately 3 ins. (8 cm) left of skull, point towards head of grave). Length 11.6 cm, tip missing: back probably angled, straight blade. Mineralized wood on tang (70).

A fragmentary **iron object** (34), (Figure 12), found in the humus layer in the vicinity of the skeleton, was not certainly associated with it.

Barrow 6b, grave IV

Skeleton adult. Lay extended on back, skull to S (83, 141). Grave cut into turf-stack in central area of mound and in NW quadrant. Grave contents indicate female.

Grave contents[12] (Figures 13, 14)

(a) Ten **amber beads** (118).

(b) Fragments of a **blue translucent glass bead**. Not illustrated (119).

(c) **Bronze ring**. Diameter 1.5 cm: of bent wire with one end doubled back (120a).

(d) **Bronze semi-spherical disc** with scored edges and perforation (120b).

Items (a)–(d) were at the skeleton's neck, presumably on a necklace.

(e) **Bronze penannular brooch** (at shoulder). Diameter 3 cm: returned terminals, flattened sideways and with tool impressions. Iron pin (117).

(f) Fragment of **sheet bronze** (at left shoulder). Length 1.7 cm: with double row of repoussé dots, one boss and one perforation (121b).

(g) **Bronze strip** (at left shoulder). Length 2.8 cm: three perforations (121a).

(h) Two **small iron plates**, riveted together with

10. There is no sign of an extra blob of metal within the hollow knob which would indicate either that it had been made separately or that it had been repaired (Härke and Salter 1984).

11. These studs and the wood remains inside the clips were kindly examined by Helen Ganiaris, of the Museum of London.

12. This grave group was published in Evison (1965: Figure 21).

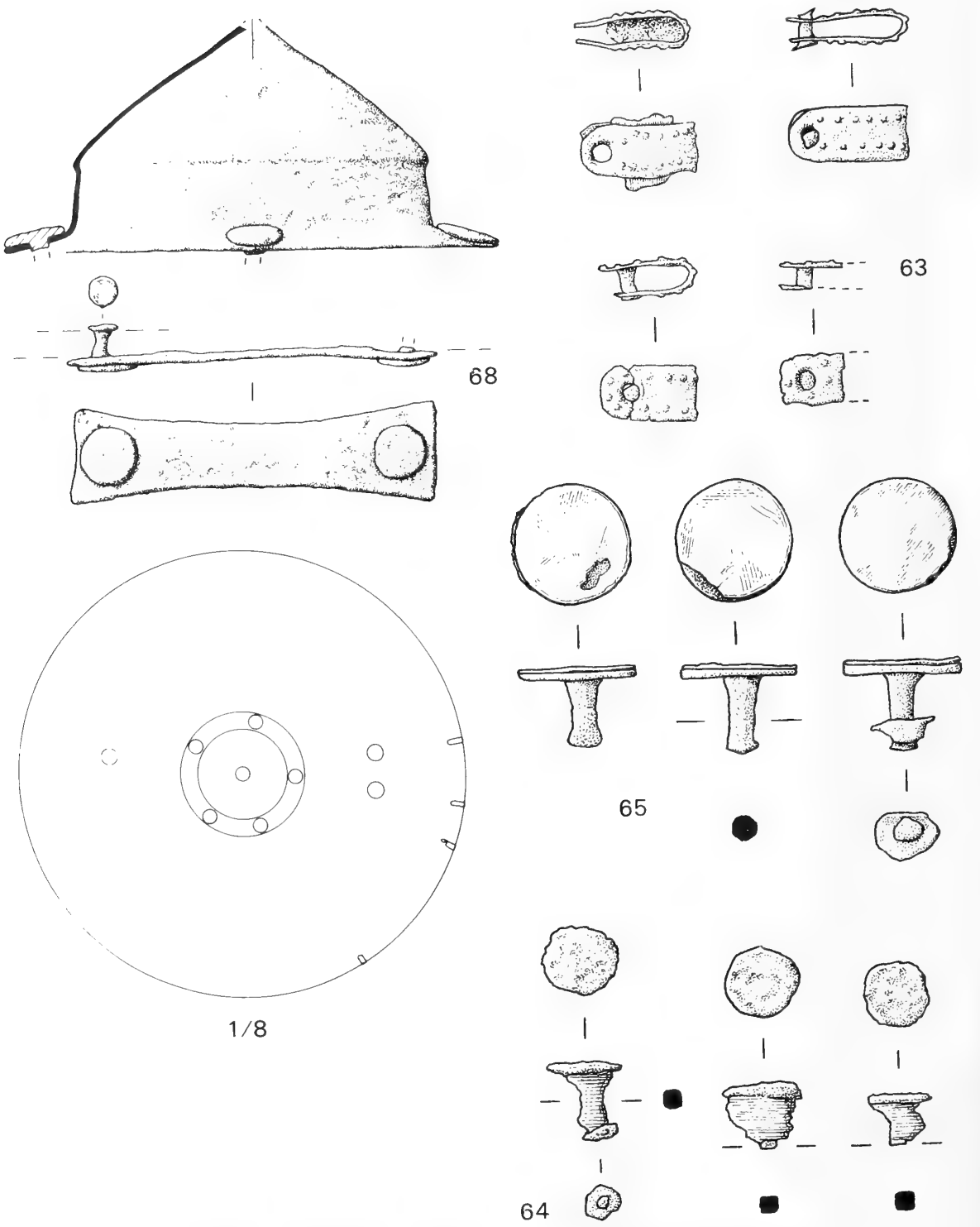

Figure 11. Barrow 6b, skeleton III; four bronze clips from edge of shield (63), three iron rivets (64), three silver-plated bronze studs from shield-board (65), iron boss and grip of shield (68). Scale: 63–65, 1/1; 68, 1/2. Shield reconstruction 1/8.

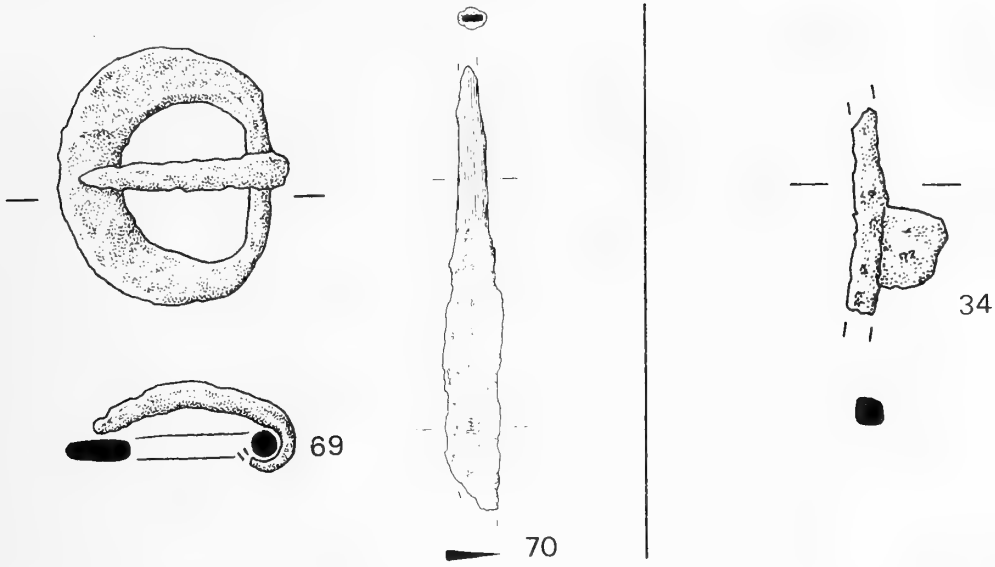

Figure 12. Barrow 6b, skeleton III (contd.); iron buckle (69), iron knife (70). Scale: 69, 1/1; 70, 1/2. Near skeleton III; fragmentary iron object (34). Scale 1/1.

transverse wood grain between (at right arm). Length 2.8 cm (122).

(i) **Circular iron buckle** (at waist). Diameter 3.3 cm (116).

(j) **Bronze key** (at left hip). Length 6.8 cm: hollow shaft, ring head with knob at top (85).

(k) Fragments of **iron keys on a ring** (at left hip). One shaft with looped end, length 7.6 cm, another shaft length 6.6 cm, bending towards one end, ring fragment diameter 4 cm. None illustrated (84).[13]

(l) **Iron knife** (at hip). Length 15.5 cm. Both back and blade probably originally curved but blade very broken. Traces of mineralized wood on tang (115).

Barrow 6b, unassociated objects (Figure 14)

Turf cover of mound, NW quadrant

Iron spearhead. Length 17.5 cm. Slender leaf-shaped blade, tip missing. X-ray photograph shows transverse rivet through split socket (67).

Square-headed iron nail. Each side of head approximately 1.7 cm: shank broken off (modern?) (61).

Pot. Sherds in black ware, with brown exterior; organic-tempered (57).

Turf cover of mound, SW quadrant

Three **potsherds**: all in black, organic-tempered ware, two with brown exterior (one smoothed), third with a buff outer surface. None illustrated (1).

Turf cover of mound, SE quadrant

Pot. Sherds in black ware, smoothed; organic-tempered (104).

Potsherds. Five in organic-tempered black ware, with brown/buff exterior; three in similar fabric, but also sandy (one with occasional inclusion of flint grit). None illustrated (104).

A fragment of a 17th-century brown glass wine bottle (12)[14] was found in a flint layer at the base of the turf cover (NE quadrant). Not illustrated.

Turf-stack, in centre of mound

Pot (in N baulk and in area of disturbance above tibia of skeleton IV). Six sherds in black ware, smoothed; organic-tempered (113). Human bones (157) (page 111) in same disturbed area.

Iron spearhead (in W baulk). Length 20.7 cm. Leaf-shaped blade: split socket (114).

Unidentifiable **iron fragments** (SW quadrant). Not illustrated (96).

Unidentifiable **iron fragments** (SE quadrant). Not illustrated (129).

13. Details of (k) taken from Professor Evison's own record sketches, as published in Evison (1965): objects now fragmentary.

14. Identification by Jennifer Price.

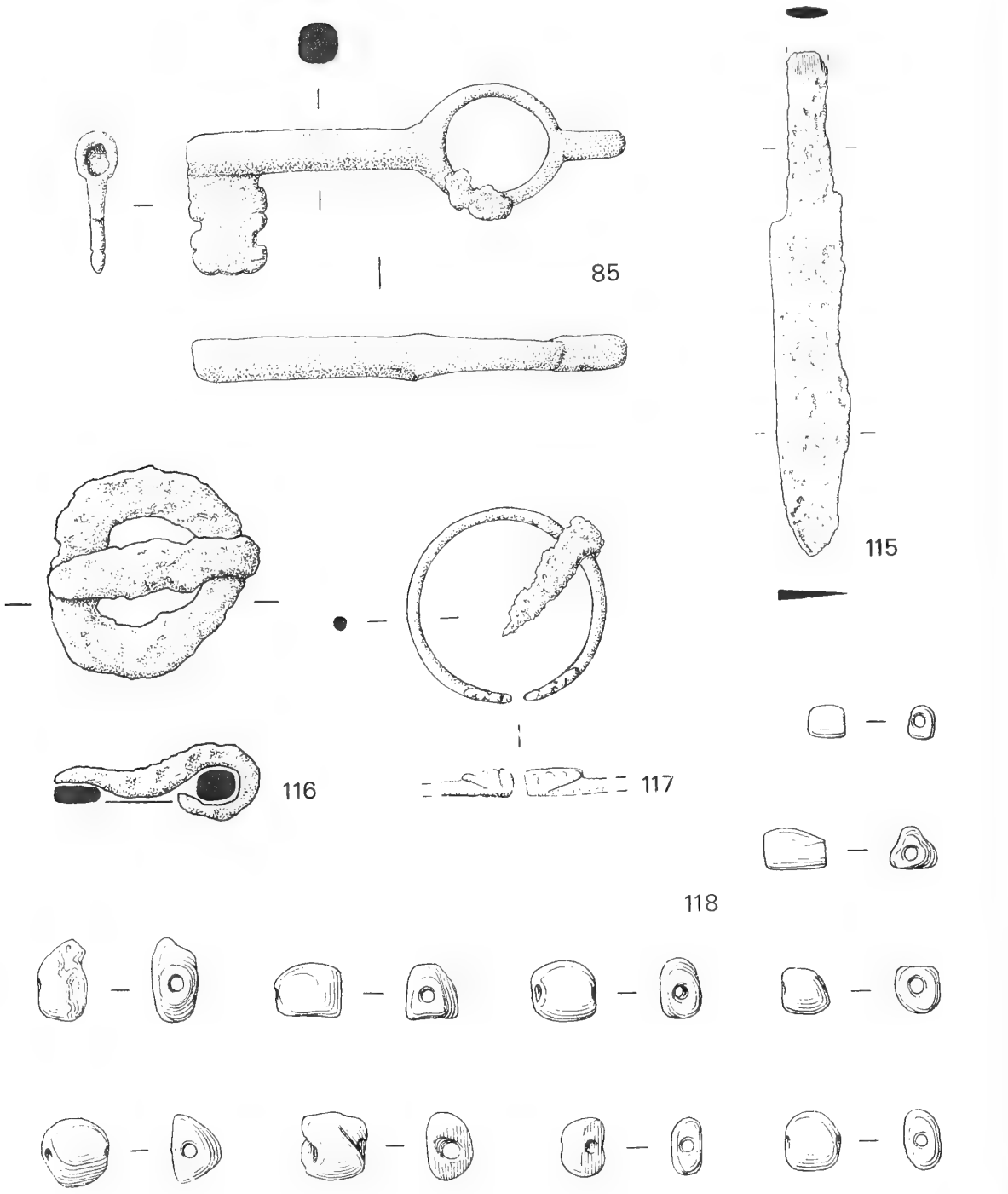

Figure 13. Barrow 6b, skeleton IV; bronze key (85), iron knife (115), iron buckle (116), bronze penannular brooch with iron pin (117), ten amber beads (118). Scale: 85, 116–118, 1/1; 115, 1/2.

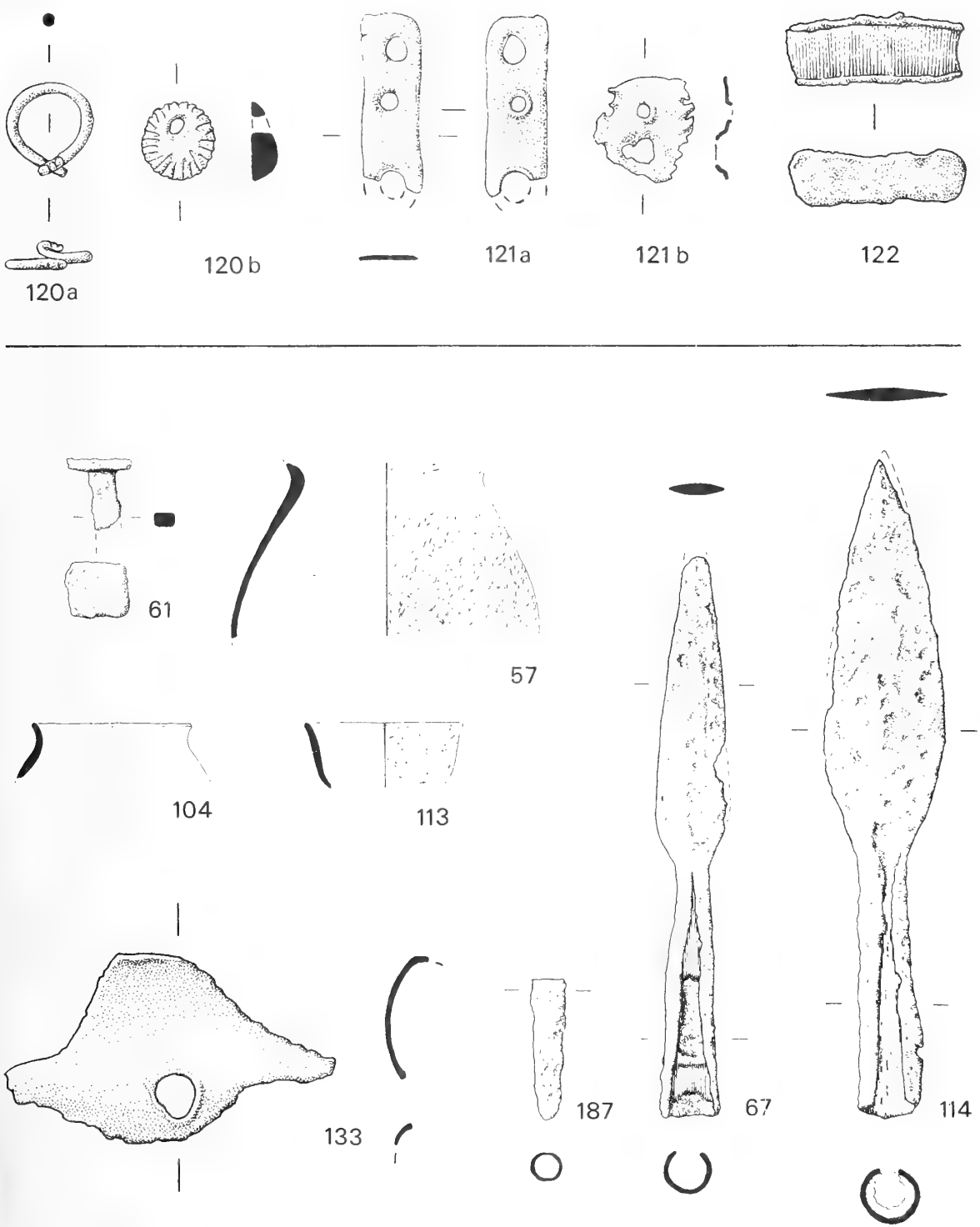

Figure 14. Barrow 6b, skeleton IV (contd.); bronze ring (120a), perforated bronze disc (120b), bronze strip (121a), fragment of sheet bronze (121b), two iron plates (122). Scale 1/1.

Barrow 6b, unassociated finds; pottery (57, 104, 113), iron nail (61), iron spearheads (67, 114), fragment of a bronze cauldron (133), iron ferrule (187). Scale: 61, 133, 1/1; 67, 114, 187, 1/2; 57, 104, 113, 1/4.

Mound
Perforated triangular lug of bronze cauldron (W baulk) (133).

Lower mound material (i.e. in disturbed areas)
Unidentifiable **iron fragments** (NW quadrant). Not illustrated (89).
Unidentifiable **iron fragments** (SW quadrant). Not illustrated (28, 41).

NE quadrant
Disc-headed iron stud. Diameter approximately 2 cm (taken from X-ray photograph: stud now in fragments). Not illustrated (229).

In a baulk
Small iron ferrule. Length 4.4 cm (187).

Tomb 7, child burial
Extended on back, skull to SW; much disturbed by burrowing animals. In shallow grave intersecting outer edge of ditch in NE quadrant.

Grave filling contained one organic-tempered potsherd (not illustrated) (21B) and earlier sherds (Smith and Simpson 1964: 73 and Figure 2). See page 110 above, for report on skeleton.

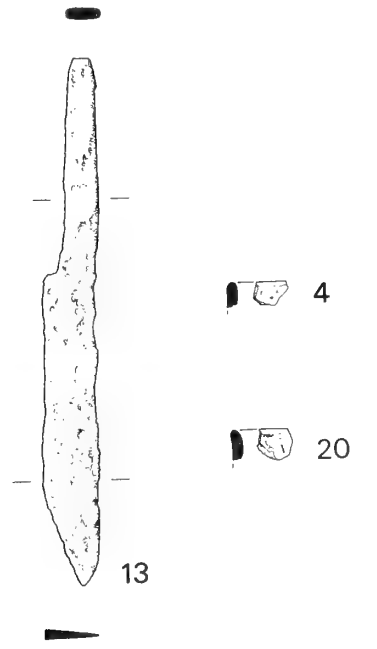

Figure 15. Tomb 7, unassociated finds; pottery (4, 20), iron knife (13). Scale 13, 1/2; 4, 20, 1/4.

Tomb 7, unassociated objects (Figure 15)

Mound, humus layer
Iron knife (NE quadrant). Length 13.8 cm. Angled back and straight blade (13).
Potsherds. Rim in burnished, fine sandy brown ware: some organic temper (4). Three sherds: two in burnished black ware; one in a buff, sandy ware; and one organic-tempered but with some fine grits, brown exterior. None of three illustrated (4).
Also, unburnt **skull fragment (25) (page 110).**

Filling of post-sockets in ditch
Three **potsherds**. Black ware, with brown exterior; very occasional tiny quartz grit but one flint inclusion 6 mm. None illustrated (32).

Circular pit below centre of mound (disturbed by a previous excavator)
Potsherd. Rim in smooth, burnished black ware: some organic temper (20). Found together with prehistoric and Romano-British sherds.

DEPOSITION OF FINDS AND RECORDS
The objects discussed in this report and the supporting records have been placed in Devizes Museum.

Acknowledgements. The excavators, Dr I.F. Smith and Professor D.D.A. Simpson, have supplied site records and photographs and have patiently answered many queries. Professor V.I. Evison has kindly discussed matters relating both to specific grave goods and to the site in general. Mr H. Härke has offered much helpful advice on the shields; my debt to him is evident in the notes. I am grateful to Mr N.A. Griffiths, both for his meticulous examination of the objects, which raised many points of interest, and for his skill in the preparation of the final drawings. Helen Ganiaris, of the Museum of London, and Jennifer Price kindly reported upon certain of the finds. Mrs S.C. Hawkes, Dr P. Robinson and Mr P. Harding helped in several ways. Miss P. Rundle provided information about the West Overton bounds. Finally, Alison Cook and Ann Clark of the Historic Buildings and Monuments Commission have offered both encouragement and practical support.

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The Site of the Borough at Old Sarum 1066–1226: An Examination of Some Documentary Evidence

by DAPHNE STROUD*

Archaeological investigation has not yet definitely established the layout of the borough of Old Sarum. Examination of medieval documentary sources suggests that from 1066 to 1226 the main part of the settlement lay within the ramparts of the iron age fort and that there was a suburb outside the W gate where some canons' houses were situated.

In 1226 the canons of Salisbury moved the tombs of their bishops, and with them the heart of the cathedral's life, from the hill of Old Sarum down to their 'new fabric' in the Avon valley.[1] Many of the townspeople came with them and thereafter the city at Old Sarum gradually declined until by 1832, when it lost its franchise as a rotten borough, it was 'only a green mound without a habitation upon it'. So completely has the old city vanished that it is now a matter for debate where its streets and houses, its market-place and its churches, used to stand.

The main outline of the early history of Old Sarum is well established.[2] It was a hill fort in the Iron Age; there was a settlement somewhere in the vicinity in the Roman period, when a number of roads converged on the E end of the fort; the Saxon borough of Serisberie was established there by the mid-11th century; the Normans turned the fort into a royal castle, throwing up a ringwork in the centre of the area enclosed by the ramparts; after 1075, when the Saxon see of Sherborne was transferred to Old Sarum, a cathedral precinct was established in the NW quadrant of the enclosure.

The borough of Serisberie continued to exist after the Conquest, being recorded in Domesday as paying £6 in tax. But was it situated within or outside the ramparts? The received opinion earlier this century was that the medieval township lay within the enclosure, and that the wall which formerly ran round most of the circuit of the outer ramparts was 'the city wall'.[3]

More recent authorities, however, have taken the view that the main part of the borough lay outside the ramparts in the Norman period, probably on the ridge beyond the E gate, where the convergence of old roads provided a convenient trading site. *Victoria County History, Wiltshire* vol. 6,[4] says: 'There is no evidence of any clearing being necessary to make room for the Norman castle on the crown of the hill-top; and the disadvantages of the site for all save defensive purposes make it likely that at this period (pre-Conquest), *as later*, the burgesses normally lived outside the ditch, betaking themselves within it only when security required' (italics mine). The section on the topography of the borough deals mainly with the lands to the E and SE of the E gate, implying, though not specifically stating, that the town's centre lay there.

The Royal Commission on Historical Monuments (England) *City of Salisbury*, vol. 1 (1980),[5] says: '. . . the Norman castle did not at first include the whole area of the hill-fort. The bailey occupied the E sector only, being defined on the W by the radial banks to S and NE of the motte, and on the other sides by the enlarged rampart of the E part of the prehistoric circuit'. 'With the castle mound and bailey occupying the E part of the former hill-fort and the ecclesiastical precinct much of the W part there would have been little room within the defences to accommodate a developing civil settlement; perhaps from the beginning most or all of it lay outside the defences on E, S and W.'

* 35 Upper St., West Harnham, Salisbury, Wilts. SP2 8LS.

1. W.H. Rich Jones (ed.), *Register of St Osmund* (Rolls Series, lxxviii, 1883–4), vol. 2, p. 55.
2. Accounts of the history of Old Sarum are given in: E. Crittall (ed.), *A History of Wiltshire*, vol. 6 (The Victoria History of the Counties of England, London: Oxford University Press, 1962), Francis Hill, 'Old Sarum', pp. 51–67. (VCH 6); Royal Commission on Historical Monuments (England), *Ancient and Historical Monuments in the City of Salisbury*, vol. 1 (London: HMSO, 1980), pp. xxviii–xxxii.
3. E.g. D.H. Montgomerie, 'Old Sarum', *Archaeol. J.* 104 (1947), p. 140.
4. VCH 6, pp. 53, 63.
5. RCHM(E) 80, pp. xxxi, 6.

The opposing views have been interpreted for the general public in the models of Old Sarum in the 12th century displayed by the Salisbury and South Wiltshire Museum during the past 60 years. The 1920s model (now withdrawn) showed the houses of the townspeople scattered over most of the area of the hill-fort not occupied by the castle mound or the known ecclesiastical precinct. The present model shows the main cluster of houses outside the fort along the roads leading to the E gate and below the SE ramparts, and only a few buildings within the enclosure and outside the W gate.

Except for the castle mound and the ecclesiastical precinct the area within the ramparts has not been investigated archaeologically. Until such work can be undertaken the site of the civil settlement will not be known with certainty, and the E suburb theory illustrated by the Museum model must be regarded as open to question. In this paper I shall put forward some points which in my view tend to support the earlier theory that the city lay within the ramparts; give a brief summary of early antiquarian enquiries and 20th-century archaeological investigations; and finally re-examine some 11th- to 13th-century documentary evidence.

There appears to be no good reason why (as suggested by *VCH* 6 in the passage quoted above) the pre-Conquest townspeople should have deserted the interior of the fort for the relative insecurity of the exposed saddle outside the E gate, a site further from the water supply afforded by the river Avon than the W part of the fort itself.[6] *VCH* 6 cites the absence of evidence for any clearance within the enclosure to make way for the Norman earthworks as indicating that the Saxon settlement lay outside. But the evidence – or rather lack of it – is equally compatible with the view that the Saxon borough lay within the ramparts and that most or all of it remained there after the Conquest, in an area not affected by the Norman developments.

The passage quoted above from the Royal Commission on Historical Monuments (England) suggests that in the post-Conquest period the S and NE radial banks (which partly remain today) were part of the castle defences, and the half of the enclosure which lay to the E of them constituted a military bailey from which civil development was excluded. This would not, however, necessarily have meant that the heart of the borough – its market place, principal church, and the houses of the moneyers – was situated, or had to move, outside the enclosure. Until 1075, when the ecclesiastical precinct was established in the NW quadrant, the W half of the enclosure would have been available for the burgesses, and thereafter some 6 acres in the SW remained. In about 1130 Bishop Roger (1107–39) obtained custody of the castle as well as the cathedral and built a curtain wall round the W and most of the E circuit of the ramparts, so that the whole hill-fort once again lay within a single defensive system. Thereafter the N/S banks can have served no serious defensive purpose, and the houses of the burgesses may well have spread into the former military bailey – if, indeed, pressure on space in the W half had not led to this development starting even earlier.

Given the cramped nature of the site it is reasonable to suppose that suburbs grew up outside the gates, but such evidence as we possess seems to point to the W rather than the E gate as the earliest site for this development. Bishop Osmund (1078–99) granted plots for canons' houses 'outside the gate of Castle Salisbury',[7] and the most convenient site would have been outside the W gate, close to the cathedral (see below for a detailed examination of this point). Much of the traffic coming to Old Sarum after 1075 must have been destined for the cathedral precinct; suburban development connected with the Church, such as housing for the work force building the cathedral, pilgrims' hostels, etc., would naturally have tended to occur by the W gate. A suburb at the W gate would also have had the advantage of being closer to the river.

JOHN LELAND

Leland, visiting Salisbury in about 1540, wrote:[8]

'Osmund . . . Bisshop of Saresbyri erectid his cathedrale chirch ther in the *west part of the town* . . .' [italics mine].
'I do not perceyve that ther were any mo gates in Old Saresbyri then 2, one by est, and an other by west. Withoute eche of these gates was a fair suburbe. . . .'
'There have been houses in tyme of mynd inhabited in the est suburbe of Old Saresbyri: but (now) ther is not one house nother (with)in Old Saresbyri or without in(habite)d. . . .'
'The diche that environid the old toun was a very deepe and strong thynge.'

It is clear from these extracts that both Leland himself and the people who informed him of the local traditions thought that the old town was situated within the ditch and ramparts, and that the settlements outside the E and W gates were merely its suburbs.

6. H. Braun, 'The Earthworks of Old Sarum', *WAM* 57 (1960), p. 407 suggests that the Saxon town lay at the W end of the enclosure.

7. *Register of St Osmund*, vol. 1, p. 198.

8. L. Toulmin Smith (ed.), *The Itinerary of John Leland* (London: Centaur Press, 1964), vol. 1, pp. 260–1.

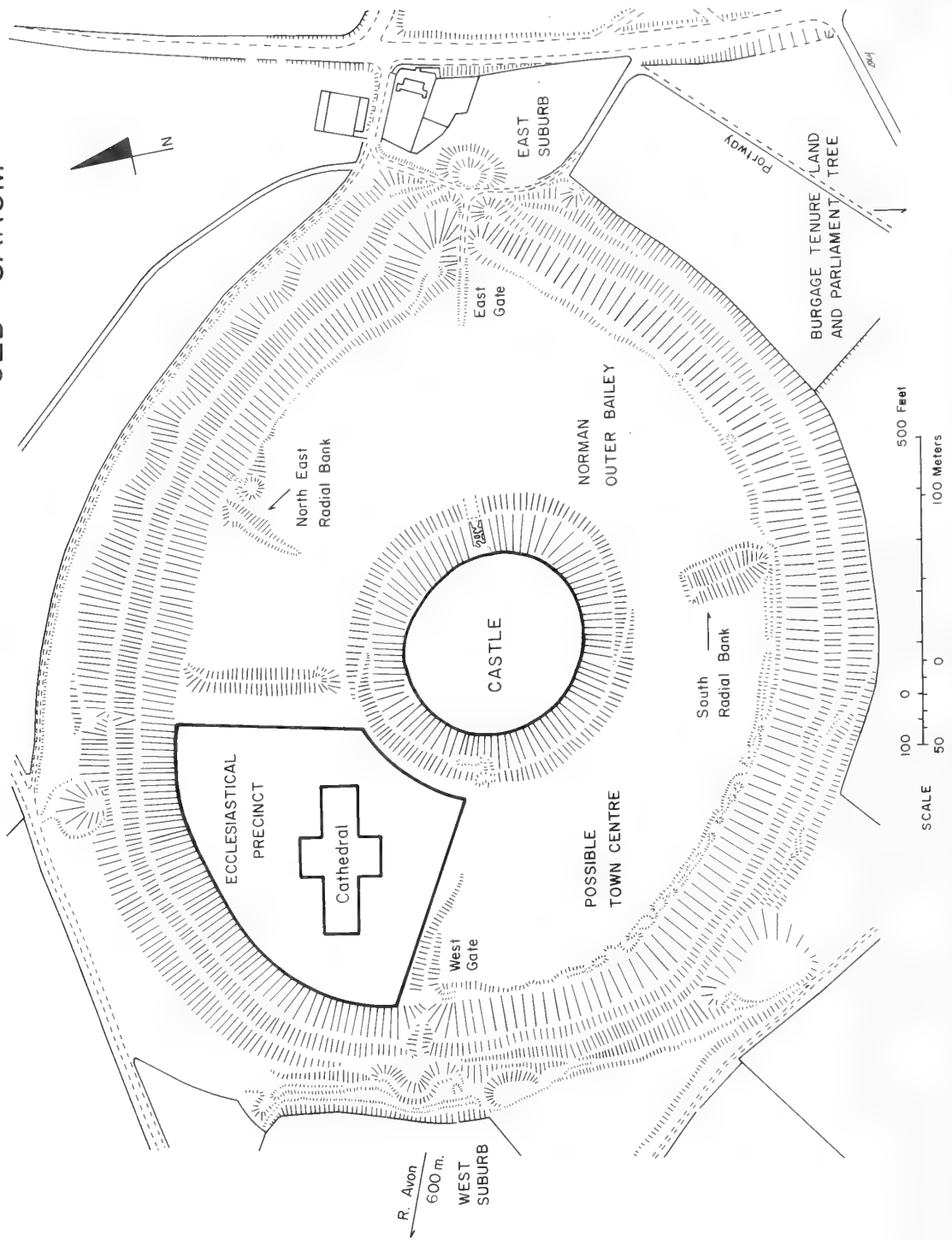

Figure 1. Old Sarum, showing elements in the lay-out of the Borough.

NINETEENTH-CENTURY MAPS

A map by Henry Wansey published in 1819[9] shows plots of 'burgage tenure land' on either side of the road known as the Portway at a point 400 yards SW of the E gate of the castle. The 'parliament tree' thought to have marked the site of the former market-place is shown a short distance to the W of the plots. Using maps attached to the inclosure award for Stratford and Milford (1800) and the tithe commutation award (1839), *VCH* 6[10] identified further plots of borough land outside the E gate, S of the ramparts, and along the road leading from the W gate to the present bridge over the Avon. These, as well as the Portway plots of Wansey's map, may be assumed to have formed part of the city in the late medieval period. As evidence for the site of the borough between 1066 and 1226, however, they are all open to the objection that it is impossible to tell at what date they were first occupied.

Wansey's map also shows a 'city wall' which skirts the outer rampart on the N side and encloses an area of about 50 acres outside the ramparts to the S. In *Old and New Sarum or Salisbury*, 1843,[11] Henry Hatcher claimed to have found traces of this wall, and he believed that the medieval borough lay within it. His plan of Old Sarum, while marking the wall with a continuous double line in the N, has a broken double line to the S, suggesting that its course or its existence here was conjectural.

No trace of this 'city wall' has been revealed by modern excavations, and even if its existence and line could be firmly established, it would create more problems than it would solve. What purpose was served by a wall running, for the N half of its circuit, immediately outside and below the outer rampart of the fortress? Why did the Portway burgage plots as well as the parliament tree lie outside the wall to the S? Why did Leland make no reference to this wall, of which there would presumably have been more evidence in the 16th than in the 19th century, asserting on the contrary that the town lay within the 'deep and strong' ditch? Until questions such as these can be answered the conjectural wall cannot be regarded as firm evidence for the site of the medieval borough.

SOCIETY OF ANTIQUARIES EXCAVATIONS 1909–15

The Society's work,[12] the only large-scale excavations carried out at Old Sarum, concentrated on the inner castle mound and on the cathedral and its environs. The excavators made it clear in their reports, however, that they thought that 'the city' had lain within the ramparts both before and after the Norman Conquest, and expected to find traces of it in the outer bailey. They looked for, but failed to find, traces of a wall to the S of the cathedral cemetery 'forming a close wall as had been expected'.[13] Unfortunately the First World War put an end to their investigations at this point.

LATER EXCAVATIONS

Excavations carried out in 1933[14] outside the E gate revealed 'Norman' cess-pits which were not attached to buildings and which were thought to represent the communal refuse pits of the town; some graves of uncertain date; and a building, possibly a church, with fragments of 13th-century carved stonework.

Further excavations in the vicinity in 1958[15] produced evidence of cess-pits dating from the 12th to the 14th century, many more graves, and one substantial building which the excavators thought was probably built, of timber and thatch, in the 12th or 13th century, and rebuilt on stronger foundations of flint etc. in the late 13th or 14th (i.e. after the establishment of New Salisbury).

These excavations indicate the existence of some form of occupation in the E suburb before 1226, and of more substantial building thereafter, but their evidence is too limited either to establish or to refute the view that the heart of the borough lay in this area at either period.

Evidence for the existence of a W suburb came to light in the 1960s, when ploughing of the field immediately outside the W gate produced a scatter of domestic refuse and some large fragments of building stone.[16] No systematic investigation of this area has, however, been undertaken.

An investigation of the outer ramparts was carried out in 1957;[17] this provided the evidence for the Royal Commission on Historical Monuments (England) interpretation of the Norman defences which postulates a military bailey in the E half of the enclosure.

9. Printed in H. de S. Shortt, *Old Sarum* (London: HMSO, 1965), p. 29.
10. VCH 6, p. 63.
11. Robert Benson and Henry Hatcher, *The History of Old and New Sarum* (constituting vol. 6 of R.C. Hoare, *History of Modern Wiltshire*: London, 1843), pp. 31, 604; plan opp. p. 605.
12. *Proc. Soc. Antiq.*, vols. 23–28 (1910–1916).
13. Ibid., vol. 25 (1913), p. 98.
14. J.F.S. Stone and J. Charlton, 'Trial Excavations in the East Suburb of Old Sarum', *Antiq. J.* , vol. 15 (1935), pp. 174–92.
15. J.W.G. Musty and P.A. Rahtz, 'The Suburbs of Old Sarum', *WAM* 59 (1964), pp. 130–54.
16. Ibid., p. 141.
17. P.A. Rahtz and J.W.G. Musty, 'Excavations at Old Sarum 1957', *WAM* 57 (1960), pp. 352–67.

DOCUMENTARY EVIDENCE

Foundation Charter of Bishop Osmund 1091

The charter,[18] after declaring that Osmund had built the church of Salisbury and established canons therein, granted to them various properties, including: *'Ecclesiam de Seriberia' cum decimis et ceteris appendiciis, et ii hidas et dimidium in eadem villa et vi hidas et dimidium in Stratford. Et ante portam Castelli Seriberiensis terram ex utraque parte vie in ortorum domorumque canonicorum necessitate.'*[19]

[i Note in A.R. Malden's edition: 'old Sarum'.]

This passage has been translated by C. Wordsworth:[19] 'the church of Salisbury (Old Sarum), with the tithes, and other appurtenances there, and 2½ hides in the said vill, and 6½ hides in Stratford (sub castle), and *before the castle gate of Salisbury land on each side of the road for the requirements of Canons' gardens and dwellings*'.

Note: The words in brackets viz. (Old Sarum) and (sub castle) were inserted by Wordsworth to identify the places by their modern names.

Osmund's first object in establishing his chapter was undoubtedly to ensure the proper performance of the liturgy, the Work of God, in his cathedral. Matins, the first of the canonical hours, began at latest soon after dawn and the canons, who at this period performed the service of the choir in person, had consequently to live as near to the cathedral as possible. If the SW quarter of the enclosure was empty, why did Osmund not house the canons there rather than 'before the gate'? It is difficult to see any reason other than that the space was already fully occupied with the houses of the townspeople. The clear implication of the charter is therefore that in the 1090s a substantial part of the borough lay within the enclosure.

Outside which gate were the canons' plots situated? The phrase used in Wordsworth's translation, 'the castle gate of Salisbury', suggests it was the main entrance to the military area, the fortified E gate. I believe, however, that this translation of 'portam Castelli Seriberiensis' is misleading. Both Malden and Wordsworth claim in their notes that the first 'Scriberia' in the text is the modern Old Sarum. More recent research has, however, established[20] that the Bishop of Salisbury's estate named 'Sarisberie' in Domesday Book consisted of the land *surrounding* the royal borough of Old Sarum, and comprised the later parishes of St Martin's, Stratford-sub-Castle and Woodford; the settlement round St Martin's, apparently the most important of the three, is sometimes referred to as 'Vetus Seriberia', Old Salisbury, at this period. The 'church of Seriberia' referred to in the Foundation Charter is undoubtedly St Martin's, and the 2½ hides 'in the said vill', land in that parish.

Having accepted 'Seriberia' as present-day Old Sarum, Wordsworth in his translation missed the point of the distinction clearly made in the text between 'Seriberia' and 'Castelli Seriberiensis'. These are two different places – (Old) Salisbury or the village at St Martin's, and 'Castle Salisbury' or the borough of Old Sarum. ('Castle Salisbury' as a name for the borough was still in use until at least the late 13th century.)[21] The phrase used to describe the site of the canons' plots – *'ante portam Castelli Seriberiensis'* – should therefore not be translated 'before the castle gate of Salisbury', indicating the main fortified entrance to the castle and its bailey (the E gate), but 'before the gate of (the borough of) Castle Salisbury', a phrase which leaves open the question whether the E or the W gate was intended.

As I have indicated above, proximity to the cathedral was of paramount importance in siting the canons' houses, and it is difficult to believe that they would have been placed outside the E gate, involving a walk of half a kilometre to the precinct even if the shortest route through the two defences of the E gate and the radial banks was always open, when land belonging to the see was available outside the near-by W gate. I believe, therefore, that the canons' houses of the charter were sited outside the W gate, where they formed the nucleus of the W suburb of the borough of Castle Salisbury. The siting of plots specifically 'on each side of the road' suggests that a planned settlement may have been made at this period along the road leading from the W gate to the river Avon.

Miracles of St Osmund

A papal enquiry held in 1230 into the canonization of Bishop Osmund recorded a number of miracles alleged to have taken place at Old Sarum *c.* 1190–1215.[22] The

18. Printed in A.R. Malden, *The Canonization of St Osmund* (Salisbury Wilts. Record Society, 1901), p. 49, from the 15th century. MS entitled *'Registrum in causa Canonizacionis beati viri Osmundi olim Saresberiensis Episcopi in Anglia'* in Salisbury Cathedral Chapter Muniments. There is another copy of the charter in the 13th-century *'Vetus Registrum Ecclesie Sarum al Registrum S. Osmundi'* now in the Wiltshire County Record Office, Trowbridge, which is printed in the *Register of St Osmund*, vol. 1, p. 198.

19. C. Wordsworth and D. Macleane (ed.), *Statutes and Customs of the Cathedral Church of the Blessed Virgin Mary of Salisbury* (London: William Clowes and Sons, 1915), p. 19.

20. VCH 6, pp. 51, 52.

21. Ibid., p. 63.

22. Malden (note 18).

accounts of the witnesses afford some useful incidental information about the place and its people.

With one exception the lay witnesses to these miracles were identified on taking the oath by their domicile, which was 'of Salisbury' in each case. The exception occurs in the miracle of Symon, a stranger who became paralysed while lodging in the house of a certain Sampson and was eventually cured at Osmund's tomb.[23] When Sampson took the oath he was not said to be 'of Salisbury' and was identified only by his trade (pelterer) and his office of hundredman – presumably of Underditch, the hundred in which Salisbury lay. Another witness, however, mentioned that Sampson was of 'Subsona' – 'below the circle' (of the ramparts). The implication is clearly that the people who lived below, or outside, the ramparts were not citizens 'of Salisbury'.

According to Agatha,[24] wife of Godfrey 'of Salisbury', Symon was taken in a cart from Sampson's house to 'the gate of Castle Salisbury in which the sick used to lie' *(ad portam Castri Sarum in qua infirmi iacebant)*. Where was this gate? Sampson himself called it simply 'the gate of the sick' *(porta languidorum)*, implying that this was its main distinguishing feature. I suggest that the E gate with its fortified gate-house, the main passage through the ramparts to the castle and its bailey, would not have been identified in this way, and that the witnesses were referring to the W gate, which offered the nearest access to the cathedral and must have been the most profitable pitch for begging.

Agatha saw Simon lying for a year or more in this gate; she remembered many details of his case and was present on the morning of his miraculous cure. Giving testimony to other miracles, Margaret, widow 'of Salisbury', recounted three separate occasions when she saw mad people cured after praying at Osmund's tomb, 'and the woman Edith (widow 'of Salisbury') saw this and many others of the city of Salisbury'.[24] Their stories imply that they were constantly in and around the cathedral and the W gate, and are difficult to reconcile with the view that the people of Castle Salisbury lived in the E suburb and came to the W part of the enclosure only when they had occasion to visit the cathedral itself. The accounts suggest rather that the witnesses were testifying to marvels which occurred in their own city, almost on their own doorsteps, which lay in the shadow of the cathedral where these well-attested events took place.

Bulls of Pope Honorius III 1217 and 1218[25]

In the late 12th century the Chapter of Salisbury found its cramped cathedral precinct increasingly unsatisfactory for the expanding activities of the Church. Proposals for a new site were under discussion before 1200, but long delays followed and it was not until 1218 that papal approval was secured for the move to New Salisbury.

Honorius III issued two Bulls on the subject. The first, dated 19 March 1217, was addressed to the papal legate Gualo and instructed him to investigate and report on the complaints submitted by the Dean and Chapter, which were then set out in the Bull. The second, dated 29 March 1218, and addressed to the Bishop and the Dean and Chapter, announced that the legate had found the complaints 'sufficiently proved' and authorized the move. The second Bull gives a slightly modified list of complaints, omitting, for example, the claim that several clerks had been blinded by the glare of the chalk. Gualo had evidently checked the complaints as instructed and found this one not proven. We may reasonably conclude that he did his work conscientiously and that, where differences occur, his account is to be preferred to the earlier version.

The Bull of 1217 stated that the cathedral clergy did not have enough houses within the precinct and were consequently obliged to rent from soldiers *(a militibus)*, and on account of this and other inconveniences few clerks were willing or able to reside. The Bull of 1218 refers to the renting of houses of laymen *(domos laicorum)*, implying that the landlords included townspeople as well as the military occupants of the castle. Clearly there *were* houses situated within the ramparts which could be rented by those who could afford it. The fact that such houses were hard to come by and many of the clergy found the rents prohibitive suggests that the town was in a flourishing condition.

A further complaint is that 'the faithful who wish to visit the mother church on Ash Wednesday, Maundy Thursday, synods, ordinations and other festivals are refused entry, the guards of the castle giving as an excuse that some danger threatens the defences'. The Bulls refer only to the denial of access on major festivals when lay people would come from a considerable distance to visit the cathedral. It is not claimed that the citizens of Salisbury itself were prevented at other times from resorting to the cathedral in the customary way, although the arbitrary closing of the gates did not only occur at festivals. The implication is that the

23. Ibid., pp. 36–40.
24. Ibid., pp. 40–41.
25. A copy of the Bull of 1217 is in the Transcript of Papal Registers by Abbé Morini, 1840, BL MS Add. 15351, f. 94r. The Bull of 1218 is printed in the *Register of St Osmund* (note 1), vol. 2, p. 5.

townspeople were already within the defences and could get to the cathedral whether the gates were open or not.

Henry of Avranches 13th Century

A poem by the court poet Henry of Avranches[26] on the move from Old Sarum describes at length both the inconveniences of the old site and the advantages of the new. Henry would almost certainly have visited both Old Sarum castle and the cathedral at New Salisbury when travelling with the royal court to near-by Clarendon palace, and details which he gives about the two places – for example, that the new church was still unfinished at the time he was writing, and that the old one was at least partially demolished soon after the canons moved down to New Salisbury – suggest that he was speaking from personal knowledge.

The poem is couched in such florid language – Old Sarum is the Mount of Gilboa which bears only bitter wormwood, while at fruitful New Salisbury the very birds compete in singing – that it is easy to dismiss it as of no historical value. However, among the rhetorical flourishes and laboured metaphors one sentence in perfectly plain language stands out: '*In castro stabat urbs castrum in urbe*': 'The city stood in the castle, the castle in the city'. The poem goes on to elaborate at great length the point that castle and city were inextricably involved with one another: the first stood in the second, the second in the first; thus they were certainly not two, etc. etc. In the familiar pattern of a medieval castle town the defences of the two were indeed integrated, so that the fortifications of the castle constituted one section of the city wall. If the borough of Castle Salisbury had been sited in the 'suburbs', completely outside the defences, castle and city would have been much *less* involved with each other than was usual, and Henry's laboured thesis would have been incomprehensible to his contemporaries.

I therefore suggest that, in spite of the artificial style of the poem as a whole, its plain statement on this point should be taken at face value and accepted as evidence that in the early 13th century the main part of the borough of Castle Salisbury lay within the ramparts of Old Sarum.

26. A.R. Malden, 'A contemporary Poem on the Translation of the Cathedral from Old to New Sarum', *WAM* 30 (1898/9), pp. 210–17.

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 127–169.

Excavations at the Deserted Medieval Village of Gomeldon, near Salisbury

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The excavations made at the deserted medieval village of Gomeldon, NE of Salisbury, during the years 1963 to 1968 are reported. The historical records referring to it are presented, and the visible evidence of its layouts as traceable on the surface. The excavation of a total of 10 buildings was undertaken, mostly in the building complexes defined by platforms. One building was of a 12th-century date, the rest of the 13th/14th century. The buildings are described, with their finds and the evidence of their dates. The implications of the Gomeldon finds are explored, in particular the evidence of a transitional stage between settlements of long-houses and of detached farms – a pattern subsequently recognized elsewhere. The evidence for the agricultural economy is surveyed. The plans of the buildings, and their variety, are discussed. The finds of pottery, ironwork and other materials are illustrated and described.

The excavations reported here were carried out between 1963 and 1968, and an account had been prepared for publication by 1971. Unfortunately, as the work was undertaken as a research project (rather than a rescue dig) it proved impossible to obtain a publication grant then, as was necessary because of the report's length. Consequently the report was shelved. Now, some 15 years on, changing attitudes to the publication of long excavation reports make it possible to publish this account. In doing so, the opportunity has been taken to revise the original text, and the result is a slimmed-down version. As the excavation was undertaken before the adoption of the metric system for archaeological recording all measurements were taken in imperial units. These have been retained in this revision.

INTRODUCTION

Gomeldon (NGR SU 182356) lies near the SE corner of Salisbury Plain, 4½ miles NE of Salisbury, and forms the S part of the large parish of Idmiston (Figure 1). Idmiston is one of a series of Bourne Valley parishes with E–W strips of land stretching across the River Bourne to the chalk downland on either side. Throughout the medieval period Gomeldon's history was linked with that of Idmiston manor as both were held by Glastonbury Abbey, probably from the 10th century.

The S end of present-day Gomeldon terminates in a downland spur (Gomeldon Hill) which slopes westwards to the river Bourne and southwards to the Winterbourne Gunner boundary. These slopes, known locally as the 'humpty-dumpty' field, were first recognized as a deserted settlement site in 1960 when we were engaged in listing Wiltshire DMVs. In 1961 a survey directed by Mr J. Davis (RCHM(E)) demonstrated that, in addition to the strikingly obvious building platforms and sunken roads, structural remains could be distinguished on the platforms, probably of long-house type.

This survey (Figure 2) provided the base plan for all subsequent work. It also demonstrated that Gomeldon would be a good site to examine as a representative of southern England DMVs to compare with three other major sites then being excavated elsewhere (Hound Tor on Dartmoor, Upton in the Cotswolds, and Wharram Percy on the Yorkshire Wolds). Consequently, excavations were undertaken annually for six years by the Salisbury Museum Research Committee under the authors' direction and with the enthusiastic cooperation of the then owner, the late Commander F.H.E. Skyrme. Interim reports of the first three seasons work have already been published[1] and a summary account of the complete excavation presented in *Current Archaeology*.[2]

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1. John Musty and David Algar, 'Gomeldon 1963, 1964, and 1965', *Salisbury Museum Research Committee Interim Reports* 1–3 (1964–6).
2. David Algar and John Musty, 'Gomeldon', *Current Archaeology* vol. 2, no. 14 (1969): pp. 87–91.

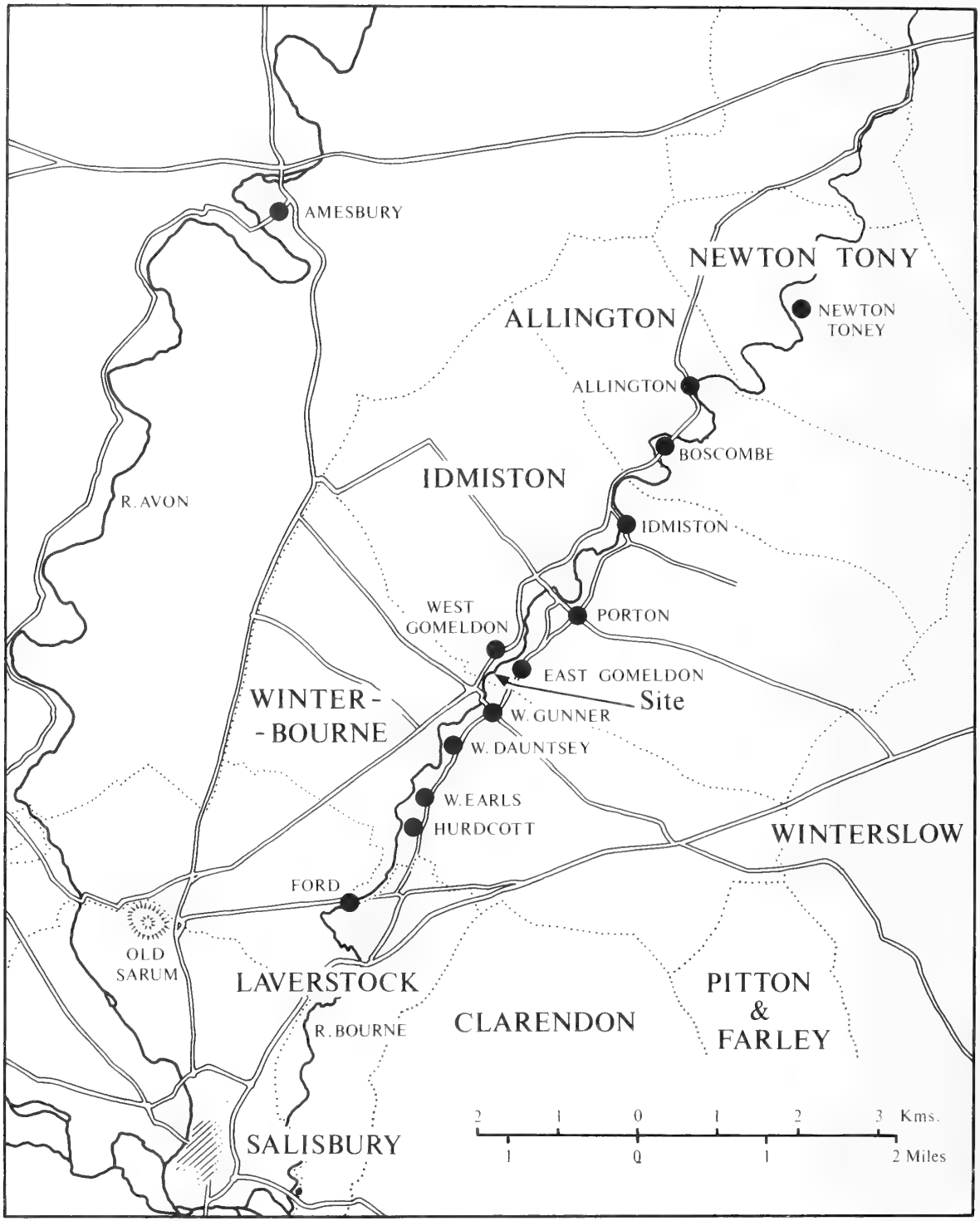

Figure 1. Gomeldon's position in the Bourne valley.

We are grateful to the many members of the Research Committe Group who gave their time each season. In particular, Mr K. Grinstead and Mr J.D. Hadley were responsible for site photography, Mr D. Truckle transported huts and equipment, and Mrs Vera Musty was in charge of the finds hut throughout. Others, notably Mr Ralph Harcourt, have provided specialist assistance and Mr J.G. Hurst was a continual source of encouragement. Mr N. Griffiths is thanked for drawing Figures 1 and 16. All the finds have been deposited in Salisbury Museum.

HISTORICAL BACKGROUND

The earliest recorded use of the Gomeldon place-name (as 'Gomeldona') is in 1189.[3] It is not mentioned in Domesday, but it is generally assumed that the 5-hide estate entered as Wintreburne (one of several estates with that name) is in fact Gomeldon. Both Idmiston and Porton which, with Gomeldon, make up Idmiston parish are listed, and Idmiston is shown as a 10-hide estate in the possession of the Abbot of Glastonbury. As Glastonbury held both Idmiston and Gomeldon until the dissolution, the supposition that the 5-hide estate at Wintreburne equates with Gomeldon is reasonable. Of the 5 hides, half constituted the demesne farm. There were 2 serfs, 6 villeins, 3 bordars, 6 acres of meadow and 60 of pasture. The mill was paying 15 shillings.

Because Gomeldon was a Glastonbury estate, we are fortunate to have published records of the tenantry in 1189,[3] 1235/52[4] and 1518.[5] Unfortunately, Idmiston and Gomeldon are lumped together in the first two documents – suggesting that to a large extent they were then administered as a single estate (as might be expected). However, Gomeldon and Idmiston are described separately in Abbot Beere's survey of 1518. Even so, the demesne lands of both were farmed by a single Idmiston tenant (Robert Wrotte, the reeve), with the arable divided between the Gomeldon and Idmiston fields. It is to be noted, also, that a number of surnames are common to Gomeldon and Idmiston, the Wrotte family being the most prominent in both. The Gomeldon tenants comprised 5 virgaters and 1 demi-virgater in 1518, which compares with 6 villeins in 1086. This demonstrates that although the medieval village was probably deserted in the late 14th century (as will be seen from the excavation results), it was subsequently resettled, although not necessarily in a nucleated form. The population data (Table 1) provide evidence for a decline in Gomeldon's population setting in between 1334 and 1377, when compared with its Porton and Idmiston neighbours, and its slower recovery in subsequent centuries.

It is also possible to compare the extent of Gomeldon and Idmiston arable at different times between 1086 and 1518 (Table 2). The figures for agricultural hides (that is, of actual cultivated land as distinct from fiscal hides, the units for levying geld) are those presented by Morland in his paper on the hidation of the Glastonbury estates.[6] To make comparisons it is necessary to convert hides into acres, and there is uncertainty as to what conversion factor is correct. Although 120 acres is generally taken to the hide, Morland suggests that an 80-acre hide was more usual in Wiltshire; therefore this factor has been used. It will be seen that the arable increased by about 20 per cent over the period. More noticeable is that the ratio of demesne to tenant land had by Abbot Beere's time fallen to 0.5 in Gomeldon (from 1.1) but increased to 1.3 in Idmiston (from 0.7). One might have expected the ratios to have been the other way round if land had been taken back into demesne because of the desertion. Doubtless, in the intervening 150 years (post-desertion) much could have happened to obliterate the effects of the desertion. Similarly, little significance attaches to the fact that 10–15 acres were vacant in the Gomeldon common fields in 1518.

Nevertheless, Abbot Beere's survey contains information bearing on earlier settlement with greater sub-division of holdings. Thus, of the six tenants listed, one, Nicholas Wrotte (described as a native), is said to have one messuage and a half virgate. However, although only a demi-virgater, he held 116½ acres in the two common fields and was the largest holder of tenant land; the others (all full virgaters) held 57½, 57, 25, 30½ and 29 acres respectively, holdings more appropriate to their status. In assembling his holding, Nicholas Wrotte appears to have secured all the associated tofts and crofts as these are mentioned. Thus, he is shown as having, in addition to his half virgate, '*a toft of 3 half virgates* of land enclosed together containing 1 acre 2½p, one close of meadow called Lyffordes mede containing

3. J.E. Jackson, *An Inquisition of the Manors of Glastonbury of the Year 1189* (London: Roxburgh Club, 1882).
4. *Rentalia and Custumaria of Michael of Amesbury 1235–52 and Roger Ford 1252–61*, Somerset Record Society, vol. 5 (1891).
5. Sir Richard Colt Hoare, *History of Modern Wilts*, vol. 5 (Alderbury) (London: Nichols, 1837), pp. 55–72 (from Harleian Ms 3961, fol. 136–145b).
6. Stephen C. Morland, 'Hidation on the Glastonbury Estates', *Somerset Archaeol. and Nat. Hist. Soc. Proceedings*, vol. 114 (1970), pp. 74–90.

date	*Gomeldon*	*Porton*	*Idmiston*
1086 Domesday survey	11 (6V, 3B, 2S)	8	15 (8V, 5B, 2S)
1189 Inquisition of Glastonbury Manors	Included in Idmiston	N/A	31 (tenants)
1235/52 Rentalia and Custumeri of Glastonbury Manors	Included in Idmiston	N/A	32 (tenants)
1327 Subsidy	15 paid 58/½		
1334 Quota	taxed 58/-	64/-	60/-
1337 Poll tax	21 heads	76 heads	74 heads
1518 Abbot Beere's survey	6 tenants	N/A	9 tenants
1545 Benevolence	3 taxed	5 taxed	3 taxed
1576 Subsidy	3 taxed	9 taxed	17 taxed
1662 Hearth tax	7 houses with hearths		
1801 Census	42	153	255
1871 Census	107	167	198

Table 1. Population data for Idmiston parish.

three perches; and one close called Long mede containing 1 acre 3p; *the site of a water-mill* at Gomeldon, now decayed, and a piece of meadow adjoining, containing half a perch, by 8p rent; also *one toft of one virgate* of land called Whitefolds, and a *toft of one half virgate*, and *a toft of one ferdell* of land there containing together 3 acres ½p and one close of meadow there containing 1 acre 1½p'. Thus his holding in the common fields and meadows would appear to have been built up from the holdings of 1 virgater, 4 demi-virgaters and 1 quarter-virgater. Two virgaters are also each shown as holding in addition *the toft of another virgate*: significantly, these held 57½ and 57 acres in the common fields respectively, or two virgates each.

If account is taken of these 'relic holdings', it is evident that the land held in 1518 by 5 virgaters and 1 demi-virgater was, at some time previously, divided between 8 virgaters, 5 demi-virgaters and 1 quarter-virgater. Further, if the virgate was by then equivalent to 30 acres (rather than the earlier 20 acres) these 14 holdings would amount to 322.5 acres; which compares well with the known tenant acreage of 325.5 (Table 2). Abbot Beere's list of tenants thus represents a shrinkage to 6 from a previously higher figure of 14: significantly, 15 people contributed to the Lay Subsidy of 1327.

It is tempting to associate the tofts of these 'relic holdings' with the DMV earthworks. However, the areas given for tofts, curtilages and crofts are far larger than those which can be distinguished on the DMV site. The fact that all but 7 acres of Nicholas Wrotte's arable holding was on the other side of the river in the West Field is not so much of a problem, as he had probably exchanged land in the East Field to consolidate in the other. Significantly, the remainder of the West Field, apart from 5 acres, was held by Robert Wrotte of Idmiston, as it was demesne land. Thus the two Wrottes, doubtless related, had secured possession of 98 per cent of the West Field.

At the Dissolution (1539) both Idmiston and Gomeldon became the property of the Tutt family, who soon after 1554 sold off the Gomeldon demesne estate. By 1640 the 'capital messuage' and farm at West Gomeldon (that is, the demesne holding) was in the possession of Thomas Mompesson. It then passed down several branches of his family until finally, in 1861, it came to Francis Elizabeth, Dowager Countess Nelson, and was

date	*agricultural hides*			*calculated acres (80/hide)*		*total acres*
	demesne	*tenants*		*demesne*	*tenants*	*demesne and tenants*
1086 (Domesday)						
Gomeldon	$2\frac{1}{2}$	$2\frac{1}{4}$		200	180	380
Idmiston	3	$4\frac{1}{2}$		240	360	600
			total	440	540	980
1189 (Inquisition of Glastonbury Manors)						
Gomeldon	–	$6\frac{7}{8}$		–	550	–
Idmiston						
1235/52 (Rentalia and Custumeri, Glastonbury Manors)						
Gomeldon	–	8		–	640	–
Idmiston						
1518 (Abbot Beere's survey)				*actual acres*		
Gomeldon	–	–		149.5	325.5	475
Idmiston	–	–		369.5	290.5	660
			total	519.0	616.0	1135

Table 2. Arable acreages of Gomeldon and Idmiston, 1086–1518.

sold in 1872. By now it was known as West Gomeldon Farm. Its earlier demesne status was concealed by the fact that the Georgian farmhouse in East Gomeldon lying next to the DMV earthworks had assumed the name Manor Farm (and most recently Gomeldon Manor).

As for other substantial buildings, it is recorded in the 14th century that there was a chapel at Gomeldon with the dedication to St Thomas.[7] Its site is presumably in the vicinity of West Gomeldon Farm, possibly in the field known as Chapel Croft, although this field name may only mean that it was church land. By 1540 the chapel was in such a dilapidated condition as to lead to its demolition. We have already noted the Domesday reference to the mill. Evidently it served both Gomeldon and Idmiston as it remained with Idmiston manor at the dissolution. Although in Abbot Beere's 1518 survey the mill was shown 'as now decayed', it must have been put back into service subsequently, as it is marked on Andrew and Dury's map of 1773 and listed as a grist mill in 1841. It is a reasonable assumption that the 18th–19th-century mill was on or near the site of the medieval mill, but we failed to confirm this when we excavated the site of the later mill in 1966.[8]

TOPOGRAPHY OF THE VILLAGE EARTHWORKS

The medieval village (which lies on chalk downland) occupies an area of approximately $6\frac{1}{2}$ acres, although the main earthworks cover only about one-third of this.

The most striking feature is a deeply sunken hollow way, the *village street* (Figure 2, R), which ascends the hill from the SE corner where it leaves Winterbourne Gunner parish. Near the top of the hill the street divides (R1, R2) and is joined by a terrace trackway (R3), which is probably of more recent origin but possibly marks the way to the East Field. R–R1 and R–R2 provided through roads along the valley to the N. Thus R–R1 forded the river and then continued along the W bank, as well as connecting East with West Gomeldon. The R–R2 branch joined up with the section labelled 'modern road' and continued E of the river to the next village, Porton. Doubtless, the village

7. J.E. Jackson, 'Names of Wiltshire Churches', *WAM*, vol. 15 (1875), p. 102.
8. John Musty, 'Water-mills on the River Bourne, South Wiltshire: the excavation of the site of Gomeldon Mill with a note on local post-medieval pottery', *WAM*, vol. 63 (1968), pp. 46–53.

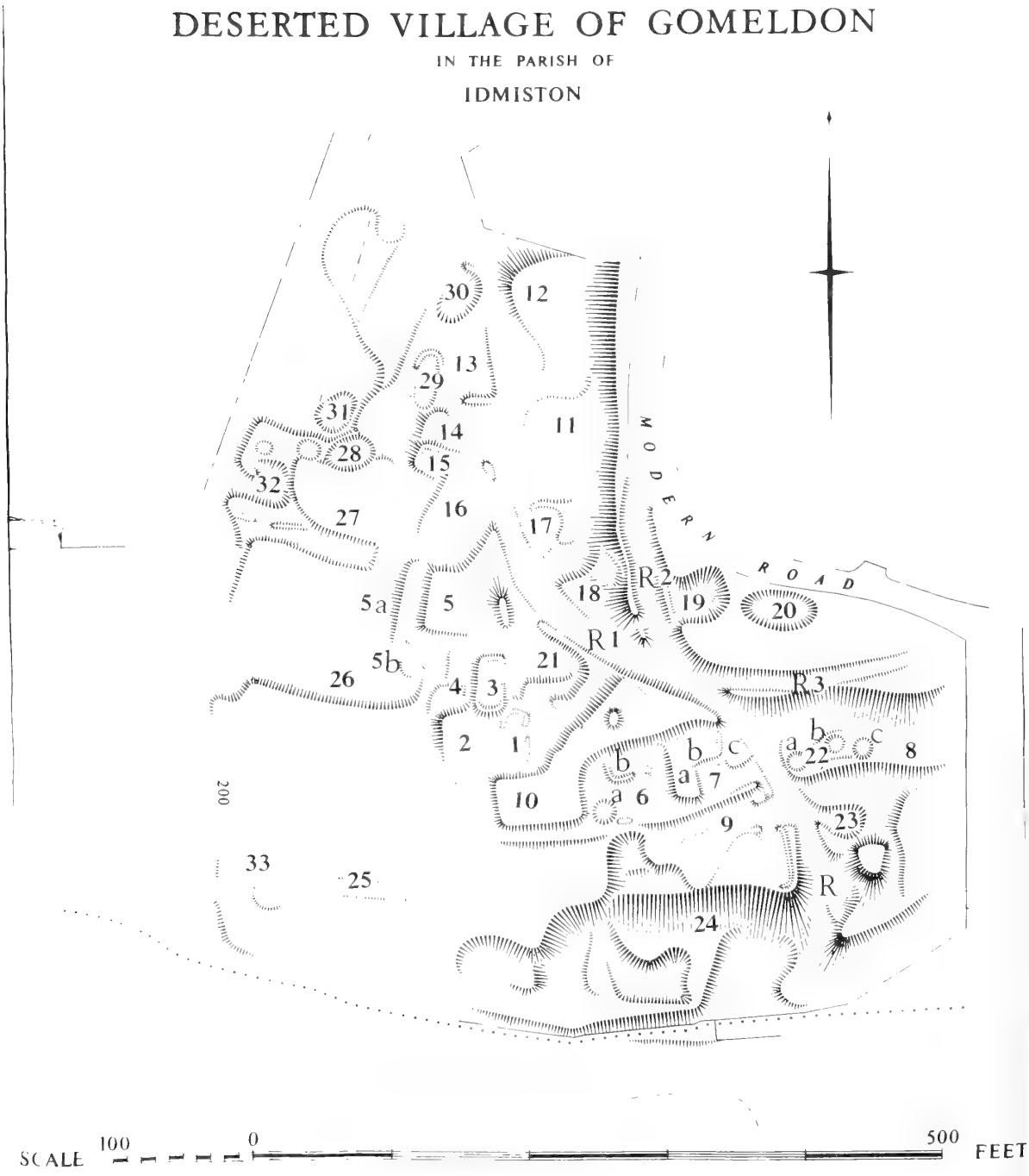

Figure 2. The village earthworks.

street continued to be part of the principal road to Porton from Winterbourne Gunner after the village was deserted and until this road was replaced by a new metalled road (not shown on plan) which skirts the site to the E.

No attempt had been made to front the *houses* on to the village street; rather, these nestle round the hill slopes below the crest on the 225 ft contour, but are so positioned as to have N–S orientations. The earliest (1–5) are sited in tofts formed from platforms obtained by an irregular scarping of the W slopes; the remainder (6A, B; 7A, B, C) lie on platforms in a long scarped area across the S slopes. An unscarped area (10), which separates the two main scarps, provided a further house platform. There is no standard toft size, although all the tofts lie in the size range 3500–6000 sq. ft (12.9–22 perch with an average of 17.5 perch).

There are no crofts attached to individual tofts, but there is one of *c.* 0.2 acres, which appears to be associated with buildings 3/5, and another (*c.* 0.8 acres) with buildings 6/7. Both lie to the W of the village nucleus on the lower slopes and are separated by a scarp line (26) denoting a former hedge or fence. At the bottom of the hill (on the 200 ft contour) another scarp marks the W perimeter, beyond which is the flood plain and the river; that at the bottom of the S slopes marks the Gomeldon/Winterbourne Gunner parish boundary.

Once the village was deserted it evidently became a waste, as there is a large disused chalk quarry (24) at the bottom of the hill. This has destroyed a scarped area (9A–9B) and therefore possibly other medieval buildings. There are also smaller post-medieval chalk-pits (19–23): other pits (30–33) at the bottom of the hill nearer the river may have been dug as water-holes, and at least one is known to be the site of a fallen tree.

There remain to be mentioned the other post-medieval features – the irregular-shaped platforms 11 and 12 in the NW corner of the village and which do front the village street. Evidently, these are the sites of the two cottages shown on Andrew and Dury's county map of 1773 and presumably associated with Manor Farm, the garden of which abuts.

Whereas the neighbouring villages are basically linear street settlements, with the main street more or less following the 200-ft contour, Gomeldon is an agglomerate settlement sited around the 225-ft contour and away from the street. However, there is a small amount of linear settlement between the agglomerate and the river, but, apart from the mill site, this may all be of 18th-century date. The layout of medieval Gomeldon clearly resulted from the need to adapt to its hillside position, which in turn is a consequence of the need to build above the flood plain. However, the situation is not an unattractive one, and sheltered, although it would have been less pleasant in the 13th century, as the hillside would have resembled a terraced chalk-pit.

THE EXCAVATION

During six seasons' work, 10 buildings were excavated (Figure 3). In the first season a total strip of buildings 1 and 2 demonstrated that these were not contemporary but separated by at least 100 years, building 2 being the earlier (12th century). Subsequently it became apparent that this was an isolated instance, as no other 12th-century building was located (although isolated post-holes were found) and all the remaining buildings examined were of 13th/14th-century date. More important, it was realized that the other platforms carried groups of related buildings. Consequently, platforms, rather than individual buildings, became the unit of excavation in the remaining seasons. The excavation sites were then termed 'complexes' and in what follows the excavation results are arranged by complex, of which there are four – 1/2; 3/5; 6 and 7. Digging could proceed fairly rapidly because of the shallow soil cover (9 ins.) and minimum re-building on any one site. A 5-ft grid was used throughout. It became the unit for recording pottery and other finds when the three-dimensional recording system was abandoned after the first season.

Complex 1/2

This consisted of two buildings (Figure 4): a 13th-century long-house (B1), 42 ft long, 13 ft wide internally; and a smaller 12th-century long-house (B2), 28 ft long, 14 ft wide, due W of B1. B2 had survived because it had been covered with flints and used as a yard for B1.

Building 1

This had 2 ft thick walls of unmortared flint trimmed on its outer faces. As with all the Gomeldon buildings, there were no foundation trenches, the flint walls simply resting on the chalk bedrock. The E long wall was set out on its lowest course at the S end and bowed outwards; the W long wall bowed inwards. Approximately 20 post-holes were located, some against inner wall faces, but the average depth and diameter was only 6 ins. – although that at the centre of the S end wall was 1 ft 3 ins. deep. A dry-stone wall joined the NE corner to the scarp behind as if to enclose a yard. Its junction with B1 was diffuse; there were at least two outer faces of the end wall, suggesting rebuilds. An entrance (3 ft wide) in the W long wall was denoted by two post-holes

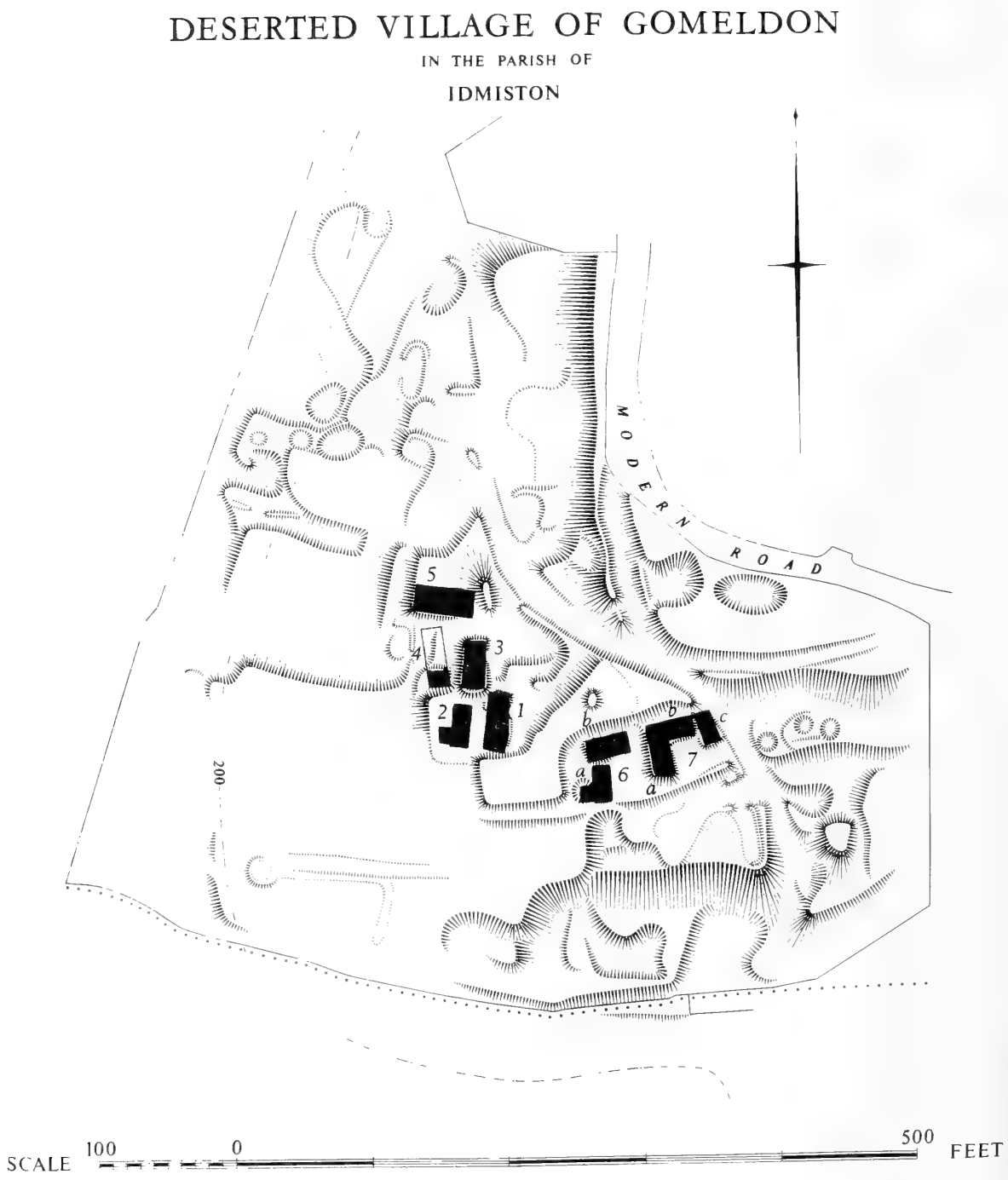

Figure 3. The excavated areas.

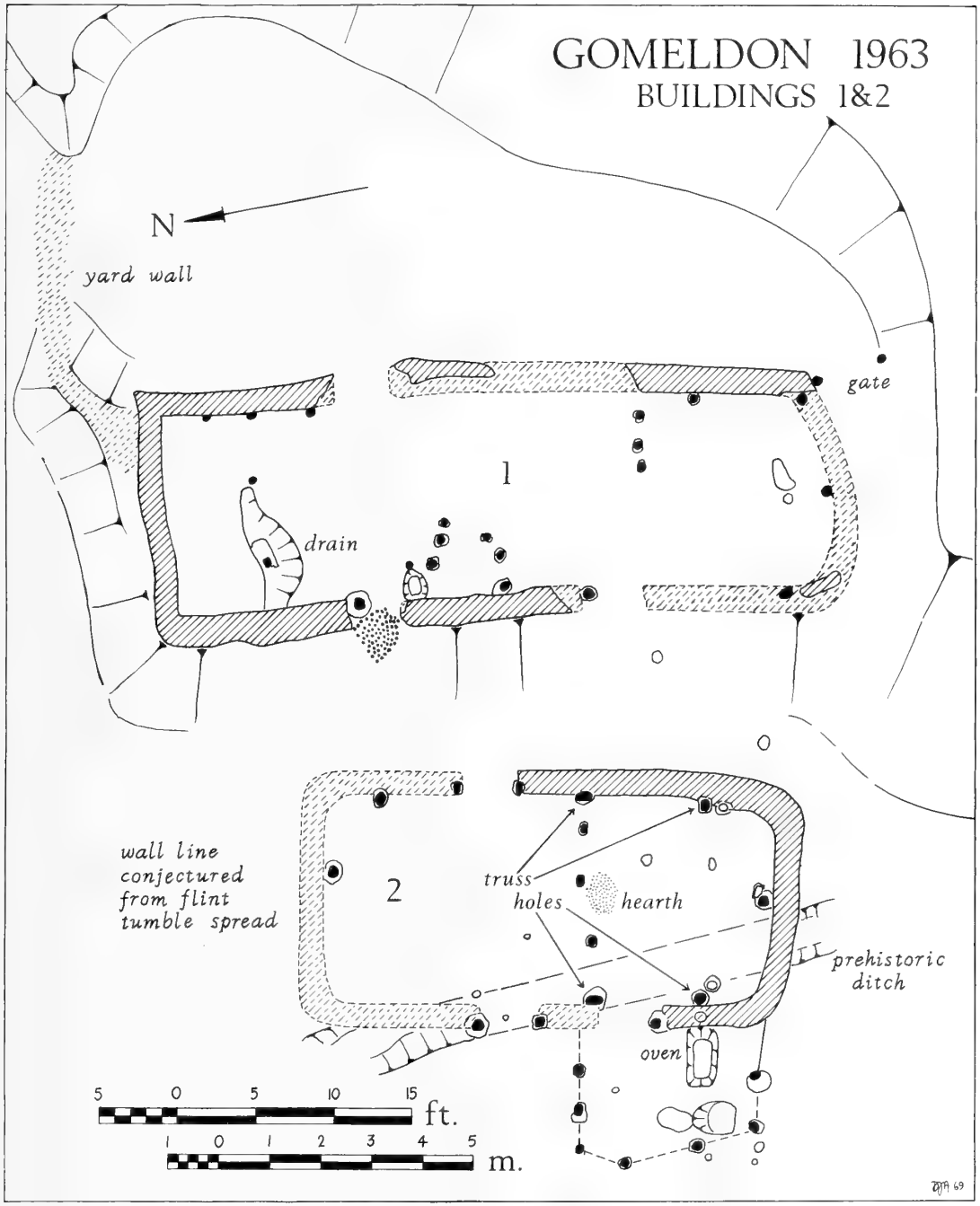

Figure 4. Buildings 1 and 2.

and a deposit of gravel between them (gravel was not found elsewhere on the site). A second entrance in the same wall at the S end can be postulated from a solitary post-hole, and a third is possibly indicated by a break in the E wall. No hearth was located, although one might have been expected in the S end. At the N end a drain ran across the building's width, its edges lined with slabs of tabular flint. Finds included several horseshoes (especially from the N end), cooking-pot rims with well-moulded angular profiles, glazed skillet fragments, a strap-end buckle (snagged in a wall), and a hunting arrow-head (beneath wall tumble). All probably date to the end of the 13th century.

Building 2

This was timber-framed (with two cruck trusses); it also had a wall of flint and chalk construction set as a double row of flints, with smaller flints and chalk rubble sandwiched between. This was only present in the S end, where it was 1½ ft thick and standing to a height of 6 ins. The main roof truss (which divided the house in half) consisted of timbers 7 by 10 ins. in cross-section, with the narrower faces slightly rounded as if only two sides of a round timber had been trued. These were set 1 ft 7 ins. deep into the bedrock at an angle of 60 degrees. On the E side the post-hole base lay beneath the wall, and there was much flint packing. On the W side the packing was rammed chalk, as there was no wall there.

The evidence for a second truss nearer the S end was a post footing on the E side (a slight depression in the chalk) and on the W side an angled post-hole 10 ins. deep for a 7 by 9 ins. timber. Each, too, had a partner as if it had been replaced or re-inforced. A substantial ridge-post, replaced once, had stood just inside the S end wall. The first post was 8 ins. square, set 2 ft deep; the replacement had only been set 1 ft 2 ins. deep, the rest of the hole being packed with flints. There were opposed doorways (3 ft wide) in the N half of the house, one in each long side. That in the E wall had one oval (6 by 10 ins.) and one rectangular (4 by 9 ins.) post, both set 1 ft 2 ins. deep. The corresponding posts in the W doorway were 1 ft 4 ins. by 1 ft 6 ins. (10 ins. deep) and 6 by 7 ins. (1 ft 4 ins. deep).

Between the main truss legs were three equally-spaced post-holes, 6 ins. deep and 6–9 ins. diameter for a partition. This had been burnt – probably set on fire by the hearth, shown by a burnt patch to have been alongside the partition. The burnt posts, the re-used ridge post-hole and a possible re-setting of the second truss all point to a possible re-build. This could have led to a shortening of the building by a retraction of the N end. Also, as the main truss hole runs beneath the wall on one side, it cannot be proved unequivocally that the flint walls are a primary feature; if not, these could have been inserted during a re-build.

The life of the building was sufficient for the floor to have been scoured away to a depth of several inches. It was sealed by flint- and chalk-wall tumble, except at the N end where a track crossed it to B1. Above this tumble was a heavy concentration of late-13th-century pottery, broken tile and other rubbish, consistent with the area having become a yard. Indeed, the even cover of the wall tumble suggests deliberate spreading. In the yard level was a sterling of John the Blind of Luxembourg (1309–46). The uppermost level, at the base of the humus, contained 17th-century pottery probably belonging to the chalk-quarrying period.

An earlier ditch ran diagonally under building 2. A door-post of the W entrance was set in it, and it was alongside the ridge-post at the S end. This ditch is likely to be prehistoric and was probably cut away when the platform was dug out; that is, its compact chalk fill must have been the primary silt of a much larger ditch.

A group of post-holes outside the W wall of B2 at its S end denotes a small associated out-building, possibly a bake-house as there was evidence for an oven. One of the post-holes yielded fair quantities of 12th-century pottery. A hone, a 12th-century horseshoe fragment and pieces of broken quern were also found.

Further W still, at the platform edge, was the start of a shallow depression (referred to subsequently as the 'scarp edge'). A large quantity of 12th-century pottery, including tripod pitcher sherds, was recovered from it as well as 13th-century wares from the upper levels.

Pottery from the main area of B2 included much of a large 12th-century storage jar found scattered over the living-room floor (and embedded in its layers) and in the original E post-hole of the second truss, along with a pair of shears. There was very little other pottery and only one glazed sherd, which was of late-13th-century date and intrusive from the layer above.

Complex 3/5

This complex consisted of a long-house (B3) with two construction phases, a barn (B5), and a yard in the angle between B3 and B5. A slightly earlier building (B4), mainly destroyed, was located in the SW corner of the yard. Part of the E wall of B4 had been re-used to construct an oven (B3/B4) associated with B3. Post-holes from earlier, 12th-century, occupation were found in the yard, but these gave an incomplete plan as the platform had been re-cut in the 13th century. These cut-down stubs showed that shallower holes would have been destroyed.

Building 3

This was 30 ft long and 14 ft wide. The 2 ft thick walls had been extensively robbed, but their lines were marked (especially at the ends) by raised areas, where the chalk bedrock had been protected from weathering by the walls and eaves. This effect was accentuated by the lowering of the floor – by animal activity at the N end and by levelling at the S end. Where wall-flints survived *in situ*, these were found to be less well trimmed than those in building 1.

In building 3, phase 1 (Figure 5), a staggered partition divided the building into living and byre ends, with an internal door providing access from one to the other. Thus, although there were opposed external doorways, there was no cross-passage, as this was interrupted by the partition. The living end had two side-hearths – although one may have functioned as an oven and is so marked on the plan – and an outside door in the W wall was alongside one of these. Much of the byre end was occupied by a large sump. The byre entrance was in the E wall and its external approach was worn away to a depth of 2 ft.

Phase 2 alterations involved removing the partition, levelling the byre-end with flint cobbling and blocking the E (byre) entrance (Figure 6). This also involved re-building much of the E wall, giving a skewed house plan similar to that observed in building 1. The sunken approach to the E entrance was also levelled with flint and chalk infill; finally, the hearths were re-sited so as to lie on the building's axis rather than against the side-walls. The hearths, like those of phase 1, were all 2 ft square and formed from roof-tiles set on edge. These were evidently salvaged material, as some were glazed ridge-tile sides, and there was also a Roman box-tile fragment.

The consequence of these alterations was that animals were no longer living in – a long-house had been converted into a farm-house.

Building 4

This survived only as the S end-wall and one corner which stood $1\frac{1}{2}$ ft high (five courses of flints). As it had been set into the slope the walls had become buried. These were $1\frac{1}{2}$ ft thick and constructed from large flints

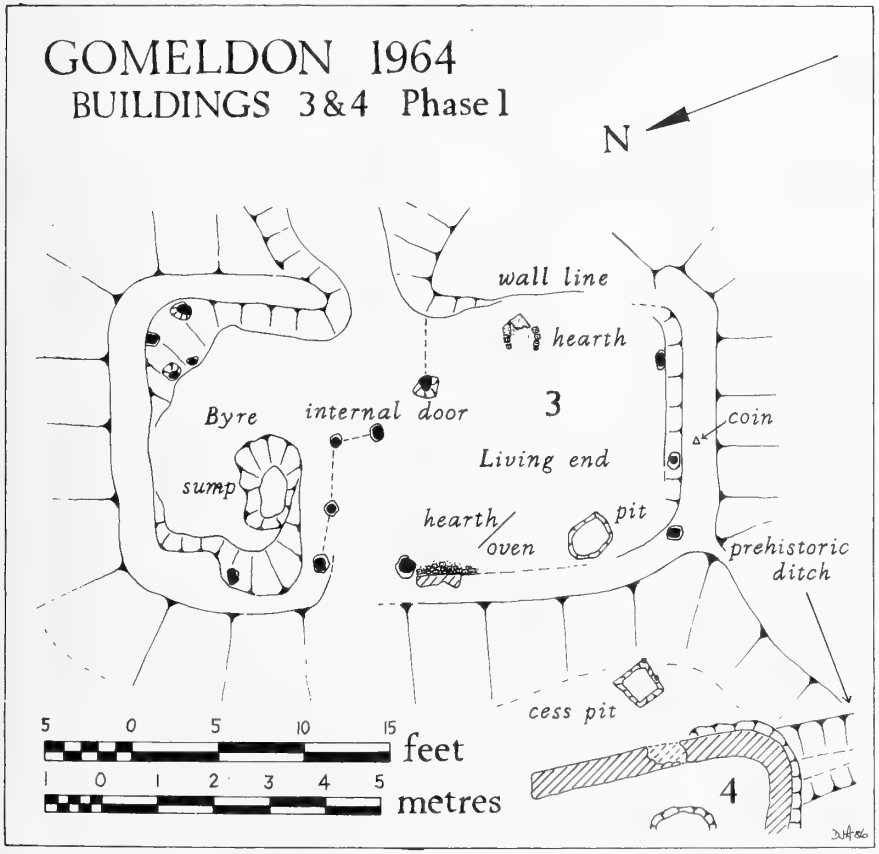

Figure 5. Buildings 3 and 4, phase 1.

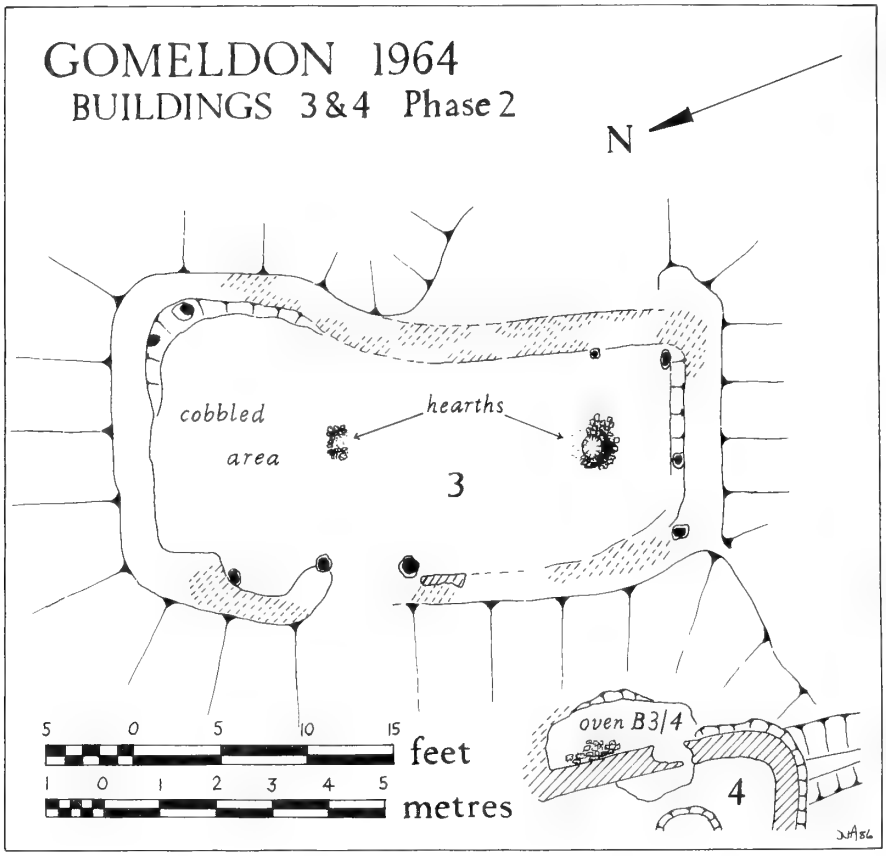

Figure 6. Buildings 3 and 4, phase 2.

trimmed on both faces, a treatment not observed in the other buildings. It is assumed that B4 was demolished, but the surviving wall was retained to form one side of the external oven (B3/B4). The wall cut through a prehistoric ditch which was also located beneath B2 and B5.

Building 5 (Figure 7)

This was a barn, 40 ft long and 17 ft wide, possibly of three bays, with ground walls (1 to 1½ ft thick) of unmortared flint. These had been extensively robbed and mainly showed as gaps in the tumble. However, the walls had survived at the E end and were found to be constructed from small flints infilled between two lines of large trimmed flints. A post-hole on the S side at the E end probably marks the position of a doorway; it may have had a stone facing, as ashlar fragments were found in and around the hole. Two raised chalk areas on the building's axis were possibly the sites of ridge-posts. A prehistoric ditch (possibly re-cut as a drain) crossed the building at the point where another ridge-post might have been located.

Special note is required of the many post-holes inside and just outside the building on the N side. One series was distinct from the rest. These were 5 ins. in diameter and 6 ins. deep, and formed a line of 40 holes (1 ft apart, centre to centre) running the length of the building at a distance of 5 ft from the S long wall, and therefore apparently constituting an internal division. Some were in pairs, as if one carried a strut for the support of a post in its partner, and others were sited between the row of holes and the wall, suggesting sub-division of the area between the partition and the wall. It is concluded that hurdles, possibly for lambing pens, had occupied a third of the barn's width.

Yard area in angle between buildings 3 and 4 (Figure 10, C)

Examination of the slope below building 3 showed that it had been enclosed by a boundary wall which also incorporated the corner of B4. The E and S walls of B5 had been extended in constructing the yard gateways, but there were no gate-post holes. Apart from the stray 12th-century post-holes previously mentioned (one

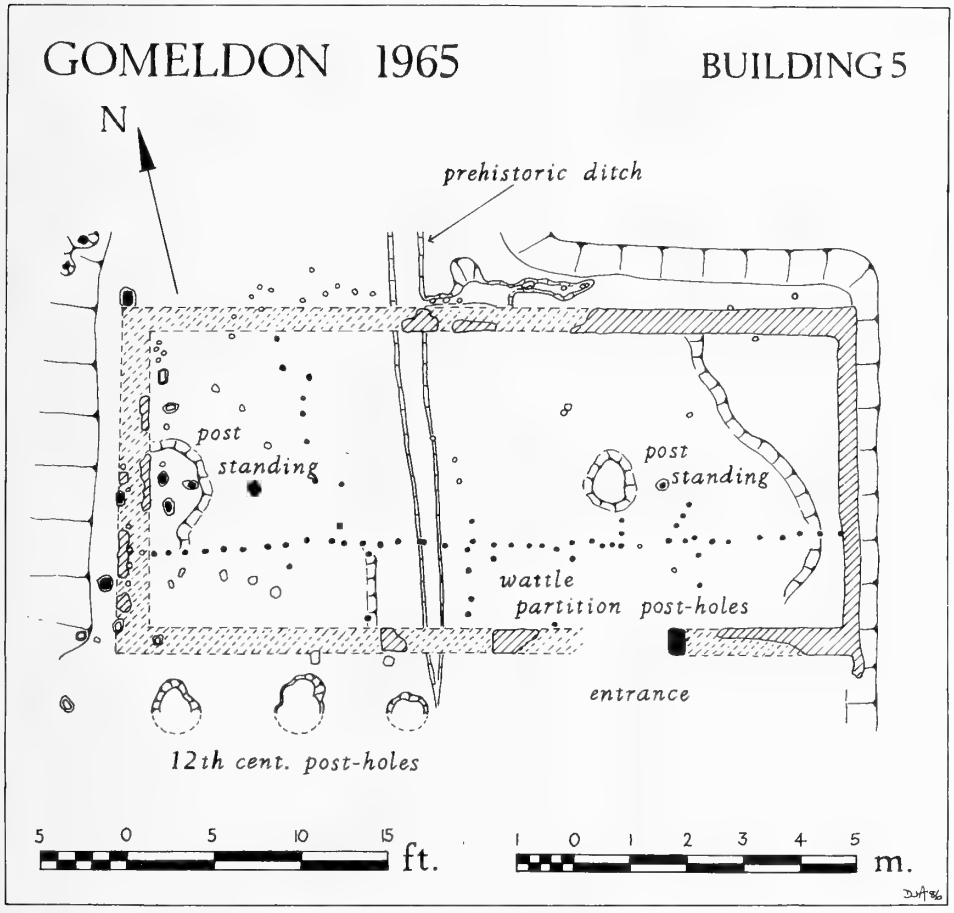

Figure 7. Building 5.

containing part of an infant skeleton), three other features were found, all contemporary with B3.

Thus, oven B3/B4 had been constructed against the wall of B4 which exhibited signs of heating. A base of roof-tile fragments and thick oven tiles had been laid against the wall, and a rough flint wall had been built 2½ ft away from, and parallel to, B4 and uphill from it. The result was a rectangular chamber opening into an oval pit.

Clearance of the SW corner of the yard uncovered a large deposit of ceramic roof-tiles and ash. Fragments of a pottery curfew were found among the tiles. The feature is interpreted as the remains of another destroyed oven (oven B3–5), possibly in a rough shelter.

It is virtually impossible to decide to which building 3 phase these ovens belonged. In the building plans (Figures 5, 6), oven B3/B4 has been shown as of phase 2. However, when the matter is viewed in the context of the evolving use of buildings 1–5 (Figure 10), it makes more sense if oven B3/B4 was in use in B3, phase 1, and oven B3–5 in phase 2. A complicating feature is the latrine pit found very close to oven B3/B4. This was 2 ft square and 1½ ft deep with two slots on one side (1½ ins. square and 1 ft 5 ins. apart), which possibly held the supports for a seat. The evidence for latrine-pit use was reddish-brown staining of the pit walls as similar staining was observed in Laverstock cesspits.[9] Pits of the Gomeldon type would need to be emptied regularly because of their shallowness; in contrast the 12 ft deep cesspits at Old Sarum and Laverstock were probably never emptied.

Dating evidence for complex 3/5 structures

A coin of Alexander III of Scotland (1249–56) was found on the chalk surface on the line of the S end-wall of B3. From inside B3 came pottery similar to that from

9. John Musty, D. Algar and P.E. Ewence, 'The Medieval Pottery Kilns at Laverstock near Salisbury, Wiltshire', *Archaeologia*, vol. 102 (1969), pp. 84–150.

B1 – cooking-pot rims with well-moulded angular profiles and glazed-jug fragments. Also a large part of a glazed skillet with stabbed decoration on the rim came from oven B3/B4; a similar vessel was found in B1. These finds date B3 to the second half of the 13th century, making it broadly contemporary with B1. It is not possible to date the individual phases. There is only limited dating evidence from B5 as there were very few finds. The earliest pottery was of 13th-century date, and no sherds were found in any of the post-holes associated with the building, but 12th-century pottery was obtained from the very large post-holes outside the S long-wall.

Complex 6

This consisted of a 55 ft square platform which had been the site of two buildings (6A and 6B), one replacing the other. Building 6A was orientated down the slope and sited in the W half. It had been extensively robbed of flint, presumably for the building of 6B and also to clear the area. Building 6B was built across the slope at the back of the platform. There was no trace of its N long-wall, which would have been at the back of the platform against the scarp; but its position was marked by a slight step in the chalk. Thus, despite a burnt area indicating a hearth, it is possible that building 6B was never finished. This would also explain the singular observation of many fresh flint flakes lying alongside the long-wall at the W end, evidently knapping refuse from wall construction. Neither building is of orthodox long-house plan, as they lack opposed doorways or sumps, and a noteworthy feature of building 6A is the sunken annexe at the SW corner entered from the main building via rough steps.

Building 6 (Figure 8)

This was 24 ft long and 12 ft wide. Its long walls were only represented by raised areas of chalk (2 ft wide), and the sole remaining section of wall was the S end, which had been left to form part of the yard wall. The surface changes at the N end were less pronounced, because the back of the platform had been re-cut prior to erecting building 6B. Nevertheless, very slight changes in chalk level indicated that B6A did not extend into the area subsequently occupied by B6B and the N wall followed the line suggested on the plan.

A novel feature is the sunken annexe, 7 by 8 ft internally and 2 ft deep, adjoining the W side at the S end. This was originally lined with flints which only survived on the S side, the rest having been robbed, probably in the 17th century judging from pottery in the robber hole (13th-century pottery was found in the grey clay silt at the feature's base). The main building was entered from the annexe by three crude steps, but no other doorways were positively identified – tentative suggestions are the break in the wall line in the SE corner and a post-hole in the wall line halfway up its length. Neither is it possible to determine whether the numerous stake-holes, and more substantial post-holes, in and around the building were contemporary; the random spacing suggests some may have contained tethering posts.

A midden (mainly sheep bones as if from many mutton stews) was found mixed with the S end-wall tumble. This was pottery free and is to be associated with building 6B. However, a 14th-century glazed sherd from beneath the tumble indicates a possible abandonment date for the complex. Other finds included 17th-century pottery (notably part of a costrel neck) from the sunken annexe robber-hole, 13th-century pottery from the annexe floor, and a barrel-lock key of 13th/14th-century form.

Building 6B

This structure, 29 ft long and 13 ft wide, was set back against a prominent scarp (Figure 8). No long-wall survived at the back, but was represented by a slight step in the chalk which was covered with a wedge of chalky soil. The other walls were of knapped and unmortared flint 1 ft 6 ins. to 2 ft 6 ins. thick, and standing 1 ft 6 ins. high. As mentioned previously, the flints had been trimmed *in situ*. There was an entrance 3 ft 6 ins. wide in the S wall. An additional structural feature was a pair of post-holes at the W end, one in each corner; that on the S side partly lying under the S wall. Presumably these had taken a timber truss, but there was no corresponding pair at the other end. It is possible that the post-holes are contemporary with B6A, or an earlier phase, and all that survived the re-cutting of the back of the platform.

The missing wall and the flint-knapping debris suggest that the building may have been unfinished and that the pottery in apparent association came from Building 6A or an even earlier phase. An alternative possibility, which has been discounted, is that the missing wall was of cob and has completely disintegrated. Because of these uncertainties it is difficult to decide on the building's function. The burnt area at the E end indicates a hearth site and the floor at that end was well trodden. At the W end the chalk was angular and comparatively unweathered. If the building was finished, then the E end must have been the living or working area; the other end may have had a raised floor for storage purposes. Certainly the absence of a sump would seem to preclude the housing of animals.

The only finds from building 6B consisted of pot-

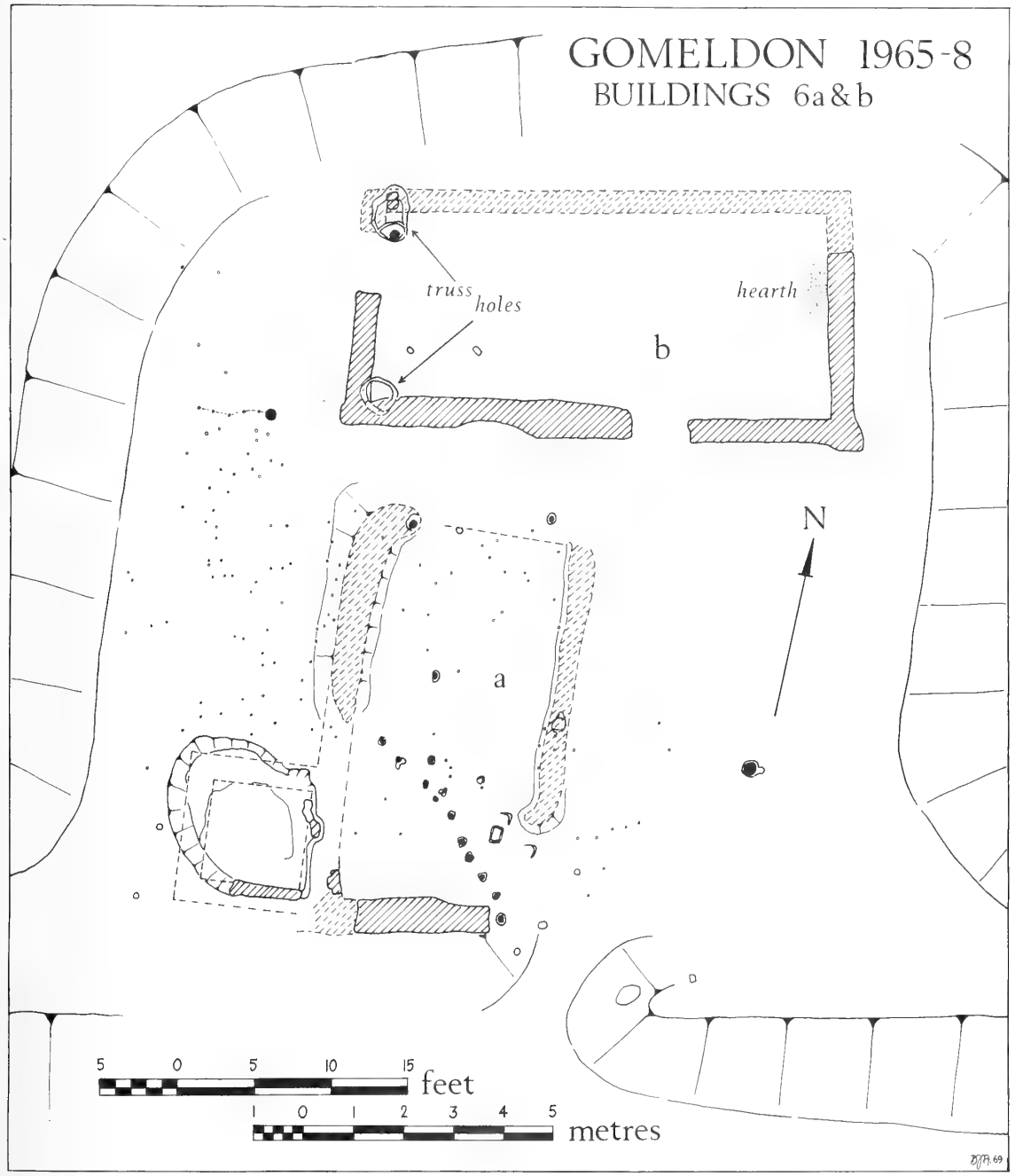

Figure 8. Buildings 6A and 6B.

tery, almost entirely unglazed and of 12th-century character. Glazed pottery from the Laverstock kilns was absent.

The yard exit was through an 8 ft wide gateway at the corner of building 6A, opening on to a trackway running parallel with the S edge of the platform.

Complex 7

The visible earthworks occupied an area 50 ft square, bounded on three sides by major scarp changes and on the fourth by the street. The foundations of two buildings (7A and 7C) could be seen extending down-slope on either side of the platform; a third building was found by excavation (7B, Figure 9). This lay across the slope between the others and was apparently integral with them. The remaining area was occupied by a yard entered from the street by a 10 ft wide gateway.

Building 7A

This was 35 ft long and 12 ft wide, possibly of three bays. The walls were 1½ ft thick (long-walls) to 3 ft thick (end-walls), built from unmortared faced flints. There was a hearth at the uphill end with a fire-back of large trimmed flint blocks, broken grindstones, oven tiles and roof tiles (flat and ridge). This was littered with broken pottery (13th/14th century), especially from skillets, and there was a considerable wearing away of the chalk surface around it. Much of the downhill end was occupied by a large sump of oval plan, 6 by 10 ft and 1 ft 3 ins. deep, which contained broken pottery and mortars of late-13th-century form. Only one doorway was identified. This opened on to the yard from the central bay, but the post-holes of an earlier doorway were located under the party wall between 7A and 7B.

Attention is drawn to the poor state of the sump end, especially to the post-plank construction sited diagonally across the SW corner. A possible explanation, apart from the well-known observation that the end-walls of byres were less well constructed than those of the living part, is that the building may have been subsequently shortened by removing the end bay (the byre). 7A would then have been the same length as 7C. The end-bay area could then have become part of the yard or the site of some rough construction external to the house. One other noteworthy feature was the coincidence of some stake-holes with wall faces to such a degree as to suggest that these were the sites of marking-out pegs used during wall-building – a normal practice of dry-stone wallers.

Building 7B

This presents an enigma. It appears to have been inserted between 7A and 7C, yet it is for all intents and purposes fused to 7A and only linked with 7C by a short length of thin walling. Clearly, more than one phase is involved and possibly, in relation to building 7A, at least three. The excavated evidence poses questions but only provides some of the answers; the rest must be conjectural. In an hypothetical first phase, building 7A may have run across the back of the platform over the area occupied subsequently by 7B as suggested by the direction of wall lines (given dotted extensions on the plan). Subsequently, in a second phase, its orientation was altered to downslope and a doorway opened up on to the area later occupied by 7B. This doorway was later blocked (in a third phase) by the party wall between 7A and 7B, and 7B may have been built to replace the byre of 7A. There are also indications of two different lines for the S wall of 7B; an infant burial lay just under the inner edge of the earlier one.

It seems unlikely that 7B had a domestic use. It was 17 ft by 10 ft and had a very uneven floor and no hearth. An almost mint gold quarter noble of Edward III was found on the floor. This must have been dropped *c.* 1370, the earliest possible date for the building's abandonment. Its loss suggests that the floor had been covered with loose material, perhaps straw.

Building 7C

This was 24 ft long by 8 ft wide. Like 7A it had a blocked doorway which opened on to the drip trench between it and the end wall of 7B, again confirming that 7B in its final form was a later intrusion. Subsequent to the blocking of this doorway (conveniently dated by a large piece of cooking pot beneath the blocking), a cross-passage had been inserted and a hearth constructed against the cross-wall. Thus, for the first time at Gomeldon, we have in complex 7 evidence for two long-houses in the same holding.

On the E edge of 7C, where it abutted the street, were several hundred stake-holes. It is assumed – there was no dating evidence – that these are later than the village and were the sites of hurdle posts belonging to sheep pens making use of the ruined walls of 7C. A short length of wall joined the SE corner of 7C to one of the yard gate-posts. The other post was 10 ft from it and a double row of stake-holes bridged the gap, but these were possibly part of the (supposed) post-medieval series. The perimeter was searched for evidence of a yard wall on the S side, but only two post-holes were found. It must therefore be assumed that a quick-set hedge formed the boundary there.

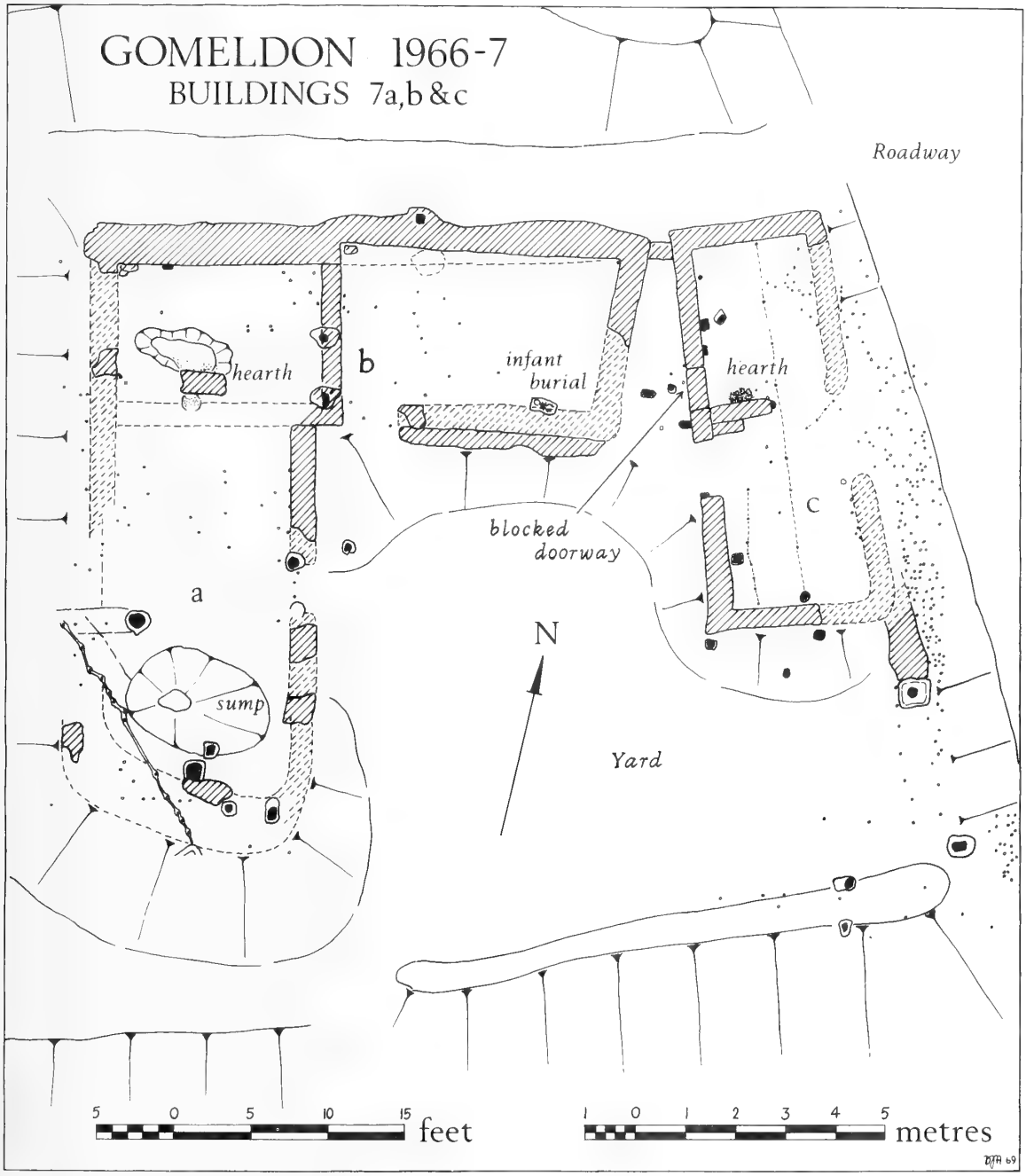

Figure 9. Buildings 7A–C.

MISCELLANEOUS FEATURES AND AREAS EXAMINED BY TRIAL TRENCHING

Scarp edge above and E of Building 1

The scarp face behind building 1 was examined with a cutting, 3 by 25 ft, extending over the top of the scarp. There was a thin turf cover over the scarp face; on the scarp edge above it was a shallow ditch (2 ft wide and 9 ins. deep) with a fill of chalk rubble and large flints. Another cutting, 20 ft S of the first, encountered the ditch again in a corresponding position to that observed in the other cutting. The feature is interpreted as possibly a bedding trench for fence running parallel with the scarp edge above building 1.

Scarp edge W of building 2

The edge of the platform occupied by building 2 was explored with two cuttings. Each revealed a depression about 2 ft deep and extending downslope away from the platform for at least 8 ft. Probing showed that this depression also extended across the slope for about 22 ft. It was roughly parallel to the building and approximately 12 ft from it. Its fill was chalky soil with heavy flinting near the bottom. Twelfth-century pottery, including a tripod pitcher handle, was found in and just above this flinting and, higher still, quantities of 13th-century sherds. Two joining sherds of a prehistoric Beaker were found just below the flint layer; these, presumably intrusive, do not date the feature, which must be medieval on the evidence of the bulk of the pottery recovered.

The feature's purpose is not clear. It possibly started life as a chalk quarry for building material – although chalk would have been available from the digging out of platforms. Subsequently, it was used as a dump for rubbish.

Platform 12

This lies in the NW corner of the village; with the adjacent platform 11, it is distinguished by its irregular shape from the square and rectangular platforms in the village nucleus. An assumption that both 11 and 12 might be of late date was tested with a 30 ft long downhill trench along the platform axis. Several hundred 18th-century sherds, pieces of red brick and hundreds of tile fragments were obtained, confirming that platform 12 is post-medieval. Platform 11 may be of a similar date. The information from one trench is inadequate for defining the platform's function; but clearly a structure had stood there, because several post-holes and a large pit (8 ft diameter and at least 6 ft deep) were located. A setting of flints in a wall-trench also crossed the cutting at right angles.

Features 21 and 27b

A trench was cut through the centre of what was presumed to be a post-medieval chalk quarry (feature 21), cutting away part of platform 1. The only finds were clay-pipe stems, thus confirming the post-medieval date. Also one of the series of three pits (feature 27b) which had been dug into platform 8 was excavated and dated by a clay-pipe bowl to *c.* 1680 – the pit had also been re-used for dumping 19th-century rubbish.

THE LIFETIME OF THE VILLAGE AND ITS STATUS

Modern resettlement, leading to a fairly substantial 20th-century village, means that Gomeldon cannot be classed as a 'lost village' in the fullest sense. Neither is it certain that the surveyed, and mainly excavated, area contained all the peasant houses of medieval Gomeldon. There may have been others nearer the river where an extension of the village street fords the Bourne, and in the present 'Manor' House garden which lies between. Also the demesne farm, and probably the chapel, were on the other side of the river at West Gomeldon; there may have been other medieval buildings there too. However, what is clear is that there was a substantial settlement on the slopes of Gomeldon Hill which had a lifetime of at least 200 years from the second half of the 12th century to a desertion in the mid- to late-14th century (if the coin from building 7B indicates a terminal date for that building). Subsequently, the area was never built on again and became rough grazing land with some chalk quarrying also.

The excavated buildings must represent a large part of medieval Gomeldon – probably six houses in the 13th century contracting to no more than two to three 'farm units' by the 14th century. The 13th-century re-cutting of platforms makes it difficult to be certain as to the number of 12th-century buildings, although it is unlikely that these exceeded those of later centuries. However, the obliteration of the 12th-century buildings, other than building 2, is a puzzling feature. The evidence points to a lack of continuity between the 12th- and 13th-century buildings as far as the excavated area is concerned, for the 13th/14th-century buildings are not modifications of 12th-century structures. It is of course possible that the main settlement of the Gomeldon hillside did not take place until the 13th century; building 2 and stray 12th-century post-holes in the adjacent complex 3/5 may represent the only 12th-century occupation there, with the rest of 12th-century Gomeldon sited elsewhere.

Uncertainty also attaches to the cause of the desertion of the village. The Black Death is suggested as the

cause by a comparison of the population figures for Gomeldon, Porton and Idmiston (Table 1). The 1377 poll-tax return for Gomeldon is approximately one-quarter of that shown for either Porton or Idmiston; yet all three had returned approximately the same sums for the 1334 quota. Something had happened to weaken Gomeldon's population during the intervening period. If this was the plague, then it might explain why the area was avoided subsequently.

The desertion was not caused by an enforced amalgamation of tenant holdings because of a change in owernship or land-use, as Gomeldon was in the possession of Glastonbury Abbey throughout. Certainly by 1518, as we have already seen, some tenants had been able to expand beyond their virgate holdings and one demi-virgater had accumulated 116½ acres. The consequence was that 14 holdings worked at some time previously had been reduced in number to six. The process may have started in the 14th century, as there was an increasing tendency by monastic estates during 1350–1450 to commute labour services and let out demesne land. The way was then open for the individual peasant farmer to increase his holding. If this did happen at Gomeldon in the 14th century, then it would provide an alternative explanation for the desertion of the excavated settlement – or at least a contributory cause.

FROM LONG-HOUSE TO FARM

Although the pattern of holdings in 16th-century Gomeldon may not be a direct consequence of the desertion of the 14th-century settlement, the excavated buildings nevertheless represent the first part of the transitional stage between a settlement of long-houses with an agricultural economy (albeit much dependent on the manorial overlord) and that of detached farms (villages were then mainly occupied by agricultural labourers). This transitional stage sees long-houses being converted into farm-houses, and farm buildings being added, the farm remaining an integral part of the village settlement. This comparatively novel finding at the time of our excavations has since been recognized in other DMV excavations. However, it is still of interest to discuss the development as observed at Gomeldon.

This development on the W side of the village (buildings 1–5) is shown in Figure 10. It begins, in a 12th-century phase, with the small long-house (B2). Then, in the 13th century, phase A, two long-houses (B1 and B4) with 'open' yards (fenced, not walled) occupied the area. In phase B, one long-house (B4) was replaced by another (B3) on a slightly different site; then, in phase C, this was converted to a farm-house by closing the byre and blocking the byre door. A barn (B5) was constructed at right angles to B3 and the ground within the angle enclosed for a yard. At the same time it is likely that B1 was converted to a byre. Thus, two holdings had been amalgamated. At the same time there was a parallel development on the E side of the village. Here, eventually, a long-house (B7A) formed part of a block of buildings which enclosed three sides of a gated yard and might be described as a courtyard farm.

Earlier excavations of sites elsewhere were examined to see if a similar change could be detected. At Beere, Devon, Jope and Threlfall excavated the first long-house to be identified in England;[10] it was of two phases, one of the doorways being blocked in the second. There was also a barn at right angles. Although the excavators do not specify which phase the barn's construction was associated with, the development at Beere may have been analogous to what happened at Gomeldon.

At another Devon site, Dean Moor,[11] Lady Fox demonstrated that the house building originally stood alone (with living and byre ends); later, with increasing stock, a separate byre and yard were constructed, and the house byre was converted to a kitchen.

At Hangleton, Sussex,[12] two buildings (3 and 8) are sited roughly at right angles, suggesting that these, too, constituted a farm unit nucleus. Certainly there were other buildings in the village (B9–12) by the 15th century, which Hurst interpreted as house, barn and oven shed, and called a farm.

At Fyfield Down, Wiltshire,[13] building 1 was of two phases. Opposed doorways of phase 1 were both blocked in phase 2, when the building was enlarged and a new doorway inserted. Again, this may be viewed as the conversion of a long-house to a farm-house. The excavator, Professor Peter Fowler, has confirmed in discussion that this could well be so, because two farm buildings were erected at the same time, parallel to and a short distance from building 1.

Thus, there is evidence from other sites in S and SW England of a move at the end of the 13th century to

10. E.M. Jope and R.I. Threfall, 'Excavation of a medieval settlement at Beere, North Tawton, Devon', *Med. Archaeol.*, vol. 2 (1958), pp. 112–40.
11. A. Fox, 'A monastic homestead on Dean Moor, S. Devon', *ibid.*, pp. 141–7.
12. J.G. Hurst and D.G. Hurst, 'Excavations at the deserted medieval village of Hangleton, Part II', *Sussex Archaeol. Collns.*, vol. 102 (1964), pp. 94–142. Also see 'Part I', E.W. Holden, *ibid.*, vol. 101 (1963), pp. 58–181.
13. H.C. Bowen and P.J. Fowler, 'The Archaeology of Fyfield and Overton downs, Wilts. (interim report)', *WAM*, vol. 58 (1962), pp. 98–115.

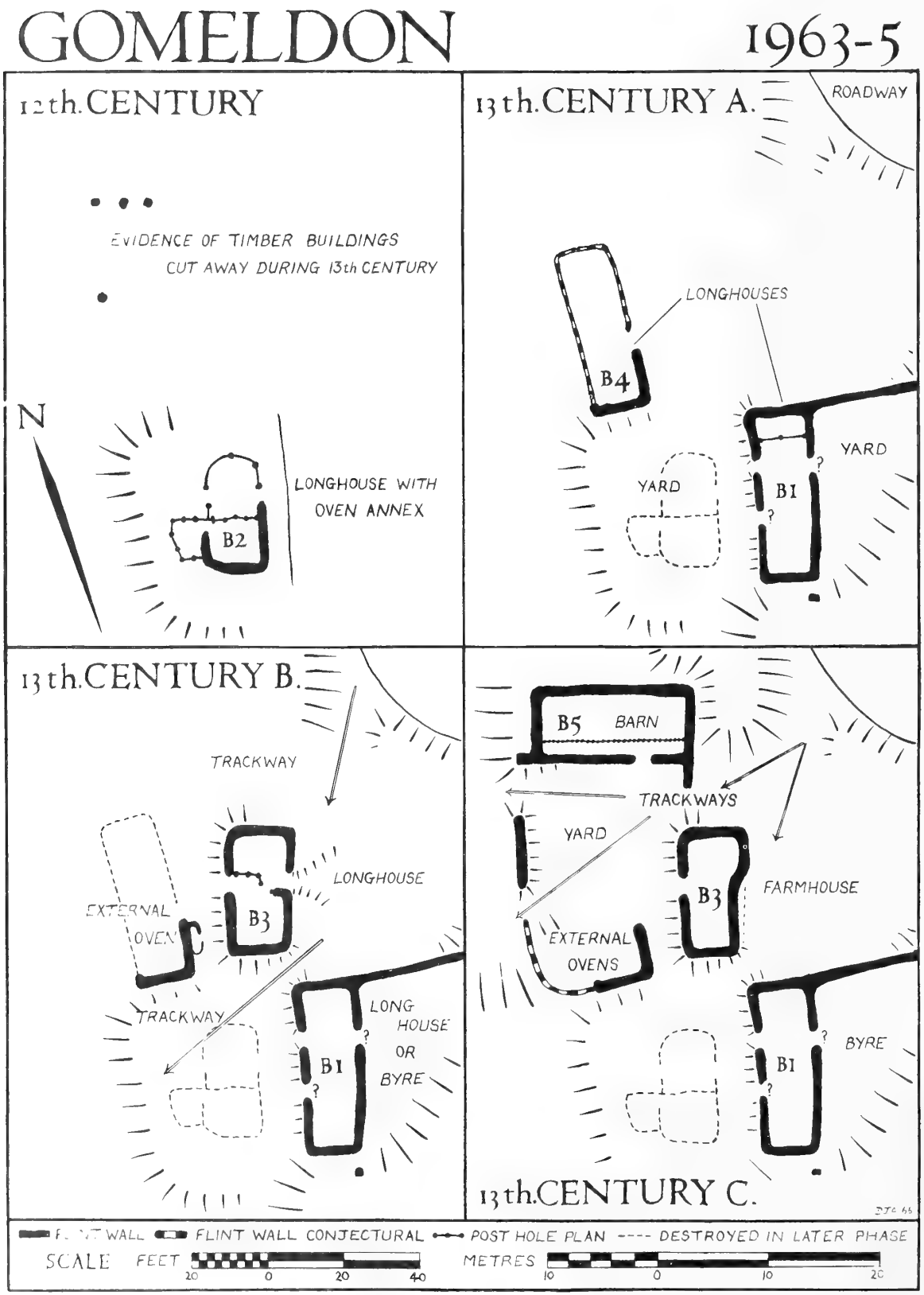

Figure 10. From long-house to farm-house.

convert long-houses to farm-houses, with the stock then quartered elsewhere. But at Wharram Percy, deserted in the early 16th century, the entire village apart from the manor house consisted of long-houses. Thus the alteration from long-house to farm may reflect local factors, rather than a widespread change in fashion or economic circumstances at a particular point in time. Certainly, where it occurs, it may imply that the occupant of a converted long-house has moved up the social ladder.

The 'Surveys of Lord Pembroke's Manors', [14] which give detailed descriptions of the houses of 22 S Wiltshire villages in the early 17th century, suggest that adding a barn was a characteristic feature of the conversion. A recurring phrase in the description of each holding is a dwelling house of (usually) two or three 'ground rooms', one or two lofted over, and a barn of one, two or three 'rooms'. Sometimes a cow-house, stable and, occasionally, a hay-house are also listed, but always the barn is mentioned next in order of importance to the house. Practically every holding had one. There were 34 in Broadchalke, for example; in the adjoining village of Bowerchalke, all 23 holdings had barns, and 17 had stables and cow-houses. On six holdings there were two barns.

Thus the changes observed at Gomeldon may well be the first stage in development from a village made up of long-houses to what was still to be observed as the typical layout of a S Wiltshire village some 300 years later, which in turn gave way to the modern village with two or three substantial farms.

AGRICULTURAL ECONOMY

We know from the Glastonbury records that the economy was based on cereals and sheep. A two-field system (total acreage 476) was operated in 1518, when there were six holdings of uneven size. The largest was 149.5 acres, the second largest 115.5, and the remainder were between 25 and 57 acres. In earlier centuries the holdings would have been in more hands, and more even in size, such that individual holdings did not exceed 30–40 acres – assuming the same total acreage was cultivated (although a part would be demesne, which by 1518 had become part of the tenantry holdings).

As for sheep, we know that in 1518 there were 360 acres of sheep grazing in East Gomeldon. Each virgater had common for 66 sheep, and each demi-virgater for 33 sheep. As the total allocation is said to be for 10 tenants, and there were only six tenants in Gomeldon, some Idmiston tenants must have had access to this also. Documentary evidence from other S Wiltshire villages shows that early 13th-century tenantry flocks were large and could exceed those of the lord of the manor. At Martin in 1225, 77 out of 85 tenants had a total of 2585 sheep, approximately 35 per head. At Bowerchalke, out of 40 tenants, 33 owned 851 sheep (approximately 26 per head).[15] In 1631, 400 years later, there were 21 tenant sheep rights for a total of 2240 sheep. If there were 14 tenants in medieval Gomeldon with an average of 30 sheep per head, the tenantry sheep flock would amount to 420.

Examination of the animal bones by Ralph Harcourt showed that sheep and cattle predominated (80–90 per cent of identifiable bones), with sheep contributing 70 per cent. In terms of meat the larger animal made the bigger contribution, and sheep only 30 per cent. The sheep were of the small slender Soay type; the cattle were large animals kept for work rather than slaughter. Only 1 per cent of the bones were identifiable as horse, but a figure of 10 per cent was obtained for pig. It is of interest that the age picture for sheep varied between buildings. Mainly young adults were represented in the animals from the W half of the village, those from complex 6 had been kept to an advanced age.

THE GOMELDON BUILDINGS

In addition to providing information on the transition from long-house to farm, the Gomeldon buildings are of value to students of vernacular architecture. Thus, as J.T. Smith points out in the next section, the most striking feature is the variety of plan. A useful preliminary to his analysis is to summarize some of the main features.

The most interesting house plan is that of building 2. It provides both a very early example of a cruck-built house and, in comparison with the other houses, an example of the transition from buildings of wholly timber construction to those incorporating stone walls. Its massive cruck-truss holes are not parallelled in the other houses, which are notable for the absence of post-holes for large structural timbers. Building 2, clearly of long-house type, is of two bays. It has a cross-passage, and a partition divided the living end (with a hearth) from the byre which, unlike the later buildings, had no sump. There was direct access from the living end to an attached timber-built shed, which presumably functioned as a kitchen/bake-house.

14. Eric Kerridge (ed.), *Surveys of the Manors of Philip, First Earl of Pembroke and Montgomery 1631–2*, Wilts. Archaeol. Soc. (Records Branch), vol. 9 (1953).

15. R. Scott, 'Medieval Agriculture', *VCH Wiltshire*, vol. 4 (1953), p. 28.

Special interest also attaches to building 5, classified as a barn on the evidence of its greater width compared to the other buildings and its internal arrangements. Like all the 13th/14th-century buildings, the ground walls are of slender build (1 to 1½ ft thick). There are no post-holes for structural timbers, although there were raised areas of chalk on the building's spine, presumably standings for ridge-posts (although J.T. Smith has expressed some doubts about this interpretation). It is unlikely that any of the structural timbers were set into the ground. The maze of post-holes inside the building must represent internal sub-divisions and the sites of barn furniture (hay racks, etc.). In particular, the row of stake-holes running the building's length, which can be grouped into sets of five, may represent the placing of hurdles for lambing pens. One problem of interpretation is that it is not safe to assume that all the post-holes are contemporary; they may represent temporary structures which have been replaced at intervals.

Buildings 1, 3 and 7 are notable for a sump or drain in the byre end; indeed, this is confirmatory evidence for the presence of byres. Five buildings had hearths and, when a sump was present, at the opposite end to it. There was no evidence for a hearth in building 1, probably because it was converted from a house to a farm building in a second phase.

All the buildings were constructed with low walls of unmortared knapped flint and without foundation trenches. These were approximately 2 ft thick and possibly originally stood about 3 ft high. There is little evidence for structural timbers, apart from the crucks etc. in building 2. In some cases small post-holes against inside wall-faces may have been for marking-out posts – good examples were observed in building 7A. Comparison of the dimensions of the buildings suggests that a 'bay unit' of 12–15 ft was usual. The length was approximately 2 or 3 times this; the largest was 42 ft (Table 3). It is of interest to compare these dimensions with those from other DMV sites. In a sample of 80 buildings obtained from published data for approximately 40 sites, 58 per cent were 25–40 ft in length, and 90 per cent did not exceed 50 ft. Also, 60 per cent had length:breadth ratios in the range 1.6–2.4. For all the buildings, there is a crude approximation to a whole number of modules or 'bay units', leading to length: breadth ratios of 2, 3, 4 or 5. Interestingly, the ratio for Wharram Percy house 6 is exactly 5.

This leads to a crude reproducibility in room size. For example, the living ends in Gomeldon buildings

building number	*internal dimensions*		*ratio of length:width*
	length (ft)	*width (ft)*	
1	42	13	3.2
2	28	14	2
3	30	14	2.1
5	40	17	2.3
6A	24	12	2
6B	29	13	2.2
7A	35	12	2.9
7B	17	10	1.7
7C	24	8	3

Table 3. Dimensions of the buildings

1–3 are 12 by 13 ft, 12 by 14 ft and 13 by 14 ft respectively; which compares with 10 by 15 ft at Beere,[10] 10 by 13 ft at Dean Moor,[11] and 10 by 16 ft at Tresmorn, Cornwall.[16] The corresponding byre dimensions are 11 by 13 ft, 9 by 14 ft and 10 by 14 ft at Gomeldon, 12 by 18 ft at Beere, and 9 by 10 ft at Tresmorn.

AN ANALYSIS OF THE GOMELDON HOUSES *by* J.T. SMITH

[This note, completed in 1978, has not been updated.]

The most striking feature of the Gomeldon houses is their variety of plan. This confirms Mr J.G. Hurst's observation, with particular reference to the long-house, that excavation in recent years has established the existence in the 13th and 14th centuries of plan types which had been assumed, on the evidence of surviving buildings, to have developed from the late 15th century onwards.[17] At Gomeldon, a comparatively small number of long-houses show that most of the variation in the relation between the principal elements of the plans which are found in the 16th and 17th centuries existed already in the 13th and early 14th centuries.

Perhaps the most crucial such relation, from the standpoint of the student of vernacular architecture, is that between the entrance to the house-part and the hearth in the hall, the latter being the principal and often the only heated room. The commonest arrangement in a 16th- or 17th-century long-house in SW England or S Wales is a chimney backing on to the cross-passage; it appears at Gomeldon in the 12th century in building 2, and in the early 14th century in building 7C. In 7C the hearth was built against a transverse wall, probably fairly low and no more than what would have been called a reredos (fireback).[18]

16. G. Beresford, 'Tresmorn, St Gennys', *Cornish Archaeol.*, vol. 10 (1971), pp. 55–73.

17. Maurice Beresford and J.G. Hurst, *Deserted Medieval Villages* (London: Lutterworth Press, 1971), pp. 113–14.

18. *Reredos*, 'the brick or stone back of an open hearth' (OED) is best known from a frequently quoted passage in William Harrison's *Description of England* (1577).

This was a safer form of construction than the timber partition which must have performed a comparable function in building 2, as the destruction of the latter by fire shows. Presumably the partition itself was built simply, using some technique akin to that known in Lincolnshire by the expressive term 'mud-and-stud' walling. The spacing of the studs, in conjunction with the position of the hearth and the sloping blades of a cruck truss, appears to preclude intercommunication between house and byre through a doorway of normal height. This inference, if true, establishes that house and byre had separate entrances. Moreover, if the earth-fast structure abutting the house on the W really is contemporary, then the house was entered through an ancillary structure – a kitchen. The evidence produced by peasant houses in recent years has upset so many received opinions that it may be unwise to pre-suppose any convention of planning merely on the basis of later practice, yet the evidence of vernacular architecture suggests that the hall door always preserved a certain dignity and was approached directly, not through a room of inferior purpose.

The reason for putting a wall or even a mere fireback between the domestic and working parts of a long-house was no doubt to keep the warmth in the hall; in two more buildings (2 and 7C) the hall provided the only living accommodation. Alternative positions for the fire can be found in houses of comparable size. In 6B it was placed against the gable wall at the upper end, exactly like house IV at Wroughton Copse, Fyfield Down, not so far away; in 3 the hearth was built close to one of the long-walls, where its position, and its relation to a partition near by, resemble the arrangement of house I at Wroughton Copse.[20] In these instances there is clearly an intention to reserve the warmth generated by the fire to the hall, unlike some excavated long-houses, such as one at Wharram Percy,[21] where no such attempt was apparent. In no house at Gomeldon was the hearth definitely in the middle of the hall, as has been found in other medieval peasant houses[22] and as was customary in surviving late-medieval long-houses with open halls.[23] In house 7A, however, it could be supposed that the hearth was more or less in the middle of the hall, but rebuilding has made interpretation difficult and perhaps both hearth and fireback belong to a rebuild in which a byre was added at right angles to the old house.

Besides these two-cell buildings, there were two buildings of three cells; it is unfortunate that in neither case was the evidence as good as for the smaller houses, because their plans are in various ways unusual. In building 1 the hall, which was presumably at the S end, has its own doorway independent of the byre doors – and there seems no reason to doubt the doorway's existence, since building 2, 3 (phase 1) and 6 offer more or less close parallels. Between hall and byre there was what the proportions of the doorways suggest to have been, functionally if not structurally, another room. The enigmatic building 7A, although different in detail, also has such a middle room; there it is separated from the hall by a fireback, as if the middle room was associated more closely with byre than hall. It may well be that both 1 and 7A incorporated single-room dwellings. Perhaps building 2, which has a smaller space on the hall side of the byre doors, offers a hint of how the room between hall and byre was used, for it has something of the appearance of the feeding-walk found in later long-houses, albeit on the opposite side of the cross-passage.

Building 3, in both of its phases, is anomalous, if the word can be properly applied when there is so much variation. Its overall shape is irregular, widening at the byre end, although building 7A seems also to have varied its width; there the hall end is the wider part. It is the only house to have had a fireplace placed laterally and a form of baffle entry instead of two opposite doors. The point of the arrangement here is obscure. Staggered partitions appear to be rare in peasant houses, although one has been noted at Muscott, Northamptonshire,[24] and an internal porch bearing some resemblance to this arrangement has been incorporated in a hypothetical reconstruction of a house at Braggington, Shropshire.[25] It may not be a coincidence that a house so anomalous as building 3 should be the only one where the byre was converted into a second heated room. Baffle entrances are rarely found in surviving long-houses and never between house-part and byre.[26]

19. P.J. Fowler and J.J. Scantlebury, 'The Archaeology of Fyfield and Overton Downs, Wilts. (second interim report)', *WAM*, vol. 58 (1963), pp. 342–50.
20. Bowen and Fowler (note 13).
21. Beresford and Hurst (note 17), Fig. 20D.
22. *Ibid.*, Figs. 19A, B, C, 20C.
23. Cf. Llannerch-y-cawr, Llanwrthwl, S.R. Jones and J.T. Smith, 'The Houses of Breconshire', Pt. I, *Brycheiniog*, vol. 9 (1963), pp. 6–10.
24. Beresford and Hurst (note 17), Fig. 21D.
25. P.A. Barker, 'The Deserted Hamlet of Braggington', *Shropshire Archaeol. Soc. Trans.*, vol. 58 (1968), pp. 122–39; reconstruction by F.W.B. Charles, pp. 134–5.
26. Cf. Batel Fawr, Batel; Jones and Smith (note 23), Pt. III, *Brycheiniog*, vol. 11 (1965), pp. 79–80.

The structural evidence at Gomeldon permits discussion of the various building techniques. The most informative house was B2, the only one which produced reasonably clear evidence of roof construction. In this house, as perhaps in all the others, the walls were primarily screens, with little in the way of a load-bearing function. Nevertheless, a great change in wall construction is observable, from buildings with rounded ends and corners (B2, B3, B4 and the upper end of B1) to others with angular corners (B5, B6B, B7A, B7B and B7C, with B6A rather uncertain); that is, there is an improvement from the 13th to the early 14th century. The improvement may well correspond to the increasing structural importance of the walls, despite the inevitable inadequacies of the evidence due to the shallowness of the soil, the number of posts associated with the walls seems to decline as the walling technique improves.

Building 2, the earliest one, of the late 12th century, is the only one in which anything like a regular system of roof supports can be traced. At the S end is a ridge-post, its purpose made plain by its unusual depth of 2 ft. A sloping post-hole near the W wall, about 4 ft N of the gable wall, must indicate one blade of a cruck truss, adjoining a wall-post; each has a less clearly defined counterpart on the E side. To the N again, the truss which incorporated or, more likely, abutted a partition had better-preserved sloping holes, which must be for cruck blades. How the other roof supports were spaced is uncertain, but in the N gable is a somewhat off-centre post which might have been another ridge-post; 4 ft away from it, against the E wall, is a post which appears to correspond to one near the other end of the wall. If this NE post was associated with another cruck truss it would leave a distance of about 14 ft unaccounted for in the roof system: for that gap there is just no evidence. The cruck truss at the S end had wall-posts closely associated with it, though not in the same way as in early surviving trusses of this type, with the post immediately outside the cruck blade or even housed into its foot.[27]

An alternative to the ridge-posts suggested above is provided by the recent identification of end-crucks,[28] which are, in effect, single cruck blades placed axially as supports for a ridge-piece elsewhere supported by cruck-trusses. In the present state of knowledge it is difficult to be sure how this type of construction could have been used in conjunction with the simple and probably rather primitive crucks at Gomeldon; all that can be said is that it provides another way of reconstructing buildings 1 and 2.

Where evidence is as fragmentary as it usually is with peasant houses, structural interpretation is full of pitfalls. Nevertheless, the somewhat later building 1, of the early 13th century, can be supposed, in the light of B2, to have had, like it, a ridge-post at the S end, and, about 3 ft away, a pair of posts standing at the ends of the long-walls and perhaps associated with a cruck truss. N again, about 9 ft from the ridge-post, is another wall-post, and the spacing between it and the SE corner post is about the same as that between the two cruck trusses of building 2. Beyond that point conjecture is impossible, but it is noteworthy that the NE and NW corners are angular, not rounded like those at the S end and at both ends of building 2, as if, perhaps, there had been some rebuilding or alteration. The alternative explanation, that this is a more advanced technique adopted simply with the passage of time, is unlikely, since it was not adopted at the S end, and, moreover, that part of the contemporary building 4 which was revealed had a rounded corner. To the same period belongs the first phase of building 3. Again the corners are rounded, but the wall and other posts are less informative. The two posts at the NE corner suggest the possibility that they terminated two separate walls or rows of structural posts, rather as in some pre-Conquest houses there are no corner-posts but rather two quite independent walls terminating close to each other. Clearly, the lateral walls had to resist the outward thrust of the roof, whereas the end-gable walls were not load-bearing and were in effect enclosing screens. If the stone-built N wall was not carried up very high, there may have been some need for posts to carry a tie-beam on this end of the building. How the varying width of this house was roofed is beyond conjecture. A difficult problem with building 3 is to visualize how the smoke from the lateral hearth can have been carried away. Presumably there was some form of hood, and since it has left no post-hole traces it has to be envisaged as being carried on a bearer, something after the manner of the one proposed at Braggington.[29]

Building 5, interpreted as a barn, belongs to a later period in the 13th century. The walls appear to have been better built than those of earlier structures, as may be seen by comparing the facings of large flints and the angular corners with the less well-finished wall and rounded corners of B4. Some variation in thickness is

27. A point first noticed by Sir Cyril Fox and Lord Raglan, *Monmouthshire Houses*, vol. 1, p. 98 (Welsh Folk Museum, 1951).

28. N.W. Alcock, 'What is a Gavelfork?', *Vernacular Architecture*, vol. 8 (1977), pp. 830–2.

29. Barker (note 25), pp. 134–5.

apparent within each wall, but on the whole the long-walls, where they survive, seem to be slightly wider than the structurally less important E end-wall. Two large patches of chalk standing proud of the ground-floor level are perhaps to be interpreted as the bases of ridge-posts; if so, there is a curious discrepancy between the presence of one close to (perhaps abutting) the W wall and the absence of anything like it at the E end. Furthermore, such posts are central to the full width of the building, which, at some 17 ft, presents greater problems of span and thrust than the next largest buildings, 2 and 3, which are no more than 14 ft wide. If, however, the row of stake-holes performed some structural function they reduce the clear span to what is otherwise the maximum of 14 ft. This supposition of a structural function is improbable but perhaps no more so than that which accepts them all as part of a partition, with the result that the barn has to be supposed as being divided longitudinally, without communication between its two compartments; for there is no trace of a door connecting them. A satisfactory reconstruction of this building is impossible.

Insofar as there is evidence for the final phase of the early 14th century, it appears that the techniques noted in buildings 1–4 remained in use, probably in a slightly improved form. An improvement in setting out is noticeable, resulting in rectangular rather than rounded corners, and there are fewer signs of either ridge-posts or wall-posts. Buildings 7A and 7C have post-holes at their S ends which could be interpreted as being for ridge-posts, and 7C has two or three wall-posts but nothing very definite. Building 6B is remarkable for the truss holes at the W end, one of which, on the S side, lies partly beneath the wall. It is difficult to account for these holes, for it would be a remarkable coincidence if they survived from an earlier building; possibly the irregular width of the S wall W of the doorway as compared with that of the other walls is a pointer to its having been rebuilt at some time.

MATERIAL EQUIPMENT AND OTHER FINDS

Summary

The finds consisted mainly of pottery and ironwork. The pottery types present are cooking pots, skillets, jugs, lamps (one example) and storage jars (12th century only). These represent an adequate (if limited) selection for food preparation and other domestic activities; none had an industrial use. One form, the skillet, was unusually frequent, considering its normal rarity, as examples were found in all the houses. Presumably it was used for frying or baking, and its frequency may represent local culinary practice.

Kitchen equipment is also represented by several stone mortars, often built into walls but occasionally in hearths. There are also five hones and three rotary grindstones (a comparatively rare object) for use in sharpening knives and tools.

Of the ironwork, horseshoes and nails predominate. Attempts to relate nail distribution to building plans produced no meaningful conclusion. The maximum horseshoe concentration was in the byre end of building 1. Some ironwork was certainly associated in function with buildings. For example, a door pivot (building 2), with a shutter hinge (building 3) and possibly the barrel padlock (building 1). A hunting arrowhead (building 1) is presumably witness of forays against deer in the neighbouring Royal Forest of Clarendon. Sheep-shears from a building 2 post-hole, which closely resemble a pair from a 12th-century cesspit at Old Sarum, not only provide confirmatory dating evidence for building 2 but also are a reminder that sheep-farming would have been the villagers' principal stock-raising activity.

Bronzework consisted of belt buckles and a circular disc, possibly from a mirror. Three coins were found; a sterling of John the Blind of Luxembourg (1309–46), a silver penny of Alexander III of Scotland (1249–86), and a gold quarter noble of Edward III (1363–69). These, from the yard of B1, from B3 and from B7B respectively, provide confirmatory evidence for a 13th/14th-century date for the main occupation of the village.

Food remains are represented by animal bones (sheep, cattle, pig, deer, rabbit and bird) and the occasional oyster. Other animals present are horse, dog and cat. The whereabouts of the village graveyard is unknown, and no adult skeletal remains were discovered. However, a small infant grave (full-term birth) was found in building 7B and the stray bones of another infant in one of several 12th-century post-holes belonging to a structure which had originally stood in the area converted in the 13th century to the yard of complex 3/5.

Finally, a considerable number of flat ceramic roof-tile fragments were found as a general scatter over the excavated area, and intact tiles were used in hearth bases. It is not believed that the Gomeldon buildings had tiled roofs, but rather the tiles had been salvaged from elsewhere for use in hearths. The same explanation applies to the finding of three examples of coxcomb points from crested glazed ridge-tiles.

In addition to the finds associated with the medieval village there was some evidence for pre- and post-medieval activity: sherds from a prehistoric beaker and from Roman vessels, pieces of Roman box-tile, a pair of

16th-century scissors and a scatter of large sherds of glazed pans and similar pottery of 17th-century and later date.

Stone mortars, grindstones, whetstones and querns (Figure 11)

1 Mortar base with a lug springing from an expanded basal angle. Sussex marble. From B7A sump along with another.

2 Fragment from the wall of a mortar. Quarr stone, Isle of Wight. From B1, wall.

3 Similar to no. 1. From B3, oven B3–5.

4 Part of base and wall of a small mortar. Local Chilmark stone with some fossils. From B6B, in wall near entrance. Cf. *Med. Arch.*, vol. 5 (1961), p. 280, Figure 74, no. 5. Dunning type 3. At Northolt dated *c.* 1300.

5 Rotary grindstone. Hearthstone (ferruginous sandstone). Diameter 12 ins. Burnt. From B3, oven.

6 Rotary grindstone incorporated in B7A hearth. Fine grain purplish stone. Colour probably due to heating.

7 Rotary grindstone in a fine-grained sandstone. Diameter 10 ins. approximately with a square axle-hole. One face is smooth but with a groove, the other rough. From B7B. For a parallel, see D.G. and J.G. Hurst, *J. Brit. Arch. Assoc.* (3rd series), vol. 30 (1967), Fig. 13, no. 52 and p. 82 for a similar example from Ashwell, Herts.

8–10 Hones in fine-grained grey sandstone. From B2, B7A, platform 12.

11 Hone. From B6A, yard.

12 Schist hone. From B7A, floor at edge of sump.

Not illustrated Quern fragment of prehistoric or Roman type. Greensand. From B2 'scarp edge'.

Coins

a Silver penny of Alexander III of Scotland (1249–56). From B3.

b Sterling of John the Blind (1309–46) from the Arlon

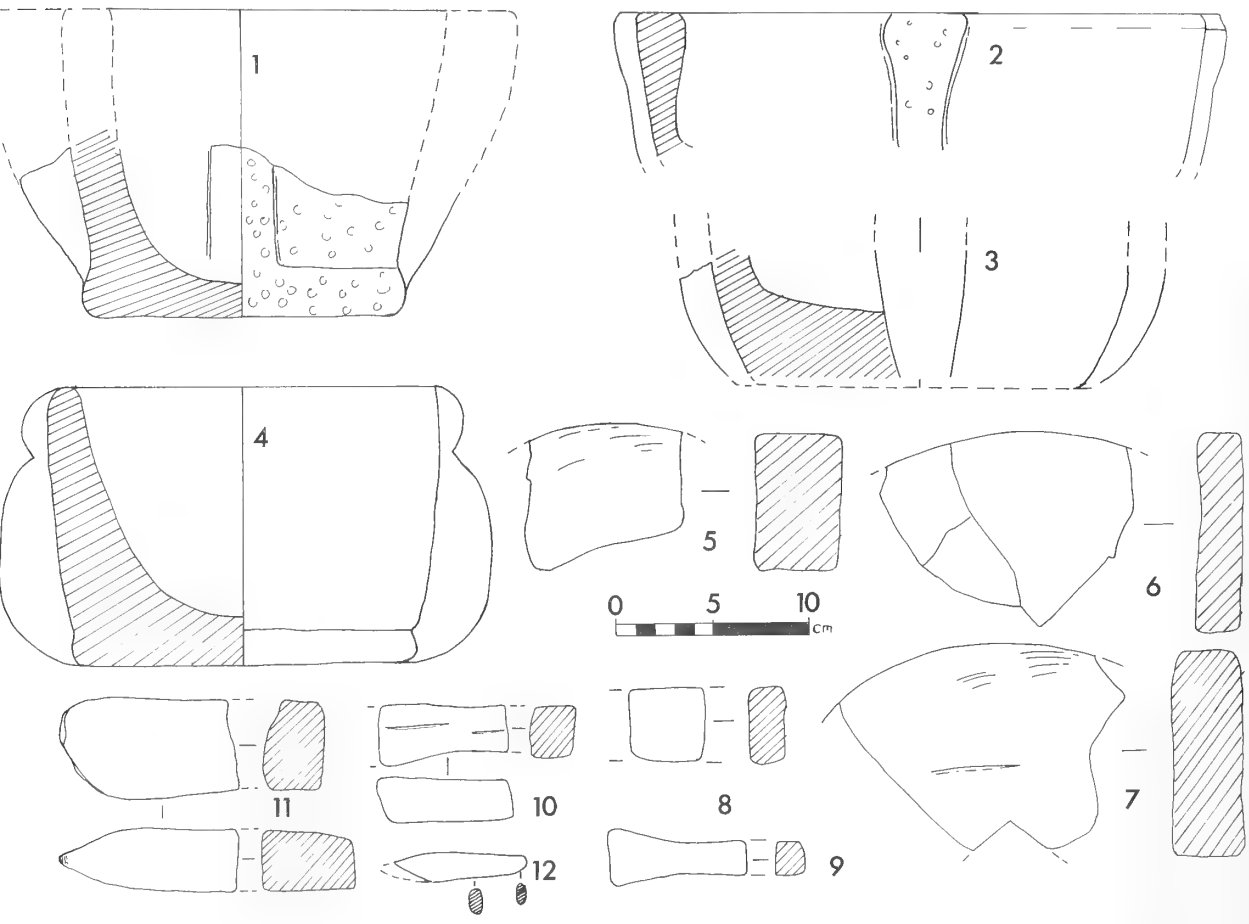

Figure 11. Stone mortars, grindstones, whetstones and querns.

mint. See E. Bernay and J. Vanné, *Histoire Monétaire de Compté Puis Duché de Luxembourg*. supplement (Brussels 1934), p. 52. Also H. de S. Shortt, *British Numismatic J.* 33 (1964): p. 171. From yard above B2.

c Quarter noble of Edward III, London, 1363–69; cf. George C. Brooke, *English Coins* (Methuen 1932), pl. xxix, 7, p. 134. From B7B.

Miscellaneous objects in copper alloy and lead (Figure 12)

13 Disc, 5.5 ins. diameter with slightly raised edge. Possibly from a mirror. From B7B.

14 Decorated lead disc backed by another. The edge is broken, but the disc has a minimum diameter of 1.25 ins. and is approximately 1/25 in. thick. At the centre of its face is an eight-petal rosette framed in a circular border of two lines, around which is a series of very small knobs. From B3.

Buckles and other belt equipment (Figure 12)

15 Plain bronze strap-buckle. Lacks pin. Common 16th-century form. From B3, topsoil.

16 Iron. ? Harness-buckle. From B7A.

17 Bronze belt-buckle and plate. Pin missing, but rust at the hinge point shows that it was an iron pin. Buckle plate decorated with scored triangles, horizontal hatching and scored lines. One rivet hole contains a decayed iron rivet, the other is empty. Resembles *London Museum Medieval Catalogue* (HMSO, 1954), plate LXXV, no. 6 in form. From B1.

18–21 Bronze strap ends, buckle plates or belt chapes. No. 18 has file-marks on the undersurface; the upper surface is possibly tinned. From B4.

No. 19 is from B3.

No. 20 (from B1) is undecorated but has two bronze

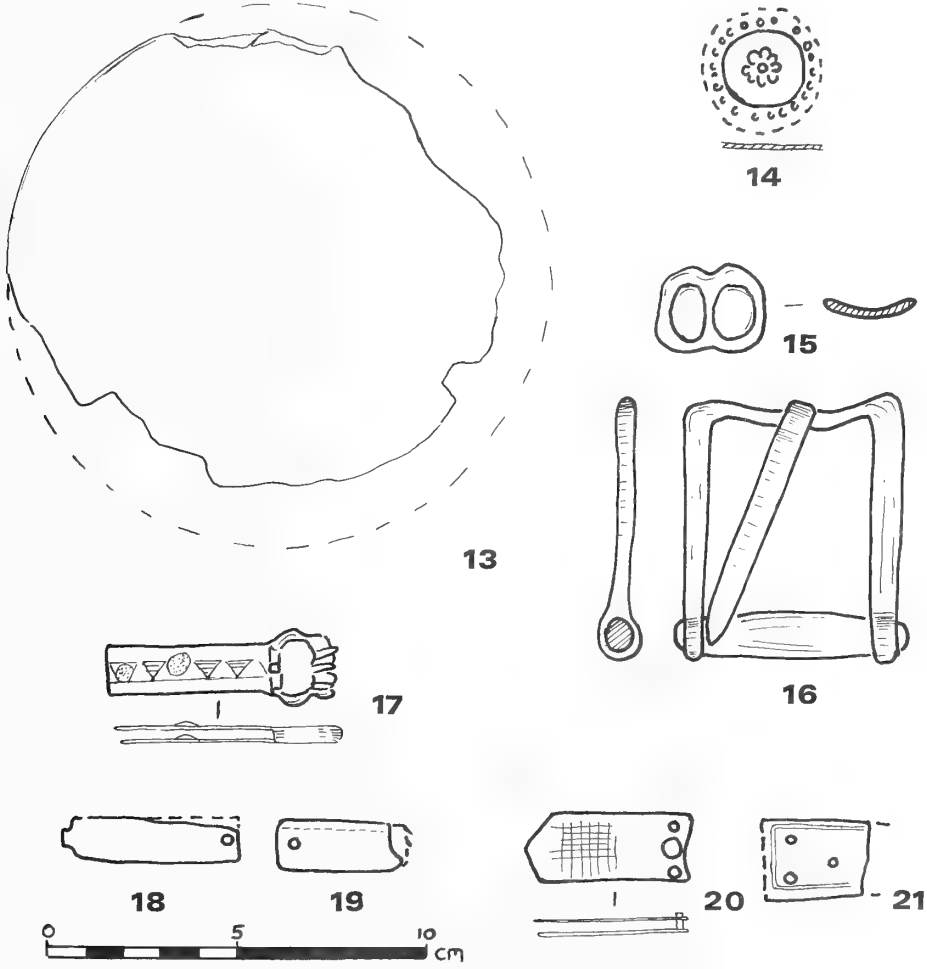

Figure 12. Miscellaneous objects in copper alloy and lead (nos. 13 and 14), buckles and other belt equipment (nos. 15–21).

rivets and compares with *Hangleton Part 1*,[12] Fig. 36, 4.

No. 21 (from topsoil over B1) has three empty rivet holes and is decorated with two scored lines.

Shears, scissors, knives, and other cutting and piercing tools (Figure 13)

22 Iron shears found in a cruck-truss post-hole in B2. Very similar to a pair from cesspit no. 1, Old Sarum East Suburb associated with a coin of William I (J.F.S. Stone and J. Charlton, *Antiq. J.*, vol. 15 (1935), p. 184, Fig. 3).

23 Iron scissors $5\frac{1}{4}$ ins. long approx. If scissors are visualized as two knife blades riveted together, and with the tangs bent over, one has a close approximation to the Gomeldon pair. Probably 16th century. From B1.

24 Iron scissors similar in size to modern nail-scissors. Solid ring handles. From topsoil outside B7A.

25–7 Iron knife blades from B1 and B6 and therefore of 13th/14th-century date, although Mr Goodall has suggested that no. 27 should not, on typological grounds, be earlier than mid-16th century.

28 Iron hunting arrowhead found beneath tumble from the W wall of B1, hence probably 13th/14th century. Compare with *London Museum Medieval Catalogue* (HMSO, 1954), Fig. 17, no. 15, dated 1241–63.

29 Iron punch, square-ended. From B3.

30 Iron punch. From B1.

Door and window fittings, etc. (Figure 13)

All these are made of iron.

31 Door pivot. From B2.

32 Shutter hinge. From B3. Cf. *Hangleton Part 1*,[12] Fig. 36, no. 9 which is dated *c.* late 13th century.

33 End of a door hinge. From complex 6, yard.

34 Barrel padlock spring mechanism. From B1.

35 Barrel padlock key. From B6A.

36 ?Lock key-hole plate. From B3.

37–8 Short lengths of chain, one with single circular lengths, one with an S-shaped double link. From B1.

39 Ring. From B6B. Another was found outside the S end-wall of B7, and a slightly smaller example in B6B yard. These could be from harness, cart furniture or tethering posts.

Horseshoes and heel-plates (Figure 14)

Six complete horseshoes and 17 fragments were found. Only complete examples are illustrated, as nos. 42–5 are solitary examples of their type and nos. 40 and 41 are representative of the others. No complete 12th-century shoes were found, but 'fiddle-key' nails from them were found in building 2.

Shoes nos. 40 and 41 are likely to be of 13th-century date. These are squat and heavy, with calkins and three nail holes on each side. The nails are of rectangular (tapering) cross-section with rectangular heads. Both have nails loosely in position, suggesting that the shoes had been removed rather than cast, and possibly the carrying-out of some farriery work in building 1.

Shoe no. 42 (from B7B) is a smaller and lighter type. The other shoes are also lighter, but only in proportion to their size, which is larger than that of nos. 40 and 41. No. 43 came from building 1 (but only from a depth of 3 ins.), and no. 44 from the topsoil over building 5 and no. 45 from topsoil over building 6, yard. The form and context of these shoes suggests a later date, probably not earlier than 14th century. The heel plate (no. 46) came from the oven area in complex 3/5 yard and should be of 13th/14th-century date.

The distribution of shoes according to find-spot is: 12 from complex 1/2; four from complex 3/5; two from complex 6; five from complex 7.

Nails and staples

A type series is illustrated in Figure 14. There are four main categories: rectangular-heads (1–3), square-heads (4–7), round-heads (8–10), and horseshoe nails (7A–7D). The horseshoe nails divide into rectangular-heads (7A, 7B) of 13th-century date, and the 'fiddle-key' type (7C, 7D) of 12th-century date. Only very few fiddle-key-type nails were found.

Of the other nails, type 3 was the most frequent find followed by 5, 6, and 4 (Table 4).

type	*length (in.)*	*cross-section (in.)*
3	2.5–3.0	0.3 × 0.4
5	2.6	0.4 × 0.4
6	1.2	0.3 × 0.3
4	3.0	0.6 × 0.6

Table 4. Typical dimensions of nails.

These compare with those for nails from Hangleton,[30] the most frequent Hangleton length being 2.25 ins. followed by 1.75 ins. and 2.75 ins. Like the Hangleton examples, the Gomeldon nails have rectangular or square cross-section shanks.

Pottery

The discussion of the pottery is arranged by vessel type

30. Hurst and Hurst (note 12), p. 137.

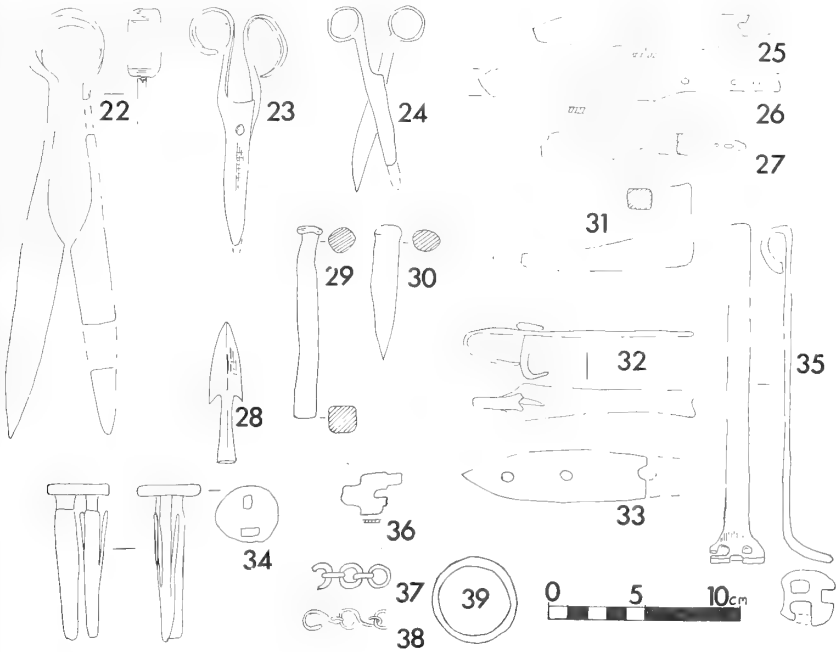

Figure 13. Shears and other cutting and piercing tools (nos. 22–30); door and window fittings (nos. 31–9).

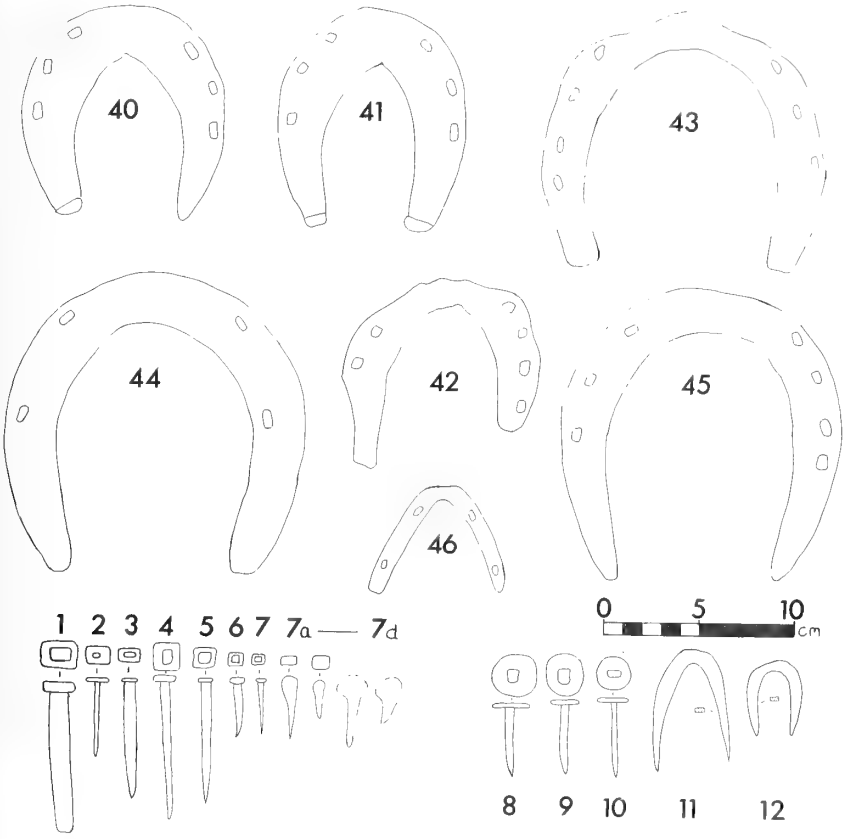

Figure 14. Horseshoes and heel-plates (nos. 40–6); type series of nails and staples (nos. 1–12).

and sub-divided according to find-spot. However, this is preceded by an account of the pottery from the scarp edge W of building 2, because this forms a good stratified series.

Much of the medieval pottery would seem to be of local manufacture, although only the sherds from high-quality late-13th-century jugs, demonstrably of Laverstock manufacture, can be attributed to a specific kiln site. Thus there are also jug sherds in a very characteristic brown unglazed fabric from an unknown kiln site and possibly of early-14th-century date. Apart from stray pre-medieval sherds, the earliest pottery is of late-12th-century date (tripod pitchers and cooking pots) from building 2 and the scarp edge W of it. The rest of the medieval pottery is of 13th/14th-century date, and cooking pots in scratch-marked ware are a common component of all the medieval pottery.

Prehistoric and Roman pottery (not illustrated)

01 Two sherds from a 'comb-stamped' beaker shoulder with a series of single lines of decoration between broad bands of cross-over pattern. From scarp edge.

02 Romano-British flanged-bowl rim in colour coated, imitation samian ware. From B3.

03 Two pieces of decorated Roman box-tile. From B1 and B3. There were also two other Romano-British sherds from a simple everted rim in grey ware and a coarse fabric jar base. Both from B3.

Pottery from the scarp edge

This consists of approximately 1000 sherds and provides the only good stratified series from Gomeldon, as it was distributed over a depth of about 2 ft.

There are five main wares:

a scratch-marked gritty;
b plain gritty;
c micaceous sandy;
d glazed wares of 12th-century type;
e glazed wares of 13th-century type.

The scratch-marked ware is either the 12th-century type with deep, coarse scratch-marks, or the developed type as made in the Laverstock kilns in the late 13th century. Like the gritty ware, the scratch-marked fabrics are red or grey, but the sandy ware is buff to grey, with a grey core normally free of added grit and with a glitter from mica particles.

The 12th-century glazed wares are in a refined cooking-pot fabric, grey to buff with a dark grey core, with a sparse green glaze; the unglazed areas have fired pinky-buff in contrast. This ware is characteristic of a tripod pitcher form recognizable from other local sites, for example Old Sarum (John Musty and Philip Rahtz, 'The Suburbs of Old Sarum', *WAM* vol. 59 (1964), p. 147, especially Fig. 6, no. 6). The 13th-century glazed wares are all in a refined fabric with an even rich glaze and typical of the Laverstock kilns.

These five wares provide the usual cross-section of locally produced pottery in use from the second half of the 12th century to the end of the 13th century and contain no surprises.

The distribution of the wares by depth is given in Table 5.

Table 5 shows that only the bottom of the fill is free from contamination by 13th-century glazed pottery. From the whole assemblage it is possible to determine crude relative proportions for cooking pots and jugs. Approximately 81 per cent of the sherds are in unglazed gritty fabrics and therefore mainly from cooking pots; 11 per cent are in the refined micaceous sandy ware used for more superior kitchen vessels and those for table use; only 8 per cent are glazed and therefore mainly from jugs. It would be of even greater interest if the whole assemblage could be separated into 12th- and 13th-century groups when making the above compari-

depth (ins.)	*scratchware*		*plain gritty ware*		*sandy ware*	*glazed ware*	
	coarse	*fine*	*red*	*grey*		*12th century*	*13th century*
3	10	23	67	78	14	0	19
6	0	33	25	70	12	0	11
9	4	14	73	106	5	1	6
12	12	0	33	48	12	0	8
15	32	14	50	44	35	13	12
18	20	4	49	73	14	6	2
21	18	0	12	6	25	15	0
24	6	0	6	2	16	1	0
total	102	88	315	427	133	36	58
percentage	9	7.6	27.1	36.8	11.4	3.1	5

Table 5. Distribution by depth of pottery from the scarp edge

son. However, it is not as easy to distinguish between the 12th- and 13th-century coarseware as it is between the glazed wares. Nevertheless, the resulting figures for the two groups might not have been greatly different to those obtained from the mixed assemblage. The same figure of 8 per cent for glazed pottery was recorded at Old Sarum for pottery assemblages from 12th-century cesspits (J.F.S. Stone and John Charlton, 'Trial Excavations in the East Suburb of Old Sarum', *Antiq. J.*, vol. 15 (1935), p. 185).

Cooking pots

From scarp edge W of building 2 (Figure 15)

1 Buff micaceous sandy ware, dark grey in fracture. Slightly unusual version of this fabric as it contains flint and chalk fragments.
2 Similar. Buff with grey tones.
3–9 Other examples of micaceous sandy ware.
10 Grey to buff gritty fabric. Flint fragments break the surface.
11 Grey to buff gritty scratch-marked fabric, 'roughcast' finish but grits do not break the surface.
12 Grey inside: outside pinky-buff. Finely gritted.
13 Blackish-grey finely gritted fabric.
14 Brownish gritty fabric.
15–16 Pinky-buff gritty fabric but grey inside.

From complex 1/2: building 2 *(Figure 15)*

17 Buff-brown to grey ware, scratch-marked inside and out.
18 Grey, finely gritted, scratch-marked ware.
19 Grey to buff gritty fabric with occasional large grits. Decorated with a clay ribbon which has been applied below a slight thickening of the top edge of the rim and then thumbed.
20 Grey gritty ware, occasional large grits.
21 Grey to buff-brown gritty ware with some grits breaking the surface.
22 Pinky-buff to grey fabric. Small patches of internal green glaze.
23 Buff to grey gritty fabric with numerous fragments of crushed flint and chalk, many exposed at the surface (floor layers).
24 Gritty ware with some buff surface toning.
25 Buff-brown gritty ware. Form unusual.
26 Light grey ware with a fine backing but with an occasional large piece of flint.
27 Grey to buff-brown fine gritted ware.
28 Blackish-grey fine gritted ware.
29–30 Buff fabric. Sooted on leading edge of rim. 13th-century form as at Laverstock.
31 Base sherd from a vessel of prehistoric form; but the fabric suggests a medieval date, probably 12th century. Grey to buff external surfaces; salmon-pink internally. Large flint fragments are visible on the surface as are numerous pock marks where particles have weathered out. From level of hard chalk.
32 Sagging base in hard (almost metallic) micaceous sandy ware. Grey surface and core, the outside being darker.
33 (Figure 16). Reconstruction of 12th-century storage jar found as a scatter of 50 sherds on and in the floor layers of building 2. Grey fabric with grey to buff external surfaces; the inner surface is grey to off-white with an unusual fine black speckling. The external grey areas are mainly the sites of detached ribs which were inadequately luted on. Sherds were submitted to Dr David Williams (University of Southampton) to elucidate the black speckling. He reports:

> Medium thick, fairly hard fabric, reddish-yellow to light grey outside surface with a conspicuous black speckling caused by numerous dark inclusions protruding through the surface; half the core is light grey and half a darker grey with small dark inclusions. In fresh fracture heavily tempered with quartz and small fragments of flint. Isotropic matrix containing well-sorted subangular grains of quartz, average size 0.50–0.70 mm, together with angular to subangular fragments of flint up to 1.20 mm across. It is noticeable that the flint on the speckled half of the core shows a dark brown colouration in plane light while that on the other side does not.
>
> To confirm that the dark grains on the inner surface are mostly flint, several were picked out, gently crushed and set in Canada balsam. Under the petrological microscope all the fragments clearly consist of crushed flint. The black speckling effect is caused therefore by inclusions of flint which have turned black, in all probability under reducing conditions in the kiln. It seems likely that for some reason the inside of the vessel did not experience the oxidizing atmosphere that affected the outside during the later stages of firing; possibly another pot had been placed on top, thereby cutting off the circulation of air.
>
> A heavy-mineral analysis was undertaken in order to give some better idea of the possible origins of the vessel, as flint and quartz are such commonplace inclusions; however, too few grains were obtained to give a reliable reading. All that can be said about the materials employed is that they could have been obtained fairly locally to the site.

Building 1 (Figure 17)

34 Buff sandy fabric not precisely micaceous sandy ware. Extensively pock-marked from the weathering out of particles.
35–6 Reddish-brown gritty ware; some grits in no. 35 are exposed on the surface, others have weathered out.

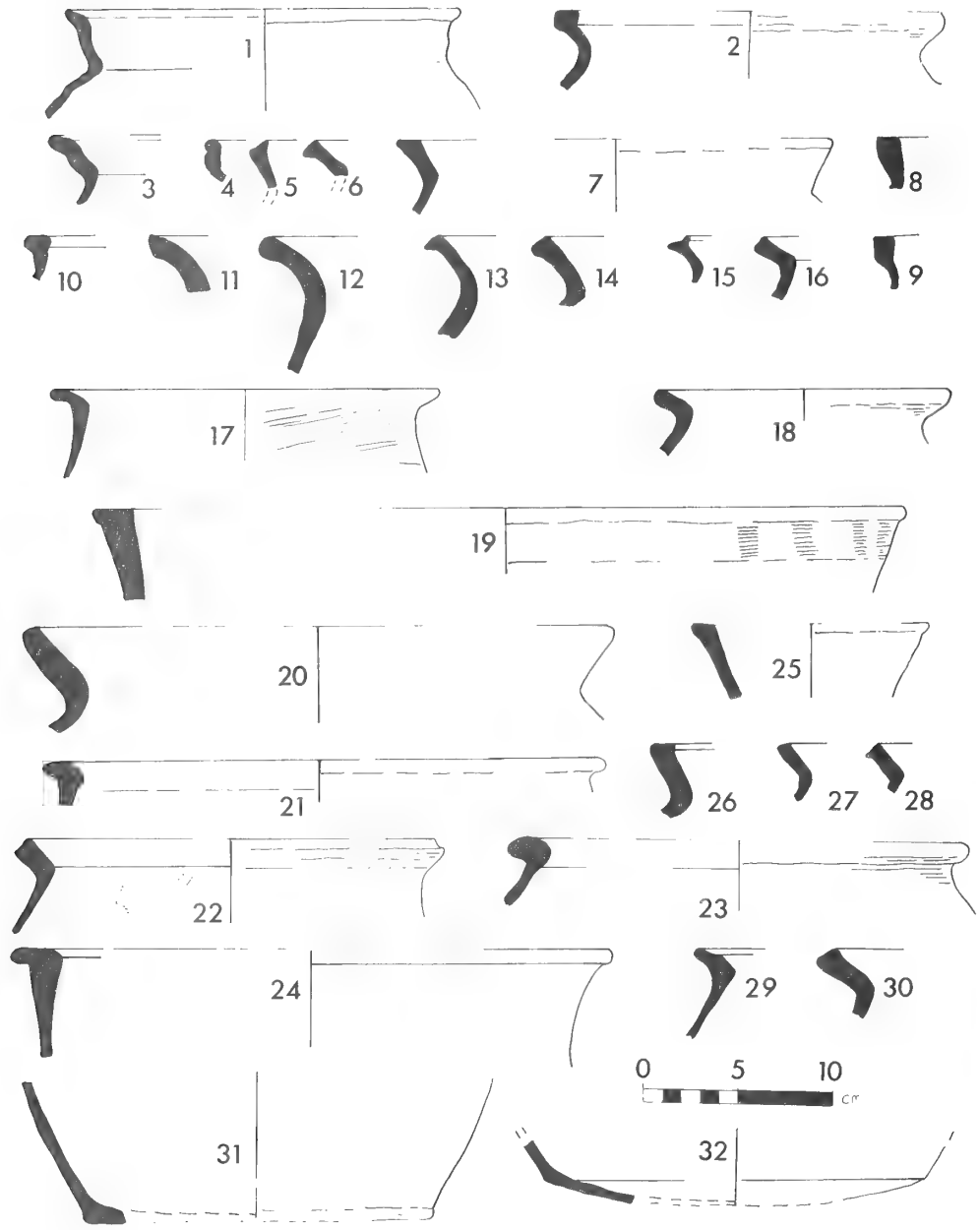

Figure 15. Pottery from the scarp edge, W of building 2 (nos. 1–16) and from building 2 (nos. 17–32).

37 Buff gritty ware. From below tumble between sump and N end-wall.

38–40 Pinky-buff fabric (no. 38 from sump). Buff toning to grey (no. 39). Buff with fine grits (no. 40).

41 Pinky-buff finely gritted ware. Specks of internal glaze.

42 Buff with fine grits. External vertical scratch-marking below rim-flange. From below wall tumble.

43 Grey gritty ware with buff toning.

44 Strap-handled cooking pot. Buff-brown outside, grey inside. Fine grit.

From complex 3/5: building 3 (Figure 17)

45 Pinky-buff fabric. From hearth.

46 Black finely gritted ware, grey buff in fracture. From hearth 1.

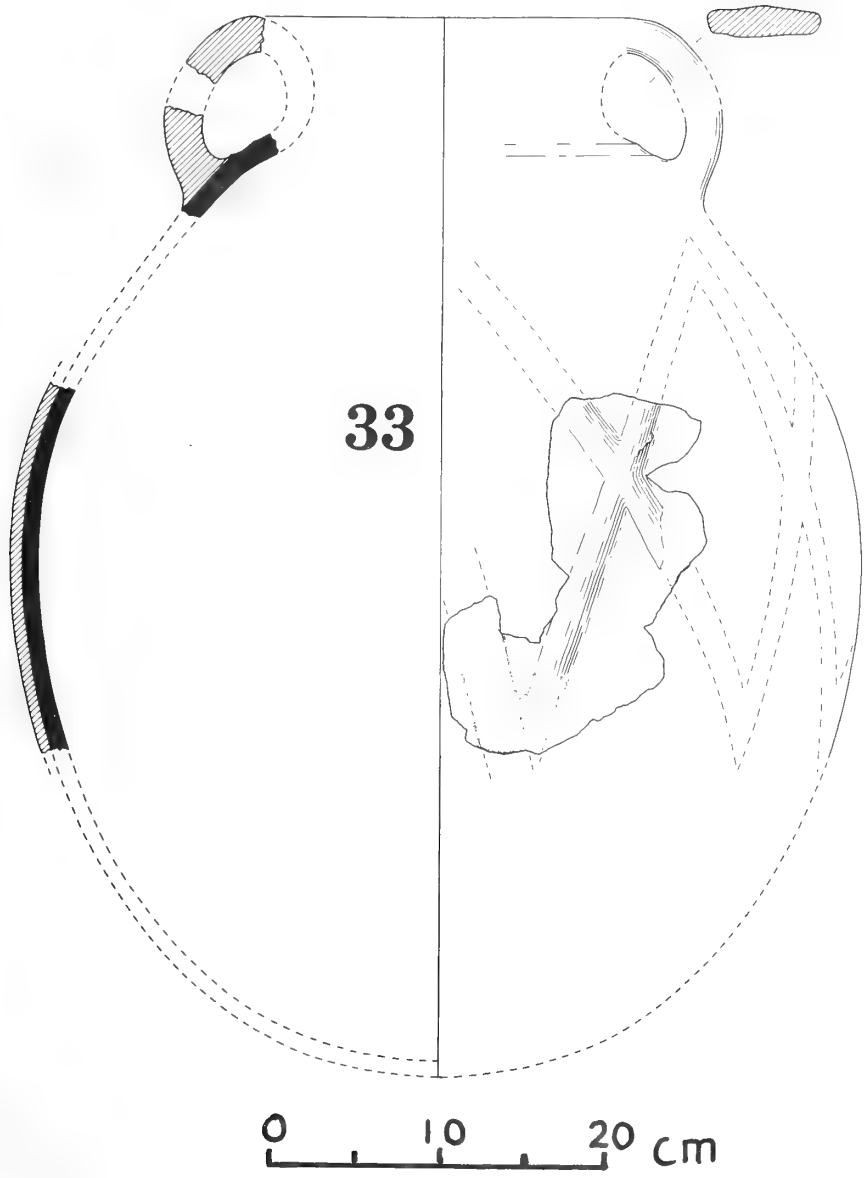

Figure 16. Storage jar from building 2.

47 Pinky-buff finely gritted ware.
48 Brownish-grey scratch-marked ware.
49 Buff-brown lightly gritted fabric. From oven B3/4.

From complex 3/5: buildings 4, 5 and platform 5A (Figure 17)
50–51 Buff to grey finely gritted ware. From buildings 4 and 5.
52 Buff to grey gritted ware with a thick ribbon of clay applied just below the rim. From building 5 above tumble.
53 Buff, finely gritted ware. From building 5, below wall.
54 Large pan rim in brown to buff finely gritted fabric. From platform 5A.
55 Grey to buff fabric. Includes large fragments of flint and some have weathered out. Base of rim thickened with a clay pad. Probably 12th-century. From platform 5A.

From complex 6A/6B: building 6B (Figure 17)
56–61 Buff to pinky-buff finely gritted wares some-

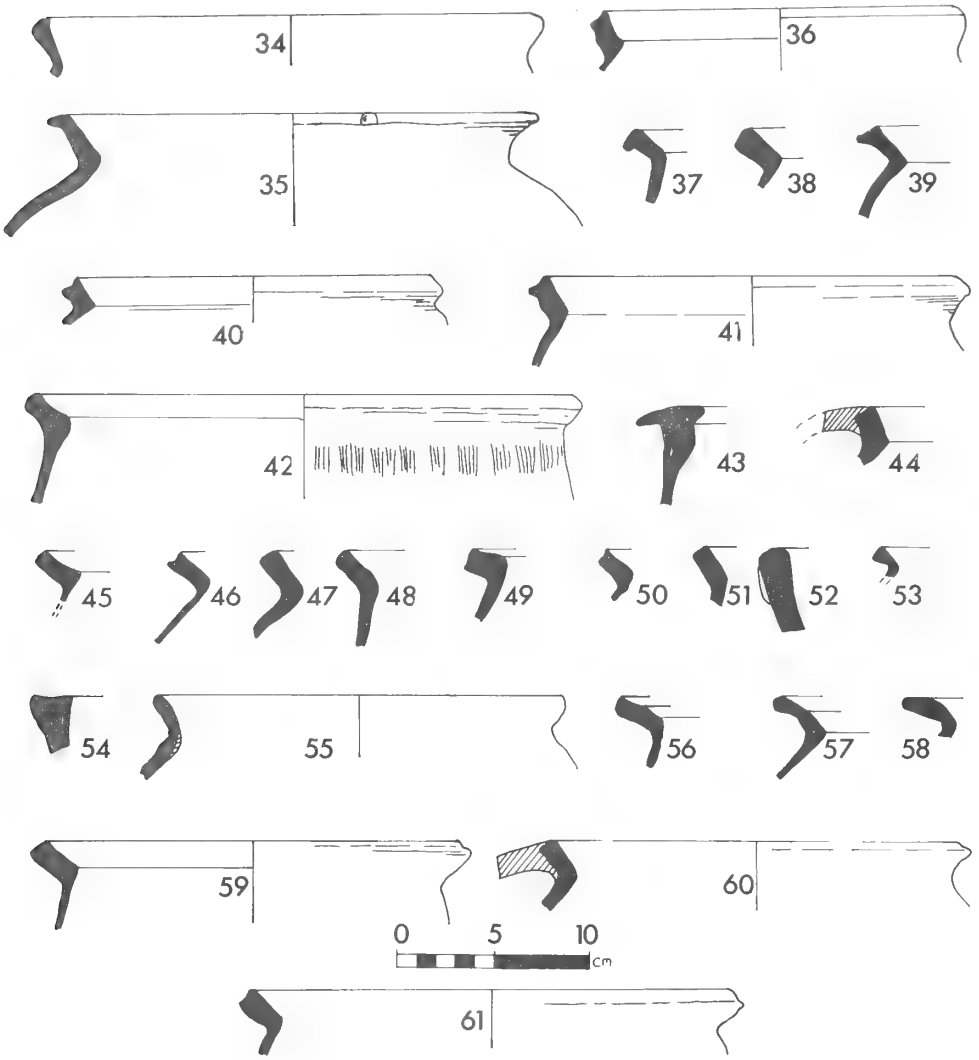

Figure 17. Cooking pots from B1 (nos. 34–44); B3 (nos. 45–9); B4/5 (nos. 50–5); B6B (nos. 56–61).

times with grey tonings, except no. 57 which is brown and scratch-marked inside and out.

From complex 7 (Figure 18)

62 Handled cooking pot in a pinky-buff to grey fabric. From building 7A hearth. Also a joining scratch-marked sherd with internal specks of greenish-yellow glaze from building 7A sump.

63 Buff ware with a fine grit. Specks of colourless glaze. From gully between buildings 7B and 7C.

64 Complete upper half of a rounded-base cooking pot (an archaic form) in developed scratch-marked ware. Buff to browny-buff with two patches of grey toning at diametrically opposed points on the rim and running, in each case, for a distance of 4 ins. along the rim flange. From building 7B.

65–7 Pinky-buff to pinky finely gritted scratch-marked ware. From building 7A.

68 Grey-buff to blackish-grey finely gritted fabric. From building 7A, wall tumble.

69–70 Grey to browny-grey fabric. From building 7A, topsoil.

71 Possibly a storage vessel. Buff, gritty, internal scratch-marked fabric. From building 7A.

72 Pinky-buff developed scratch-marked ware. The external scratch-marking is at an angle of approximately 60 degrees to the horizontal, whereas on the inside it ran with the rotation of the pot during

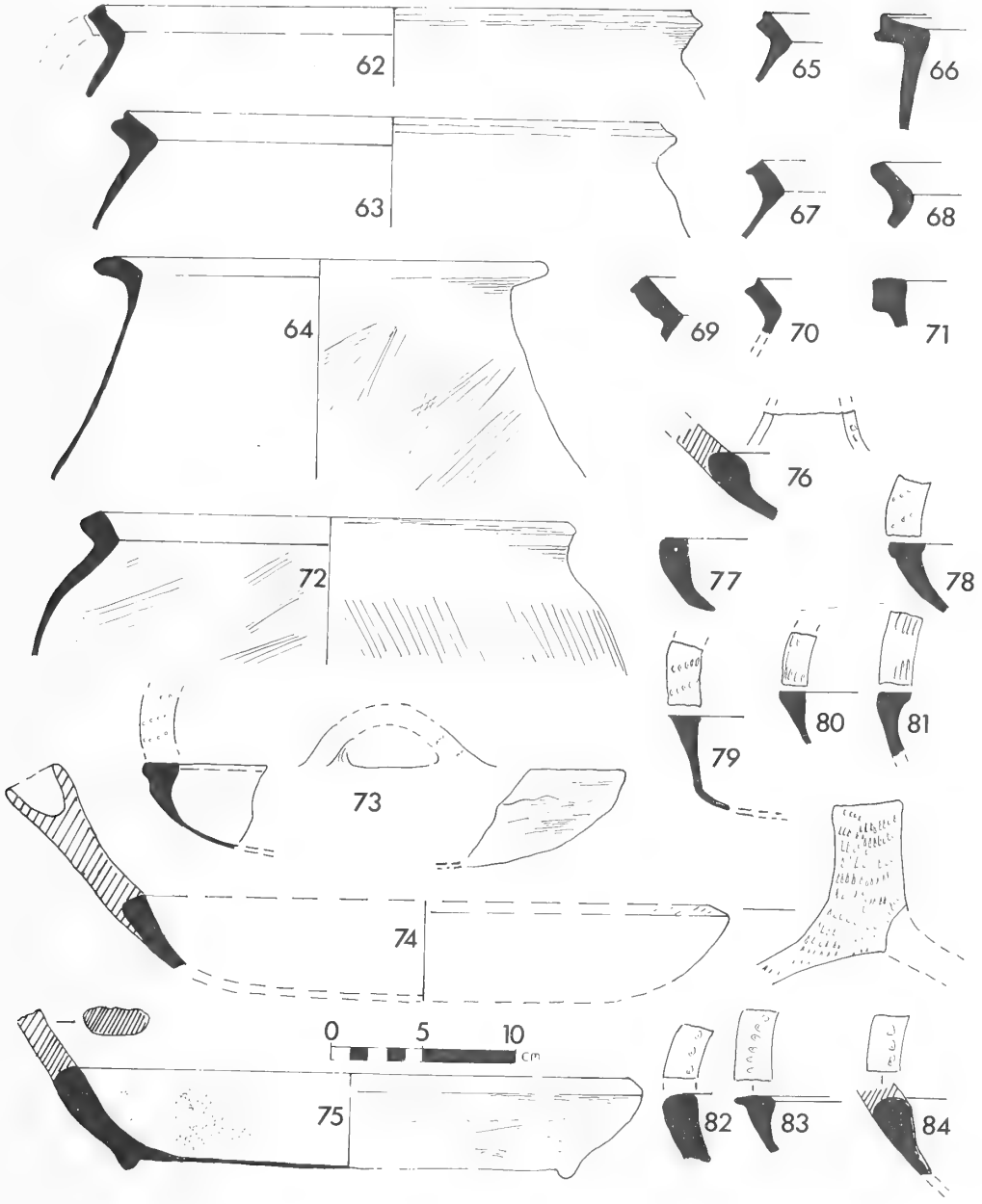

Figure 18. Cooking pots from complex 7 (nos. 62–72); skillets from various buildings (nos. 73–84).

throwing. The ware and the square-cut rim suggest a late-13th -century date. From below the blocking of the blocked doorway of building 7C.

Skillets (Figure 18)

All these are in an internally glazed scratch-marked ware – the glaze was presumably to assist cleaning. Examples came from all the houses. Most were found in the vicinity of ovens or hearths; in particular, there were a number of fragments in building 7A hearth. The rim decoration of groups of stab or cut incisions is a common feature of the Gomeldon skillets.

73 Skillet or handled-bowl. Lateral handles. Probably oval in shape. Fabric similar to no. 73. Thick internal green glaze. From complex 3/5, oven B3/B4.

74 Fine-gritted grey scratch-marked ware. Partly

green glazed internally; outside sooted. Decorated with impressions from a pronged tool. From under wall tumble outside B6B entrance.

75 Skillet with supporting feet. Pinky-buff fine gritted scratch-marked ware. Patchy internal green glaze; sooted outside. From complex 3/5, yard.

76 Pinky-buff to buff scratch-marked fabric. Traces of yellow-green glaze internally and on handle stub which is decorated with crude rectangular stab marks. From complex 3/5, oven B3/B4.

77 Skillet with sagging base in fine-gritted scratch-marked ware. Thick internal matt glaze. Outside and top of rim are heavily sooted. From B3.

78 Similar fabric to no. 76. Rim decorated with a four-prong tool. From outside B3.

79 Buff to grey scratch-marked ware. Internal yellow-green patchy glaze; heavily sooted inside and out. Rim decorated with a five-prong tool. From complex 7.

80 Fabric similar to no. 79. Specks of internal glaze and sooted inside and out. Rim decorated with sets of three cut-marks. There are five sherds and one is very weathered, undoubtedly from lying in the hearth. From B7A.

81 Buff to blackish-grey scratch-marked ware with a patchy internal colourless glaze. Rim decorated with cut-marks. From complex 7.

82 Buff fabric with a thick internal yellow-green glaze on internal surface. Rim decorated with a row of stab-marks. From complex 3/5, beneath N wall of oven B3/B4.

83 Grey to buff fabric. Decorated with a row of stab-marks. From B3.

84 Pinky-buff to buff scratch-marked ware. Sooted and with a decomposed internal glaze. Rim decorated with a row of stab marks. The rim is slightly thickened for the start of the handle which was also similarly decorated. From complex 3/5, oven B3/B4.

Jugs (Figure 19)

The sherds from jugs can be divided into four groups according to vessel type:

a Tripod pitchers with rouletted decoration and patchy glaze. All examples came from the scarp edge, W of B2. Date: late 12th century.

b High-quality glazed jugs of Laverstock type. From B2 (upper layers) and complex 3/5, with a few from complexes 6 and 7. Date: late 13th/14th century.

c Unglazed jugs in characteristic pinky-buff to browny-buff wares and with rod handles decorated with exaggerated thumb-presses. From B1 and complexes 3/5, 6 and 7. Date: late 13th/14th century, but probably later than Group b and not earlier than 14th century.

d Unglazed jugs decorated with painted stripes. From B6B and B7 only. Date: as for group c.

85 Tripod pitcher rim in grey to pinky-buff finely gritted fabric, dark grey in fracture. Internal patchy light green glaze, external thick olive green glaze. From scarp edge, B2.

86 Tripod pitcher handle. Similar ware to no. 85. Transparent to greeny-yellow patchy glaze. Edges pulled up and lightly thumbed. Upper surface decorated with rouletting. From scarp edge.

87 Tripod pitcher body sherd with rouletted decoration. Ware similar to no. 85. Thin external glaze coloured by fabric. From scarp edge.

88 Pinky-buff finely gritted fabric with accidental specks of glaze internally. From B1.

89 Buff coarse fabric. From complex 7.

90 Strap-handle section in a grey gritty fabric with browny-buff surfaces. Upper surface decorated with thumb impressions. From B2.

91 Strap-handle section from a jug in cooking-pot fabric with a patchy colourless thick glaze. Decorated with stab marks. From complex 1/2.

92 Browny-buff to grey-black finely gritted fabric. Unglazed. From complex 3/5, yard below B3.

93 Rim with strap handle stub and body sherd with the other end of the handle. Unglazed coarse browny-buff fabric. The handle is decorated with wide shallow grooves in a chevron pattern. From B7A, hearth.

94 Strap-handle section from a coarse ware jug or handled cooking pot in a salmon-pink lightly gritted fabric. From complex 7.

95 Unglazed jug handle in a pinky-buff sandy fabric. The pronounced thumbed grooves at the handle/body junction are characteristic and occur on other examples. From complex 3/5.

96 Handle from a similar vessel (but internally scratch-marked) and probably from same kiln. From B6B.

97 Strap-handle decorated with thumb impressions from an unglazed jug or cooking pot in a grey to pinky-buff fabric. From complex 1/2.

98 Rod handle stub decorated with slashed pads in a reddish clay different to the body which is pinky-buff and coated with a colourless glaze specked with green. Probably made at Laverstock. From B3 below tumble.

99 A similar rod handle stub. From B1 below wall tumble.

Figure 19. Jugs from various buildings (nos. 85–107).

100–101 Strap-handle sections from jugs. One is in a buff fabric (from B1), the other is in a blackish-grey fabric from complex 3/5, oven B3/B4.

102 Handle stub from a high-quality, Laverstock-type, jug. All-over green speckled glaze and the start of a stripe in contrasting brown. From B2.

103 High-quality creamy-buff fabric with external green glaze. An early Laverstock product. From B3.

104 Sherd from a Laverstock jug. Buff fabric with a yellow-green glaze with contrasting lead-coloured stripe and applied pellets glazed like the body. From scarp edge, W of B2.

105 Sagging base in scratch-marked cooking-pot ware with pairs of thumb-presses on the heel. Pinky-buff to grey fabric. From complex 3/5, oven B3/B4.

106 Base in a similar fabric and glaze to no. 107. Possibly from a Laverstock jug. From B3.

107 Pinky-buff to grey-buff fabric with a patchy

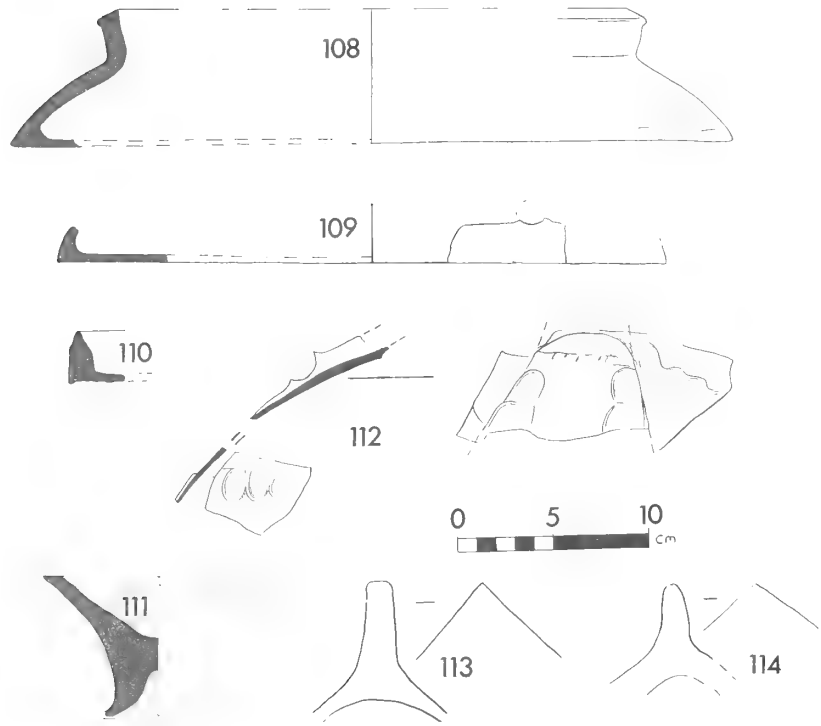

Figure 20. Other vessels and ridge-tile crests.

external green glaze. Possibly from Laverstock. From B3.

Not illustrated. Four sherds from a jug in buff to pinky-buff cooking-pot fabric decorated with reddish-brown painted horizontal stripes (from B6B). Another sherd in a similar ware, but greyish with greyish-brown stripes was found in B7A (living end).

Other types of vessel and roof furniture (Figure 20)

'Beehive' bases

The greater part of a type of vessel well known from Wessex sites was found in building 6B (Figure 20, no. 108). The type, originally defined by Professor E.M. Jope, was described by him[31] as resembling a truncated cooking pot and probably used as a chafing dish; it has also been discussed by us.[32] Our alternative suggestion was that it provided the base for a bee-hive skep. The usual hole in the side is not present in the collection of sherds from no. 108, but is present in no. 109. Apart from the two examples illustrated, others were found in complexes 1/2, 6 and 7.

108 Browny-buff finely gritted fabric with external scratch-marking. Half the complete vessel was found. From B6B.

109 Brown to reddish-buff scratch-marked fabric typical of three others from the same area. From complex 7.

Shallow dish

110 Buff to grey gritty fabric. Suggestion of light thumbing-down of the basal angle. From B6 above tumble.

Pottery lamp

111 Unglazed cooking-pot fabric with grey-buff outer surface and soot-blackened inside (B6B). Compares with *London Museum Medieval Catalogue* (HMSO, 1954), pp. 175–6, especially figure 54, no. 5.

Curfew

112 A handle stub and 11 large body-sherds found in association. Buff to grey sandy fabric with patchy light green external glaze; soot and tar are present on the inside. The large strap handle with thumb-

31. E.M. Jope, 'Regional character in West Country medieval pottery', *Trans. Bristol and Gloucs. Archaeol. Soc.*, vol. 71 (1952), p. 62.

32. Musty, Algar and Ewence (note 9), p. 107.

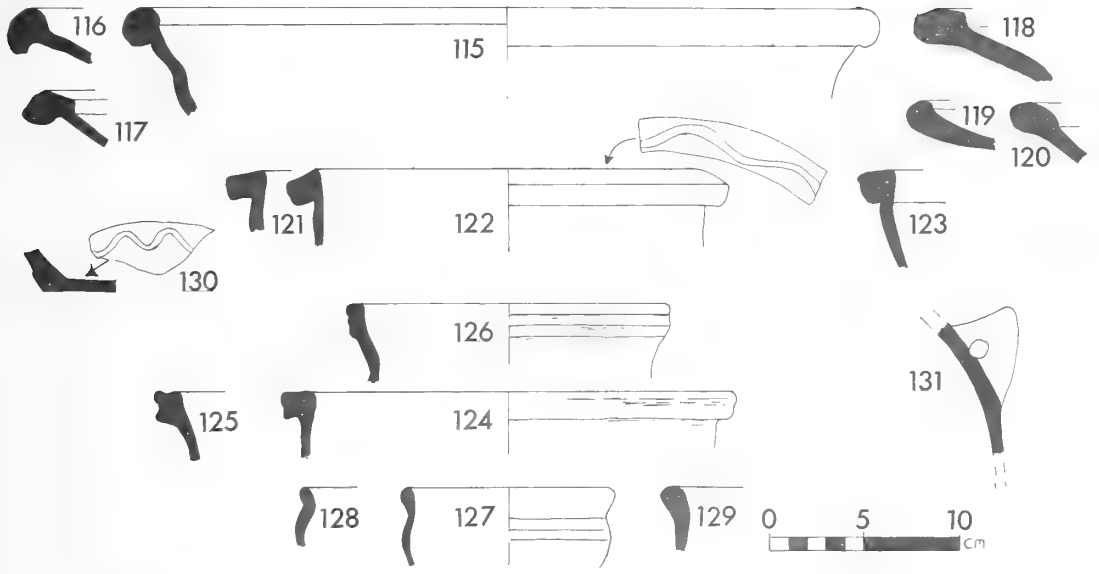

Figure 21. Post-medieval pottery (nos. 115–31).

pressed edges and the thumb-pressed strips on the body are typical curfew features although the possibility that the sherds came from a large jug cannot be completely excluded. Examples from another DMV site, Hangleton, have been discussed by Mr J.G. Hurst[33] and curfews were made at Laverstock.[32] Their use was to cover hearths at night. No. 112 was found in the collapsed remains of oven B3–5, complex 3/5.

Ridge tiles

113 Knife-cut ridge-tile crest. Thick green high-quality glaze on a buff fabric; probably from Laverstock and therefore late 13th century. From building 3, hearth.

114 Similar but of lower quality. Unglazed. A small pebble is incorporated in the fabric. Unlikely to be of Laverstock manufacture. From complex 3/5, oven B3/B4.

Plain roof tiles (not illustrated)

Numerous fragments were found, especially at the sites of the hearths in building 3. It is probable that all the tile found in the various buildings originated from hearths or ovens. The tiles are either red or buff and 0.4 in. or 0.5 in. thick. A few have peg-holes but some are blind, suggesting that these had not been salvaged from a roof and may have been bought as wasters.

Oven tiles (not illustrated)

All are associated with hearths or ovens, especially with oven B3/B4 and building 7A hearth. The tiles have buff to pinky-buff surfaces with a grey core and are 1–1¼ ins. thick and could also be described as thin bricks. One large fragment is 1¼ ins. thick with maximum dimensions 3.4 by 5 ins., and the sides and one face are smooth, the others rough.

Post-medieval pottery

Examples of post-medieval pottery found in the layers above buildings and on platform 8 are illustrated in Figure 21. These are vernacular wares, coarse earthenware, mainly pans and bowls, produced by local kilns – in this case probably Verwood.[34] Wares not illustrated include the products of factories outside the area, e.g. German stoneware, a bellarmine jug sherd, and Staffordshire comb-ware. These factory wares, present in a very small proportion, are swamped by the local products which would have been sold in near-by Salisbury market or hawked from door to door. A broad date for much of this pottery is late 17th/early 18th century.

a pans with splayed clubbed rims

115 Pinky-buff fabric, yellow-green internal glaze with diagonal brownish streaks. From platform 8.

116 Buff fabric, yellowish internal glaze. From B2.

33. J.G. Hurst in in Holden (note 12), p. 135.

34. Although no attempt has been made to establish identity of rim shapes with known Verwood forms, comparison of glaze and ware has been made with sherds picked up on kiln sites at Verwood, and good agreement achieved.

117 Buff fabric, colourless external glaze. From B2.
118 Buff to pinky-buff fabric, greenish internal glaze. From B2.
119 Fine sandy fabric with dark grey core. Green to colourless internal glaze. From B2.
120 Buff fabric with traces of transparent glaze externally, yellowish glaze internally. From B2.

b pans with hammer rims
121 Buff to grey fabric. Green glaze internally also on undersurface of rim-flange. From B3, flint tumble above hearth.
122 Fabric and glaze as no. 121. From platform 8.
123 Rim sherd representative of 28 pieces of one vessel. Fabric similar to no. 121, but a lighter green glaze. From complex 7, gateway.
124–5 Fabric and glaze as for no. 121. Both from platform 8.

c bowls with everted or slightly thickened rims
126 Buff fabric, internal green glaze. From platform 8.
127 Buff to grey fabric, internal yellow glaze. From platform 8.
128 Reddish to buff fabric, internal orange glaze. From platform 8.
129 Similar to no. 128, much of the rim's circumference present. From B3.

d bases and lugs
130 Fabric and glaze similar to no. 128. Inner surface of base decorated. From platform 8.
131 Pierced lug from a costrel. Pinky-buff fabric. External green glaze with reddish-brown and lead coloured specks of similar character to no. 115. From B6A, robber pit in sunken annexe.

ANIMAL BONES *by* RALPH HARCOURT

Buildings 1 and 2

A total of 448 bones and bone fragments were determinable, of which fewer than a dozen were complete. The great majority were of the usual domestic animals – sheep, cattle and pig. The sheep and cattle together formed over 80 per cent of the total. Horse remains provided only 1 per cent, and pig just over 12 per cent.

The list of other species is short: rabbit, dog, deer, cat, and birds – of more than one species. Dog and cat were represented by one specimen for each, a canine tooth and humerus respectively. The deer remains consisted of an almost complete fibiotarsal joint, the constituent members of which were found in close association and thus probably were from the same animal, and some teeth. It is unlikely that the rabbit remains are contemporary with the rest of the collection, for, although in several cases being small light bones, they are extraordinarily well preserved. They are furthermore very white in comparison with the yellowish appearance of bones long buried.

As is to be expected, teeth formed a considerable proportion of the remains of each species – 36 per cent for cattle, 100 per cent for the dog, 70 per cent for the pig, and over 60 per cent for sheep.

The fragmented condition of the bones makes assessment of age and size not easy, but it is possible to say that the sheep remains consisted mainly of young adults with occasional examples of much younger and of fully mature animals.

The age picture in the pig is rather more difficult. Judging by the nature and size of the teeth the majority were fairly well-grown, although there is a humerus from a very young (? sucking) pig.

The bovine remains were, on the whole, of large animals, the most impressive being a massive left humerus with a distal width of 83 mm – possibly that of a draught ox? This would seem to suggest that the cattle were kept rather more for work and milk than for slaughter at an early age. One ox calcaneum bore marks of hacking nearly all the way round it.

	percentage	*other species*	*no. of specimens*
sheep	61.0	rabbit	10
cattle	19.5	dog	1
pig	12.8	deer	9
horse	1.1	cat	1
others	5.6	bird	4

Table 6. Buildings 1 and 2: relative proportions of different species based on number of fragments

Building 3

The species represented were sheep, cattle, pig, dog and horse; also included were four bird bones (domestic fowl and rook have been identified). The greater part was provided by the food animals, sheep and cattle together 87 per cent and pig 9 per cent.

Dog provided two specimens. One was a metatarsal (100 mm), longer but slimmer than that of a big male foxhound and possibly from a wolf-hound or deerhound, that is 30–33 ins. (76–83 cm) at the shoulder. The other was a large first upper molar, again bigger than the equivalent member of the foxhound.

Of the sheep remains the most notable was a forelimb complete from the radius downwards, found with the parts in correct anatomical relationship. This must mean that the limb was hacked off and thrown out,

where it remained undisturbed. The teeth represent animals of all ages including the worn molars possibly of ewes killed when past breeding age. A series of eight distal tibial extremities was compared with an example from a yearling Soay-type ewe and seven were very similar in size, the other being much heavier and stouter, possibly that of a ram. This bone was the only one in the whole collection showing saw-marks.

The bovine specimens included a mandible fragment with erupting premolars indicating an approximate age of $2\frac{1}{2}$ years. The remaining teeth were of young adults. The fusion of epiphyses of long bones in various instances points to animals of more than $3\frac{1}{2}$ years in two cases and less than this in another. These ages are based on modern cattle and may be an underestimate. The bones, although in no case complete, were all stouter than those of a Jersey heifer.

The horse specimens consisted of a metacarpal (210 mm length; 30 mm midshaft diameter) and a metatarsal (251 mm length; 25 mm m.s.d.) indicating animals of about 13 hands (134 cm).

The only butchery signs were saw-marks on the ram tibia already mentioned. There was no evidence of disease or anatomical anomalies.

The percentages (Table 7) would seem to suggest that sheep predominated. When they are expressed in terms of carcase weight (i.e. with head, skin, offals and feet removed), rather than bone numbers, the picture changes. This calculation is based on dressed carcase weights of 300 lb. for cattle, 25 lb. for sheep, and 65 lb. for pig. It is effected by multiplying the number of bone specimens of each species by the carcase weight and then expressing this as a percentages of the total weight of meat so obtained. These figures are intended to represent an average animal for each species, the killing-out percentage being low by modern standards.

	bone remains (per cent)	*meat (per cent)*
sheep	74	31
cattle	13	60
pig	9	9
horse	1	–
dog	1	–
birds	2	–

Table 7. Building 3: relative proportions and meat yield of the various species

Buildings 5 and 6

The animal remains from these buildings were similar to those from elsewhere in the village: sheep, cattle, pig, horse, dog, bird and, as a newcomer, hare.

Dog was represented by two specimens, a very much worn canine tooth and a small metatarsal indicating a terrier-sized animal of about 16 ins. (46 cm) shoulder height.

Bovine mandibles and loose teeth were scarce, insufficient to give any worthwhile information as to age. All measurements of cattle bones (Table 8) were similar to

bone	*total length (mm)*	*proximal width (mm)*	*distal width (mm)*	*site*
radius	–	79	–	Gomeldon
	–	74, 77, 82	–	Northolt
	–	75, 69	–	Chillingham
humerus	–	–	62, 69	Gomeldon
	–	–	60, 74	Northolt
	–	–	79, 66	Chillingham
metacarpal	175	46	51	Gomeldon
	–	–	54, 57, 67	Gomeldon
	175, 179, 182, 184	–	50, 68	Northolt
	177	–	50–79	Kirkstall
	165–175	–	49–61	Petergate
	–	–	65, 55	Chillingham
tibia	–	–	50, 59	Gomeldon
	–	–	53, 58	Gomeldon
	–	–	60	Chillingham

Table 8. Buildings 5 and 6. Comparative bone dimensions: Gomeldon and contemporary Chillingham cattle.

those from other medieval sites (Northolt Manor,[35] Petergate,[36] Kirkstall Abbey[37]), and the larger specimens were very close to those of the Chillingham bull and cow at the British Museum (Natural History), respectively 4 ft 5 ins. and 4 ft. 0 ins. at the shoulder. Sheep are all of the small slender-limbed Soay/St Kilda type. An attempt was made to age as many single teeth as possible, not merely mandibles with teeth; while age determination with single teeth is not as accurate, the margin of error is not sufficiently great materially to alter the overall picture. The result (Table 9) indicated that sheep were kept to an advanced age and not killed young. It bears out Trow-Smith's[38] statement that from the 12th century to the time of Bakewell, the late 18th century, the object of keeping sheep was the maximum clip, soil-manuring and milk being subsidiary and meat almost ignored.

age (years)*	*per cent*
<1	14
1	5
1½	6
2–3	17
3–4	10
4–5	35
>5	13

* Based on modern figures which may be underestimated.

Table 9. Buildings 5 and 6. Age structure of sheep estimated from teeth

It will be seen that 'less than 1 year old' is well represented, indicating the usual relatively heavy losses in first-season lambs. Then mortality drops, and subsequently climbs steadily each year up to the 5-year group. Then, as, in proportion, few sheep of this age would still remain alive, it falls away again. While meat was not a primary product it must not be lost sight of that a community of the type represented in this village would very likely eat sheep that had died a natural death. Until very recent times the mutton of a sheep dead of braxy – a Clostridial infection – was regarded as a great delicacy.

The only measurable horse bone was a metacarpal (243 mm length, 55 mm proximal width, 51 mm distal width) which indicated a fairly sturdy animal of about 15 hands (155 cm).

The total species percentages expressed in terms of bone remains and meat are shown in Table 10.

	bone remains (per cent)	*meat (per cent)*
sheep	66	18.9
cattle	22	74.4
pig	9	6.7
other	3	–

Table 10. Buildings 5 and 6. Relative percentages and meat yield of species present

Buildings 7A–C

The collection of bones from these buildings is very small, with less than 100 identifiable specimens. The domestic species present are sheep, cattle, horse, pig and fowl. Fallow deer is the only wild animal represented.

The cattle, a minimum of 2 animals being represented, were fully mature with well-worn teeth. No measurements were possible.

There was a minimum of four sheep. The number of teeth from aged animals was three times greater than that from younger ones, providing further evidence that sheep were kept to an advanced age. There were only two measurable specimens: a radius of 29 mm proximal width and a cheek tooth-row of a mandible of 64 mm.

Horse is represented by a few teeth, all from a small area in building 7A. Pig remains are very scanty. The fallow-deer specimens both came from building 7A sump and consisted of two antlers, one a cast specimen and the other from a killed beast with a portion of skull attached. This was from a buck not less than 2 years old. Fallow deer shed their antlers in April, so the cast specimen was probably picked up between then and June as cast antlers do not usually survive long above ground.

HUMAN BONES *by* MISS ROSEMARY POWERS

From building 7B came a neonate skeleton, fully birth size and undoubtedly human. The head, shoulders and right arm are missing. Those parts present are: left arm (complete) and some hand-bones; both legs (nearly complete) and some foot-bones; trunk (ribs, some vertebral arches, two centra, both ilia, both ishia). The supraorbital region of the right frontal bone and some

35. Judith E. King, in J.G. Hurst, 'The Kitchen Area of Northolt Manor, Middlesex', *Med. Archaeol.*, vol. 5 (1961), p. 295.
36. M.L. Ryder, cited by P.A. Jewell, 'Cattle from British Archaeological sites', in A.C. Mourant and F.E. Zeuner (eds.), *Man and Cattle* (Symp. Proc. Roy. Anthrop. Inst., London 1964).
37. M.L. Ryder, in David E. Owen, C.V. Bellamy and C.M. Mitchell, *Kirkstall Abbey Excavations 1955–1959*, Thoresby Society Publication 48 (1959).
38. R. Trow-Smith, *History of British Livestock Husbandry to 1700* (London: Routledge and Kegan Paul, 1957).

other splinters are all that remains of the skull, and they are more decayed than the other bones. The absence of the clavicles and mandible must be due to disturbance, as they are the densest bones in the skeleton at this age.

Maximum lengths of the long-bone shafts are: femur 70 mm; tibia 62 mm; fibula 59 mm; humerus 61 mm; radius 58 mm (?); ulna 58 mm (?). The last two measurements are estimated, as the wrist is slightly damaged. The maximum dimensions of ilium: width 33 mm, height 29 mm.

From the yard of complex 3/5 came a rib almost identical to one of the ribs from the building 7B skeleton.

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 170–175.

Two Medieval Roofs in West Wiltshire

by P.M. SLOCOMBE*

Renovation work during 1985 uncovered two roofs of considerable interest which were brought to the notice of the Wiltshire Buildings Record. One belongs to a rural manor house and may date from the 14th century, and the other belongs to a town house and is probably of the late 14th or early 15th century.

MANOR HOUSE, UPTON SCUDAMORE

This house was previously examined in January 1957 by an investigator of the Royal Commission on Historical Monuments when work was being carried out.[1] A thorough recording was made of the features which could then be seen and 11 photographs were taken. The restoration of 1985 exposed much more of the fabric of the house, making further details visible, and the building can now be reassessed.

Construction

Manor House is built of stone with some brick repairs and consists of a hall range facing S with a cross-wing at each end (Figure 1). The roof over the hall range has the earliest features. It is two bays long and therefore incorporates a central open truss. In 1957 this truss was largely hidden by an inserted fireplace and stack of the late 16th or early 17th century. An upper floor had also been inserted in the hall at the same date, so the former great hall became divided into four rooms, and a barrel-vaulted ceiling concealed the roof timbers of the W bay. The hall has now been reinstated into one room. The removal of the central stack and repair of the S wall have revealed that the central truss is of base-cruck type, the upper structure consisting of a simple short crown post with slightly curved four-way struts (Figure 2). The tie over the base crucks is cranked and chamfered and supported by long arch braces with solid spandrels. The arch braces are in two sections and also chamfered.

In 1985 the builders found that the lower part of the base cruck on the S side of the truss was enclosed inside the S stone wall of the hall; it was traced down as far as 5 ft (1.5 m) above the hall floor. If this is its original length it can be classified as a raised base cruck. If it formerly reached to the ground it was a full base cruck, which would imply that the hall was originally timber-framed. There is some evidence to support this possibility. A base cruck was a status symbol whose ornamental value was lost if it was buried in stone to roof height. Further, the fine dais window at the W end of the S wall of the hall has two cinquefoil-headed transomed lights with four sunken trefoil-headed panels above, all in a square label (Figure 3). It was dated to the late 15th century in 1957, and this still seems appropriate. The whole S wall of the hall, free of plaster when examined in 1985, seems to be contemporary with this window. Since the roof can hardly be as late as the end of the 15th century, this suggests that the walls of the hall were formerly of timber and were rebuilt in stone. The history of the house, outlined below, makes a rebuilding around 1482 likely.

Square-set roof plates are carried on the ends of the tie of the central base cruck truss, slightly trenched into its top face, and steep, heavy chamfered windbraces run to the plates from the crucks. Above the roof plate are trussed common rafters, tenoned at the apex and smoke-blackened like the rest of the original roof. The collar purlin, the longitudinal timber supported on the crown post, has simple sloping scarf joints in places. It, in turn, supports the collars of the common rafters. About 3 ft (0.9 m) W of the central truss, one pair of trussed rafters has an additional collar 1 ft (0.3 m) higher up and 27 ins (0.7 m) below the apex of the roof. This is likely to be the remains of a smoke louver. Nails in the W face of the pair of rafters above this extra collar show that there was once infilling of some kind. The common rafters of the central truss and immediately to its E had to be replaced (in 1957?), so there is no comparable evidence on that side.

At the E end of the hall the lower part of the partition against the service cross-wing has been considerably rebuilt. In the upper part it does, however, retain a crown post with four-way struts. The collar purlin

* Wiltshire Buildings Record, 41 Long St., Devizes, Wilts. SN10 1NS.

1. Unpublished report at the National Monuments Record, Fortress House, 23 Savile Row, London.

Figure 1 Manor House, Upton Scudamore, from the S during renovation in 1985

Figure 2. Manor House, Upton Scudamore. The central open truss of the hall from NW.

Figure 3. Manor House, Upton Scudamore. The head of the late-15th-century dais window in the S wall of the hall.

which it supports continues for 4 ft (1.22 m) E-wards into the roof of the service wing where it is cut off. It is unrelated to the queen-post roof of the cross-wing which runs N/S, and shows that there was an original service end in line with the hall. At this partition the roof plates on either side of the roof appear to be supported on straight posts in the manner derived from aisled-hall construction. Next to the partition the rear door of the cross entry in the hall remains, but the S doorway was replaced, perhaps in the 16th century, by a new one at the W end of the room next to the dais window.

The partition W of the hall against the parlour wing has also been reconstructed. The blackened collar purlin of the hall roof is tenoned into the top of a clean post, and the structure below the post includes a re-used timber with elongated ovolo moulding. At a lower level in the partition is a tiebeam, and under this a central post on each side of which is a large curved brace to the tiebeam. This could well be a 15th- or 16th-century reconstruction. There is no evidence remaining for an earlier parlour end to the house, but the truncated tiebeam roof over the present cross-wing includes some blackened re-used timbers. The cross-wing may originate in the 16th century, but seems to have been considerably altered in the 17th century.

History

The Manor House, which in 1957 was called Manor Farm, was the capital messuage of a large freehold estate, which the Park family held in the Middle Ages under the lords of Upton.[2] The first reference is to Simon Park, who held $\frac{1}{3}$ knight's fee of Godfrey Scudamore in 1242–3. There are references to a Walter Park in 1270 and 1307, and to another Walter, son of William Park, in 1332 and 1334. In 1347 John Park held his lands by a rent of 40*s*. By 1471, however, the property had fallen into the hands of the lords of Upton, probably either for want of an heir or by forfeiture. The lands and the house, known as 'Parkescourte', were then held as a customary holding of the manor of Upton. In 1482 a new tenant was ordered to rebuild a kitchen and repair the rest of the house. The manor of Upton as a whole had been bought by the

2. E. Crittall, *VCH Wiltshire*, vol. 8 (1965), pp. 78–89.

Hungerford family in the early 15th century, but was lost in the 1460s when a Hungerford was attainted. It was restored to the family in 1485, when the demesne lands were let to John Hill, who already held the former 'Parkescourte' lands. In 1542 the farm was called 'Parks Farm' and was let to Christopher Eyre, local bailiff of the Hungerfords. In 1582, when it was in hand, the lands consisted of 124 acres of arable land, 24 acres of inclosed meadow and pasture, plus 3 virgates totalling 91 acres in individual strips of about an acre which had been added to the farm in about 1542. The farmer of Parks could also keep 273 sheep on the Downs. By 1606 the property was called Acres Farm and was let to a William Seaman. Either he or a namesake was Rector of Upton in the 17th century, and his family bought the farm when the manor of Upton was broken up in 1689.

11 SILVER STREET, BRADFORD-ON-AVON

The building comprises at present an L-shaped shop (called The Dairy) with first floor over, and an extension to the W of the rear wing. The E side of the L incorporates the remains of a medieval building, set gable end to the street. The front room would have probably been two bays long. The room behind, of which the smoke-blackened roof remains, was a three-bay open hall. To the rear of the hall is a single-storey later extension, a bakehouse with a number of ovens, and there are two detached stone-vaulted storage cellars in the hillside behind, perhaps used by a butchery business in the early 19th century.

The two open trusses of the hall roof are similar (Figure 4). They have a slightly cambered tiebeam originally with short arch braces below, a slightly cambered collar, also arch-braced, clasped purlins and a ridge piece clasped below the tenoned apex. The tiebeams and collars are chamfered, and the arch braces are chamfered, running down to a step stop with a narrower chamfer continuing. The closed truss at the S end of the hall only differs in having no bracing to the collar and the tiebeam.

Beyond the S wall a chimney stack was built at a later date. It survives on the first floor, though all trace of it has been removed in the shop below. On the E side of the stack a smoke-blackened windbrace and common rafter remain; on the W side the hall purlin runs on for a short distance, showing that the building originally continued in line with the hall to the street. At the N end of the hall the purlins and windbraces are set into the stone gable wall, though this may not necessarily have been the original arrangement.

The early history of the house is not known. The site is just above the former market place of Bradford-on-Avon, on what is thought to have been the main Saxon road through the town. It has been suggested[3] that the plot is one of the oldest on the N side of the river. To its E is Silver Street House, formerly the New Bear Inn.

DISCUSSION

The hall roof of Manor House, Upton Scudamore, with its base crucks, crown post and coupled common rafter superstructure is a predominantly SE type, only occasionally found so far W where two-tier crucks were more common in good-quality roofs of the 14th century. It is a type typical also of aisled houses, and it has been mentioned that the E partition at Upton Scudamore may be derived from an aisled form where arcade plates are carried on posts. It is known from excavations that aisled buildings existed in Wiltshire in the early medieval period, but the sole surviving example known is at Market Lavington where only fragments remain.[4]

A few crown post roofs have been recorded in Wiltshire. The earliest is probably that of the Old Deanery, Salisbury, dating from the second half of the 13th century, where the lower part of the roof is formed of raised base-cruck trusses and the trussed rafter superstructure is supported by scissor bracing.[5] There are a number of 14th-century examples at Salisbury including the George Inn, High Street, where the crown posts are set in the common rafter roofs of a timber building.[6] At Garsdon Manor near Malmesbury and Bradenstoke Abbey (now removed to Wales) the crown posts are used in stone buildings in combination with short principals and upper crucks.[7] A closer parallel with Upton Scudamore, dating from the early 14th century, was the roof of the barn at Manor Farm, Cherhill, demolished in 1956.[8] An upper roof of crown posts and collar purlins was combined with four base-cruck aisled trusses. This building, however, had some archaic features in its bracing and use of stylobates.

3. J. Haslam, *Wiltshire Towns: The Archaeological Potential* (Devizes: WANHS, 1976).
4. Unpublished report at the National Monuments Record (note 1).
5. M. Wood, *The English Medieval House* (London: Dent, 1965), pp. 50–1.
6. RCHM(E), *Ancient and Historical Monuments in the City of Salisbury*, vol. 1 (London: HMSO, 1980), pp. 96–9.
7. N.W. Alcock and M.W. Barley, 'Medieval Roofs with base-crucks and short principals', *Antiq. J.*, vol. 52 (1972), pp. 132–68.
8. S.E. Rigold, 'The Cherhill barn', *WAM*, vol. 63 (1968), pp. 58–65.

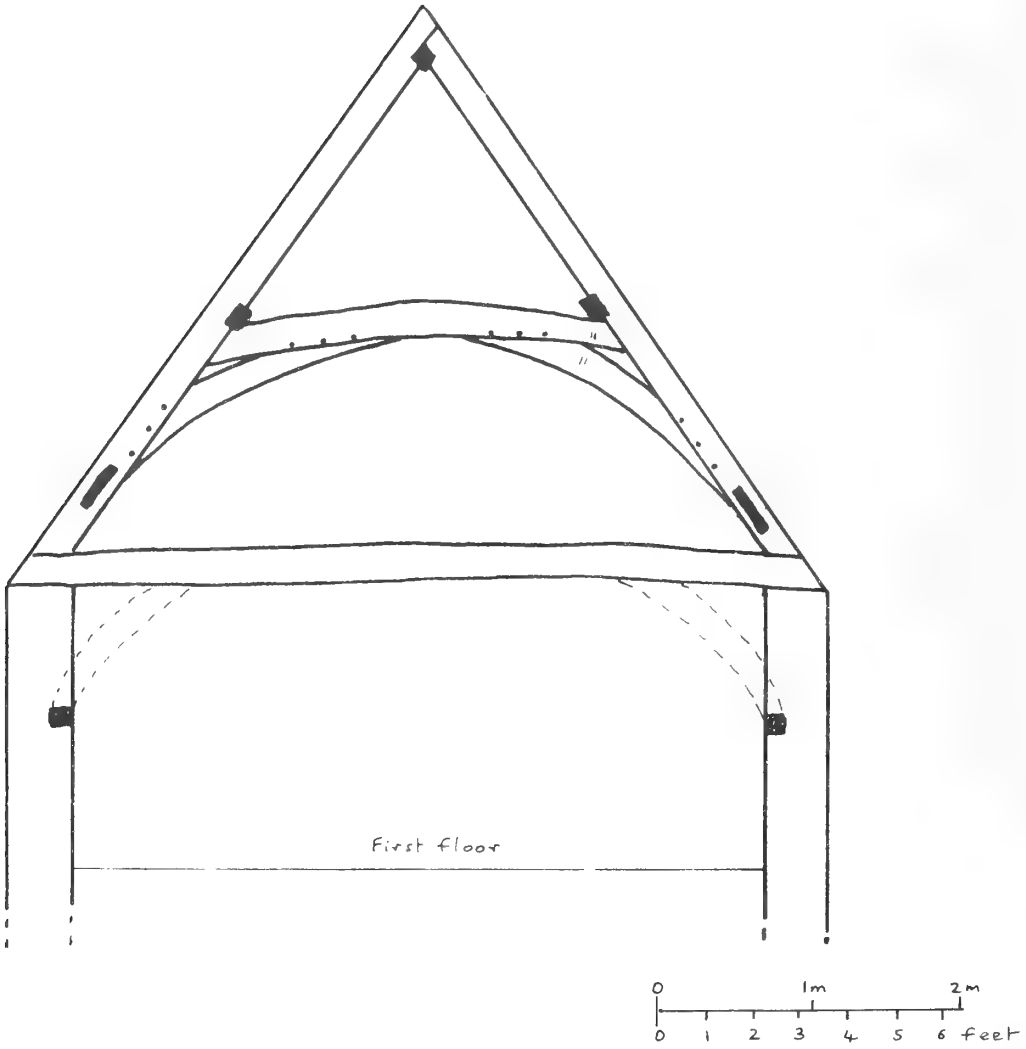

Figure 4. 11 Silver Street, Bradford-on-Avon. Open truss of the hall looking N.

Base crucks in Somerset have been described in a series of articles.[9] They were used chiefly in buildings of more than average width. 16 to 18 feet was a normal width for ordinary cruck buildings, but base-cruck buildings could be up to 28 feet wide. Upton Scudamore is just over 19 ft (6 m) wide between the stone walls, but would have been about 20 ft 6 ins. (6.25 m) between timber walls. Base crucks were also associated with wealthy owners of high social standing, as J.W. Tonkin has established in his work on Herefordshire.[10] Most of the Somerset examples are two-tier crucks, but at the Tudor Tavern, Taunton,[11] the superstructure above the tiebeam is a crown post with trussed rafters, like that at Upton Scudamore – though some details of the building are different; for example, the roof plates are below the tie, and base crucks are used for the closed trusses at each end of the hall. The Tudor Tavern is dated to the late 14th century.

The roof of 11 Silver Street, Bradford-on-Avon, is a hybrid type with SE and SW features. It is particularly unusual in being basically an arch-braced collar truss but having in addition a braced tiebeam. The tiebeam is

9. E.H.D. Williams and R.G. Gilson, 'Base crucks in Somerset', *Proc. Somerset Arch. Nat. Hist. Soc.* (1977, 1979 and 1981).

10. J.W. Tonkin, 'Social standing of base crucks in Herefordshire', *Vernacular Architecture*, vol. 1 (1970), p. 7.

11. Williams and Gilson (note 9) (1981), pp. 45–51.

included in all three trusses and does not seem to be a feature added later as a repair. The clasped purlins are an E feature (tenoned or trenched purlins being more common locally), but the ridge piece is a W feature though its position, clasped below the apex, is unusual. This is a roof of medium-quality wood in smallish scantling. The owner was perhaps a merchant, without the access to top-quality timber which a landowner would have had. The relatively short lengths of the bays, each about 6 ft 8 ins. (2 m) long, and the extra bracing provided by the tiebeams and the lower braces may have been intended to compensate for this and must have done so since the roof survives in good condition. Comparable trusses have been found at Yew Tree Cottage, Church Street, Norton St Philip[12] and at 8 Chamberlain Street, Wells,[13] both in Somerset. At Yew Tree Cottage the end truss of the hall has a collar and tiebeam, a ridge piece below the apex resting on an upper collar, and clasped purlins held in position with short upright struts. The truss, like the closed truss at Bradford-on-Avon, has no arch bracing but is of larger scantling. At 8 Chamberlain Street, Wells, an intermediate open truss has a tiebeam, collar, clasped purlins and ridge piece below the apex. It, too, has no bracing. The main truss of this roof is, surprisingly, a two-tier cruck with cusped bracing indicating a probable 14th-century date.

Both roofs which have been described appear to fall into the period *c.* 1350 to *c.* 1450, but being unusual they cannot be dated with certainty. The position of the roofplate and the shortness of the crown post together suggest a 14th-century date for Manor House, Upton Scudamore; the roof at 11 Silver Street, Bradford-on-Avon, may be contemporary or slightly later.

Acknowledgements. I would like to thank the owners, Mr M. Upsall at Upton Scudamore and Mr A.C. Case at Bradford-on-Avon for their permission to record the buildings, and also Mr J. Field and Mr A. Houghton of Warminster History Society and Mr A. Powell of Bradford-on-Avon for drawing attention to the buildings. Photographs and fuller notes on the buildings are deposited in the Wiltshire Buildings Record collection at Devizes Public Library.

12. E.H.D. Williams, unpublished report at Somerset Record Office, Taunton.

13. Williams and Gilson (note 9) pp. 63–4.

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 176–183.

Bee Boles in Wiltshire

by A.M. FOSTER*

Bee boles are apertures in house or garden walls which held straw bee-hives (skeps). Fourteen boles on 13 sites have been recorded in Wiltshire, mostly in the stone-rich NW part of the county. Most sites have three to five boles per set. The majority of these sets are in stone, and average 0.47 m high, broad, and deep. The three brick sets tend to be larger, averaging 0.80 m high, 0.88 m broad, and 0.41 m deep. The only one built in chalk has the greatest number of recesses, 20; these average 0.37 m high, 0.43 m broad, and 0.35 m deep. Many of the sets are quite elaborate. As bee boles were never the usual method of housing skeps, and Wiltshire's climate does not necessitate the extra protection they offer, perhaps their use in W Wiltshire is due as much to their attractiveness as decorative architectural features as to any agricultural function.

INTRODUCTION

Bee boles are apertures, commonly in the exterior of house walls or the inside of garden walls, in which were placed, before the advent of the moveable-frame wooden hive in 1861, straw hives or skeps. They appear to be essentially a British architectural feature; of 690 recorded at the International Bee Research Association (IBRA), only 12 are in continental Europe. In Britain bee boles at present appear to cluster in the N and coastal areas, which receive 30 or more inches of rainfall a year. As bee boles were never the usual method of holding skeps, this distribution may reflect attempts at bee-keeping in marginal areas (Crane 1983: 153).

Perhaps because the climate in Wiltshire does not require the extra protection from the weather provided by boles, by 1984 only 3 sets of bee boles had been recorded in Wiltshire by the IBRA. Since then, 11 more have been discovered in the county, through the activities of the Wiltshire Buildings Record (Devizes), and various interested individuals. These have now been recorded using the guidelines provided by the IBRA. The particulars of each set are presented in the gazetteer at the end of this paper.

WILTSHIRE BEE BOLES

The majority of bee boles known at present in Wiltshire are in the W of the county, an area of readily available building stone. Examples are found in the civil parishes of Corsham, Box, Winsley, Bradford-on-Avon, Monkton Farleigh, and Biddestone. There are two in the S of the county, at Warminster and West Lavington, and one in the E, in the parish of Broad Hinton. Most are associated with small farms and cottages. The dates of their construction are, in most cases, uncertain, as many of the buildings and garden walls in which they are constructed cannot be closely dated, with the exception of Widbrook Farm (1835). Two others, both at Monkton Farleigh, are probably also 19th century. Five appear to be early 17th century. The one at Uffcott Farm is perhaps as early as the Tudor period, although the dating is based only on the owner's opinion. In any case, he, like all the other residents of the properties recorded, has no recollection of the bee boles being used to house skeps in this century. Most of those recorded at the IBRA from other counties are 17th and 18th century.

To provide the bees with all available warmth, bee boles are generally S-facing. Three sets of those recorded in Wiltshire are not. The one at Ridge Farm faces E, while two, at 'The Wilderness' and St Denys Convent, rather surprisingly face N. Except for the sets at Uffcott Farm and at Cottles Lane, which are 1.55 and 1.60 m respectively from the ground, most of the boles are set approximately 0.5 m from the ground. The number of bee boles per property ranges from 1 (at St Denys Convent and Littleton Panell) to 20 (at Uffcott Farm); most sets contain 3 to 5 boles, following the general pattern recorded elsewhere in the country (Crane 1983: 128).

Three sets (Widbrook Farm, St Denys Convent, Littleton Panell) are of brick; one (Uffcott Farm) is of chalk blocks; the remainder are of dressed stone in stone or coursed stone-rubble walls. This is perhaps

* 18 High Lawn, Devizes, SN10 2BA.

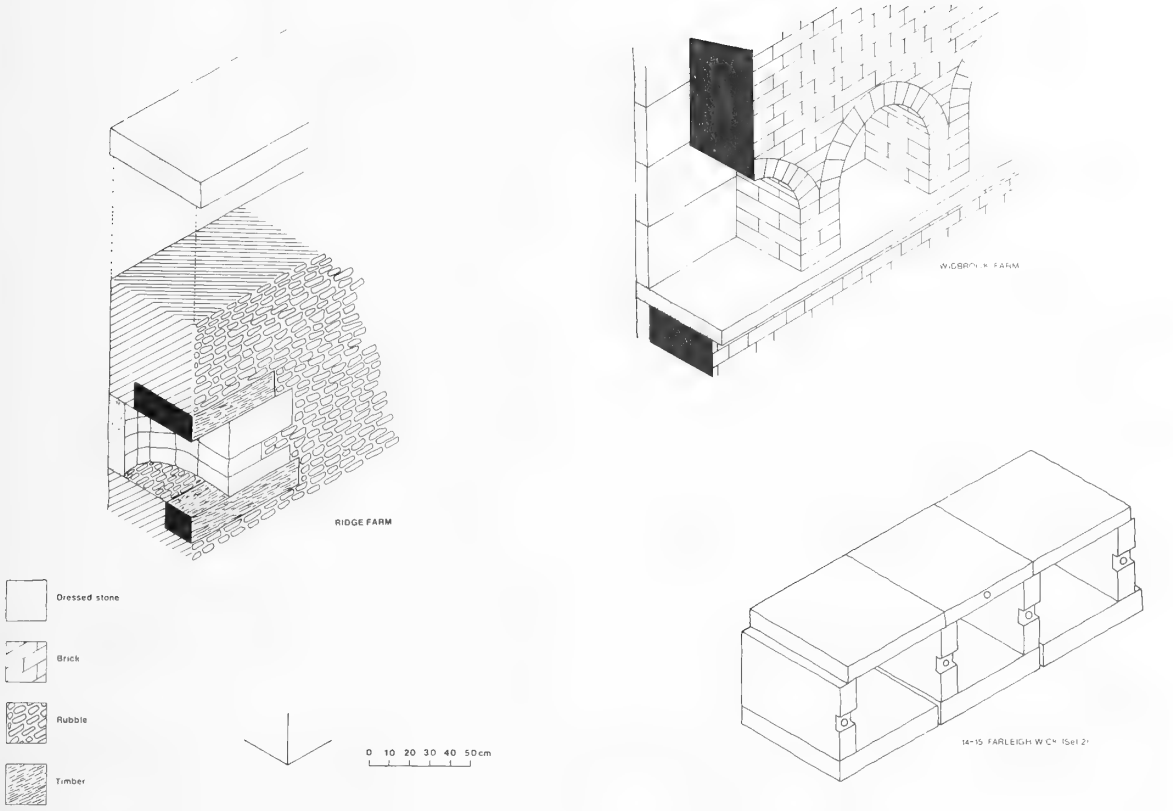

Figure 1. Details of construction.

not surprising as W Wiltshire is good stone country. One only (the second set at 14–15 Farleigh Wick) is free-standing.

As can be seen from Figure 1, the bee boles are an integral part of the wall structure, set into the wall as it was built. The lintels are well-shaped, of stone or, in one case (Ridge Farm), of wood. The main purpose of the wall at Widbrook Farm appears to be the boles.

The set at Uffcott Farm is the most shallow (0.35 m in depth). Those in brick are deeper, *c.* 0.41 m deep but with sills 0.03–0.05 m as well. The depth of those in stone ranges from 0.41 to 0.56 m. The Uffcott Farm set is also the narrowest at 0.43 m. The examples in brick vary from 0.51 to .39 m broad, while the stone examples average 0.47 m broad. One, at 'The Wilderness', is 0.61 m broad, while the single brick bee bole at St Denys Convent is 0.74 m broad. This example and the one at Littleton House are much larger in both breadth and height than any others recorded in Wiltshire. They may have been used to house more than one skep, the former perhaps being divided by a second shelf halfway up the bole. The bole at St Denys was reconstructed in the 1960s, at which time the original dimensions were altered. The average height of the Wiltshire boles is 0.52 m.

The style of construction varies from the very simple free-standing stone slabs put together to form a box, as at 14–15 Farleigh Wick, to very elaborate gabled examples such as at Honeybrook Farm and the 'Little House' (Figure 5). This elaboration suggests that the bee boles served a decorative as well as an agricultural function. The striking similarity between these two further implies, if not a regional style, then certainly the work of the same builder. Another occurrence of a 'style' may be seen in the two examples from Monkton Farleigh. Generally, the boles in brick are arched, those in stone or chalk square, or rectangular with a flat or rounded back.

Both the Biddestone and Monkton Farleigh examples are provided with holes in the side walls of the boles, perhaps to hold bars to prevent the skeps from falling out or being stolen. The holes in the Biddestone boles are set *c.* 0.03 m in from the outside edge of the side-walls, which themselves project 0.14–0.19 m from the house wall. A bar would have been passed through these holes to secure the skeps. At Monkton Farleigh,

Figure 2. Distribution (by Parish) of boles in Wiltshire.

the holes are set in the outside edge of the side-walls (Figure 1). Perhaps they held hooks through which a bar was passed. A curious feature at Little Ashley Farm is a short length of iron bar with a hole, projecting from the house wall above the bee boles. Another bar could have been passed vertically through this hole to secure the skeps; unfortunately, there is no sign of a corresponding bar at the base of the bee boles. The provision of bars across the skeps is primarily a northern feature (Crane 1983: 125).

Further investigations in Wiltshire would, I feel sure, turn up yet more instances of bee boles, especially in the stone-rich area of the SE of the county. Bees have been kept in Wiltshire since at least Anglo-Saxon times; 9 *mellitarii* are mentioned by the Domesday book among the workforce in a manor at Westbury. The *serviens* at Bradford-on-Avon who rendered a tithe of honey to the nuns at Shaftesbury may have supervised an apiary there (Darlington 1955: 55). Although the climate may not have necessitated the provision of boles for skeps, their undoubted capacity for use as ornamental architectural features very likely contributed to their construction.

Acknowledgements. I wish to thank all those who helped and encouraged me in my pursuit of these rather unusual features. I am especially indebted to Mrs Pamela Slocombe of the Wiltshire Buildings Record, Dr Eva Crane of the IBRA, Mr M.J.C. Smith, and all the property-owners who allowed me to examine and record their bee boles.

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GAZETTEER

This gazetteer contains all the bee boles known to me in Wiltshire. They have been recorded, using the guidelines produced by the IBRA, although the form of the gazetteer differs from the IBRA record forms. The numbers of the bee boles refer to the distribution map (Figure 2). All measurements are in metres; the order of the internal dimensions of the bee boles is as follows: height × breadth × depth. Although addresses are given, unannounced visitors are not necessarily welcome; please respect the privacy of the property-owners.

1 **Widbrook Farm**, Trowbridge Road, Bradford-on-Avon (Figure 3). NGR ST 834593.
Date: 1835.
Direction faced: SE.

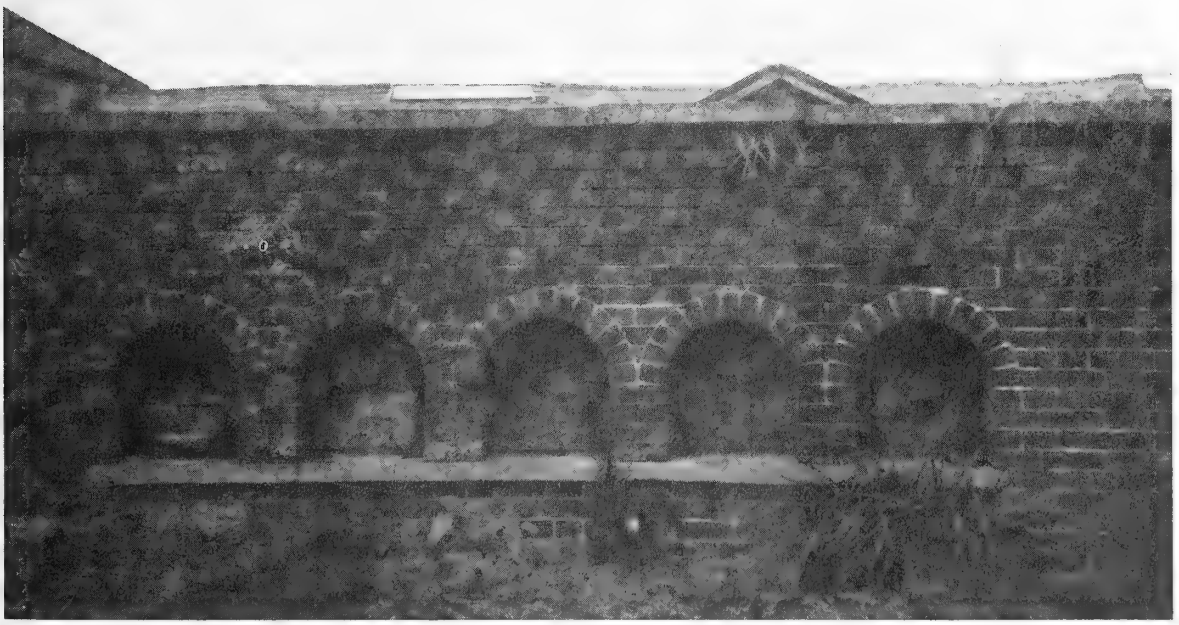


Figure 3. Widbrook Farm, Bradford-on-Avon. Set of 5 brick bee boles in a wall flanking the house. The two other sets in brick (Littleton House and St Denys Convent) are similar but larger, perhaps to hold more than one skep/bole.

No. of recesses: 10.
Shape of recess: arched.
Dimensions: 0.57 × 0.51 × 0.36 m.
Height above ground: 0.37 m.
Material:
wall: brick backed with stone.
bee bole: brick, stone sill (extends 0.05 m).
Details of construction: 2 sets of 5 each, in two walls flanking house.

2 **Little Ashley Farm**, Winsley.
NGR ST 813625
Date: (?) 17th century.
Direction faced: S.
No. of recesses: 2.
Shape of recesses: horseshoe.
Dimensions:
top 0.48 × 0.53 × 0.55 m.
bottom 0.45 × 0.55 × 0.56 m.
Height above ground: 0.35 m.
Material:
wall: coursed rubble.
bee bole: coursed stone rubble, stone shelf.
Details of construction: 2-tiered; iron bar at top with hole, no corresponding fixture at bottom.

3 **Ridge Farm**, Corsham. NGR ST 872682.
Date: (?) 18th century.
Direction faced: E.
No. of recesses: (?) 6 (2 visible).
Shape of recesses: square.
Dimensions: 0.37 × 0.42 × 0.40 m.
Height above ground: 0.52 m.
Material:
wall: coursed stone rubble.
bee bole: dressed stone, wooden lintel.
Details of construction: see Figure 1.

4 **The Wilderness** (Figure 4), Box.
NGR ST 824686.
Date: *c.* 1626.
Direction faced: N.
No. of recesses: 5.
Shape of recesses: rectangular.
Dimensions: 0.54 × 0.61 × 0.30 m.
Height above ground: 0.48 m.
Material:

Figure 4. The Wilderness, Box. Rectangular boles with stone lintels in ashlar stone wall. This is the simplest type of stone bee bole seen, with variations, at 6 of the 13 Wiltshire sites.

wall: stone.
bee bole: stone.
Details of construction: 2-tiers, 1 bee bole on top, 4 on bottom, those on bottom smaller (0.41 × 0.34 × 0.30 m).

5 **Honeybrook Farm**, Slaughterford.
NGR ST 844732.
Date: (?) 1600.
Direction faced: S.
No. of recesses: 5.
Shape of recesses: 4 square, 1 pentagonal.
Dimensions: 0.41 × 0.48 × 0.51 m.
Height above ground: 0.38 m.
Material:
wall: stone rubble.
bee bole: dressed stone.
Details of construction: set projects 0.14 m from house wall; holes in side-wall for bars to hold skeps in; compare no. 6.

6 **Little House** (Figure 5), Cuttle Lane, Biddestone. NGR ST 862736.
Date: house begun 1608.
Direction faced: S.
No. of recesses: 5.
Shape of recesses: 4 square, 1 pentagonal.
Dimensions: 0.43 × 0.46 × 0.49 m.
Height above ground: 0.50 m.
Material:
wall: stone.
bee bole: stone.
Details of construction: set projects from privy wall 0.19 m; holes in side-walls for bars to hold skeps in; compare no. 5.

7 **22 Farleigh Wick**, Monkton Farleigh.
NGR ST 803642.
Date: (?) 18th century.
Direction faced: S.
No. of recesses: 3 (1 blocked).
Shape of recesses: rectangular.
Dimensions: 0.38 × 0.46 × 0.43 m.
Height above ground: 0.76 m.
Material:
wall: stone rubble.
bee bole: rubble with mortar floor, stone lintels.
Details of construction: holes in lintels to hold bars.

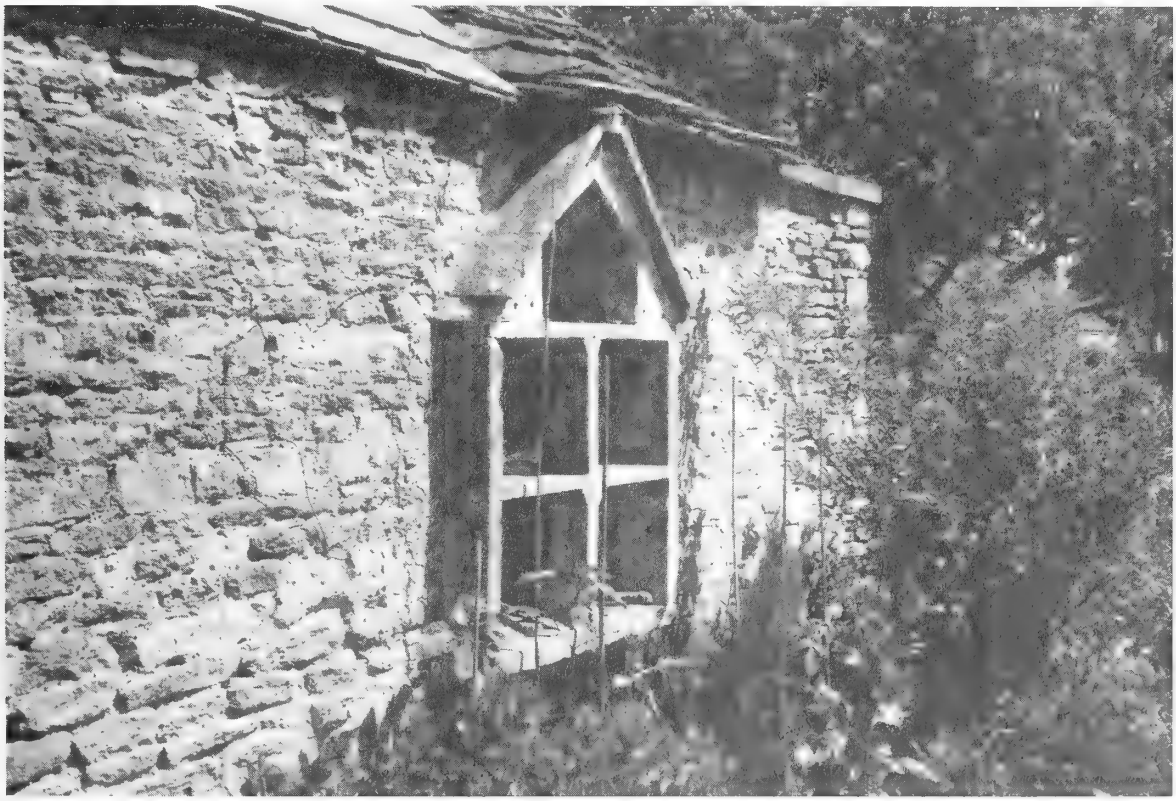


Figure 5. Little House, Biddestone. An elaborate gabled set in stone. The example from neighbouring Honeybrook Farm is almost identical. Note the holes in the projecting side walls, perhaps to hold a bar to secure the skeps.

8 **14–15 Farleigh Wick**, Monkton Farleigh. NGR ST 804641.

Set 1
Date: *c.* 1850.
Direction faced: SW.
No. of recesses: 6.
Shape of recesses: square.
Dimensions: 0.37 × 0.39–0.42 × 0.41 m.
Height above ground: 0.79 m.
Material:
wall: stone.
bee bole: stone.
Details of construction: slots in front of sides of bee boles, perhaps to hold bars for securing skeps.

Set 2
Date: unknown.
Direction faced: SW.
No. of recesses: 3.
Shape of recesses: square.
Dimensions: 0.30 × 0.42–0.47 × 0.50 m.
Height above ground: at ground level.
Material: bee bole: stone.
Details of construction: free-standing; slot and holes in front of side-walls, perhaps to hold bars for securing skeps.

9 **St Denys Convent**, Vicarage Street, Warminster. NGR ST 872452.
Date: 1629; but wall rebuilt *c.* 1960.
Direction faced: NE.
No. of recesses: 1.
Shape of recesses: arched.
Dimensions: 1.01 × 0.74 × 0.35 m.
Height above ground: 0.54 m.
Material:
wall: brick.
bee bole: brick with stone shelf (sill extends 0.03 m).
Details of construction: bee bole rebuilt and original dimensions lost; Sister Lucie believes it was originally much narrower.

10 **Uffcott Farm** (Figure 6), Broad Hinton. NGR SU 125775.
Date: (?) Tudor.
Direction faced: S.
No. of recesses: 20.
Shape of recesses: square.
Dimensions: 0.37 × 0.43 × 0.32–0.37 m.
Height above ground: 1.55 m.
Material:
wall: chalk blocks.
bee bole: boles divided by brick piers with alternate oak supports under thatch roof of wall.

Figure 6. Uffcott Farm, Broad Hinton. A unique set of 20 bee boles in a wall of chalk blocks. The boles are defined by brick piers.

Details of construction: wall buttressed in places; Brick piers appear to be later than original wall, perhaps replacing timber divisions or for added support for thatch roof.

11 **Littleton House**, Littleton Panell, Devizes.
NGR ST 998541.
Date: house is 11th century.
Direction faced: S.
No. of recesses: 1.
Shape of recess: arched.
Dimensions: 0.80 × 1.39 × 0.51 m.
Height above ground: 0.43 m.
Material:
Wall: random rubble.
bee bole: brick.
Details of construction: bee bole obviously later than house wall, which has been patched with brick; no evidence of second shelf in bole.

12 **5 St Margaret's Place** (Figure 7), Bradford-on-Avon. NGR ST 827607.
Date: house 1720.
Direction faced: SW.
No. of recesses: 5 (blocked in).
Shape of recesses: arched.
Dimensions: 0.56 × 0.53 × 0.52 m.
Height above ground: 0.37 m.
Material:
wall: coursed stone.
bee bole: stone.
Details of construction: holes in side-blocks, perhaps for bar to secure skeps; back wall 0.05 m deep.

13 **258 Cottles Lane**, Turleigh, nr. Bradford-on-Avon. NGR ST 807607.
Date: house 16th–17th century.
Direction faced: SE.
No. of recesses: 2.
Shape of recesses: rectangular.
Dimensions: 0.74 × 0.47–0.53 × 0.49 m.
Height above ground: 1.60 m.
Material:
wall: ashlar blocks.
bee bole: stone.
Details of construction: holes in side-blocks, perhaps for securing skeps.

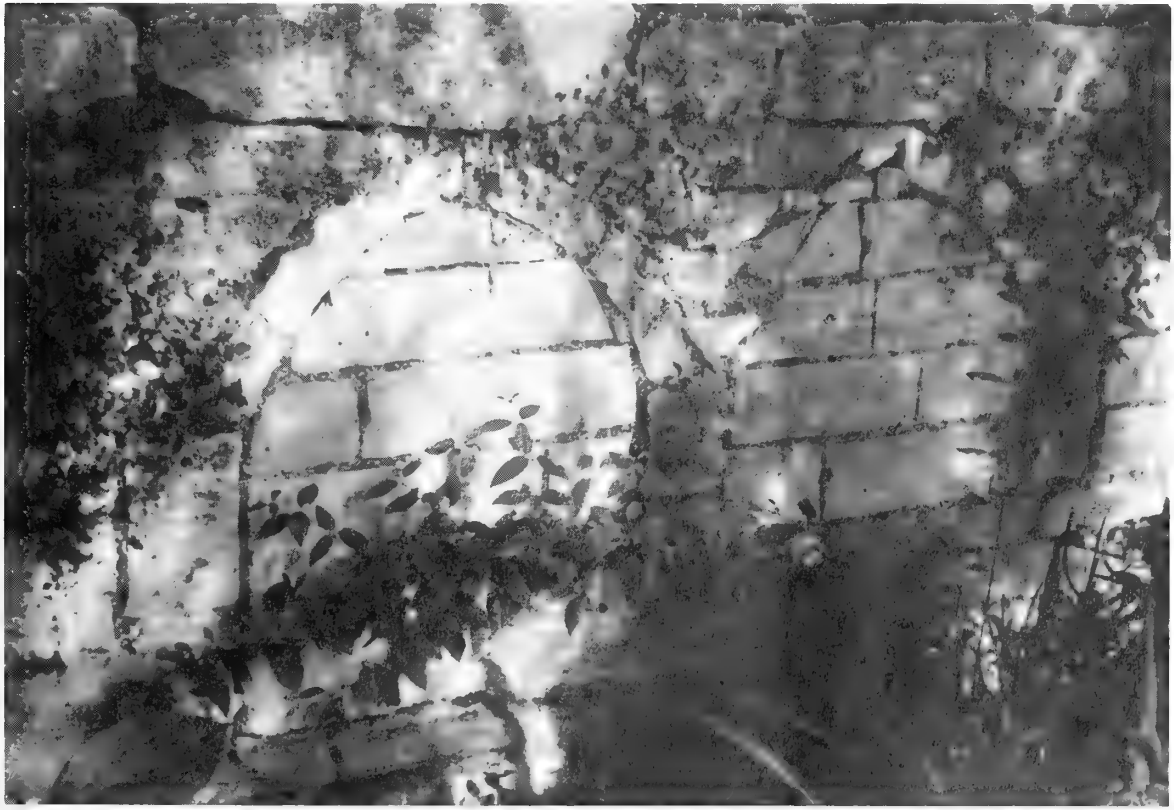


Figure 7. 5 St Margaret's Place, Bradford-on-Avon. A set of now blocked-in bee boles, with stone arches in a coursed stone wall. The only arched example found in stone.

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 184–191.

The Penistons: a Salisbury Family of Catholic Architects and Yeomen 1770–1911

by MICHAEL COWAN*

The activities of the Peniston family are set out, as they can be traced from the press and the family archive, from the late 18th to the early 20th centuries. They were builders, architects and, later, active in local government. Father and son in the 19th century were Regimental Sergeant Majors in the Salisbury Troop of the Wiltshire Yeomanry, and the records give some lively insights into the Yeomanry's role. The Penistons' prominence in local affairs is set against their Catholicism.

The activities of the Peniston family of Salisbury during the late 18th and early 19th centuries are quite well known in a fragmentary way. Various works on Catholicism, on the Yeomanry and on historic buildings draw attention to various members of the family, and the Peniston papers in the Wiltshire Record Office constitute an extensive and wide-ranging archive. This paper seeks only to fill a gap by outlining a survey of the family and its activities from 1770 to 1911, and to indicate some areas of research which could be fruitful.

In the N transept of Salisbury cathedral is a memorial (Figure 1) to Regimental Sergeant Major John Michael Peniston, Royal Wiltshire Yeomanry, 1807–58. From this starting point it has been possible to trace four generations of Penistons spanning 141 years (Figure 2). The main local sources have been contemporary press reports and the Peniston archive in the Wiltshire Record Office (WRO 451). Members of the family were variously a bricklayer, architects, surveyors, property developers and local-government officials; they were all Catholics and, in the second and third generations, stalwarts of the Royal Wiltshire Yeomanry. The glimpses that we have of their lives create the picture of a family of humble origin, somewhat unlikely pillars of Salisbury society and the Yeomanry during the 19th century, which slipped again into obscurity and disappeared.

THOMAS PENISTON

Thomas Peniston is first heard of as 'director of the Bricklayers' at the building (1770–76) of New Wardour Castle, home of the recusant Arundells. His wife's full married name was Elizabeth Arundell Peniston[1] and his second and third daughters carried the name Arundell,[2] probably more a mark of respect than any indication of relationship.

In 1781 an apprentice in Salisbury is indented to 'Thomas Peniston, bricklayer', and by 1797 the small Catholic community in the city was meeting at his house. Catholics in Wiltshire clustered strongly around Wardour, said to be possibly one of the few places in England where the 'old religion' never ceased to be practised. The Arundells may not have been active in political life but they were a strong religious focus; by 1767 some half of the Catholics in the county were in the Tisbury area, and over three-quarters by 1839. Thomas Peniston left Wardour for Salisbury, but there was an Arundell connection in the Close where at first, before his house was used, the congregation of six adults met in Mrs Thomas Arundell's house in Rosemary Lane.[3]

JOHN PENISTON (*c.* 1778–1848)

Thomas Peniston remains a shadowy figure but his son John is much better known, a robust, dominating and successful figure. He is first mentioned as a Sergeant in the Salisbury Troop of the Wiltshire Yeomanry in 1797. He had joined at or shortly after its formation in 1794, when he would have been about 20 years old. He was to become the Lieutenant Peniston who invariably

* 24 Lower Street, Harnham, Salisbury, SP2 8EY.

1. See J.A. Williams, Catholic Recusancy in Wiltshire 1600–1791.
2. WRO 451/403 (genealogical table)
3. WRO 451/401, the original source for most of the somewhat scant published detail on Catholicism in Salisbury between the 1780s and 1820s, is a short memoir written in old age by John Peniston. It has also been published with a brief commentary by J.A. Williams as 'Catholicism in Salisbury' in the Month for October 1961. For a general description of Catholicism in Salisbury, see VCH Wiltshire 3 and 6.

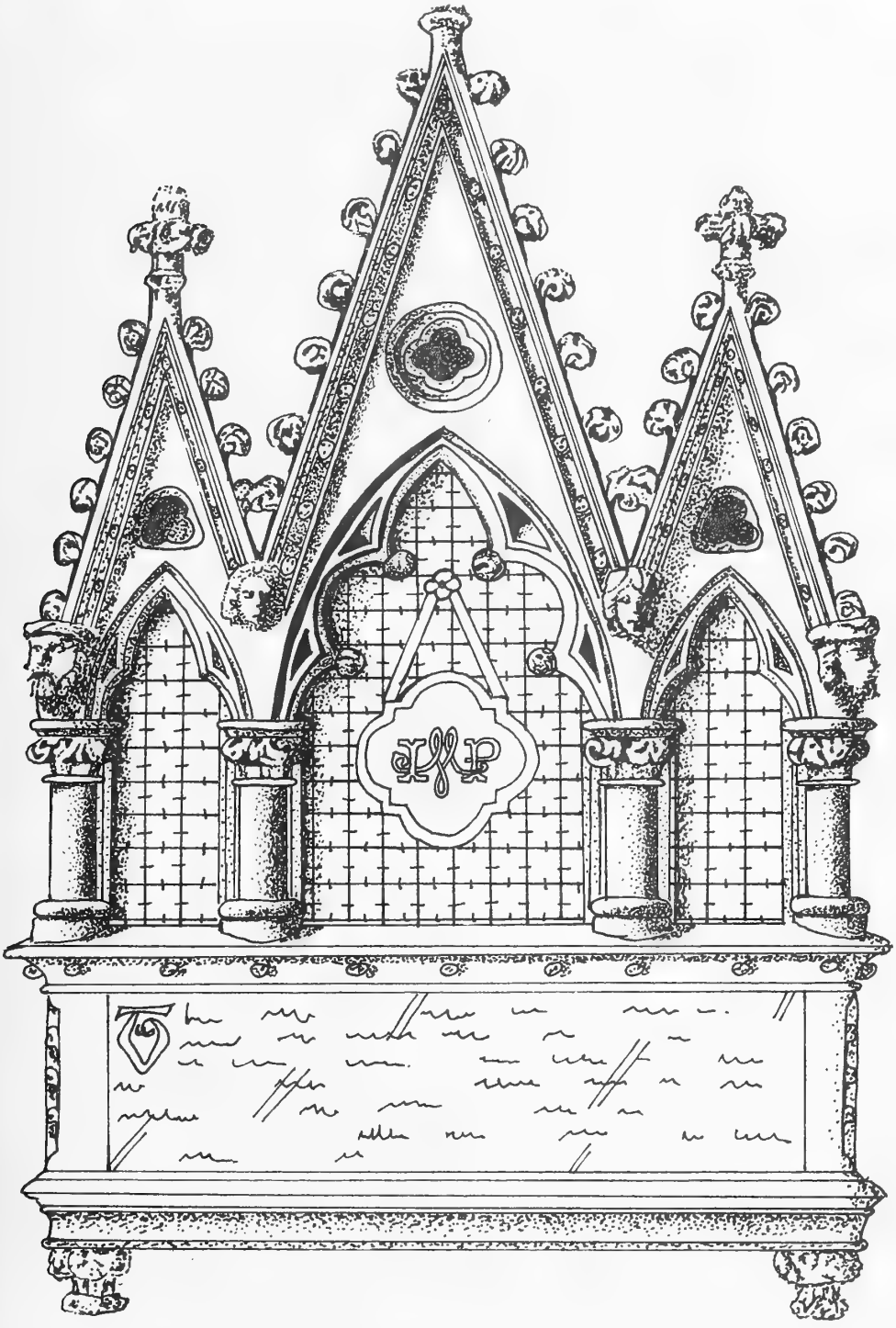
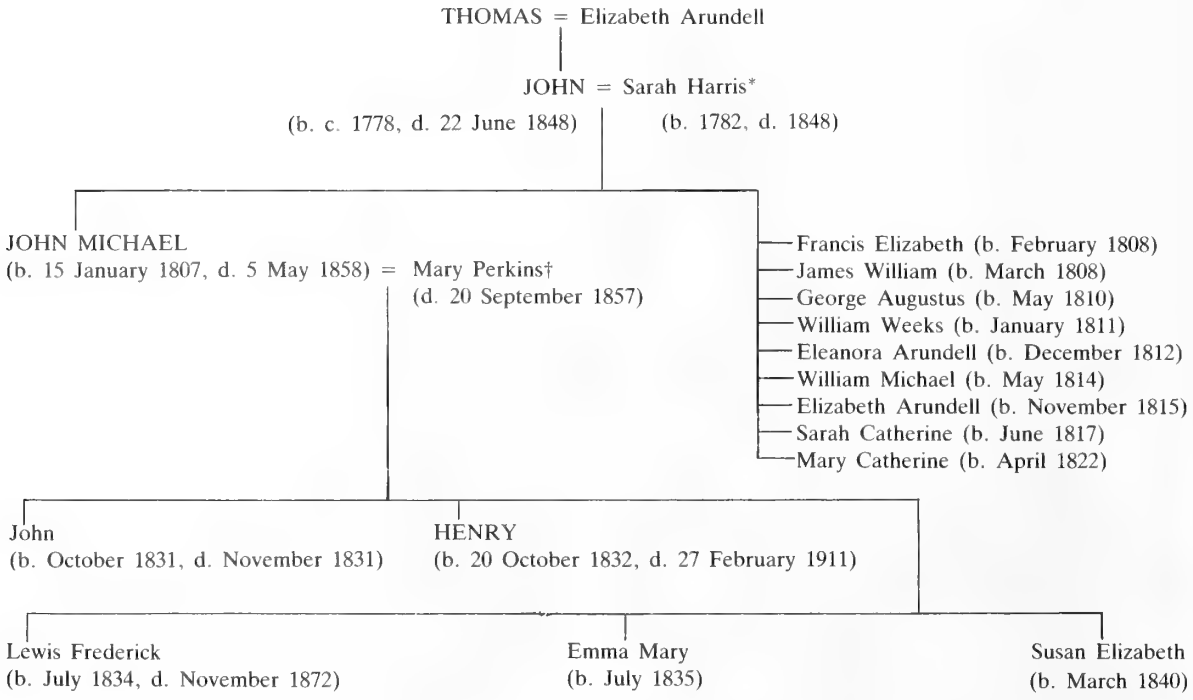


Figure 1. Memorial to RSM John Michael Peniston in Salisbury Cathedral. Drawing by Katy C. Ball.



* Married at Bath 19 December 1805.
† Married at 'Reading and Hartley Wintney, Hants' 5 January 1831.

Figure 2. Peniston family-tree, based mainly on a note signed by John Michael and Mary Peniston on 7 December 1848 (WRO 451/403). There were other Penistons who do not fit here; for example, a Henry Peniston was signing architectural plans in 1838.

features in any description of the exploits of the Salisbury Troop in the machine riots of 1830.

He comes most clearly into focus in the decade from 1820. There are letters extant from that year in which he is thanked by both Bishop and Chapter for 'preserving the peace of the Close'. At the Easter Quarter Sessions in 1822 he was appointed 'General Surveyor of County bridges and public works', initially for one year;[4] his family were to hold the office for 42 years. This was one of the three appointments (the others being Clerk of the Peace and Treasurer) from which the later structure of county government was to emerge.[5] His Yeomanry career advanced dramatically. Finally, in about 1830, he built a terrace of houses in de Vaux Place, lived at Number 1 and thereafter gave his address as, simply, The Close.

He developed a substantial architectural practice with interests as far afield as Chippenham and Southampton. He worked for Lord Palmerston at Broadlands and for Lord Nelson at Trafalgar House near Downton. In the latter case the detailed correspndence is about the mundane business of installing lavatories. Pevsner's survey of Wiltshire buildings[6] credits him with only one entry – for St James Church, Devizes, a Gothic revival church in a competent Perpendicular style with an archaeological correctness that is unusual for its date of 1832 (Figure 3); but footnotes to descriptions of Salisbury buildings by the RCHM[7] are peppered with his name. His varied business career, much of it to be reconstructed from his letter books,[8] is worth more extensive study than is possible in a short article. What is examined here is mainly his part-time military

4. WRO A1/150/26 E1822.
5. For background on the development of local government in Wiltshire, see VCH Wiltshire 5.
6. N. Pevsner, The Buildings of England: Wiltshire, 2nd edition (Harmondsworth: Penguin, 1975), p. 208.
7. RCHM(E) Ancient and Historic Monuments in the City of Salisbury, volume 1 (London: HMSO, 1980).
8. WRO 451/58 to 69 (1823–58).

Figure 3. St James' Church, Devizes, designed by John Peniston (1832). Drawing in the Society's collection.

career, an unusual activity, one might think, for an urban Catholic. It should be noted that the standard work on the Wiltshire Yeomanry,[9] published in 1886, is very much of its time and makes scant reference to the Penistons whose service was, in the main, non-commissioned and of an administrative nature.

The creation of a volunteer cavalry force in each county was part of the final stage of military preparedness in the face of the French threat, and one can see John responding as a public-spirited citizen. Pitt, addressing the Commons on 5 March 1794, had proposed, 'As an augmentation of the cavalry, for internal defence, they might under certain circumstances have a species of cavalry consisting of Gentlemen and Yeomanry.' The subsequent plan sent to Lord Lieutenants envisaged, *inter alia*, that such bodies should consist of 'Gentlemen and Yeomanry or such persons as they shall recommend'.

Clearly John Peniston came into the third category. An important consideration was that a Yeoman provided his own horse. Landowners often met this cost, and much else, for their tenants, but it must have been a deterrent to many urban dwellers. Despite the climate of the time his Catholicism seems to have been no disability. The Catholic Emancipation Act of 1829 was in the future, there were still to be anti-papist demonstrations in Salisbury, and the Arundells were not to appear as Yeomanry officers in the Salisbury Troop until 1826. However, that he was accepted in the role of Yeoman may reinforce our view that he was an able and impressive man of some substance.

He was appointed Regimental Sergeant Major in 1809. This post in any military unit, then as now, is prestigious, the holder being the principal non-commissioned rank with the direct ear of the Commanding Officer and exerting substantial authority. A

9. H. Graham, The Annals of the Yeomanry Cavalry of Wiltshire, volume 1 (Liverpool, 1886); useful, but to be treated with caution.

county yeomanry regiment was, at the time, something between the modern Territorial Army and riot police. In Wiltshire, Troops, or sub-units, were formed at Salisbury and a number of other locations in the county; they normally only met together for training once a year. Regimental headquarters did not exist on a permanent basis but only around the person of the Commanding Officer when required. There is little or nothing published to indicate how any regiment was conducted on a day-to-day basis. It is not clear what the formal duties of the RSM were or to what extent Peniston was typical or otherwise. However, the evidence of his correspondence suggests that he increasingly carried out the administration of the regiment, from his own home and as an adjunct to his business activities.

The events of 1820 (which, unlike those of the 1830s, have not previously been identified in any published work) show him as a dominating figure. Liverpool's decision to drop the 'Pains and Penalties' bill against the Queen was greeted with popular enthusiasm. Contemporary press reports tell us that in Salisbury 'illuminations' were planned for Monday 13 and Thursday 16 November, but a backlash, obviously unexpected, resulted in rioting and destruction of windows and lamps in both city and Close on the Monday. As a result, on the Thursday both the Yeomanry and special constables were stood by. This apparently deterred further trouble.

The report in the *Salisbury Journal* says that the Yeomanry were 'commanded by Major Baker, Mr Adjutant Pettitt and Sergeant Major Peniston but no military action was necessary'; maybe, like Peniston,[10] they all got letters of thanks from the Chapter, but one doubts it. An instruction earlier on the Thursday is addressed to 'Mr Peniston commanding at Headquarters';[11] the indication seems to be that he was in control of both the Special Constables and matters generally.

He was commissioned in 1825 at about the age of 50 and was appointed acting Adjutant the following year. The Adjutant ran the day-to-day affairs of the unit, and one perhaps sees here the system being accommodated to fit a man who could do the job. Not only does he fail to fit the sterotype of the 'yeoman' but his progression was quite untypical. William Pettitt was the first adjutant, from 1798 until he died in 1836, but Peniston deputized formally for him from 1826. Nonetheless one suspects that he had, as RSM, been doing so for some time. An attempt was made in 1830 to have him properly appointed as Adjutant, but 'the military authorities declined to depart from the rule already in force and appoint a gentleman as Adjutant who had never served in the regular cavalry'.[12] This appears to have been a quite proper refusal in accordance with the rules; Pettitt was equally unqualified, but his appointment dated from earlier and more relaxed days. However, although the regimental history does not recall the fact, John Peniston did formally become Adjutant when Pettitt died. His three commissions from the Lord Lieutenant survive:[13] as Cornet (7 October 1825), as Lieutenant (5 May 1826), and as Adjutant (6 July 1836). The last is accompanied by a solicitor's bill for three guineas. The work detailed suggests that obtaining it was unusually complex and may reflect ambition and perseverance more than necessity.

John Peniston seems often to have been called upon to arbitrate. On one occasion two farmers could not agree about the control of water;[14] on another Henry Hatcher, then running his school at Fisherton, was at an impasse over a bill with one Mr George, his drawing master.[15] In 1832 John Peniston was to calm tempers when his son, by then Regimental Sergeant Major, and 30 troopers of the Salisbury Troop signed a 'remonstrance' directed at their captain – Lord Arundell – who had voted against the Reform Bill. In this respect at least the Catholics were not united.

John died in 1848. His was the first burial in the graveyard of the new, but at the time incomplete, St Osmund's Church. The *Salisbury Journal* notes that it was the first time the church bell had been tolled.

His gravestone (Figure 4) is embellished with the symbols of his calling, proudly defined after his names and dates as simply 'Architect'. This seems to distance him from his father, whom he himself had described as 'director of the Bricklayers'. In practice they may not have been so far apart; John Peniston did much mundane construction work and the application of the term 'architect' may here be interestingly early. The *Oxford English Dictionary* entry on 'architect', published in 1885, certainly quotes Ruskin writing in 1854 that 'no person who is not a great sculptor or painter *can* be an *architect*. If he is not a sculptor or painter, he can only be a *builder*.' Gilbert Scott as late as 1879 distinguished architecture in the same way from 'mere building' – which, it seems, is what John Peniston actually did.

10. WRO 451/396.
11. WRO 451/396.
12. Graham (note 9).
13. WRO 451/396.
14. WRO 451/95.
15. WRO 451/205.

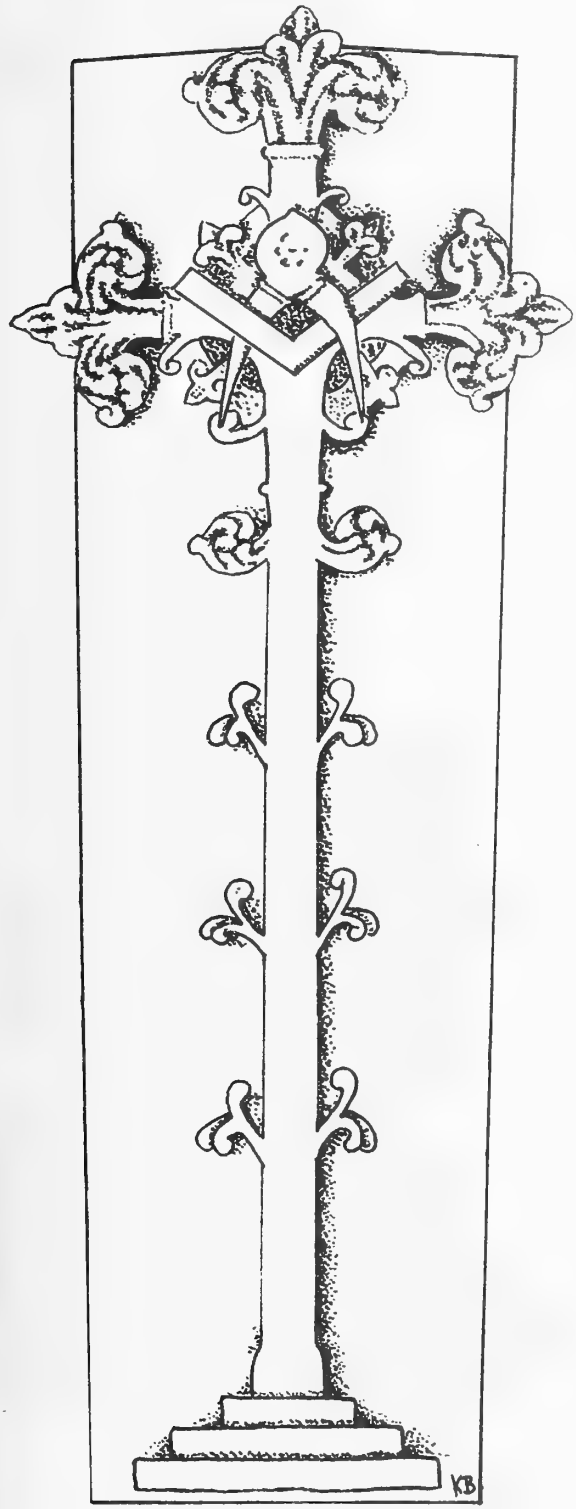


Figure 4. Memorial to John Peniston, St Osmund's, Salisbury. Drawing by Katy C. Ball.

JOHN MICHAEL PENISTON (1807–58)

For John's son, John Michael Peniston (the third generation), January 1831 was an eventful month; he was both married and promoted to his father's old appointment as Regimental Sergeant Major. He and his father ran the business and the regiment from de Vaux Place. The Poll Book for 1841 shows John living at Number 1 and John Michael at Number 2; but by 1846, two years before John died, his name does not appear on the electoral role and his son is living at Number 1.

In the Peniston letter books (which run from 1823 to 1858) architectural, county and city affairs intermingle with those dealing with the training, pay, clothing and equipment of the regiment. For example, RSM Peniston writes on 2 April 1844 to remind Lieutenant Viscount Folkestone and Cornet Earl Nelson that the Salisbury Troop was to parade on the Greencroft on 12 April; to take another random example, in January 1856 he was writing to the Adjutant at Marlborough about re-issuing equipment to new recruits.

The building business continued to thrive. In 1853 eighteen modern cottages with running water, drains and lavatories, were being built at Peniston Court in Culver Street.[16] John Michael's surviving sons, Henry and Lewis, were educated at Downside and Stoneyhurst respectively. John Michael succeeded his father as County Surveyor and City Architect; he also served the yeomanry well but did not have the opportunity to shine in action. After 1830 the regiment was not again deployed in riot control. Some other units were, the last time being in Exeter in 1867, but in general the development of modern policing meant that the yeomanry tended to become more and more a social institution. The Wiltshire Yeomanry had its serious side, particularly when commanded by the second Marquess of Ailesbury,[17] but the social side was not neglected as the manner of John Peniston's death illustrates.

The event is spectacularly well attested. The Troops of the Regiment formed together to train for some eight days at a different location each year. In 1858 it met on the Ailesbury home ground. The Salisbury Troop travelled to Marlborough on 29 April – RSM Peniston having written 10 days before to the landlord of the Crown Inn at Everley to order lunch on their way for 'between 24 to 30' men.[18] In the *Salisbury Journal* is a detailed record of the camp, running to several columns and extensive even by the standards of the day.

16. WRO 451/319.
17. See M. Baker, 'A 19th century landowner and his wife: the 2nd Marquess of Ailesbury', Hatcher Review, vol. 18 (1984).
18. WRO 451/69.

On 5 May the regiment was inspected by Colonel Parker of the Life Guards on Marlborough Common, and a fête at Tottenham Park followed. Columns of descriptions of the park and the house culminate in a report of a lunch for 'upwards of a thousand' in an immense marquee in front of the house. This was followed by dancing in the orangery from 10.00 pm to daylight. The report notes fairly briefly that Mr Peniston was taken ill after the meal and shortly after died. Not all those present were told, only members of the Salisbury Troop who returned to their quarters. The inquest at Marlborough concluded that death arose from 'an affection of the heart'.

A Regimental Order was re-published in the *Salisbury Journal* on 5 June, together with a copy of a letter from the Adjutant to the various Troops of the Regiment seeking subscription for a memorial. This must be the memorial which is in the Cathedral but there is no reference to it in the regimental history nor does there appear to be any further reference in the press. In the following year, 1859, the Regiment assembled for training in Salisbury and held a service in the Cathedral. This would seem to have been an appropriate occasion to dedicate the memorial, but there is no indication of this. The obituary of Henry Peniston in 1911[19] records that, after the regiment had been reviewed by the Prince of Wales, his father 'died in the arms of Lord Nelson'. The Prince of Wales was certainly not there, although the latter occurrence is possible. The third Lord Nelson was at the time an officer in the Salisbury Troop, but if the event did take place contemporary reports are silent.

HENRY PENISTON (1832–1911)

Henry Peniston contrasts strongly with his father and grandfather. From their time the archives contain evidence of vigorous business and military activity. From Henry's time we have press cuttings,[20] mostly his own letters to the *Salisbury Journal* and other papers. The death of his father reflects in the letter book for 1858.[21] On 27 April Henry is writing, 'my Father is from home and will not return for a week, I have however forwarded your letter'; the next, undated, says, 'Severe family affliction has prevented my earlier attending to your letter . . .'; but, on 18 May, normal business is resumed.

After a few years the records tail off. The press-cutting book tells us that Henry, in 1858, sought and obtained his father's posts as County Surveyor and City Architect; he lasted in the first until 1864 and in the latter to 1866. The verbatim account in the *Wiltshire County Mirror* of a Special Session in February 1864 revealed that as County Surveyor he had been responsible for 'sole charge of the county bridges and roads attached to them, of the Assize Courts, and a half yearly inspection of the prisons, attending at committees which were but rare, and at the four quarter sessions'.

Local government had not, from this description, developed very far but perhaps too far for Henry. His case at the Special Session was that imputations of incompetence in relation to the new militia accommodation were unjustified because his duties had increased but his salary had not. At the end of the hearing he resigned. In Salisbury a complex argument about the new Grammar School resulted in his resignation as City Architect. He got a frosty resolution of thanks for his services from the Council. The obituary notices record that he had been a member of the Royal Wiltshire Yeomanry, but he is not recorded as an officer and no details of his services have come to light.

He appears to have spent much of the rest of hs life arguing in the columns of newspapers. One protagonist asks, 'can Mr Peniston's resources be plumbed or his pen exhausted?' In 1888 he put 1 to 6 de Vaux Place, de Vaux College and de Vaux Lodge up for sale. He died on 27 February 1911; at 'The Retreat' in St Nicholas's Place according to the *County Mirror*; at de Vaux Lodge according to the *Salisbury Journal*. One short obituary notice comments that he and his sister had been stalwart supporters of St Osmund's Church, but there is no reference to any other family. Loose in the end of his press-cutting book there is, rather sadly, a short clipping from 1903 about a successor as County Surveyor being provided with a motor car.

Henry seems to have been the last in line of a family whose success in the early 19th century was in activities which might, on the face of it, seem unusual for Catholics, particularly in the public service of yeomanry and local government.

There is considerable scope in their papers for augmenting our present limited knowledge of how the day-to-day administration of a yeomanry regiment worked at a time when, as a 'police force', yeomanry activities were particularly prominent.[22] There is also

19. Cutting in WRO 451/409.
20. WRO 451/409
21. WRO 451/69.
22. For background on military affairs, and in particular the gaps in published research of the sort identified here, see recent bibliographical articles: I. Beckett, 'What to read on military history', Local Historian, vol. 16, no. 7 (August 1985); H. Strachan, 'British Army 1815–1856: recent writing reviewed', Journal of the Society for Army Historical Research, vol. 58 (summer 1985).

scope for extending our knowlege of how, in an emerging local-government system, the county and city surveyors went about their business. There may also be something to learn in a more general context about developing attitudes towards Catholics in the early decades of the century.

For all practical purposes the formal disabilities of Catholics were removed in 1829 by a highly controversial measure which related more to events in Ireland than to any widespread social pressure in England. Nonetheless attitudes towards Catholics, particularly those who did not parade their religion unduly, must have varied widely and included a great deal of tolerance. John Peniston, in particular, was a successful self-made businessman, prominent also in public life where his evident vigour and personality seem likely to have countered any intolerance that may have existed in Salisbury. On a lighter note, his son's memorial in the Cathedral, with which this trail started, suggests a pleasing degree of 'ecumenicism in Barchester'.

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 192–196.

The Parkinson–Cunnington Connection

by CHRISTOPHER GARDNER-THORPE*

A new aspect to the life of William Cunnington, the pioneering Wiltshire archaeologist, is given by the surviving letters of his correspondence with James Parkinson, the doctor whose name was given to 'Parkinson's disease'. The letters concern geology, fossil-collecting and the exchange of specimens; they throw light on Cunnington's busy interest in geology – an interest overshadowed by the attention that has been given to his archaeological work.

Hidden in the volumes of letters and other treasures in the Society's museum in Devizes may be found a set of seven letters written by James Parkinson to William Cunnington. These form part of a two-way correspondence of which unfortunately the series from Cunnington to Parkinson has been lost.

The letters came from James's home in Hoxton and date from January 1807 to October 1810, just before Cunnington died in December 1810. It is not always easy to transcribe the flowery handwriting of those times. The letters are reproduced in full as an appendix to this paper.

First, some notes on James Parkinson's life are appropriate. His name is well known as the man who described the Shaking Palsy, paralysis agitans, the disorder later to be called *Parkinson's Disease*.

JAMES PARKINSON

James Parkinson was born on 11 April 1755 at the family home at 1 Hoxton Square in the respectable area of Shoreditch in London. His mother was called Mary (her surname is not known), and his father was John Parkinson, an apothecary and surgeon whose memorial stone can still be seen at the parish church of St Leonard in Shoreditch. James was the eldest of three children; his brother, William, died at the age of 21 years and his sister, Mary Sedgwick, is buried at Stonehouse in Gloucestershire.

James was baptized at St Leonard's Church. In due course he was apprenticed to his father and qualified as a doctor in Edinburgh in 1784.

The early years of James's professional life were concerned with political issues. He published many pamphlets while a member of the London Corresponding Society, an organization which was suppressed in 1799 but not before James's confederates had been involved in the 'Pop-Gun Plot', an attempt to assassinate King George III by firing a poisoned dart from the pit of a theatre. James was questioned by the Prime Minister, William Pitt the Younger, and the Privy Council. James's political pamphlets include many which were highly critical of Edmund Burke and other politicians of the time, and most were published under the pseudonym 'Old Hubert'.

James learned shorthand to facilitate notetaking and attended the lectures of the famous surgeon, John Hunter. The shorthand notes were eventually published by John, James's son. James distinguished himself medically in many ways and gained a silver medal from the Royal Humane Society and, for his geological works, the first Gold Medal of the Royal College of Surgeons. He became chairman of the Association of Apothecaries and Surgeon Apothecaries of England and Wales.

James continued the medical practice in the family home at Hoxton. He published many medical papers, at first alone but in later years with his son, on diverse topics including gout, tetanus, rabies, typhoid, lightning and the training of doctors. He also published a popular medicine text. He campaigned for a change in the regulations so that two doctors were needed to certify madness. Only one doctor had previously been required, but James was severely criticized in the newspapers for a possible error of judgment in relation to the committal to a madhouse of a woman, Mary Daintree, on the testimony of her nephew. In fact it turned out that she was not mad.

James's most famous medical publication is *An Essay on the Shaking Palsy*, which describes the disorder which was named after him in 1878 by Charcot, the famous French neurologist. James described the illness in six individuals, but only three were his patients – the other three were based on chance observations of passers-by in the street. Only five copies of this, one of the most

* The Coach House, 1a College Road, Exeter EX1 1TE.

famous of medical books, are known to exist. Parkinson's disease is one of the commonest disorders of the nervous system, especially in the elderly.

During his medical career James was a resolute churchman and a Trustee for the Poor for the Liberty of Hoxton. He encouraged the development of Sunday Schools, and in 1814 the first building specially for the purpose was erected in Hoxton Street near to James's home.

James married Mary Dale, a girl from a medical family, and six children were born, two of whom died in infancy. Three children married and the line of descent has been traced until recently.

James died on 21 December 1824 and was buried at St Leonard's Church, but a gravestone has not been identified there. A plaque was erected in the church in 1955 to commemorate him.

James distinguished himself in medicine and the most fitting memorial to him is the text of his famous essay. However, he is equally if not better known in relation to his geological interests, and it is primarily these that concern his correspondence with William Cunnington.

JAMES PARKINSON'S GEOLOGICAL INTERESTS

Through his geological interests, James made many friends among the scientists of the day. Indeed, he can claim fame along with William Martin for the impetus for fossil-collecting in England and, with the French biologists Lamarck and Cuvier, has been named a father of scientific palaeontology.

James's interest in chemistry and subjects scientific probably originates from some early chemical texts. The best man at his wedding, Wakelin Welch, was a keen palaeontologist. James bought many of his specimens from dealers in London and he travelled the south of England in search of fossils. He spent a fortnight touring Bagshot, Blackwater, Cranbourne, Winbourne, Lychett, Wareham, Swanage, Ambresbury, Salisbury, Purbeck, Osmington, Weymouth, Lime, Christchurch, Farnham and Dorking.

James supported the setting-up of the Natural History Museum in London and kept a fine collection himself. Of the collection, Parkes wrote in 1815

> On a review of what I have said respecting the Emperor's collection of minerals at Vienna, I think it necessary to guard my readers against supposing that I mention this collection as being the finest in Euroipe, because that is not the fact, as there are several collections of the same kind in England which I suspect far surpass those at Vienna. In confirmation of this, I need only refer to Mr Parkinson's superb collection in Hoxton Square, London. The polished specimens in his cabinet, of various kinds of wood in a petrified state, are beautiful beyond conception. The coloured plates which accompany his splendid work on extraneous fossils, though well executed, fall very short of the beautiful originals.

Many of James's geological specimens are still in existence.

James published two well-known fossil books, *Organic Remains of a Former World* (1804–11) and *Outlines of Oryctology; or, an Introduction to the Study of Fossil Organic Remains* (1822). In addition, James contributed several papers to learned journals on various geological and oryctological (fossil) topics. He was one of the thirteen founder members of the Geological Society in 1807, became a member of the Committee of Maps, and contributed papers to the Society's meetings and journal. He knew many of the well-known scientists of his day including Humphry Davy, William Buckland and Gideon Mantell.

WILLIAM CUNNINGTON AND GEOLOGY

William Cunnington of Heytesbury (1754–1810) is, thanks to his great-great-grandson's biography[1] and the biographical study of his patron Sir Richard Colt Hoare,[2] among the better-documented early excavators. Although it is his archaeological work which has drawn the most attention, he was also a geologist and fossil-collector of distinction.[3] One of his scientific papers was on 'Tabular sarsens and mud cracks',[4] and it was his consulting the geologist James Sowerby which enabled the two distinct types of rock at Stonehenge to be identified as north Wiltshire sarsen and igneous bluestones from western Britain.[5]

THE CORRESPONDENCE DISCUSSED

The correspondence starts with general observations upon fossil-collecting and geology, and turns to the exchange of geological specimens, discussions regarding James's book, and offers to select special copies and illustrations for some of Cunnington's friends, a desire to meet in Wiltshire or London, and to personal enquiries regarding Cunnington's health. We may presume that the seventh letter is the last from James to Cunnington, since the date is so near to his death which occurred only two months later. Surely if there had been later letters these too would have been preserved.

1. Robert H. Cunnington, *From Antiquary to Archaeologist: a Biography of William Cunnington 1754–1810* (Aylesbury: Shire, 1975).
2. Kenneth Woodbridge, *Landscape and Antiquity: Aspects of English Culture at Stourhead* (Oxford: Clarendon, 1970).
3. R.J.C. Atkinson, Introduction to Cunnington (note 1).
4. *WAM*, vol. 51 (1936), pp. 405–18.
5. Christopher Chippindale, *Stonehenge Complete* (London: Thames & Hudson, 1983), p. 122.

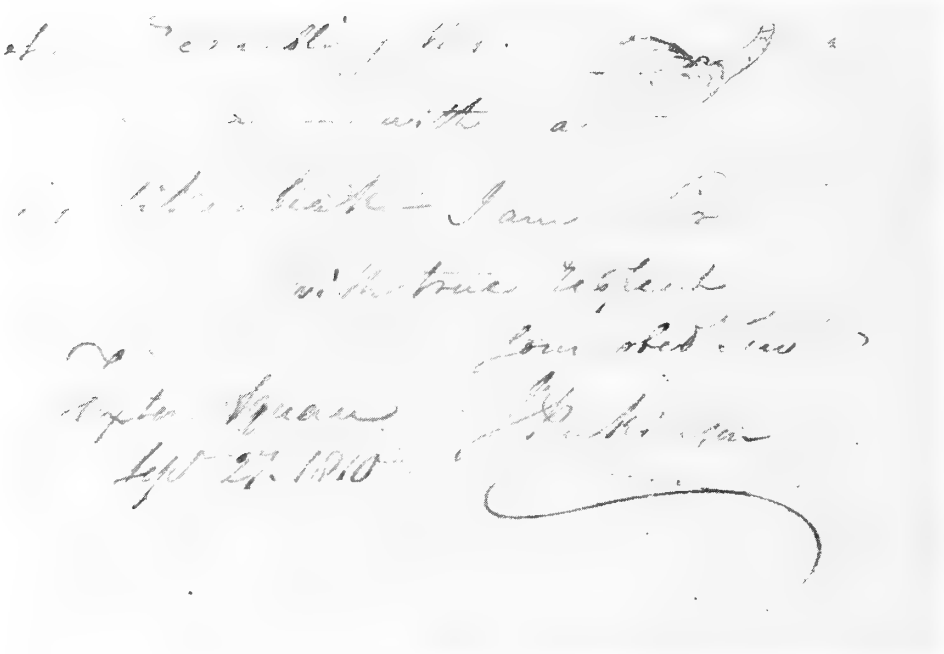


Figure 1. Drawing by James Parkinson in his letter of 27 September 1810 addressed to William Cunnington: 'A fossil shell – a Bivalve – Anosmia – with a proboscis-like beak'. Parkinson's signature is also shown underneath.

The wording of the first surviving letter suggests that it is the first in the series; Cunnington may have written to James to offer him fossils from Steeple Ashton, or James may have written earlier requesting samples. James may even have written a letter to someone else in Wiltshire, which had been passed to Cunnington, who replied with the gift of some specimens. James seems to have had a copious correspondence with many geologists. The flow from letter to letter seems logical enough, so the seven probably constitute the complete set.

The letters are written in careful, large and bold script. The handwriting is similar to that of other samples which can be seen elsewhere in letters and book dedications. There are many crossings out, scratchy and messy, but no ink blobs. The style is of extreme politeness, with many apologies for apparent omissions, and fears that an impression of rudeness might have been given. Some words, for example 'risques', appear in other texts and seem to be colloquialisms from that time.

James's receipt of fossils from Wiltshire gave him great pleasure, as it enhanced his collection with entirely new material, to the extent that he was anxious even to have inferior specimens from Cunnington.

The reference in the letter of 21 February 1809 to a 'kind invitation' may well be the first invitation to James to visit Cunnington. It might refer to the loan of a collection or the expansion of the volumes of James's monumental work on fossils, which was between the second and third volumes at that time. Indeed, Cunnington offered to provide drawings for the books. Such were James's feelings for Cunnington's works that he offered to propose him for Honorary Corresponding Membership of the recently-formed Geological Society in London.

The book seems to have taken up a fair amount of the correspondence, since James was keen to try to help oblige Cunnington's friend by special intervention to send hand-selected copies of the engravings to be bound into the copy for Sir Richard Hoare. This reference is important, since it seems to be the only evidence that the colouring of the plates was undertaken by one of James's daughters, perhaps Emma, whose needlework sampler is still in existence.

The undated letter preceded the publication of Volume II of *Organic Remains* in July 1808. An excellent bibliographical discussion of *Organic Remains* has been published by Thackray.[6]

The letter of 27 September 1810 seems to have been the last which James wrote to Cunnington and in this James drew a bivalve shell 'with a proboscis-like beak'

6. J.C. Thackray, 'James Parkinson's *Organic Remains of a Former World* (1804–1811)', *J. Soc. Bibliography Nat. Hist.*, vol. 7 (1978), pp. 451–66.

(Figure 1). This is probably the only drawing by James to survive, and makes this a rare document indeed. Cunnington himself had access to a good artist, or was one himself, judging by James's remarks (23 September 1809) on the picture sent him by Cunnington.

In his letter of 23 September 1809, James refers to Cunnington's 'tormentor', his headache. It is thought that this was due to acromegaly, a condition where the pituitary gland is enlarged, usually by a small benign tumour, which secretes growth hormone and leads to headache, deterioration of vision, enlargement of part of the skull (the pituitary fossa) and various other complicated hormonal changes. Cunnington's appearance in his portrait in Devizes Museum supports the diagnosis.[7] It may have been as a result of complications of the acromegaly that Cunnington died. An interesting link between acromegaly and Parkinson's Disease is that a drug has been developed which is used to treat both conditions.

THE LETTERS APPENDIX

1 2 January 1807

Dear Sir

I am much obliged by your kind present of Steeple Ashton fossils; of which the week before W. Townsend had favoured me with a few select specimens. Among the Echinites there are some, those whose superior opening are surrounded by a species of lace work, which are new to me. I find indeed I had one specimen, but I knew not whence it had come from. Perfectly uninformed of what you most abound in, in your collection, I have of course been at a loss in concluding what my . . . should consist of: for with respect to the heads of the encrinus expecting those which I have in the matrix to add illustrative specimens to which I bid 4 Guineas & a half for one of 7oz 1/2 for another, at the sale of the Leverian Museum. I have only two heads, I know not where I can obtain another: they are now so scarce. I am now making my researches into the nature of this fossil & have broken three or four to pieces for the purpose of examination & must perhaps sacrifice another for inquiring sake –

I am Sir
Your most obed servant
Jas Parkinson

Hoxton Square
Jan. 2. 1807,

2 26 February 1808

Dear Sir,

At all events I have to apologise to you – the accompanying slip, I found the other day I am not able to determine whether it had been omitted to be sent at the time it was written, or whether it was so negligently written as to have been copied & the copy to have been lost – so that I have to apologise either for the unnecessary trouble I give you or for having omitted to have transmitted my answer in proper time. To have omitted to have answered your polite letter, would have been unpardonably negligent, & would therefor have been a circumstance which would . . . seriously neglect; should this have been the case, be so kind . . . accept my apology and be assured that to have been guilty of such rudeness to you is directly contrary to my earnest wishes. – The second volume of Organic Remains will contain 20 plates of which 16 are finished, it of course cannot be long before it risques its appearance before the public.

From, Sir, with sincere respect
Yours
James Parkinson

Hoxton – Feby. 26.
1808.

3 21 February 1809

Hoxton Square

Dear Sir.

Accept my thanks for your very kind contribution to the stock which I am endeavouring to form for the advancement of my favourite science. The specimens which you have been so obliging as to send sufficiently shew how very prolific the . . . which covered your parts of the island was in Corals, & indeed of various kinds of marine animals with their dwellings.

There is not one of those which you have sent which in my opinion, is referable to any known recent species; they of course shew not only the difference w.ch exists between those of the former & those of the present world; but give also to evince the vast richness of variety of organisation & form which were possessed by the creatures of that day.

I have, Sir, sent a few specimens of different descriptions which may serve to increase if not to enrich your collection. I am now at work endeavouring to determine the degree of relationship existing between the *shells* of the present day & those which belonged to this globe in its previous state. In doing this, I am anxious to obtain what specimens I can, that I may be enabled to describe their specific characteristics. You have some, I believe, in the green sand of Wiltshire, for any inferior specimens of these I shall be very thankful, as well as for any of the sand or any mass which appears to possess any minute fossil shells. I am Sir, with the hope of being favoured with a call when you come to Town –

Your obliged servant
Jas Parkinson

Feb.y 21. 1809

Dear Sir for your kind & polite invitation which I am unfortunately unable to avail myself of For your interesting observations accept my grateful acknowledgements

4 undated

Dear Sir

I am exceedingly obliged by your very kind offer of drawings of Corals from your collection for the use of my work; but the fact is that want of room has prevented me from doing justice to these substances, & obliged me to close that part long ago, although much more might have been introduced. This, you will hardly admit of as an excuse; but you must take into consideration that my second volume, will contain only corals,

7. Calvin Wells, 'A clinical view of William Cunnington', in Cunnington (note 1), pp. 161–2.

Allyenin and Encrine: & if I had devoted more of it to corals, I should have been only able to comprise in it those substances & the Alcyonia, leaving Encrine to another volume. This, when we look forward to the prodigious number of fossils yet to be examined would hold out to my reader a terrific appearance as to the length of the work.

With respect to the time of appearance of my second volume, I think I may venture to say about the 1st of March – my Engraver with whom it rests, says that 1st of Feb.y – my experience has taught me hesitation when reckoning on their promises.

Permit me Sir to congratulate you on the justly acquired additional fame for your late accurate account of some of your most ingenious & successful antiquarian researches.

We have lately established in London a Geological Society, of which I shall be very happy in proposing you as an honorary Corresponding Member should it be agreeable to your wishes – From, Sir,
your most obliged –,
Jas Parkinson

5 23 September 1809
Dear Sir
Accept my thanks for your kind favour of some of your Wiltshire shells, an examination of which will doubtlessly assist me much in my inquiries respecting the fossil shells of that part of our Island – The picture is remarkably fine & I propose to have it engraved. – With respect to corals I much regret my limited space, as I could certainly proceed much farther, & as to shells, they would of themselves be almost enough for a volume; but I dare not trust myself farther than the public will be with me. Indeed the report of Sir R. Hoare's bookseller is incorrect, for though I cannot complain of the sale, there still exists no difficulty in obtaining the first volume. Sherwood, Neilly & Jones, Paternoster Row, the real publishers assure me that the first volume has never yet been refused to any purchaser.
I am, Sir, gratefully & respectfully yours, J. Parkinson
Hoxton Square. Septr. 23. 1809 –

P.S – I trust that your tormentor (headache) has by this time quitted you. It is not fair to attack one who so industriously & so variously employs his abilities. Still may I observe that for any fossil shells which if univalves I can get a view of their mouths & if bivalves of the hinge part, & which you do not require for your own museum I shall be very thankful.

6 27 September 1810
Dear Sir –
I commissioned my booksellers to endeavour to obtain a copy of the first volume from among the trade & they sent me one word yesterday that they have been unsuccessful, although they had written to one or two . . . who they thought might have one still on hand. I have two copies which I had received, if Sir Richard Hoare likes it I will have one of them put into new boards for him & send it with or without the second volume according to his directions.

hope your health is amended & that you are not restrained in your pursuits which you have hitherto proved so very successful. How rich is Wiltshire in subjects for your investigation – its fossils would make a very rich volume. – Pray have you at Chute many of the oval Cornu Ammonis I have one imperfect specimen from Sussex & I wish to give a figure of them – Do you know a fossil shell of your neighbourhood of a form somewhat resembling this. [*here there is the drawing of Figure 1*] a bivalve – anosmia – with a proboscis-like beak – I am, Sir
with true respect
Your obedt servt
J Parkinson
Hoxton Square
Sept 27. 1810

7 23 October 1810
Dear Sir
I am very sorry at not having it in my power to oblige the Lady, but the copy which I have (this day) sent to my bookseller for Sir Richd Hoare, is the only one left of the first edition, being the one I had reserved for myself. If she wishes it the bookseller shall send her the volumes when ready & my daughter who colours them shall select the plates particularly for her.

Your friend Mr Johnson has favoured me with a visit & I assure has highly gratified me by his conversation; I am in some hopes of catching him again for a little more fossil gossip: he knows more of fossils than anyone I have lately met with. How happy, my dear Sir, should I be were I able to leave for a little while the oar I am constantly obliged to ply & to spend a few days in Wiltshire to view your rich collection of fossils antiques &c of which I have heard so much; but it is impossible – the conditional offer of your duplicates, strong as is its power, must not break my chains.

At the same time, I must give you my earnest thanks for your extremely kind invitation: & pray, Sir, as you do come sometimes to town, do contrive in part of a day, the next time; it would be to me a rich treat. I must also thank you for your kind intention of sending me some of your Farringdon fossils &c as mentioned in your last, I acknowledge I wish for them, as I wish to again declare in my third volume the continued favour I receive at your hands. – Should I, or indeed should I not obtain appreciation of the proboscidal Anomia or of the oval cornu Ammonis, I shall take the liberty of availing myself of your very nice drawings accompanying yours of the 5th. inst. – I am Dear Sir –

Yours respectfully
Jas Parkinson

Hoxton Square
Oct. 23 1810

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 197–210.

Insectivores in Wiltshire: Shrews

by MARION BROWNE

The paper surveys the occurrence of three species of shrews in Wiltshire, using data from historical records, from systematic survey over the years 1976–84 and from a special survey during the years 1984–85. The methods of data collection are described and the records are set out. The discussion identifies patterns in the data in respect of distribution, habitat choice, activity, mortality and predation.

INTRODUCTION

Three species of shrews are considered in this paper; two are terrestrial and belong to the genus *Sorex*, one is semi-aquatic and belongs to the genus *Neomys*. All are small mammals, which are defined as having an average adult weight of 50 g or less; in the case of British shrews, the top adult weight is about 23 g. The three species are the Common shrew *Sorex araneus*, the Pygmy shrew *S. minutus* and the Water shrew *Neomys fodiens*. The order used follows Corbet (1975).

Records from historical sources and from surveys prior to 1976 were available. During 1976 mammal recording was established on a firmer basis, recording sheets were printed and circulated, and records were actively sought using every available recording technique. In 1984 a special survey form was printed and circulated, with the aim of bringing the distribution maps up to date and of adding to the data already held. This paper summarizes known incidence and distribution of shrews in Wiltshire up to the end of 1985 and presents available information on aspects of their biology and behaviour.

METHOD

Provisional distribution maps were established from information extracted from the National Biological Records Centre and from known local sources, published and manuscript (Dillon and Noad 1980; Dillon 1984) up to 1976. The information was sparse and the provisional distribution maps showed far from complete coverage. A shrew survey form was therefore prepared and circulated throughout the county to natural history and conservation societies, to members of Women's Institutes and other organizations, and to everyone who had ever submitted records of shrews in the past. Field meetings and live trapping programmes[1] were organized for the purpose of studying the identification of live specimens and for the study of location and habitat. Lectures and workshop meetings were held for the purpose of studying the identification of skeletal remains from owl pellets and other sources. Short articles were published in the local press and in the newsletters and bulletins of local societies. One natural historian took part in a national survey called 'What the cat brought in', which was organized by Doncaster Museum with the aim of determining the importance of the domestic cat as a predator. Also, people were questioned during conversations, from which transcripts could be made and records extracted.

Evidence was sought on the presence of shrews from sightings and field signs, with information on location, map reference, habitat, time of day, date, diet, breeding, mortality and predation.

Physical characteristics of the shrews for identification purposes were established during live trapping programmes and from dead specimens. Comparative sizes and proportions are shown in Figure 1. In general terms the shrews are small animals with very long pointed muzzles, tails which are approximately the same length as their bodies, and very dense velvety fur. The two smaller shrews are dark grey or brownish grey with paler ventral surfaces and *S. araneus* is tricoloured, having a band of intermediate colour along the flank. *N. fodiens* is black with a well demarcated white ventral surface, abnormally the pelage is all black; all the toes are fringed with stiff hairs, and there is a keel of stiff whitish hairs along the under side of the tail. There are five toes on the fore and on the hind feet of all three shrews. All three have red-tipped teeth; the first incisors are large and elongated, and followed, in

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1. A licence from the Nature Conservancy Council is now required if shrews are to be live trapped.

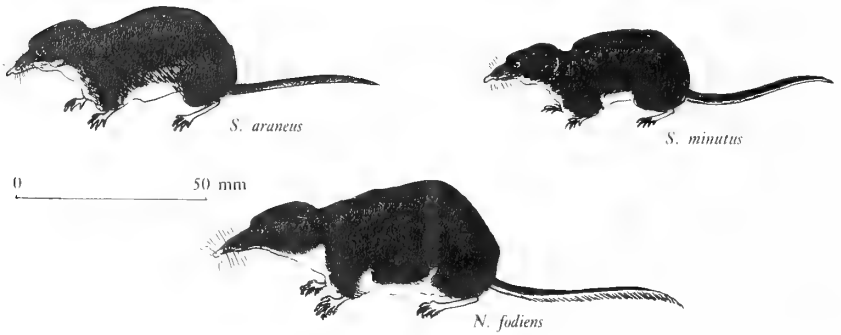

Figure 1. Comparative sizes and proportions of shrews, approximately 1:2.

the upper jaw, by a number of small teeth with single pointed cusps (five unicuspids in *S. araneus* and *S. minutus*, four unicuspids in *N. fodiens*).

Live sightings and dead animals provide acceptable evidence, as do field signs such as tracks, burrows, nests and skeletal material.

The feet of live and dead shrews have been studied in detail. In practice, shrews are not heavy enough to leave recognizable footprints, but the size of the feet and the number and pattern of the pads can be useful in identifying partially decomposed dead specimens; the feet of *N. fodiens* in particular, with the densely fringed toes, are unmistakable. The diagnostic features are shown in Figure 2.

Burrows are used by all three species. *S. araneus* makes runways through leaf litter and burrows through soil, whilst *S. minutus* uses burrows made by other species. *N. fodiens* excavates shallow burrow systems in banks, entered above or below water level. Burrows are not diagnostic and require supporting evidence.

Nests are used by all three shrews but are not diagnostic and require supporting evidence.

Skeletal material, particularly skulls and jaw bones, may be encountered in the field and isolated from the castings of predatory birds and from animal remains in discarded bottles. Earlier work yielded material from which diagnostic features were noted and used in subsequent analysis (Dillon, Browne and Junghaans in prep.); these features are shown in Figure 3.

RESULTS

By the end of 1985 the number of records from all sources was 551, in which the number of individual animals mentioned was 2008 (this was a minimum number deduced from the evidence), representing 249 1 km square records. All records were added to the existing distribution maps. Known distribution of the three shrew species at 31 December 1985 is shown in Figures 4–6. The distribution maps are plotted on a 1 km grid but, for clarity, only the 10 km grid is shown. Basic details of the records were published in annual Mammal Reports (Browne 1977–84).

Nearly 25 per cent of the records were of live sightings. Some were of single animals (*S. araneus* 28 per cent, *S. minutus* 69 per cent, *N. fodiens* 73 per cent), some were of multiple sightings; in two instances *S. araneus* was described as being seen in large numbers and in one woodland site the undergrowth was described as 'alive' with shrews for about five minutes. For the purpose of comparative quantification of records, where exact numbers were not stated, 'several' and 'occasional' were deemed to be five, 'many' and 'frequent' to be 10, 'large numbers' to be 50, and 'alive with shrews' to be 100. Live shrews were recorded either by chance or in live trapping programmes and these data are presented in Figure 7. More than 75 per cent of the records were of dead animals. There were no field sign records, although nests were mentioned in support of three live sightings of *S. araneus*; in two cases the shrews were seen in nests, one at Idmiston composed of privet leaves, box leaves and grass, and one at Whaddon composed of shredded foam rubber and concealed under a discarded metal sheet. In the third case, two animals at West Kington were observed on and off during three days carrying wistaria leaves a distance of approximately four metres along a terrace,

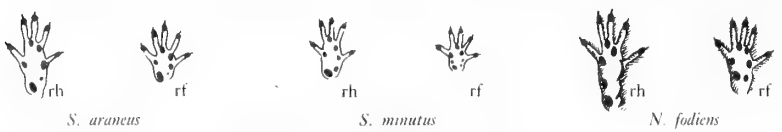

Figure 2. Toe and foot pads of shrews, approximately 1:1.

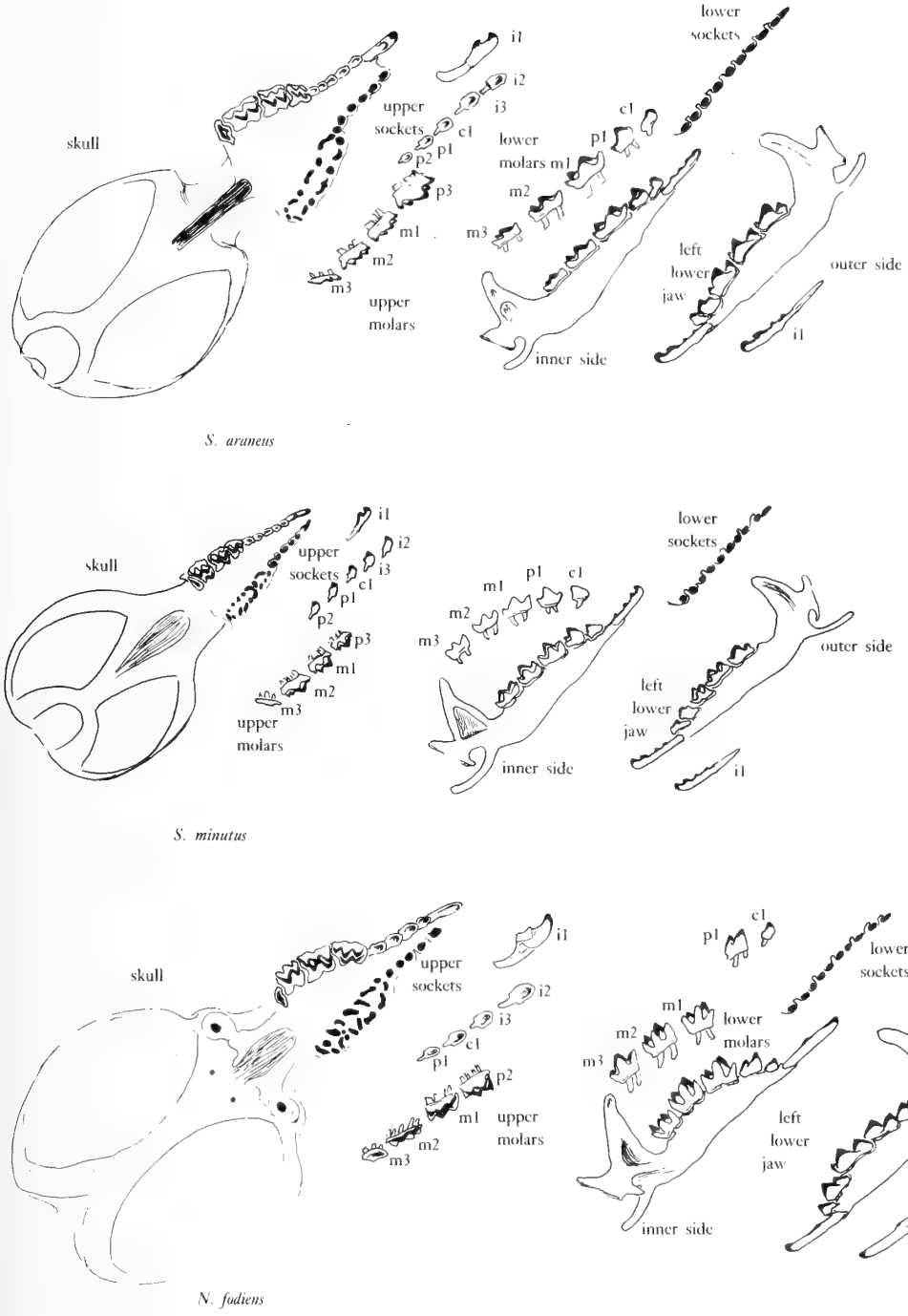

Figure 3. Skulls, jawbones and teeth of shrews, approximately 3:1. Top S. araneus, *centre* S. minutus, *bottom* N. fodiens. *i incisor, c canine, p premolar, m molar.*

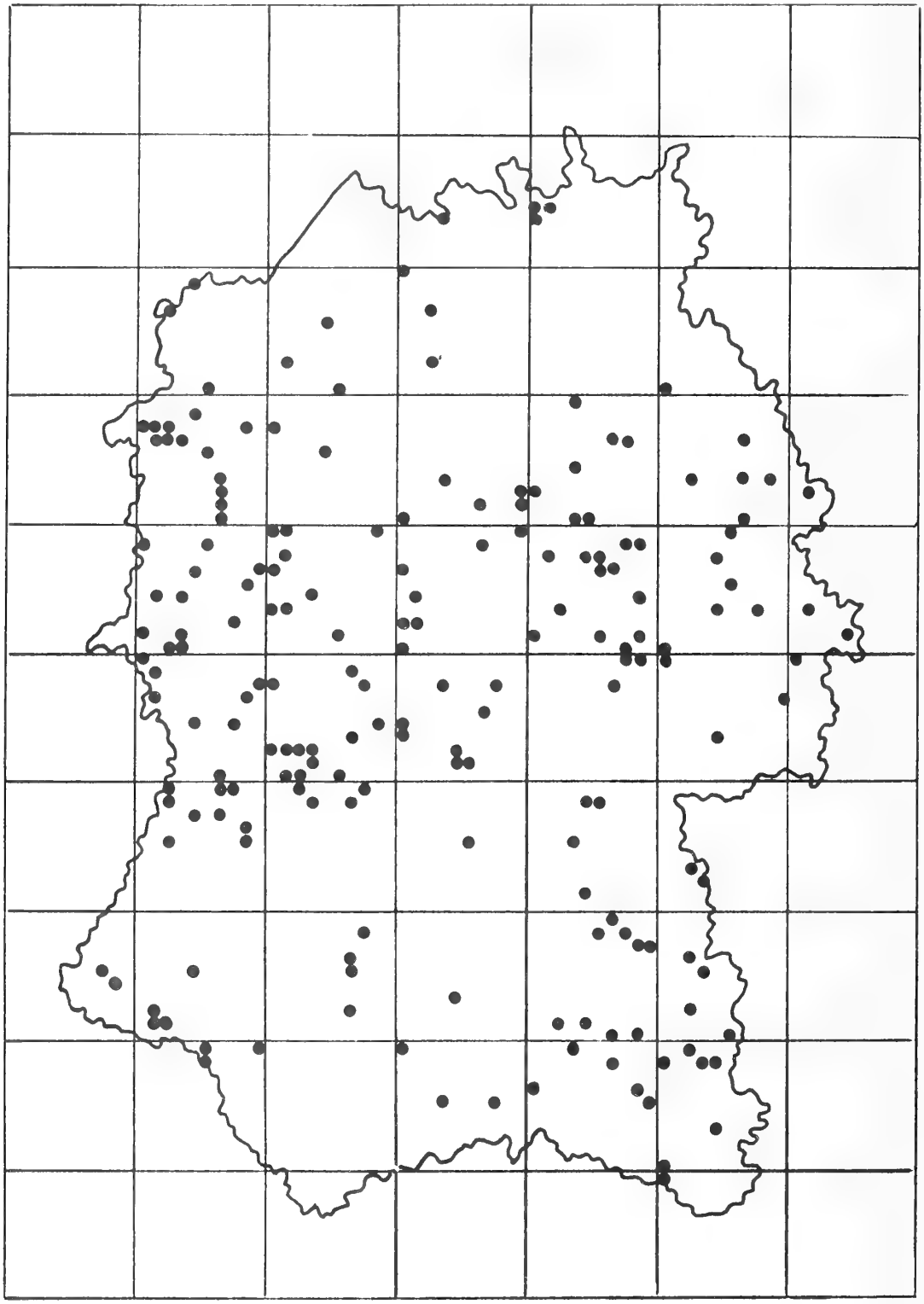

Figure 4. S. araneus: *known distribution in the county.*

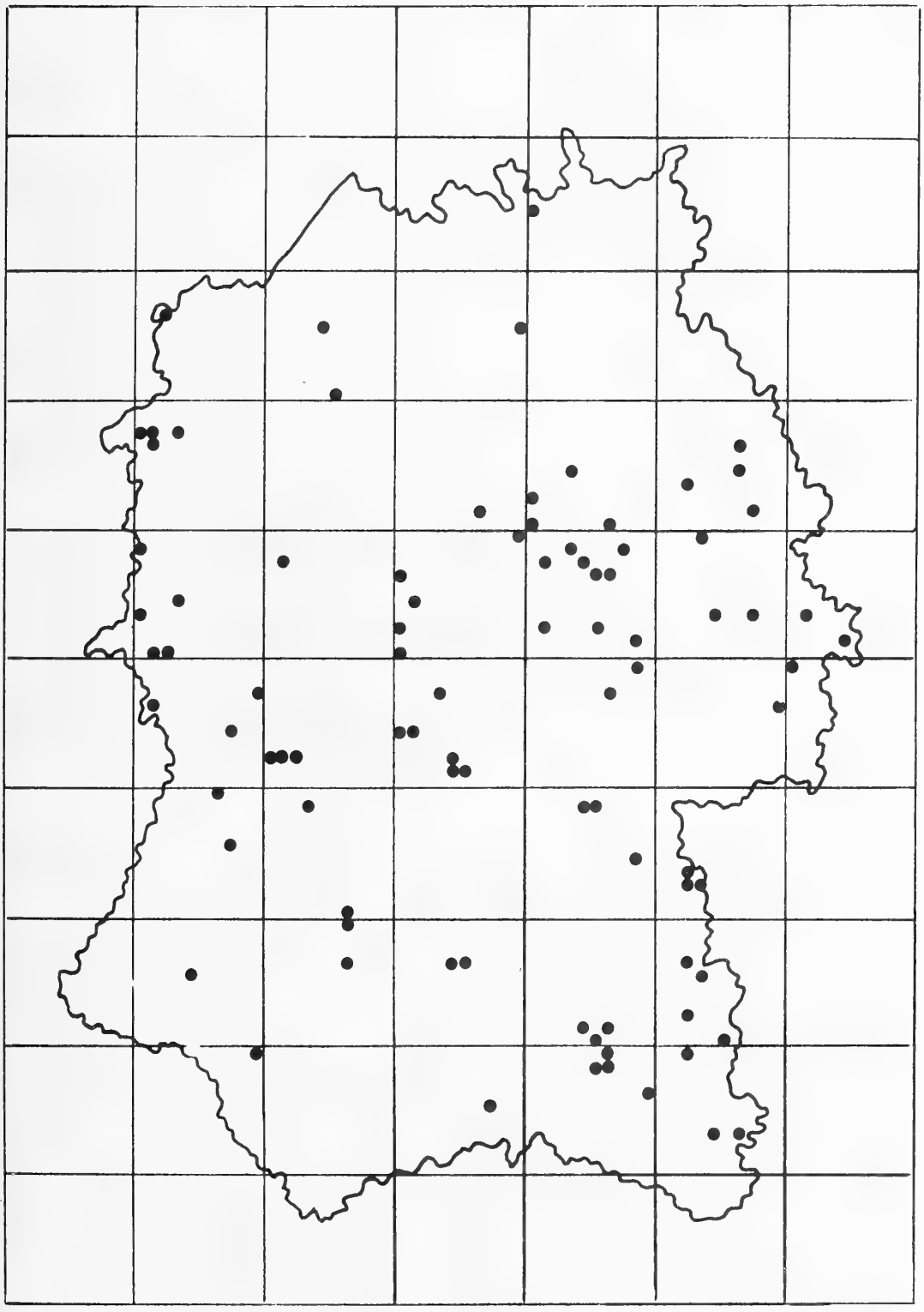

Figure 5. S. minutus: *known distribution in the county.*

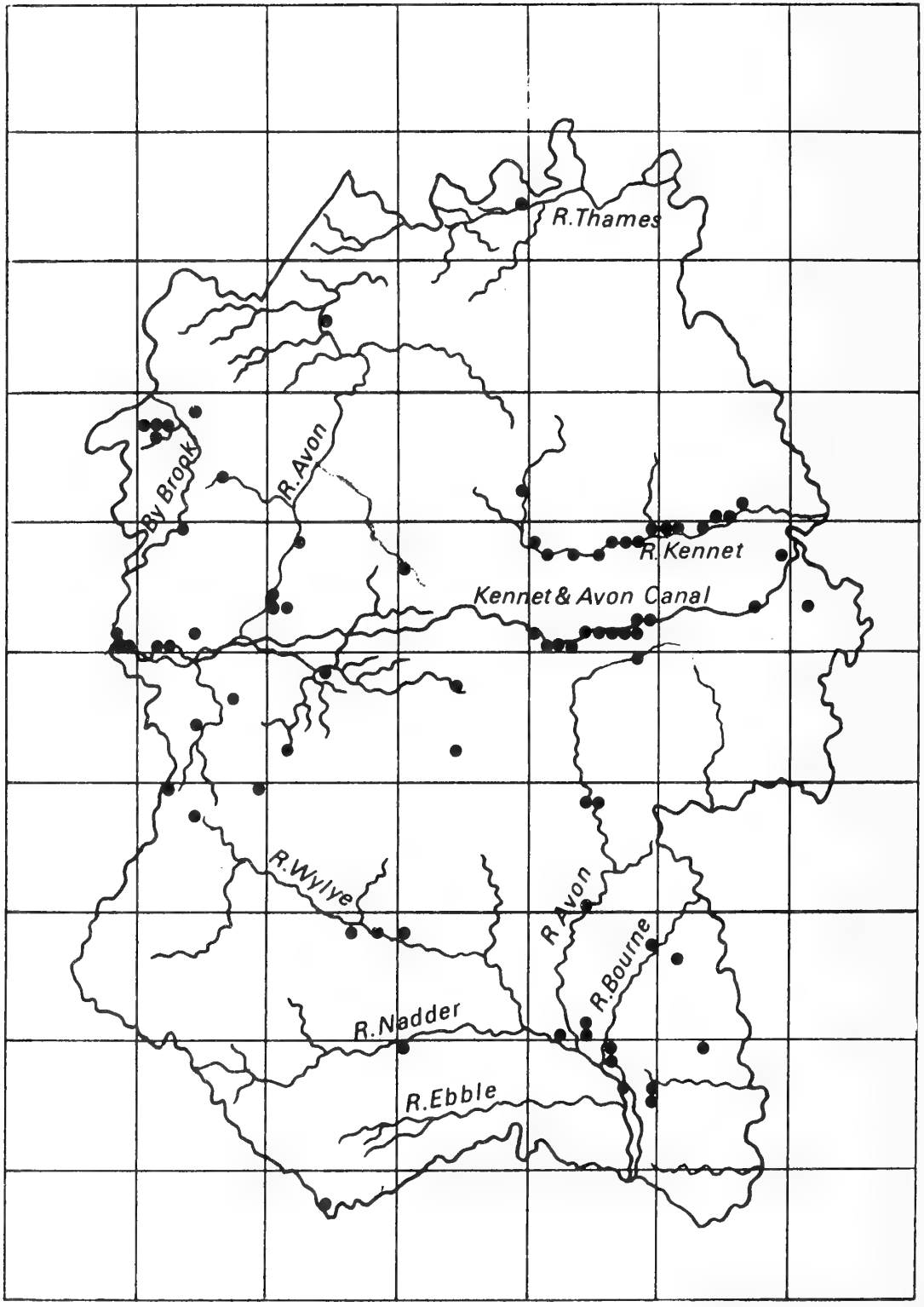

Figure 6. N. fodiens: *known distribution in the county.*

	casual sight		*trapping*	
	no.	*%*	*no.*	*%*
S. araneus	314	82.5	67	17.5
S. minutus	31	64.5	17	35.5
N. fodiens	76	100	–	–

Figure 7. Live records, by numbers and percentages.

behind a flight of stone steps and vertically up a stone retaining wall to a gap between the stones where they vanished from sight; the leaves were carried singly, each leaf being as big as the shrew carrying it, and over 100 journeys were watched altogether; even when the shrews were out of sight behind the stone wall their movements could be followed by the rustling of the dry leaves. The nature of record for each species is shown in Figure 8.

Habitat information from the record sheets was divided into four main categories in terms of cover. These were 'open', 'marginal', 'closed' and 'artificial and commensal'; the water habitats included for *N. fodiens* overlap with the 'open' and with the 'marginal' habitats as shown in Figure 9. There is also some overlap of detailed categories and the descriptive terminology used by contributors was diverse and has had to be standardized, but the main categories are nevertheless clearly defined. Of the 'open' habitats, 'waste' denotes rough, unused grassland or areas of agricultural and industrial dereliction. Of the 'marginal' habitats, 'lay-by' is also a waste area but occurring in a linear distribution where it overlaps with certain other categories such as 'road verge' and 'hedgerow'. Of the 'closed' habitats, 'woodland' denotes mature but largely unmanaged primary or secondary deciduous woodland, 'plantation' denotes newly planted or young commercial woodland, usually coniferous or mixed, and 'coppice' means regularly managed deciduous woodland. Other categories are self-explanatory. In assigning records of skeletal material to habitat categor-

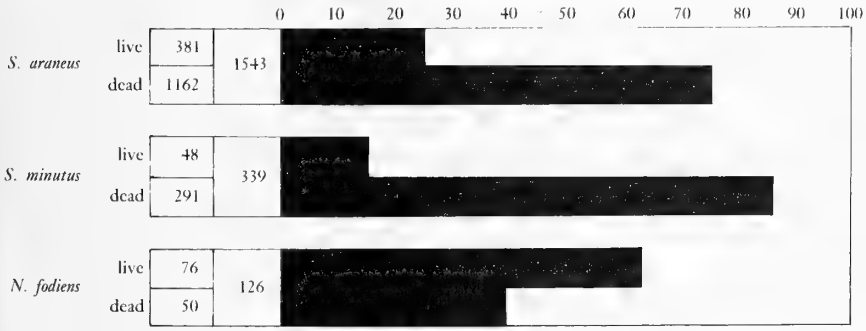

Figure 8. Nature and number of records, and percentage representations.

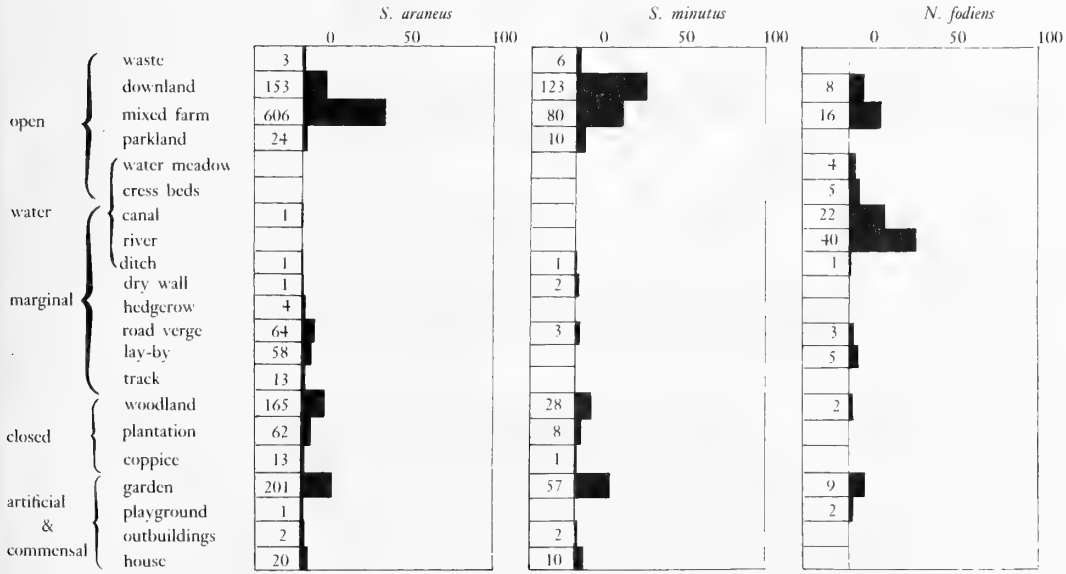

Figure 9. Habitat: number of records and percentage representations.

ies, when the provenance of the prey units was unknown, the habits of the predator have been taken into account; thus the prey of the kestrel *Falco tinnunculus*, the Barn owl *Tyto alba* and the Little owl *Athene noctua* has been assigned to 'mixed farm' or to 'downland' according to locality and the prey of the Tawny owl *Strix aluco* and the Long-eared owl *Asio otus* to 'woodland'. The number and proportion of each habitat type used by shrews is shown in Figure 9.

In examining the diurnal activity of the shrews not all the records could be used. It was clear that nearly all the casual sightings of live animals were diurnal, although few contributors gave precise times. It was also known, from the habits of the predators, that the prey of *F. tinnunculus* was killed diurnally and the prey of *T. alba*, *A. noctua*, *S. aluco* and *A. otus* nocturnally. It was, on the other hand, usually impossible to know when cats had killed their prey and, with chance finds of dead shrews, including road casualties, impossible to know when death had occurred. Similarly, it was not known when shrews had entered discarded bottles or how long before discovery they had died. Data used in determining diurnal activity patterns therefore derive from records of casual live sightings, from the results of systematic live trapping programmes, in which the traps are visited at regular intervals including early morning (nocturnal catch), and from analyses of the castings of avian predators. These data are presented in Figure 10.

610 records of individual shrews (approximately 30 per cent of the total number) were dated accurately to a month and have been used to plot annual activity patterns. These data are presented in Figure 11.

There were only three records of shrews seen feeding. *S. araneus* was observed eating a worm at Lavington, and one was found, holding a piece of cheese, dead in a breakback mousetrap (it was assumed to have been about to eat the cheese). One case of cannibalism was observed at West Kington in 1976, when using jar traps during a live trapping session; jar traps allow a multiple catch and one jar, when inspected, was found to contain a live female *S. araneus* and a partially eaten *S. minutus* corpse. *N. fodiens* was observed at West Kington taking small flies (*Diptera* sp.) off the retaining wall of the river bank near a bridge.

Very few signs of breeding were recorded. Those for *S. araneus* were a pregnant female released from a Longworth trap at Eysey in June 1978, a lactating female at Winterbourne Monkton in August 1976, three juveniles released from a Longworth trap at Kingston Deverill in June 1974, two juveniles caught by a cat at East Knoyle in June 1984 and several juveniles caught by a kitten at Upton Scudamore in July 1984. There were three records of *S. minutus* juveniles, several dead at East Knoyle in July 1984, one killed by a cat at West Kington in October 1975 and one rescued from a cat at Whaddon in November 1981. There was only one record for *N. fodiens*, a juvenile found dead at Tollard Royal in March 1962.

1147 individual shrews were found dead. Some were

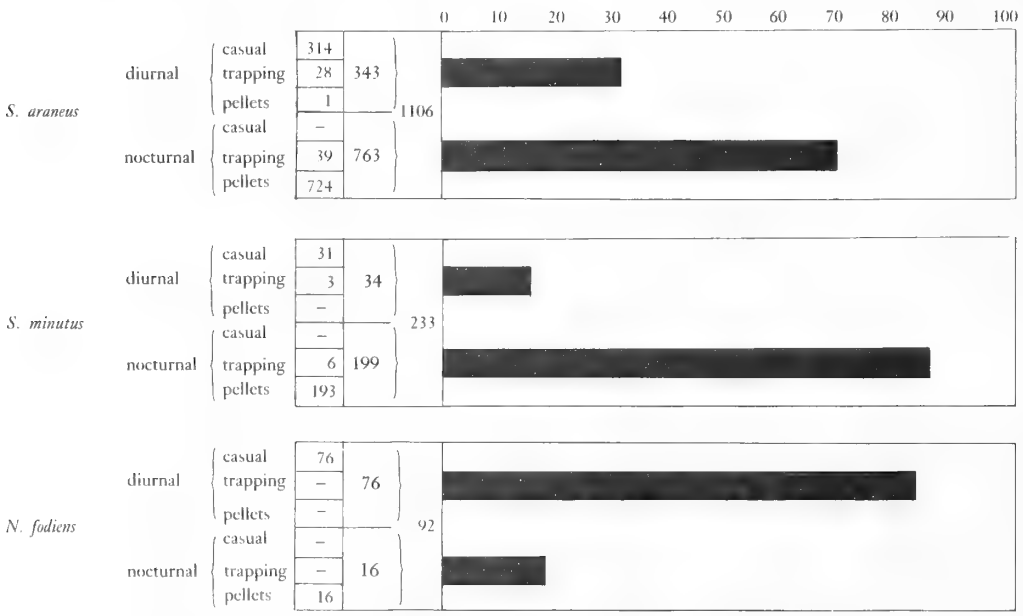

Figure 10. Diurnal activity: number of records and percentage representations.

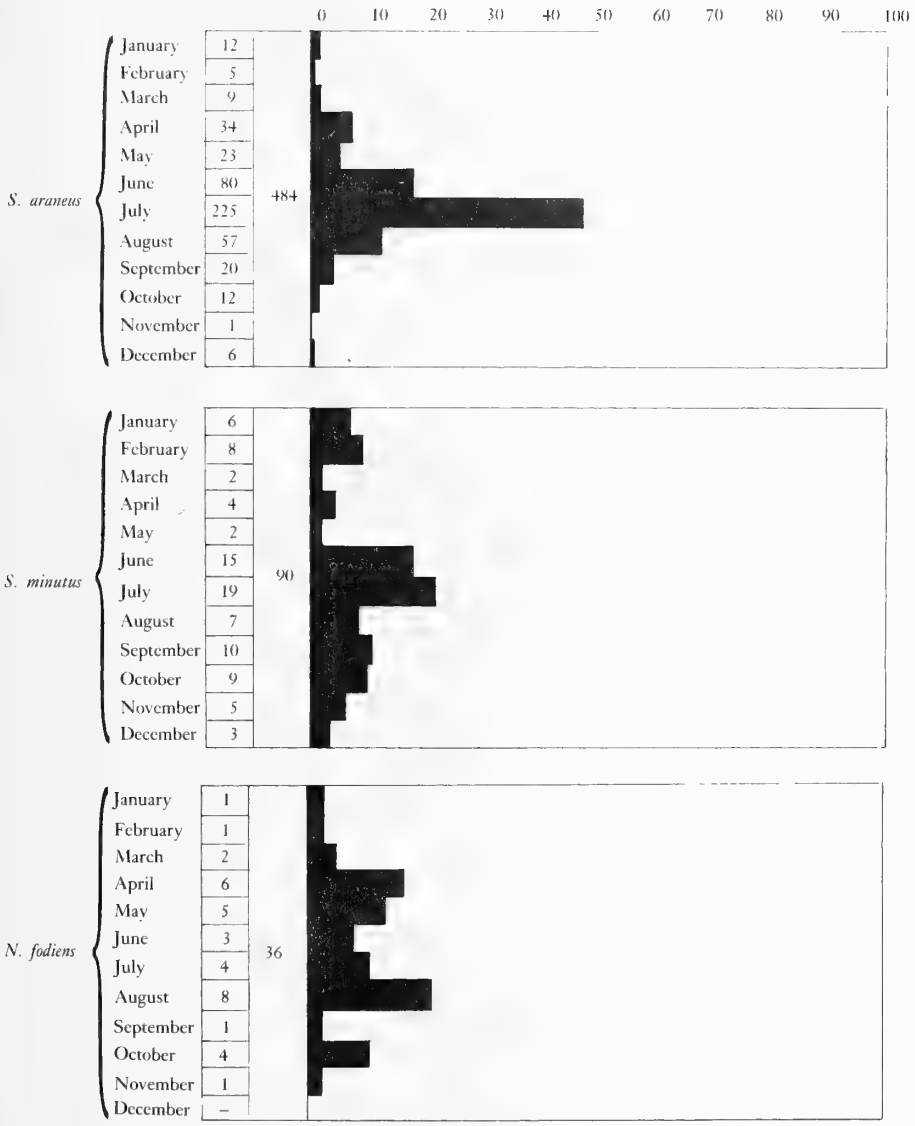

Figure 11. Annual activity: number of records and percentage representations.

chance finds, several were killed on roads and two were drowned, both *S. araneus*, one in a garden pool at Southcott, one in a tea-leaf bucket at Bradford-on-Avon. *S. araneus* and *S. minutus* were found dead in Longworth traps and in breakback mousetraps (set for mice), and all three species have been found in discarded bottles from which they have been unable to escape (Morris 1966). The greatest number of dead shrews were isolated from the castings of predatory birds and these featured prominently in the records. The incidence of mortality is shown in Figure 12.

Avian predators known to have taken shrews in Wiltshire are the kestrel *F. tinnunculus*, the Barn owl *T. alba*, the Little owl *A. noctua*, the Tawny owl *S. aluco* and the Long-eared owl *A. otus*. The *F. tinnunculus* record came from analysis of a few pellets collected at West Kington (author's data). Owl pellets have been collected more systematically and analyses and data were available for the following: 424 individual *T. alba* pellets from various roosts in the county and a large fertilizer bag full of partially decomposed pellet material from a hollow elm tree at Milton Lilbourne (Ticehurst 1935; Gillam 1973; Turner 1976; Dillon 1977 and 1983; Tichner 1978; Ward 1979; Newton pers. comm.; Dillon, Browne and Junghaans in prep.); 50 *A. noctua* pellets from three localities (Dillon 1977); 6 *S. aluco*

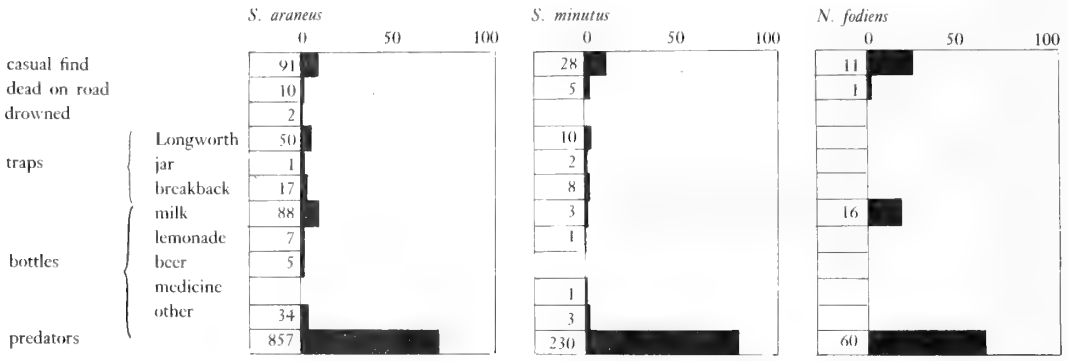

Figure 12. Mortality: number of records and percentage representations.

pellets from one locality (Turner pers. comm.); 69 *A. otus* pellets from one locality (Turner pers. comm.). Mammalian predators known to take shrews are the fox *Vulpes vulpes* (one record) and the domestic cat; domestic cat data derived from record sheets submitted by 39 individual recorders and from the 'What the cat brought in' survey (Ward 1981). The incidence of predation based on these data is presented in Figure 13.

DISCUSSION

All three shrew species are found to be widely distributed in Wiltshire. On a 10 km square basis, county distribution of *S. araneus* is near-complete and the 1 km square representation for this species suggests that distribution is widespread and general wherever conditions are suitable. Under-represented areas of the county, such as the NE corner, reflect a local shortage of experienced recorders and not necessarily a lack of shrews. *S. araneus* and *S. minutus* are largely sympatric throughout their range (Ellenbroek 1985) and this is reflected in the distribution maps of the two species in Wiltshire, although *S. minutus* is more sparsely represented. Widespread wherever there is plenty of ground cover, *S. minutus* is nevertheless found to be less abundant in woodland (Corbet 1977) and to be particularly scarce in open woodland (Godfrey 1981), factors which may contribute to the apparent disparity in distribution between the two species in Wiltshire. *N. fodiens* has proved difficult to study and has been seldom encountered in the field; it is borne out by Churchfield (1985) that it is elusive and localized; in spite of this, the species is shown to be widely distributed in Wiltshire and, although possibly localized, to colonize most of the river systems as well as many stretches of the Kennet and Avon Canal.

In terms of numbers of records and of individual animals, *S. araneus* is shown to be the most numerous of the three shrews; the high figures for this species reflect its susceptibility to avian predation and the incidence of skeletal remains in *T. alba* castings in particular highlights a trend which is fully exemplified in the detailed analysis of predation data. Although predation is the main cause of mortality in *S. minutus* and although *T. alba* is shown to be its main predator, analyses of skeletal material show that it forms only 20 per cent of *T. alba* prey; it seems therefore that *S. minutus* is less abundant than *S. araneus* and this is confirmed as being usually the case by Corbet and Ovenden (1980) and by Godfrey (1981), and it seems also to have been the case 50 years ago when *S. minutus* was described by Sandars (1937) as distinctly rarer. *N. fodiens* is considered to be less numerous than either of the smaller shrews (Godfrey 1981) and the Wiltshire data certainly show it to be considerably less abundant.

Live sightings formed less than 25 per cent of *S. araneus* records and less than 20 per cent of *S. minutus* records. This may be due in part to the diminutive size and elusive nature of these little animals and also to a

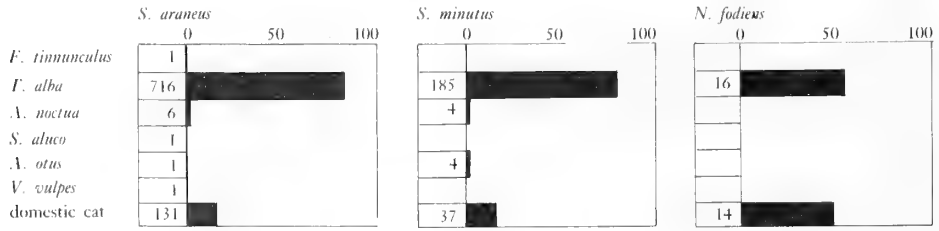

Figure 13. Predation: number of records and percentage representations.

certain extent to the difficulty of accurate identification in the field; not only are adults of the two species similar in size, juvenile *S. araneus* may be smaller than adult *S. minutus* (Godfrey 1981). The difficulty of identification is exemplified by earlier writers; MacGillivray (1843), for example, did not distinguish between the two species, although realizing that separation was likely; 'the Common shrew,' he wrote, 'varies in size and colour and is, probably, confounded with one or more species hitherto undetermined'. By the early twentieth century distinctions between the two species were recognized. Hall (1913) for example called *S. minutus* the Lesser shrew and noted that its tail was proportionately longer than that of *S. araneus*, still the most useful diagnostic feature for casual field sightings. In marked contrast, 70 per cent of *N. fodiens* records were of live sightings; although less abundant, its larger size makes it easier to see (particularly at close quarters, as when a fisherman found one in the waders he was wearing) and its black and white colouration is unusually distinctive – as Hall (1913) pointed out, black is a rare colour in mammals.

No shrews of unusual colour were recorded during the survey, but have been noted in the past. A pied specimen of *S. araneus* was seen near Amesbury *c.* 1830 and two specimens of *N. fodiens* near the River Nadder at Bemerton, one all white in October 1958, one semi-albino in December 1958. Corbet (1977) states that minor albinism of ear tufts in *S. araneus* is frequent and of tail tip seems to vary geographically, whilst gross colour variation is extremely rare. Jenkins (1977) notes white on ears and near eyes to be frequent in *N. fodiens*, but albinos to occur very rarely.

Identification of dead shrews presented fewer problems since corpses and skeletal material could be sent in for examination by experts. It was not therefore surprising that more than 70 per cent of *S. araneus* records and more than 80 per cent of *S. minutus* records derived from dead animals, particularly taking into account their susceptibility to predation. This situation was reversed, however, with *N. fodiens*, a species seldom encountered dead by chance, particularly as a road casualty, not caught in any type of trap during the survey and, although susceptible to predation, forming only a small proportion of total prey.

Field sign records did not feature in the survey, except for three nests recorded in support of live sightings. Although burrowing and nesting behaviour has been observed, there are few references to nest materials in the literature, except grass. Van den Brink (1973) adds roots, bark and moss for *N. fodiens* and Burton (1976) adds moss and wood chips for *S. minutus*. The three nest records in Wiltshire provide much too small a sample to allow any trend to be discerned, although the choice of materials does seem idiosyncratic. Observing captive shrews, however, Crowcroft (1957) noted that they would utilize any substance affording insulation such as grass, leaves, feathers, paper and cotton wool. It is probable therefore that wild shrews will take advantage of any good insulating substance they come across and that the human habit of discarding all kinds of rubbish in odd corners of the countryside provides shrews with useful nest material, including foam rubber.

S. araneus and *S. minutus* are found in almost every habitat type, providing that there is some cover (Corbet 1977). Habitat data show *S. araneus* to be the most ubiquitous of the three shrews in Wiltshire, able to exploit a wide range of habitats including overgrown grassland, 'marginal', 'closed' and 'artificial', wherever sufficient cover is available. *S. minutus* is also found in the 'open', 'closed' and 'artificial' types but is scarce in, or absent from, the 'marginal' categories. *N. fodiens* exploits comparatively open mixed farmland and rough grassland situations as well as the expected canal and river locations, with a few records from woodland and gardens. The distribution of the three species in the detailed categories 'downland' and 'mixed farmland' may be subject to some distortion due to the assignment of owl pellet records on the basis of the habitat requirements of the predator, on which basis *T. alba* records were assigned to these two categories according to location, although they are correctly represented in the main category 'open'. *N. fodiens*, although adapted for aquatic life, with its fringed toes and keeled tail as swimming aids, is known to travel some distance from water (Jenkins 1977). In Wiltshire this species has been found up to 1 km from the nearest water in woodland and in road sidings, where the skeletal remains have been extracted from discarded milk bottles; a dead specimen was also found at least 1.5 km from the nearest water on open rough grassland (Overend pers. comm.), although it was not known whether it travelled there or whether it was, perhaps, dropped by a predator. *N. fodiens* feeds on land as well as in water (Crowcroft 1957) and is therefore not confined to water habitats or dependent on them for food.

Diurnal activity figures for *S. araneus* and *S. minutus* derive from casual sightings, from live trapping programmes where the traps were visited at regular times, and from skeletal remains from the castings of avian predators. Both these species are shown to be active day and night with a trend towards nocturnal activity much more marked in *S. minutus* than in *S. araneus* and at variance with the detailed work of Crowcroft (1957) who, although concluding that *S. araneus* is one and a

half times as active during the night as during the day (which is reasonably consistent with the Wiltshire results), found *S. minutus* about equally active during day and night. Crowcroft (1957) also found *N. fodiens* more active at night than during the day, again at variance with the Wiltshire data; however, only two recording methods were available for the Wiltshire survey, casual sightings by human observers during the day and *T. alba* pellet analysis as nocturnal evidence. Although *T. alba* hunts over most of the open habitats exploited by *N. fodiens*, it forms a very small proportion of *T. alba* prey (Dillon, Browne and Junghaans in prep.); further, *N. fodiens* is shown to occur most frequently in rivers and canals where it may be less accessible to avian predators. The nocturnal evidence is therefore distorted and both nocturnal and diurnal samples are too small to allow an accurate assessment of *N. fodiens* activity.

Approximately 30 per cent of the individual shrew records were dated accurately to a month and available for plotting annual activity. The samples for each species individually are not sufficient to produce detailed results; they do, however, reveal broad trends which are in keeping with the findings of more detailed studies. All available evidence indicates that every female shrew, irrespective of age, produces young in May or June and some females mate again at post-partum oestrus (Crowcroft 1957). The number of litters per season is variable, up to five in *S. araneus* and several in *S. minutus* (Corbet 1977), two or more in *N. fodiens* (Jenkins 1977). Numbers thus build up during the summer, *S. araneus* reaching peak numbers in June to August, *S. minutus* in June (Burton 1976) and *N. fodiens* breeding from April to September (Jenkins 1977). The results of the Wiltshire survey, although not entirely clear cut, nevertheless follow in broad outline this picture of the way in which populations build up during the summer.

The diet of shrews is extremely varied, including many invertebrates of the soil and litter, especially earthworms and beetles as well as insects and larvae, spiders, centipedes, woodlice, snails and slugs, *S. minutus* taking smaller prey items than *S. araneus* (Corbet 1977). Insects and many other invertebrates are also taken by *N. fodiens* as well as larger prey including amphibians, frogs and small fish (Jenkins 1977). In view of the wide range of prey available, the small number of observations of shrews feeding in Wiltshire is disappointing. Cannibalism is not unknown, for example *N. fodiens* will prey upon *S. araneus*, but Crowcroft (1957) maintains that *S. araneus* does not normally prey upon *S. minutus* because, even in a fairly confined space, the more acute senses and greater agility of *S. minutus* enable it to keep out of the way. The two species are largely sympatric and potentially competitive; Ellenbroek (1985), however, finds that they have a stable ecological relationship which is maintained by means of vertical segregation, *S. araneus* burrowing underground, *S. minutus* more active in the upper soil layers. Clearly, then, the jar trap was too confined a space, affording no opportunity for the more agile *S. minutus* to escape and thus, in abnormal conditions, allowing cannibalism to take place.

The main breeding seasons for the three species have already been cited in the discussion on annual activity, in order to show how population numbers build up to a peak during the summer. Of the few records obtained during the Wiltshire survey which provide data on breeding periods (pregnant females, lactating females and juveniles) most fall within the accepted time limits, only two being unusual. The gestation period for *N. fodiens* is 24 days, and Crowcroft (1957) found that infants ceased suckling after 27 days; assuming that the dead juvenile at Tollard Royal was weaned and had left the nest (it was recorded as a casual find) by March, this implies that the parents had mated a minimum of 51 days earlier, in February, a time when all the females are immature (Crowcroft 1957) and brings about the suspicion that it was in fact an undersized adult. At the back end of the year the dates are just possible, if unusual; Crowcroft recalls one pregnant *S. minutus* female as late as 12 October, which would result in juveniles in November, as at Whaddon.

The incidence of chance finds of dead shrews is moderate; whilst some may have been caught by predators and dropped uneaten, they are often noted to be unmarked and it seems more likely that, owing to their small size and consequent problems with thermoregulation, they are the victims of chill or wet weather. Numbers found dead on roads or drowned are too small for any discernible trends to be seen. *S. araneus* and *S. minutus* are susceptible to death in Longworth and jar traps, again through thermoregulation problems, a difficulty which was largely overcome in later trapping sessions by adjusting trap inspection times, particularly in the early morning, so that as time went on trap deaths became a much less significant cause of mortality. Large numbers of *S. araneus* casualties were found in discarded milk and other bottles; *N. fodiens* was also a milk bottle victim but, owing to its larger size, not found in other types of bottles; *S. minutus* was less susceptible to death in bottles, its small size and greater agility perhaps allowing it more chance of escape. All three shrew species are highly susceptible to predation.

Compared with the large numbers of predators, both avian and mammalian, known to take small rodents

(Dillon and Browne 1984) the number of predators known to take shrews is small. Stoat *Mustela erminea* and weasel *M. nivalis*, both potential predators, are not known to have taken shrews and there is only one known instance of predation by *V. vulpes*. The domestic cat is shown to be a significant predator, although it does not eat shrews but leaves them lying about, where they may well be confused with casual finds and cause a certain amount of distortion in the nature of record. Owls are the main predators (Corbet 1977), undoubtedly so in Wiltshire. Comparative interpretation of data derived from owl pellet analysis is problematical owing to the widely differing habits of the four owl species known to have taken shrews in the county. *T. alba* pellets are produced at the roost which, once located, can be visited regularly for pellet collection. *A. noctua* is unpredictable in roosting behaviour and pellet ejection, and *S. aluco* is even less consistent, regurgitating randomly within its territories, thus making pellet collection very difficult. *A. otus* is predictable in pellet regurgitation, but the roosts are extremely difficult to locate. Only the pellets of *T. alba* provide a consistent yield of the jaw remains of shrews which provide material for identification and analysis. Despite these limitations *T. alba* is shown to be the most significant predator on all three shrew species, in terms of numbers as well as per cent of the data; all three are available to this owl in their 'open' category habitats. The sample from *A. noctua* pellets is small and the sample from *S. aluco* negligible. The sample from *A. otus*, although also small, shows an interesting larger intake of *S. minutus* which reflects the theory of its vertical segregation in the upper layers of soil or leaf litter where it is more accessible to woodland owls. Considering the accessibility of *N. fodiens* in several of its habitat ranges to *T. alba* and to domestic cats, the sample is nevertheless very small and in view of its ability to exploit both terrestrial and aquatic environments for food and of its diet, predominantly of common and ubiquitous prey species, it has many advantages, and it is strange, as Churchfield (1985) points out, that such a well adapted animal does not occur more commonly.

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Notes

A Group of Bronze Objects from Castle Rings Fort

by ANNE TOMLINSON* *with a contribution by* ROBERT STEPHEN-MURRAY†

PROVENANCE *by Robert Stephen-Murray*

In February 1984 I was shown, at the premises of Fox & Co. in Yeovil, a group of four bronze objects. I was told they had been found, probably about a year earlier, by a metal-detector user in the vicinity of Castle Rings, the univallate hillfort on the greensand ridge near Donhead St Mary. Later letters from Fox & Co. and from the finder informed me that the objects were discovered 17 to 20 cm below the surface at NGR ST888254; that is, NE of the N entrance to the fort on Gutch Common below Knipe's Farm.

Macroscopic examination of the finds is not consistent with their having lain for long together, as two of the objects have a green patina, and the other two a green-black patina.

THE BRONZES *by Anne Tomlinson*

It must be stressed at the outset that the bronzes were not found under controlled conditions, and consequently little is known about their context and stratigraphic relationship. It was reported that the objects were found 'together', but that description is unhelpfully vague; moreover, the differing patina on the objects would seem to belie such contiguity. These grounds militate against calling the collection a 'hoard', for to do so might conflate disparate material – perhaps even settlement debris – into an artificial grouping. In the absence of further information about their true provenance, it would be imprudent to do more than detail the currency of the four objects. No attempt has been made to reconcile their dates or to equate the bronzes with the near-by settlement site of Castle Rings Camp.

Tanged chisel (Figure 1a)

The chisel (no. 882) is complete except for slight damage to the tip of the tang. Its patina is similar to that of the plain gouge. The rectangular-sectioned tang widens to a projecting collar at its junction with the concave-sided 'triangular' blade; the edge is slightly flared. The length is 79 mm, the width of the blade edge 29 mm.

Tanged chisels are chisels characterized by the presence of a definite demarcation between the blade and the square- or rectangular-sectioned tang. They can best be divided into three types on the basis of the shape of the blade, this being a functional rather than a purely decorative trait. Examination of all the tanged chisels from the British Isles identified three sub-types (Turnbull 1978: appendix IV), the first of which, type 1, comprises chisels with concave-sided 'triangular' blades and slightly expanded cutting edges up to 55 mm wide. This chisel belongs in that category.

Tanged chisels first appear in Britain at the beginning of the Late Bronze Age, that is, in the Wilburton industrial phase of S England, and in NW France in the parallel industrial tradition of St Brieuc-des-Iffs. The hoard from Ely, Cambridgeshire, published by John Evans in 1885, contained one such tool, although due to a break it could not be assigned to a particular category, while a similarly dated find from Doncaster, Yorkshire, contained a type 1 chisel in association with a looped palstave of transitional type (Burgess 1968: 11, Figure 7). Most of the British examples, however, date to the succeeding Ewart Park industrial phase (O'Connor 1980: list 131), many being found in hoards containing material of the 'Carp's Tongue sword complex', or on settlement sites in association with such small bronze items as rings, pins, bracelets, awls and tweezers (e.g. Eldon's Seat, Dorset (Cunliffe and Phillipson 1968); Scarborough, Yorkshire (Wheeler 1931); Cullykhan, Banff (Greig 1972); Wallingford, Berkshire (Collins 1948–9). As for the end of the tool type's currency, it is difficult to prove conclusively that such chisels were still in use during the final phase of the British Late Bronze Age (contemporary with continental Hallstatt C: O'Connor's Late Bronze Age 4, Burgess's Llyn Fawr phase), owing to the difficulty of demonstrating associations on such multi-phase sites as Traprain Law, E Lothian, and Staple Howe, Yorkshire; the chisel from Brogyntyn, Selattyn, Salop (Savory 1976: 55) is the most reliable indication of such a date.

Many suggestions have been made regarding the

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Figure 1. The four bronze objects.
Above centre, tanged chisel, no. 882.
Above left, plain gouge, no. 884.
Above right, collared gouge, no. 883.
Below, sectioned band.

function of these tools. Raftery, examining the chisels with markedly concave-sided blades, has suggested they were 'for cutting leather or some damp pressed material', pointing to the similar implements used today to cut soap and tobacco (Raftery 1942: 128), while two recent articles in *Archäologisches Korrespondenzblatt* have treated all three sub-types as leather knives (Roth 1974; Tackenberg 1975). Tanged chisels are clearly not suited to use on metal nor to work with wood or clay moulds, although they are often associated with tools used on these materials.

Two parallel-sided gouges (Figures 1b and 1 c)
The first, plain gouge (no. 884) has a round-sectioned tapering socket. It is 88 mm long, and has a working edge 18 mm wide. A slight casting seam is visible on both sides. The patina is similar to that of the tanged chisel.

The second, collared gouge (no. 883) has a round-sectioned tapering socket. It is 81 mm long, and has a working edge 1 mm wide. The patina is similar to that of the knobbed bracelet.

Socketed gouges have generally been classified by Burley's (1956) scheme, which divides them into two classes by the presence or absence of mouldings around the collar and socket mouth. The division was invested with chronological significance, with the unmoulded type believed to precede the moulded. However, both plain and decorated gouges have since been shown to occur simultaneously in the British Isles and N France, that is, during the Wilburton/Saint-Brieuc-des-Iffs industrial phases (O'Connor 1980: 137; Briard 1965: 183); examples are to be found in such British hoards as Isleham, Cambridgeshire, Guilsfield, Montgomery, and Blackmoor, Hampshire. But the majority of gouges date to the succeeding, Ewart Park, industrial phase (and its equivalents in Scotland and Ireland), occurring both in hoards and among settlement debris. A few have been found with material of the latest British bronze-age phase, either with such indigenous types as linear facetted axes (e.g. Blandford and Sixpenny Handley, Dorset), or with Hallstatt C material (e.g. Llyn Fawr, Glamorgan, and Brogyntyn, Salop). Since these tools exhibit virtually no typological change

Figure 2. The four bronze objects. Left to right: plain gouge, U-sectioned band, tanged chisel, and collared gouge.

throughout their lengthy currency, it is impossible to pinpoint the dates of these examples.

Gouges are generally considered to have been used in carpentry. Deshayes (1960: 109) and Piggott (1968: 305) have pointed to their suitability for cutting mortices, while Anderson (1911), in publishing the gouge from the Adabrock hoard, Lewis, suggested that they would have served excellently as planes. Hodges's suggestion that they were used in making organic parts for metal weapons, such as sword-hilts, is equally plausible (Hodges 1957: 53).

Fragmentary U-sectioned bronze band (Figure 1(d))
The band has six plain adjoining hemispherical nodes. The nodes at either end display circular lateral perforations, 2 mm in diameter. The band's patina is similar to that of the collared gouge.

This fourth item in the collection appears to be part of a bossed or 'nut-moulded' bracelet. Bracelets with protruding bosses have a long currency, originating in central Europe at the Hallstatt B–C transition (Verron 1976: 805), occurring in Hallstatt C and D contexts in W Central and S European contexts (Freidin 1982: 57; Kossack 1959: Taf. 13.14; Peroni 1973: Figures 4, 7 and 7, 11, respectively), and continuing into the La Tène period, both on the continent and in Britain. Those with *hollow* bosses, however, such as this one, have a more restricted currency. They seem to derive from the massive bracelets of Hallstatt C and D, and occur on the continent consistently in later Hallstatt D and early La Tène contexts (Freidin 1982: 58; O'Connor 1980: 259). The few such hollow bracelets found in Britain have, alas, been unassociated or come from badly stratified settlement complexes examined early this century (e.g. Cold Kitchen Hill, Wiltshire). The closest parallel to the one from Castle Rings is that from Milton Lilbourne near Pewsey, Wiltshire (Figure 3), found on the edge of a major late-bronze-age/early-iron-age site, partially examined during the excavation of a Saxon cemetery. The only difference is that the knobs on the Castle Rings example are separated by D-sectioned bands decorated with ribbing. However, even this recent Milton Lilbourne find was not securely associated with datable material. On the evidence of the continental finds, a date of 6th/5th century BC can be tentatively ascribed to the Castle Rings example.

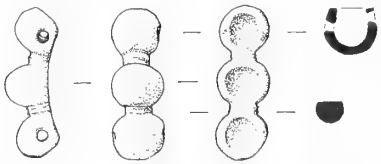

Figure 3. U-sectioned band from Milton Lilbourne.

If the lateral perforations on the terminal nodes are taken as part of the bracelet's closure mechanism, then these features too would suggest a Hallstatt D/La Tene I date. The link,or 'hinge and dowel', method of attachment seen on the Clynnog, Caernarvonshire, collar (Savory 1976: 56) is found on late Hallstatt bracelets in the Marne (Bretz-Mahler 1971: 58), and likewise occurs on bracelets from early La Tène contexts in E Yorkshire (Stead 1965: 52–4) and Mount Batten, Plymouth (Clarke 1971: 147). However, examination of the Castle Rings bracelet would seem to suggest that the perforations in this case, if indeed primary, are decorative rather than functional; in view of the fragmentary nature of the object, it would be unwise to suggest that the section served as the closure segment of a bipartite bracelet, and safest to attribute it merely to the category of bossed bracelets.

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Rescue Excavation near the Woodbury Late Prehistoric Enclosures

by DERMOT BOND*

The W side of the road between Riding Meads and Odstock Hospital (SU 149 275) was widened by *c.* 3 m during February and March 1983. Part of this work impinged on the scheduled area which includes the enclosures of Great and Lesser Woodbury (SMR 298), subject of Bersu's classic excavations, and was examined by the Central Excavation Unit.

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The plough soil was removed by machine and the surface of the chalk cleaned by hand.

Five groups of features were identified (Figures 1, 2):

1 A gully with a typically flattish base parallel with the edge of the tarmac road (context 84). This lay beneath the roadside hedge.

2 To the W of this gully, a series of narrow ruts were observed in the chalk (context 85). These sometimes consisted of pairs about 2.8 m apart. Their alignment was irregular in relation to the modern road.

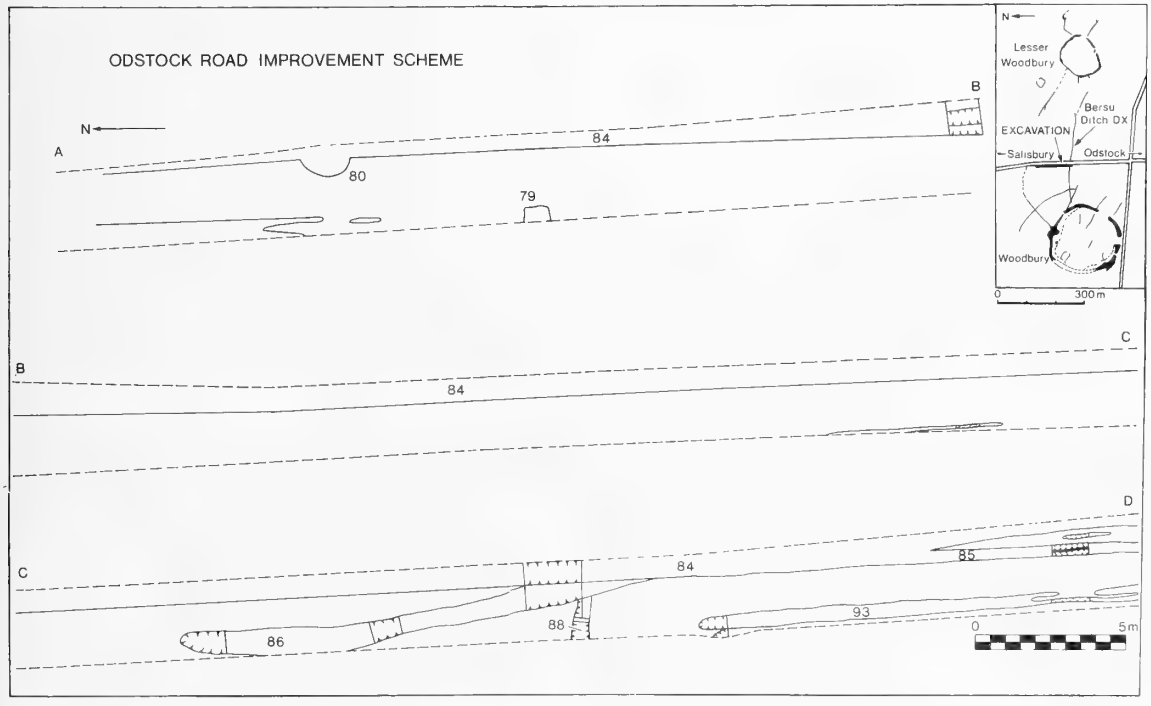

Figure 1. Inset shows the excavation on the Salisbury–Odstock road in relation to the Woodbury enclosures. Main figure shows the N part of the excavated strip, in three parts, marked A–B, B–C, C–D. The numbers are the contexts (see text).

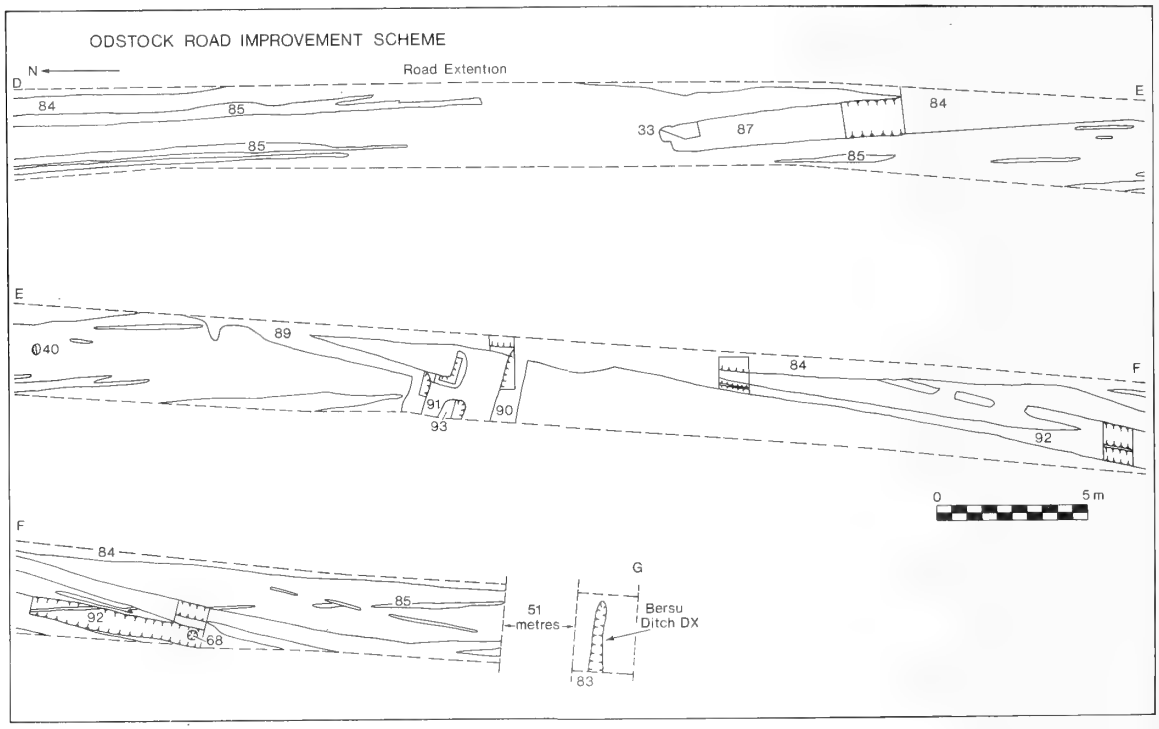

Figure 2. S part of the excavated strip in three parts, marked D–E, E–F, F–G.

3 Ditches and gullies aligned at about 90 degrees with reference to the road (contexts 79, 88, 90, 91, 93). These were of varying profile.

4 Gullies at a slight angle to the road (contexts 86, 87, 92). The average depth of these features was *c.* 30 m (Bersu 1940).

5. The ditch designated DX by Bersu and identified as illustrated in Bersu (1940).

This ditch showed a weathered profile on its S side, with quantities of weathered chalk in the fill. This might indicate that a bank stood to the N. It ended before the edge of the present road, and did not carry on as the continuous entity represented in Bersu's plan.

Interpretative problems arise from the physical constraints of the area examined, for the width of the extension was small in relation to its length. The few artefacts recovered were of medieval/post-medieval date or recent agricultural metalwork.

Gullies 88, 90, 91, 93 appear to represent an 'early' though undateable phase of agricultural activity, which may include ditch DX. They are all aligned E–W; 88 precedes 86; and all are earlier than the gully parallel to the modern road.

The gullies 86 and 92 are chronologically intermediate features between this early group and the series of possible cart-tracks (context 85). These suggest that a medieval or earlier hollow-way existed beneath and to the W of the present road. It subsequently went out of use, and a drainage ditch and hedge were established at the side of the line of the contemporary road.

The site archive and artefacts are deposited in Salisbury Museum.

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Excavations at Avebury 1982

by PACKARD HARRINGTON* *with a contribution by* VARIAN DENHAM*

INTRODUCTION

In 1982 three excavations were undertaken in Avebury by the DoE (now HBMC) Central Excavation Unit. All three excavations were undertaken in advance of extensions to buildings (Figure 1). At the Workingmen's Club (site 232) a small area was examined immediately outside the bank of the large monument near the S entrance in advance of extensions to the club-house. A small area in the interior of the monument was excavated at 'Crafts' gift shop (site 237). At 'Rosemead' a further small excavation took place on the S side of the Beckhampton Avenue outside the W entrance of the monument (site 238).

This report summarizes the data contained in the excavation archives, which are deposited with the Museum. Copies of the archives are also deposited with National Monuments Record.

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THE WORKINGMEN'S CLUB (Figure 2)

Excavation of a narrow cutting to the W and N of the clubhouse exposed the sloping surface of the natural chalk. In addition to the septic tank and sewer of the clubhouse, two other modern features – a soakaway (context numbers 5, 13, 15) and a rectangular post-hole (17) were located. Cultivation of the area prior to the erection of the clubhouse was indicated by three parallel plough-grooves (11, 19 and 31) penetrating 0.10 m into the natural chalk surface. In a contractor's soakaway trench system further to the E (not shown on the figure) part of a dog-burial was found, and pottery from unstratified loose soil (context 35) over this area indicated a Roman presence.

The upper horizons encountered in the excavations (21–25) presented a disturbed appearance and consisted of layers of brown sandy loam and chalk rubble containing modern material. All are limited in distribution and may be derived from the excavation of the septic tank and pipe trenches. The septic-tank pit

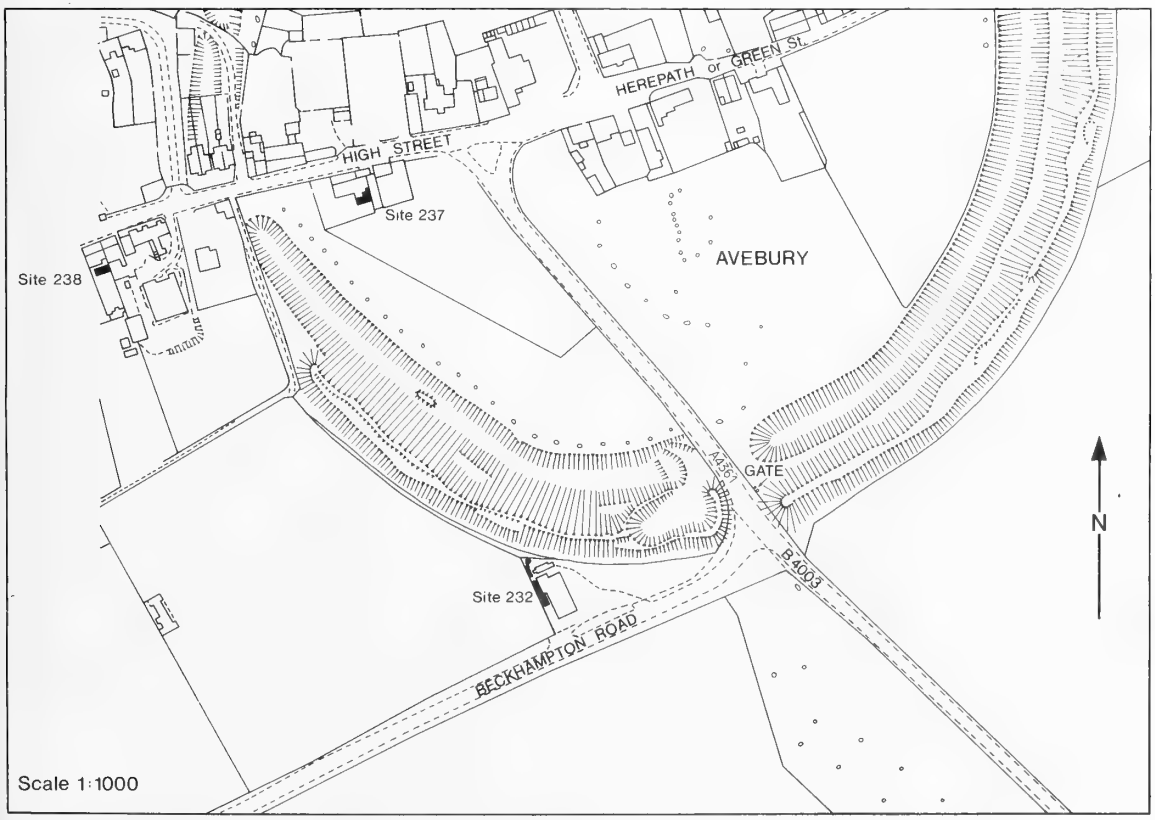
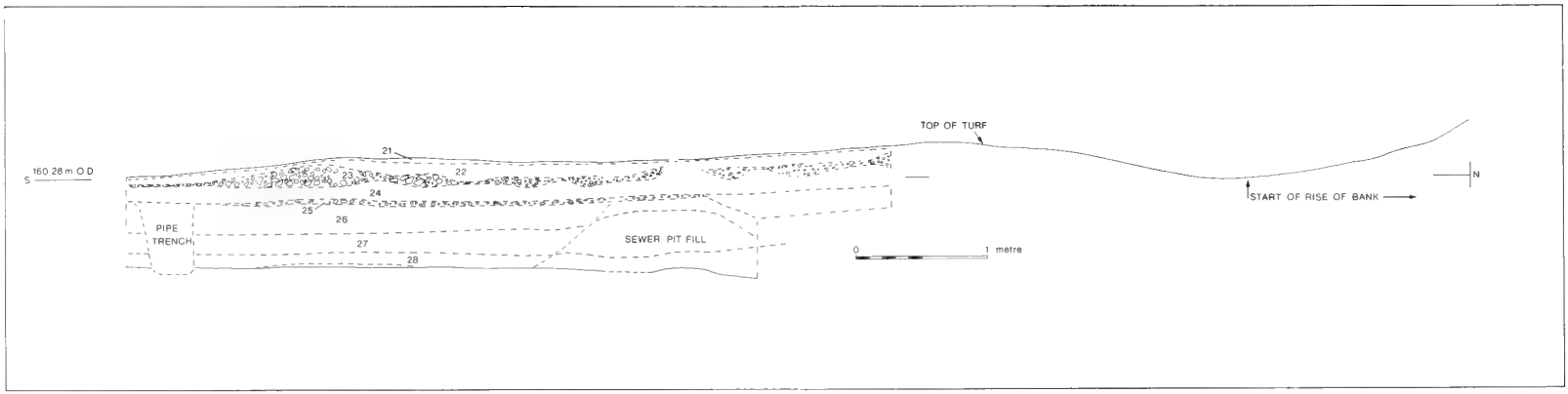


Figure 1. Avebury: location map of excavated sites.



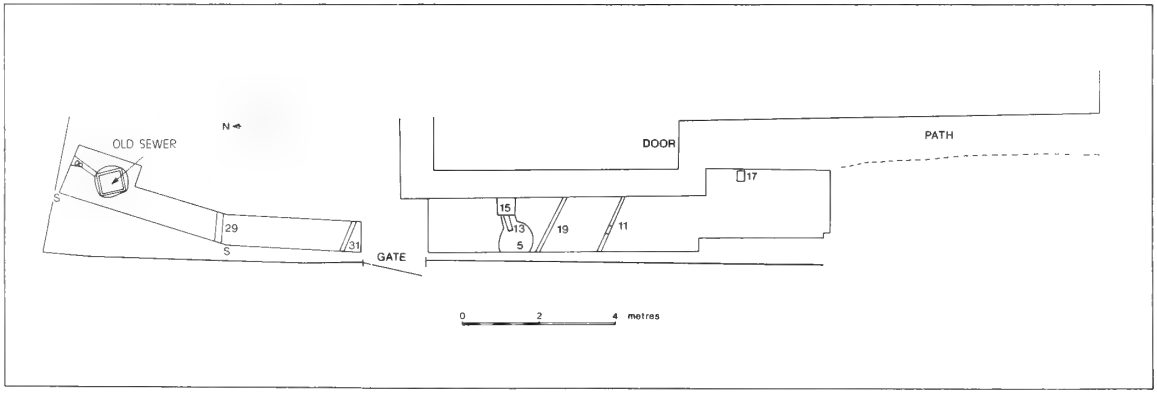


Figure 2. Site 232, Workingmen's Club: excavated plan and section.

appeared to have been cut from level of the top of layer 26, a layer of brown clayey loam containing flints and small rounded fragments of chalk. Layer 27 was a clean yellowish-brown clayey loam which produced a single sherd of sandy ware, probably post-medieval in date. The composition of layer 28, which immediately overlay the natural chalk, was a clean yellowish-brown chalky clayey silt.

It is clear that none of these horizons can be directly related to the Avebury earthwork, though the lower layers may represent accumulation of material washed down from the bank.

'CRAFTS' GIFT SHOP (Figure 3)

Excavations to the rear of the sarsen-built house exposed the flat surface of the natural chalk, apparently deliberately levelled as a preparation of the building of the house. The presence of the base of a brick fireplace (41) and two mortared sarsen foundation blocks (39 and 40) indicated a rearward extension to the house predating the present brick-built kitchen.

A number of post-medieval pits were found within the excavated area. Three of these – 14, 19 and 28 – were lined with stiff reddish-yellow clay. The fill of pit 28, on the E limit of the excavated area, was cut by the trench of a sarsen wall foundation (48) beneath the brick wall of the present garage. The structure which this foundation represents is not shown on Stukeley's 1723 plan of Avebury's W entrance (Burl 1979: 192).

One interesting individual find was a fragment of sarsen slab inscribed 'IR'. This was found in a loose foundation make-up of a lean-to structure against the W wall of the brick-built garage.

'ROSEMEAD' (Figure 4)

Excavations at the back of a brick-built house outside the W entrance of the monument involved the clearing of a small area down to the surface of the natural chalk. The depth of stratigraphy encountered in the area may be seen in section C–D. Layers 30, 3 and 4, all composed of dark greyish-brown clayey loam, contained post-medieval material. Layer 12, overlying natural chalk, was a fairly clean grey loam which sealed the two earliest features encountered on the site – pit 24 and feature 31.

Feature 31 was a large anomaly on the W side of the excavated area which could not be fully excavated as it lay beneath the foundations of the adjoining bake-

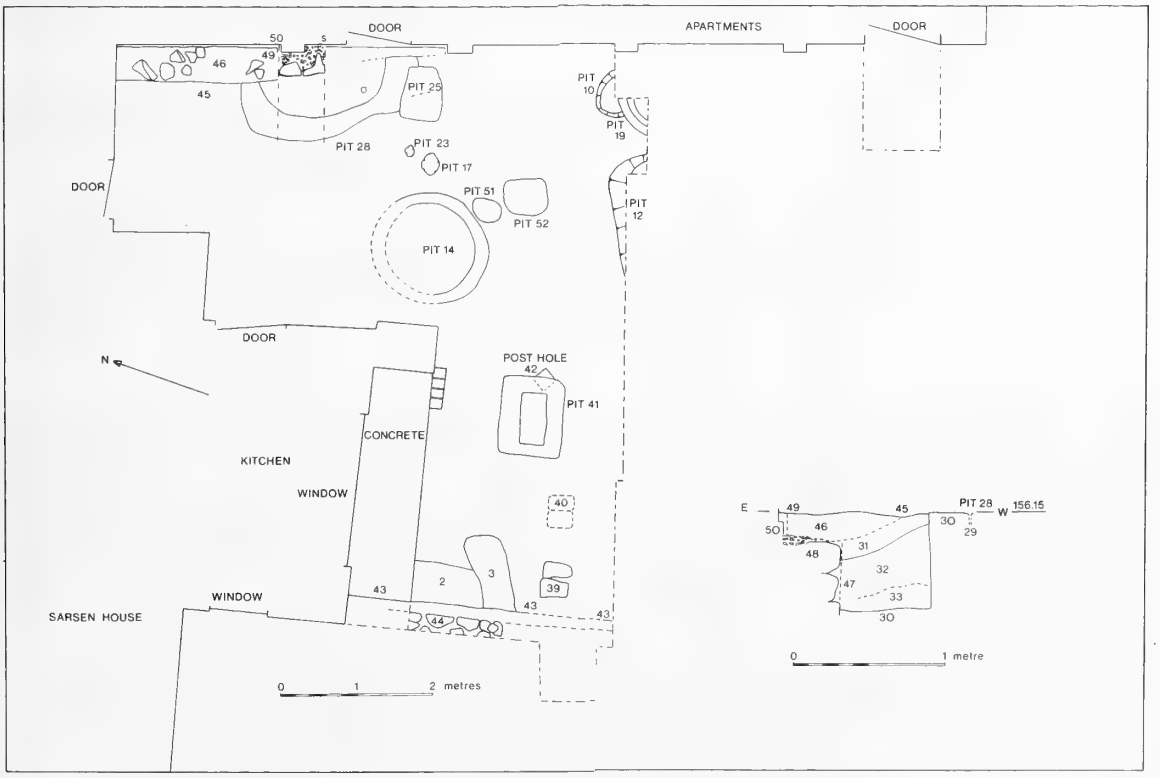


Figure 3. Site 237, 'Crafts': excavated plan and sections.

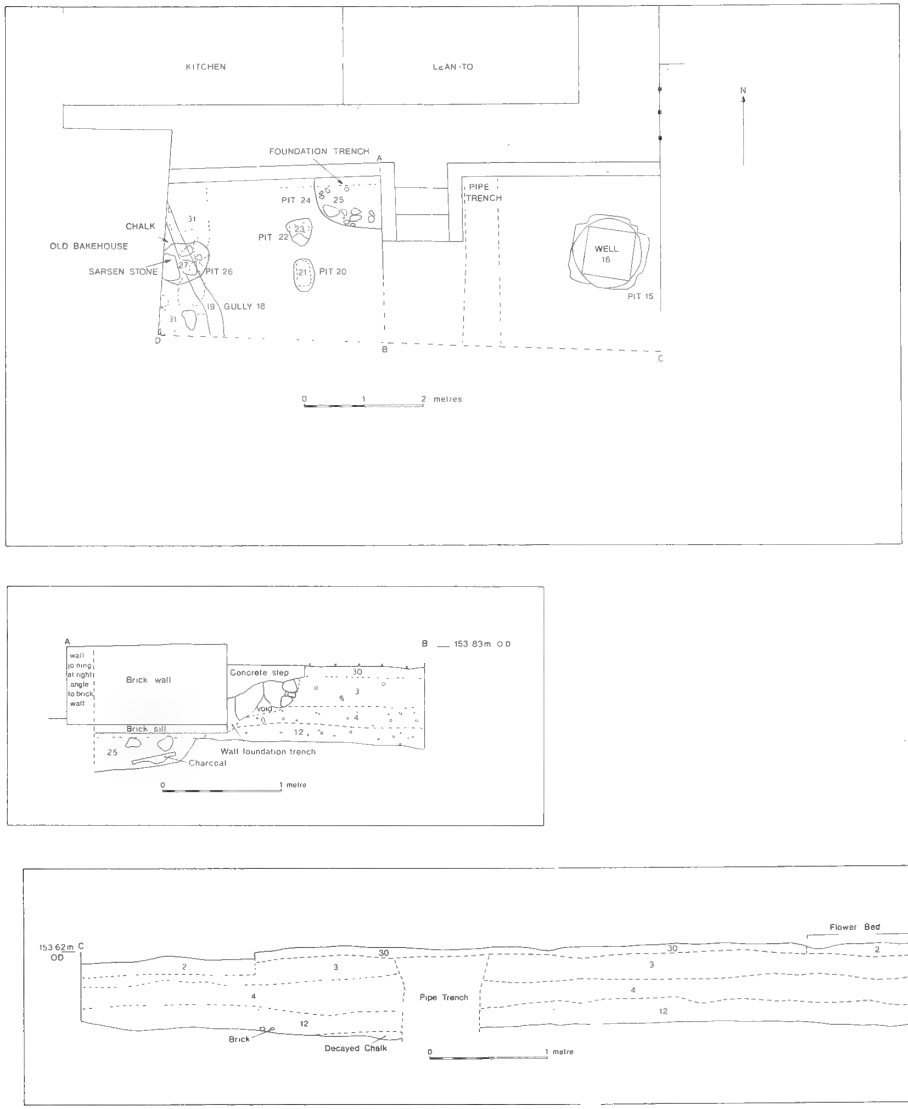


Figure 4. Site 238, 'Rosemead': excavated plan and sections.

house. Its filling consisted of dark greyish-brown loam containing sarsen fragments, flint nodules, charcoal, chalk rubble, mudstone and animal-bone fragments. Pit 24 was a large feature, 0.28 m deep below the top of natural, whose filling was similar to feature 31. No pottery was produced from the filling of either feature, and both may be prehistoric.

A number of later features were also encountered. These included a gully (18) cut into the top of layer 12; its filling contained coal fragments, small fragments of sarsen and a single late medieval/early post-medieval pottery sherd. The gully cut the fill of a small pit, 26, containing several sarsen slabs. Also located were two small post-medieval pits, 20 and 22, and a brick-lined well (16).

Stukeley's plan of Avebury (Burl 1979: 48) does not show the present building of 'Rosemead' and indicates that this was still an open area at this time.

THE FINDS *by* VARIAN DENHAM

Only pottery occurred in sufficient quantities to merit discussion here. The sites also produced brick and tile, clay-pipe fragments, glass, industrial waste, metalwork and flint. Catalogues of all these materials, together with brief summaries, are contained in the archive.

Pottery

Workingmen's Club (site 232)
A total of 43 sherds was recovered, from contexts ranging in date from Romano-British to modern. The pottery from context 35 dates from the first or second centuries AD; it comprises a sherd of samian ware, a sherd from a tankard in Black Burnished 1 ware, and two fragments of greywares of indeterminate form. A sherd of flint– and quartz-tempered fabric which is likely to be of medieval manufacture was recovered from context 9 (same as 26). A fragment of sandy ware of probable post-medieval date was the only sherd found in layer 27. Layer 22 contained modern china.

'Crafts' Gift Shop (site 237)
A total of 58 sherds was recovered. Although a few fragments of green-glazed sandy wares were clearly of medieval date, these are heavily abraded and likely to be redeposited. None of the pottery-producing contexts can be securely dated to before the 17th century.

The majority of coarseware sherds derive from domestic vessels, notably iron and lead glazed pancheons. Stoneware bottles and tankards are also present together with a typical suite of 18th- and 19th-century tablewares, including transfer-printed pearlwares and mocha wares.

'Rosemead' (site 238)
A total of 214 sherds was recovered. Although the material ranges in date from the 15th century to modern, late-18th- and 19th-century pottery was present in all pottery-producing contexts except 19, the filling of gully 18, which produced a single body sherd of copper- and lead-glazed coarseware. The form is indeterminate and only a broad 15th- to 17th-century date-range can be assigned to this fragment.

The post-medieval contexts produced a wide variety of forms and fabrics which are comparable in quality with the material from site 237.

Acknowledgements. The excavations at the Workingmen's Club and 'Rosemead' were directed by Dave Batchelor and Dermot Bond. The author wishes to thank Elma Harrington, Abigail Borrow and Andra Kurlis for their assistance in the excavation work, and Sheila Keyte for the word-processing of this report and of the site-archive files. Thanks are also due to David Goodger (CEU Graphics Officer) for his help in organizing the archive material and to Philippa Gamble, who produced the illustrations. Specialists contributing to the archive are Jonathan Humble (glass and flint), Tony Bell (Roman ceramics) and Paul Wilthew (industrial material). The author also wishes to thank Dr Isobel Smith for her helpful discussions on the excavation at 'Crafts' and Mr and Mrs Rendell ('Crafts') and Dr and Mrs Brothwell ('Rosemead') for their warm hospitality. Finally the author also wishes to thank John Hinchliffe and Dr Geoff Wainwright of the HBMC for proof-reading this report.

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Medieval Pendants from Edington and Sharcott

by NICHOLAS GRIFFITHS*

In the publication of a small cinquefoil-shaped pendant in *WAM* 76 (1981), 168–9, it was pointed out that the lack of surviving colour on medieval objects makes identification of the heraldry difficult if not impossible. Two pendants found in 1983 and subsequently acquired by Devizes Museum, however, retain sufficient of their colouring to enable identifications to be made, while also providing several points of historical and heraldic interest.

The larger of the two pendants (Devizes Museum 1984.94 and Figure 1, a) was found at Edington, and is made of copper alloy, with the remains of an iron pin in the loop. The arms *argent a saltire engrailed gules* are well preserved, the silvered ground being slightly tarnished, whilst the red enamel inlay is complete. The pendant is slightly worn at the edges which may have removed the lip, usually present, which served to retain the enamel. Figure 1, b illustrates a similar pendant from Norfolk,[1] which, although it only retains a small spot of red enamel, is otherwise well preserved, and demonstrates how the inlay was kept in place when poured in in a liquid state.

The arms are those of the family of Tiptoft or Tibetot (both forms of the name being used in the

* 9 Riverside, North St. Wilton, Salisbury, Wilts.

1. Now in the collection of Mr Peter Shaffery, who kindly gave permission for its publication. Mr Shaffery also possesses another example from Torksey, Lincs.

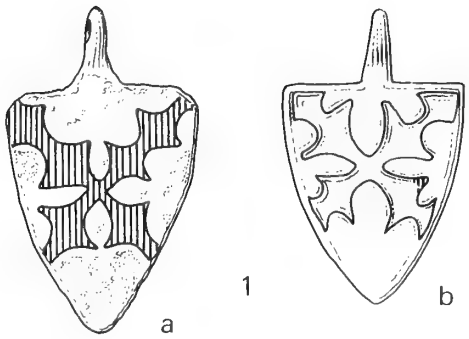

Figure 1a. The Edington pendant.
Figure 1b. The Norfolk pendant.

Figure 2. The Sharcott pendant.

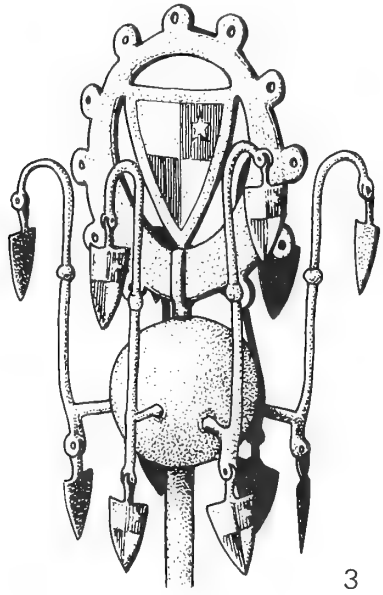

Figure 3. A full ornament reconstructed.

middle ages), and are recorded as such from the 13th century onwards, appearing in a roll of arms of *c.* 1280.[2] From *c.* 1300, Pain de Tiptoft was commonly styled First Baron Tiptoft, and the family came to prominence at the end of the 14th century; John, Baron Tiptoft, was Speaker of Parliament in 1406,[3] and his son, also John, was created Earl of Worcester on July 1st, 1449. He became known as 'the butcher of England' for his cruelty, and was finally executed on October 18th, 1470.[4]

In the few cases where heraldic pendants can be dated, the dating generally falls within the 14th century, and it is at this period that Wiltshire connections can be found for the Tiptofts. Bathampton Manor, in the parish of Steeple Langford, formed a part of the Barony or Lordship of Castle Combe from at least the 12th century; and with it, passed through various hands until *c.* 1340, when it was assigned to John de Tiptoft following his marriage to Margaret, sister of Giles, Lord Baddlesmere. Their son, Robert, Lord Tiptoft of Castle Combe, died in 1372, and the manor passed to Millicent, his second daughter and co-heiress, who married Sir Stephen Scrope.[5]

Thus for a period of some thirty years the arms of Tiptoft would have been commonly seen both at Castle Combe and Bathampton, and no doubt in the County generally; as these pendants are considered the trappings of family stewards, bailiffs and retainers, perhaps even as badges of office. It may be merely coincidence that Edington lies along the most direct route from Castle Combe to Bathampton.

The second pendant (Devizes Mus. 1984.36 and Figure 2), also of copper alloy, was found at Sharcott, near Pewsey, and is noteworthy on two counts, its heraldry and its extremely small size.

The colouring appears to represent *quarterly or and gules, a ? in the second quarter*; the red enamel is well preserved, but only a small trace of gilding remains at the base of the suspension loop. What appears to be damage in the second quarter proved, upon microscopic examination, to be the remains of a precisely cut recess, approximately hexagonal; the right-hand half of this recess preserves its sharply cut edges.

The most likely coat of arms to be intended is that of de Vere, Earls of Oxford, *quarterly gules and or, a mullet (or spur-rowel) argent in the first quarter.*

Clearly, it may be objected that the arms on the Sharcott pendant are the reverse of those borne by the de Veres; and that the hexagonal recess hardly resembles a five-pointed mullet. To the former objection may be cited examples of heraldic metalwork where the colours are reversed,[6] or a complete mirror image has

2. Camden's Roll; BM Cotton Roll XV, 8, edited by Greenstreet (*Journal of the British Archaeological Society* 38, pp. 309–28).
3. *Dictionary of National Biography*, p. 889.
4. *ibid.*, pp. 891 ff.
5. *WAM* 49 (1928): 269.
6. E.g. Mediaeval Society Monograph nr. 3 'Excavations at King John's Hunting Lodge, Writtle, Essex, 1955–7', 1969, p. 87 nr.

been produced;[7] probably a simple error in preparing the mould, but enamelled and, presumably, used. It should be added that however formal the rules of medieval heraldry, reversal of arms was quite common, for example the famous illumnation of Sir Geoffrey Luttrell in the Luttrell Psalter; armed and seated on his horse, the horse's trapper and ornaments carry the arms in reverse on the right-hand side, and presumably properly displayed on the left. The same applies to Sir Geoffrey's ailettes at his shoulders, the crest on his helmet and the pennon on his lance. This has the effect of the heraldry always pointing forwards.[8]

To the objection that a small hexagon hardly represents a mullet, it may be suggested that the small scale of the pendant precluded all but a token shape; filled with white enamel it would appear correct to all but the closest scrutiny. A larger, shield-shaped stud of 14th-century date, seen recently, carries a five-pointed mullet, but upside down, and it is clear that precise representations were frequently ignored.

Having thus suggested that the pendant probably represents the de Veres, its small size remains to be explained. Of the large number of shield-shaped heraldic pendants known, only a small number are as small as this one,[9] and it seems unlikely that they would be hung individually on horse-harness straps. Some may have been items of personal jewellery, but a further possibility remains.

In Termoli Cathedral Treasury (on the east coast of Italy) is preserved a large and elaborate set of pendants, having found a later use as a reliquary. J.B. Ward-Perkins discussed this object in 1949,[10] and demonstrated that it was probably fastened to the saddle of a draught-horse, such as pulled the 'great carriages' of the later middle ages.[11]

Originally fitted with six 'arms', each bearing two pendants, its purpose was to display the arms of the owner; whilst the base was fastened by a strap or straps to the wooden draught-saddle, the globe was free to rotate around a vertical 'axle' and the entire object would thus flash in the light and jingle with the movement of the carriage, a feature of harness commented upon by Chaucer.[12]

It may therefore be suggested that the Sharcott pendant and its small counterparts belong to similar, if less elaborate constructions,[13] used on draught-harness for carriages. Figure 3 suggests a possible reconstruction of such an ornament, using the Termoli example as a guide (the missing arms restored in the drawing), but employing the arms of de Vere reversed.

Acknowledgements. I am grateful to Dr P. Robinson of Devizes Museum for his help and encouragement; to Mr Peter Shaffery (see note 1); and to Mr John Osmond-Smith for his advice with matters heraldic.

106 and fig. 49; and Cirencester Museum G 284; where the red and blue grounds of England and France are reversed, so that the English lion is against a blue ground, the French fleur-de-lys against red!

7. E.g. a large quatrefoil-shaped plaque with the arms of a de Bohun completely reversed, in the Collection of the College of Arms; exhibited at the Heralds' Commemorative Exhibition, 1934, and illustrated in the Catalogue; 1970 reprint, p. 66, nr. 87 and plate XLIX.
8. The Luttrell Psalter, 1932, folio 202b and plate I.
9. 9 out of some 200 shield-shaped pendants known to the author.
10. J.B. Ward-Perkins, 'A medieval harness-mount at Termoli', *Antiq. J.* 29 (1949), pp. 1 ff.
11. Cf. The Luttrell Psalter, 1932, folio 181b–182, plate 115–116.
12. Chaucer, *The Canterbury Tales*, Penguin edition, 1951, p. 24:

    'His bridle, when he rode, a man might hear
    Jingling in a whistling wind as clear,
    Aye, and as loud as does the chapel bell . . .'
    From the Prologue.

13. For simpler examples, see British Museum OA 242 and 1855, 10–29, 13, both illustrated by Ward-Perkins (op. cit. note 10), and Salisbury Museum ii G13, illustrated in *Proceedings of the Dorset Field Club* 32 (1911): 226–38 and fig. 12.

Excavation at Old Wardour Castle, 1983

by GEORGE SMITH*

In March 1983, a trench was dug by machine at Wardour Castle for an electricity cable from the Gothic Pavilion across the bailey to the castle keep and thence to the ticket office situated by the N gate through the curtain wall. The trench was approximately 181 m long, 0.25 m wide and 0.45 m deep. For a large part it cut only through topsoil and greensand make-up from

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the late-18th-century landscaping of the then ruined castle. In part the trench just reached the tops of various rubble layers of light-coloured fine-grained sandstones (as used in the castle construction) and three walls of uncut stone, one at least being part of the early-18th-century formal gardens known from documentary evidence (Nathaniel Buck engraving, 1735) and earlier excavations (Keen 1967).

DESCRIPTION OF THE TRENCH

Where the cable was to pass through the curtain wall at the gateway to the steps by the Gothic Pavilion, the trench was excavated by hand. It revealed only that the curtain wall was 0.30 m thicker at 0.15 m below ground level than above it. Immediately to the N on the inner side of the curtain wall was a (backfill?) layer of greensand rubble.

The trench then crossed the gravelled trackway which follows most of the internal perimeter of the curtain wall. This had a foundation of mortary rubble, overlying a continuation of the greensand and rubble. N of this, on the slope, the trench cut only artefact-free greensand loam, presumably made ground. The trench then cut through both the greensand deposit and the top of a series of dumps of fairly clean, broken small-sandstone rubble, some mixed with sand. Towards the N end, approaching the curtain wall, these deposits did not appear, there being only the clean greensand loam deposits, except where a layer of modern brick rubble marked the former position of the perimeter trackway (now grassed over on the E part of the bailey).

Apart from these stone-rubble deposits, the trench cut the tops of three walls. These were all of rough uncut fine-grained sandstone, well cemented. Two walls lay parallel and close to the castle keep wall and one lay at right angles to the N tower. Wall 1 was uncovered only in part of its width. Wall 2 was quite narrow (0.60 m); it was backed on the castle side by a layer of fairly pure Chilmark stone rubble and on the other by loam. Wall 3 was also narrow (0.45 m) and seems to have been freestanding, with loam on either side. Walls 1 and 2 were probably part of a revetment for a terrace surrounding the base of the castle keep and Wall 3 is part of one of the walls of the former formal gardens.

FINDS

The finds were limited to two areas:

Close to the castle keep wall was a layer (4) which contained cow bone, oysters, mortar and stone fragments plus some pottery and one piece of window glass. The pottery includes two fragments of German stoneware (probably Raeren) of mid- to late-16th-century date. The window glass fragment is plain with traces of leading. It seems most likely that the layer is part of the make-up for the terrace around the keep which could be assignable to the late-16th-century refurbishment unless the pottery is redeposited.

From greensand loam layers in the N part of the bailey came pottery and glass bottles of a date *c.* 1680–1720. As the castle itself was never re-occupied after the Restoration, these finds must derive from the adjoining house of that date and have been dumped during the construction of the various walls, terraces and paths of the formal gardens in the early 18th century.

Acknowledgements. Thanks must go to Mr R. Fox of the Portsmouth City Museums for the pottery and glass identifications. The finds, plans, site descriptions and photographs are lodged at the Salisbury and South Wiltshire Museum, The King's House, 65 The Close, Salisbury, Wiltshire, SP1 2EN.

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A Medieval Horse Pendant from Clarendon Park

by P.R. SAUNDERS*

The medieval horse pendant recorded here (Figure 1)[1] was found by Mr Ken Smith[2] in 1980 N of Britford on Peter's Finger Farm in Clarendon Park parish at SU 16102865. It lay about 15 cm deep in damp clay-gravel soil, a few metres N of the River Avon to the E of the present sewage works and where there had formerly been water meadows.

The pendant is of simple quatrefoil type, and,

* Salisbury and South Wiltshire Museum, The King's House, 65 The Close, Salisbury SP1 2EN.

1. I am grateful to Mr Nick Griffiths for drawing the pendant and discussion about its dating.
2. I am indebted to Mr Smith, in whose ownership the pendant remains, for kindly allowing its analysis and publication.

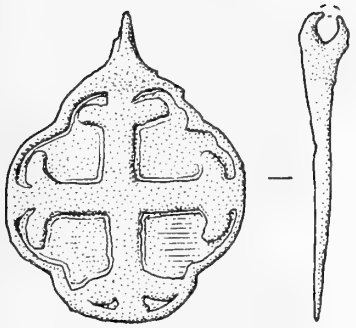

Figure 1. The Clarendon Park pendant.

although corroded, there remain clear traces of a cross flory design on its face. It is 32 mm wide. The suspension loop is broken, which may account for its loss in antiquity. It is known that pendants of this type were attached to horse-trappings and, especially since the finder has reported numerous horseshoes from the same vicinity, it is tempting to think that the pendant might have been lost from a horse fording the water meadows. Mr Mike Corfield has kindly examined the pendant scientifically and reports:

'It is made of cast bronze which has been overlaid with silver at the points where the metal is exposed. The arms of the cross are filled with a green enamel: the space between the arms was originally blue enamel, and traces of this survive and can be seen under the microscope. The enamel appears to have been applied by the painting technique, as no cloisonné framework or champlevé cells can be seen.

'The back of the pendant is counter-enamelled in green enamel – this was necessary to prevent cracking and warping caused by uneven stresses during enamelling.'

Most horse pendants have been discovered in non-archaeologically associated contexts and are therefore difficult to date, but several have been dated to the 14th century, on the basis of their heraldry, notably examples from Newark Priory, Surrey;[3] Darlington, Co. Durham;[4] and Rievaulx Abbey.[5] The device on this pendant, azure a cross flory vert, may be intended to be decorative rather than truly heraldic. On stylistic grounds a late-14th-century date is suggested for it.

3. *Archaeological Journal* 3 (1846): 79.
4. 'Armorial pendant found at Darlington', *Antiquaries Journal* 2 (1922): 143–4.
5. G.C. Dunning, 'Heraldic and decorated metalwork and other finds from Rievaulx Abbey, Yorkshire', *Antiquaries Journal* 45 (1965): 53.

'We Have the Man Shakespeare With Us': Wilton House and *As You Like It*

by MICHAEL G. BRENNAN*

An open-air production of Shakespeare's *As You Like It* was staged at Wilton House by the Salisbury Playhouse Company from 24 June to 2 July 1983.[1] The programme notes stated: 'Tradition has it that the first performance of *As You Like It* was given at Wilton in 1603 by the King's Company with Shakespeare himself as one of the actors.'[2] It seems only fitting, therefore, that *As You Like It* should have been restaged 380 years later at the country seat of the Earls of Pembroke. However, this supposedly 'traditional' association of the play with Wilton House came into being only in the mid-19th century and its birth – a strange event even by the flexible standards of Shakespeariana – merits careful scrutiny.

In 1865 William 'Ionica' Cory, an assistant Master at Eton College, was employed at Wilton as a Greek tutor to the son of the house. One evening, it seems, the then Lady Herbert regaled Cory with stories about the historical associations of Wilton House. He noted in his journal for 5 August how he had been told about the contents of a letter which Mary, Dowager Countess of Pembroke (1561–1621), had written in 1603 to her

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1. I am grateful to Dr R.C. Godfrey for bringing my attention to this production at Wilton and for sending me a copy of the programme.
2. Since *As You Like It*, almost certainly written during the 1590s, was entered in the *Stationers' Register* on 4 August 1600, any staging in 1603 must have been a revival rather than a first performance.

eldest son William, the third Earl: 'The house (Lady Herbert had said) 'is full of interest: above us is Wolsey's room; we have a letter, never printed, from Lady Pembroke to her son, telling him to bring James I from Salisbury to see *As You Like It*; "we have the man Shakespeare with us". She wanted to cajole the King in Raleigh's behalf – he came.'[3]

This apparently exciting discovery had obvious attractions for the Pembrochian party in the debate over the identity of the 'Mr W.H.' of Shakespeare's *Sonnets*; but it cannot be accepted without question. Cory never claimed to have seen the letter himself, and it has subsequently eluded all other literary detectives. The publication in 1897 of Cory's *Letters and Journals* prompted immediate enquiries from Shakespearian scholars. E.K. Chambers, who led the investigation, was informed on 4 March 1898 by Sidney, fourteenth Earl of Pembroke, that 'no trace of the letter in question could then be found at Wilton, and that his mother, Lady Herbert [Cory's informant] then not in very good memory, believed that a copy was at the B.M. [British Museum], or possibly the R.O. [Record Office]. Nothing has since been heard of it'.[4] Over 80 years of fruitless pursuit later, the present location of this letter is still unknown. At this point, it should perhaps be mentioned that Reginald, fifteenth Earl of Pembroke (d. 1960), was an enthusiastic and knowledgeable family historian who took great pains in collecting together the Herbert family's papers, housing them in a purpose-built archive.[5] He found no such letter – or perhaps he knew better than to look.[6]

It is possible, of course, that this letter was simply misplaced or lost at some stage between 1865 and 1898 when E.K. Chambers first attempted to trace it. Nevertheless, it is advisable, for the moment, to remain non-committal over this point. In the Arden edition of *As You Like It*, for instance, Agnes Latham wisely satisfied herself with the observation: 'Cory does not claim to have seen the letter, and it has not since come to light, at Wilton or anywhere else.'[7] Others, however, have been willing to lend more credence to Lady Herbert's assertion. E.K. Chambers flirted with the significance of the phrase, 'we have the man Shakespeare with us', for almost half-a-century, musing in 1944 that 'the apparent familiarity, with which Shakespeare seems to have been referred to, is noteworthy'.[8] Chambers's desire to believe in this letter was echoed by J. Dover Wilson, who lamented in his 1966 edition of the *Sonnets*: 'That Shakespeare came to be familiar with Wilton might have been borne out by a letter, now unhappily lost, but reported by William Cory as existing in 1865.'[9] In view of this wall of trust erected by Chambers and Dover Wilson around Cory's journal entry, M.C. Bradbrook understandably concluded in her recent book, *Shakespeare: the Poet in His World*: 'The King spent early December [1603] at Wilton, home of the Herberts, and the King's Men went down to give some plays. A letter, now lost, from Lady Pembroke, mentioned that the man Shakespeare was there; and the play was *As You Like It*.'[10]

But what exactly is the evidence concerning the performance of a play by the King's Men at Wilton in 1603? It is definitely known that Pembroke entertained King James at Wilton House between September and December of that year.[11] London had been hit by the plague in late autumn, and a western progress was organized, including the Earl's country residence.[12] On 2 December the King's Men were summoned to Wilton House from Surrey to act before the court. This group of actors, formerly the Lord Chamberlain's Men, formed the company to which Shakespeare and Burbage belonged. In reward for their pains, John

3. *Extracts from the Letters and Journals of William Cory*, selected by F.W. Cornish (1897), p. 168. This reference to Sir Walter Raleigh is in agreement with a contemporary source. On 27 November 1603, Dudley Carleton wrote to John Chamberlain: 'I do call to mind a pretty secret, that the Lady of Pembroke hath written to her son Philip, and charged him, of all her blessings, to employ his own credit, his friends, and all he can do, for Raleigh's pardon; and though she does little good, yet she is to be commended for doing her best in showing *veteris vestigia flamme*.' Printed in Philip Yorke, Earl of Hardwick (ed.), *Miscellaneous State Papers: from 1501–1726* (1778), vol. 1, p. 386.
4. Chambers reported the relevant details of this letter in *William Shakespeare: a Study of Facts and Problems* (1930), vol. 2, p. 329.
5. See my 'William, Third Earl of Pembroke, and the MPs for Wilton, 1621–1628', *WAM* 78 (1984), p. 70, for the fifteenth Earl's diligence in locating and preserving his family's papers.
6. The present and seventeenth Earl of Pembroke has generously allowed me to examine the contents of both his archive and private library. I came across no trace of this letter.
7. *As You Like It*, Arden edition (London: Methuen, 1975, reprinted 1977), p. x.
8. E.K. Chambers, *Shakespearean Gleanings* (1944), p. 128.
9. J. Dover Wilson (ed.), *New Cambridge Shakespeare* (Cambridge: Cambridge University Press, 1966, reprinted 1979), p. c.
10. M.C. Bradbrook, *Shakespeare: the Poet in his World* (London: Weidenfeld & Nicolson, 1978), p. 171.
11. E.K. Chambers, *The Elizabethan Stage* (1925), vol. 4, p. 117, noted the court at Wilton for only five or six days (20–24 October and 2 December) and left the rest unaccounted for. However, references to a more extensive stay at Wilton are to be found in J. Nichols, *The Progresses . . . of King James the First* (London, 1828), vol. 1, pp. 250, 254; vol. 4, p. 1059. *Historical Manuscripts Commission, Salisbury MSS*, vol. 15, p. 243, and *HMC Various Collections*, vol. 1, p. 76.
12. During his stay at Wilton, James granted an audience to the Venetian ambassador which is described in some detail in *Calendar of State Papers Venetian, 1603*, p. 116.

Heminge received, on behalf of the company, a payment of £30. This was an unusually large sum for what is assumed to have been a single performance.[13] Unfortunately, the name of the play does not appear in any of the surviving court records.[14]

Cory's recollection of his conversation with Lady Herbert is the only source which positively identifies the play performed as *As You Like It*. Furthermore his journal entry contains at least one major inaccuracy, as the phrase 'above us is Wolsey's room' was almost certainly either a mistake or a mere fantasy.[15] Cardinal Wolsey died in 1530, but the first Earl of Pembroke was not finally granted the Abbey and estate of Wilton until 1544, soon after which date he began building a large house for himself on the site. Even if Lady Herbert meant that Wolsey had once stayed at Wilton Abbey before the Dissolution, it is clear that no 'upstairs' part of Wilton House in the 1860s incorporated rooms pre-dating the first Earl of Pembroke's Tudor mansion.[16]

Furthermore, the reputation of Cory's informant does little to inspire confidence in her as a reliable witness. Elizabeth Ashe A'Court (d. 1911) was the widow of Sidney, Baron Herbert of Lea (d. 1861), who from 1832 lived at Wilton in the place of his half-brother Robert, twelfth Earl of Pembroke.[17] Lady Elizabeth was a notoriously imaginative and, at times, erratic individual. Lord Dacre (the historian Hugh Trevor-Roper) described her as 'an ingenious lady, much addicted to Shakespeare fantasies. She also had a fertile imagination.'[18] Sir Tresham Lever, the most recent historian of the Pembrokes, added that she was 'easily swept into indiscretions'.[19]

Although details of this reported letter from the Dowager Countess of Pembroke are dutifully recorded in most scholarly editions of *As You Like It*, its existence has always been a subject of some controversy. In 1898 Sir Sidney Lee took a markedly sceptical attitude towards the Lady Elizabeth's claims. He sternly noted that 'the alleged tradition, recently promulgated for the first time by the owners of Wilton, that *As You Like It* was performed on the occasion, is unsupported by contemporary evidence'. With obvious signs of growing irritation, he concluded: 'No tangible evidence of the existence of the letter is forthcoming and its tenor stamps it, if it exists, as an ignorant invention.'[20] E.K. Chambers, however, was far from willing to dismiss this letter out of hand and wrote in 1930: 'I am not so sure as was Sir Sidney Lee that the letter, said to have been once at Wilton, in which Lady Pembroke invited the King to see a representation of *As You Like It* in 1603, is to be put down as mythical. It certainly cannot now be found, but its existence was recorded by a competent historian in 1865.'[21]

Despite this trusting optimism, the accumulative evidence – the Wolsey reference, the Lady Elizabeth's predilection for Shakespearian fantasies, and the absence of a second witness who had seen this elusive document – tends to discredit the entry which Cory made (no doubt in good faith) in his journal. This letter, then, may be seen as a figment of the Lady Herbert's imagination and, as Hugh Trevor-Roper suggested over twenty years ago, is best dismissed, 'as one of its copious fruits'.[22] Nevertheless, as one surveys the range of learned commentaries on this entry in Cory's journal offered by Lee, Chambers, Dover Wilson, Latham, Bradbrook and others, it is pleasing to think that this attractive and intriguing Lady Herbert may have succeeded in outwitting the bulk of Shakespearian scholars for well over a century.

13. In view of the size of this payment, Bradbrook's supposition that the King's Men performed 'some plays' at Wilton may well be true.
14. See R. Knowles (ed.), *As You Like It*, New Variorum Shakespeare (New York: Modern Language Association of America, 1977), pp. 633–4.
15. Shakespearian scholars have been strangely indifferent to these five words. The transcription of Cory's journal entry in the Variorum edition (widely regarded as the most scholarly edition of the play) omits them altogether.
16. This phrase might just possibly be interpreted to mean that a room in Wilton House was associated with Wolsey on account of it containing his portrait, a piece of furniture once owned by him, or some other such item. I have unearthed no evidence, however, to support such a reading.
17. Robert Herbert had chosen to set up home with his mistress and their children in the Place Vendôme, Paris.
18. Hugh Trevor-Roper, 'The mystery of Shakespeare's Sonnets', *Oxford Magazine*, 23 January 1964, p. 145. I am grateful to Lord Dacre for lending me a copy of this article.
19. T. Lever, *The Herberts of Wilton* (1967), p. 217.
20. Quoted in *As You Like It*, ed. Knowles (note 14), p. 633.
21. E.K. Chambers, *Facts and Problems*, vol. 1, p. 76.
22. Trevor-Roper (note 18), p. 145. The Lady Herbert, a keen student of Shakespeare, could have easily known about the performance of a play at Wilton before the King in 1603 from P. Cunningham (ed.), *Extracts from the Accounts of the Revels at Court, in the Reigns of Queen Elizabeth and King James I* (1842), p. xxxiv.

A Sidelight on Army Recruitment in 1709

by EDWARD BRADBY*

One of the rewards of the amateur historian who searches original documents is that occasionally he stumbles on one that has little or no bearing on the subject of his study but lights up some unexplored feature of the everyday life of its time. One such bonus came my way recently when I was going through a dusty bundle of documents from a lawyer's office, now in the Wiltshire Record Office, in an attempt to understand why the burgesses of Devizes repeatedly elected two rival Mayors in the reign of Queen Anne. Most of the papers were briefs or depositions relating to a complicated network of legal cases arising from the disputed elections; but among them was one which had no obvious bearing on the matter, but is of considerable interest in itself.[1]

Headed 'Burrough Incorporate of Devizes in the County of Wilts', it is a copy of official entries made by the 'Commissioners appointed for putting in Execution within the said Burrough An Act of Parliament Intituled an Act for the Speedy and Effectual Recruiting her Majesty's Land forces and Marines . . . for . . . 1709'. The entries record the decisions of five meetings of the Commissioners in the winter of 1709–10, on 16 December, 9, 13, and 16 January, and 24 February. The names of the Commissioners are given in each case.

All the lists begin with Benjamin Street, Mayor, and most of the other names are those of senior burgesses. James Sutton senior sat on all five occasions, and his son of the same name on four of them. Stephen Street, the Mayor's son, and himself later four times Mayor, sat twice. Both the Suttons and both the Streets were well-to-do clothiers. Two other senior burgesses who sat were Charles Flower (who was to be Mayor in 1714) and William Powell, a clothier owning property in Devizes and the neighbourhood.

Two others, who were not burgesses in 1709, had figured in the lists at an earlier period, and were prominent Dissenters. One was Edward Hope. He and his father of the same name (d. 1706) had been grocers by trade and supporters of the young Congregational church in Devizes. Unlike his father, who had served on the Borough Council for many years before becoming Mayor in 1661, the younger Edward Hope first appeared in the list of burgesses in January 1688, when he was appointed Alderman and Mayor by Royal Mandate, as part of James II's sweeping replacement of the Council membership (in order to get a Council favourable to the repeal of the Test and Corporation Acts). He lost his seat on the Council the following October, when James – with William's invasion imminent – again remodelled the Council in the interests of the Tory High Church movement. He does not reappear as a Councillor, though he can be traced as a property owner in the neighbourhood for another 40 years. Joseph Wright, who sat as Commissioner on one occasion, had, like Hope, been made an Alderman in 1688 (in the second purge, made in March), and had similarly lost his seat in October. He is presumably the man who in his will of 1711 left £500 to the Devizes Baptists. The only Commissioner whose name does not appear at all in the burgess lists was Richard Mathews, who sat three times. He owned property in Devizes and Bulkington, and in his will (proved 1711) made James Sutton one of his trustees.[2]

Although the Devizes Commissioners were so closely associated with the Corporation, the Mayor was the only one who sat *ex officio*. The others, as the wording of the Act makes clear, were drawn from those named individually in Acts of this and the preceding year, as Commissioners for administering the Land Tax. There are separate lists for each county, and those for Wiltshire contain nearly 400 names. The Recruitment Act itself specifies two other qualifications for a Commissioner: he must be paying not less than £100 a year in Land Tax, and must take the oaths under two Acts of the previous reign, which would exclude avowed Jacobites.[3]

Of the five sessions in those three winter months, one dealt with two recruits, the others with one each. Four

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1. WRO, G/20/1/90, no. 81.
2. Burgess lists: WRO, G/20/1/18 and 19. Hope: *VCH Wiltshire* 10, p. 297; *WAM* 6, p. 83; WRO 212B/2368, 2374; WRO 248/39. Sutton: *VCH Wiltshire* 10, pp. 249, 256. Wright: *ibid*, p. 295. Powell: WRO, 212B/2467, 3700. Mathews: will in WRO, Cons. Sarum, AD 1711.
3. Recruitment Act: Anne 7, c. 2 (*Statutes of the Realm*, Rec. Comm. 29). Land Tax Acts: Anne 6, c. 35 (Rec. Comm. 28); Anne 7, c. 1 (Rec. Comm. 29). Oaths: W. & M. 1, c. 8 (Rec. Comm. 26), pledging loyalty to the sovereign and abhorrence of the pope; and Wm III 13 & 14, c. 6 (Rec. Comm. 27), acknowledging the protestant succession.

of the six men were described as enlisting voluntarily: James Minor of Devizes, tailor; Thomas Cushee of Southwark, rimmaker; Archiball Mackdonnell from Londonderry, 'Kingdom of Ireland', labourer; and Daniel Savage of 'Couley in the County of Gloucester', clothworker. In each case £4 was paid to the recruit, provided in the first two cases by the 'Collectors' of St John's Parish, in the third by the Collectors of St Mary's Parish, and in the fourth by the 'Receiver Generall'. These payments are explained by the financial provisions of the Act. The recruitment bounty obviously had to be paid on the spot, whereas the ultimate liability, falling on the regiment receiving the recruit, would take some time to settle. So the expedient was adopted of drawing on the moneys collected locally for the Land Tax: the Collectors responsible for gathering the Land Tax in each parish were authorized by the Commissioners to pay the bounty; the Commissioners reported their transactions to the Secretary for War; and in due course he reimbursed the Land Tax account out of the moneys voted for the Forces. Receivers General were appointed to hold Land Tax moneys for each county. The Receiver referred to here would presumably be the one for Gloucestershire, brought in because no local parish was involved.

The other two men were recruited against their will, and the details are interesting. Thomas Blanch of Devizes, cardmaker, was brought in by one of the Constables, Edward Moxham, as a deserter, Moxham being rewarded by a payment of £1, furnished by the (Land Tax) Collectors of St John's. Thomas Powell was brought in by the two Constables, Moxham and Edward Smith, as 'being an able-bodied man and within the description of the Act'. The relevant clause authorized Parish Officers (Churchwardens, Constables, etc.) to search out any able-bodied men 'not following any lawful Calling or Employment, or having no other lawful and sufficient Support and Maintenance', and to bring them to be levied as soldiers. In such cases £1 was paid as a reward to the parish officers who produced the man, and £3 to the Overseers of the Poor in his place of last abode, the latter payment being designed both to encourage the Overseers to cooperate in recruitment, and to help them maintain the poor, especially the poor relations of enlisted men. In the case cited, the £4 was paid by the (Land Tax) Collectors of St Mary's Parish: £1 went to the Constables, and £3 to the Parish of St John's.

The document also details the units to which the recruits were sent: Minor and Blanch (the latter, being a deserter, 'delivered by the Constables') went to Lieut. Thomas Seaman in 'his Grace the Duke of Argilles Regiment of Foott'; Cushee, Mackdonell and Powell went to Capt. Edward Edmonds in the Rt Hon. Viscount Shannon's Regiment of Marines; and Savage to Capt. Francis Randolph in the Hon'ble Col. Sutton's Regiment of Foot.

To see this little piece of recruitment machinery in context, we may recall that Marlborough's wars were nearing their end: the battle of Malplaquet, in September 1709, although a victory, had cost the allied troops 20,000 lives; the war in Spain was going badly; and the Tories were pressing strongly for a peace settlement. It may be no accident that the Devizes Recruitment Commissioners show a strongly Whig orientation. All the burgesses among them were active supporters of the Whig side in the disputed mayoral elections of 1706–10 (though the terms Whig and Tory were not in use in local politics at this date); and, as we have seen, Edward Hope and Joseph Wright were Dissenters, and so likely to favour the Whig policy of vigorous opposition to France, where the 'Old Pretender' – a declared papist – was waiting for a favourable opportunity to reassert his claim to the English throne.[4]

It may seem strange that six or seven gentlemen should have been called together five times in ten weeks to deal with a total of six enlistments. It should, however, be remembered that Devizes in the reign of Queen Anne was quite an important administrative centre: County Quarter Sessions were held there regularly and Assizes from time to time; the Borough Council met on an average once a month and often more frequently, the Court of Record weekly; and committees of the Council were charged with such matters as financial scrutiny and review of leases.[5] Moreover, at the time we have been considering, a fierce political battle between the Whigs and Tories on the Borough Council had been raging for several years, against a background of much lobbying and bribery. It is probable that the Commissioners whose names figure in our entries would be meeting each other almost daily, whether at the Guildhall, at each others' houses, or over a bowl of punch at the Bear or the Crown; as soon as the Constables reported to the Mayor that they had a possible recruit, a meeting could have been quickly and easily arranged.[6]

4. For background, see *VCH Wiltshire* 10, p. 284; E. Bradby, *The Book of Devizes* (Buckingham: Barracuda, 1985), p. 74. Individual alignments: WRO, G/20/1/90, *passim*, especially nos. 6, 62, 83.
5. *VCH Wiltshire* 10, pp. 251, 274–5.
6. Bradby (note 4), pp. 52, 74. Typescript article on Devizes elections, 1690–1715, in the possession of the History of Parliament Trust.

Stonehenge: the Shepherd's Crook Turf Carving

by JOHN GOULSTONE*

A report in the weekly newspaper *Bell's Life in London* (page 5, column 4) for 30 March 1851 reveals the unexpected fact that Stonehenge was once associated with an emblem, popularly known as the Shepherd's Crook, cut into the turf apparently in the same manner as the well-known 'troy-town' mazes and chalk hill figures. The relevant passage deals with the first day of the hare-coursing competition which started at Stonehenge on 18 March:

> The morning broke in storms, cloudy, and rain upon the north-men and southerons as they wended their way to the mysterious and lonely temple of Stonehenge, the trysting place for the first day's tournament of this eventful match; and, as our eye wandered over these ruins, we thought that it might have been on some such fitful day that this 'Giant's Dance' (as of old these stones were called) was borne on the wings of the wizard 'Merlin' from the plains of Kildare and planted upon this spot, as a monument of treachery and blood. We thought too of the many old coursers who have been wont to join hands in generous rivalry here, and, as we gazed upon the Shepherd's Crook, deeply carved upon the virgin turf, we thought of the many generations of those who had watched their fleecy care beneath the shadows of this mighty pile.

Unfortunately, since the anonymous correspondent appears to take it for granted that the carving was too familiar a sight to warrant a detailed description, its age, its original significance, even its precise location can now be little more than a matter of speculation. It seems all we can say with reasonable certainty is that the Shepherd's Crook must have already been a Stonehenge landmark when the first of the guardians, charged with preventing damage to the stones and the surrounding turf, was appointed in 1822[1] – and that the resultant ban on digging at the site caused it to become grassed-over some time during the second half of the last century.

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1. See C. Chippindale, 'The enclosure of Stonehenge', *WAM* 70/71 (1978): 110.

James Bridges's *Stonehenge*

by CHRISTOPHER CHIPPINDALE*

A note in the last WAM *on the Fox Talbot photographs began an occasional series on the more special items in the Society's collection of prints and drawings, now being ordered, catalogued and conserved under the direction of our Hon. Curator of Prints and Drawings. This second note is on a Stonehenge watercolour.*

Having inflicted already two notes about unregarded Stonehenge paintings on *WAM*,[1] I might feel a third was one too many were it not that the Bridges (Figure 1) is so special. In fact, new or lost Stonehenge paintings have been trickling through London sales – a Turner of Oxford and a Nicholson, an oil of the coursing meeting (now on loan to Salisbury Museum), the rosy watercolour by Copley Fielding (now in our own collection); an Inchbold, and another 19th-century oil (now in the Racing Museum at Newmarket). One of the greater English watercolours, of Stonehenge in a storm by J.M.W. Turner for his series of *Picturesque Views*, can now be seen by the public again as it is also now on loan to Salisbury Museum. The Bridges, whose whereabouts has recently been or thought unknown, was in Devizes Museum all along; but there is no record of when it arrived.

The Bridges is in superb condition, neither darkened by grime nor faded by sunlight. Richly coloured in greens and browns, it is a rare interior view of Stonehenge, looking SW past the great leaning stone 56

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1. Christopher Chippindale, 'Three early oil paintings of Stonehenge', *WAM* 77 (1983): 81–6; 'Another early oil painting of Stonehenge', *WAM* 78 (1984): 129–30.

Figure 1. Stonehenge *by James Bridges, c. 1820. 67.5 cm wide by 50.0 cm high. Devizes Museum.*

towards the barrows on Normanton down: on the left are the two SE trilithons, with three upright bluestones in front of them; in the right foreground are the fallen sarsens of the central trilithon. Among the stones, and wandering in the distance, is the flock of sheep, inescapable decorations of the Stonehenge watercolour. Resting on a stone is the shepherd with his dog; in front is a hunched lady. Above, a break in the cumulus lets the sunlight down on the farther sarsen and the landscape beyond.

This interior view of Stonehenge, although published by Stukeley in 1740,[2] is rare among the Stonehenge watercolours. Yet the art-historian Louis Hawes notes that it is this interior vision of Stonehenge which most produced the sublime experience of Stonehenge that was first enjoyed in published words by Stukeley.[3] On entering the circle Colt Hoare, for example, felt: 'at first sight all is amazement and confusion; the eye is surprised, the mind bewildered. The stones begin now, and not before, to assume their proper grandeur, and the interior of the temple, hitherto blinded by an uniform exterior, displays a most singular variety and gigantic magnificence'.[4]

The Bridges of about 1820 may, without embarrassment, be compared to the two famous Stonehenge watercolours, the Turner of 1828 and the Constable of 1835.[5] Both are rather more contrived, almost theatrical in their effect: Turner, for example, adjusts the shape and disposition of the central stone settings and has his shepherd struck down by a lightning bolt that bursts through the whole sky-scape. By comparison, the Bridges gives a quiet effect, not entirely realistic (the human figures are much reduced in scale from their proper size so as to magnify the stones) but seeming much less contrived. The sublime effect comes from the stones themselves, rather than from a created theatre for Stonehenge.

This is by no means the only painting of Stonehenge by Bridges. About a dozen, of Stonehenge and Avebury, were sold in Salisbury some 15 years ago; the two whose whereabouts are known are also unusual and excellent.[6] One is another internal view, less topographically correct and in rather curious colours of moonlight.

James Bridges was a competent watercolourist, who just creeps into the reference books[7] but does not seem ever to have been closely studied. He lived in Oxford and exhibited oils and watercolours at the Royal Academy from 1819 to 1853; his subjects were local scenes, with some from Scotland, Germany, Switzerland and Italy. One comment on his work calls it 'simple unaffected transcripts of the "thing seen", with much accuracy but less art, but pleasing from their cheerful tone and clarity' – a level of plain competence which the Devizes watercolour rises well above. Another comment, that 'his [human] figures are generally poor', is not contradicted!

2. William Stukeley, *Stonehenge* (London, 1740).
3. Louis Hawes, *Constable's Stonehenge* (London: HMSO, 1975).
4. Sir Richard Colt Hoare, *The Ancient History of South Wiltshire* (London: 1812), pp. 145–6.
5. Reproduced in Christopher Chippindale, *Stonehenge Complete* (London: Thames & Hudson, 1983), colour plates VII and VIII.
6. In a Wiltshire private collection. Reproduced in Chippindale (note 5), colour plates IV and V.
7. H.L. Mallalieu, *The Dictionary of British Watercolour Artists up to 1920* (Woodbridge: Antique Collectors Club, 1976), p. 41. Maurice Harold Grant, *A Dictionary of British Landscape Painters from the 16th Century to the Early 20th Century* (Leigh-on-Sea: F. Lewis, 1952), p. 28.

Ben and Maud Cunnington: the Gower Connection

by C.T. BARKER*

The achievements of Captain Ben Cunnington (1861–1950) and his wife Maud (1869–1951) in the field of prehistoric archaeology are both considerable and well known (Cunnington 1954: 228–31). Their activities beyond Wiltshire are less fully documented, so it was with some surprise that in the museum of the Royal Institute of South Wales, Swansea, I came across flintwork from a mesolithic site at Burry Holms (SS 400 925) accompanied by the label 'found and presented by B.H. Cunnington'. Subsequent inquiries have revealed that not only did Ben, Maud and their son Ned spend holidays on the Gower peninsula, exploring the cliff-tops and caves, but also that the collections of the Royal Institute benefited on several occasions from gifts from the couple.

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The origins of this link between the Cunnington family and South Wales can be traced back to a Devizes corn merchant, Robert Valentine Leach. Forced by the failure of his business in about 1840 to leave Wiltshire, he moved his expanding family to Briton Ferry, then a small village at the mouth of the River Neath, 5 miles E of Swansea. Here Leach established a private asylum where the less mentally stable members of wealthy families were provided with care and medical supervision. However, it was not the asylum but rather an involvement in the tin-plate industry that was to restore Leach's fortunes, enabling him eventually to return to Devizes, to repay his creditors, and to purchase and restore Devizes Castle.

Leach and his wife produced no fewer than fourteen children – every one a girl. The apocryphal explanation for this genetic misdemeanour is that as a 'freethinker' Leach had threatened to raise any sons in similar fashion, while promising that any daughters would be raised as church-goers!

We can only guess whether Leach greeted his daughters' approach to marriageable age with fear or relief. Catherine (Kate) was the second daughter to marry, having fallen in love with Dr Charles Pigge, who worked in her father's asylum. While Leach approved of the match, he apparently did not relish the prospect of a 'Pigge' as a son-in-law, and the unfortunate doctor was persuaded to alter his surname to Pegge. Charles and Kate were married in 1861 and raised seven children, including Maud Edith, born in 1869.

In 1873 one of Kate's younger sisters, Annette, married Alfred Cunnington of Devizes. They had four children in quick succession: Annette (Tiny) in 1874, Alfred Valentine (Val) in 1876, Robert Henry (Robin) in 1877, and Cecil Willett (Will) in 1878. Alfred's early death in 1879, aged only 29, left Annette to bring up the youngsters as best she could. However, family holidays were still possible, and several summers were spent in a cottage near the Worms Head in the SW part of Gower.

Figure 1. The Cunningtons at Worms Head – late 1890s. In the foreground, left to right, Annette, Maud, Ben, Tiny. Behind, left to right, Val, Will. Photograph courtesy of Mr R.T. Lucas.

Four years after Alfred's death, his younger brother Benjamin left his job as a war correspondent and returned to Devizes to take control of the family's wine and spirit business (Anon. 1950). In 1889 Ben married Maud Pegge, the start of a partnership that was to last 70 years. They too regularly escaped from Devizes for holidays at Worms Head (Figure 1), where they spent many an afternoon 'flinting' – applying the skills they had acquired in Wiltshire to the fields of Gower. Records show that in the years before the First World War they also investigated several of the caves near Rhossili, including the Goat's Cave in which Buckland had discovered a paleolithic skeleton covered in red ochre – the famous 'Red Lady' (Rutter 1948).

On at least four occasions Ben and Maud donated material from Wiltshire to the museum of the Royal Society of South Wales:

September 1906: 27 paleolithic hand-axes and other flint tools from Knowle Farm, Bedwyn (Museum Ref. A.906.2.1–27). These must be part of the large assemblage recovered from the quarry earlier this century and subsequentlydispersed through a number of collections (Froom 1983: 27). The majority of the Swansea hand-axes are coarsely flaked core tools, though piece 22 is much more carefully worked and piece 12 is a retouched flake. Pieces 2 and 25 are fragments of the same ovate hand-axe.

May 1907: 27 pieces of Peterborough Ware from the 1859 excavation of the W chamber of the West Kennet long barrow (Thurnam 1860; Barker 1985: 10). The sherds, mostly small and unremarkable (Museum Ref. A.907.1), were not included in the account by Maud Cunnington (1927) of the pottery recovered by Thurnam.

February 1909: 26 pieces of iron-age ware from Oare (Museum Ref. A.909.7), mostly rimsherds.

1937: 18 fragments of 'Iron Age A' pottery from the Hallstatt settlement at All Cannings Cross (Cunnington 1923), again mostly rimsherds (Museum Ref. A.937.25).

An iron man-trap was acquired by the museum in September 1908 from 'Devizes' (Museum Ref. A.908.6). This probably also arrived courtesy of the Cunningtons.

Acknowledgements. My thanks are due to Mr Robert Lucas of Reynoldston, Gower, for his considerable help regarding the Cunnington family history – he himself being the son of Annette (Tiny) Cunnington. Drawings and photographs of the Peterborough ware have been deposited in the Devizes Museum.

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Wiltshire Prehistoric Sites in Recent Fiction

by LESLIE GRINSELL*

The six novels here noticed comprise three which try to reconstruct the period when the monuments were built and used for their original purposes; two which use them as a setting for recent events; and one which portrays the return of a late neolithic goddess to the present.

David Burnett, *The Priestess of Henge*.[1]
Mary John, *Blue Stones*.[2]
Harry Harrison and Leon Stover, *Stonehenge: where Atlantis Died: the Mighty Saga of Atlantis and Ancient Britain*.[3]

There is surely little doubt that a good novelist, provided that he does his 'homework' adequately and gets his facts right from the most authoritative

NOVELS WHICH RECONSTRUCT THE PAST

The novels which try to reconstruct the past are:

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1. 434 pages. London: Hamish Hamilton, 1982. £8.50. Hardback.

2. 168 pages. Port Talbot: Barn Owl Press, 1982. £2.95 paperback.

3. 352 pages. London: Panther, 1985. £1.95 paperback.

archaeological literature, can clothe the bare bones with flesh more convincingly than the average down-to-earth archaeologist.

David Burnett is an industrious writer who has already had several books published on Wessex, including a scholarly and well-documented and illustrated book on *Salisbury: the History of an English Cathedral City* (1978). *The Priestess of Henge* is set in the period (*c.* 2100–2000 BC) of the supposed removal of the bluestones from the Presely Hills to the neighbourhood of Stonehenge: Period II of the prehistorians. It is not limited to Stonehenge but brings in Avebury (p. 36), Silbury Hill (p. 33), and the Dorset Cursus on Cranborne Chase (pp. 75–6). His interpretation of this Cursus as an avenue primarily for funeral processions finds support from many archaeologists. This lengthy book contains many good ideas. However, this reviewer found the large number of *dramatis personae* (34) made the story difficult to follow. Many readers would feel unhappy about the author's attribution of the Avebury and Marlborough Downs area to the Dobunni of the Cotswolds and surroundings at such an early date, and they scarcely penetrated S of the White Horse Vale. Archaeological readers will be unlikely to accept the existence of hillforts as early as 2100–2000 BC (pp. 84, 115, 134, 235, 328). Bronze arrowheads are very rare in Britain (pp. 200, 204). David Burnett is surely far more successful in his non-fiction writings.

Mary John is Senior Librarian at the Pembrokeshire County Library in Haverfordwest and her home is on the edge of the Presely Hills, and she is therefore unusually well qualified to write a novel – albeit for children – about the supposed removal of the bluestones from the Presely Hills to the Stonehenge area. *Blue Stones* narrates the story of two sisters living on the Presely Hills who meet an early-bronze-age chief who wants to show them how to cast bronze implements and weapons in exchange for permission to remove a local circle of bluestones to Salisbury Plain. One of the sisters (Cil) agrees, but the other (Aer) does not. Although written primarily for children, this reviewer found it excellent reading for those in their second childhood. Factually it is probably the most reliable of the three 'Stonehenge' novels under consideration. It was the winner of a children's fiction competition.

Harry Harrison is a prolific science-fiction writer, and his collaborator **Leon Stover** is Professor of Anthropology at Illinois Institute of Technology, where he runs a course on Stonehenge. Their novel *Stonehenge: the Epic Novel of Prehistoric Battle and Adventure* was first published in 1972. It has now been largely re-written and appears under the new title *Stonehenge: where Atlantis Died: the Mighty Saga of Atlantis and Ancient Britain*. The greater part of the book appears to have been written by Harrison, but with his text kept firmly under control by his collaborator, who was perhaps the sole author of the Afterword (pp. 311–50). There are 37 *dramatis personae*, which this reviewer did not find too many as they are introduced gradually in the course of a gripping narrative. The period is set – somewhat over-precisely – between 1480 and 1477 BC, during Stonehenge Period III of the prehistorians, when according to the authors (following Atkinson's 1956 chronology) the sarsen triliths are supposed to have been dressed and set up. In brief, the authors' thesis is that following the volcanic eruption on the island of Santorini (Thera) during the 15th century BC, some enterprising mariners reached Cornwall, where they knew from existing lore that there were deposits of the tin which they needed for alloying with copper to produce bronze implements and weapons. In this way Minoan/Mycenaean prospectors reached Cornwall and brought with them an Egyptian architect named Inteb. Their combined skills led them to fetch large sarsens from the Marlborough Downs and more particularly to shape and dress them to form the lintelled circle and triliths with mortice-and-tenon jointing which we see today. In this context the archaeological evidence – notably the curvature of the lintels at Stonehenge being paralleled by that of the lintels of the more developed tholos tombs (e.g. the Lion Tomb at Mycenae), perhaps of roughly comparable date – is such that their thesis could not have been entirely rejected at the time it was written. Indeed some Mycenaean connection was being accepted as recently as 1980 (Colin Burgess, *The Age of Stonehenge*, pp. 24, 80, 156). In his recent book *The Mycenaeans in Europe* (1984), A.F. Harding has shown to his own satisfaction how thin the evidence is for any sort of Mycenaean connection with the British Isles. This involves his explaining away several items all of which are admittedly dubious: the Mycenaean dagger-hilt said to have been found in a barrow at Pelynt, the bronze double-axe said to have come from near Fowey, the Rillaton gold beaker (all three items significantly from Cornwall), and the 'Mycenaean' dagger-carvings on stone 53 at Stonehenge. And what of the architectural parallels between the Mycenaean tholos tombs and the lintelled circle and triliths of Stonehenge? Of course it could be argued that both are reproductions in stone of what may have been previously done in wood.

The Afterword mentions (p. 344) an interesting parallel between the five triliths and five of the major barrow-cemeteries in Wessex: the South Dorset Ridgeway, Cranborne Chase, the Stonehenge area, the Avebury region, and the Lambourn area (the weakest

of the five but with no obvious rivals), conjecturing that each trilith may have been in some way linked with a settlement represented by one of those cemeteries. This idea was first put forward by Patrick Crampton in his book *Stonehenge of the Kings* (1967).

To conclude: the main thesis of the 1972 novel reflected the most authoritative archaeological opinion of that time. The new edition is in many ways an improvement but it has not taken stock of the changing attitudes during the last decade concerning East Mediterranean influence. Indeed, to have done so would have defeated the whole purpose of the novel. It will be interesting to await the state of the question of Mycenaean influence in 1990.

NOVELS WHICH USE PREHISTORIC SITES AS A SETTING FOR RECENT EPISODES

Two novels of this type are here considered:

J.R.L. Anderson, *The Nine-Spoked Wheel*.[4]
Penelope Lively, *Treasures of Time*.[5]

J.R.L. Anderson is author of the text of *The Oldest Road: an Exploration of the Ridgeway* (1975). His novel *The Nine-Spoked Wheel*, published the same year, is concerned with the Avebury region, and particularly with the supposed excavation of the hole of Stone 29 of the Main Circle (actually the hole has not been located and its stone is missing). The director of the excavation, a Dr Arbolant, was obsessed with his theory that the megalithic monuments of Avebury were built by proto-Etruscans (Villanovans). To prove it, he planted a Villanovan urn in the stone-hole, and persuaded a local rural craftsman to carve 'Etruscan' inscriptions under his direction at the monument. He then arranged for the excavation party to move in. One of the volunteer assistants, Paul Crampton, an archaeology student from Cambridge University, became suspicious and went late one evening to investigate stone-hole 29, but the stone fell and crushed him to death. Dr Arboland considered the death of Paul Crampton regrettable but of little consequence compared with the importance of his own discovery of the proto-Etruscan origin of Avebury. Dr Arbolant subsequently made a 'later prehistoric' boat and had it loaded with Presely bluestones at Milford Haven, intending to voyage up the Bristol Channel to the Bristol Avon, to the accompaniment of massive coverage by television and the press. However, the boat sank *en route*, and Dr Arbolant, who was on board, took poison before being drowned. The story is excellent and well written, but most readers would have spotted the villain early on, as noted by the reviewer in the *Times Literary Supplement* (1975, p. 784).

Penelope Lively is author of numerous books, including *The Presence of the Past: an Introduction to Landscape History* (1976), a stimulating and well-illustrated book which anticipated the formation of the Society for Landscape Studies some years later. Her novel *Treasures of Time* is set largely on the Marlborough Downs, but with bits in London, Oxford and elsewhere. The parts of Wiltshire interest concern one Tom Rider, MA, DPhil., who was working on a thesis on the 18th-century antiquary William Stukeley, partly in the British Museum Library (p. 2) and partly in the Bodleian Library at Oxford (p. 74). 'I probably know more about Stukeley than anybody else in the world; I know where he was on April 4th 1719 and I know . . . the broad course of his life from the day he was born till the day he died' (p. 3). Tom Rider joins a group to take part in a BBC television programme at a chambered long barrow, called Charlie's Tump from a local tradition that it was one of the hiding places of Charles I from Cromwell's troops (pp. 14, 56, 177, 179). It was within sight of Windmill Hill, and the East Kennet long barrow was the other side of the valley (p. 14) – yet it was different from the West Kennet long barrow and had not been preserved and restored like the latter (p. 180). It had been excavated by a Prof. Hugh Paxton who had found in it an intrusive deposit of a Bronze Age hoard including a gold cup (p. 179); an article on it had been published in *Antiquity* (p. 94) which may have helped Paxton to obtain his academic post.

The book contains some shrewd observations. 'What I find odd, is that earlier archaeologists should have been so anxious to attribute everything to continental influence. You'd have thought it would have fitted in with good old imperialist chauvinist days to claim the culture that produced Avebury and Stonehenge and the Charlie's Tump grave-goods for Britain. But not a bit of it – it all had to have come from the Mediterranean, via other nice civilised places like France (p. 95).

Most readers of *WAM* may detect in Tom Rider a close resemblance to Stuart Piggott, the only person who has ever written a substantial book on Stukeley (1950; 2nd edition 1985). It remains to add that the only possible chambered long barrow to fit the description of Charlie's Tump would have been the West Kennet long barrow before its restoration. A pleasing minor detail is that Penelope Lively consistently spells Kennet with only one 't', whether the name of the river, the valley, or one of the villages.

4. 192 pages. London: Gollancz, 1975. £5.

5. 200 pages. London: Heinemann, 1979. £8.95 hardback, £2.25 paperback.

A NOVEL WHICH INVOKES THE RETURN OF A NEOLITHIC GODDESS

Michael Hyndman, *Nine Lost Days*.[6]

Michael Hyndman is author of *Schools and Schooling in England and Wales* (2nd edition 1979). For relaxation he has written (with tongue in cheek) *Nine Lost Days* (30 October to 7 November 1980), which attempts to portray the situation at Avebury, Silbury Hill, the West Kennet long barrow and surroundings *c.* 2250 BC, about the time when (according to the novel) long barrows were being superseded by stone circles. The geography of the main thread of the story is illustrated by the endpapers comprising (front) a map of Avebury and the Marlborough Downs, and (back) a map of the Ridgeway including Wayland's Smithy, Uffington Castle and the White Horse: but there are incidental references in the text to other sites including New Grange, the Rollright Stones, and Mitchell's Fold in Shropshire.

The main characters are the Jameson family: mother and father and their son Ben (aged 17) and daughter Josie (aged 16). Ben is full of modern scientific jargon, and Josie has an interest in folk tradition. These characters are for most of the time dominated by a neolithic goddess named Qenet, whom Ben and Josie succeed in contacting on 30 October through Josie's cassette while visiting the West Kennet long barrow. Ben interprets long barrows as Series I Transfer Stations, Silbury Hill as a prototype Series Ib Transfer Station, and stone circles as Series II Transfer Stations. Qenet promised to appear in person in the West Kennet long barrow on the evening of 31 October: Hallowe'en with its traditional association with the supernatural, as Josie was careful to note.

Ben and Josie are duly driven by their parents along the A4 and they park their orange Citroën car at the lay-by by the footpath to the West Kennet long barrow about 5.30 p.m. on 31 October. Ben and Josie proceed to the West Kennet long barrow armed with torches. Qenet promptly appears through one of the standing stones: a tall blonde in an emerald green dress. In due course she is led down the path to the lay-by on the A4, where she is introduced to Mr and Mrs Jameson who invite her to go for a drive in their car. Qenet was delighted to find that her name survives in 'Kennet' as the river name and the name of the two neighbouring villages. In a matter of a few minutes Qenet acquires a fluent knowledge of the English language including a good deal of contemporary slang, and she quickly learns to drive the Jamesons' orange Citroën (which she calls the 'demon chariot'). Ben thought her skill was due to telekinesis, but Qenet explained that it was due to her familiarity with interdimensional synchroherence adjustments (pp. 26–7). She stayed for a few days with the Jamesons, who fed her on crême-de-menthe which she enjoyed partly because it matched the colour of her dress.

Perhaps the highlight of Qenet's visit to 1980 was her drive to Avebury, which she had not seen for more than 4000 years. As she drove into the Circle she remarked, 'There shouldn't be a road through here . . . And what are all these houses doing inside my circle?' (p. 27). She made short work of the Ministry of Ancient Monuments uniformed attendant who took exception to her appearance. 'This is *my* place. Mine. Understand? Not your hollow neglectful Ministry's . . . Now beat it. Shove off. Go!' (pp. 28–9).

In due course Qenet visits Devizes Museum in search of Prof. Snid of the Department of Archaeology, Salisbury University, but he was away directing a laser survey on Overton Hill near the Sanctuary. The receptionist at Devizes Museum admired Qenet's bronze-age gold bracelets and enquired whether they were replicas perhaps bought from Annabelinda's.

Qenet's visits to Avebury and Devizes occupied day 3 of her sojourn. Day 4 (pp. 42–60) is occupied partly by a visit to the Department of Archaeology in Salisbury University. Days 5 and 6 are spent at the Rollright Stones, and at Mitchell's Fold and other stone circles in Shropshire (Pi 3 circles: smaller and later than Series II Transfer Stations such as Avebury and Stonehenge). In Shropshire, on day 7 they picked up an addition to their party in the person of T. Rexy Pooh (*Tyrannosaurus Rex*), with whom they returned to witness Prof. Snid's activities on Overton Hill, which Qenet observed from the inside of Silbury Hill (Days 8, 9). The story is useful for its conjectures on the likely reactions of any neolithic persons who were to revisit their former haunts.

6. 132 pages. London: Allen and Unwin, 1982. £5.50.

Some Notes on the Food of the Grey Heron (*Ardea cinerea* L.) in East Wiltshire

by PATRICK J. DILLON* *and* JOY PORTAL*

The grey heron (*Ardea cinerea* L.) is a top carnivore of wetland ecosystems. As it feeds at all trophic levels its diet is rather catholic and includes small mammals, young water-birds, fish, amphibians, a variety of invertebrates and plant material. Various reconstructions of the diet of the heron have been based on collection and analysis of those indigestible portions of food which constitute regurgitated pellets (Hibbert-Ware 1940; Lowe 1954; Milstein *et al.* 1970; Hewson and Hancox 1979). Whereas this technique is particularly suited to reconstructions of the diet of owls and some Falconiformes, where recovery of skeletal material in the pellets may be an accurate reflection of prey taken, doubts have been expressed about its application to the heron. Fish and amphibian bones, for example, are normally well digested (Hewson and Hancox 1979) and will be poorly represented in pellets. Moreover, the wide variety of food taken by herons means that a range of techniques must be employed to establish the identity of the remains.

An evaluation of the techniques used in reconstructing the diet of the heron from regurgitated pellets was undertaken, using material collected from heronries at Englefield Park and Savernake Forest (Portal 1984). The small quantity of material collected from the Savernake site enabled the following notes to be made on food taken by herons in E Wiltshire. The results for Englefield Park will be presented elsewhere (Dillon and Portal, in prep.).

The Savernake heronry is situated in a clump of approximately 30 mature beech trees surrounded by arable fields at a distance of about 400 m from the edge of the main woodland area of Savernake Forest. The main feeding areas for the birds are probably the River Kennet some 5 km N of the heronry, the Kennet and Avon Canal 2 km S and possibly the River Enborne 8 km E. The post-war status of his theronry has been discussed by Boyle (1970; 1977). At the time of our visit in October 1983 there were ten nests and, from the accumulated debris at the bases of the trees, it was apparent that most of them had been occupied during the course of the year.

Pellets were collected and oven dried at 100°C for two days prior to being broken up and sorted by hand. The 47.49 g dry weight of material yielded the following constituents: fur 26.74 g (56.3%); feathers 8.25 g (17.4%); bones 1.75 g (3.7%); invertebrate matter 0.19 g (0.4%); plant matter 0.40 g (0.8%) and mineral material 10.16 g (21.4%). Identification of food items was based on the techniques of Day (1966) for fur and feathers, Yalden (1977) for mammal bones, Webb (n.d.) for fish bones, and Quigley (1977) for invertebrates. The following were found: Fur: insectivore (Insectivora sp.), brown rat (*Rattus norvegicus*), field vole (*Microtus agrestis*), bank vole (*Clethrionomys glareolus*) and water vole (*Arvicola terrestris*); feathers were too fragmented for identification; bones: lower jaw of water vole (*A. terrestris*), teeth of field vole (*M. agrestis*), claws of mole (*Talpa europea*), wing of juvenile mallard (*Anas platyrhynchos*) and various unidentifiable fragments; invertebrate matter: head of beetle (*Dytiscus* sp.), wing case of beetle (Gyrinidae sp.), caddis fly larva (Ephemeroptera sp.), stone fly larva (Plecoptera sp.) and various unidentified terrestrial beetle fragments.

As the pellet sample is small and the data on food items are not quantitative, it is not possible to make definitive statements about diet. Nevertheless, some basic trends are apparent. The poor recovery of bones noted by previous workers was confirmed in this study. There were no identifiable fish or amphibian bones, and for mammals and birds the proportion of bone to fur and feather recovered was very low. There is no means of assessing, from this analysis, the relative importance of fish and amphibians in the diet, but the high proportion of fur to feather is of interest and suggests that mammalian prey forms a larger part of the diet than bird prey, although this may be subject to seasonal variation. Semi-quantitative analysis of the fur in this study suggests that the water vole is the most frequently taken mammalian prey. Herons have been noted taking water voles elsewhere in Wiltshire (Browne 1982) but the records of predation on mole, brown rat, field vole and bank vole are the first for the country. The invertebrate component of the diet is similar to that observed by earlier workers. Plant matter is believed to be taken to aid pellet formation (Hibbert-Ware 1940; Lowe 1954) and mineral material is probably ingested during normal waterside feeding.

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Wiltshire Archaeological and Natural History Magazine vol. 80 (1986), pages 240–244.

Wiltshire Archaeological Register for 1984

The Register for 1984 is arranged in chronological order and by parishes. In order to save space '84' does not precede the serially numbered entries in the text, but this prefix should be used to identify individual items in future cross references.

The Register has again been compiled on a selective basis. Records of small groups of unassociated flintwork and of pottery, when of uncertain date or of common Romano-British or medieval types, have been omitted as well as a number of other uninformative stray finds. Not included also are, firstly, certain groups of finds from sites which are due to be published in detail in the near future such as bronze-age finds from 1984 burials in Blackberry Lane cemetery, Potterne; and also certain sites which might be particularly vulnerable to the depredations of 'treasure-hunters'. While it is no longer practical to include all stray finds, it is hoped that contributors will continue to supply full records so that future Registers may be compiled from as comprehensive a range of material as possible.

Accessions to museums are noted by the short name of museum (Devizes or Salisbury) followed by the accession number. For objects remaining in private possession, the sources of information noted are museum records or individual informants, not necessarily the owners. Particulars of attribution and provenance are as supplied by the museums, societies and individuals named. Where there is a reason to doubt the accuracy of the find record, this *caveat* is given in the text.

Acknowledgements to individual donors for those gifts to the Society's museum at Devizes which fall within the chronological range of the Register (prehistoric to *c.* AD 1500) will be found in the Curator's Report for 1984.

The illustrations have kindly been provided by N. Griffiths.

Abbreviations

C	century as in C2, second century.
DMDB	Devizes Museum Day Book.
PP	in private possession.
SAS	Swindon Archaeological Society.
TMAR	Thamesdown Museums Archaeological Records.
WAM	*Wiltshire Archaeological and Natural History Magazine.*
WAR	Wiltshire Archaeological Register.

MESOLITHIC

1 **Aldbourne**, Laines, around SU 229745. Small assemblage comprising tranchet axe, 2 bi-polar cores, 2 scrapers and 7 waste flakes. PP. DMDB 1048.

2 **Brixton Deverill**, Cold Kitchen Hill. ST 8438. 'Pebble mace-head' of broadly triangular form with hour-glass perforation and batter marks on the three points. PP. DMDB 1044.

3 **Shalbourne**, Oxenwood. W of long barrow, *c.* SU 308593. Broken 'pebble mace-head' with hour-glass perforation. Devizes 1984.66.

NEOLITHIC

4 **Aldbourne**, Stock Lane. SU 237738. Small assemblage of waste flakes. PP. DMDB 1015.

5 **Amesbury,** Stonehenge. SU 12244218. Blade with secondary retouch, discovered in an Aubrey Hole in 1926. Salisbury 193(a).1984.

6 **Amesbury**, Stonehenge. SU 12244218. Flint hammerstone, from the ditch excavation, 1926. Salisbury 193(b).1984.

7 **Amesbury**, Countess Road, 'Woodlands'. SU 152431. Eight flakes and a piece of burnt flint, from the neolithic pits. Salisbury 208.1984.

8 **Amesbury**, Fargo Plantation. SU 1043/1142. Two flint scrapers and a core. Salisbury 189.1984.

9 **Amesbury**, 'east of the Stonehenge Cursus'. No NGR. Flint scraper. Salisbury 224.1984.

10 **Bowerchalke**, East Chase. SU 0121. Flint core. Salisbury 221.1984.

11 **Bowerchalke**, Knighton Wood. SU 0522. Chipped flint axe. Salisbury 215.1984.

12 **Bromham**, Mother Anthony's Well. *c.* ST 999642. Small assemblage of 8 waste flakes, 1 chert flake, 1 square-ended scraper. Devizes 1984.90.

13 **Collingbourne Kingston**, Cowdown, Parsonage Farm. SU 2555. 2 flaked flint axes. Devizes 1984.85 and 86.

14 **Coombe Bissett**, New Barn. SU 101244. Two polished flint axes; scraper. Salisbury 214.1984.

15 **Dinton**, New Barn, Dinton Beeches. SU 0034. Blade end of a polished axe. Salisbury 195.1984.

16 **Durrington**, Woodhenge. SU 151434. Flint scraper. Salisbury 194.1985.

17 **Ebbesbourne Wake**, Holloway. ST 9923. Rough flint point. Salisbury 203.1984.

18 **Ebbesbourne Wake**, 'Garden near school'. ST 9924. And 'Jobson's Drove'. No NGR. 2 flint scrapers discovered in 1934. Salisbury 222.1984.

19 **Fifield Bavant**, Fifield Bavant Down. SU 140711. Unpolished discoidal flint knife 'found west of the eastern group of Iron Age pits'. Salisbury 213.1984.

20 **Liddington**, Liddington Castle rampart. SU 207797. Fragment of pecked greenstone axe (pet. no. WI 414). TMAR 000091.

21 **Netheravon**, Fittleton, Pidgeon Close. SU 146496. Unpolished flint axe. PP. DMDB 1056.

22 **Shalbourne**, Rivar Farmhouse. SU 318618. 10 waste/retouched flakes. Devizes 1984.43.1.

23 **Tisbury**, Lower Chicksgrove. ST 971306/7. Flake assemblage collected in 1975. Salisbury 228.1984.

24 **Winterbourne Stoke**, 'near the long barrow'. SU 100415. Flint scraper. Salisbury 197(a).1984.

25 **Winterbourne Stoke**, unlocated but probably around the barrow group. Fabricator. Salisbury 197(b).1984.

26 **Winterbourne Stoke**, bowl barrow, G2. From a rabbit scrape, SU 099416. Flint blade with serrated edge. Salisbury 197(c).1984.

27 **Winterbourne Stoke**, 'east of the Stonehenge Cursus'. *c.* SU 1243. Flint scraper, adze and blade. Salisbury 191.1984.

BEAKER

28 **Avebury**, 'Windmill Hill and vicinity'. No NGR. Collection of sherds; 2 tanged and barbed arrowheads. Devizes 1984.18.

29 **Avebury**, Beckhampton. SU 07956780. Tanged and barbed arrowhead; flint knife. PP. DMDB 1007.

30 **Bishops Cannings**, Horton Down. SU 07356580. Tanged and barbed arrowhead of Conygar Hill type. PP. DMDB 1008.

31 **Chiseldon**, Mays Lane. SU 18707958. Tanged and barbed arrowhead. PP. TMAR.

32 **Corsham**, Pond Close Farm. ST 87706758. Tanged and barbed arrowhead. PP. DMDB 1077.

BRONZE AGE

33 **Aldbourne**, Four Barrows. SU 24747728. Collared urn sherd (with scraper and another undiagnostic sherd). PP. DMDB 1081.

34 **Aldbourne**, N of Aldbourne Gorse. SU 26137418. Base of small MBA urn of uncertain type. Devizes 1984.28.

35 **Amesbury**, King Barrow Ridge. SU 1342. Flint assemblage comprising scrapers, fabricators and blades, salvaged from the garage fire at Avebury in 1945. (See *WAM* XLVIII, where several pieces are illustrated.) Salisbury 210.1984.

36 **Avebury**, 'Bunty's Barrow', not identified. No NGR. 10 sherds. Devizes 1984.150.

37 **Bishops Cannings**, Bourton. SU 041644. Bronze awl and fragment of bronze socketed axe-head. Devizes 1984.126.1–2.

38 **Bishopstone**, Fox Hill. SU 24108080. Six sherds of flint gritted pottery; flint knife (? of this date) and waste flake. PP. DMDB 1055.

39 **Bratton**, N of B3098. ST 903524. Two flint gritted sherds, one with oblique lines around the carination. Devizes 1984.108.

40 **Bratton**, 'by the long barrow G1 outside the S entrance of the hillfort'. ST 900516. 6 sherds. Devizes. 1984.92.

41 **Brixton Deverill**, area of Cold Kitchen Hill. *c.* ST 8438. Bronze pin in two fragments and incomplete. Devizes 1984.128.

42 **Ebbesbourne Wake**, South Field. *c.* ST9822. Flint arrowhead found 'many years ago'. Salisbury 134.1984.

43 **Ebbesbourne Wake**, Holloway. *c.* ST 9923. Flint arrowhead found 'many years ago'. Salisbury 134.1984.

44 **Edington**, Barrow G1. ST 94114853. Undiagnostic sherd found in a rabbit scrape. Salisbury 4.1984.

45 **Edington**, Tinhead. ST 92925413. Bronze pin with small spherical head. Devizes 1984.95.

46 **Fifield Bavant**, Fifield Bavant Down. SU 002256. Perforated axe – hammer of preselite (pet. no. WI 434). Salisbury 127.1984.

47 **Kingston Deverill**, W of Monkton Deverill. *c.* ST 853375. Bronze awl. Devizes 1984.132.1.

48 **Liddington**, enclosure by parish boundary. SU 199805. 23 gritted sherds; 2 scrapers. PP. DMDB 1080. See also below No. 82.

49 **Longbridge Deverill**, Hill Deverill. *c.* ST 867401. Bronze flanged axe. PP. DMDB 1049.

50 **Manningford**, W of Denny Sutton Hipend. *c.* SU 153576. Fragment of knobbed bracelet. Devizes 1984.24.

51 **Netheravon**, Manor Farm. SU 145482. Bronze chisel without lugs or collar. Salisbury 240.1984.

52 **Redlynch**, 'on the edge of a round barrow'. No NGR. Flint knife. Salisbury 209.1984.

53 **Shalbourne**, Rivar Farmhouse. SU 318618. Deverel – Rimbury sherd. Devizes 1984.43.2.

54 **Westbury**, NE of Bridewell Springs. *c.* ST 89455187. Sherd of oolite-gritted ware and 2 undiagnostic prehistoric sherds. Devizes 1984.116.

55 **Westbury**, NE of pumping station. ST 890517. Fragment of socketed bronze axe-head. Devizes 1984.136.

56 **West Lavington**, West Lavington Down. ST 996493. Tanged bronze chisel. Devizes 1984.51.

57 **Uncertain findspot**, area of Pewsey. Socketed and looped spearhead – an old find. Devizes 1984.142.

58 **Uncertain findspot**, said to have been found on the Marlborough Downs in 1881. Two looped palstaves, formerly in the Ulster Museum, ex Day Collection (237.2 and 237.3). Devizes 1984.152.

IRON AGE

59 **Brixton Deverill**, Cold Kitchen Hill. No NGR. Silver lentoid lump, possibly a small ingot or blank for a coin. Devizes 1984.35.

60 **Cherhill**, from pit facing the entrance of Oldbury Castle. SU 0469/0569. Body sherd. Devizes 1984.87.

61 **Fifield Bavant**, Fifield Bavant Down. SU 140711. Three samples of carbonized grain from Pit 46 of the Iron Age settlement; fragment of chalk loom-weight. Salisbury 207 and 217.1984.

62 **Little Bedwyn**, W of Chisbury Camp. No NGR. Plated pale gold quarter stater, perhaps of type Mack 67. PP. DMDB 1026. See WAR 1980.36 and 1981.28.

63 **Manningford**, Bohune Down. *c.* SU 16055562. Sarsen saddle quern. PP. DMDB 1004.

64 **Ogbourne St George**, Buckerfields. *c.* SU 19907383. 'Irregular Dobunnic' silver coin, type Mack 384a. PP. DMDB 1027.i.

65 **Swallowcliffe**, Iron Age settlement on Swallowcliffe Down. ST 968254. Two sherds. Salisbury 211.1984.

ROMAN

66 **Aldbourne**, Whitefield Hill. SU 20457658. Collection of C1 sherds. PP. DMDB 1047.

67 **Bishops Cannings**, E of Court Farm. SU 041644. Two coins – an imitative As of Claudius and an uncertain C4 coin; fragment of New Forest ware beaker. Devizes 1984.126.

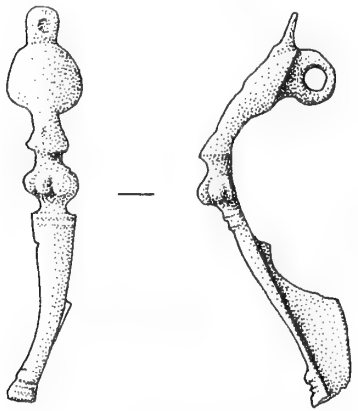

Figure 1. Fibula from Bishops Cannings. Register no. 68. 1:1.

68 **Bishops Cannings**, NE of Court Farm. SU 04226425. Trumpet brooch. PP. DMDB 1052 (Figure 1).

69 **Bratton**, near Birchanger Farm. *c.* ST 89655216. Silver finger ring (published *WAM* 79 (1984): 231, Figure 1); broken shale spindle-whorl; Septimius Severus denarius. Devizes 1984.138 and 135. PP. DMDB 1054.

70 **Bratton**, near Birchanger Farm. ST 898520. As of Hadrian with Britannia reverse. PP. DMDB 1005.

71 **Bratton**, near Birchanger Farm. ST 902521. Four C3 coins; 2 bronze fragments. PP. DMDB 1006.

72 **Broad Hinton**, Whyr Farm. *c.* SU 12207695. Collection of sherds; 22 C3 and C4 coins, bronze ring. Devizes 1984.133. See also WAR 1982.54 and refs. cited there.

73 **Bromham**, Hillside Farm. No NGR. Circular copper/bronze ingot. PP. DMDB 1042.

74 **Bromham**, Hillside Farm. ST 975663. Julian the Apostate miliarensis, *rev.* type VIRTUS EX-ERCITUS, struck at Arles – a stray from the Bromham hoard. (See A.M. Burnett and P.H. Robinson 'The Bromham, Wilts., Treasure Trove', *BM Occasional Paper* 54 (1984): 100 ff.) PP. DMDB 1062.

75 **Chiseldon**, Plough Hill, around SU 19158025. Collection of sherds. Devizes 1984.38.

76 **Devizes**, garden of 7 Mayenne Place. ST 987613. Follis of Constantine I, London mint. PP. DMDB 1065.

77 **Easton Grey**, N of settlement. ST 890875. Three C3 and C4 coins; catch-plate from a type R fibula. Devizes 1984.33.

78 **Edington**, Lower Baynton Farm. ST 93925510. 11 chalk/limestone tesserae; 5 lead fragments. Devizes 1984.96.

79 **Heywood**, Westbury Ironworks site. ST 864524. 19th-century collection of 44 C1–late C4 coins. Devizes 1984.13.

80 **Kingston Deverill**, Monkton Deverill. ST 853375. Antoninianus of Allectus; 2 other C3 coins; 2 C4 coins; 3 bronze or iron fragments; collection of pot-sherds. Devizes 1984.132.

81 **Knook**, probably Knook Down. No NGR. 3 terra sigillata vessels found together in *c.* 1910. Salisbury 126.1984.

82 **Liddington**, enclosure by parish boundary. SU 199805. 27 sherds, chiefly of Savernake ware. PP. DMDB 1080. See above, no. 48.

83 **Little Bedwyn**, W of Chisbury Camp. No NGR. Fragment of fibula; small phallus mount; 2 bronze fragments. Devizes 1984.60. See also WAR 1981.28.

84 **Marden**, garden of 69 The Street. SU 086578. Antoninianus of ?Tetricus I with Neptune reverse. PP. DMDB 1028.

85 **Marlborough**, SE of town centre. *c.* SU 1969. Follis of Constantine I. PP. TMAR.

86 **Melksham Without**, Halfway House Farm. ST 90506715. 10 C2–C4 coins; fragment of large fibula with pelta-shaped plate. PP. DMDB 1040.

87 **North Wraxall**, site of villa. *c.* ST 837761. 5 C3 and C4 coins; 2 mortaria sherds; segmented green glass bead and whetstone. PP. DMDB 1064.

88 **Ogbourne St George**, Buckerfields. *c.* SU 199738. As of Severus Alexander; antoninianus of Tetricus I or II; 2 'Constantinopolis/Victory on prow' coins. PP. DMDB 1027.

89 **Orcheston**, Orcheston Down, Church Pits. SU 073483. Coin imitating a FEL TEMP REP – fallen horseman type of *c.* 350. PP. DMDB 1004.

90 **Shalbourne**, Rivar Farmhouse. SU 318618. Collection of sherds. Devizes 1984.43.

91 **South Newton**, S of Mill Farm. SU 090334. Copper alloy fibula in the form of a bird. Salisbury 128.1984.

92 **Swindon**, Freshbrook, Liskeard Way. SU 116835. Dupondius of Trajan. TMAR 000086.

93 **Urchfont**, Green Farm – rear garden of farmhouse. SU 037571. Follis of Constantius I. PP. DMDB 1043.

94 **Westbury**, NE of pumping station. ST 890517. Fragment of fibula and coin of Constans. Devizes 1984.136.

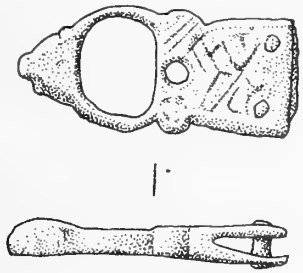

Figure 2. Late Saxon buckle from Bishops Cannings. Register no. 98. 1:1.

95 **Westbury**, NE of Bridewell Springs, around ST 89355200. 18 sherds; lead and bronze fragments. Devizes 1984.112.

96 **Winterbourne Monkton**, 'Site 171' on Monkton Down (*WAM* 45: 209). Collection of finds made by G.M. Young *c.* 1930–40, including C1–C4 coins, fibulae, plate-brooches, bone pins, glass beads, iron cleats and sherds. Full publication forthcoming. Devizes 1984.93.

EARLY MEDIEVAL (*c.* AD 450–1000)

97 **Aldbourne**, E of village. SU 26777576. Head and neck of a small-long brooch. PP. DMDB 1013 (subsequently acquired by Devizes).

98 **Bishops Cannings**, Court Farm. SU 042642. Late Saxon combined buckle and buckle plate. PP. DMDB 1057. (Figure 2.)

99 **Bishops Cannings**, Bourton. SU 041644. Bronze 'lace-tag' and animal-headed strap-end. Devizes 1984.126.6 and 7.

100 **Chiseldon**, Plough Hill. SU 19158025. Grass-tempered sherd. Devizes 1984.38.

101 **Collingbourne Ducis**, SW of the Church. SU 24165348. Penny of Ecgberht, King of Wessex (*c.* 828–39). PP. DMDB 1045.

102 **Ogbourne St George**, Buckerfields. *c.* SU 199738. Plated garter hook. PP. DMDB 1027.vi.

103 **Swallowcliffe/Ansty**. ST 96712548. Skeleton and finds from a barrow excavated in 1966 and including iron bed fittings, bronze and iron fittings from two buckets, a bronze censer, satchel fittings and casket fittings. Salisbury 130.1984.

104 **Sutton Veny**, site of Pitmead Roman villa. *c.* ST 901434. Iron spearhead with raised ridge below socket. DMDB 1058 (subsequently acquired by Warminster Museum). (Figure 3.)

MEDIEVAL (*c.* AD 1000–1500)

105 **Bishops Cannings**, Bourton. SU 041644. Group of finds including key, jetton (SIT NOMEN DOMINI type), lid of cosmetic container, buckles etc. Devizes 1984.126 and PP. DMDB 1049.

106 **Bishops Cannings**, W of Manor House. SU 03446426. C15–C16 purse frame. PP. DMDB 1022.

107 **Bishops Cannings**, Churchyard. SU 03756419. Six C12–C13 sherds; whetstone and worked bone fragment. Devizes 1984.9.

Figure 3. Late Saxon spearhead from Sutton Veny. Register no. 104. 1:1.

108 **Bishopstone**. SU 247838. Small jug with patchy green glaze. TMAR 000089.

109 **Bratton**, N of Bratton Castle ST 904523. Bronze coin-weight for weighing a Spanish gold coin of Ferdinand and Isabella. *cf.* Dieudonne pl. IX, 13. Devizes 1984.1. See also WAR 1981.69.

110 **Broad Hinton**, Whyr Farm, around SU 12207695. Cut halfpenny of Henry III; C14 jetton. Devizes 1984.133.25–6.

111 **Bromham**, Bell Farm. *c.* ST 9767. C15 bronze coin weight. DMDB 1039.

112 **Chippenham**, building site. ST 917732. Lead or pewter seal matrix of lOhlS DE BARRA. PP. DMDB 1018.

113 **Chiseldon**, Plough Hill, around SU 19158025. Collection C12–13 sherds. Devizes 1984.38.

114 **Clarendon Park**, Clarendon Palace. SU 18193023. Animal bones from the 1930s excavations, including bones of ox, pig, sheep, fallow and roe deer and fowl. Salisbury 136.1984.

115 **Clarendon Park**, Clarendon Palace. SU 18193023. Piece of dressed stone. Salisbury 234.1984.

116 **Codford**. ST 974416. Iron stirrup. Salisbury 115.1984.

117 **Devizes**, garden of 2 Waiblingen Way. SU 000618. Henry V halfpenny of the London mint. PP. DMDB 1023.

118 **Devizes**, Caen Hill Gardens. ST 988614. French C15 jetton with reverse legend VIVE LE BON ROY DE FRANCE. Devizes 1984.115.

119 **Edington**, E of moated site. *c.* ST 94355380. Shield-shaped armorial pendant with engrailed cross (for the arms of Tiptoft). Devizes 1984.94. See above pp. 221–3.

120 **Edington**, Upper Baynton Farm. ST 94455370. Lead papal bulla of Eugenius III. Devizes 1984.117.

121 **Hardenhuish**. No NGR. Group of late medieval floor tiles. PP. DMDB 1019. To be published separately in the *Census of Medieval Tiles from Wiltshire*.

122 **Kingston Deverill**, W of Monkton Deverill, around ST 853375. Small assemblage of finds including pennies of Edward II, 8 buckles, 2 pewter spoon fragments, iron arrowhead, bronze strap-end. Devizes 1984.132.11–32.

123 **Lacock**, beneath bridge at ST 91706865. Assemblage of C12–C13 sherds, shearblade and whetstone. Devizes 1984.53.

124 **Manningford**, Woodbridge Inn. SU 134572. 5 unglazed sherds. Devizes 1984.10.

125 **Ogbourne St Andrew**, W of the Og. *c.* SU 18737196. Bronze pear-shaped harness ornament. Devizes 1984.59.

126 **Ogbourne St George**, Buckerfields, around SU 19907383. Weight for a ½ noble coin; two Edward I/II pennies (one a counterfeit of a coin of York mint); Edward III half-groat; chape; bulla of Pope Nicholas IV. PP. DMDB 1027.

127 **Pewsey**, Sharcott. *c.* SU 14985851. Shield-shaped armorial pendant. Devizes 1984.36.

128 **Shalbourne**, Rivar Farmhouse. SU 318618. Large assemblage of unglazed sherds; roof tile fragments; small silver gilt annular brooch. Devizes 1984.43 and PP.

129 **Swindon**, Freshbrook, Fleetwood Court. SU 11408333. Henry VII half-groat. PP. TMAR.

130 **Swindon**, 'Toothill area'. ? *c.* SU 123837. C15 French jetton. PP. TMAR.

131 **West Lavington**, E of Dial House. SU 00895299. Assemblage of unglazed sherds. Devizes 1984.11.

132 **Wroughton**. SU 142804. 16 sherds of Minety-ware pottery. PP. TMAR.

DATE UNCERTAIN

133 **Bulford**, Barrow 3. SU 16874280. Fragmentary human bones found 5 m from the centre of the barrow, in a rabbit scrape. Salisbury 11.1984.

134 **Chitterne**, near Chitterne Barn. SU 018437. Human skeletal material of a male, a female and an infant in three graves. Salisbury 188.1984.

135 **Heytesbury**, Barrow 4. ST 925442. Fragmentary human bones found in a badger hole. Salisbury 12.1984.

Wiltshire Archaeological and Natural History Magazine, vol. 80 (1986), pp. 245–249.

Through a Glass Darkly: Wiltshire in Old Photographs

a review article by JOHN CHANDLER*

For whatever commercial, or perhaps sociological, reasons, the last decade has witnessed an unprecedented interest in published collections of historic photographs. This review considers 26 such publications,[1] all concerned exclusively with places in Wiltshire, or Wiltshire in general, and all published between 1974 and 1985. Only one has been noticed in these columns before.[2] As befits a review article, some discussion of principles, methods and pitfalls is attempted, in the hope that a spirit of gentle criticism may be of benefit to future aspirants to the genre.

Of course the very men and women now staring out from the pages of such books, the late Victorian and Edwardian passers-by, were the first to develop a mania for collecting photographs. But the reawakening in modern times is probably owing to Gordon Winter, whose *A Country Camera 1844–1914* appeared in 1966, and was followed by a series of topographical and thematic volumes of Victorian and Edwardian photographs published by Batsford. With their detailed captions and large format, permitting flexibility and variety of page design, they set the standard, and have been frequently emulated. Their influence extends beyond the conscious imitations, and it would hardly be an exaggeration to suggest that the practice of including captioned historic photographs has become almost *de rigueur* in town and village historiography. Nor is photography the only medium to be packaged in this way. A volume of Wiltshire topographical prints, published in 1983,[3] is not considered here, but many of the works under review include prints and drawings as well as photographs.

Calne in Camera, published in 1974 as a result of an exhibition of old photographs staged in the previous year, is the earliest work in our sample, and it has inspired two more recent collections by Peter Treloar of Calne photographs. More influential were David Burnett's volumes of 1975 and 1976, which, apart from the more recent works of Michael Marshman, are the only publications to cover the county as a whole. Collections devoted to Chippenham, Trowbridge and Swindon followed between 1977 and 1979,[4] the latter by Peter Sheldon, who, with four such titles to his credit, is the most prolific compiler of old Wiltshire photographs. Between 1982 and 1985 no fewer than 19 volumes appeared, mostly devoted to individual towns. Apart from four in a series produced by European Library, a Dutch publishing house,[5] and two by national publishers with a regional bias,[6] they are all homespun publications or the work of small local publishers. In their work during this period Michael Marshman and Peter Sheldon have extended the origin-

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1. They are as follows. In notes hereafter they are denoted by letters A–Z, followed by the page or plate number(s) where appropriate.

A G. Barrett and S. Jefferies, *100 Pictures of Chippenham Past*, 1985.
B D. Burnett, *A Wiltshire Camera 1835–1914*, 1975.
C D. Burnett, *A Wiltshire Camera 1914–1945*, 1976.
D D. Buxton and J. Girvan, *A Devizes Camera*, 1983.
E Calne Borough Council, *Calne in Camera*, 1974.
F P. Colman, *Devizes in Old Picture Postcards*, 1983.
G H. Fassnidge and P. Maundrell, *Bradford on Avon: a Pictorial Record*, 1983.
H F. Fuller, *Stratton in Camera*, 1984.
I M. Gray and F. James, *Marlborough in Old Photographs*, 1982.
J T.J. Griffiths, *Chippenham in Old Picture Postcards*, 1983.
K D. Howell, *An Old Postcard Album of Warminster*, 1985.
L M.A. Howell, *Bygone Swindon*, 1984.
M M. Lansdown, *et al.*, *Trowbridge in Pictures, 1812–1914*, 1979.
N M. Marshman, *Wiltshire: a Photographic Record 1840–1920*, 1982.
O M. Marshman, *A Wiltshire Landscape: Scenes from the Countryside 1920–1940*, 1984.
P Melksham and District Historical Association, *Melksham: a Backward Glance*, 1985.
Q A.C. Powell, *Bradford on Avon in Old Picture Postcards*, 1983.
R A.A. Richardson, *Salisbury in Old Picture Postcards*, 1983.
S P. Sheldon, *Swindon in Camera: a Photographic Journey 1850–1979*, 1979.
T P. Sheldon, *A Swindon Album*, 1980.
U P. Sheldon, *Golden Lions and Silver Screens*, 1982.
V P. Sheldon, *Fishing for the Moon*, 1984.
W C. Smith, *Chippenham Walkabout*, 1977.
X P. Treloar, *Calne in Pictures*, 1982.
Y P. Treloar, *Calne in Focus*, 1984.
Z Warminster History Society, *Old Pictures of Warminster*, 1984.

2. N: *WAM*, 77 (1983), 175.

al conception of captioned photographs, so that in their books the photographs are accompanied by long historical commentaries.

The compiler of works of this kind faces two limitations in his choice of photographs, and must balance his selection accordingly. On the one hand his work is dictated by the subjects people have chosen to photograph, and on the other hand by the suitability of available photographs for reproduction. It follows, therefore, that the greater the number of photographs at his disposal, and so the more he is able to discard, the more interesting and aesthetically rewarding he can make his book. Irrespective of any considerations of historical aims and methods, which we shall discuss later, certain categories of photograph may usually be rejected. These include the out-of-focus, torn and faded, unless they can be retouched or are of particular subject interest; also the omnipresent postcards and snapshots of familiar, unchanging tourist attractions, such as Salisbury Cathedral and Longleat. The less photogenic the subject, on the other hand – a Swindon bottling plant, Victorian stink pipes, the inmates of Semington workhouse, laying the foundations of Calne gasometer[7] – the greater the potential interest, and the more valuable the photograph is likely to be as a historical source. The compiler's art, therefore, is seen in his selection of photographs; but he must also be adept at caption-writing, a skill more difficult than might at first be imagined.

The caption is an adjunct to the photograph, and can assist the user of the book in several ways. It may supply information which was available to the owner of the original but is not apparent from the reproduction. Obviously endorsements such as postmarks and pencilled identifications fall into this category, as does fine detail lost during the copying process. The caption-writer may be excused, even thanked, for pointing out details rendered invisible through poor reproduction, but out of courtesy he should at the proof stage put himself in the reader's shoes and check whether or not points discussed in the caption will in fact be visible in the book.[8] A good caption should at the very least attempt to date and locate the photograph. Additional information may include naming people or objects depicted, and explaining events and processes which the photograph illustrates. In general the caption should reflect the reasons for including the photograph in the book; if there is nothing interesting to say about it, then it is doubtful whether it should be there.

It is a feature of some compilers, such as Michael Marshman and Peter Sheldon, that they extrapolate from a photograph a long and often valuable contribution to a neglected subject in a caption, which may take up more space than the photograph itself. This perfectly valid and pleasing extension to the genre is not to be confused with the irritating habit, indulged in by some compilers, of gratuitously stating the obvious. Perhaps each book should be permitted one reference to hats, lack of traffic and the pedestrian predilection for the middle of the road, but more than one becomes tiresome. Worse is the *verbatim* repetition in the caption of the legend printed on the postcard itself and plainly legible.[9] Obviously the caption should be accurate, unambiguous and consistent. When we read that the Salisbury giant is called Hob-Nob [Hob-Nob is in fact his attendant hobby-horse], that *scite* is Latin for 'place', and that the Great Western Railway extended its line through Chippenham in 1856–8 [in fact 1841],[10] we are less inclined to believe other, unverifiable, statements made by the same compilers. And though we may be irritated by the repetition of information in subsequent captions,[11] discrepancies between captions are even more disquieting.[12] Ambiguity, on the other hand, whilst not to be encouraged, may be quite endearing. Thus we learn that Stratton Bowling Club had a large ladies' section,[13] or that, 'she played the harmonium each Sunday, tricycling back and forth, and was affectionately known as the Bishop of Beanacre'.[14]

The overall impression of captioning in the volumes under consideration is of the dedication and attention to detail of the compilers. There are exceptions, of course, such as a failure to identify the Westbury white horse,[15] and one compiler's misguided attempt to write all the captions as if his work would be used as a tourist guidebook,[16] but in general the standard is high. Michael Marshman's eye for detail (long combinations hanging in a dormer window to dry, the order of presentation of coronation mugs)[17] is paralleled by that

3. D. Burnett, *A Wiltshire Portrait, 1568–1856*, 1983.
4. W; M; S.
5. F; J; Q; R.
6. I; L.
7. V, 7–8; H, 39; C, 87; X, 32.
8. *cf.* P.
9. F, 17; F, 55.
10. R, 7; P, 51; J, 5.
11. e.g. W, 18; W, 30–1, 37.
12. J, 15 claims that a well was removed in 1867 to make way for a war memorial; J, 62 tells us that the war memorial was erected in 1952.
13. H, 12.
14. P, 27.
15. F, 71.
16. R.
17. N, 44; N, 87.

Figure 1. Two boys looking at the postcards displayed by a Devizes shop, an enlarged detail from an 1896 glass negative. Reproduced from D. Buxton and J. Girvan's Devizes Camera.

of the caption-writer who noticed a small dog interrupting Lord Weymouth's proclamation of Edward VII at Warminster.[18] David Buxton and John Girvan strike a wistful note when they observe: 'It is strange to see how this display of new furniture, eighty years later, looks exactly like an antiques showroom.'[19] Peter Sheldon, whose sympathy with the world of the Edwardian photographers is one of the most pleasing features of his books, comments with obvious relish on the irony contained in his illustration of firefighters extinguishing a fire on the site of the present fire station.[20]

From the point of view of design, the compiler's most important decision is that of page size, and there can be little doubt that the aesthetically most successful works are those which employ a quarto or A4 page size in preference to the traditional octavo or small landscape format. The latter is something of a straitjacket, virtually restricting the designer to one illustration per page, and unable to cope satisfactorily with a portrait format postcard. It is nevertheless employed by, amongst others, the European Library volumes and by the otherwise admirable series of books on Calne. A large page size offers flexibility, variety and a chance to make interesting juxtapositions, techniques exploited to the full by David Burnett, David Buxton and John Girvan, and the Warminster compilers. A photograph of really fine quality may be shown to stunning effect by bleeding it to the edges of a double page, as in a view of Estcourt Street, Devizes, or David Burnett's title page of troops passing Stonehenge.[21] In striving for variety and an interesting layout, however, care should be taken not to divorce photograph from caption, or – worse still – print caption at right-angles to photograph.[22] And on no account should a well-designed and captioned ship be spoiled for a ha'porth of photolithographic tar, the fate of Melksham's grey and gloomy volume.[23]

The average number of photographs in the sample under review is a little over 100, with a spread from 76 to 151.[24] The more mature compilers have endeavoured to impose a systematic arrangement, based usually on broad historical themes. The county-wide volumes of David Burnett and Michael Marshman, with their greater resources, carry this off well, but it can also be effectively applied to a single town, such as the volumes on Trowbridge and Warminster.[25] In choosing a title would-be punsters will find that the larder of photographic and optical jargon has been fairly comprehensively raided. Peter Sheldon's *Fishing for the Moon* is a whimsical rejection of the tradition, worthy of applause in spite of his far-fetched explanation. But if the title purports to be straightforward it should be accurate – a point hardly worth making were it not for *Devizes in Old Picture Postcards*. No fewer than fourteen of the illustrations are clearly not picture postcards, and about the same number are not Victorian or Edwardian, as claimed in the publisher's preface.

Variations on the stereotyped book of old photographs are to be welcomed, but are seldom tried. Three volumes include portrait galleries, and a fourth pays particular attention to the careers of the photographers whose work is represented.[26] Peter Sheldon's quiz was unfortunately marred by a printer's error.[27] 'Then and now' pairs of photographs are extensively used in *Chippenham Walkabout*, and occur *passim* in other volumes. Part of the tithe map of Warminster sits happily alongside the photographs,[28] and Peter Sheldon reproduces for the first time two 18th-century maps of Swindon which are of considerable historical interest.[29] Particularly useful is the map of Melksham showing the position and direction of all the photographs.[30] Michael Howell includes by way of introduction a transcription of tape-recorded memories covering periods and places similar to those of the photographs. Considering the natural links between these two media, it is surprising that they are not more often juxtaposed. Most introductions are little more than lists of acknowledgements, an account of the book's gestation, or a few trite paragraphs about the town in question. Only nine volumes are properly introduced,[31] and even fewer have indexes.

In attempting an assessment of the historical value of these books, the reviewer, having examined 2816 photographs, cannot fail to be impressed by the sheer weight of numbers involved. An arrogant historian might scorn the naivety of an individual compilation, but he surely cannot deny that, taken altogether, such a body of photographs, conveniently mass-produced, is an important historical source for anyone working on 19th- and 20th-century Wiltshire. For each photograph

18. Z, 86.
19. D, 56.
20. V, 40–43; U, 45.
21. D, 1; C, 2; cf. U, 61; Z, 38.
22. V, 16; V, 20; V, 24.
23. P.
24. E, F and Q are all 76; B is 151.
25. M, Z
26. M, O, Z; S.
27. V, 45–6.
28. Z, 94.
29. V, 10–11.
30. P, p. 5.
31. B, C, D, I, L, N, O, S, U.

there is a caption, and the existence of 2816 captions is in itself a considerable resource, since they may record personal reminiscences and anecdotes published nowhere else. Misgivings arise not with the quantity of the data, but with their quality. As an architectural or topographical record old photographs are admirable. Michael Gray perceptively describes his book as 'a check list of what we possessed, to be compared with what we have now'.[32] Even a blurred photograph with an inaccurate caption may be the sole evidence for the elevation of a vanished building, or the existence of a piece of roadside furniture.

But as a contribution to social history the photograph is less trustworthy. It misleads in two ways – by its selection of subjects, and by its effect on subjects. Books of old photographs are full of life's zeniths – occasions of national celebration, carnivals, grand openings and charabanc outings – and its nadirs – fires, floods, thunderstorms and accidents. The fire engine is photographed gleaming new, the cottages when derelict prior to demolition. This is not always the case, of course, but it is sufficiently prevalent to bias the overall impression these books give of the past. Michael Howell's photograph of somewhere else in Swindon on the afternoon of the great tram disaster[33] may be a unique exception to the rule that abnormal overrides normal. The compiler, if he is serious about his wish to present good social history, may try to compensate for this bias caused by sensationalism. In his caption-writing he should certainly try to correct the photograph's other treachery, that of influencing its human subjects to behave in an unusual manner. Posing for the photograph may extend to fabricating an event for the camera's benefit, and it takes the eye of an expert to spot that, for instance, the Trowbridge weaver at his loom, or the corn-gathering women of Great Cheverell, are anachronisms.[34] How often the photograph has hoodwinked the caption-writer as well as the casual reader is anyone's guess.

At one level the book of old photographs is entertainment. It consoles and fascinates us, reinforcing our view of Victorian society with captions such as: 'The approach to Bridge Street during August 1875 shows Mr J. Martin's capital archway of evergreen with his new invention, "The Patent Cask Lifter", hoisted high above the crowd and illuminated on each side by an Atmospheric Gas Stove.'[35] At a second level it offers a resource of historical information to be used or rejected by the critical historian as he would any other primary source. The third level, that of purveying good, balanced, social history, is seldom attempted. Only in Michael Marshman's two collections – assisted by his countywide canvas – and Peter Sheldon's two later portrayals of Swindon – a town which grew up with the camera – are the limitations of the medium transcended and history created from nostalgia.

32. I, 7.
33. L, 89.
34. M, 40; O, 60.
35. Q, 58.

Reviews

Neolithic Studies: A Review of Some Current Research, edited by Richard Bradley and Julie Gardiner. 218 pages, numerous figures. Reading Studies in Archaeology No. 1. Oxford: British Archaeological Reports British Series 133. Oxford 1984. Price £12.00.

Richard Bradley, player-manager, and Julie Gardiner, coach, lead a young team formed mainly of home-grown Reading Department of Archaeology products in an energetic and highly promising performance on their home ground of southern England. The very existence of such a team is perhaps the single most welcome aspect of this volume, since as is well known the Reading department was threatened with closure in the lamentable 1981 UGC cuts. Before the game has even begun the player-manager does the equivalent of leaping up the protective fencing and gesticulating rudely – and rightly – in the direction of such folly. Innovative high-quality research is possible in smaller departments, and we look forward to further volumes in this new series.

Papers are contributed by the editors, Thorpe, C. Richards, Cleal, Green, Holgate, Thomas and J. Richards. The senior editor gets all over the pitch, and there are pleasing combinations by C. Richards with Thorpe and with Thomas. All the papers concentrate on the Neolithic and most concentrate on Wessex, though there are also studies of the Upper Thames valley, East Anglia and eastern Yorkshire. The scope of the volume is wide, ranging as it does over survey and settlement pattern, chronology and material culture sequences, burial and ritual. The two main themes seem to me to be the nature of settlement distribution and the nature of neolithic social interaction, politics or call it what you will, as evidenced particularly in the history of burial and ritual, in the appropriate monuments.

Within this sort of framework there are several welcome virtues. Virtually throughout there is an explicit concern with theory and model building. This is seen at its best in those concerned with monuments and ritual. There are references to Turner, van Gennep, Hertz, Bloch, Leach and also Friedman, and on the whole the use of these is selective rather than slavish. It is no advance simply to import theory wholesale from other (though ultimately related) disciplines and to rely on unfamiliarity to create a certain academic cachet, and most of the papers here give the sense of reaching for theory appropriate to the archaeological record. How successfully this is carried out must be considered further below, but we are given an active, dynamic Neolithic in which both tradition and the possibility for changes and disruption are stressed. The archaeological record is attacked (in places even ransacked) with a fine sense of detail, and there is no shying from small sherds, pits, post-holes and other unglamorous features. Examples range from the re-analysis of Durrington Walls to the settlement development of Cranborne Chase based partly on excavation and partly on survey. The sense of detail is seen also in the report on the Stonehenge environs survey by J. Richards of the Wessex Archaeological Trust which insouciantly notes the sampling of 1000 hectares and the analysis of 400,000 surface flints. A third major virtue is the attention paid to different parts of southern England with the clear recognition that developments may be different from region to region. This is brought out particularly by Bradley and others in studies of Cranborne Chase, and by Bradley and Holgate on the Upper Thames valley, by Thorpe and C. Richards in their late-neolithic contrast between Wessex and Yorkshire, and by Thomas in his explicit contrast of 'a tale of two polities'. By the Late Neolithic, he suggests, S Dorset can be contrasted strongly with N Wiltshire in the extent to which innovations and new ways of doing things were incorporated into existing social formations. For him, the Avebury area was more traditional, better integrated and less subject to internal division.

Thus far, plaudits. There is current Reading fieldwork in the Lake District and thus every sign that there are wider concerns than for the southern chalk alone. There are a number of aspects however for this emergent school to consider for the future.

First, there has to be a continued wrestling with theory. I myself find the rather rigid contrast of Thorpe and Richards between 'ritual authority structure' and 'prestige goods economy', which they apply to the Late Neolithic and the shift from the Grooved Ware orbit to the Beaker syndrome, to be unwieldy. Perhaps this is because here the theory does seem a somewhat wholesale import (from Friedman). I will ask students for a long time to come to dissect their claim that 'the Beaker/Peterborough association represents the penetration of the ritual authority system by a prestige goods economy operated by high ranking continental groups working through lower status "big men" in

Wessex and lower ranking lineages' (pp. 77–8). Why in one supposed situation there should be an exclusive or at least major concern with authority derived from ritual, and in the other major concern with prestige goods, is never explained. I would suppose that the manipulation of both ritual and material symbols was important in both horizons.

Bradley's more empirical approach to monuments may show the kind of correction that needs to be applied. In the study of Durrington Walls it seems to me that it is not the theory but its application which needs careful further consideration. The idea of purposeful, spatially structured depositions in ritual contexts is a powerful analytical tool. The question is whether there is so much to see in such a partially excavated monument and whether any agreed pattern must necessarily be seen as ritual. There also lurks the problem of post-depositional process. If post-hole contents in the Southern Circle are derived from the phase of decay and abandonment, where does this leave the search for contemporary patterned ritual residues?

In other questions there needs to be more theory. In the settlement studies the approach is largely pragmatic, but there must be some sort of framework within which to accommodate both new surface survey and evaluation of older collections. If we do not have clearer expectations of what to expect from various sorts of domestic and other contexts, what do the monumental quantities of collected flint mean? Well-preserved settlements elsewhere in western Europe show that the domestic residue can often be surprisingly small.

Chronology is another problem for ambitious explanation. The editors boldly state their faith in the superiority of C14 dating over typochronology at the outset. Research elsewhere however in high-precision C14 dating and dendrochronology is showing what a blunt instrument routine, conventional C14 dating is. As explanation gets more sophisticated, finer chronologies are invoked, often finer than can be sustained by the routine C14 evidence. I predict therefore a future resurgence in typochronology, which has after all served the Dutch Late Neolithic well for over 30 years.

Finally there must be further consideration of the kinds of scale at which to approach the Neolithic evidence. There is a preference here for smaller rather than larger units, for Wessex rather than southern England, or for N Wiltshire and S Dorset within Wessex, for example, but the basis for the chosen units is never really explained except as a reaction to geographically over-extended generalization. There are fascinating issues here. We must develop the ability to analyse given situations at several scales simultaneously. There will also remain for the present a tension between the need to create generalizing models at the risk of over-simplification and the desire to create more individualizing sequences, often on the basis of still-inadequate data bases.

That is a suitable note on which to consider the future. We find ourselves in a terrible financial state, since it has become extremely difficult to get funds for fieldwork via HBMC, units or research institutions. For the most part universities have been completely squeezed out of any kind of rescue archaeology, where most of the money for fieldwork lies. That is a situation largely out of our control. It is possible however to seek a greater degree of discussion among all the interested parties than is the case in the present situation, which fits the model of increased competition for scarce resources leading to increased boundary maintenance and group definition. Where there is money to spend, it has to be spent wisely, but where can one find any sort of agreed basic policy for the Neolithic? Future work is not directly considered in this volume, but it points up many of the more useful things that could be done. Let us hope it is widely read.

ALASDAIR WHITTLE

Julian Richards. Beyond Stonehenge: a Guide to Stonehenge and its Prehistoric Landscape. Salisbury: The Trust for Wessex Archaeology, 1985. 24 pages, 12 plates, 30 drawings, 2 maps. £1.50.

Michael Pitts. Footprints through Avebury. Frome: Stones Print, 1985. 64 pages, 56 plates, 8 drawings, 8 plans and maps. £1.95.

Attractive and inexpensive booklets such as these about two of Britain's most famous prehistoric monuments must be welcomed by both the general public and by professional archaeologists. Both are profusely illustrated, *Avebury* in particular by Michael Pitts's evocative photographs, and both endeavour not only to describe the physical structure and excavations of the sites but also to reconstruct the landscape in which they are to be found.

How different this approach is from the pre-war, greyly printed governmental leaflets, worthy but unimaginative, dehumanised and full of technicalities, as though written by the works manager of a scrap-metal yard. In contrast, these little books are full of colour, full of people and, above all, full of enjoyment.

Once one has got over the shock of the title of *Beyond Stonehenge*, a regrettable repetition of Gerald Hawkins's 1973 successor to *Stonehenge Decoded* (1966), it is possible to realise the many merits of Julian Richards's mono-

graph about Stonehenge and its prehistoric landscape. Benefitting from the author's own assiduous fieldwork on eastern Salisbury Plain, this is an admirable though brief account of how the great sarsen ring developed from earlier, simpler structures. For the uninformed reader the descriptions of earthen long barrows and causewayed enclosures can be nothing but useful and it is delightful to come upon Stukeley's discovery of the Cursus.

There are short paragraphs on Woodhenge, Durrington Walls, the excavation at Coneybury Hill henge, all accompanied by some pleasing reconstructions of the countryside from early Neolithic to Middle Bronze Age times. Suddenly, 'The Stones Arrive'. Beaker Folk are reduced to 'ideas and objects' but the bluestones are set up, still derived from the Preseli mountains despite recent objections to this source, and they are followed by the erection of the well-known sarsen ring. Round barrows are included and so is the Bronze Age way of life together with a full-page illustration of a Deverel–Rimbury farmstead. The booklet ends with a mention of the excavations at Stonehenge and the work of the Trust for Wessex Archaeology.Perhaps the most helpful section of all is to be found on the final two pages, where there is a map of the sites within a mile and a half of Stonehenge showing the roads and footpaths that give access to them. That so much can be crammed into so small a space is a credit to the author and his designers.

Footprints through Avebury has all the same merits and a little more. It has, of course, the considerable advantage of dealing with an area full of megalithic marvels beyond Avebury itself, and Michael Pitts does not neglect his opportunity. Nor does he confine his work to the prehistoric but has charmingly included details of the church and Avebury Manor.

His book is longer and is arranged differently from *Beyond Stonehenge* with six suggested excursions: to Windmill Hill; to the Sanctuary, West Kennet and Fyfield Down – though the visitor will need a 1:50,000 map to find the field systems there; a third excursion is to Avebury itself; a fourth to the church, so often by-passed by the tourist mesmerized by the monstrous stones; a fifth to the manor with its mélange of mediaeval and Tudor conflicts; and, lastly, a visit to the museum and its friendly custodians.

This is a splendid little book. There are photographs in plenty, reproductions of Stukeley's sketches, and there are very good and novel plans of the manor and church, the latter showing the five major phases from Saxon to Elizabethan times. It is a book not for an afternoon but for a weekend or for repeated visits to this wonderland of N Wiltshire.

Maybe this is the chief merit of both these admirable booklets. They are about Stonehenge and Avebury but they are much more than that. They are easily read, accurate, beautifully illustrated, and they offer the enthusiast easy access to the less obvious attractions around the great stone circles. Pitts quotes from Longfellow's *The Reaper*, of 'footprints on the sands of time'. His own book and Julian Richards's, will encourage others to follow in those footsteps on the windswept chalk of Wessex.

AUBREY BURL

D.V. Clarke, T.G. Cowie and Andrew Foxon. Symbols of Power at the Time of Stonehenge. Edinburgh: Her Majesty's Stationery Office for the National Museum of Antiquities of Scotland, 1985. £25 hardback, £15 paperback. xvi + 334 pages, 309 illustrations, almost all in colour.

The volume in question is at least in part an exhibition catalogue, and as such cannot be entirely divorced from the exhibition itself, held in Edinburgh for a regrettably short time during 1985. The badge available at the exhibition ('I'm no squat grunting savage') firmly proclaimed the organizers' main theme, that of prehistoric craftsmanship and skill. The objects themselves were viewed within a framework of ideology and power, both displayed and manipulated. The gentleman on the poster which greeted the visitor was clearly no 'squat grunting savage'; he was a little too well-groomed for most people's concept of prehistoric man, and wearing his 'symbol of power' with the assurance of one confident in the attractive power of his aftershave.

The exhibition, presented in a now standard cave-with-spotlights format, was spectacular, the quantity and quality of the exhibits gathered from all over Northern Europe masking some rather irritating shortcomings of presentation detail. The numbering of objects can only be described as confusing, and the minimal explanation offered outside the catalogue at time stretched the objects' powers of eloquence.

The exhibition is now no more than a memory to those fortunate enough to have made the trek to Edinburgh, but its concept and contents are still availble through the medium of the catalogue and it is fortunate that this publication goes far beyond being a mere illustrated list.

The introduction firmly states that both the book and the exhibition concentrate on aspects of a single theme, the manifestation of power, prestige and status in the 3rd and 2nd millennia BC. Influenced, it is claimed,

indirectly by Marx and more openly by Bradley, the understanding of these aspects is seen as central to our knowledge of 'the social foundations of Prehistoric Britain'.

The arguments for the use of power and prestige, their changing manifestations and the switch from the communal to the individual are presented in a series of narrative chapters: 'The Use of the Ancestors', 'From Ancestors to Gods', and 'The Acknowledgement of Individual Power'. The latter is inevitably the longest, moving from the massive monuments of communal effort and individual anonymity to the rich and spectacular graves of the 2nd millennium BC, the ultimate expressions of individual status, wealth and power. A certain Caledonian influence can be detected, particularly in the earlier chapters, but this is inevitable in view of the visual and material richness of many northern sites. The move down south is not entirely trouble-free, however, and those familiar with the Avebury landscape will find the aerial photograph on page 70 (printed in reverse) a little puzzling. It is also difficult to see why, apart from being deliberately unconventional, it was found necessary to rotate the Stonehenge area map through 90 degrees, losing a cursus and a henge in the process. Stonehenge itself receives conventional treatment, its phases presented after RCHM and Atkinson. It is, however, surprising that despite utilizing the most recently available Phase 1 radiocarbon date of 2410 BC, no mention is made of Evans' suggested phase of abandonment; particularly strange as the complementary phase of construction at Durrington Walls is specifically noted. Chapter 5, 'The Importance of Craftsmen', contains a series of contributions covering the major divisions within the material assemblage now available for study. These sections vary in their approach from, for example, Taylor's straightforward resumé of earlier work on gold and silver to sections on ceramics which set out to introduce by 'random and light-hearted analogies' ideas not only of function but of taste, fashion and inevitably of symbolism. The final section of chapter 5 considers organic materials and wisely considers decay in its preface. Perhaps this would have been an appropriate point at which to place more emphasis on those aspects of prehistoric symbolism and display now lost to archaeology but widely available within the contemporary ethnographic record. Elaborate hairstyles, singled out in the introduction as a contemporary means of power display, are just one example of concepts, if not objects, which could have received greater attention.

More unfortunate, although not surprising given the thematic emphasis of the exhibition, is the absence of contrast in the material record. The fine objects, beautiful though they may be, represent a past (and to a certain extent a present) emphasis of investigation which leans heavily on monuments both ceremonial and funerary. 'Settlements' and 'domestic sites' do get an occasional, usually very generalized mention in the catalogue, which also attempts to show 'people' in prehistory. In this it fails, as a gawping visit to a stately home fails to illustrate the lives of its 18th-century estate workers. A little more about the everyday aspects of prehistory would have provided a welcome and informative contrast, while demonstrating quite clearly to the visitor the gaps in our basic record. Perhaps this was why such aspects were omitted.

Such criticisms as can be levelled are more at approach than at production, as the volume is beautifully produced and, in contrast to many recent archaeological publications, is reasonably priced. As an exercise in the marriage of the conventional to the theoretical this book has in many ways succeeded in producing a 'more rounded approach to prehistory' (Chapter 6 – Conclusion). The volume, itself perhaps a symbol of the organizers' and authors' prestige and status, should be on every prehistorian's bookshelf where, once read, it can reside as a symbol of its owner's (purchasing) power.

JULIAN RICHARDS

The World of John of Salisbury, edited by Michael Wilks (Studies in Church History: Subsidia 3). Oxford: Basil Blackwell for the Ecclesiastical History Society, 1984. xii + 469 pages. £25.

Notwithstanding his name, John of Salisbury is not closely connected with Wiltshire. His name suggests that he was born at Old Salisbury, and in the opening paper of the book Professor Christopher Brooke offers the guess that his father was a married canon of Old Salisbury. John himself was a canon there, but may hardly have lived there at all. In July 1980, however, Salisbury commemorated the eighth centenary of his death, and the book records most of the papers which were presented by a distinguished group of scholars at a symposium held on that occasion.

As a classical scholar, writer on philosophy and political theory, contemporary historian, traveller, letter writer, participator in the Becket controversy, and promoter of the cult of St Thomas, 'a man of action no less than a scholar' (p. 177), John of Salisbury leads the student into the heart of his age, even with his 'private jokes and allusions whose meaning can no longer be recovered' (p. 429). Aspects of his life and work have recently been studied, as Professor David Luscombe

tells us, in countries as far apart as Poland and California, Denmark and Tasmania. 'This community of scholarship seems almost a recreation of the unity which bound 12th-century scholars together in a common culture.' The international appeal of the subject is clear from the book: its 25 papers are by 22 authors based in eight different countries and writing in four different languages: four papers are in German, two in French, one in Italian, though none in Latin.

They are short, one as little as four pages, and would be significantly shorter without footnotes and appendices. They offer not so much a survey of John of Salisbury's world as the cultivation of some of its territory, and readers who are already at home there will enjoy the rich and varied harvest. The book is a full one, but there is no index.

C.R. ELRINGTON

Wiltshire Dissenters' Meeting House Certificates and Registrations 1689–1852, edited by J.H. Chandler for the Wiltshire Record Society, Vol. 40 for 1984. Devizes, 1985. xxxvii + 226 pages. Obtainable from M.J. Lansdown, 53 Clarendon Road, Trowbridge, Wilts. BA14 7BS. £15 plus postage to non-members.

This book lists 1,780 Meeting House Certificates issued between 1689 and 1952 with an appendix of seventy registrations under the Declaration of Indulgence 1672. Thanks to Dr Chandler's flexibly expert editing it is much more besides.

So first, what it is not. It is not an instant history of Wiltshire Dissent. For that, the anxious enquirer must go to Marjorie Reeves's account in the *Victoria County History* (iii, pp. 99–149) and thence to the not over-large collection of congregational, associational and related histories which Dr Chandler lists after his introduction. There the searcher will find the flesh and bones of local Dissenting history. Dr Chandler's volume is neither flesh nor bone. It is sinew and tendon. Or, to change the metaphor, it is clue and connexion.

The period covered is that for which the Toleration Act was in force. In Wiltshire terms that means from the certificate for Ramsbury of 9 July 1689 to that for Yatton Keynell of 14 May 1852. In this period, for which the 1672 Declaration of Indulgence, unsanctioned by Parliament and operative for barely a year, was an *hors d'oeuvre* (the Declaration of 1687 seems to have had no effect in Wiltshire), Nonconformist meeting places were first certified to, and then registered by, the bishop or archdeacon or quarter sessions who licensed them accordingly. Dr Chandler explains the legal requirements and subsequent emendations. Strictly speaking, registration, though prudential, was not compulsory before 1812, and thereafter it was compulsory only for assemblies of more than twenty people other than the household at the certified premises. It was extended to Roman Catholics in 1791 and to avowed Unitarians in 1813. Roman Catholics are not covered in the present volume, and with one exception there are no Unitarian certificates for Wiltshire. When the system was ended in 1852 it was for the sensible reason that central government now had the appropriate apparatus and for the even more sensible reasons adduced by Bishop Denison of Salisbury. Denison was the prime mover in the system's abolition. He disliked the licensing by Anglican authorities of premises for Protestant Dissenters, a phrase which might legally encompass the assembling of socialists with their doctrine of infidelity and immorality or of Mormons with their strange and impious fanaticism. Anglican licence implied Anglicans' approval, and in the heady Victorian atmosphere of Free Trade in religion it did not do for old-established churches to confer gratuitous respectability on sub-Christian sheepstealers.

This is the background to the list of certificates. What can be inferred from the certificates themselves? Here are some inferences: the emergence of Dissent from underworld to second-class establishment; its fissiparousness; its geographical and social pervasiveness; its thickening where the countryside thickened into market towns; its changes of churchmanship. That last is a marked feature, apparently reflecting the ebb and flow of numerical strength as seen with the dwindling of Presbyterianism, the growth of Congregationalism, the arrival of Methodism (first Wesleyans, then Primitives, with a scattering of Independent Methodists), the penumbra of sectarianism – Swedenborgians, Sandemanians, Catholic Apostolics. What is less easily inferred is the extent to which the Congregationalism which burgeoned from the later 18th century is a new growth and the extent to which it is the twin beneficiary and natural development of the Presbyterianism and Independency of the 'Old Dissent'. Equally hidden are the Baptist continuities and discontinuities, both General and Particular.

But what is certainly to be inferred is people rather than polity. Here are surnames with a Dissenting resonance beyond Wiltshire: Flower, Gifford, Horder, Taunton, Jupe, Whitaker, Anstie, but alas, no Keyneses. Here is touched upon the world celebrated by Marjorie Reeves in *Sheep Bell and Ploughshare*. Here is evidence among the smaller sects of permeation from household to household, or among the Baptists and Congregationalists of the missionary activities of

strategically placed ministers and the aggressive power of gathered congregations. Occasionally the certificates spell this out. 'Our silk house in Church Street' [1268, 13 June 1829] speaks of the influence of that representative Congregational layman, Charles Jupe of Mere. The bellfounder, millwright, 'agriculturalist', miller, draper, shoemaker, grocer, brickmaker, involved in the Congregational work at Great Cheverell four years later, speak of the men of local bottom, banded in pious confederacy [1382, 3 October 1833]. The Wesleyan room licensed ten years after that 'adjoining the Golden Lion Inn near the Swindon Railroad Station on the Great Western Railroad'. Zephanian Job of Swindon, dissenting minister [1627, 12 June 1843], speaks of the concern (and consequent success) which Methodists, Wesleyans especially, felt for the harbingers of the railway age. And this brings us to the heart of the matter, for though these certificates are poor guides to Nonconformist *adherence* (as the editor is careful to explain), they are highly suggestive guides to Nonconformist *evangelism*, foundational material for that disciplined impressionism which distinguishes the historian from the antiquarian.

That such things are to be inferred is a tribute to Dr Chandler's editorial skills. He firmly sets out the limits of inference, not least where it concerns apparently clear patterns of growth and decline. He also introduces his reader to unexpected spheres of inference, with his discussion of postal services and the role of local carriers. All this is explored within an introduction whose judiciousness schools the book's user for the liberation subsequently offered by three vital indexes – of denomination, occupation, and persons and places. With such topping and tailing the intervening list of certificates becomes an indispensable tool for the ecclesiastical, social, local and family historian, and not just for Wiltshire.

CLYDE BINFIELD

David Underdown. Revel, Riot and Rebellion: Popular Politics and Culture in England 1603–1660. Oxford: Clarendon Press, 1985. xvi + 324 pages, 4 maps, 16 illustrations.

More than any other period of English history, the years preceding and during the Civil War have seen a fruitful interaction between local and national studies. Not the least of the exemplars of this has been David Underdown, author not only of a 1973 study of the Civil War in Somerset, but also of a brilliant analysis of politics in the Puritan Revolution, *Pride's Purge* (1971), in which a significant amount of space was devoted to the local dimension of national developments. His new book represents a fresh departure, since in it he presents a view of the Civil War and its origins, not merely in a local context, but from the point of view of whole communities, and particularly the middling and lower orders of society: he thus shares in a curiosity about 'popular culture' which has been much in evidence among historians in recent years. For his focus, he has taken the three counties of Wiltshire, Somerset and Dorset, and not the least of the virtues of his book is the rewarding picture that it provides of local society in the period he deals with.

His aim in the book is two-fold. Much of it comprises a narrative of the origins and course of the Civil War in the context of popular culture, showing the way in which the movement towards war harnessed social tensions and stereotypes, and in turn itself reinforced and redirected them. Underdown leaves us in no doubt of a – not altogether surprising – correlation between the reforming activities of Puritan élites and opposition to the King on the one hand, and, on the other, between royalism and adherence to the traditional social order. Hence there is a real 'cultural' significance in the stereotypes of the Cavalier and Roundhead, with genuine resonances at the time, a point to which he returns more than once in the book. Moreover he argues that, though to a significant extent the war was made possible by the way in which the regime of Charles I propelled moderate opinion in an oppositionist direction, its effect was to transfer resentment to the triumphant parliamentary regime, so that the experience of republican rule was to cement the link between royalism and traditional social values more firmly than ever.

His second argument is that the degree of adherence to these contrasting sets of values varied in differing parts of the country, and, in the context of his three chosen counties, he argues for a strong contrast between the downland areas, where traditional social organisation and customs remained strong and where the impact of Puritan reform was minimal, and the wood-pasture and clothing areas, where individualistic market values had begun to erode the old community spirit, and where reformist religious views had made more inroads. For this, he is able to take his text from a contemporary, John Aubrey, who not only observed the contrast between these two areas and their inhabitants, but also linked this to the religious tendencies of the 'woodsere' region.

Moreover Underdown develops this view to argue against existing interpretations of allegiance in the Civil War, contending that a class-based explanation is im-

plausible, but that the view that people's loyalties were predominantly localist also lacks adequate explanatory power. Instead, he argues that localism meant different things in different places, suggesting that by understanding the regional contrasts that he outlines one can come up with a more satisfactory explanation of patterns of allegiance than any theory adduced hitherto.

In most of the book, Professor Underdown makes his case by using a rich yield of piecemeal evidence from administrative records, letters, newsbooks and the like. In one, he supplements this by attempting to use such statistical data about allegiance as he has been able to find, which, so far as it provides any conclusive evidence, tends to bear out his general claim. On the other hand, here complications emerge, which are apparent to an extent even in his other chapters. Though Underdown's regional model undoubtedly adds a worthwhile element to our understanding of Civil War allegiance, it seems unlikely that it would work as well in areas where contrasts were less pronounced. On the other hand, this does not detract from the fruitfulness of the book's general approach – and particularly its demonstration of a link between cultural stereotypes and wartime allegiance – nor from the valuable addition that it constitutes to the literature on Wiltshire and the other counties on which it is focussed.

MICHAEL HUNTER

Stuart Piggott. William Stukeley: an Eighteenth-Century Antiquary. 2nd edition, London: Thames and Hudson, 1985. 191 pages, 44 illustrations. £14.00.

Our Vice-President has given us the most delightful present, in the year of his 75th birthday: a new edition of his biography of William Stukeley, first published 35 years ago and out of print many years. The new edition is revised and enlarged, better-illustrated, with new material especially on Stukeley's draft treatise on the Wiltshire megalithic monuments of 1723 and on his involvement with the 'Richard of Cirencester' forgery of a Roman itinerary of Britain.

William Stukeley was first written as an Oxford BLitt. thesis; Piggott, even before the distractions of war service, had made himself one of the foremost field archaeologists of the day, and felt he really ought to have some academic qualification. But it was already too late, and his examiners faced, not another mature undergraduate, but the Abercromby Professor of Archaeology in the University of Edinburgh. Since then we have had his *Druids*, *Ruins in a Landscape*, and *Antiquity Depicted*; together they make a superb history of the British antiquarians. Piggott himself learnt his trade by following with Alexander Keiller in Stukeley's footsteps through Avebury, and the warmth of his own affection for the old master – with his many defects – brightens the whole book.

William Stukeley himself needs no introduction in *WAM*, and the heart of the biography is his great seasons of fieldwork round Avebury and Stonehenge in the years 1719–24. Here Piggott can amplify his older account with the new material that has come to light (such as the MS records of barrow-digging published in the last *WAM*), and to look anew at Stukeley's attempt, more than two centuries before Alexander Thom's megalithic fathom, to find a 'Celtic foot' or a 'Druidical Cubit' in the dimensions of Stonehenge. Stukeley's tangled life takes him into every kind of strange corner: the Druids of course, but also landscape gardening, the beginning of the Gothic revival, and obscure theological disputes of the 1720s. On all of these, Piggott is shrewd, perceptive, brief and quite appallingly widely read.

Another thing that has changed since 1950 is the wild fringe of archaeology, and its impact. This is an embarrassing subject when it comes to Stukeley, for the Stonehenge Free Festival, like the bogus Druids, the gentler eccentrics of the time of the first edition, draws inspiration from some of Stukeley's delusions; and Piggott is always good, and sometimes severe, on why and how he went so wrong.

The publishers have made a fine job of the production, but they have not been too generous with the pictures. The superb drawing of the 'Atto da fe', as Avebury villagers burn and break one of the monoliths, is reduced to the size of a large matchbox. I hope this is because they have persuaded Piggott to follow with an illustrated Stukeley album.

Piggott begins the book with two quotations: from Richard Gough, who thought, 'If any man was born for the service of Antiquity, it was Dr Stukeley'; and from O.G.S. Crawford, a modern master in the tradition of topographical fieldwork which Stukeley began, who wrote, 'Let us once for all pay a tribute of esteem and gratitude to Stukeley's memory.' We can combine the sentiments in thinking Stuart Piggott was rightly born for the service of Antiquity, and in paying him a tribute of esteem and gratitude – not, fortunately, to his memory, as he is so alive and lively with us.

CHRISTOPHER CHIPPINDALE

Edward Bradby, The Book of Devizes. Buckingham: Barracuda Books, 1985. 144 pages, numerous illustrations. £14.50

In spite of its importance, both as the site of one of the

great castles of medieval England, and as a market centre, Devizes has hitherto lacked a good, brief and authoritative history, and this book admirably fills the gap. Mr Bradby's familiarity with the town, its topography, buildings, roads and former trades is evident throughout the book, as is his detailed knowledge of the documentary sources. He pays tribute to the skilful research conducted by the late Professor Ralph Pugh for the account of Devizes in *Victoria County History of Wiltshire*, vol. 1; (1975), but notwithstanding this help, it is a considerable achievement to have produced such a readable and informative history in little more than 100 pages of text.

The task is made even more difficult by the fact that for the Middle Ages, when Devizes and its castle played an important part in national affairs, few records survive which are specifically concerned with the town itself or its inhabitants; while for later centuries, when Devizes prospered as a market and manufacturing centre, there is an overwhelming abundance of material. Readers may well be bewildered by the complex intrigues, battles, movements of armies and dynastic conflicts of the 12th and 13th centuries; but the author demonstrates clearly the effect which this troubled period had upon Devizes and the way in which its remarkable street-plan evolved around the castle. The growing importance of the town is reflected in the two fine churches of St John's and St Mary's, in the grant of royal charters – the first in 1141, in parliamentary representation, borough government and the merchant guilds. During the later Middle Ages, Devizes expanded as trades, especially the woollen cloth trade, flourished, and as the markets and fairs increased their business. From the 16th century, borough minutes, churchwardens' accounts, deeds, wills and other sources become available, and give a clear picture of the religious upheavals of the Reformation and of the ways in which the parish churches, the priory, chantries and other religious foundations were affected. Devizes was also much involved in the Civil War, notably by the battle of Roundway Down in 1643, and later by the virtual demolition of the castle. In spite of such turmoils, the town continued to prosper, and new trades such as leather-crafts, metal-working, clock-making, the processing of tobacco and the manufacture of snuff were established. The prosperity of the 18th century is reflected in the fine buildings of the town, while from 1810 the Kennet and Avon canal provided a link with London and with Bath and Bristol, and to the wider world beyond.

The fact that Brunel's Great Western Railway avoided Devizes, so that the town was dependent upon a branch line opened in 1857 and closed in 1966; and that although the county gaol was in Devizes, the town failed in its attempts to become the main administrative centre of the county, were both seen at the time as disasters. In retrospect, as Mr Bradby points out, the failures have meant that Devizes has kept much of its character and has not been overwhelmed by modern development.

The varied fortunes of this attractive and historic town make a fascinating story. Edward Bradby tells it very well; the book is well produced, and the numerous illustrations add to its attractiveness. It can be thoroughly recommended as an excellent brief account of the history of Devizes.

J.H. BETTEY

Jean Moorcroft Wilson. Charles Hamilton Sorley: A Biography. London: Cecil Woolf, 1985. 215 pages, 30 illustrations. £12.50.

The Collected Poems of Charles Hamilton Sorley, edited with an introduction and preface by Jean Moorcroft Wilson. London: Cecil Woolf, 1985. 142 pages. £9.95.

At last Charles Sorley is being given the recognition he deserves. These two books, taken together, enable us to see him in the round, and not just as the young poet of the Marlborough Downs who was tragically killed at the age of 20 on the Western Front in October 1915. Jean Moorcroft Wilson is to be congratulated on treating with scholarly thoroughness and care the short life history and literary output of so young a man, and on showing what a fascinating person he was, how mature in outlook and deep in insight by the time of his early death. Sorley for her is worth three books – for she is now editing his letters – and, when the trilogy is complete, he should be recognized as one of the most promising writers of the early years of the 20th century.

It was high time we had a proper collected edition of Sorley's poems, including the light verses written for school occasions when he was in C1 House at Marlborough College. The introduction to the *Collected Poems* tells the reader who he was, what he did during his short career, and which authors ancient and modern,. English, German and Greek, influenced him; for he read widely and absorbed quickly, passing from one literary influence to another with whirlwind speed but always finding and keeping something of value in each of them. In the poems themselves we can follow his literary progress from 'Verses for a C1 House Concert' to the deeply moving sonnet, 'When you see millions of

the mouthless dead', which Dr Wilson considers his finest poem, as it was almost certainly his last.

What the introductin to the *Collected Poems* tells us is elaborated in much greater detail in the *Biography*. After describing fully Sorley's career and development at Marlborough College between 1908 and 1913, where he was both rebel and pillar of society, and all the time was learning to write competently in verse, Dr Wilson devotes two of the most interesting chapters in the book to the first seven months of 1914, which Sorley spent in Germany. His spring and summer sojourn at the University of Jena is described fully for the first time, and its influence on him explained. After that came life in the Army, first in training, then on the Western Front, and the run-up to death. The prospect of early death had a profound effect on Sorley, and prompted him to write some of his most mature and thoughtful poems.

At the same time he remains, so far without a rival, the poet of the Marlborough Downs. 'Still stand the downs so wise and wide?' he asked; and G.M. Young, the historian and literary critic, who also loved the downs, had no use for the objection I once put to him that the epithet 'wise' demands a little too much of the reader's imagination. Of course it doesn't. In the 'signpost' poems Sorley shows us the downs in a very different mood, 'where the mists swim and the winds shriek and blow'. The signpost which now stands at the place on the downs where he saw them thus is a fitting memorial to him.

Much of our information about Charles Sorley comes from his letters, a selection of which was edited by his parents and published in 1919. The edition which Dr Wilson is preparing will no doubt give us a fuller picture of him as a letter writer than the selection made by Professor and Mrs Sorley. This will be well worthwhile, for they are very readable letters, graphic and entertaining; and they reveal a quality which seldom appears in the poems – Sorley's great sense of humour. If it is at times rather schoolboyish, that is only to be expected; and it is never malicious. It was encouraged by his home background. Mrs Sorley, kind, attractive and witty, could bring the best out of clever people; she claimed that she could make A.E. Housman talk at a social gathering, which was not at all an easy thing to do. But from the humorous to the serious was a short step for Charles Sorley, whose deeply thoughtful face confronts us on the dust jacket of these two books and compels attention.

MARK BAKER

'Peter Gurney' [C.S. Smith], Shepherd Lore: the last years of traditional shepherding in Wiltshire. Avebury: Wiltshire Folk Life Society, 1985. vii + 140 pages, 27 photographs. £2.95 (paperback).

This is a collection of articles written for the *North Wiltshire Herald* in the 1930s which Mrs Morrison discovered in the Devizes Museum Library and has put together with excellent photographs and published for the Wiltshire Folk Life Society as this book.

The book tells of the last years of traditional shepherding in Wiltshire, and it is highly nostalgic to look back to those years. The hurdled flock of Hampshire, Dorset or Oxford Downs was an integral part of the Wiltshire Eight Course System, which itself was the product of Victorian High Farming. Before the Enclosures the village lands were farmed in three common fields on a three-course rotation – wheat, barley, fallow. There was no build-up of fertility – only the fallow gave the exhausted land a rest – and yields were very low.

The Enclosure Act put the village lands under the management of the new tenant of the old Lord of the Manor. The wretched dispossessed peasants provided the labour for the industrial revolution. The happy tenant of what had once been common property had the incentive to improve his land. England initiated the new industrial and agricultural methods which have since transformed the world.

The purpose of the new agricultural methods was to increase the fertility of the soil in order to grow larger cereal crops to feed the soaring population of this country. The hurdled sheep flock had a key role to play in this. The Wiltshire Eight Course Rotation was: Wheat – Barley – Turnips – Swedes – Wheat – Barley – Grass – Grass. This rotation was beautifully designed both to enhance fertility and to control disease in crops and sheep.

The sheep were really manure carts. About half a farm was generally downland; the sheep grazed there by day and were folded back on the fodder crops on the arable land by night. They thus removed the fertility from the downland and added it to the arable land. This process produced the wonderful herb-rich flowery downlands of Wiltshire, for the lower the fertility the better the flowers.

The sequence of arable crops for the sheep was as follows: After Christmas they would be on swedes and kale and they would lamb on them in February–March. For April–May–June they would be on cultivated grasses, some of which would be conserved for hay, and then for the whole of the autumn would be on turnips. This system was also beautifully balanced for

work for the horse teams, for unless they had continuous work through the year they would not keep fit. During the winter they would be ploughing up turnip and swede ground behind the sheep. In March and April they were sowing barley, May sowing turnips, June hay-making, July sowing swedes, August–September harvest, October–November sowing wheat.

This almost perfect system of agricultural balance – a balanced fertility, disease control and work-load – broke down under the impact of cereal imports from the New World. The New-World farmers were recklessly cashing in on the inherent fertility of new soils. There was no way in which Old-World farmers, who had to husband the fertility of their soils, could compete. The first shipload of grain arrived in 1865, and from then on an increasing flood, combined with a disastrous harvest in 1879, led to the acute depression of British farming which lasted till 1939.

Once financial depression hit the farming industry, the first thing to attract a stringent look was the sheep. As I said, they were manure carts from the downland to the arable land; the down breeds as sheep were not very cost-effective; they were not prolific, they were not good milkers, they did not have high-quality wool, and the labour involved in hurdling them was tremendous. In 1879 the tenant of Pertwood farm went bankrupt; in 1881 my grandfather took the farm, sacked all the men, put the first-ever post and wire fence round the whole farm, brought train-loads of prolific, milky Cheviot sheep down from Scotland, put a Scottish shepherd in the farmhouse – and started making money out of sheep.

As the financial crisis deepened during the 1920s and early 1930s, it was only cash crops that saved farmers. It is often two years between sowing your wheat and selling it; in those years it was then worth half what it had cost you to grow it; the same with beef cattle, the same with sheep. But milk andd eggs and to a lesser extent pigs were sold before the price dropped below the cost of producing them. In Wiltshire we had rivers and water and could keep cows, and Hosier invented the bail in which to milk them cheaply and mechanically. It was milk and eggs and pigs which paid the bills.

But in many places the old system clung on. It had done so well, it was so right. In others, in spite of the cows and the poultry and the Scotch sheep, a hurdle flock was kept on. My father kept one on at Kingston Deverill and my uncle at Codford. It was almost sacrilege not to have one, for it had been the keystone of the old system. But where you depended on it for your living you went bankrupt – all the old yeoman farming families of Hampshire, where there wasn't water for the cows, went out during the twenties and thirties. In Wiltshire we hung on by the skin of our teeth, thanks to milk.

In those years – those of my childhood – the shepherds still behaved like petty dictators, as they had had every right to do 40 years earlier when everything depended on them. Moving the hurdles was a dreadful job. It had to be done every day regardless of the weather, and a general farmworker had to be sent to carry them on a shore balanced on his shoulder through wet turnips over his knees, probably with a wind blowing – to be treated like mud by the shepherd. The shepherd would then tell the boss to send somebody better next day.

The shepherds would never ever help with anything else on the farm. Hay-making was a fearful labour in those days – it was really killing, pushing the stuff up elevators into ricks as the car-sweep brought it in. The dairymen, who had been up since 5 a.m. and were earning the money to keep the whole place going, were considered to have done nothing all day and had to appear to heave the hay up the elevator after tea. But the shepherds said, 'No, we have to mind your business with the sheep.'

The new science of cereal cropping makes it possible to apply phosphates, potash and nitrogen to one's crops and raise the fertility of the whole farm, not half of it, to the maximum. It is so much easier than coping with a shepherd and his sheep, but a whole lot of what is most valuable in life is lost in the doing of it.

MICHAEL STRATTON

Roy Pitman. A Naturalist at Home. Trowbridge: Wiltshire Library and Museum Service, 1984. 182 pages, with numerous colour photographs by the author. £6.85.

Written for pleasure and intended for reading with enjoyment, this is not a scientific work or a reference book; it is a collection of reminiscences culled from the diaries of a man, now in his eighties, who has had a compulsive interest in natural history since the age of seven. It is anecdotal and the writing has a flavour of the thirties, a literary style now rather dated which in no way detracts from the charm of the book.

Roy Pitman belongs to the old school of natural historians, a breed now sadly almost extinct. A true all-rounder, there is nothing in the natural world that does not arouse his interest; not for him recoil at sight of a reptile or from a bat flitting past at dusk, he is much too busy watching, entranced, as a glistening jewel emerges from a shrivelled discarded skin, or marvelling at the agility of a small aerial predator locating its prey.

Compassion is there too, for although, in the fashion of his generation, he was a great collector, he has no time for needless suffering, and the sight of an animal in distress always arouses his pity and compels assistance, his patients providing in return unlimited opportunities for unusual observations and increased knowledge.

Born in Salisbury, Roy Pitman has lived in Wiltshire all his life, written articles on natural history subjects, appeared on television and advised the BBC on the filming of *The Petersfinger Cuckoo*. In spite of travelling widely, he maintained an interest in small things and many of his observations were made at home. Maggots in the peas, small larvae in the carrots or inside an orange or feeding on rat-poison pellets, all are retrieved, offered suitable diets, grow to maturity and provide the occasional thrill when a rare moth emerges. In the Pitman kitchen a slow-worm comes out of the celery, a cabbage contains a nest full of baby field voles; rare birds are brought to his door; if he finds a car abandoned upside down it has tadpoles in the rainwater in the roof. His finds may seem like magic but the ease with which he finds things is deceptive, hiding a lifetime of hard work, a keen eye which looks everywhere and an enquiring disposition which allows him to leave no discarded metal sheet unturned.

Flaws can be found in the publication; someone could have read the script more critically, checked the scientific names. To dwell on these would be to miss the point of the book. It is as if, in reading through his diaries, the author has been caught up again in the events, recapturing the excitement felt at the time; everything rushes from his pen and is poured on to the pages, giving a sense of immediacy which can hardly fail to communicate to the reader some of his own enthusiasm for his subject.

An important book for historical reasons, quite possibly the last of its kind that will be published. It affords a glimpse of Wiltshire half a century ago, when there was a reasonable chance of seeing an otter or a litter of young dormice or of watching a smooth snake give birth to young, and an insight into the character of one whose dedicated and enquiring mind puts him well up among the front runners in the field of natural history in Wiltshire this century.

MARION BROWNE

Shorter notices

As usual, *WAM* has space only to review a handful of the more than 200 books published annually on Wiltshire subjects or with Wiltshire connections. The opportunity is taken here once more to notice a few of those which cannot be reviewed in full.

Major **G.W.G. Allen**, the great pioneer of archaeological air photography in the inter-war years, wrote his **Discovery from the Air** almost 50 years ago. Now his book, intended as a guide to the technique as illustrated by worked examples, has at last appeared, as a number of the enterprising journal *Aerial Archaeology*.[1] Although his basic division of sites into those made visible by shadows, by soil-marks and by crop-marks remains, the book is now, of course, a period-piece more than a practical handbook. One of the 23 views of Wiltshire sites, for example, shows the Avebury Avenue in course of excavation by Alexander Keiller. But so much of the chalkland has been disturbed that these archive photographs, like that of Celtic fields at Winterbourne Monkton, now have a precious value as records of what has gone.

The **Bishopstone history** edited by G.I. Parker[2] is another admirable Wiltshire parish history, telling its story from earlier records in medieval times through to the 20th century. A detailed village map of 1758, setting out the scattered copyholders' allocations before the Enclosures rationalized their tenure, is a special feature. Common lands, manor, church, mill, roads, chalk pits, church and bells, and school all find, as usual, their share of attention and interest.

Nigel Bray's history of the **Devizes branch** railway line[3] gives a full account of the branch that ran from the main Great Western direct route to the West Country up through Devizes and Seend to Bradford and Trowbridge. Bypassed when Brunel chose the route through Swindon for his London–Bristol line, and again when the direct line ran further S through Lavington, Devizes was always off the main track, though there were through trains to London for many years. After the brief busy period of the second war, the line slid into decay and closed in 1967. Nigel Bray's book is very much in the style of railway histories, but lively detail and interest make it of a wider appeal than just to the enthusiastic gricer.

Henry Willis's book on Second World War **Pillboxes**[4] brings field archaeology right up to date –

1. G.W.G. Allen, *Discovery from the Air*, edited by J.S.P. Bradford and O.G.S. Crawford, edited as *Aerial Archaeology*, volume 10, by Derek A. Edwards. East Dereham: Aerial Archaeology Publications, 1984. £4.50 paperback.
2. *An Introduction to the History of Bishopstone*, edited by G.I. Parker. Bishopstone, 1985. £3.75, spiral-bound.
3. Nigel S.M. Bray, *The Devizes Branch: A Wiltshire Railway Remembered*. Chippenham: Picton, 1984. £4.95, paperback.
4. Henry Wills, *Pillboxes: A Study of UK Defences 1940*. London: Leo Cooper/Secker & Warburg, 1985. £12.00.

and with good reason. The concrete home defences of the invasion-scare period are historical monuments, ugly and useless to most modern eyes and usually protected (as Stonehenge was in an earlier century) only by their weight and worthlessness. So it is good they are recognized for what they are, the surviving physical evidence of a crisis of less than 50 years ago. Some are now protected under the historic buildings schedules, and now there is a first-rate history of them. Mr Willis covers the country, but he is based in Salisbury and Wiltshire figures prominently.

Without Reserve by **T.W. Powell**[5] is an amiable and reflective autobiography, including Mr Powell's wartime service, but mostly covering his lifetime's work as an auctioneer and valuer in Chippenham. Mr Powell tells good stories, sometimes of rogues and innocents, and he has a modest and delightful way of telling a story against himself. And he has sharp advice, surely enduring, about how best to sell, if sell you must, and about gazumping, which seems to be an older habit than I for one ever realized.

Kathleen Wiltshire's last and posthumous collection of Wiltshire folk-stories, **More Ghosts & Legends of the Wiltshire Countryside**,[6] is a final round-up of tales she was told, mostly in very recent years, of black dogs, phantom riders, haunted houses, poltergeists and other oddities, collected mostly from her audiences as she talked to Wiltshire clubs and societies.

5. T.W. Powell, *Without Reserve: Memoirs & Opinions of a West Country Auctioneer*. Corsham: C.J. Hall, 1985. £4.50 paperback.
6. Kathleen Wiltshire, edited by Patricia M.C. Carrott, *More Ghosts and Legends of the Wiltshire Countryside*. Melksham: Venton Educational, 1984. £6.95.

Obituaries

Nathaniel John Gordon Clark, known to his many friends as Niel, died aged 87 in July 1985. He was educated at Winchester and Sandhurst. Joining the Army aged 17, he was commissioned into the Devon Regiment with which he went to France in 1916. He later transferred to the newly formed Tank Corps with which he saw action as Section Commander and Reconnaissance Officer. He retired from the Army in the rank of Captain in 1920, when he joined the family firm of wine merchants, Matthew Clark and Sons. Between the wars his holidays took him climbing in the Alps and ocean racing; and a Hellenic tour fired a lasting interest in archaeology. During the second war he rejoined the Army, serving with London District and with London Controlling Section (Deception). Following retirement in the rank of Major in 1946, he became increasingly interested in ancient cultures and archaeology, travelling widely in the classical world, the middle and far east, and central America. He lived in Wiltshire, at Clench House, Wootton Rivers, from 1961 to 1979, joining the Society and developing a particular interest in the county's archaeology and especially in Silbury during Professor Atkinson's excavation.

Niel served on the Society's Council between 1966 and 1975. During the latter part of this period he was chairman of the House Committee and, after the illness of the then President, he acted as Chairman of Council from November 1974 until June 1975. The Society was particularly indebted to him at that time for his stalwart service during a difficult period of financial and organizational uncertainty.

After leaving Wiltshire in 1979, he continued to attend many Society meetings and functions. He and his wife Evelyn Mary, whom he married in 1929, could always be looked to for advice and support. Shortly before his death he attended the AGM at Lydiard Tregoze in June 1985, then as ever delighting fellow members and Society officers by his enthusiasm, good humour and unfailing loyalty.

Geoffrey Grigson. Long resident in Wiltshire and a member of our Society since the 1930's, Geoffrey Grigson, poet, critic, naturalist and antiquary, died in November 1985. A countryman by birth and residence, he combined the 'archaeological and natural history' aspects of our title in one perceptive and alert intelligence, bringing together imagination and scholarship in a way which satisfied his own ingeniously polymathic mind, but which he could transmit to his readers in vigorous and elegant prose. He valued his association with the Society, and wrote a charming and sympathetic essay on Canon E.H. Goddard, our great Editor for 52 years.

He put on record his early delight in *Antiquity* under Crawford's original editorship – 'this educated imaginative editor' of 'the flower of all periodicals familiar to me in my day' – and he himself brought to French palaeolithic cave paintings the same understanding as he did to Henry Moore or Samuel Palmer. He discovered and appreciated William Stukeley when he was scarcely known except to students of Stonehenge and Avebury, and his anthology *The Romantics* (1942) contains no less than five long quotations from his writings – more than from Gray and equal to Crabbe and Cowper. His knowledge of the by-ways of the 18th century was a rich delight, and I well remember one fascinating conversation with him which began with Aeolian Harps (on which in fact he wrote) and ended in Magic Lanterns.

But his erudition and imagination were most agreeably combined in his books on plants and gardening. One imagines him writing at a window open to the garden, with Godwin and Vavilov at his left elbow, Parkinson and Gerarde at his right, and in between, most of English literature in his head. *The Englishman's Flora* of 1955 and the *Dictionary of English Plant Names* of 1974 are books dangerous to the curious: you look up an innocuous item and an hour or two later you are still there, an addict thirstily swigging yet another entry full of arcane and recondite information.

He is a loss to English letters and to Wiltshire. In the 17th century he would have been called 'a curious Gent' and would have appreciated the implied compliment. Thomas Hardy, fellow-poet and curious observer of the Wessex countryside, had the same quality, and indeed the phrase – 'He was a man who used to notice such things.'

Julia de Lacy Mann, MA, DLitt., was born in London in 1891, the daughter of a former philosophy don at Cambridge. She was educated at Somerville College, Oxford, where she read Literae Humaniores. After graduating she combined social work in London with the study of the then new subject of economic history, and took the Social Science Certificate at the London School of Economics in 1915. War work included

periods at the Admiralty and then the Foreign Office, and she was present at the Versailles Conference in 1919.

After this she returned to Oxford to read for the diploma in Economics. There, under the influence of one of her tutors, she turned her attention to the history of the cotton industry, at first intending to work for a Ph.D. Through this she came into contact with A.P. Wadsworth, then labour editor of the *Manchester Guardian* and subsequently its editor, who was also working on the early cotton industry. Their joint book, *The Cotton Trade and Industrial Lancashire, 1600–1780*, was published in 1931 and remains today an important work in its field.

Meanwhile, in 1923, Miss Mann had become Vice-Principal of St Hilda's at Oxford and Tutor in Economics, and then in 1928 Principal of the same college. This post she held with great distinction until she retired in 1955. Administrative concerns limited her academic work, but she played an important part in the development of her chosen field, as assistant editor of the *Economic History Review*, and as a teacher and supervisor of research.

When she moved to her retirement home at Bowerhill near Melksham she turned again to serious work on textile history. She contributed the post-medieval chapter on the woollen industry to the *Wiltshire V.C.H.*, and wrote articles on the Wansey clothing family of Warminster and on labour relations in the 18th century. She also contributed the chapter on early textile machinery to the *History of Technology*. The full fruit of her enormous work effort was *The Cloth Trade in the West of England from 1640 to 1880*, published in 1971, a book which any reader can enjoy for its massive authority combined with clarity of exposition. She subsequently made further contributions to the journal *Textile History*, and until almost the day of her death was occupied with research on her family background in Guernsey.

Miss Mann served as a co-opted member on the County Education Committee and the County Records Committee for many years, and was a frequent lecturer to local bodies. She had been a member of the Society since 1948, and attended outings and meetings regularly. Her academic background, the precision of her mind and speech, her tall and stately presence, and in recent years her great age, might have made her formidable, but in fact they were softened by real kindness and a notable sense of humour. She was always happy to pass on her knowledge and advice to younger workers on the history of textiles, and all her friends were aware of the wide range of her literary and political reading. She was presented with a *Festschrift* in 1973, and her 90th birthday was marked at a Pasold Research Fund conference at Oxford in 1981, both occasions which she much valued.

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