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Volume 89 1996

THE WILTSHIRE ARCHAEOLOGICAL AND NATURAL HISTORY MAGAZINE

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This volume of the *Magazine* is dedicated, with affection and gratitude, to the memory of Margaret Guido, FSA, Vice-President of the Society, who died on 8 September 1994.

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The Society was founded in 1853. Its activities include the promotion of the study of archaeology (including industrial archaeology), history, natural history and architecture within the county; the issue of a Magazine, and other publications, and the maintenance of a Museum, Library, and Art Gallery. There is a programme of lectures and excursions to places of archaeological, historical and scientific interest. The Society also maintains the Wiltshire Biological Records Centre at the Museum.

The Society's Museum contains important collections relating to the history of man in Wiltshire from earliest times to the present day, as well as the geology and natural history of the county. It is particularly well known for its prehistoric collections. The Library houses a comprehensive collection of books, articles, pictures, prints, drawings and photographs relating to Wiltshire. The Society welcomes the gift of local objects, printed material, paintings and photographs to add to the collections.

The *Wiltshire Archaeological and Natural History Magazine* is the annual journal of the Society and is issued free to its members. For information about the availability of back numbers and other publications of the Society, enquiry should be made to the Secretary.

Contributions for the Magazine should be on subjects related to the archaeology, history or natural history of Wiltshire. There is no fixed length. Papers, notes and reviews should be typed on one side of a page only, with good margins and double spacing. The style for footnotes, references and so on should be that found in this issue. The author-date system is preferred for references and footnotes should be avoided unless essential. Contributions of article length should be accompanied by a summary of about 100 words. Two copies, one of which is a top copy, should be sent to the editor at the Museum, 41 Long Street, Devizes, Wiltshire, SN10 1NS. A further copy should also be retained by the author. The editor and subject editors will be pleased to advise and discuss with intending contributors at any stage during the preparation of their work. They will also supply notes, if requested, which may be helpful in explaining house style and in giving advice on the compilation of references and bibliographies, and the preparation of illustrations.

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Prehistoric Sites and a Romano-British Settlement at Butterfield Down, Amesbury

by MICK RAWLINGS and A.P. FITZPATRICK

with contributions by
D.A. ALLEN, MICHAEL J. ALLEN, A. BURNETT, ROSAMUND M.J. CLEAL, M. CORNEY, ANDREW CROCKETT, S.M. DUGGAN, J. EGERTON, M. FAIRBROTHER, P.A. HARDING, M. HENIG, J.I. MILLARD and SARAH F. WYLES

Work in advance of house building allowed the planning and limited excavation of prehistoric and Romano-British sites. A possible Late Neolithic pit-ring henge was identified, while a ring ditch, a crouched inhumation and a decorated chalk plaque were considered to be probably of Early Bronze Age date. A pit containing the major portion of a large Beaker and fragments of two other Beakers was found adjacent to a large ditch which is probably of later Bronze Age date. Early Roman occupation lay largely outside the areas examined. A village-like later Roman settlement was identified, where a wide range of environmental and artefactual evidence indicates a mixed farming economy. Parts of an outlying enclosure of the same date were examined. An early 5th-century gold coin hoard was also found.

INTRODUCTION

The archaeological investigations considered in this report were undertaken by Wessex Archaeology for The Gleeson Group plc. Work was conducted in several stages from February 1990 until 1993, both prior to and during construction of a new housing estate on 23ha of open ground on the eastern outskirts of Amesbury (centred on SU 166414: see Figure 1). The estate, named Butterfield Down after architect William Butterfield (1814–1900), who worked on the parish church of St Mary and St Melor, Amesbury, is still under construction and there is a possibility that further archaeological work may take place.

Archaeological investigations began with a systematic surface artefact collection over the whole site (Figure 2), and were followed by the excavation of a series of 21 small 'keyhole trenches' (Figure 3) and a subsequent watching brief. In October 1990, the findspot of a hoard of eight gold coins just to the north of Trench 22 was examined (Figure 1). A geophysical survey covering 3.5ha, designed to locate concentrations of features in the area to the north of Trench 22 was carried out in the same month. A smaller area to the west of Trench 22 was included in the survey as a means of testing the feasibility of geophysical survey techniques on this site; this area was to be stripped and investigated as Trench 23 in November 1990.

Two areas were subjected to an archaeological watching brief during topsoil stripping early in 1991 (Figure 3, Trenches 25 and 26). An evaluation comprising geophysical survey and trial trenching was carried out in December 1991 in an area at the south-western edge of the development site (Figure 4).

In August 1993 a further area along the eastern edge of the site was examined prior to development (Figure 5) and a Beaker pit was found.

The methodology and results of each phase of work are discussed below.

Geology and topography

The site is situated on the western part of the predominantly flat-topped ridge of Cretaceous Upper Chalk known as Boscombe Down (Figure 1, B). No deposits of clay-with-flints have yet been recorded and the soils are typically thin rendzinas, becoming slightly thicker on the slopes. The land slopes down gently to the north and west. Most development so far has taken place on the more level ground at the southern edge of the field, between 110m and 115m OD.

Archaeological background

Butterfield Down is situated within a rich archaeological landscape (Figure 1, B–C). Stonehenge is less than 5km to the west; there is a group of well-preserved Bronze Age barrows 1.3km to the

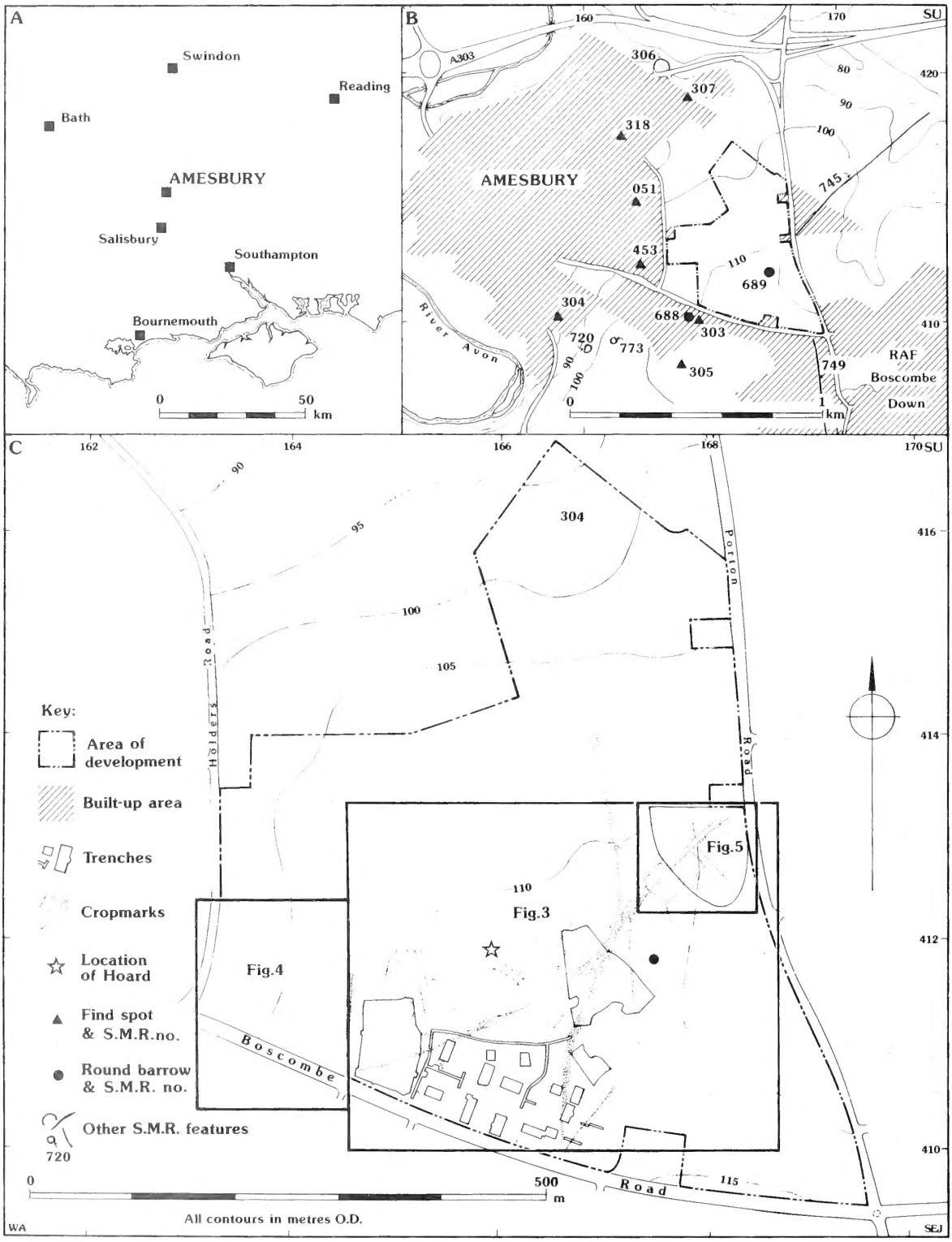


Figure 1. Butterfield Down: Location in relation to Amesbury and previously known sites and monuments (A–B); distribution of cropmarks, excavated trenches, and location of gold coin hoard (C)

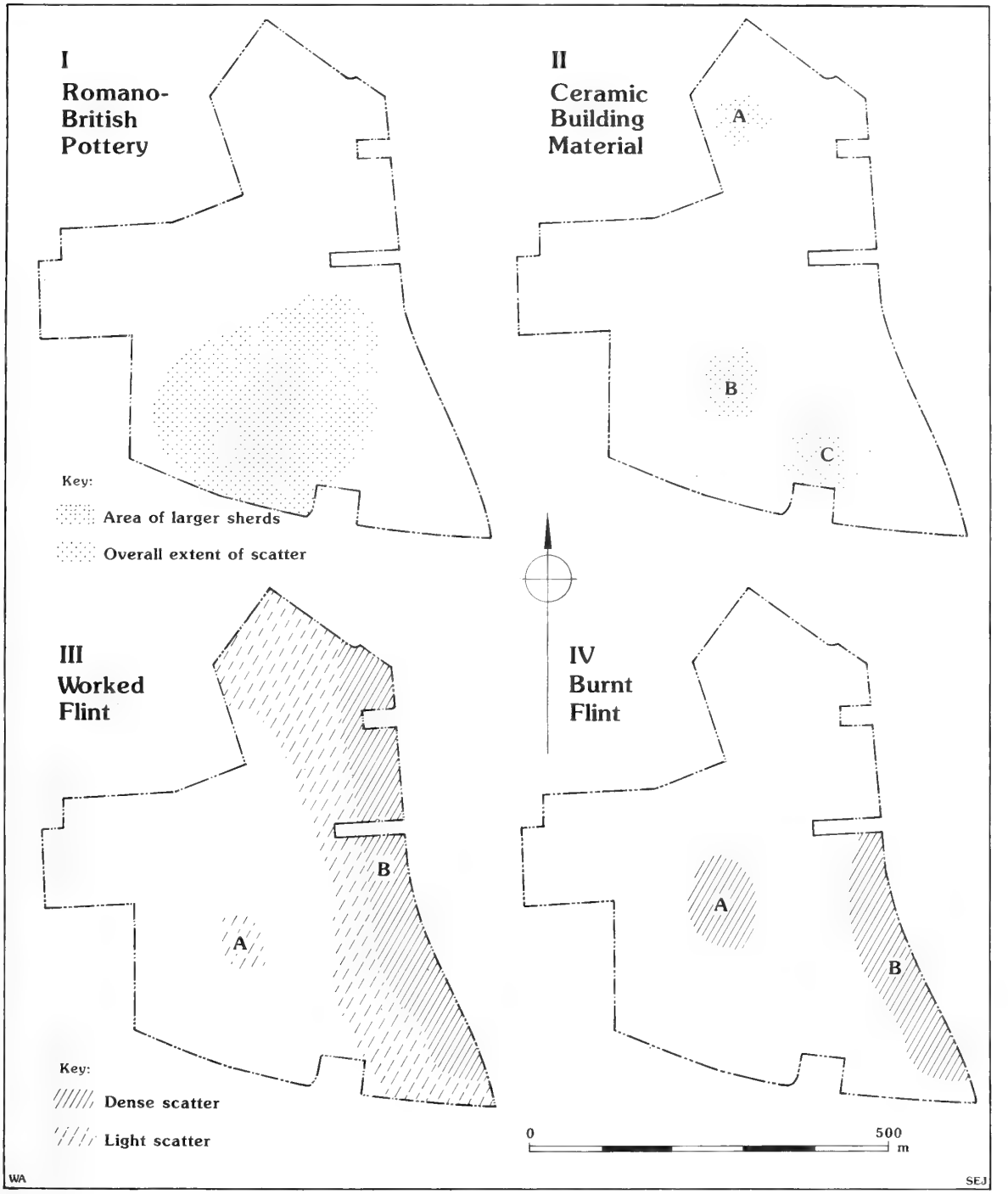


Figure 2. Butterfield Down: distribution of selected materials recovered in fieldwalking survey

north-east on Earl's Farm Down, and a bowl barrow immediately to the south of the site (Sites and Monuments Record (SMR) 688) was destroyed in 1951. The existence of further barrows is suggested by ring ditches recorded as cropmarks to the south-west (SMR 720 and 773). The SMR records a possible round barrow within the development area (SMR 689) noted by O.G.S. Crawford on his private 6-inch map but this monument cannot now be located either on the ground or in aerial photographs.

A large ditch (SMR 745) which forms one element of the Earl's Farm Down network of Bronze Age linear features (Bradley, Entwistle and Raymond 1994, fig. 22), runs up to the eastern edge of Butterfield Down and continues across the development area. Another ditch (SMR 749), which had a low bank on each side, lay to the south-east of the site but is now largely built over; it may also be part of the Earl's Farm Down network, possibly a continuation of SMR 745.

Archaeological work during building at Boscombe Down airfield, to the east of the present site, revealed widespread occupation during the late Iron Age and Romano-British periods (Richardson 1951). Cropmarks recorded in recent aerial photographs at Southmill Hill, less than 1km to the south-west of Butterfield Down, have been interpreted as further evidence of activity in the later prehistoric period (McOmish 1989, fig. 5). Aerial photographs taken in 1990 by the RCHM(E) show several large and diffuse linear features, possibly trackways, running into the central area of Butterfield Down. Also visible is a group of ditched enclosures at the eastern side of the development area and several shorter lengths of linear cropmarks (Figure 1, C). The enclosures are close to the line of the large linear ditch, SMR 745.

The numerous known features and findspots of the Romano-British period provide evidence of intensive activity at that date in the area. Immediately south of the site, construction work in 1951 revealed two middens containing Romano-British pottery as well as a ditch, pits and a roadway (SMR 303). Further south, a pot was found in *c.*1842, within which were bronze and silver coins of the 3rd and 4th centuries AD and some silver finger rings (SMR 305, and Corney, below). Part of a Romano-British inhumation cemetery (SMR 306) was located during railway construction in 1900 north of the site, and further sherds of Roman pottery have also been found close by (SMR 307). To the north-west of Butterfield Down a bronze coin of the late 3rd century AD was found in a garden (SMR 318) and to the south-west a series of late 2nd- to 4th-century AD coins was recovered in 1922 and 1972 (SMR 304).

In addition, a Neolithic stone axe and several items of metalwork have been found within recent years at Butterfield Down by local metal-detector users and identified by Salisbury and South Wilts Museum. The metalwork includes a possible Late Iron Age sword hilt pommel, a Roman disc brooch, a medieval harness pendant and a post-medieval copper alloy strap end.

Throughout this report the terms early and late Roman refer to the 1st–2nd and 3rd–5th centuries AD, respectively.

Fieldwork

by MICK RAWLINGS

METHODOLOGY

Phase 1: Fieldwalking

An extensive fieldwalking survey was carried out across the whole of the development site in February 1990. Although there was a low crop cover, ground conditions were reasonable and artefact recovery was good. All artefact types were collected along a series of 25m transects at 25m spacing, on a grid based on the National Grid, and a full report was prepared (Wessex Archaeology 1990).

Phase 2: Excavation stage 1

In July 1990 a series of small trenches was opened at the southern end of the development area (Figure 3, Trenches 1–21). After machine-stripping, all features were hand-cleaned and planned and a sample of feature types was excavated to assess the date and nature of earlier activities. Most of the trenches were placed where a concentration of Romano-British pottery was identified during fieldwalking. Trenches 1–13 were located on the sites of proposed houses, Trenches 14–19 along the routes of proposed roads, and Trenches 20 and 21 were positioned to examine a linear feature recorded on aerial photographs (Figure 1, C). A watching brief was subsequently carried out during construction within the overall area in which Trenches 1–21 were located; features were identified but not excavated: this area was recorded as Trench 22.

Phase 3: Excavation stage 2

In November 1990 a second stage of excavation (Trench 23) was carried out ahead of development to the west of the previous excavations. The principal

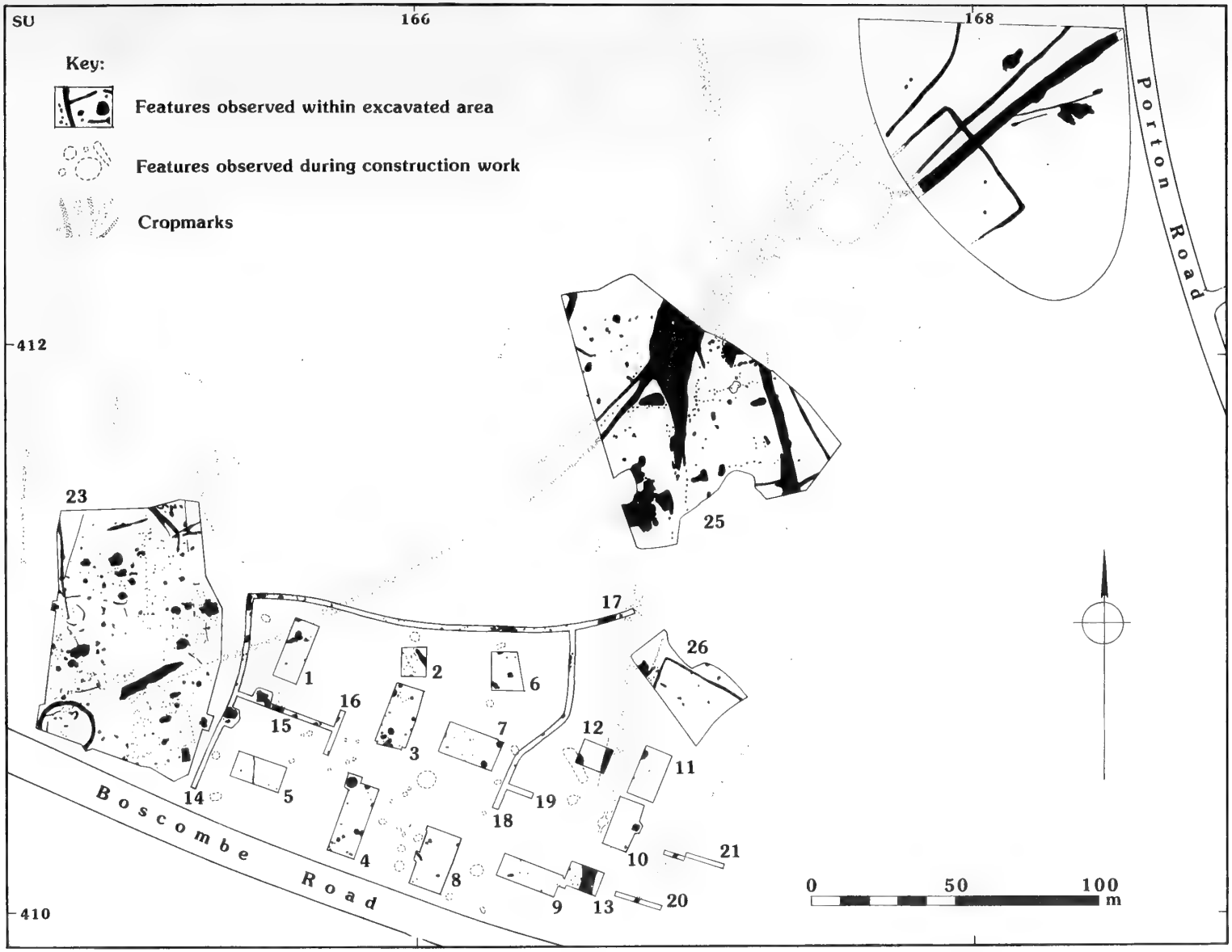


Figure 3. Butterfield Down: location of Trenches 1–26 and archaeological features (all phases); Trench 22 is the overall area within which Trenches 1–21 are located

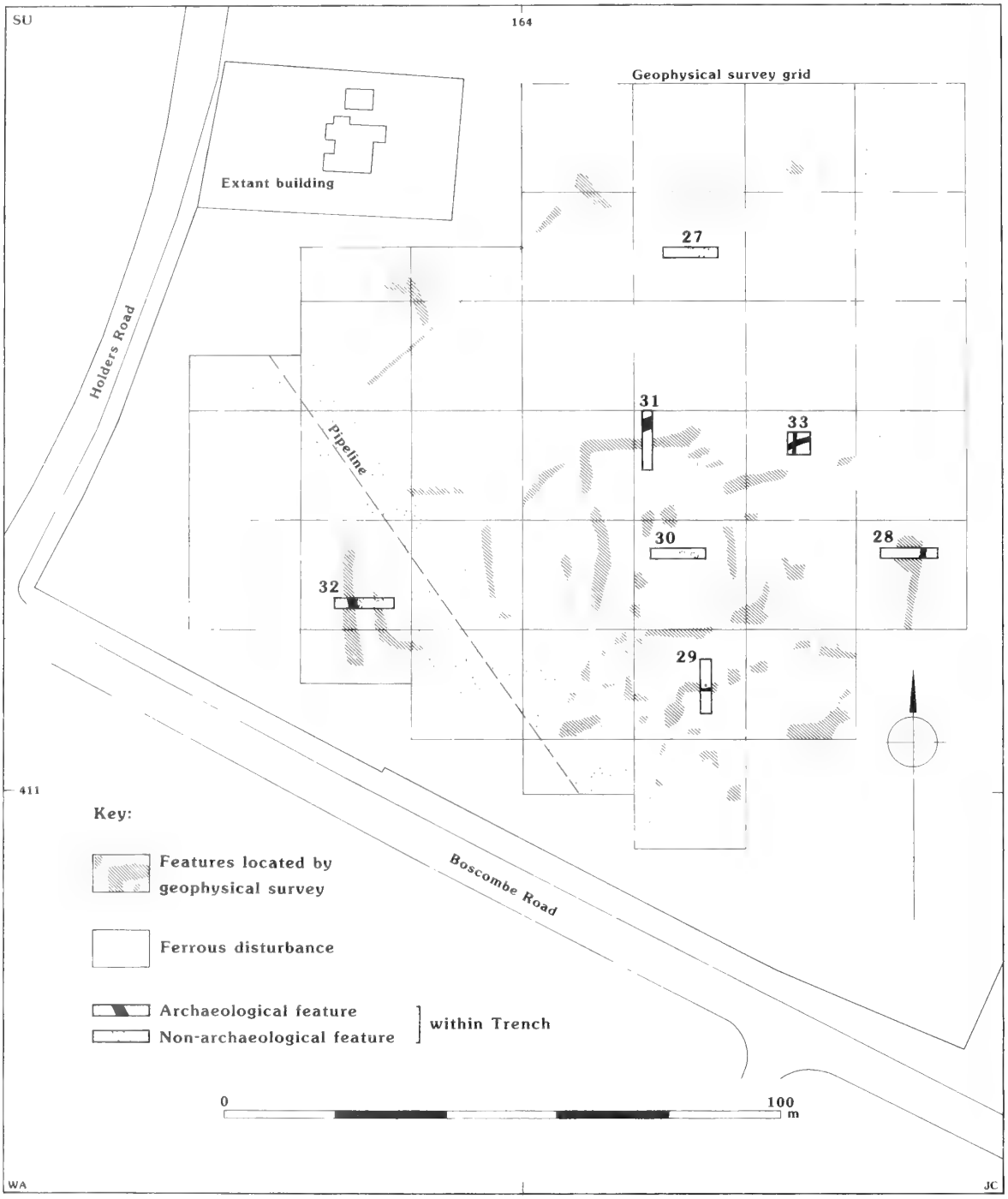


Figure 4. Butterfield Down: geophysical survey and trial trench evaluation in the south-west corner of the development area

objective of this work was to recover an accurate plan of a substantial area of the site. The whole area (*c.*0.54ha) was stripped using a mechanical excavator and the exposed chalk was then hand-cleaned. All features were planned (Figure 6) and a sample was excavated. In general the density and distribution of the features in the trench confirmed the results of the geophysical survey within this area, which had indicated a large number of discrete features but no substantial linear ones. A similar pattern was recorded by a geophysical survey in the area to the north of Trench 22.

Phase 4: Watching Brief
An archaeological watching brief was carried out during pre-construction work to the north of the Phase 2 excavation area (Figure 3, Trenches 25 and 26). Following machine-stripping of the soil cover, all visible features were planned and recorded. No excavation was undertaken within these trenches.

Phase 5: Evaluation
A geophysical survey was undertaken across the area of land located immediately to the west of Trench 23 (Figure 1) prior to construction work. A number of trial trenches were dug to investigate areas suggestive of high or low archaeological potential and a sample number of archaeological features was excavated (Figure 4).

Phase 6: Excavation stage 3
Following machine-stripping of the soil cover over an area of land located on the eastern edge of the development area (Figures 1 and 5), all visible features were planned and recorded, and a sample of feature types was then excavated.

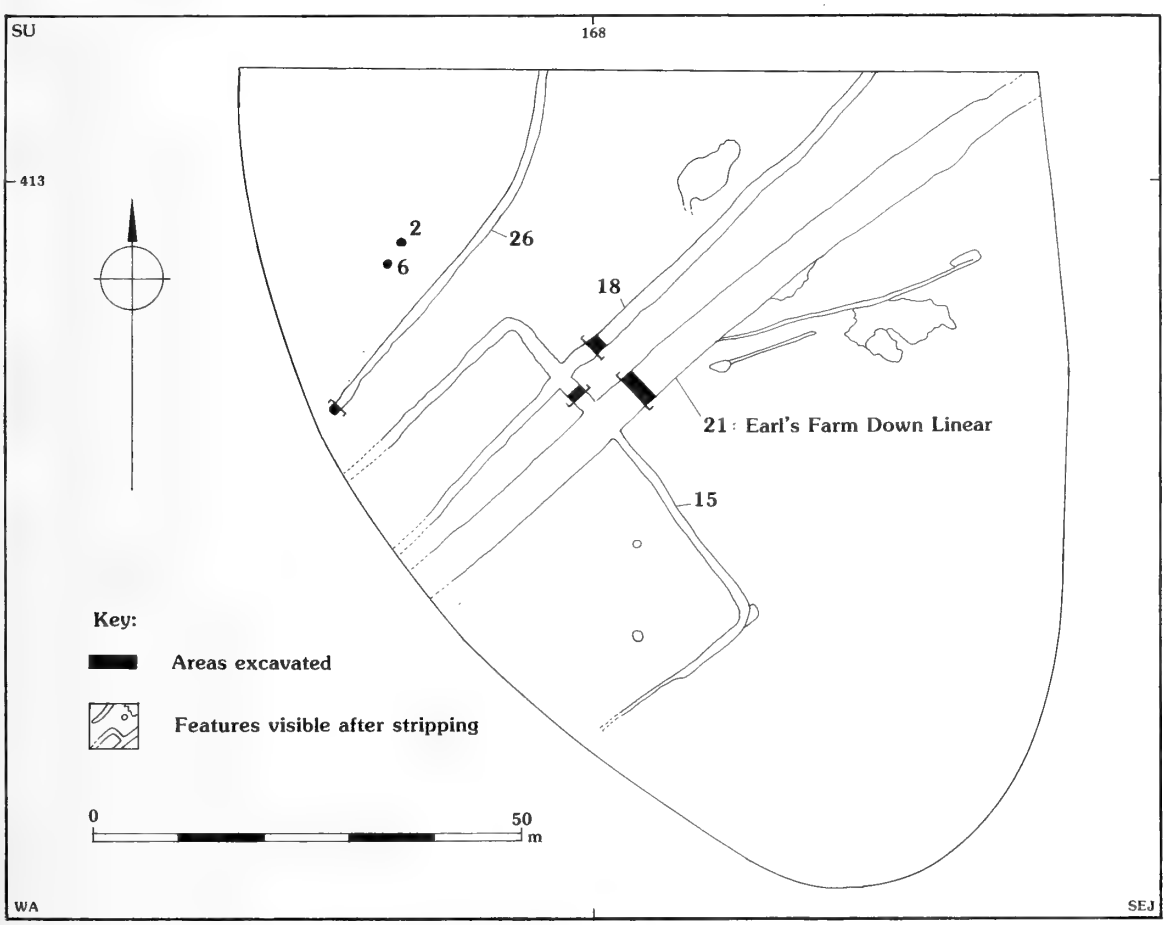


Figure 5. Butterfield Down: Beaker Pit (2) and prehistoric and Romano-British ditches at the eastern edge of the development area

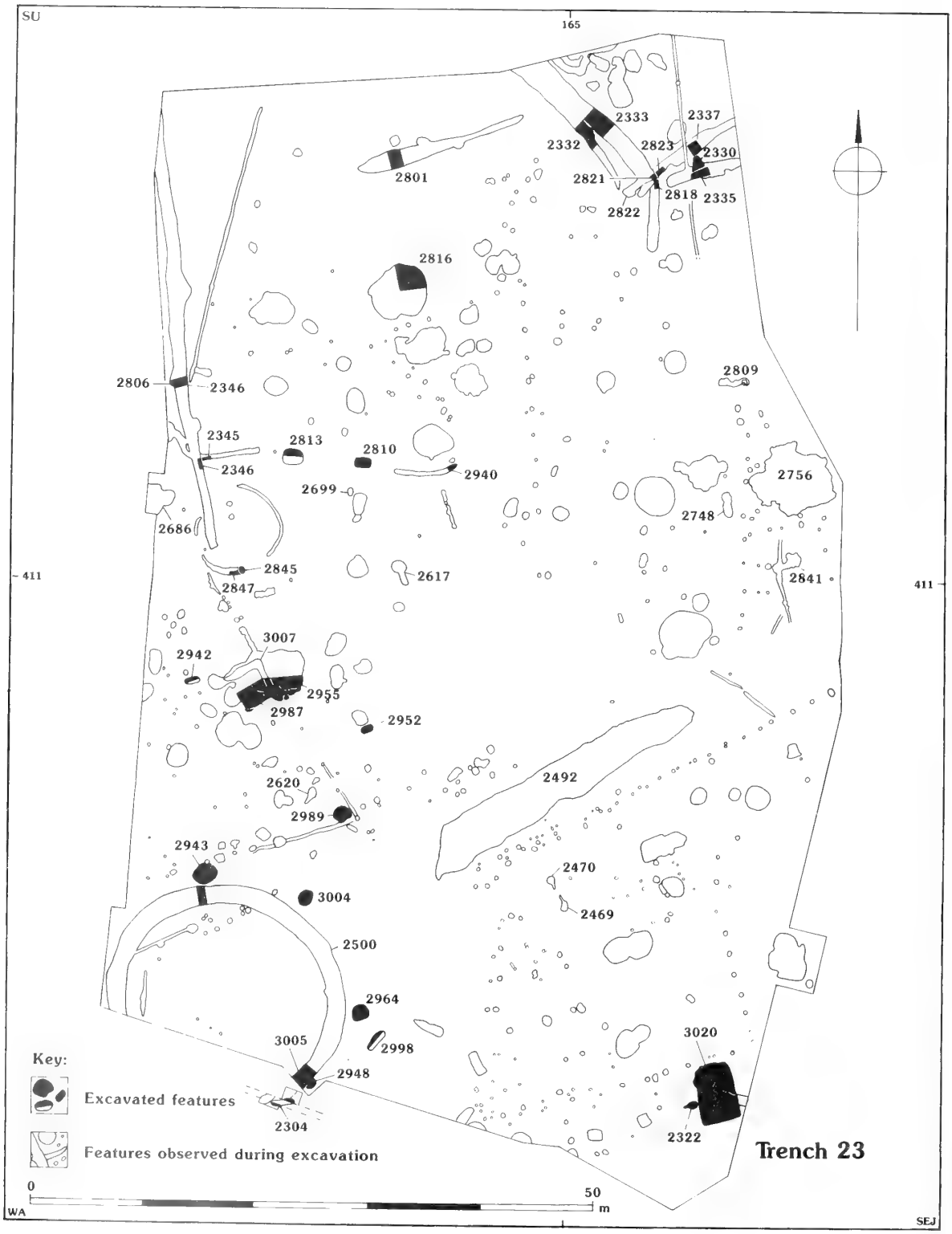


Figure 6. Butterfield Down: plan of archaeological features in Trench 23 (all phases)

FIELDWALKING RESULTS

Almost all of the pottery found was Romano-British and spanned the whole of that period. There was a clear concentration in the southern part of the development area (Figure 2, I), within which was an area of larger sherds.

Three distinct concentrations of brick and tile were identified (Figure 1, II, A–C). Of these, only B could be positively dated as Romano-British; C mainly comprised modern building debris but A contained few datable pieces.

The main concentration of worked flint was along the eastern edge of the development area (Figure 2, III, B, with a small discrete cluster indicated at A). Most of the flint was heavily plough-damaged making precise identification difficult; however, the majority of tools were scrapers. Apart from the scrapers only one tool, a fabricator, was found. Overall the technology of the assemblage shows little evidence of deliberate blade production and this, together with the restricted range of tool forms, suggests that the majority of the worked flint can be dated to the later Bronze Age.

The distribution of burnt flint (Figure 2, IV) is similar to that of worked flint, with a small cluster in the centre of the field (A) and a broader concentration (B) along the eastern edge. In the course of other surface collection surveys in the vicinity of Amesbury, there has been a consistent association between higher levels of surface burnt flint and areas of later Bronze Age activity (Richards 1990).

A few fragments of quernstone were also recovered during the surface collection, as well as a Roman coin, all from within the main scatter of Romano-British pottery.

The fieldwalking highlighted areas of greater archaeological potential within the development area. A definite concentration of worked flint associated with a scatter of burnt flint suggested activity during the later Bronze Age along the eastern edge of the field, which may be associated with a linear ditch and enclosures adjacent to this area identified on aerial photographs. The other cropmarks seen in aerial photographs appear to be associated with an extensive area of Romano-British settlement, within which a discrete concentration of ceramic building material (Figure 2, II, C) may derive from one or more substantial buildings.

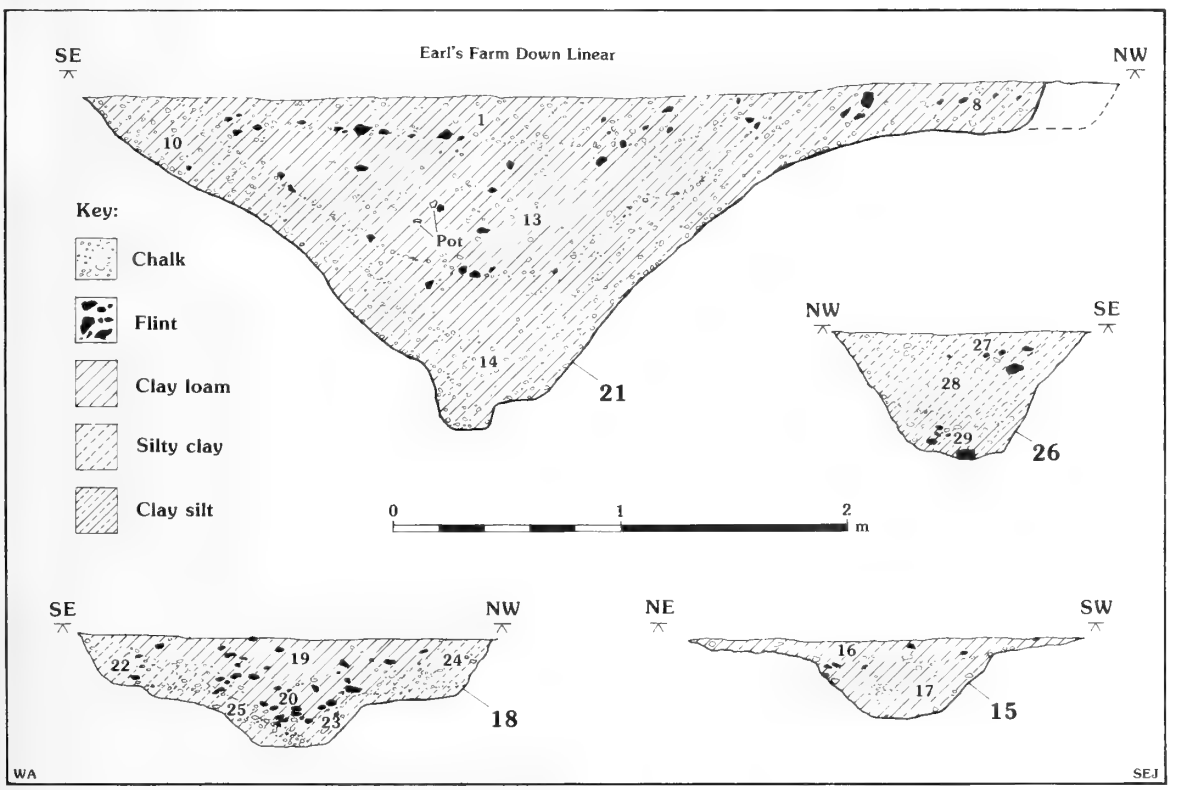


Figure 7. Butterfield Down: sections through prehistoric ditches at the eastern side of the development area

The excavations and associated works

PREHISTORIC

Beaker pit and linear ditch

A number of small pits were recorded following machine-stripping of an area of land at the eastern edge of the development site (Figure 5), and two of these were subsequently excavated. Pit 2 was irregular in both plan and profile, generally measuring 0.8m in diameter and 0.3m in depth. The single homogeneous fill contained the fragmented major portion of a large decorated Beaker (Figure 15, 1) and sherds of two other Beakers, along with several pieces of worked flint. Pit 6 was more circular in plan and measured 0.75m in diameter and 0.15m in depth. A few pieces of worked flint were recovered from the single fill, but no other finds were noted.

Located close to these pits were two nearly parallel ditches aligned north-east/south-west. The smaller and more northerly of these (Figure 5, 18) was 1.9m wide at the surface and 0.5m deep. The profile is of a shallow, flat-based feature with a deeper central gully which suggests a recut of the ditch (Figure 7), though no such event was discernible within the fill sequence. A single sherd from a coarse Beaker was found in the basal fill, and a sherd from a Collared Urn was found in the upper fill along with several small sherds of Romano-British pottery. A bronze coin of Romano-British date was found on the surface of this feature.

Ditch 21, to the south, is almost certainly the large linear feature recorded as SMR 745, visible as a cropmark and extant earthwork for over 5.5km eastwards from Butterfield Down. This has been the subject of previous investigations (Cleal *et al.* forthcoming) and is suggested to be part of a land division system of probable Late Bronze Age date (Bradley, Entwistle and Raymond 1994). The present ditch was 4.15m wide at the surface and 1.45m deep. It was V-shaped in profile and had a small, vertical-sided, flat-based slot at the base (Figure 7). A chalky basal fill extended up the sides of the ditch. The upper fills were darker and more loamy, and contained several sherds of pottery, predominantly of Romano-British date but including one of Late Iron Age date and one modern. No finds were recovered from the lower ditch fills.

Trench 23

A ring ditch in the south-west corner of Trench 23 was probably 20m in diameter, although not all of it lay within the excavations (Figure 6, 3005). Two sections were excavated across the ditch revealing that it was 1.5m wide at the top, 0.8m wide at the bottom and 0.6m deep, with a flat base. A substantial quantity of worked flint was found within the ditch fill sequence: much of it was primary knapping debris, while elements of blade production on the cores indicated a later Neolithic/Early Bronze Age date. Two small sherds of undiagnostic Roman coarseware were found in the upper fill of the ditch; no pottery was found in the primary fill.

Four pits lay adjacent to the ring ditch. To the south-east a small oval pit (2948) had been cut through the outer edge of the ditch. It was about 1m long and 0.35m deep with steep, straight sides and contained a large assemblage of worked flint characteristic of the later Bronze Age along with three sherds of Late Bronze Age pottery. Three sherds of Romano-British pottery are considered to be intrusive.

A circular pit (2943) just to the north of the ring ditch was 2m in diameter and 0.6m deep. The upper fill contained a few pieces of undiagnostic worked flint and a small quantity of pottery, including one sherd of later Neolithic Peterborough ware and two sherds of Middle–Late Bronze Age Deverel-Rimbury type. Although one of the remaining sherds was Romano-British, the others were certainly prehistoric and in a fabric similar to the Peterborough ware sherd. No finds were recovered from the basal fill.

To the east of this pit was a slightly smaller circular pit (3004) 1.2m in diameter and 0.6m deep, containing only a few undiagnostic worked flints in the upper fills. On the flat base of the pit was the crouched inhumation of a child aged approximately 12 years (Plate 1) who had suffered from a severe abnormality of the lumbar vertebrae which might have caused permanent paralysis. There were no accompanying grave goods, but in the compacted shallow fill below the skeleton was a tiny sherd from an accessory vessel, possibly an Early Bronze Age 'incense cup' (Figure 16, 1).

Pit 2964 was 1.5m in diameter and 0.45m deep. A few small fragments of human bone were recovered from the upper fill but there were no finds in the lower fills. To the south-east of this pit was a subrectangular feature (2998), 2.2m long by 0.7m wide and 0.35m deep, with steep sides and a flat base. No artefacts were found but the colour and texture of the fills were similar to those found in the prehistoric features. Three similar subrectangular features lay close by and could have been part of a small, segmented ditch enclosure adjacent to the ring ditch.

Plate 1. Butterfield Down: (child) Burial 3004, probably Early Bronze Age, from Trench 23

ROMANO-BRITISH

Trenches 1–22. Features of Roman date were recorded in every trench but Trench 19 (Figure 8). The highest density of features was in the central and western parts of the area (Trenches 2, 3, 4 and 7), with markedly lower densities in the east (Trenches 10–11) and south-west. A wide range of feature types was recognised and sixteen individual features or groups of features were excavated.

The wide linear feature 1302 (Trench 13) was shown to be only 0.25m deep and to contain a substantial quantity of late Roman pottery. It appeared to continue into Trench 12. The feature correlates with one recognised in air photographs (Figure 1, C) and its interpretation as a trackway was confirmed by the excavation. A shallow feature (1202) excavated in Trench 12, which had a basal layer of packed burnt flint, may be the remains of an associated trackway.

A feature recognised in air photographs and identified in Trenches 20 (2001) and 21 was shown to be 0.7m deep with a flat base. Although the only dating evidence was four undiagnostic Roman sherds, the feature may be either a ditch enclosing the eastern part of the site or a part of a contemporary field system next to the settlement. Other linear features included a short and very shallow curving gully (Trench 8, 808) and the terminal of a ditch (Trench 2, 202) of similar size to 2001, which had been recut at least once. The earlier ditch contained only Roman coarsewares; the recut included diagnostic late Roman types.

Two pits, 312 (Trench 3) and 404 (Trench 4) were excavated to a depth of 1.9m and 2m, respectively, before being backfilled. Large quantities of sheep bones were recovered from pit 404, in particular mandibles and foot elements. Substantial quantities of late Roman pottery were recovered from both pits but pit 404 also contained a single sherd of Early Bronze Age date as well as a fragment of a clay spindle whorl and two bone objects.

Two further pits, 304 and 306 (Trench 3), were *c.*0.35m deep and contained undiagnostic Roman coarsewares, although two sherds of the later Bronze Age were found in 306. Three groups of features were excavated in Trenches 1, 6 and 15. In each case the irregular plan of the group was shown to be the

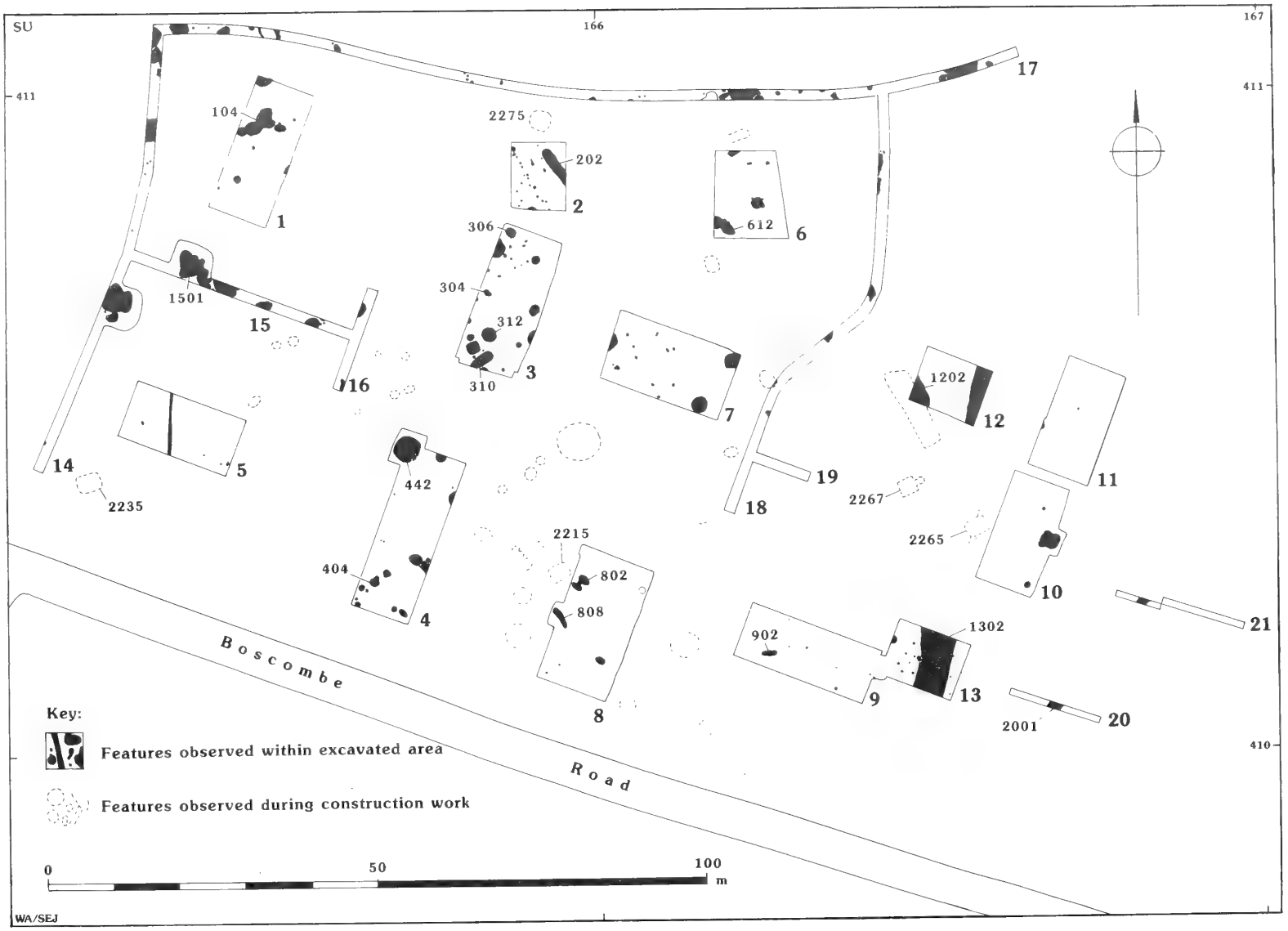


Figure 8. Butterfield Down: archaeological features in Trenches 1–22

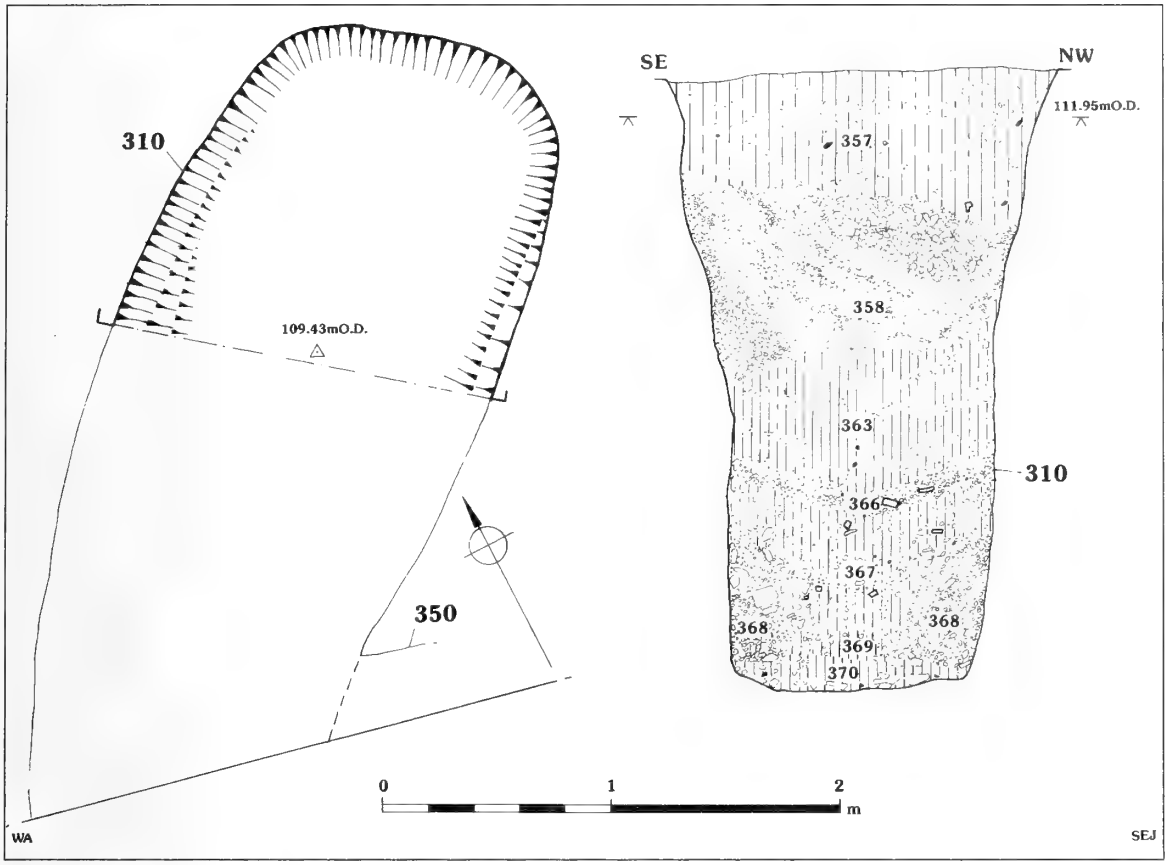


Figure 9. Butterfield Down: plan and section of ditch or pit 310 in Trench 3

result of a series of shallow intercutting scoops. The pottery from the groups in Trenches 1 and 6 was late Roman but that from the group in Trench 15 was early Roman.

Feature 310 (Trench 3) was similar in profile (Figure 9) to pits 312 and 404, although this one was excavated to the base, a depth of 2.7m. It was not clear on excavation if this was a ditch terminal or an elongated pit. The complete corpse of a crow (either carrion or hooded) had been placed on the chalk bedrock and covered with a layer of dark soil (370). No other finds were recovered from this layer but the two overlying fills (369 and 367) contained large quantities of late Roman pottery and other finds such as animal bones and oyster shells. The upper part of the pit contained a deposit of chalk rubble (358) and a final fill of brown silty clay loam (357). Finds from 357 included late Roman pottery and a small chalk plaque with incised decoration (Figure 14 and Plate 4).

A dumbbell-shaped feature (802) in Trench 8 was demonstrated to be a small, oval dryer or oven, with an ovoid hearth at the south linked by a short flue to the stokehole at the north. The hearth contained blocks of burnt chalk and 2nd-century or later coarsewares.

At the north-west corner of Trench 4 a sub-rectangular feature, possibly the remains of a cellar or a sunken-floored building (442), was 3.7m long and 2.7m wide, with an average depth of *c.*0.4m (Figure 10). The undulating base rose slightly in the north-east corner and along the eastern side there was a small ledge. Towards the southern end of the ledge was an oval depression 0.2m deep (444) which, if contemporary, may have supported a post or been a step. There were two stakeholes at the north-east corner of the feature. Large quantities of 3rd- and 4th-century pottery were recovered.

A number of postholes were found, including an alignment which represented a fence running across Trenches 2, 7 and 9. Other fence-lines may exist and it is possible that the site was divided internally.

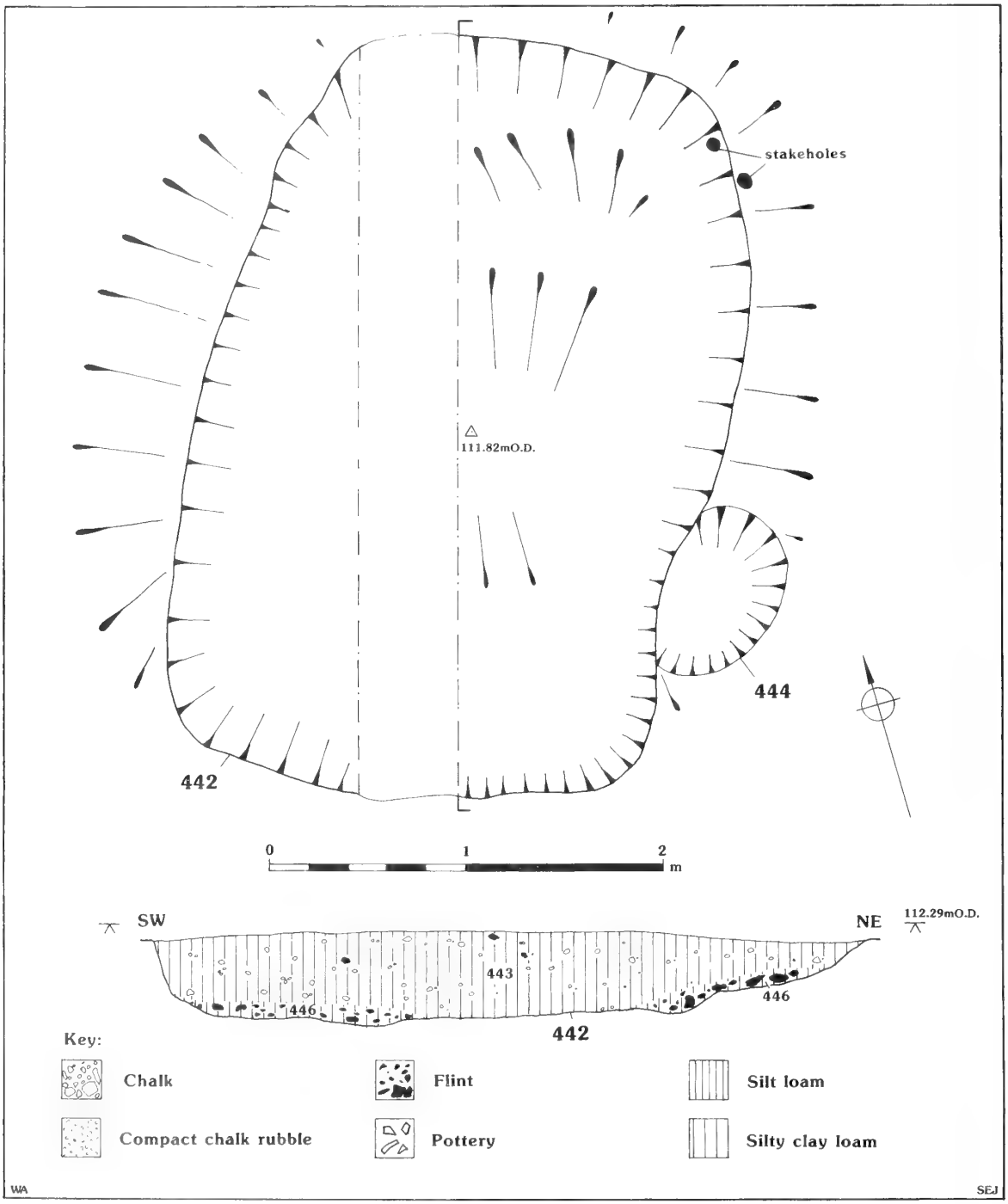


Figure 10. Butterfield Down: plan and section of sunken-floored building 442 in Trench 4

Plate 2. Butterfield Down: corn drier 2267, Trench 22

After the excavation of Trenches 1–21, topsoil was stripped from the whole area by the developer, and this was called Trench 22. The use of a tracked bulldozer made the recognition of archaeological features difficult. Even so, some larger features were recorded and planned (Figure 8). Four features (2215, 2235, 2265, 2275), which were similar in size, shape and alignment to the sunken-floored feature, were augered and the depths at their centres ranged from 0.35m to 0.43m. These features may also have been cellars or sunken-floored buildings.

The sole feature (2267) cleaned and accurately planned within Trench 22 was a very well-defined rectangular pit 2.7m long and 2.5m wide (Plate 2) with a smaller circular element attached to one side. The pit had mortared flint walls which were capped by flat limestone slabs in places. The evidence from the corn drier or malting kiln excavated subsequently in Trench 23 suggests that pit 2267 may also have been part of a similar structure.

Trench 23. Three sections were excavated across a group of intersecting ditches in the north-east corner of this trench (Figure 6). Although some of the ditches contained late Roman pottery, the great majority of diagnostic pottery from these features was early Roman. An isolated shallow ditch (2801) to the west of this group contained a quantity of pottery with only one diagnostic sherd of the late Roman period. However, in the absence of features exclusively of 1st–2nd-century date, the activities which took place in this area are not clearly understood.

A large rounded feature (2816), 5m in diameter, was sampled and found to be an irregular hollow 0.4m deep with two fills containing much pottery along with animal bone, shell, ceramic tiles and nails. The pottery included a quantity of early Roman date but the presence of diagnostic fine wares of the late Roman period suggests that the earlier material was residual. Similar features at sites of Romano-British and earlier date have been considered to be 'working hollows'.

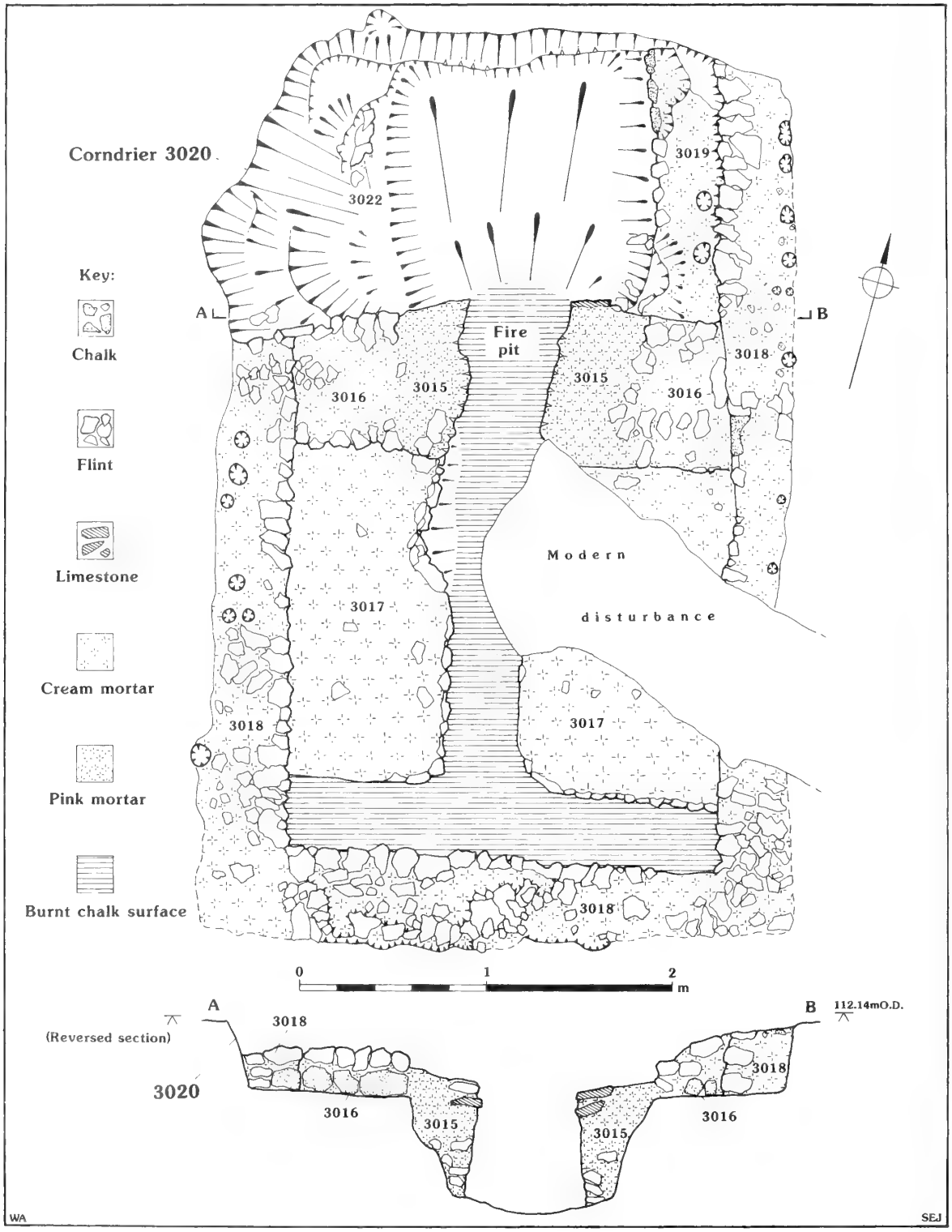


Figure 11. Butterfield Down: plan and section of corn drier 3020 in Trench 23

To the west of this feature, two sections were excavated in and across a ditch (2346) adjacent to the western edge of the trench. The ditch was 0.5m deep and the lower fill contained late Roman pottery. It cut a shallow steep-sided pit (2806) of late Roman date, and also a smaller, undated, ditch only 0.05m deep (2345). A deeper pit to the east (2813) which was excavated to a depth of 1.25m had vertical sides and was 1.75m in diameter. As with several features considered above, although early Roman pottery was recovered, the presence of a substantial amount of late Roman material suggests a 3rd- or 4th-century date for the infilling of the pit. A dump deposit in the fills contained many fragments of cob walling. At the lowest excavated level, a complete horse skull was found directly on top of the substantial part of a sheep skeleton. Although described here as a pit, this feature could also be interpreted as a shaft or a well.

A rectangular feature (2810) to the east of the pit was totally excavated and was very regular in form, some 0.55m deep, with vertical sides and a gently sloping base. Few finds were recovered from this feature but it appears to be of late Roman date.

The terminal of a shallow ditch (2940) to the east was also excavated, but only one, undiagnostic, sherd was recovered. Another ditch terminal (2847) to the south-west comprised part of a group of ephemeral curving ditches enclosing a subcircular area within which ditch 2346 terminated. Ditch 2847 was 0.2m deep with steep sides and a flat base. A few sherds of late Roman pottery were found in the single fill of the ditch, whilst a small metal bird thought to be a sceptre-head (Figure 13) was found on its surface. At the eastern terminal of the southern segment was a small rectangular grave (2845) which contained the remains of an infant aged approximately six months. Only the cranium and long bones were present but it is probable that the body was complete when buried and that soil conditions have destroyed all but the most resilient elements. The stratigraphic relationship between the ditch and the grave was not clear and no diagnostic pottery was recovered from the grave. A second infant burial lay in a shallow subrectangular grave (2952) to the south-east. This burial was even less well-preserved, with only a few teeth and bone fragments remaining.

Plate 3. Butterfield Down: corn drier 3020, Trench 23

No diagnostic pottery was recovered from the grave; however, it is likely that both burials are of Roman date. A shallow scoop (2942) close to the western edge of the trench was also undated and its purpose is unknown.

Further to the south-east was a circular pit (2989), 1.5m in diameter, which was excavated to a depth of 1.2m. The pit was filled with a series of dump deposits of chalk rubble and flint nodules, and occasionally a mixture of both. Only two sherds of pottery were recovered, one of which was early Roman. This pit was adjacent to the intersection of two straight, shallow, but incomplete gullies which may represent the corner of a building. To the north-west, and on a similar alignment to one of the gullies, was a wall-footing of crushed chalk faced on either side by a single layer of flint nodules (3007). The foundation was cut into the fills of a large hollow (2987) made up of several intercutting scoops and shallow pits. The wall-footings were only 0.1m high and survived in two short sections forming a right-angle, the flint nodules on the outside surviving as only a single course. This probably represents the corner of a building of which no other definite trace was recovered; it probably survived due to the unconsolidated fills in the hollow (2987) causing subsidence which had made foundations necessary. No datable pottery was recovered from the foundation trench but late Roman sherds were found in the fills of the hollow, along with some early Roman material.

In the south-east corner of the trench a subrectangular feature (3020) 4.85m long and 3.2m wide was aligned north-west/south-east. Its eastern side had been cut by a modern service trench. Upon excavation the feature was found to be a well-constructed T-shaped subterranean structure (Figure 11 and Plate 3), a typical example of a corn drier or malting kiln, possibly sited within a rectangular building.

Access to the stokehole area, approximately one metre below present ground level, was by a series of steps cut into the chalk at the western side. The stem element of the T-shaped flue was 3m long and 0.4m wide; the axial element was 2.3m long and 0.35m wide. The fire-pit was indicated by a more heavily burnt patch of chalk bedrock adjacent to the stokehole, although lesser amounts of burning were recorded throughout the flue.

The hot air passed along the flue to heat a rectangular pit 3.2m long, 3m wide and 1m deep. Walls of flint nodules set in a compact mortar (3018) lined the pit and the eastern wall continued beyond the pit to line the edge of the stokehole: these walls were internally faced with a single layer of flint nodules. Several small stakeholes were cut into the top of the east and west walls.

On each side of the fire-pit a short section of wall (3016) had been added, perpendicular to the sidewalls. These later walls were slightly wider and faced with courses of flint nodules and chalk blocks. Only two courses were recorded, placed on a ledge of chalk bedrock and clearly distinct from the walls lining the rectangular pit. They extended towards the fire-pit for approximately 0.55m but a pink sandy stone mortar with a few flint nodules (3015), concentrated mainly at the base, was bonded onto the end of them. These walls overhung the fire-pit slightly and as flat slabs of limestone were recorded in the upper part (Figure 11) it is likely that these were part of an arch over the fire-pit at the mouth of the flue.

Beyond the flue arch walls and either side of the flue, the interior of the structure was excavated to a depth of 0.3m below the present ground level. At this depth there was a compact surface of light grey-brown mortar (3017) within which were occasional flint nodules. This surface is likely to have been the base for a raised drying floor of some sort but no evidence was recovered to indicate the nature or position of such a floor.

The base of the flue was filled with a dark grey deposit of ashy material which lay directly on the chalk bedrock. Along the stem of the 'T' this deposit was 0.15m deep but in the axial element it was slightly thicker, rising sharply to a depth of 0.3m at each end. Six samples of this ash were collected at regular intervals along the flue and all contained carbonised barley and wheat which had not germinated. Weed seeds were also present in two samples.

Considerable quantities of mortar and building materials were recovered from the filling of the flue, along with large amounts of pottery, mostly of late Roman date, and animal bone, indicating the demolition or collapse of the superstructure and deliberate refuse disposal.

Adjacent to the western edge of the corn drier was a small dumbbell-shaped oven (2322). The western element of this was a shallow subcircular pit with a flat base which was cut directly into the chalk bedrock. As this showed evidence of burning it may have been the stokehole. It was linked directly to the eastern element, a more regular circular pit, 1m in diameter and 0.25m deep. This was lined with a 0.15m thick layer of orange-brown clay within which some smaller flint nodules were visible. The internal surface of the lining had been fired to a yellow colour

with a much harder texture. An ashy deposit was found in the northern part of the base of the chamber but it was not examined and no diagnostic pottery was found.

Several other similar, though less well-preserved, dumbbell-shaped features were recorded (Figure 6: 2469, 2470, 2617, 2620, 2841, 2748 and 2809). At the eastern end of 2809 a single plain *lydion* brick had been used as the base of the oven or hearth.

As in the earlier excavations, alignments of postholes partitioning the site were recorded. Clear examples can be seen in the south-east part of the trench, where one alignment runs parallel to, and south of, trackway 2492, while two other alignments form a right-angle to the north-east of corn drier 3020.

Other areas: The watching brief carried out during machine-stripping of two further areas in the southern part of the development site resulted in the planning of many more features (Figure 3, Trenches 25 and 26). Although none of these was excavated, almost all of the pottery observed on the surface of the features was of Romano-British date. The plan of the features in these trenches suggests a continuation of the settlement already investigated in Trenches 1–23, with further trackways, ditches, fence-lines and, possibly, sunken-floored buildings.

In the south-west area which was subjected to geophysical survey and trial trench evaluation, the dense evidence of Romano-British occupation recorded to the east was not present (see Figure 4). Instead, a number of linear features were located and excavated, and it appears likely that this area contains several small ditched enclosures located adjacent to the settlement. These are similar in size and form to the enclosures recorded by aerial photographic survey in the eastern part of the development area (Figure 1, C) and partially investigated by excavation (Figure 5). Ditch 15 here was shown to be 0.75m wide and 0.35m deep, with moderately sloping sides and a slightly irregular base. It formed the north-eastern side of a square or rectangular enclosure, 45m wide. Three sherds of Romano-British pottery were found in the fills of this ditch. A second ditch (26) was curvilinear in form and was also of Romano-British date, but does not appear to be part of the group of enclosures.

The finds

The following accounts are summaries of fuller reports in the site archive. Artefacts recovered by fieldwalking are only mentioned when they are considered to be of intrinsic interest.

The Roman gold coin hoard

by A. BURNETT

In October 1990 a small hoard of eight gold (and possibly one silver) coins was discovered by a local metal-detector user approximately 90m to the north of Trench 22 (Figure 1, C). A full description of the coins is published in Burnett 1992.

Two joining sherds of pottery, probably from the vessel within which the coins were deposited, were also found (Figure 16, 8) and showed signs of recent breaks. The pot is a small New Forest colour-coated, plain, globular beaker (Fulford 1975a, Type 30.12), a type which became more common after AD 340–50 (Fulford 1975b; 1979).

The Butterfield Down hoard comprises eight gold solidii and possibly one silver siliqua. There are solidii of four emperors, one of Gratian (AD 367–83), two of Valentian II (AD 375–92), two of Arcadius (AD 383–408) and four of Honorius (AD 393–423). Analyses of similar coins indicate that the gold content is high (*c.*98%).

Analysis of the silver siliqua of Arcadius (AD 383–408) indicates that it is of fine silver (90%). It is rare to find single silver coins in hoards of gold issues of this period, and it is the only silver coin known to have been found at Butterfield Down. It was found at the same time as the gold coins and is of the same date, although it is more worn. A date of about AD 405 is suggested by the presence of the latest coin in the group, making this one of the latest coin hoards known from Roman Britain.

Following the discovery of the hoard, a 2.5m^2 trench (Trench 24) was hand-excavated in the area of the findspot in order to recover any further finds or subsoil features within which the pot might have been placed. Since, however, the finder was unable to re-identify accurately the exact findspot, it may be that the trench was dug outside the area of the hoard. No further gold coins or other parts of the pot were found, but the edge of a group of small features was revealed, along with three stakeholes. None of the features seemed to have been disturbed so if the hoard vessel came from within the area excavated it is likely that it was located at the base of the present ploughsoil. Although two copper alloy coins were found within Trench 24, they were not made available for study.

Other Roman coins

by M. CORNEY

In addition to the eight or nine coins from the hoard and the bronze issues found at the same time, a further 925 coins were recovered from the general area of the Down by metal-detector users. All have been examined and, where possible, full identification has been made. Two hundred and thirty-three (25%) were illegible, the high percentage reflecting the crude cleaning methods employed.

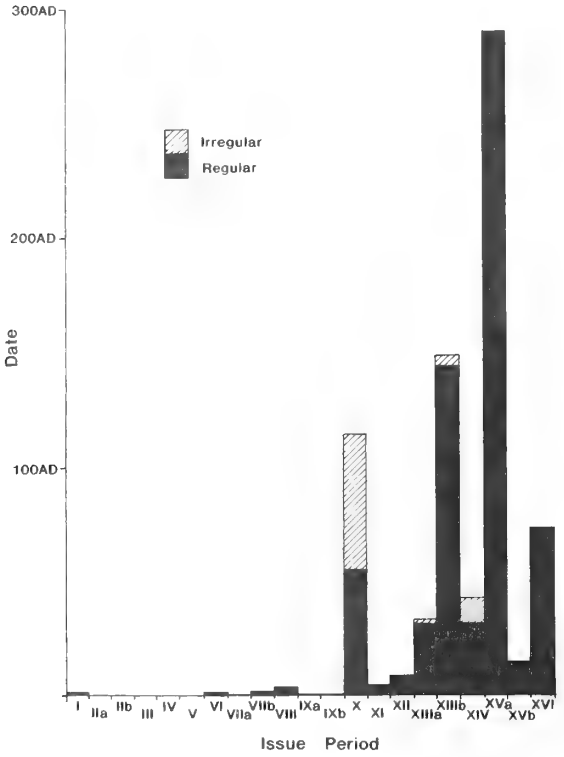


Figure 12. Butterfield Down: Roman coins by coin period

The numbers of coins by issue period (Reece 1972) are presented in Figure 12 (including those recovered from controlled excavation). The pattern of loss shows little evidence for coin use from the 1st–3rd centuries AD. A dramatic increase occurs from the middle of the 3rd century AD with a high rate of coin use and loss continuing into the early 5th century. In period X (AD 259–275) 59 coins (52% of the period total) are barbarous issues. The peak occurs in the period AD 364–378 with a total of 288 coins representing 40% of the identifiable assemblage. Continued coin use into the early 5th century AD is well represented with issues of period XVI (AD 388–402) representing 9% of the total – a high figure which conforms to the general pattern of late Roman activity in the central Wiltshire region (Corney, in preparation).

Other numismatic evidence, perhaps related, for late Roman activity in the area east of Amesbury comes from the discovery, in 1842 or 1843, of a mixed hoard of silver rings and bronze and silver coins ranging from Postumus (AD 259–268) to Theodosius II (AD 375–392) from New Covert, 500m south-west of Butterfield Down (SMR 305 above; VCH 1957, 30).

Objects of silver and copper alloy

by S.M. DUGGAN

A badly damaged undecorated silver finger ring with an average diameter of *c.*19mm was found by a metal-detector user. Although likely to be Roman, a closer date cannot be assigned. Some 53 copper alloy objects were found, only eight of which were recovered during excavation, five in fieldwalking and the remainder by metal-detector users. They are considered by type below and unless the context is given, the piece was found by metal-detector users.

Four of the six brooches are early Roman and include Dolphin, bow, and Lamberton Moor types. A large trumpet brooch with a lionesque knop is likely to be of late 2nd- or early 3rd-century date; a similar example was found at Exeter, Devon (Holbrook and Bidwell 1991, fig. 102, 27). The final brooch is T-shaped with a head-loop and a lozenge-shaped plate inlaid with rhomboidal and clover-leaf and dot shaped mouldings which may have been enamelled. This brooch shares several characteristics with the Flavian Caerleon type which is found in south-west Britain (Collingwood and Richmond 1969, fig. 103, 28-9; Wedlake 1982, fig. 53, 55) but the lozenge-shaped plate is unusual and is comparable with flat rhomboidal brooches of 2nd century AD date (Crummy 1983, fig. 14, 78).

Three finger rings and one key ring were found. A finger ring from the upper fill of the 'working hollow' 2816 in Trench 23 has a well-preserved bezel, containing an amber-coloured glass or enamel setting, and hoops on either side which include a winged moulding. Similar examples of 3rd- or 4th-century AD date have been found at Colchester, Essex (Crummy 1983, fig. 50, 1777–85) and Cirencester, Gloucestershire (Viner 1982, M2; fig. 54, 37).

Pieces of four separate armlets were found, all 3rd- or 4th-century types. A fragment of plain armlet was found within one of the fills of the corn drier 3020, while a section of a two-strand plaited wire armlet was found on the surface of the fill of ditch 2333.

A single broken probe, or possibly a pin, was found in 'working hollow' 2987 in Trench 23; comparable examples come from Colchester and are thought to be of early 2nd-century date (Crummy 1983, fig. 65, 1929–32). Fragments of four belt plates or buckles have been found, one of which is possibly 1st century AD (*ibid.*, fig. 151, 4211), but the others are likely to be post-Roman. A spoon with a pear-shaped bowl and three linear incisions at the base of the handle is paralleled (albeit without incisions) by a find from Colchester (*ibid.*, fig. 73, 2014) dated to the early 2nd century. Part of a spoon with a round bowl of a type usually dated to the late 1st and 2nd centuries AD was found in corn drier 3020.

In addition to the figurine identified as a sceptre-head, discussed below, there are fragments from four copper alloy figurines. Three of these are single feet: one a claw with four nails, one an animal foot with five 'toes', and the third badly worn and indistinct. The fourth piece is a finely modelled bust of a woman with her hair gathered into a knot at the nape of her neck. As the base is sharply angled, it is clear that it was attached to another piece, possibly a stand of some form.

Finally, a pendant mount from a rare type of post-medieval sword-belt fitting was also discovered (*cf.* Gaimster 1988).

Sceptre head

by M. HENIG

A small copper alloy figure of a bird perched atop an iron rod (Figure 13) was found in the upper part of ring ditch 2847 in Trench 23. The bird is 43mm long from beak to tail and weighs 24g. It has a long curved beak and a rather small head, flattened at the top with a suggestion of brows above the eyes. The wings are folded upon its back, the pinions being indicated by means of long grooves, and it has a squared-off tail. The bird is probably intended to be an eagle, although the bill is more like that of a chough.

Comparison may be made with figurines of birds from the temple site at Woodeaton (Kirk 1949, 31, nos. 4–5) and from Ramsden, near Finstock (Henig and Chambers 1984, fig. 1, 1), both in Oxfordshire. An eagle in a cache of religious paraphernalia found at Willingham Fen, Cambridgeshire, may also be noted (Rostovtseff 1923, 94, pl. iv, 5). The feet are missing in all these cases so it is uncertain whether they were votives given to deities (referring to the widespread belief in augury whereby birds as denizens of the air could reveal the will of the gods in their flight patterns) or were elements in regalia.

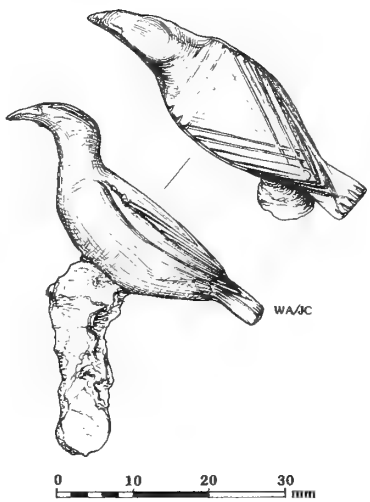


Figure 13. Butterfield Down: copper alloy bird on iron mount from Trench 23

The uppermost element in a priestly head-dress in the hoard from Felmingham, Norfolk (Gilbert 1978, fig. 5A) supported a bird whose foot alone remains. However, much more pertinent to the Butterfield Down eagle is a bird from the same cache, probably a corvid, standing upon a globe which was evidently fixed on an iron staff (*ibid.*, fig. 4D). This was surely a sceptre head or tipstaff of the same type as the eagle, designed to be carried in religious processions. The shafts of the Butterfield Down and Felmingham Hall sceptres may have been of bare iron, but it is perhaps more likely that copper alloy sheeting with an iron armature gave strength and solidity to the object.

The only other bird sceptre known from Roman Britain is an owl from Willingham Fen, Cambridgeshire (Rostovtseff 1923, 94, pl. iv, 4). Sceptres topped by birds are best known in the form of the eagle-sceptres of the Roman emperors (Strong 1976, pl. 127; Kent 1978, pl. 549). A number of sceptre heads have been recognised in Roman Britain, mainly representations of deities though some may portray emperors (Henig and Leahy 1984). It is probable that they would have been used away from shrines in processions designed to bless the fields and propitiate the gods who looked after the community. Consequently, the Butterfield Down sceptre is not out of place in an otherwise secular context, and it emphasises the important part religious ceremonies played in daily life.

Iron objects

by M. FAIRBROTHER

Some 43 iron objects and 143 iron nails were excavated but none have been radiographed or conserved. Nine small cleats were found, six small oval examples (*cf.* Manning 1985, pl. 61, R60-4) and three longer, narrower, oval ones (*ibid.*, pl. 61, R54–9), all probably from the soles or heels of boots. Other items for personal use include a pin with a domed head, and a stylus found in corn drier 3020 of a type thought to be early Roman in date (*ibid.*, fig. 21, Type 1). The five knives were of different types (*ibid.*, fig. 28, Types 10, 11a, 13, 16 and 21) and although those which could be dated appear in the mid 1st century AD, the types are long-lived.

A shackle, perhaps for animals, consisting of a bar forming two-thirds of a circle, with eyes at the ends, one holding a round loop and the other a long narrow loop bent into a shallow V-shape was also found (*ibid.*, fig. 23, 7). The shackle would have been closed by passing the narrow loop through the round loop and securing it with a chain or padlock. The heel portion (including the hook) of a hipposandal was also found.

There are few tools – only three wedges, one of which was associated with a fragment of a heavy iron bar but does not seem to have been attached to it. Pieces of structural ironwork comprise a joiner's dog (*ibid.*, pl. 61, R52), a heavy metal bolt, a possible loop fitting and a double spiked loop (*ibid.*, pl. 61, R34–50). The remaining ironwork comprises six pieces of strip binding, a single horseshoe and an assortment of pieces of wire, rods or bars.

Metalworking slag

by ANDREW CROCKETT

A total of 28 pieces weighing 1581g was recovered from the site. The most common type is ferrous and quite dense, deriving from smithing rather than smelting. Not enough material was found to identify firmly any areas used for metalworking but it is worth noting that slag was found in two 'working hollows': 2973 and 2987 in Trench 23.

The worked flint from pit 2

by P.A. HARDING

A small assemblage of worked flint was recovered from the feature which contained portions of three separate Beakers (Figure 5, pit 2). Most of this flint was found in the upper fills of the pit, associated with Vessel 1. The assemblage is in mint condition and the presence of chips suggests a date contemporary with the Beaker.

No refitting was possible, although distinctive cortex forms and patterns in the flint indicate that a minimum of two nodules may be represented. Proportionally, there is more broken material than unbroken, which suggests that knapping took place nearby. The chips are uncharacteristic of those produced during platform preparation which is in accord with the flakes, only one flake showing evidence of platform preparation. The chips are better interpreted as accidental by-products of knapping.

Four flake tools were present. An end scraper made on a long broken flake (Figure 15, 4) had been retouched at the distal end by semi-abrupt, direct, regular flaking to a short convex edge. An end scraper made on a thin non-cortical flake (Figure 15, 5) showed semi-abrupt, regular, direct discontinuous retouch and some inverse retouch, especially towards the proximal end. An end scraper made on the proximal end of a thin, broken flake (Figure 15, 6) showed semi-abrupt, irregular, direct retouch forming a convex edge, whilst another flake had been retouched along one edge (Figure 15, 7) with marginal, inverse flaking to form a straight edge.

There is an insufficient quantity of flint in the assemblage to allow firm conclusions to be drawn. However, despite the absence of any diagnostic tool types, the overall character, typology and condition of the material suggest that it is contemporary with the Beaker pottery. The fairly high proportion of tools and the scarcity of cores may indicate domestic or ritual activity rather than industrial production.

Portable stone objects

by A.P. FITZPATRICK *and* J.I. MILLARD

Prehistoric

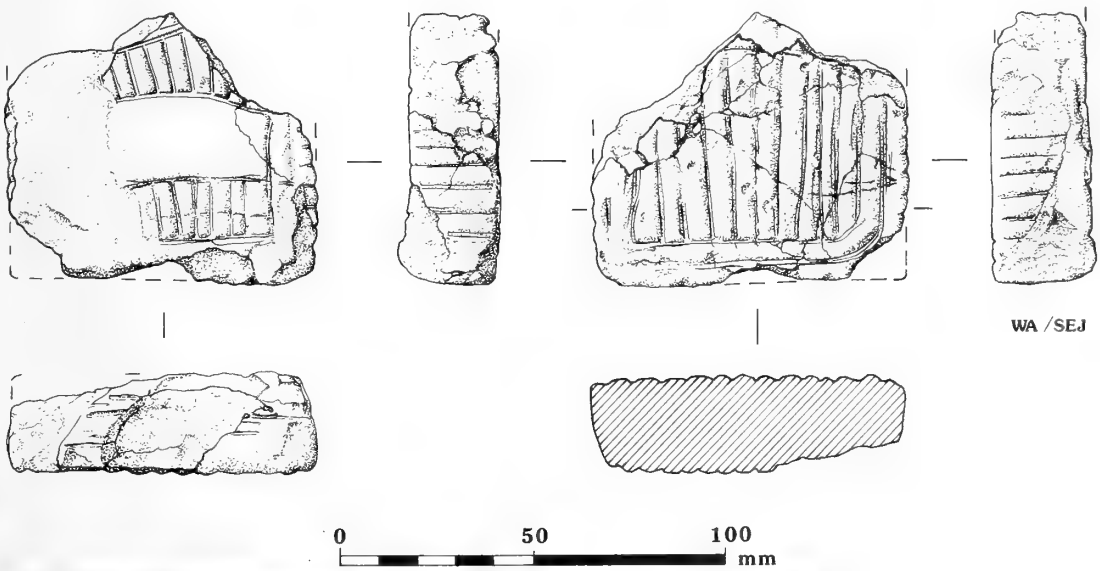
A rough-out for a Neolithic stone axe was found by a metal-detector user. It was thin-sectioned by R.V. Davis on behalf of the Council for British Archaeology Implement Petrology Committee (ref. 1858/W1428), revealing a highly altered medium grained gabbro. The rock is probably Cornish, and possibly from the Falmouth area. This may suggest that the piece is of earlier rather than later Neolithic date.

A rectangular, decorated chalk object (Figure 14; Plate 4) was recovered from the upper fill of pit 310 in Trench 3. There is incised decoration on the two faces and on three of the edges, the fourth being too worn to establish whether the decoration extended all over the object. No parallels of Roman date are known to the writers but the piece is similar to the two Late Neolithic plaques from the Chalk Plaque

Pit, Amesbury (Harding 1988; Varndell 1991) and a date in the Late Neolithic or Early Bronze Age seems likely, particularly as the decoration on the plaque appears to echo that on Beakers (Lawson 1993).

Forty-four quernstone fragments from 17 separate querns were recovered. Of these, 16 were small hand querns, with a diameter of less than 0.5m, in conglomerate, coarse and fine sandstone, and coarse limestone. The other stone is a Greensand millstone with a diameter of 0.62m, and is a type which is usually associated with mechanically worked mills (Cunliffe 1971, 153, fig. 71). This was found on the surface of an unexcavated feature in the north-eastern part of Trench 23, close to a group of ditches which may be early Roman.

Further quern fragments were recovered from a range of contexts, including the fills of corn drier 3020. Five limestone mortar fragments were found, two of which may be of Purbeck Marble. They are the same size and type as an example from Colchester (Buckley and Major 1983, fig. 79, 2804); dished profiles and smoothed interior surfaces are evident on four of the five fragments, one of which had an extant lug. Seven whetstone fragments were found in a variety of features; all had two surviving surfaces, at least one of which was polished.



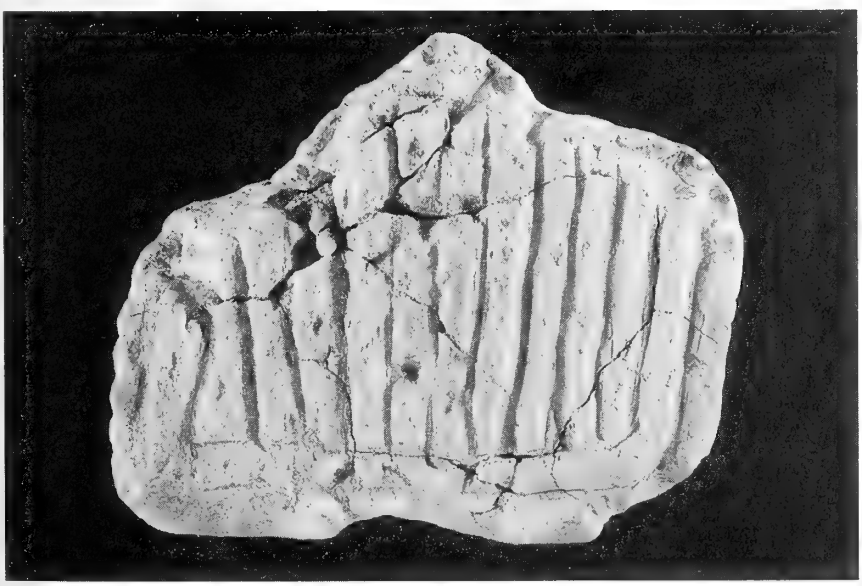


Figure 14 (above) and Plate 4. Butterfield Down: incised chalk plaque from Trench 3. Scale 1:2 and actual size

Shale object

by ANDREW CROCKETT

Two-thirds of a solid circular shale object, 27mm in diameter and apparently lathe worked, was found in a rubble fill within corn drier 3020. One surface is flat, the other slightly domed, giving a thickness of 6mm at the centre, and the piece would have weighed *c.*6.4g. Although the piece is broken, it appears to be a gaming counter. Bone, glass, stone and ceramic gaming pieces or counters are well known (Crummy 1983, 91–6; Holbrook and Bidwell 1991, 229, 267, 275, 279) but the use of shale for such pieces is not paralleled at the sites referred to or in the large assemblage of shale objects from Silchester (Lawson 1976).

The glass

by D.A. ALLEN

A total of 22 glass vessel fragments and one glass bead was found. Almost all are of colourless or greenish colourless glass, with only two small blue-green chips and one dark blue fragment which, together with the absence of blue-green bottle fragments, is typical of a later Roman collection.

The dark blue fragment was the only piece of typically 1st century AD tableware present. It was found in one of the upper fills of corn drier 3020 and although the precise form cannot be determined, the strong colour and optic-blown ribbed decoration were commonly used for jugs, jars and bowls during the second half of the 1st century AD.

From the Flavian period onwards, colourless glass replaced bright colours for tablewares and several fragments of this type were found. One of these, from the lower fill of pit 404 in Trench 4, is the rim of a very common later 2nd- and 3rd-century cup (Isings 1957, 85b; Allen 1988, 293, no. 44).

Fragments from later Roman containers were also found. One piece, from the surface of an unexcavated feature 2756 in Trench 23, was probably from a mould-blown barrel-shaped bottle of a type often made and signed by Frontinus or Felix (e.g. Harden *et al.* 1968, 44, no. 79, from Faversham, Kent) and quite common during the later 3rd and 4th centuries.

A small green square-sectioned bead was found on the surface of an unexcavated feature 2699 in Trench 23 and is a common Roman type of 3rd–4th century date (Guido 1978, fig. 37, 6–7).

The pottery from pit 2

by ROSAMUND M.J. CLEAL

Three Beakers are represented in the assemblage recovered from pit 2, one by a single sherd, one by two conjoining sherds, and the other by half to two-thirds of a vessel. The last is made up largely of conjoining sherds, and it seems likely that the vessel was complete when placed in the feature and has subsequently suffered some destruction. Sherds were examined at x20 magnification, following standard Wessex Archaeology procedures.

Vessel 1

This vessel is represented by a large, crushed portion of a Beaker (Figure 15, 1) and a sherd count is therefore not relevant. The total weight of the surviving portion of the vessel is 2949g, and at least three-quarters of the Beaker is present.

Fabric: hard, with smooth surfaces and a hackly fracture. It contains the following inclusions, of which grog is the most obvious:

Grog	Sparse to moderate (<15%), ill-sorted, sub-rounded to sub-angular fragments of grog. Mostly fine (<1mm) but some as large as 5mm; in the largest fragments inclusions of grog and quartz sand are visible.
Flint	Sparse (<3%), well-sorted, angular fragments (<4mm), not well-prepared.
Shell	Occasional (i.e. not present in every sherd), <3mm.
Quartz Sand	Moderate (<15%), well-sorted, rounded grains (<1mm, most <0.5mm).

Firing: the vessel is patchily oxidised on the exterior to shades of red and orange; the core is mainly oxidised as is the interior surface.

Decoration: the decoration is incised and comprises horizontal zones of filling, including a deep, herring-bone-filled, running chevron; ladder-patterns; lattice; and a narrow, filled, running chevron. It is also clear that a second, narrow, filled, running chevron had been planned on the upper belly, but this had been rejected after laying out in outline around at least some of the circumference. This was then replaced by a plain zone with a wide zone of lattice below, the outline of the running chevron not being entirely erased. The decoration, although complex, is not executed with particular care, and is not consistent around the circumference of the vessel.

Condition: the sherds are in good condition, with little wear on the surfaces. There are traces of a carbonised residue on the interior surface.

Vessel 2

Two sherds comprising one rim sherd (36g) and one body sherd (24g) of a comb-decorated Beaker (Figure 15, 2). The exterior rim diameter is *c.*170mm.

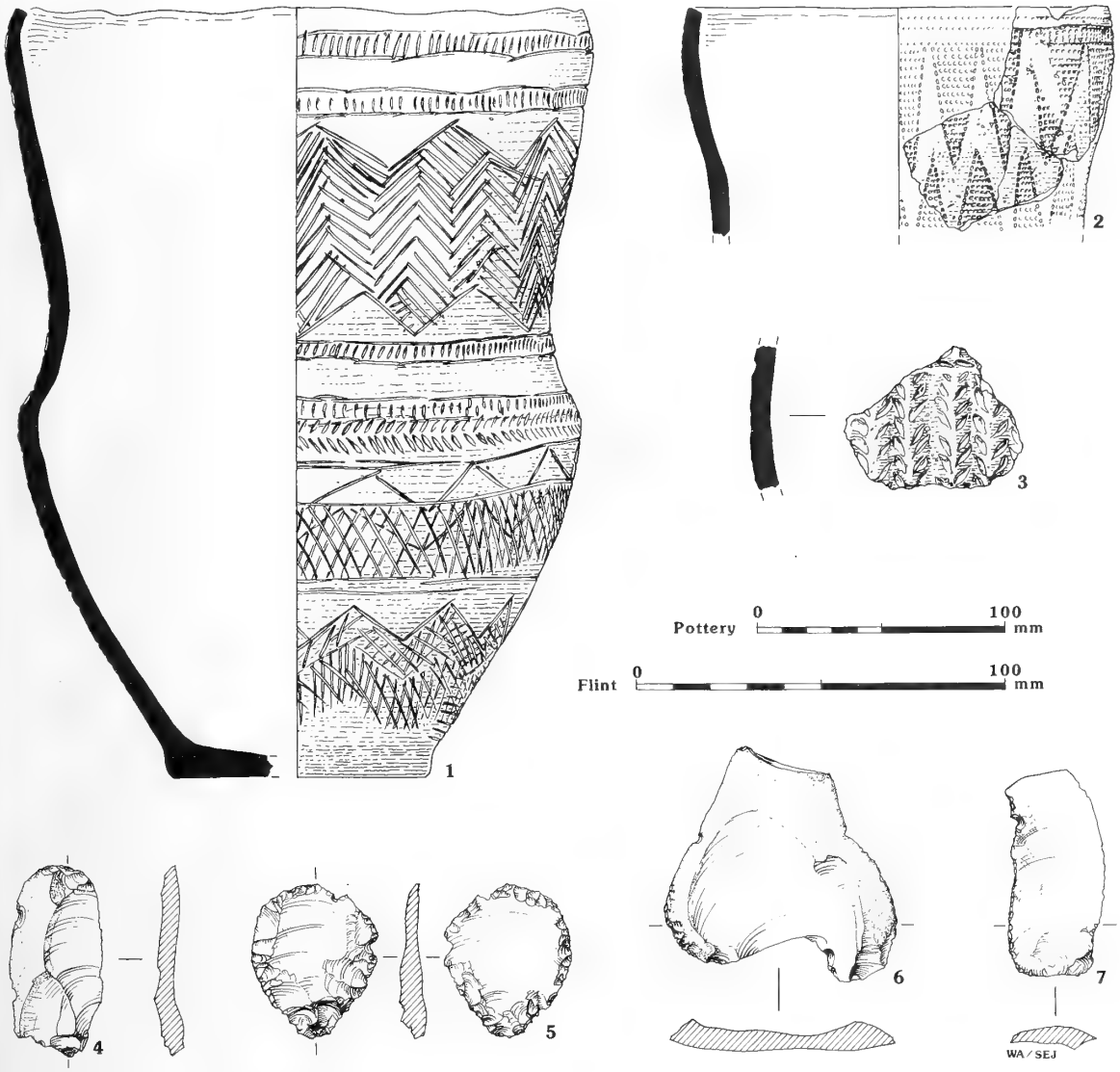


Figure 15. Butterfield Down: Beaker pottery and associated flints from pit 2

Fabric: moderately hard with rough, poorly-finished surfaces and a hackly fracture. It contains the following inclusions, of which bone is the most obvious:

Bone — Sparse to moderate (5–10%), well-sorted, angular fragments. Maximum size <5mm, most <3mm, unevenly distributed. The pieces are white, soft and appear to be well-calcined, indicating that they were calcined in an oxidising atmosphere: this must have occurred prior to their being added to the fabric as the pot is only partially oxidised. In particular, some very well-calcined pieces only show in broken edges of the vessel within a matrix of unoxidised body core. The fragments of bone cannot be differentiated as either animal or human (J.I. McKinley pers. comm.). The fragments are unevenly distributed throughout the fabric.

Flint — Rare (<3%), ill-sorted, angular fragments. Maximum size <10mm, most <5mm. Not well-calcined.

Pebbles	Rare (<1%), ill-sorted, rounded. Maximum size <7mm. These are probably flint.
Quartz Sand	Moderate (*c.*10%), well-sorted rounded grains, most <0.5mm.
Iron Oxides/ Glauconite	Sparse (5%), well-sorted, rounded, dark grains. All <0.5mm but some too small to measure at x20 magnification.
Grog	There are some small fragments of comminuted potsherd (grog) present, but these are hard to differentiate from the matrix. Maximum size *c.*4mm, rounded, sparse to moderate (<?10%).

Firing: the vessel is patchily oxidised on the exterior with one area of clear orange colouring 70mm from the rim. The remainder of the exterior is pale orange-brown, indicating only partial oxidation. The interior is partially oxidised to pale brown, and the core is black.

Decoration: this comprises rectangular-toothed comb impressions, but the worn state of the impressions did not allow the tooth length to be established. Comb size varies but seems to be about 2 x 1mm. It is possible that a shorter comb was used for infilling than for the outlines, but this is not certain. There is a horizontal band of ladder pattern below the rim, separated from it by a single horizontal line of impressions. A reserved chevron motif runs around the neck of the vessel: the background is filled with horizontal lines of impressions. This is motif 32ii of Clarke's Southern British Group 4 (Clarke 1970, 427).

Condition: both the edges and the surfaces of the sherds are weathered. On the exterior the weathering is severe enough to obscure some of the comb impressions.

Vessel 3

This vessel is represented by a single sherd weighing 34g (Figure 15, 3).

Fabric: hard with a hackly fracture. The exterior surface is rusticated and the interior smoothed. It contains the following inclusions, of which bone is the most obvious:

Bone	Sparse (<5%), well-sorted, angular fragments <1mm. The fragments are soft, white, and do not react with dilute (10%) HCL. They are unevenly distributed.
Flint	Sparse (<5%), well-sorted, angular fragments <2mm, not well-calcined, and unevenly distributed.
?Sandstone	Occasional (only one fragment observed) whitish inclusion made up of sub-angular quartz grains in an opaque creamy white, non-calcareous matrix. The fragment is very friable.
Iron Oxides/ Glauconite	Rare (<3%), small dark grains, some black, some reddish. Some at least do not respond to a magnet and may therefore be glauconite rather than iron oxides. The grains are fine and mainly too small to measure at x20 magnification.
Grog	Sparse (<*c.*7%) fragments which are difficult to distinguish from the clay matrix and mainly small (<1mm).
Mica	The matrix is slightly micaceous, with rare fine mica, too small to be measured at x20 magnification.
Quartz Sand	Rare fine grains, <0.5mm.

The fabric is similar to that of Vessel 2 but shows greater attention to preparation of the additives, with the smaller size of the bone fragments being particularly noticeable.

Firing: the exterior is fired to a pale orange-brown, the interior to mid-pale brown, and the core to black. The hint of orange in the exterior surface colour suggests that the fully oxidised colour of the clay would be a clear orange. The core of the sherd is obscured by a tarry deposit along the broken edges.

Decoration: this is plastic and comprises fingernail pinching in vertical ribs, with a zone of horizontal decoration which almost certainly consists of horizontal ridges also formed by fingernail pinching, although this is only preserved in a small area of the sherd. It is not clear from the sherd which way up it should be viewed, but the convexity of the vessel profile in the area covered by vertical ribs strongly suggests that this is the belly of the vessel.

Condition: the sherd shows some wear, particularly on the interior surface where the partially oxidised surface has partly worn away. The edges are abraded but show a quite distinct, tarry, carbonised deposit. This is also present where the sherd is freshly broken, suggesting that it is present throughout the wall in this part of the vessel. Likely explanations for this deposit are either that the clay was highly carbonaceous and that this part of the vessel has carbonised during firing or use, or that an organic material has been absorbed by the vessel wall during use and subsequently carbonised during post-firing heating.

OTHER PREHISTORIC POTTERY FROM NEAR PIT 2

A single, plain, body sherd (3g) in a grog-tempered fabric was recovered from the basal fill of ditch 18 (Figure 5). The exterior surface and half of the core were fired orange, the interior surface and the rest of the core were black. This sherd is almost certainly from a coarse Beaker.

A single rim sherd (23g) in a soft, grog-tempered fabric was found in the upper fill of the same feature. The sherd is undecorated and the rim is internally bevelled. This is probably from a Collared Urn, although the base of the collar is not present. A few sherds of Romano-British and later pottery were also found in this context.

DISCUSSION

The Beakers are not certainly associated, as there is some doubt that Vessels 2 and 3 were deposited at the same time as Vessel 1. On the grounds of the extremely unusual fabrics of Vessels 2 and 3, these two Beakers at least are likely to be contemporary. It seems unlikely that Vessel 1 should represent separate use of such a small feature, but not impossible. There is no human bone, either unburnt or cremated, with the deposit and it must be assumed that it is not a funerary one.

The occurrence of bone as a tempering material is extremely unusual, but not unique in the Neolithic and Bronze Ages. Seven cases of Neolithic and Beaker date are cited by Smith and Darvill as being known at the time of their writing (1990, 152), of which one at least is certainly Beaker (from Lough Gur, Co. Limerick).

In terms of Clarke's (1970) classification, Vessel 1 exhibits motifs 4 and 5 (ladder pattern and lattice-filled band) of the Basic European Motif Group, a herringbone-filled version of motif 27 (deep, filled, running chevron) of the Late Northern British Motif Group, and motif 33 (filled, running chevron) of the Southern British Motif Group. The use of a Northern Group motif is interesting, but the vessel shows no other attributes diagnostic of that group, and it is difficult to see it as other than a Southern tradition vessel. Within that tradition it is assignable to Clarke's Developed Southern British Group (S2), in which the filled neck/zoned belly style of decorative organisation, present on Vessel 1, is especially characteristic (Clarke 1970, 210). A feature of the apparently domestic assemblages which include Beakers of this group is large rusticated Beakers which display horizontal rows and vertical columns of finger-pinching (*ibid.*, 1970, 214), such as occur on Vessel 3.

Vessel 2 may be ascribed to either Clarke's Developed Southern (S2) or to his Late Southern (S3) Beaker Groups; as the lower body is missing it is not possible to establish whether the belly is filled or zoned, and this is one of the criteria for separating these groups.

In terms of Lanting and van der Waals Steps, only Vessel 1 is certainly assignable, to Step 6 (Lanting and van der Waals 1972). However, both Clarke's classification, and that of Lanting and van der Waals, can no longer be seen as useful in determining the likely date of a Beaker, since the British Museum Beaker dating programme has failed to provide support for either scheme from well-associated radiocarbon determinations, and in their stead it may only be suggested that there is a clear time band into which Beaker use falls, approximately between 2600 and 1800 cal BC (Kinnes *et al.* 1991). The Clarke scheme remains useful in that it indicates broad patterns of, particularly, decorative similarity, and of associations between types of Beaker, as in this case, where it indicates that it is not unusual to find Beakers similar to Vessels 1 and 2 with rusticated vessels such as Vessel 3, on apparently domestic sites.

The other pottery

by J.I. MILLARD

Introduction

The pottery assemblage comprises 6394 sherds (124,567g), the majority of which are of Romano-British date, with prehistoric and post-medieval material also present (Table 1). Analysis followed the standard Wessex Archaeology analytical recording systems (Morris 1992a; 1992b), and for this purpose was divided into two parts. First, a brief scan of the pottery from Trenches 1–22 and surface collection from the unexcavated features in Trench 23 was undertaken. Pottery from excavated features in Trench 23, which has the greatest stratigraphic integrity, and from Trench 24 (the hand-excavated trench around the gold coin hoard) was then recorded in detail.

Pottery recorded by scanning

The presence of Roman wares of known type or source, for example Black Burnished ware, and all pottery not of Roman date (prehistoric, medieval/post-medieval) was recorded, but detailed analysis was not conducted. The remaining Roman pottery was divided into broad fabric groups on the basis of

the dominant inclusion type: grey and oxidised sandy fabrics, grog-tempered fabrics, flint-gritted fabrics, and fine wares of unknown type. The number and weight of sherds by fabric group for this part of the analysis are shown in Table 1. In addition, 18 rim types were identified and recorded on a presence/absence basis (Table 2).

Pottery recorded in detail

Methodology. The prehistoric and Roman pottery from features in Trench 23 and from Trench 24 was divided into five broad fabric groups on the basis of the dominant inclusion or known source: flint-gritted fabrics (group F), shell-tempered fabrics (group S), grog-tempered fabrics (group G), sandy fabrics

Table 1. Quantification of pottery recovered up to 1992 by fabric

Type	*scanned recording*		*detailed recording*		
	no.	*weight*	*fabric*	*no.*	*weight*
Prehistoric	10	69g	F1	1	22g
			F2	2	11g
			F3	7	38g
			F4	14	28g
			G1	2	7g
			S1	3	14g
Grey wares	1820	20639g	Q100	1161	18136g
			Q101	344	5179g
			Q102	123	1354g
			Q103	46	533g
Oxidised wares	297	3801g	Q104	160	2290g
			Q105	29	440g
			Q106	14	114g
			Q107	3	63g
			Q108	5	45g
Grog-tempered	574	20094g	G100	321	12819g
			G101	4	80g
Flint-gritted	3	150g			
Savernake ware	4	44g			
Black Burnished ware	438	5732g	BB1	331	4152g
			BB1(var)	4	214g
Oxfordshire	132	1345g	CC	51	387g
			White ware	5	81g
			Parchment	3	6g
			Mortaria	21	1023g
			Oxidised	4	11g
New Forest	172	1815g	Parchment	3	77g
			Red-slipped	15	129g
			Stoneware	82	785g
			Greywares	1	23g
Rhenish	1	2g		9	57g
Samian	20	191g		29	384g
Amphorae	11	1669g		35	17500g
Fine wares unknown source	17	207g	Q110	8	190g
			Q112	1	2g
	2	2g	Q113	8	47g
			Q114	5	25g
Medieval/Post-medieval	9	107g		4	12g
Total	3510	55867g		2884	68700g

(group Q), and fabrics of known type or source (group E). The first four groups were then subdivided into separate fabric types, according to the range and coarseness of inclusions present (Table 3). Details of vessel form, surface treatment, and decoration for the Roman pottery were also recorded.

Prehistoric pottery

A small quantity of Late Neolithic and Late Bronze Age pottery was recovered from Trenches 3, 4, 13, 17 and the surface of Trench 23. Twenty-nine prehistoric sherds were recovered from excavated features in Trench 23. Six fabric types were identified: four flint-gritted (F1–F4), one grog-tempered (G1), and one shell-tempered (S1). All of these fabrics were represented by very small numbers of sherds. In most cases the lack of diagnostic material precludes close dating; the majority of it was found redeposited in later contexts.

Two sherds (fabric F2) bear impressed decoration and have been identified as Late Neolithic Peterborough ware in a fabric similar to that already recovered in the Stonehenge area (Cleal with Raymond 1990, 235). One sherd (G1) may derive from an accessory vessel (Figure 16, 1), probably an incense cup of Early Bronze Age date (*cf.* Annable and Simpson 1964, no. 445; R.M.J. Cleal pers. comm.). A second sherd in the same fabric is also likely to be of Early Bronze Age date. The single sherd of fabric F1 derives from a thick-walled vessel, most probably an urn of Middle Bronze Age Deverel-Rimbury type, and is similar to the Early/Middle Bronze Age fabric types recovered in the Stonehenge area (Cleal with Raymond 1990, 241). All other handmade sherds are prehistoric but not datable more closely.

All sherds except the fragment of ?incense cup were found with later material and must therefore be considered as residual. The fragment of the ?incense cup was found beneath the body in burial 3004 (Trench 3). As it is a tiny fragment it may simply have been incorporated in the fill of the grave but it is considered as a grave good here.

Roman pottery

Thirty-seven fabrics were identified and quantified (Table 1) and the coarse and fine ware fabrics are listed in Table 4. Eighteen coarse (Table 2) and one fine ware rim types were identified and quantified and the six most common rim types are illustrated (Figure 16, 2–7). Imported fine wares are represented by Rhenish ware and samian. The Rhenish ware sherds are all from Trier-type beakers, produced between AD 150–250 (Greene 1978, 18).

No attempt was made to attribute the samian to production centres but it is likely that the great majority are Central Gaulish. Four sherds had been repaired. Form 18/31 platters were the most common form, with one sherd from a form 18 platter, five from a form 79 platter, and two possibly from a form 43 mortarium. Apart from form 18, which can be dated to the mid–late 1st century AD, all the forms are 2nd century.

Nearly equal amounts of Oxfordshire and New Forest products were recovered (Table 1); however, the New Forest material is represented mainly by stoneware-type colour-coated wares and the Oxfordshire vessels by red-slipped wares. Oxford wares include oxidised colour-coated wares, white ware and parchment ware and the forms include the carinated bowl type C81, 'dog bowl' type C94, and mortaria types C97 and C100 (Young 1977). One sherd may be from a type C88 bowl.

Table 2. Romano-British Coarse and Fine Ware Rim Forms excluding New Forest and Oxfordshire products

* = forms identified from amongst scanned material
\+ = forms identified from amongst pottery recorded in detail

	R100	Rim form undiagnostic
+*	R101	Everted rim jar (3rd–4th C)
+*	R102	Everted rim jar (1st–2nd C)
*	R103	Straight-sided bowl with grooved rim
+*	R104	Flanged bowl (late 2nd–3rd C)
+*	R105	Dropped flange bowl (3rd–4th C)
+*	R106	Dog dish, shallow bowl (2nd–4th C)
+*	R107	Storage jar
+*	R108	Flagon
+*	R109	Carinated bowl/dish (1st–2nd C)
+*	R110	Wide-mouthed jar (1st–2nd C)
+*	R111	Narrow-mouthed jar
*	R112	Butt beaker (1st–2nd C)
*	R113	Shallow bowl with bead rim (2nd–4th C)
+*	R114	Flat-rimmed bowl (2nd C)
*	R115	Shallow dish/lid (1st–4th C)
*	R116	Shouldered bowl (1st–2nd C)
*	R117	Bead rim jar (1st C)
*	R118	Reeded rim bowl (1st–2nd C)
	R122	Everted, flattened rim jar with double or single grooves on upper rim surface (1st–2nd C)
+	R123	Wide-mouthed, necked jar/bowl with out-turned bead rim
+	R124	Shallow bowl with internal bevel
+	R125	Lid-seated rim vessel
+	R126	Deep bowl with clubbed rim
+	R127	Fish dish; shallow oval dish
+	R128	Bowl with clubbed rim (2nd–4th C)

Table 3. Romano-British fabric group totals from Trenches 23–4 by feature: detailed recording

Feature	*Context*	*Grog*		*BB1 (all)*		*Quartz (coarse)*		*Quartz (fine)*		*Samian*		*New Forest*		*Oxford-shire*		*Amphorae*		*Rhenish*	
		no	*wt*	*no*	*wt*	*no*	*wt*	*no*	*wt*	*no*	*wt*	*no*	*wt*	*no*	*wt*	*no*	*wt*	*no*	*wt*
2306	2306	3	15	11	82	41	252					1	12	3	10	5	45		
2322	2312	1	122																
2330	2329	3	33																
	2336					1	13												
	2338					6	37												
	2347	2	67	2	15														
	2348					1	6												
2332	2326			2	4	2	13							1	1				
2333	2327		12	186	7	77	32	273		1	11	2	29	4	38				
2335	2334	1	56	6	119	70	1231	1	8	1	13	1	8			1	133		
2337	2328			4	71	18	171					1	5						
2346	2342	6	121	8	115	26	434					4	18	2	29				
	2343			4	20	8	64					1	1						
2801	2800	1	36	7	58	32	737					2	28	2	13				
2806	2807													1	2				
2809	2805						2	45											
	2809	2	20																
2810	2803	2	120	4	27	13	89												
2811	2811	4	136	2	30	2	56												
2813	2812	5	120	11	77	76	1165	1	3	2	14	1	16	3	5				
	2814	8	539	8	132	55	1113	3	164	1	31	3	31	1	228	2	996		
	2824	19	1397	27	634	199	4139	9	50	2	62	2	31	8	335	8	2304	1	3
2816	2331	17	249	44	514	146	2479	1	5			22	289	16	136				
	2341	2	26	25	753	73	1295			1	2	14	144	4	58				
2821	2324	2	22	8	53	9	44			1	1			2	8				
	2349			3	13														
	2820			2	18	9	99							3	8				
2822	2323	1	10	2	10	14	68			1	1								
2823	2325	3	45	5	18	15	95												
2829	2825					7	45												
2841	2828					22	170					1	23	1	4				
2845	2835	1	2	3	7	4	25												
2847	2846	1	28			5	23					2	5						
2938	2937					5	43												
2943	2827					1	9												
2948	2947					2	6	1	3										
2955	2844	4	115	10	133	97	1366	1	2			2	18	7	46	24	14067		
	2953					2	29												
	2954					3	33												
2972	2960	1	50	4	29	14	131												
2973	2838	1	28	2	25	26	267			1	4			1	2				
	2974					15	129			1	2	1	7	1	2				
	2975			1	18	1	8												
2983	2979					1	5												
2987	2826			2	20	19	114			1	3	1	9						
	2830			2	2	29	343					2	6						
2989	2950	1	115																
	2962					1	2												

3010	2971					1	5												
3020	2300	23	668	36	411	255	3867	3	25	5	89	10	66	11	281			4	35
	2301					3	19												
	2305	8	33	5	70	111	1328			1	37	9	87	1	6				
	2307	1	91	1	4	23	227					1	2	1	14				
	2309			3	13	15	186			1	3			1	16				
	2315			2	13	13	126			1	18			1	33				
*1	2316	57	1101	54	548	235	3476	1	2	5	73	5	43	4	138			3	10
*2	2317					8	98	1	2	1	2			1	66			1	9
	2319	1	6	1	22	11	272												
	2802			2	88	18	405							1	12				
	2843	1	126	12	105	20	285												
	2956					2	40												
	2976					11	241												
	2316	103	5802	1	3	10	282												
	2815					59	2554												
	3024	10	274	1	3	31	423					6	45						
	3025	20	1237			7	121					3	64						
	3026	1	26			3	39												
	3027			1	12	1	16												
	3028											2	29						

*1 Special Find 5031
*2 Special Find 5054

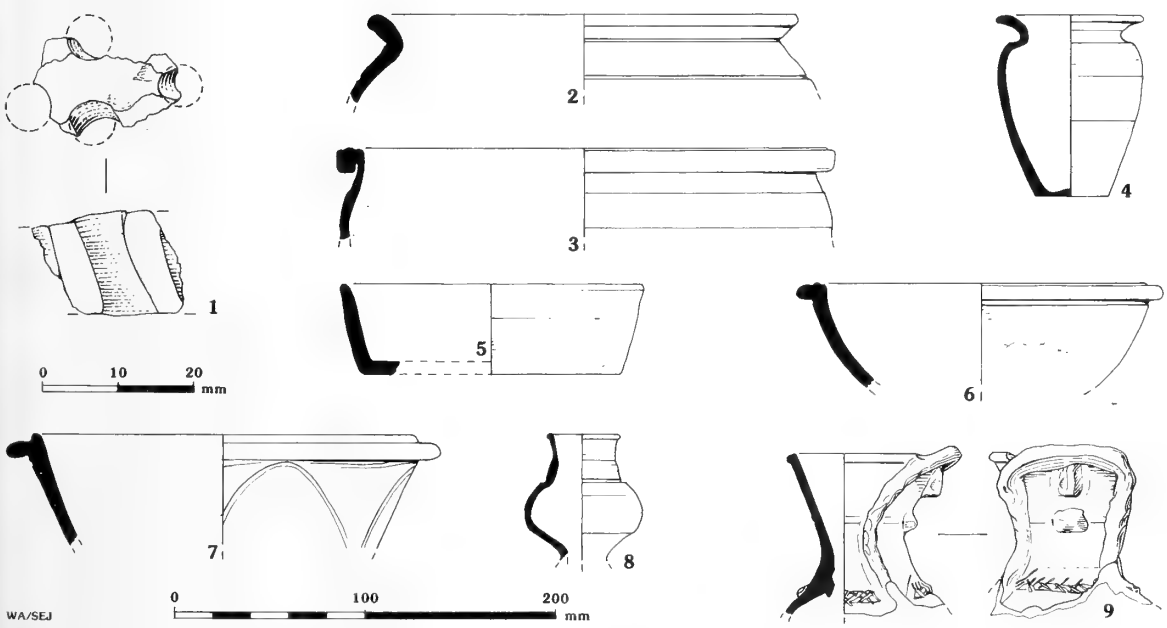


Figure 16. Butterfield Down: prehistoric and Romano-British pottery from Trench 23
1. Possible incense cup, Early Bronze Age, fabric G1, pit 3004 2. Everted rim jar, 1st–2nd century AD, fabric E101, rim R102, ditch 2337 3. Everted rim jar/bowl, 3rd–4th century AD, fabric Q102, rim R122, pit 2816 4. Everted rim jar, 3rd century AD, fabric Q100, rim R102, kiln/oven 2841 5. Dog dish, 2nd century AD onwards, fabric E101, rim R106, pit 2816 6. Flanged bowl, late 2nd-3rd century AD, fabric E101, rim R104, pit 2816 7. Drop-flanged bowl, 3rd-4th century AD, fabric E101, rim R105, pit 2816 8. Hoard vessel, New Forest colour-coated globular beaker
9. Face pot, fabric Q110, pit 2813

The New Forest products include colour-coated, parchment, red-slipped (Fulford 1975a, fabrics 1a, 1c, 2a), and grey wares. Forms include single examples of jug types 18 and 22, two examples of the indented beaker type 27, one each of beaker types 30 and 33, two type 63 bowls, an example of a type 106 mortarium and six unidentifiable rims (*ibid.*). Four fine sandy wares of unknown or uncertain origin were defined (fabrics Q110, Q112–14; Table 4; detailed descriptions in archive) but these fabrics are represented by very few sherds (Table 1).

The rim of a narrow-mouthed, flagon-like vessel with an applied and incised face mask (Figure 16, 9) occurred in fabric Q110 (rim type R108). The origin is unknown, but it may be a fairly local product as undecorated sherds in the fabric were recorded throughout the site. The decoration does not fall into the face mask traditions identified by Braithwaite (1984) and Butterfield Down lies outside the previously known distribution area of face mask pots, which was restricted to the north and east of Britain. The form of the vessel is unusual for this type of decoration, since it has previously been recorded in only one instance, near Carlisle, Cumbria (ibid.).

The single sherd of fabric Q112 derives from a 2nd-century poppyhead beaker with barbotine decoration of a type produced at the Highgate Wood, Kent, Upchurch and Oxfordshire centres amongst others (Tyers 1978). Fabric Q113 may be a product of the colour-coated ware industry of north Wiltshire which was in operation *c.*AD 125–40 (Anderson 1979, 11). This fabric has also been recognised at an enclosed settlement at Figheldean in the Avon Valley (Mepham 1993, fabric type Q114).

Thirty-five sherds of Dr. 20 amphorae from southern Spain, mostly from a single vessel, were recovered. This is the most common type found on Romano-British sites; the vessels would have contained olive oil and were produced from the mid 1st to the end of the 3rd century AD (Peacock and Williams 1986, 136). The rim has been removed and the handles had apparently been sawn off. However, the base also seems to have been sawn in half, suggesting that the neck and handles were not removed to reuse the vessel.

Thirteen coarse ware fabrics were recognised; nine are broadly defined and may include products from more than one source. None of the fabrics identified are restricted to early forms, with the exception of Q103, which is represented by five identifiable sherds: four everted rim jars of early form (R102), and one wide-mouthed jar (R110).

Table 4. Romano-British coarse and fine ware fabrics, excluding New Forest and Oxfordshire products

E101	Black Burnished Ware (BB1)
E102	Black Burnished Ware (BB1 variant)
G100	Wheelthrown, coarse grog-tempered fabric
G101	A finer version of G100
Q100	Wheelthrown, coarse grey wares without glauconite
Q101	Wheelthrown, coarse grey wares with probable glauconite
Q102	A finer version of Q100
Q103	A finer version of Q101
Q104	Wheelthrown, coarse oxidised wares without possible glauconite
Q105	Wheelthrown, coarse oxidised wares with probable glauconite
Q106	A finer version of Q104
Q107	Wheelthrown, sandy fabric with poorly sorted quartz grains and displaying irregular firing conditions
Q108	A finer version of Q105
Q110	Wheelthrown, white-slipped, well-sorted oxidised sandy fabric with sparse iron oxides
Q112	Wheelthrown, hard, dense, fine unoxidised fabric with rare quartz grains
Q113	Wheelthrown, oxidised, slightly sandy fabric with sparse iron oxides, colour coated
Q114	Wheelthrown, hard, dense, fine, oxidised fabric with rare quartz grains and iron oxides

This may be the result of insufficient data rather than any genuine trend. Other early vessel forms in coarse ware fabrics include an everted rim jar (R102) in BB1, while from the scanned collection there are butt beakers (R112), shouldered bowls (R116) and bead rimmed jars (R117), which show Iron Age influences. Savernake ware, an early Roman fabric, was amongst the material scanned from Trench 4.

The most commonly represented fabric types with regard to rim sherds (Q100, Q101 and Q102) all include examples of vessels dating from the 1st to the 4th centuries, such as everted rim jars (R101, R102), flanged (R104) and dropped-flange (R105) bowls and 'dog dishes' (R106). The two grog-tempered fabrics were frequently found in thick-walled storage jar forms, although only one datable rim sherd was present, an early form of everted rim jar (R102). Black Burnished ware (BB1) in its early and late forms does show continuity of availability from one production centre. It is found in everted rim jars of early (Figure 16, 2) and late (Figure 16, 3) forms, flanged (Figure 16, 6) and dropped-flange

(Figure 16, 7) bowls, 'dog dishes', and one example of a 'fish dish' (late 3rd–late 4th century AD) (Gillam 1976; Seager Smith and Davies 1993, 252).

Estimated Vessel Equivalents (EVEs) (Orton 1980) were calculated for each form as a means of assessing statistically their relative numbers in the assemblage (Table 5). This showed that the two most common forms were the early and late forms of everted rim jars (R101, R102) and that there were roughly equal numbers of early and late vessel forms (nine and six forms, respectively; Table 2) for which a definite date range could be given. There were, however, twice as many later than earlier vessels, suggesting that the main period of site activity was in the 3rd to 4th centuries.

Table 5. Estimated Vessel Equivalents from Trenches 23–4, detailed recording. (EVEs were not available for rim forms 124, 127 and 128 as the sherds were too small to allow calculation)

Rim form	*EVE*	*Rim form*	*EVE*
R101	7.45	R111	0.16
R102	7.52	R113	0.08
R104	1.02	R114	0.05
R105	2.48	R123	0.12
R106	3.40	R124	-
R107	1.16	R125	0.07
R108	0.40	R126	0.30
R109	0.13	R127	-
R110	0.15	R128	-

The only coarse ware fabric type which can be attributed to a known source is Black Burnished ware (BB1) from the Wareham/Poole Harbour area of Dorset (e.g. Williams 1977). Sources for the other fabrics are uncertain, since grey wares in particular are difficult to characterise and the assemblage probably represents the products of several different production centres. Anderson (1979) has defined one centre of grey ware manufacture in north Wiltshire *c.*42km to the north of Butterfield Down where kilns are known at Purton, Whitehill Farm and Toothill Farm.

The presence of what is probably glauconite in fabrics Q101, Q103, Q105, and Q108 might indicate a source close to outcrops of Upper Greensand which occur in north and west Wiltshire. A production centre at Westbury is suggested by kiln furniture and wasters found there (Rogers and Roddham 1991). Other possible sources are the New Forest kilns, which produced grey wares alongside the fine wares in the late Roman period, but these wares have not yet been sufficiently well characterised for identification to be possible.

Distribution

Trenches 1–22 and Trench 23 surface collection: certain fabrics were commonly found; grey wares, oxidised wares, BB1, grog-tempered fabrics, Oxfordshire and New Forest products were present in all but Trenches 5 and 9. Only three flint-gritted sherds were recovered, all from the surface collection in Trench 23.

There were also isolated examples of other fine wares which occurred in greater quantities in the excavated features of Trenches 23 and 24. White-slipped ware was recovered from Trenches 1, 3–4, and 7, samian from Trenches 1, 3–4, 7, 12, and 17, and amphora sherds were found in Trench 3. All these wares were also retrieved from the surface of Trench 23, together with one sherd of Rhenish ware and two of probable north Wiltshire colour-coated ware. Four sherds of Savernake ware were found in Trench 4 – the only occurrence of this type on the site.

No distinct early features were identified in the analysis and although a number of early rim forms were identified they occurred with later material. Early everted rim jar forms were recovered from 11 trenches and the surface of Trench 23; examples of a carinated bowl/dish rim, a wide-mouthed jar, a shouldered bowl of 1st/2nd-century date, and a 1st-century butt beaker were recovered from Trench 4. The shouldered bowl form was also recovered from Trench 22. A bead-rimmed jar form was identified in Trench 15 and a 1st/2nd-century reeded rim bowl form in the assemblage from the surface collection in Trench 23. With the exception of the concentration in Trench 4, the early forms were distributed randomly across the site.

Trenches 23 and 24. Roman pottery was recovered from most of the excavated features and no significant clustering was observed. Feature 3020, a corn drier, showed a concentration of fabric types Q100, Q101 and Q104, but it is likely that the pottery was deposited over a period of time after the structure went out of use.

The variety of early and late Roman types recovered, together with certain fabric types which have a limited date range, show that the site was occupied throughout the Roman period. None of the locally-made wares seems to have been restricted to any chronological period, and non-local wares were present throughout the occupation of the site. The relatively small amount of early Roman wares, such as Savernake ware, or easily definable early forms of BB1, indicates activity at Butterfield Down was at its peak in the late Roman period when the large proportion of New Forest and Oxfordshire wares may reflect the status of the site.

Occupation at Butterfield Down seems to begin at the time that occupation at nearby Boscombe Down West declined (Richardson 1951). The latest forms at Boscombe Down West are very similar to the early rim forms at Butterfield Down and Trench 4 in particular has a concentration of these, including shouldered and carinated bowls. The range of fabrics and forms in the late Roman assemblage is paralleled nearby at the substantial settlement west of Durrington Walls where little early Roman material was found (Swan 1971).

Although there is a greater emphasis on the late Roman period at Butterfield Down, the range of fabrics and forms is similar to that found at Figheldean (Mepham 1993). If the difference is not due to the different dates of the sites, the proportion of fine wares at Butterfield Down, 6.7% by weight, which is comparable to the 7% at the site west of Durrington Walls (Swan 1971) may suggest that these sites were of higher status than that at Figheldean.

Ceramic building material

by J.I. MILLARD

Some 256 pieces of ceramic building material (14,340g) were recovered. Of these, 120 pieces (11,934g) are Roman, 134 pieces (2,395g) medieval or post-medieval and two pieces (11g) are undated. The post-Roman material consists mainly of small fragments of brick or roof-tile and is almost entirely from unstratified contexts. The even distribution of this material is likely to be the result of agricultural practices, probably manuring.

The Roman material includes 86 fragments of brick, six of tile of uncertain form, seven of *tegulae*, one *imbrex* and two of comb-patterned flue tile. Eighteen other fragments may be dated to this period on the basis of fabric and form but are of uncertain type. The material was evenly distributed across the excavation, the only concentration being a group of 64 fragments from a single plain *lydion* brick measuring 430mm x 290mm x 35mm which had been used as the base of a hearth or oven in Trench 23 (Figure 6, 2809). There was no obvious use or reuse of ceramic building material in the mortared structures such as the corn driers.

The fired clay

by ANDREW CROCKETT

A total of 107 pieces (2,155g) of both single-faced and double-faced cob walling was found. This material is oxidised throughout and some pieces have suffered from burning after use. Most of the cob walling formed part of a dump in pit 2813 (Figure 6), while a further large group was found in the fill of the excavated corn drier 3020.

Approximately half of a spindle whorl (fabric G101, 35mm diam., <12mm thick, *c.*25g, central perforation 10mm diam.) was found in pit 404, Trench 4. Roman spindle whorls are usually made from worked stone, shale, or broken pottery (Leach 1982, 217), and it is rare to find examples made from clay.

The building stone

by J.I. MILLARD

Some 137 flat stone slabs, all probably tiles, were found. Most are of limestone, although there are fourteen of sandstone. The tiles can be divided into two broad groups: thin slabs likely to be roofing material, and slightly thicker pieces more suitable for flooring. Two of the roof tile fragments have surviving nail holes and on one of these ferrous corrosion products are visible adjacent to the hole. Nine of the fragments are much thicker than the floor tiles, and their function is unknown. Other building material consists of two dressed blocks, one of limestone and the other of Greensand, both probably architectural fragments. Unworked pieces of Oolitic Limestone and sandstone may also have been building materials.

Worked bone and ivory

by J.I. MILLARD

One ivory and one bone pin were found in the fills of corn drier 3020; a second bone pin and a carved sheep metatarsal were recovered from the fills of pit 404 in Trench 4. The ivory pin is 78mm long, has a spherical head and the shaft tapers at both ends, a form paralleled in bone pins thought to date from after AD 200 (MacGregor 1985, figure 64, nos. 8–10). Unless it is actually highly polished bone, the pin was probably imported. The importation of elephant and fossil (mammoth) ivory to the Mediterranean world is known in the 4th century (Krzyszkowska 1990) but it is unknown whether raw materials or only finished objects reached mainland Britain.

The bone pin from the corn drier is similar but is only 26mm long. Only a 56mm portion of the shaft of the third bone pin survives and this tapers at both ends. The natural grooves on both the anterior and posterior surfaces of the sheep metatarsal have been enlarged using a knife.

Paleo-environmental material

The carbonised plant remains

by MICHAEL J. ALLEN

Six samples of ash were recovered from regular intervals along the flue of corn drier 3020. They were processed using standard flotation methods, and the 500μm flots were assessed. All samples contained carbonised grain (barley, *Hordeum* sp., and wheat, *Triticum* sp.), none of which showed signs of germination. Two of the samples contained chaff elements (e.g. rachis fragments, etc.), and weed seeds (*Polygonum* sp. and cf. *Bilderdykia convolvulus*) were common in two samples and present in two others.

These finds suggest the burning of crop waste as well as cleaned grain, and could indicate disposal and burning of farm waste in the structure after it had gone out of use; it is more likely, however, to reflect the probability that 'corn driers' actually had a variety of uses (van der Veen 1989).

Animal bones

by J. EGERTON

Nearly 4,000 well preserved but severely fragmented animal bones were recorded from Trench 23, principally from late Roman contexts. Only securely dated finds are considered here.

The early Roman assemblage was dominated by sheep (over 50%) but cattle were also found in significant numbers with other domestic animals present (Table 6). Although the majority of bone was recovered from pits and ditches, the relatively high proportion of teeth indicates poor preservation overall of the assemblage. Over 15% of the assemblage was weathered but only three gnawed and two butchered bones were recorded.

Table 6. Animal bones from early Roman contexts in Trench 23

	Teeth	*Other elements*	*Total*
Cattle	2	9	11
Sheep	7	12	19
Horse	-	3	3
Dog	-	1	1
Chicken	-	1	1
		Total fragments	78
		Total identified	35
		% identified	44.9

Late Roman contexts contained 3771 fragments of which 1746 (47.7%) of the bone from features was identifiable (Table 7). The assemblage was heavily fragmented due to physical breakage and butchery prior to deposition and also in part because of post-depositional breakage. The sample produced only 17 complete and mature long bones (sheep 8, horse 5 and cattle 4). The percentage of identified bone demonstrates a common variation between feature types and identifiable fragments, with pits offering better preservation, and proportions of species were constant across the site.

Table 7. Percentages of species from late Roman features in Trench 23 excluding contexts with special deposits/large quantities of bones, e.g. pit 404

Cow	35.9	Chicken	0.6
Sheep	54.8	Red Deer	0.13
Pig	4.1	Hare	0.06
Horse	3.1	Bird	0.06
Dog	1.1	Amphibian	0.13

The relative proportions of species is unsurprising, with the proportion of sheep (55%) slightly larger than cattle (36%) on this chalkland site. Apart from two special contexts, most of this site reflects small-scale primary and secondary butchery waste.

Some cattle on the site were used as draught animals (see below), but the limited ageing data also suggests some were killed on maturity for meat and 57% of the cattle fragments were from high meat-bearing bones. Generally cattle produce thirteen times more meat per animal than sheep, so setting aside secondary products, they were the most important animal in the food economy (Grant 1984; Done 1986; Millett 1990).

Most of the butchery marks (cuts and chops) were associated with primary butchery, but some (28%) were associated with disarticulation of the foot elements. One animal had spavin which is associated particularly with draught animals resulting in their only being able to manage light loads; two bones displayed septic arthritis and one had an exotosis on the foot.

The remains of at least 46 sheep, comprising 55% of the assemblage, were found. Most bones were fragmented but only 22 butchery marks were noted and 40 bones had been gnawed by canines.

A few neonatal deaths probably associated with lambing were recorded. The majority of bones, however, indicate a mature age at death (i.e. three years+) and this is supported by the dental data. As three good fleeces can be obtained by the time an animal is three-and-a-half years old, this suggests

Table 8. Animal bones from pit 404

Context	*Phalange 1*	*Phalange 2*	*Phalange 3*	*Astragalus*	*Calcaneus*	*Teeth*
441	50	62	44	11	11	-
445	5	11	4	-	-	45

sheep rearing was primarily for wool and other products rather than meat.

Pit 404 in Trench 4 contained a large collection of foot and tooth elements (Table 8). These elements are very well preserved, mostly from mature animals, and lack cut marks so it is likely that they are either waste products of industrial processing, such as skinning or tanning, or comprise a special animal deposit. The group is paralleled, for example, by a group from a Roman well at Oakridge II, Basingstoke, Hampshire (Maltby 1993) where a collection of head and foot elements was in an excellent state. However, at Butterfield Down the metapodial bones were not found with the tooth elements so it seems likely that metapodia were used for bone tools. It may not be a coincidence that a sheep metatarsal had been worked into a tool.

Only four horses were identified but a large proportion of the fragments were teeth (33%); this, together with the rarity of butchery (just two cuts associated with disarticulation), suggests that horses were seldom, if ever, eaten at this time. A complete skull of a 19-year-old horse was found in pit 2813 in Trench 23. It is not clear if this was a special deposit for as well as containing seven complete and associated sheep long bones, it was accompanied by a seemingly ordinary mix of waste bones.

Only four pigs were recorded, suggesting that they were not an important part of the food economy though the limited ageing data does suggest that they were bred on the site and were killed whilst young.

There are, perhaps, rather few dog bones considering the canid gnawing of seventeen elements (1.1% of the assemblage). One very young puppy was found in a ditch in Trench 3. Two bones of red deer were found, one an antler from a mature animal which had been sawn off below the burr. Other animals represented included hare, chicken and amphibian.

Of special interest is the burial of a crow, whether carrion or hooded is uncertain, in a pit or ditch (310) in Trench 3. The preservation of the bones, which was very good, endorses the suggestion that it was a special deposit.

Discussion

The animal bones give keen indicators of the activities on this late Roman settlement in an area which lacks well-investigated sites. Animal husbandry was clearly of a similar mode to that of other small rural settlements of the period. The cattle bones are intensely butchered and there is evidence for the use of all parts of both sheep and cattle.

Assessment of the land Mollusca

by SARAH F. WYLES *and* MICHAEL J. ALLEN

Samples were taken from a subsoil hollow in the centre of the ground enclosed by the ring ditch and from the ring ditch itself (2500). The subsoil hollow is undated but if, as seems likely, it is earlier than the ring ditch, the presence of species such as *Vitrea contracta* and *Carychium tridentatum* which are found in leaf litter and tall grass would suggest tall grassland. The presence of open country species (*Vallonia* spp. and *Pupilla muscorum*) indicates long, ungrazed grassland, possibly with some localised scrub habitats in the area.

The primary fills of the ring ditch were barren and there were few finds from the secondary fills. However, the presence of *Vallonia excentrica* in the lower secondary fill and *Helicella itala*, *Pupilla muscorum* and *Vallonia excentrica* in the upper secondary fill suggests that after the monument was built it was surrounded by well-established, short-turved grazed grassland, which fits well with what is known of the contemporary landscape in the area.

Columns of contiguous samples were taken from ditches 15, 18, 21 and 26 in the east of the site and were dominated by open country species. In the case of Ditch 21, the presumptively later Bronze Age Earl's Farm Down 'Linear', the sequence showed no significant change in the major species composition with the exception of *Vertigo* in the upper fills. Some variation within the *Vallonia* species was noted, however, indicating the potential for discerning changes in the open country environment.

Marine Mollusca

by SARAH F. WYLES

Fragments from at least 158 oysters, which may have been dredged from natural beds rather than farmed, were recovered from Roman contexts all across the site. The numbers are too small for oysters to have been other than an occasional supplement to the diet of the inhabitants.

Discussion

by MICK RAWLINGS, A.P. FITZPATRICK *and* ROSAMUND M.J. CLEAL

Prehistoric

Late Neolithic pit ring

One certain and one possible prehistoric monument were found within the area which was later the site of a Romano-British settlement. Although only one pit could be partially excavated (2998), it is probable that the four subrectangular pits in the south-west of Trench 23 were related, forming a small 'pit ring henge'-type structure *c.*10m in diameter. Similar monuments are increasingly well known in southern England.

At Conygar Hill on the Dorchester, Dorset, bypass, two similar structures were found, one of which contained Late Neolithic Grooved ware (Smith forthcoming) and there are two further examples from Dorchester-on-Thames, Oxfordshire, although the ditch segments there were up to 2m deep (Atkinson *et al.* 1951, Site II, phase I and Site IV). Late Neolithic Peterborough ware was found in Site II at Dorchester-on-Thames (where Site IV is likely to be contemporary) and was used in funerary practices. A comparable monument at Barrows Hill, Radley, Oxfordshire is probably also of Late Neolithic date and may have been funerary (Chambers and Halpin 1984, 6–7).

Other small, circular Late Neolithic monuments are known in the immediate vicinity of Butterfield Down. The first phase of barrow Amesbury G71 on Earl's Farm Down, *c.*1.3km away, was a small ring ditch of probable Late Neolithic date (Christie 1967). At Butterfield Down, Peterborough Ware was found in pit 2943 *c.*20m to the north-west of the pit ring henge. The unfinished stone axe provides further evidence for Neolithic activity on the site, but perhaps at an earlier date in the period.

Pit 2

Beakers similar to those recovered from pit 2 have been found on domestic sites elsewhere, but the context and typology of the Butterfield Down material may indicate a non-domestic mode of deposition. Vessel 1 is an extremely large Beaker, apparently larger (in terms of approximate height and diameter) than all but one of the vessels illustrated in Clarke 1970 (the exception being a rusticated vessel from Great Barton, Suffolk: Clarke 1970, fig. 916).

The volume of Vessel 1 is approximately eight litres (calculated by division of the internal profile into conic frustra), which falls within the sort of volume typical of storage, or possibly food preparation, rather than for individual eating and drinking. The volume places it towards the upper limit of the range for Beakers, which appears to lie mainly between one and five litres, averaging at three litres (Thomas 1991, fig. 5.8).

The fact that there is some carbonised residue adhering to the interior suggests that it had held organic contents at or before deposition. The possibility that its use and deposition were not domestic is apparent, but this hypothesis cannot easily be tested. If analysis of the organic residues were to be undertaken, it might shed some light on the nature of the material held within the Beaker.

Although Butterfield Down Vessel 1 is exceptional in terms of size, it is not unique in terms of its deposition within a small, apparently isolated site. Although non-funerary Beaker sites are not as common in Wessex as they are in some other regions (e.g. eastern England), other vessels have been found in similar circumstances in the area. At Barrow Pleck, Rushmore (Cranborne Chase), sherds representing slightly less than half an incised Beaker not dissimilar to Vessel 1 were found in the top of a periglacial feature, where they had probably been placed in a slight hollow formed by the slumping of the fill (Cleal 1991, 148, fig. 7.3, P6). A less ambiguously domestic site with at least one similar Beaker is close to Badbury Rings, Dorset, where two pits and a posthole were filled with sherds of probably more than fifteen vessels (Gingell with Dawson 1987), one of which was represented by approximately one quarter to one third part of its total and which could be classed as a Clarke's Final Southern Beaker (S4).

The occurrence of small numbers of Beaker sherds as scatters or in small isolated features cannot be considered unusual, either locally or within the region (e.g. the widespread occurrence of small-scale Beaker scatters in the Stonehenge area, Cleal 1990, fig. 154). As such, the sherds of Vessels 2 and 3 would not occasion particular comment. The presence of the large and virtually whole Vessel 1, however, indicates that this deposit cannot be regarded in quite the same light. Given this, it is tempting to speculate that the extremely unusual nature of the fabrics of Vessels 2 and 3, with their bone temper, may also reflect a non-domestic or not wholly domestic function.

Early Bronze Age chalk plaque and ring ditch

Other evidence of later Neolithic or Early Bronze Age date is provided by the chalk plaque (Figure 14). Although it was found in a late Roman pit, the object finds its best parallels with the Late Neolithic chalk plaques from the nearby Chalk Plaque Pit *c.*200m to the east, which were associated with Grooved Ware (Harding 1988; Lawson 1993). The decoration on the Butterfield Down piece is closer to that on Beaker pottery, which may suggest that it is slightly later in date.

A further prehistoric monument, the ring ditch, does not appear to have encircled a central grave cut into the natural chalk. Although graves may have been dug in the southern part of the ring, it is quite possible that the ring ditch did not contain any burials, or that they may have been made in the now destroyed mound. The lithic assemblage from the ditch suggests a Late Neolithic–Early Bronze Age date. Although there are local parallels, such as the penannular ditch of Winterbourne Stoke Barrow 44 (of a similar size) which are thought to be Late Neolithic (Green and Rollo-Smith 1984), an Early Bronze Age date for the Butterfield Down example is considered more likely.

The crouched inhumation burial 3004 is probably broadly contemporary with the ring ditch and may have been a satellite burial. In view of the predominantly funerary contexts of incense cups it is likely that the small fragment – possibly of one of these vessels – found in the grave is a formal grave good rather an accidental introduction during the digging of the grave.

The snails from a hollow in the centre of the ring ditch monument are likely to pre-date it and they suggest an open, long-grassed environment which may have contained some scrub. However, by the time that the fill of the ditches began to stabilise, the monument lay in well-established, short-turved, grazed grassland, an environment which is well documented in other analyses in the area. It is also noteworthy that the fills of features of prehistoric date have a different colour from those of Roman ones which is probably due to an increase in the quantities of chalk resulting from the reduction of soil depth by ploughing, probably during the Middle–later Bronze Age, a trend which is again well documented in the later prehistory of the chalklands.

The Earl's Farm Down linear ditch

Sample excavation of the large linear ditch at the east side of Butterfield Down failed to provide any clear evidence for the date of this feature. It forms part of a major component of a network of such ditches known as the Earl's Farm Down complex which, along with other similar networks in the Salisbury Plain area, has been tentatively assigned an original construction date within the later Bronze Age (Bradley, Entwistle and Raymond 1994, 122). They are seen as territorial divisions which represent the formal organisation or re-ordering of the landscape. The summary evidence from the mollusca suggests that the ditch lay in an open country environment although detailed analysis might indicate changes within it.

Although restricted by the limited amount of excavation possible, the evidence from Butterfield Down is a useful addition to our knowledge of the later Neolithic and Bronze Age periods in the Stonehenge area and the variety of later Neolithic/Early Bronze Age special deposits and funerary and ritual monuments in Wessex (Barrett, Bradley and Green 1991, 58–139).

Roman

Glass and pottery from the 1st and 2nd centuries AD were recovered from a variety of contexts, but structural evidence for early Roman activity on the site is restricted to a few features, in particular a group of right-angled ditches in the north-east of Trench 23 (Figure 6). It is possible that early Roman activity at Butterfield Down was mostly outside the areas so far examined since the brooches discovered as surface finds would seem to suggest occupation at this time. The lack of evidence for Iron Age activity offers a contrast to the continuity through the later prehistoric and Romano-British periods seen at local sites such as Chisenbury Warren (Bowen and Fowler 1966, 50–2) and Figheldean (Graham and Newman 1993).

The late Roman settlement at Butterfield Down covered at least six hectares and appears to have been unenclosed. The bulk of the pottery is later Roman and there was a dramatic increase in coin loss in the settlement at this time.

Our understanding of the layout of the settlement is limited since excavation was restricted to the sites of modern houses and roads (Trenches 1–21). However, the evidence is consistent with the clearer picture given by the larger area of Trench 23. Here a single, shallow, right-angled wall-footing and a ring gully were the only certain traces of the foundations of buildings; no clearly defined buildings or residential compounds were identified. Although there are hints that there may have been a temple on the site (see below), the character and quantity of

finds strongly suggest a settlement in which buildings left little, if any, archaeologically obvious traces.

Timber-framed buildings may have rested on sill beams as at, for example, the early phase of Skeleton Green, Hertfordshire (Partridge 1981) or on stone joist supports, as at the late Roman settlement at Wanborough, Wiltshire (Anderson and Wacher 1980). The cob walling from Butterfield Down could have come from such timber-framed buildings. One sunken-floored feature was excavated in Trench 4 while several similar examples were observed during the watching brief (Trench 22). These may be the remnants of sunken-floored structures or cellars representing the only surviving evidence of buildings, a situation known for example at the extra-mural settlement at King Harry Lane, St Albans, Hertfordshire where large, late Roman 'cellars' dated to the 3rd century are the only structural evidence for buildings (Stead and Rigby 1989, 7–11, fig. 4, 7–8).

Some of the buildings at Butterfield Down may have been roofed with clay and stone tiles instead of thatch, and some may have had stone tiled floors. The two possibly architectural fragments suggest that more imposing buildings may have stood in the settlement, perhaps in the area of the clay tile scatter located during fieldwalking (Figure 2, II, B). The posthole alignments show that the settlement was divided by fences, some of which presumably enclosed buildings. The hollow ways in Trenches 12–13, 23 and possibly 17, represent substantial tracks or roads, confirming indications in aerial photographs of a series of trackways passing through the settlement.

A range of evidence informs us of the activities of the inhabitants of Butterfield Down. Plant macrofossils from corn drier 3020 indicate that barley and wheat were 'dried' while chaff from the same samples suggests that the crops were also being winnowed and threshed on site. The number and variety of the corn driers or kilns identified might suggest either that cereal processing was undertaken on a small, perhaps household, basis or that it was a more important activity. The presence of a millstone, probably from a mill driven by animals, as well as numerous querns, points to the latter possibility.

Cattle and sheep appear to have been the most common farm animals. The combined evidence of age and butchery marks points to the killing of cattle on maturity and the primary butchering of high meat-bearing joints indicates that these could have provided a principal source of meat. The evidence of pathology also suggests that some cattle were used as draught animals and it may have been animals such as these on which the iron shackle was used.

In contrast, the sheep identified appear to have been kept to maturity, presumably for their fleeces and other products. The discovery of a large assemblage of feet and teeth suggests that some animals at least were butchered in such a way as to allow their hides to be kept. Some of their bones were worked into tools. Pigs were also eaten, as were hares and chickens. Horses seem to have been butchered rarely and they are likely to have been kept primarily for riding, as beasts of burden, and for traction; the horseshoe, and perhaps the hipposandal also, would have been worn by these animals.

Very few tools which might be indicative of other tasks undertaken by the inhabitants were found. The single spindle whorl testifies to the spinning of wool and the slag shows that some smithing was undertaken; the knives could have served a variety of uses. The discovery of a stylus indicates conditional literacy, at least, an ability which is likely to have been quite rare in settlements of this sort (Evans 1987). The glass and pottery demonstrate something of the range of storage and table vessels used and, as would be expected on a predominantly later Roman site, foodstuffs imported in amphorae are rare.

Evidence of the religious beliefs of the inhabitants is provided by the burial of infants within the settlement (2845 and 2952, Trench 23), a practice which is particularly common in late Roman rural settlements (Struck 1993). The sceptre-head is a notable discovery and it may not be accidental that it was discovered on the surface of the shallow ring gully 2847. Such dating evidence as there is from the gully suggests a late Roman date, a period in which domestic buildings were usually rectangular, which raises the possibility that it may have been a temple. However, as the infant burial found in one of the gully terminals would be appropriate to a domestic setting the question must remain open. In any case, the distinction between sacred and profane should not be drawn too rigidly and certain deposits may or may not derive from religious acts.

The crow, whose skeleton was found in the base of feature 310 (Trench 3), had clearly been placed there and covered over deliberately. This may be paralleled in a 4th-century deposit at Foxholes Farm, Hertfordshire where a cockerel was placed at the bottom of a pit and flanked by two coins, the upper part of the pit being packed with flints (Patridge 1989, 49, 208–9). In pit/shaft 2813 at Butterfield Down (Trench 23) a horse's head had been placed on top of part of a sheep, and a sherd

from a face mask pot was found within the overlying fill. These pots are often associated with religious activities on settlements (Braithwaite 1984, 124). The deposit of sheep heads and feet in pit 404 may represent waste from the processing of hides, but it could also be a votive deposit (Scott 1991, 117).

It is possible that specialised religious buildings stood on Butterfield Down. The large number of late Roman coins and other late Roman metalwork such as the figurines, spoons and bracelets, could derive from a temple. The evidence for one or more buildings with tiled roofs crowning the summit of the Down, and the fragments of architectural masonry found in the excavations might also support this suggestion.

The setting of the site

Excavations at nearby sites allow Butterfield Down to be placed in its local context. The later prehistoric and early Roman site of Boscombe Down West (Richardson 1951) is located *c.* 3km to the south-east and its occupation appears to have declined as Butterfield Down developed, the latest pottery forms at Boscombe Down being very similar to the earliest here.

Butterfield Down shares many similarities with the site at Durrington Walls (Wainwright 1971) 3km to the north-west. This is an extensive, unenclosed late Roman settlement with a ceramic assemblage which also indicates some early Roman activity. There is a lack of clearly identifiable buildings, though there are a number of small ovens or kilns, together with a well-constructed corn drier which is almost identical to the one excavated at Butterfield Down (Figure 11, Plate 3). The ceramic assemblages are analogous, with similar ratios of fine to coarsewares.

Turning to the broader range of settlement types within the region, discussion of Romano-British rural settlement has historically been linked to early observations concerning the lack of villas in the region of Salisbury Plain. This absence, along with other factors, led Collingwood and Myers (1937, 224) to suggest that the Plain formed part of an imperial estate, an idea which has enjoyed enduring popularity, though more recently it has been suggested that poor soil conditions were responsible (Esmonde Cleary 1989, 106).

However, whilst some villas are known, the number of nucleated settlements (Graham and Newman 1993, 51), together with the evidence of recent air photographs and surveys of extensive Romano-British field systems and sites such as Church Pits, Knook Down East and Knook Down West (*Britannia* 23, 1992, 297–9, fig. 20–2) suggest that soil conditions on the Plain were not a constraint.

Instead, social factors may be one reason for the paucity of villas. While accepting that in the early Roman period Salisbury Plain (amongst other regions) might have been part of an imperial estate, Hingley has suggested that in the late Roman period the estate might have been partitioned and sold to private landowners: thus villas ought not to be too readily expected, and the wealth expended elsewhere in building villas might here have been used in different ways (Hingley 1989, 156–61), for example in material goods. Hingley's suggestion, however, that wealth was invested in goods rather than in buildings (*op.cit.*) is unconvincing as such objects are also found at villas. Nonetheless, his distinction between individual and community is valuable, and the size of the settlement at Butterfield Down is large enough to represent a 'village'. The apparent absence, so far, of lavish dwellings at Butterfield Down may indicate the collective ownership of wealth. However, some settlements were occupied from the Iron Age and throughout the Roman period (Graham and Newman 1993, 52) and the absence of villas from the downlands of the Plain could reflect its distance, both physical and social, from major towns and the ideas of *Romanitas* which they embodied (Scott 1991, 116). Clearly, further and more detailed work on Romano-British sites within Salisbury Plain, and their integration within wider landscape analyses, is necessary.

The Archive

The archive is deposited in Salisbury and South Wilts Museum, 65 The Close, Salisbury, Wiltshire SP1 2EN.

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The project has been managed successively by Julian C. Richards, Peter J. Woodward, Richard Newman and A.P. Fitzpatrick. The

fieldwalking was carried out under the control of Martin Trott. The excavations were directed by Mick Rawlings with additional supervision by Hugh Beamish, Neil J. Adam, Lawrence Pontin, Andrew B. Powell, Rachael Seager Smith, and P.A. Harding. Trench 24 was excavated by Vince Jenkins. Aerial photographs were organised by Graham Brown, who also assisted with the excavations. The photographs are by Elaine Wakefield and Mick Rawlings, and the drawings by Linda Coleman, Julian Cross and S.E. James.

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Wiltshire Archaeological and Natural History Magazine, Vol. 89 (1996), pp. 44–72

A Romano-British Farmstead and Associated Burials at Maddington Farm, Shrewton

by JACQUELINE I. McKINLEY and MICHAEL HEATON

with contributions by RACHAEL SEAGER SMITH, DAVID MURDIE, MICHAEL J. ALLEN, JOHN A. DAVIES, S. HAMILTON-DYER, P. HINTON and R. MONTAGUE

The discovery of two burials during construction of a pipeline booster station by Esso Petroleum Co Ltd at Maddington Farm, Shrewton, led to full excavation of the site. The site proved to be part of a small Romano-British farmstead of probable 3rd–4th century date, comprising a small circular posthole structure with associated hearths and pits adjacent to field boundary ditches that appeared to have also functioned as the focus for a small inhumation cemetery.

INTRODUCTION

The Site

In 1961, Esso Petroleum Co Ltd laid an oil supply pipeline from the Fawley Refinery at Southampton to Avonmouth near Bristol (Figures 1 and 2, context 1246), a distance of some 80 miles. More recently, as part of the ongoing programme of management and maintenance, it became apparent that a 'booster station' was required to maintain oil pressure across the varied relief crossed by the pipeline. For safety reasons such installations require accessible sites away from built-up areas. Maddington Farm near Shrewton was chosen as the most suitable site, partly on the grounds that it impinged on no known archaeological sites. An environmental impact assessment of the proposed site and its immediate surroundings (RSK Environment Ltd 1992) revealed some evidence of prehistoric activity and it was recommended that a watching brief should be conducted during preliminary stages of construction.

The pipeline passes *c.*400m north-east of Maddington Farm which lies on the B390 2km west of the village of Shrewton, between Salisbury and Devizes (Figure 1). The farm buildings are situated on the north side of the road at the bottom of one of the numerous dry valleys that dissect the southern edge of Salisbury Plain, joining the Till valley at Shrewton. The ground rises to the north, south and west to the level of the surrounding downs, at approximately 120m OD. The downs are crossed by a network of bridleways and footpaths, one of which follows a south-west–north-east route from the east side of the main farm buildings, crossing an east–west bridleway *c.*140m north of the site. The area of excavation lay immediately to the west of this bridleway, *c.*500m from the farm buildings at SU 0490 4450, on arable land on the south-facing slope just below the summit of the Chalk spur (Figure 1). The soils of the area are humic rendzinas and typical palaeo-argillic brown earths. Clay-with-flints also occurs locally.

Construction work, in September 1993, comprised slight re-routing of the existing oil-carrying pipe through the booster pump set several metres into the natural chalk (Figure 2: pipe diversion trench). To the north of the pump the ground was terraced to house the station buildings and the area to the south was stripped and made up with scalpings to provide hard-standing for the contractors prior to landscaping. Emptying the 1961 pipe trench of backfilled material revealed that the pipelaying operations had cut through a formerly unnoticed burial (121) outside the construction site. A second burial (128) was found in the north edge of the 1993 pipe diversion trench. Wessex Archaeology was instructed to excavate fully the construction site to the north of the pipe diversion trench.

Archaeological setting

Maddington Farm lies on the southern periphery of Salisbury Plain, close to the Stonehenge and Avebury World Heritage Site, and within one of the richest concentrations of prehistoric monuments

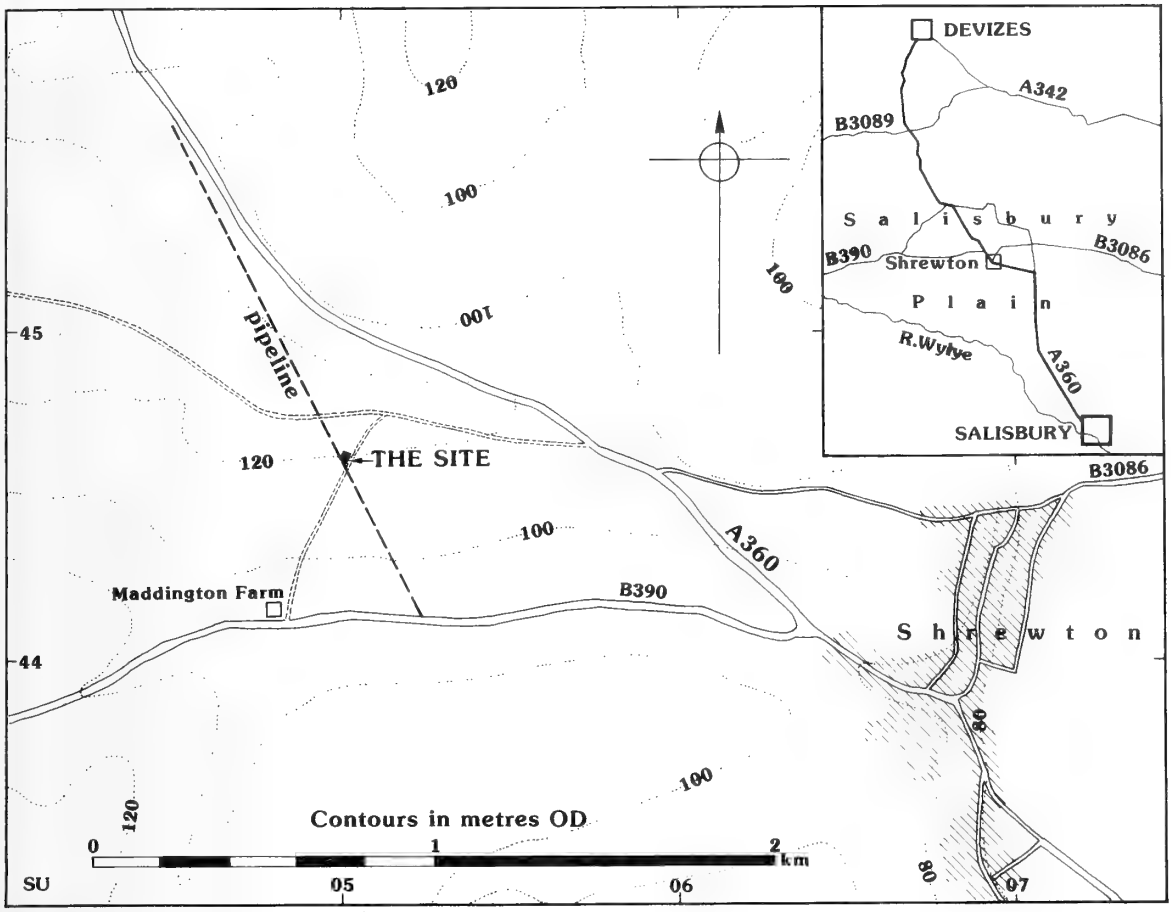

Figure 1. Maddington Farm, Shrewton: site location plan

and archaeological sites in Europe. Knowledge of the Romano-British period has increased substantially in recent years as a result of the ongoing surveys of South Wiltshire and the Salisbury Plain Training Area (SPTA) by the Royal Commission on the Historical Monuments of England. Intensive settlement and land-use in and around the area of the Plain in the Romano-British period is now apparent, often demonstrating a continuum of use from the prehistoric to the late Romano-British periods (M. Corney pers. comm.). Ten Romano-British settlements, evident as earthworks, have been reported to date (*WAM* 1994) ranging from the 6-ha settlement at Compton Down to the *c.*22-ha village at Charlton Down, both *c.*10km north-east of the site. The overall picture shows a range of occupation from farmsteads to large-scale settlements, including several villas, and a complex field system extending over the Plain.

The excavation

The excavation was restricted to the *c.*45.5 x 40.0m area of terracing north of the pipe diversion trench. Although adjacent areas to the south and east, including the bridleway up to the site, were stripped of topsoil and prepared for contractors' compounds and vehicular access, no subsoil disturbance was involved and hence no threat was posed here to archaeological deposits.

There was no space on the site for topsoil storage and stripping was undertaken by the pipeline contractors on a piecemeal basis during upgrading of the vehicular access. Archaeological excavation proceeded as areas became available, generally about one third of the site being accessible at a time. This necessitated more tracking and spoil handling than would normally be acceptable on archaeological sites, resulting in some disturbance and compression of the uppermost archaeological deposits. A team of

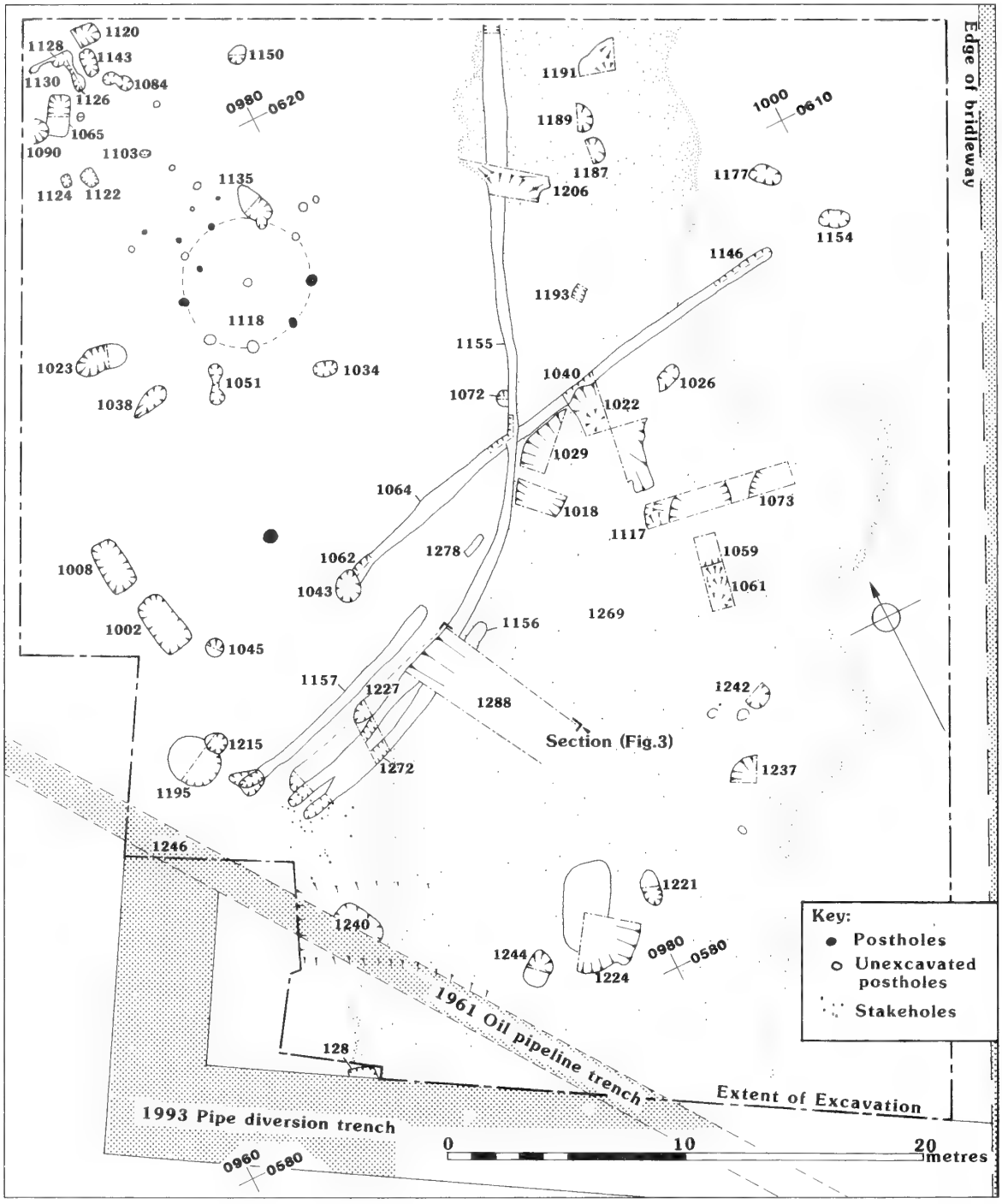

Figure 2. Maddington Farm, Shrewton: plan of excavated area showing all features

four archaeologists (assisted on one occasion by the main contractors) worked for four weeks between 20 September and 14 October. Archaeological deposits were examined in sample slots, half-sections or by total excavation in the case of inhumations. Bulk soil samples were taken from the visually most promising dated contexts and processed for palaeo-environmental materials. A single soil column was extracted from a machine-cut section through a colluvial deposit for molluscan analysis (Figures 2 and 3).

The archive of materials, site records and detailed reports is stored at Wessex Archaeology's offices at Old Sarum under the archive code W564; it will be deposited at Salisbury Museum in due course.

Archaeological deposits

by DAVID MURDIE *and* JACQUELINE I. McKINLEY

All archaeological deposits were contained within features cut into natural chalk. The site having been ploughed, there were no archaeological deposits surviving above the natural chalk and few stratigraphic relationships to support detailed site phasing.

Structure 1118

In the north-western area of the site, an almost complete circle of eight postholes at *c.*2m intervals formed the outline of a 5.5m-diameter structure around a single central posthole. A tenth posthole may have been masked or destroyed by feature 1135 which could account for the apparent gap in the north-eastern side of the circle. The postholes were of approximately 0.34m diameter and 0.17m depth, with vertical sides and flat bases, and filled with dark brown silty loam. There were nine other postholes situated immediately north of 1118, with similar dimensions and fills. Their apparent concentration in the immediate vicinity of the structure suggests that they might be associated with it.

Hearths

There were six hearths, all situated in the north-western area of the site, three within 3m of the south edge of structure 1118 (1038, 1034 and 1051), and three in a small group in the north-west corner of the site (1090, 1084 and 1128). Of these, 1038, 1034 and 1090 were shallow, cut to a maximum surviving depth of 0.16m, rectangular to ovate in plan, 1.10–1.50m long by 0.55–0.75m wide, with steep sides and flattish bases which were discoloured and scorched. In each case the bottom fill contained large quantities of charcoal, sealed beneath layers of silt and silty clays containing varying amounts of chalk fragments.

Features 1051 and 1084 each consisted of two contiguous circular or bowl-shaped depressions, the former 1.50m long with a maximum diameter of 0.56m and maximum depth of 0.19m, and the latter 1.25m long with a maximum width of 0.50m and a maximum depth of 0.18m. The fills were similar to those of 1034 and 1038 and evidence of burning was observed on the bases and sides.

Feature 1128 consisted of a circular depression connected via shallow linear troughs to two smaller pits to the west and south. The two pits (1126 and 1130) contained black silty clay primary fills beneath compact, fire-reddened powdery chalk, whilst 1128 itself contained a single fill of charcoal-flecked yellowish-brown silty clay and chalk rubble.

All the hearths produced Romano-British pottery and burnt flint with limestone and quern fragments, iron nails, fired clay (possibly hearth lining) and flint flakes.

Pit 1195

Situated in the south-west part of the site, *c.*1m north-west of the western terminal of ditch 1157, this feature displayed a bell-shaped profile, 2m wide at the surface and 1.7m at the base, with a depth of 1.33m. The primary fills (1199, 1201, 1210, and 1217–1220) comprised thin layers of highly organic silts lying against the sides of the pit but tipping predominantly from the eastern edge, with a combined thickness of 0.3m. They were sealed by a 0.5m-thick dump (1198) of dark greyish-brown silt that extended the full width of the pit, sealed below a 0.1m-thick layer of loose chalk rubble (1197). The uppermost fill (1196) was a yellowish-brown silty clay with occasional chalk and flint inclusions, cut on the eastern side by feature 1215. Most of the finds were derived from fills 1196 and 1210 and included Romano-British sherds, animal bone, worked bone pins (SFs 76 and 77), worked flint, worked stone fragments and ceramic building material.

Linear features

A series of linear features crossed the site diagonally, apparently enclosing the main concentration of features described above and all with at least one terminal within the site. The earliest (1064) ran east–west and was cut by one of a series of three

concentric curvilinear ditches (1155, 1156 and 1157) which curved slightly from the west corner of the site to the north-east.

Feature 1064, excavated in four segments, was 22m long and aligned east–west with distinct terminals at each end. It had almost vertical sides and a flat base, with a maximum width of 0.70m and maximum depth of 0.53m at the western terminal, becoming gradually shallower and narrower towards the eastern end where it was 0.5m wide by 0.3m deep. The single fill comprised a chalky, dark yellowish-brown silty clay. The western terminal cut the eastern edge of animal burial pit 1043 (see below), and although these features are separated stratigraphically, their close juxtaposition suggests they may be roughly contemporaneous. Fragments of human bone were recovered from an area 1.2m west of the eastern end of the feature where they appeared in concentration: it was unclear whether they represented a disturbed shallow inhumation burial or redeposited bone. Feature 1064 cut the upper fill of feature 1022 (see below) and was itself cut by ditch 1155.

Features 1155, 1156, and 1157 had similar bowl-shaped profiles, 0.35–0.50m wide by 0.10–0.15m deep, were co-terminal and appear, stratigraphically, to be contemporaneous. The longest (1155), excavated in five segments, was at least 35.5m long, extending beyond the northern edge of the excavation. It curved across the centre of the site from west to north-east, cutting the upper fills of ditch 1064, and was apparently respected by 1157 and 1156. The most northerly of the three (1157) was 10.5m long, with three phases of a distinct terminal at its west end, and with a possible continuation (1278) 3m beyond its less well-defined eastern end. The southernmost of the three, 1156, excavated in three segments, had distinct terminals at both ends and appeared to cut 1269, the fills of the quarry pits/lynchet (see below). All three features contained single fills of chalky, brown silty clay with occasional secondary deposits of flint nodules. Of the eleven defined layers from the excavated segments, four contained worked flint and Romano-British pot sherds.

There were twenty-seven stakeholes clustered around the south-western terminals of ditches 1157, 1156 and 1155, within an area *c.*3 x 3m. Excavation of six revealed narrow profiles, 0.07m wide by 0.08m deep. The absence of similar features from the rest of the site suggests that these are indeed stakeholes and that they are associated with the ditches. None contained finds.

Postholes

In addition to the postholes described in relation to structure 1118, a further nine postholes were identified. Five of these occurred within the hearth group in the north-west corner of the site, three cutting 1269, the fills of the quarry pits/lynchet (see below) in the south-east of the site, and one isolated in the centre of the site. The postholes varied in shape from oval to square and were 0.26–0.85m in diameter and 0.13–0.33m deep. All were filled with brown silty clay and contained small quantities of artefacts, including fragments of Romano-British pottery, animal bone, worked flint and an iron nail. No structural groupings were apparent.

Quarry pits and the lynchet, context 1269

The site was dominated by an extensive linear spread (1269) of mixed loamy materials describing a broad amorphous arc running north-east to south-west, apparently bounded on the west by the linear features described above. It corresponded to a broad linear surface depression that developed during initial plant movement across the site, and was seen to extend beyond the north edge of the site running across the natural contours. It was investigated in a series of hand excavated sondages (Figure 2, various) and a single machine-excavated trench (Figure 2, 1288; Figure 3), that collectively revealed a roughly linear concentration of amorphous intercutting pits in a rather ambiguous relationship to the grave group described below and a shallow colluvial deposit partly contained within them; some, such as 1244, 1221 and possibly 1224, were visible as discrete features on the surface, while the majority were defined only after removal of the overlying deposits in 'box trench' sondages.

The sondages revealed amorphous, intercutting pits typified by 1022. This was trapezoidal in plan, 4.0m long by 3.8m wide with irregular sides and a generally flat base 0.6m deep, and had been cut through the west end of grave 1026 (see below). It was filled with several erratically interleaved layers of silty clays, dumps of compacted chalk fragments and lenses of fine, dark humic loam, the uppermost of which was cut by ditch 1064. Generally, artefacts were found only in the upper fills of these features, with the bulk, including fragments of human and animal bone, pot sherds, flints, fragments of non-local stone, and one iron nail, recovered from a single context (1060) that filled features 1059 and 1061.

The machine sondage 1288 (Figure 2, 1288; and Figure 3) across the centre of 1269 revealed a shallow, typical calcareous colluvium (1250–1253) (Allen 1992), sealing the chalk rubble fills of a

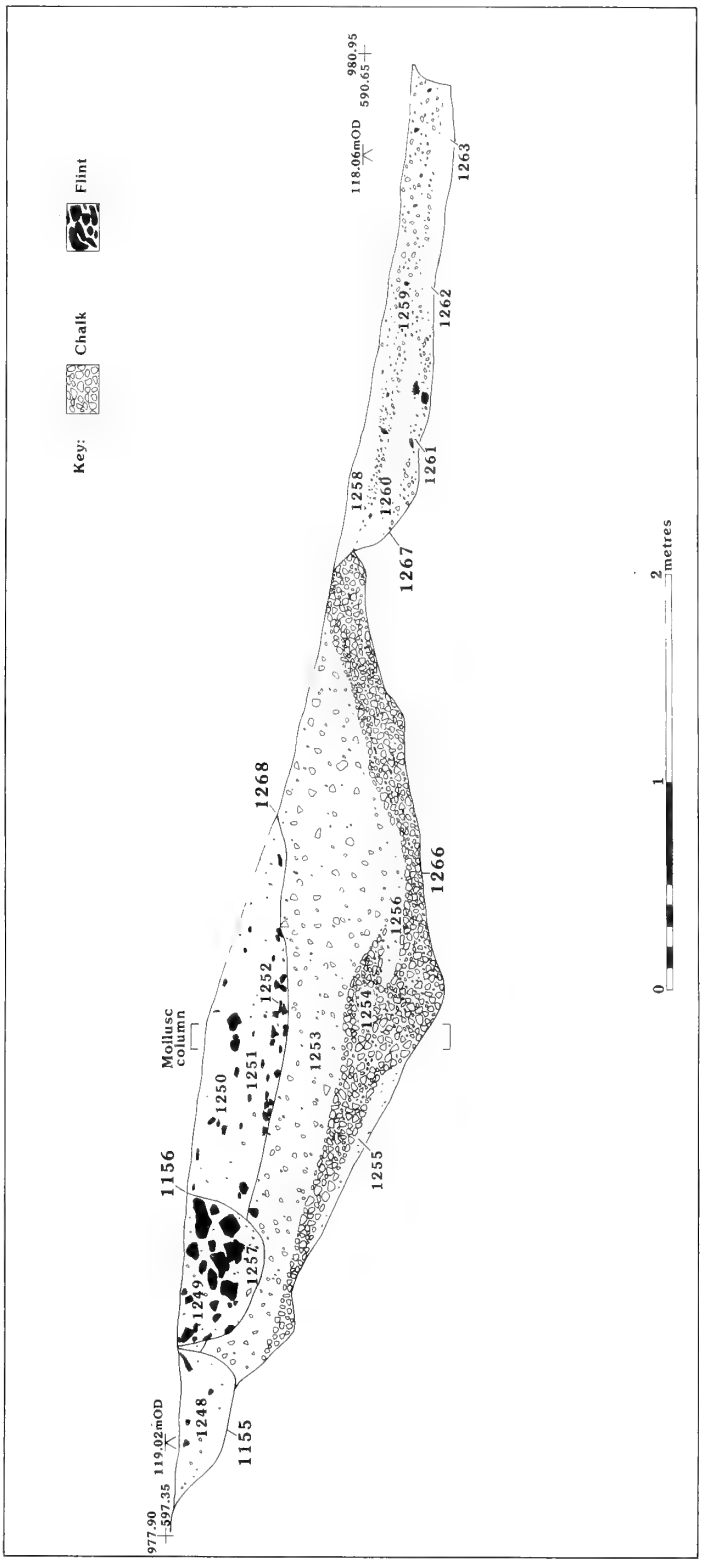

Figure 3. Maddington Farm, Shrewton: section across linear ditches, the quarry pits and lynchet, showing position of molluscan column

number of underlying quarry pits (Figure 3, 1266 and 1267). The colluvium appeared to be resting in a shallow negative lynchet in the hillside formed by the western edge of the quarry pits, represented here by feature 1266, and may originally have extended out over feature 1267 as well. Stabilisation horizons were clearly visible within it, one of which (1268) was marked by an artefact-rich layer (1252) containing fired-clay, animal bone, pottery and tile. The uppermost layer (1250) was cut by ditches 1155 and 1156. A single column of soil samples was taken through this combined sequence for mollusc analysis.

Graves

Grave 121 lay outside the excavation area, approximately 16m north-west of the bridleway on the southern edge of the 1961 oil pipeline trench (1246) by which it had been cut; it formed a shallow scoop cut into natural chalk, *c.*0.75 x 0.50m, containing the badly fragmented upper and lower limb bones from an inhumation.

Grave 128 was excavated in section from the northern face of the 1993 oil pipe diversion trench. A sub-rectangular vertical-sided and flat-bottomed cut of uncertain dimensions, it contained a flexed inhumation (124) with iron hobnails along the soles, aligned east–west with the skull to the west, and was sealed by lynchet fill (122) equivalent to 1253 (above).

Grave 1002 was situated on the western edge of the site. A shallow, rectangular cut with vertical sides and a flat base, 2.40 x 1.20m, and 0.5m deep, it was cut into natural chalk and contained a badly crushed, extended, prone inhumation (1005) aligned north–south with the skull to the north. A skeleton of a small dog (1019) laid on its left side, lay head to head below the upper torso. The presence of a coffin was indicated by layer 1004, a dark rectangular area of silty clay extending around the inhumation and defined by 41 coffin nails in two lines at the head and foot of the grave (SF 30–59). Other artefacts include a bronze coin, and an *As* of Faustina II (AD 161–175; SF 60) recovered from the mouth.

Grave 1008 (Figure 4) lay on the western edge of the site, 0.80m north of grave 1002. A rectangular cut 2.15 x 1.15m, with vertical sides and a flat base 0.70m deep into natural chalk, it contained an extended, supine inhumation (1012), aligned north–south with the skull to the south. A coffin was indicated by a rectangle of pinkish grey silt (1011) extending to within 0.18m of the grave edge, defined by 42 iron coffin nails extending 0.5m from the head and foot ends of the grave to a height of 0.40m from the base. Other artefacts comprised five very small copper-alloy rivets recovered with leather fragments (one *in situ*) around the disto-medial sides of the feet (SF 29) and a single sherd of Romano-British pottery.

Grave 1026 was situated in the north-east area of the site on the eastern edge of the quarry pits. A shallow ovate feature, 0.9m x 0.75m, it was cut into 1269 (quarry pit/lynchet fills) but, curiously, was also cut at its west end by quarry pit 1022 (see above). It had sloped sides and a flat base, 0.07m deep, and contained a badly disturbed inhumation (1037), crouched on the left side, aligned south-west to north-east, the skull removed by 1022.

Grave 1177 was in the north-eastern corner of the site, forming a shallow 1.25m x 0.85m ovate cut into natural chalk with gently sloped sides and a flat base, 0.12m deep. It contained a disturbed inhumation (1179), tightly crouched on the left side, aligned south-east to north-west with the skull at the south-east. There was charcoal flecking in the grave fill within the immediate area of the skeleton.

Animal burials

Feature 1043, situated in the central western area of the site, was cut by the western terminal of ditch 1064. Oval in plan, 1.40 x 1.10m, with vertical sides and a flat base cut into the natural chalk to a depth of 0.62m, it contained the articulated skeleton of a calf (1058) laid on its right side with the skull to the west and feet together. The burial was placed directly on the chalk base and sealed beneath a single deposit (1044) of chalk rubble and silty clay.

Feature 1154 was situated 2.50m east of the eastern terminus of linear feature 1064 and directly in line with 1064 and feature 1043. Similar in plan to 1043, 1.30m long x 0.60m wide, though with a bowl-shaped profile of only 0.1m depth, it contained the disturbed fragments of a cattle skeleton, almost certainly disturbed during earlier plant movement. The feature was filled with a chalky, dark brown silty clay (1153).

Feature 1143, situated within the hearth group in the north-west corner of site, comprised a 1.2m long by 0.64m wide rectangular cut in the chalk, with steep sides and a flat base to a depth of 0.37m. It contained the articulated skeletons of five piglets, all oriented north–south, sealed beneath a chalky, dark yellowish-brown silty clay (1144) from which two small abraded sherds of Romano-British pottery were recovered.

Pyre debris pits

Three features (1224, 1240 and 1244) all situated at the southern margin of the site, cutting the lynchet

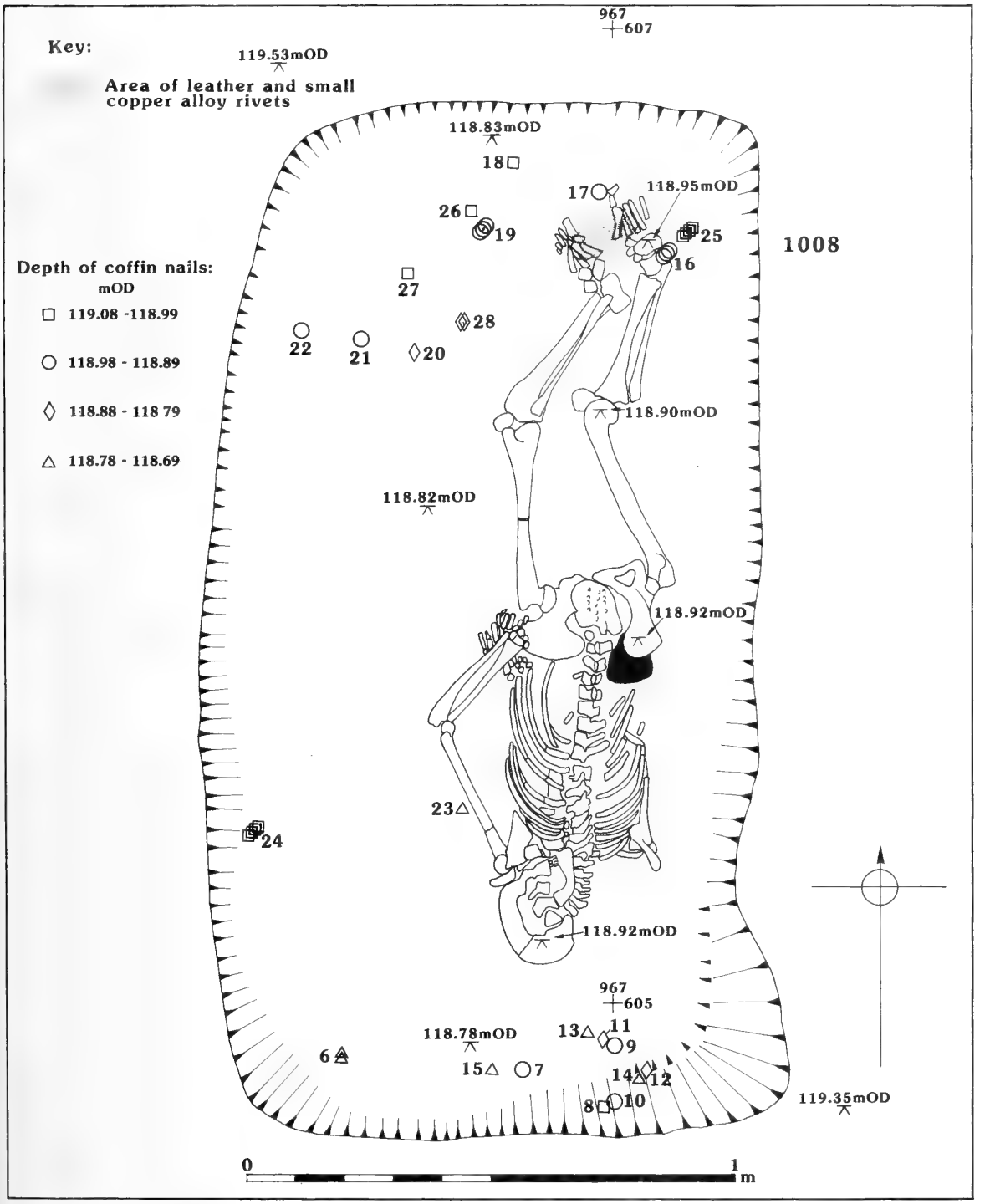

Figure 4. Maddington Farm, Shrewton: grave 1008

deposits (1269) described above, contained relatively large quantities of fire-derived materials such as charcoal and burnt flint, and cremated human bone. In view of the absence of these materials from the rest of the site, particularly the cremated bone, they are assumed to have been deliberate deposits. On the basis of comparisons with other, as yet unpublished, cemetery sites at Baldock and East London (McKinley forthcoming), they are referred to here as pyre debris pits.

Feature 1224, the largest of the three, 4.0 x 2.60m wide and 0.60m deep, was sub-rectangular in plan with a very poorly defined upper edge. Excavation of a quarter segment of the pit revealed its true dimensions to be at least twice those apparent on the surface. It was filled by a single deposit (1225) of very dark greyish-brown silty clay containing abundant charcoal, burnt flint, cremated human bone, animal bone, Romano-British and Iron Age pottery.

Feature 1240, cut away on its south-west side by the 1961 oil pipeline trench (1246) was sub-rectangular in plan, 1.80m long north to south by at least 1m wide, with steep sides and a flat base 0.30m deep. It was filled by a single deposit (1241) of very dark brown silty clay containing an abundance of charcoal flecks, burnt flint and cremated human bone. The feature was well-defined and cut into the surface of the lynchet deposits.

Feature 1244, in the centre of the group, was sub-rectangular in plan, 1.60 x 0.80m, with sloping sides and a flat base 0.22m deep. It was filled by a single deposit (1245) of very dark brown chalky, silty clay containing abundant charcoal flecks, burnt flint and cremated human bone.

Miscellaneous pits and hollows

The remainder of the excavated features comprised shallow amorphous pits and hollows of dimensions varying between 0.6m to 2.25m in length to 0.46m deep, and of varying orientations. They were concentrated principally in the north-west corner of the site and all were filled with similar brown silty clays containing few artefacts, and of no apparently obvious function or association, although the concentration of features in this area is perhaps significant.

Finds

Roman Coins

Identified by JOHN A. DAVIES

SF 60, context 1005; resting on the palate of inhumation burial 1005.

Faustinia II, *As*, AD 161–175. Obv. and rev: illegible.

SF 74, context 1000: topsoil.

Constantius II, AE2, AD 353–355. Obv: DN CONSTAN [TIVS PF AVG]; rev: [FEL TEMP REPARATIO] falling horseman. Mintmark missing (off-flan).

Metalwork

by R. MONTAGUE

Two items of copper alloy and about 264 of iron were recovered. The exact number of iron objects cannot be given as some of the hobnails from grave 128 were fragmentary. The metalwork was recorded in its unconserved state; detailed records are available in the archive.

Copper alloy objects

A spatulate sheet object, possibly part of a toilet set, was found in the fill of feature 1224. Five identical copper alloy rivets, 2.10 x 1.60mm, with one flat head and the other hemispherical, were recovered from around the disto-medial foot bones of skeleton 1013 (Figure 4), and may represent some form of decoration on leather sandals. One rivet remained *in situ*, set through a fragment of leather with the hemispherical head uppermost.

Iron cleats

Three cleats were recovered. Two came from the cluster of hobnails along the soles of the feet of skeleton 124 in grave 128. The occurrence of cleats together with hobnails as a form of both strengthening and protection against excess wear of shoe soles is not unknown: six of the 144 graves at Lankhills, Winchester, which contained hobnails also contained cleats (Clarke 1979, 322–325, figures 38 and 39). The third cleat was recovered from feature 1223.

Iron hobnails

A total of 162 hobnails was recovered, with approximately 160 complete and fragmentary examples from the soles of the feet of skeleton 124 in grave 128 (*c.*80 from each foot). This total is fairly high. Of the 43 graves from the Romano-British cemetery at Poundbury, Dorchester, only two produced a higher total (*c.*290 and *c.*325). Peaks in the frequency distribution were noted at *c.*10, *c.*35 and *c.*50 hobnails per boot (Mills 1993a, 99; table 10). A hobnail was also recovered from the fill of posthole 1084, and another from the fill of pit 1195.

Coffin nails

A total of 83 coffin nails of Manning's (1985, 134) Type 1 was recovered from graves 1002 (41) and 1008 (42, Figure 4). These were all very similar in form, with flat round heads (diam. 13.6–21.6mm) and square-sectioned shanks (length 59.1–78.3mm). This type of coffin nail is common in Romano-British cemeteries (Mills 1993b, 114–116). Some nails were clenched over, indicating a thickness for the wooden planks of 23.9–56.2mm. Twenty had observable traces of mineralised wood, variously located under the head, along the shank or in both areas.

The coffin nails in both coffined burials were clustered at the foot and head; none occurred along the sides in 1002 and those in 1008 spread to a maximum extent of 0.50m along the sides (Figure 4). Similar distributions were observed at Alington Avenue, Dorchester (Romano-British graves 268 and 3661; Davies *et al.*, forthcoming), and in many of the 451 graves at Lankhills (Clarke 1979, figures 47–66).

Other nails

Other nail types include seven flat- and round-headed nails which were clustered at the waist area of the dog burial 1019 in grave 1002. These are much shorter than the coffin nails from grave 1002, with complete examples averaging 24.8mm in length, and may represent the remains of some sort of fitting or harness worn by the dog. Six other nails were recovered, all from features producing pottery of Romano-British date.

Tools

An iron awl, measuring 96.5 x 5.0mm, was recovered from feature 1193, and a probable knife handle (*cf.* Manning 1985, pl. 53, Q5) was found during topsoil stripping of the central area of the site.

Flint

Forty-one pieces of worked flint were examined and recorded by Philip Harding; details are in the archive. According to his observations the assemblage principally comprised small and frequently broken flakes, with a single example of a double-sided scraper. There were no cores or other primary waste. The material varies in patination and condition and, as most of it was recovered from contexts otherwise dated to the Romano-British period, can be considered largely residual on this site.

Pottery

by RACHAEL SEAGER SMITH

The pottery assemblage comprises 563 sherds (4800g), of which the majority are of Romano-British date; small quantities of prehistoric pottery are also present.

The pottery has been analysed in accordance with the standard Wessex Archaeology recording system for pottery (Morris 1992). It was divided into four broad fabric groups based on dominant inclusion types: flint gritted (Group F), grog-tempered (Group G), sandy (Group Q) and fabrics of known type or source (Group E). These broad groups were then further subdivided into 24 fabric types based on the range and coarseness of inclusions present. The following terms are used to describe the quantity of inclusions: occasional = less than 1%; rare = 1–2%; sparse = 3–7%; moderate = 10–15%; common = 20–25%; abundant = 30%+. Each of these fabrics was assigned a unique, chronologically significant fabric code.

The pottery has been quantified (using both number and weight of sherds) by fabric type for each context and details of vessel form, surface treatment, decoration and manufacturing technique have been recorded. Pottery fabric totals are given in Table 1, and Table 2 summarises the vessel forms present in each fabric type.

Prehistoric pottery

The prehistoric pottery has a potential date range from the Late Neolithic/Early Bronze Age to the Iron Age although dating is hampered by the lack of diagnostic sherds. Three fabric types were identified:

F1. Hard fabric; sparse to moderate crushed angular flint <1.5mm, sparse quartz <0.25mm, rare iron oxides <0.5mm. Unoxidised.

F2. Hard, fine-grained sandy matrix with sparse crushed angular flint <4mm. Unoxidised.

G1. Soft fabric; rare to sparse grog <1mm, rare quartz <0.5mm, rare iron oxides, soft white particles, both <0.25mm. Predominantly oxidised but interior surface, margin and core may be unoxidised.

Late Neolithic/Early Bronze Age Beaker activity in the area is indicated by the fabric G1 sherds. Two of these, from pit 1195, have square-toothed comb impressed decoration and, while undecorated, the three joining sherds of this fabric from quarry pit 1022 are probably also from a Beaker vessel. Both the flint-gritted fabrics are represented by featureless body sherds from thick-walled vessels only, but based on the appearance of the sherds, fabric F1 is

Table 1. Distribution of pottery by feature and fabric, showing number and weight of sherds

		PREHISTORIC			ROMANO-BRITISH COARSEWARES							FINEWARES			
Feat	cont	F1	F2	G1	F100	Grog	Q coar	Q glauc	Clay discs	BB1	NF p	Unprov fine	NF fine	Oxf fine	Sam
-	1001					1 16g	5 35g	4 10g		5 16g		2 41g			
-	1001					1 58g									
-	1013						3 1g								
125	123						3 50g								
1002	1004	5 3g					3 4g								
1002	1005	1 4g													
1018	1010						2 25g								
1022	1020			3 6g			6 39g	5 30g		3 7g				3 12g	1 4g
1022	1021									1 42g					
1029	1025						1 15g			1 6g				11 84g	
1034	1035						24 43g								
1038	1039					54 1110g	2 11g								
1043	-		3 3g												
1051	-						3 43g								
1059	1109						3 34g								
1059	1111					1 5g									
1061	1060						41 154g	3 11g						2 16g	
1065	1066									1 1g			1 8g		
1067	1068					1 23g	1 42g	1 1g		2 3g	1 9g			1 6g	
1067	1069						1 59g						2 21g		
1067	1070						6 110g	2 59g		7 18g	11 102g		4 38g		
1090	1091									7 67g					
1090	1086	2 2g					9 56g	5 24g		6 78g					
1103	1104						1 3g								
1108	1011							1 4g							
1122	1123					2 61g									
1124	1125						1 1g								

		Prehistoric			Romano-British Coarsewares							Finewares			
Feat	cont	F1	F2	G1	F100	Grog	Q coar	Q glauc	Clay discs	BB1	NF p	Unprov fine	NF fine	Oxf fine	Sam
1128	1127						5 14g								
1143	1142														1 1g
1143	1144						9 17g	1 2g							1 1g
1155	1202	1 3g													
1156	1161						1 2g								
1157	1163				1 3g										
1183	1184						3 23g	6 66g		3 44g		1 12g			
1185	1186						4 25g								
1191	1192						13 142g								
1195	1199						4 6g								
1195	1219						1 1g								
1195	1210						1 1g					44 470g			
1195	1198						6 121g							1 20g	
1195	1196			2 5g		1 10g	13 266g	4 14g	3 82g	14 102g					
1206	1207					2 16g	1 3g					1 2g			
1224	1225		3 57g				12 96g			7 100g					
1226	1223					4 123g	6 32g	2 11g							
1227	1228						1 3g	1 10g		3 16g				1 4g	
1231	1232														2 3g
1242	1243						2 8g	1 4g							
1244	1245		1 25g												
1264	1248						1 5g								
1268	1251						2 190g		9 651g	2 70g			1 19g		
1269	-						3 9g	1 5g		2 29g					
1276	1277						15 54g			2 37g					
Total nos.		12	4	5	1	72	252	38	12	71	12	52	8	19	5
Total weight (g)		15	82	11	3	452	1703	280	733	687	111	486	86	142	9

Key: Grog = fabrics G100 and G101
Q coar = fabrics Q100, Q102, Q106, Q197, Q110 and Q111
Q glauc = fabrics Q101 and Q103
Unprov fine = fabrics Q104, Q105 and Q109
NF fine = fabrics E161 and 162
feat = feature
cont = context

probably of Middle–Late Bronze Age date while fabric F2 is probably Iron Age.

Sources for the prehistoric fabrics are uncertain although all three are likely to be fairly local. Grog was the predominant inclusion amongst the Beaker sherds recovered in the area of the Stonehenge Environs Project (Cleal with Raymond 1990, 237–238). No direct parallels were found between the flint-gritted fabrics and the material from the Avon Valley (Mepham 1993) or Butterfield Down, near Amesbury (Millard 1996) although flint-gritted wares of similar broad date bands do occur at both these sites. The three joining body sherds of the sand and flint-gritted fabric F2 from pyre debris pit 1224 may have been deliberately trimmed to form a roughly circular counter.

The distribution of the prehistoric pottery by feature is given in Table 1. The majority of prehistoric sherds occurred in association with Romano-British material and must therefore be considered residual. In three cases, linear feature 1155, the calf burial 1043 and the possible pyre debris pit 1244, sherds of prehistoric pottery were the only datable artefacts recovered and may therefore indicate the date of the feature, but the possibility that they are redeposited cannot be excluded.

Romano-British pottery

Twenty-one fabric types were identified and these have been divided into coarse- and finewares.

Finewares

Seven fineware fabrics were identified. The only Continental imports recognised are five sherds (9g) of samian. These sherds have not been assigned to any production centre and all are very small and abraded. Only one vessel form was recognised, a Dragendorff 33 cup, a type common from the late 1st to late 2nd centuries AD.

The other finewares from known sources comprise various products of the late Romano-British Oxford and New Forest production centres. Oxfordshire red colour-coated wares are the most numerous amongst this group. Vessel forms include flanged bowls (Young 1977, 160, type C51), hemispherical bowls with bead rims (*ibid.*, 160, type C55); mortaria are indicated by the presence of body sherds only. New Forest finewares comprise both the red-slipped and colour-coated wares (parchment wares are here considered to be part of the coarseware assemblage). The only vessel form recognised was the indented beaker (Fulford 1975, 50, type 27) but all the sherds of this fabric are from closed forms.

Three fineware fabrics from unknown sources were also recognised:

Q104. Hard fabric; common quartz and rare iron oxides both <1mm. Oxidised, often with thin unoxidised core. Wheelmade.

Q105. Hard, fine-grained fabric; rare to sparse iron oxides both <0.25mm. Oxidised. Wheelmade.

Q109. Hard, fine-grained fabric; sparse quartz <0.5mm, rare to sparse iron oxides <2mm and sparse mica <0.25mm. Oxidised with unoxidised inner margin and core. Wheelmade. Exterior surface coated in a thick, creamy-brown slip.

The source and date of the buff sandy ware (fabric Q104) are uncertain although it is likely that these sherds are derived from flagon forms. It is possible that the very fine-grained oxidised ware is an example of a minor New Forest product, in which the red-slipped ware fabric, fired to a higher than normal temperature although not reaching that typical of the colour-coated wares, is used to produce open bowl forms more usually found in the coarser, sandier parchment ware fabrics. This fabric is not mentioned by Fulford (1975) but examples do occur amongst the kiln assemblage from Pitt's Wood (Swan, in preparation).

All the sherds in the white-slipped red ware fabric (Q109) derive from a single flagon, the neck and rim of which is missing. The application of a white slip to hide an otherwise red firing fabric is a phenomenon found widely across southern England but the production centres of these vessels remain largely unknown. White-slipped red wares are generally dated from the mid 1st–late 2nd century AD.

A greater range of imported fineware fabrics was recovered from the sites at Figheldean (Mepham 1993) and Butterfield Down, Amesbury (Millard 1996). This, however, is likely to be a factor of chronology; at Shrewton the majority of activity seems to have occurred from the later 2nd century AD onwards, outside the period of currency of these finewares. Together, the Oxfordshire and New Forest finewares form 7% of the assemblage, a higher figure than that from Durrington (Swan 1971), Figheldean (Mepham 1993) and Butterfield Down (Millard 1996). However, at all these sites, the same emphasis on closed forms from the New Forest and open forms from the Oxfordshire region is apparent, even though the numerical importance of sherds from these centres is more variable.

Coarsewares

Fourteen coarseware fabric types were identified, including two of known source. Four of these fabrics

Table 2. Romano-British coarsewares: vessel form by fabric, giving number of occurrences

Fabrics	Vessel Forms																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	17	18
G101											1						
Q100		1		1			1	1	2			1	1	1			
Q101		2							3								
Q102		3	1														1
Q108								3									
Q109						1											
Q111	1	2	1		1											1	
E101		3	6							3							
E160															1		
Total	1	11	8	1	1	1	1	4	5	3	1	1	1	1	1	1	1

Key to Vessel Form:
1=flat-flange bowl/dish; 2=everted rim jar; 3=dropped-flange bowl/dish;
4=bowl with inturned rim; 5=attenuated jar; 6=flagon body; 7=lid;
8=clay disc; 9=everted rim with squared end; 10=dog-dish; 11=rolled rim storage jar;
12=flagon rim; 13=necked jar with a hooked rim;
14=narrow necked jar with a rolled rim; 15=small everted rim jar; 16=flanged bowl;
17=high shouldered jar; 18=necked jar with groove at junction of neck and shoulder.

are 'catch-all' types and include products from more than one source. The correlation of fabric types and vessel forms is shown in Table 2.

E101. Black Burnished ware (BB1); for fabric description see Williams (1977).
E160. New Forest Parchment ware; for fabric description see Fulford (1975, 26).
F100. Soft, fine-grained; moderate quartz <0.5mm, rare angular crushed flint <1mm, rare iron oxides <0.5mm. Oxidised.
G100. Hard, soapy; moderate poorly-sorted grog <5mm, rare quartz, mica and iron oxides, all <0.5mm. Predominantly oxidised. Handmade. Surfaces smoothed or burnished but with grog frequently protruding, especially on interior.
G101. Hard; sparse grog up to 5mm, crushed, angular flint <2mm, rare iron oxides. Oxidised. Handmade. Surfaces smoothed but larger inclusions protrude.
Q100. Hard; moderate to common quartz <0.5mm, rare iron oxides <0.5mm. Unoxidised. Wheel- and handmade examples. A 'catch-all' group for all sandy greywares without probable glauconite.
Q101. Hard; common quartz, sparse to moderate probable glauconite, rare iron oxides, all <0.5mm. Unoxidised. Wheel- and handmade examples. Probable glauconite very visible, often giving speckled appearance. A 'catch-all' group for all sandy greywares with probable glauconite.
Q102. Hard; moderate to common quartz <0.5mm, rare iron oxides <0.5mm. Oxidised. Wheel- and handmade examples. A 'catch-all' group for all oxidised sandy wares without probable glauconite; includes intentionally oxidised fabrics as well as oxidised examples of fabrics that are more usually unoxidised.
Q103. Hard; common quartz, sparse to moderate probable glauconite, rare iron oxides, all <0.5mm. Oxidised. Wheel- and handmade examples. Glauconite(?) very visible, often giving speckled appearance. A 'catch-all' group for all oxidised sandy greywares with probable glauconite.
Q106. Hard, fine-grained; common quartz <0.25mm, rare iron oxides <1mm; occasional elongated voids <2mm. Unoxidised. Manufacturing technology uncertain. Characteristically a very dark greyish-brown in colour.
Q107. Hard, fine-grained; moderate quartz <0.25mm, sparse but very visible red iron oxides <0.5mm, rare mica. Generally unoxidised but exterior margin of some examples oxidised. Manufacturing technology uncertain.
Q108. Hard, coarse; common quartz <0.25mm, sparse angular flint up to 10mm, rare soft, white calcareous particles, red iron oxides, both <1mm. Oxidised. Handmade. Used exclusively for clay discs.
Q110. Hard, very fine-grained; common quartz, rare black iron oxides, both <0.25mm. Unoxidised. Wheelmade. Characterised by a very white core with dark grey surfaces.
Q111. Hard; common quartz, rare iron oxides, both <0.5mm. Unoxidised although some examples have partially oxidised core. Manufacturing technology uncertain. Surfaces smoothed or burnished.

The distribution of Romano-British pottery by feature is given in Table 1. The sandy wares, in particular the 'catch-all' fabric groups (Q100–103),

are clearly derived from a number of different sources and probably span a wide date range. Kilns to the west of Swindon are known to have been producing sandy greywares from the early 2nd century AD until the end of the 4th century (Anderson 1979) while the presence of probable glauconite in fabrics Q101 and Q103 suggests a source in the region of the Upper Greensand areas of west and north Wiltshire. Greyware wasters and kiln furniture have been found at Westbury, on Upper Greensand in the west of the county (Rogers and Roddham 1991, 51). The presence of New Forest greywares amongst this assemblage is also indicated by the bowl with the inturned rim (Fulford 1975, type 7), while everted rim jars and narrow-necked jars with rolled rims are also known amongst the repertoire of the New Forest greyware potters (*ibid.*, types 30.5 and 31.2, respectively) as well as at a variety of other centres. The vessel forms have a recognised date from the mid 2nd century onwards, although the sherds of fabrics G100 and Q107, which are also found at Figheldean (Mepham 1993, fabrics G100 and Q113) and Butterfield Down, Amesbury (Millard 1996, fabric G100), indicate the presence of earlier Romano-British material amongst the assemblage. Fabrics F100, Q106 and Q110 are represented by body and/or base sherds only.

The three Black Burnished ware forms recognised are the characteristic and most widely distributed products of this industry during the later 3rd–4th centuries, although some of the more fragmentary everted rim jars may be of later 2nd-century date. Other later Romano-British material amongst the assemblage includes the small everted rim jar in New Forest parchment ware, which has a date range of *c.*AD 300–380 (Fulford 1975, 74) and the greyware vessels, probably also from this source and contemporaneous with it. The clay discs, fragments of which were found in storage pit 1195 and feature 1268, were made exclusively in the coarse, sandy oxidised fabric with large flint inclusions (Fabric Q108). The function of these objects is uncertain. Various uses, including storage jar lids, cheese-press lids and components of ovens or other heating structures have been suggested. Examples of similar discs occurring in local fabrics are known from various sites in south Oxfordshire (Miles 1978, fig. 57, 32; Sanders 1979, fig. 28, 124–127; Wessex Archaeology 1993) but no published examples from sites closer to Shrewton have been identified during the preparation of this report.

The paucity of diagnostic sherds recovered increases the difficulty of dating the Romano-British assemblage with any precision. The majority of excavated features contained no pottery or insufficient diagnostic sherds to be assigned anything more than a general Romano-British date. No early Romano-British (1st–2nd century AD) groups were identified but quarry pit 1191 contained material of 2nd–3rd-century date, while storage pit 1195 contained sherds spanning the mid 2nd–4th centuries. A larger number of features containing later Romano-British (3rd–4th century) pottery were recognised. These included quarry pits 1022, 1059 and 1061, hearths 1086 and 1090 and 'miscellaneous' features 1029, 1065, 1067, 1227, 1268 and 1276.

The assemblage contains the usual range of fabrics and forms typical of a southern English small Romano-British farming community of comparatively low status, and is broadly comparable with those from other sites in the vicinity (Swan 1971; Mepham 1993; Millard 1996).

Other artefacts

by RACHAEL SEAGER SMITH

Worked stone

Fragments from eight worked stone objects were recovered, representing seven rotary querns and a probable roof tile.

Three of the querns are of Greensand, the nearest outcrops of which occur within 15km of the site on the Greensand ridge of north Wiltshire, although at present the best known production centre of Greensand querns is at Lodsworth, West Sussex (Peacock 1987). The other quern fragments are of various sandstones. With the exception of one sandstone example of a lower stone from feature 1084, all the querns were too fragmentary to determine which stone was represented. The fragment of the lower stone has iron staining visible inside the central pivot hole. The diameters of only two of the fragments could be measured. One of these, of Greensand, found in posthole 1103, measured approximately 0.80m in diameter, while the other, a fragment from a very well-worn sandstone quern found in pit 1195, measured approximately 0.40m.

The probable roof tile is represented by three thin, flat fragments, two of which join, of fossiliferous limestone. These were found in hearth 1038 and the patchy, slight reddening of the surface of all three fragments may indicate their exposure to heat.

Three of the quern fragments (two sandstone, one Greensand) were found in feature 1084 and a further fragment came from posthole 1103; the roof tile fragment was recovered from feature 1038: all comparatively close to structure 1118.

Non-local stone
Three fragments of unworked, non-local stone were found (i.e. not naturally occurring within *c.* 15–20km of the site). One small chip of fine-grained limestone was recovered from quarry pit 1061 while a small piece of sandstone and a slightly fossiliferous limestone fragment were found in pit 1195.

Fired clay
A total of 58 fragments (216g) of fired clay was recovered. Although all were small, shapeless and featureless, they were recovered from the fillings of hearths (40 pieces from feature 1126, eight from feature 1090 and ten from feature 1038): thus it is possible that they are derived from hearth linings, oven covers or similar structures, although none of the fragments are vitrified or show signs of over-exposure to extreme heat. All the fragments from features 1126 and 1090 are soft, very chalky and off-white in colour, while those from feature 1038 are harder, deep reddish-brown in colour and contain a larger proportion of clay, although still with chalk inclusions.

Worked bone
A complete pin (object no. 76) with an elaborately decorated head (Figure 5) and an incomplete bone point (object no. 77) were found in the primary fillings of pit 1195. No direct parallels have been found for the pin although it is encompassed by Crummy's type 6 pins with bead- and reel-shaped heads which are broadly dated to the 3rd and 4th centuries AD (Crummy 1983, 24). The pin has an elaborately decorated head comprising a cylindrical bead decorated with an incised zig-zag and reel surmounted by a small conical bead. It is carefully made and finished, with uniform surface polish on the plain, tapering, circular cross-sectioned shaft which is not quite straight (length 130mm). The top of the pin head also has very high polish. The bone point is damaged at both ends (surviving length 109mm, width 5–11mm, thickness 4–8mm). It was made from a curving bone fragment and has a tapering, square cross-section. The surface is well-polished for *c.* 40mm at the narrowest end, but much less well finished over the remainder. The function of this object is uncertain although it is likely to be of Romano-British date.

Ceramic building material
One piece of ceramic building material was found on the surface of the unexcavated quarry pits/lynchet (1269). The fragment is almost certainly of Romano-British date but it is too fragmentary to identify the brick or tile type from which it was derived (*cf.* Brodribb 1987, 3).

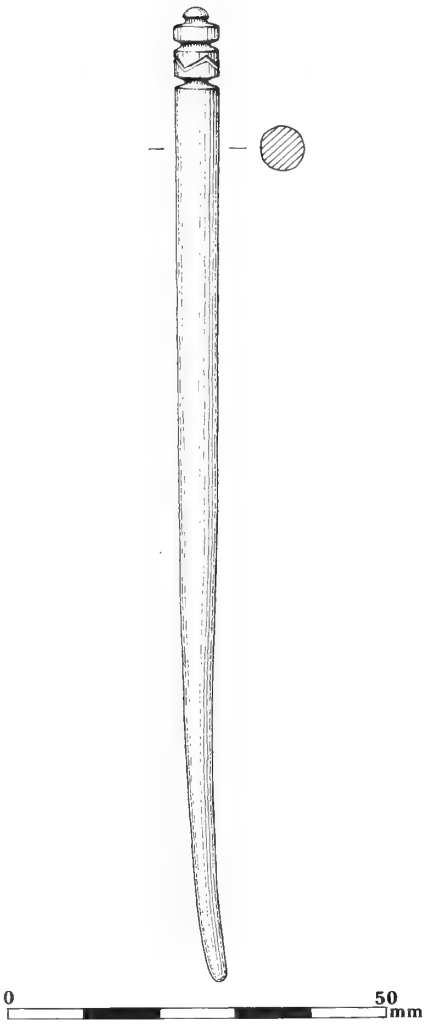

Figure 5. Maddington Farm, Shrewton: bone pin; actual size

Palaeo-environmental material

Human bone
by JACQUELINE I. McKINLEY

Inhumed human bone was recovered from eight contexts, comprising five discrete inhumation burials (124, 1005, 1012, 1037 and 1178), one probable burial (121), one disturbed/redeposited burial (1145), and bone redeposited in a quarry pit

(1020). Small quantities of cremated human bone were recovered from eight other contexts (Table 4). Full details are in the archive.

Methods

Cremated bone was analysed following the writer's standard procedure (McKinley 1989).

Age was assessed from the stage of tooth development and eruption (van Beek 1983); the stage of ossification and epiphyseal fusion (Gray 1977; McMinn and Hutchings 1985); the length of immature long bones (Bass 1987); the pattern of degenerative changes in the pubic symphyses and fourth ribs (Brooks 1955; Iscan *et al.* 1984 and 1985); tooth wear patterns (Brothwell 1972); and the general degree of cranial suture fusion and degenerative changes to the bone.

Age categories:

infant	0–4 years (young 0–2 years; older 3–4 years)
juvenile	5–12 years (young 5–8 years; older 9–12 years)
subadult	13–18 years (young 13–15 years; older 16–18 years)
young adult	19-25 years
mature adult	26–45 years (younger 26–30 years; older 31–45 years)
older adult	45+ years

Sex of adults was assessed from the sexually dimorphic traits of the skeleton (Bass 1987). Cranial, Platymeric and Platycnemic indices were calculated according to Brothwell (1972) and Bass (1987). Stature was estimated using Trotter and Gleser's regression equations (1952; 1957). Pathological lesions and morphological variations/non-metric traits were recorded, and diagnoses suggested where appropriate. Anatomical terminology used is according to Gray (1977) and McMinn and Hutchings (1985).

Results

Condition of bone. Bone from the two deep graves, 124 and 1012, was in good condition, though some fragmentation had occurred as a result of the heavy weight of chalk rubble grave fill, while some breakage of 124 had resulted from the 'salvage' nature of recovery. Bone from the other graves was generally in rather poor condition, especially the spongy bone of the vertebrae and innominates, and was root-marked. The bone from these shallow graves was often fragmentary, partly as a result of heavy plant crossing the site immediately prior to excavation, but some fragmentation was of less recent origin and had probably resulted from agricultural disturbance.

Demography. A minimum of seven individuals was identified from the inhumed bone: one young juvenile, one older juvenile, three adult females (mature, older mature/older and older), and two adult males (young and older mature). The general physique of all the individuals tended towards the gracile. The older mature adult 1005 could be identified only as possibly male due to contradictory morphological traits: the general size of the skeleton and skull morphology indicating a female, whilst the size of the articular surfaces and innominate morphology suggested a male.

Unfortunately, the assemblage represents probably only a small part of the cemetery and further demographic comment is therefore precluded.

Skeletal indices. Stature estimates were made from four skeletons: two females, 124 (160.5cm) and 1012 (154.4cm); two males, 1005 (169.0cm) and 1179 (166.5cm).

Cranial indices could be calculated for only two individuals: both were mesocrany. Platymeric (anterior–posterior flattening of proximal femur shaft) and platycnemic (medio–lateral flattening of the tibia shaft) indices were calculated for four individuals: three platymeric (1005, 1012, 1179) and one eurymeric (124); two platycnemic (1005, 1179) and two eurycnemic (124, 1012). The numbers involved are too low to apportion any significant interpretation.

Pathology

A summary list of lesions/pathological conditions and morphological variations according to bone groups affected is presented in Table 3.

Dental disease. Full or partial dentitions were available for six of the seven individuals, and four of the five adults had some dental disease. One hundred and thirty-eight teeth were recovered and 125 sockets in five left and right mandibles, and six left and five right maxilla, were available for examination. A total of 158 tooth positions were recorded (including crown crypts).

Of the teeth, 16/158 (10%) were lost *ante mortem* from four of the five adults: 9/72 (12.5%) maxillary, 7/68 (10.3%) mandibular, 11/38 (28.9%) female and 5/57 (8.8%) male. The much greater percentage of female tooth loss is, at least in part, related to the occurrence of more females in the older age categories. Although significant comparison of such small numbers with other contemporaneous sites is not easy, the overall percentage of tooth loss is close

Table 3. Human bone: summary of inhumed bone, showing percentage of skeleton recovered, age and sex of the individual(s) and pathological lesions/morphological variations

context	% skeletal recovery	age	sex	pathology
121	c.8%	older juvenile		**periostitis**: r.femur
124	c.0%	older adult	female	**o.a.**: r.p.humerus, r.p.radius, r.costo-clavicular, costo-vertebral, bi-lateral acetabulae, cervical, lumbar, sacro-iliac; **d.d.d.**: cervical; **trauma**: fracture l.d.fibula, ?atlas transverse ligament; **hyperostosis**: 4th & 5th lumbar, manubrium; **?infection**: 5th lumbar & 1st sacral surfaces; **o.p.**: r.scapula, r.d.radius, r.d.ulna, l.p.ulna, l.trapezium, l.1st metacarpal, l.finger phalanges, atlas-axis, thoracic & lumbar bodies, r.patella; **exostoses**: l.1st metacarpal, l.finger phalanges, iliac crests, l.p. & d.tibiae, l.fibula, r.d.fibula, patellae, calcanea; **pitting**: lateral clavicles; **d.l.**: r.& l.1st p.foot phalanges, r.1st metatarsal; spina **bifica occulta**; m.v.: occipital bunning, calcaneal double facets, small 11th & 12th thoracic rib facets, fusion r.foot 5th middle & distal phalanges
1005	c.75%	older mature adult	??male	**calculus**; **p.d.**; **hypoplasia**; **caries**; **abscesses**; **o.a.**: thoracic; **trauma**: ?fractured l.rib; **o.p.**: atlas-axis, l.scapula, middle finger phalanges, r.d.humerus & p.ulna, r.d.tibia; **pitting**: l.d.tibia; **exostoses**: l.calcaneum, l.tibia & fibula, r.p.femur, iliac crests, r.patella; **d.l.**: r.p. femur; **hyperostosis**: r.femur neck; **m.v.**: atlas double facet
1012	c.98.5%	older/mature older adult	female	**calculus**; **p.d.**; **hypoplasia**; **caries**; **abscesses**; **?sinusitis**; **calcified tissue**; **Schmorl's**: lumbar, thoracic; **o.a.**: lumbar; **o.p.**: thoracic, atlas, axis, sacrum; m.v.: atlas double facet, accessory neural foramina 6th–7th cervical, pseudo-facet sacrum & r.ilium
1020	c.3% <1%	1) young juvenile=1145 2) adult=?1037		
1037	c.48%	mature adult	female	**calculus**; **p.d.**; **?abscess**; **periostitis**: r.clavicle, **m.v.**: ?absent mandibular M3
1045	c.25% c.8%	1) 4–6yr. 2) adult =?1137/1179		**calculus**; **hypoplasia**
1179	c.75%	young adult	male	**calculus**; **p.d.**; **cribra orbitalia**; **periostitis**: r.ventral ilium, femoral necks/proximal shafts, r.clavicle; **bone rarefication/vascularity**: acetabulae, l.femoral neck; **d.l.**: l.acetabulum, l.femur head, r.1st p.foot phalanx; **exostoses**: calcanea, l.d.finger phalanx; **o.p.**: atlas-axis; **m.v.**: maxillary 12 'pegged', retention l.deciduous canine, double facets calcanea, r.squatting facet

Key:
r., right; l., left; p., proximal; d., distal; o.p., osteophytes; o.a., osteoarthritis; p.d., periodontal disease; d.d.d., degenerative disc disease; d.l., destructive lesion; m.v., morphological variation; M, molar; I, incisor.

to that from Baldock Area 15 (12.4%; McKinley forthcoming) and Cirencester (8.5%; Wells 1982).

Tooth loss tends to increase with age and may be related to one or more factors. Diet and dental hygiene may influence other dental diseases which predispose to tooth loss. Tooth loss from excess wear may be precipitated by periodontal disease (gum infection), which all the adults showed to some degree.

Dental caries were noted in dentitions 1005 and 1012. Of the whole assemblage, 12/138 (10%) teeth had carious lesions: 6/53 (11.3%) female and 8/50 (16% male); 8/72 (11.1%) were maxillary and 6/66 (9.1%) mandibular. The majority of lesions were in the molars. In half of the affected teeth the crown had been fully destroyed. Where it was possible to ascertain the origin of the lesion, all were cervical with the exception of one small occlusal lesion. All dentitions showed some degree of calculus (calcified plaque), which was heavy in 1005, covering the occlusal surface of the third molars. Dental abscesses were present in three dentitions: 1005, 1012 and 1037. Of the whole assemblage, 7/126 (5.5%) of sockets had abscess lesions, of which 4/46 (8.7%) were female and 3/51 (5.9%) were male (3/53 (5.7%) were maxillary and 4/73 (5.5%) mandibular). The general condition of the dentitions suggests a relatively poor level of dental hygiene.

Trauma. There is a well-healed spiral fracture in the left distal fibula of 124, with associated exostoses at the distal interosseous ligament attachments of the fibula and left tibia. The exertion of a violent lateral force is indicated (Adams 1987), resulting in rupture of the ligaments and fracture of the bone. No lesions were noted in the talus. One left rib from 1005 has a well-healed fracture, which may have resulted from a fall or a blow to the chest.

Infections. Evidence for possible sinusitis was noted in 1012, where areas of irregular new bone were seen on the wall of the left antrum. Non-specific periostitis was observed in three individuals. Infection of the periosteum (the membrane covering the bone) may result from direct introduction of bacteria via a wound or fracture, or spread from foci elsewhere in the body through the blood stream. The juvenile skeleton 121 has areas of periosteal new bone on the distal right femur shaft, but incomplete skeletal recovery limits diagnosis. Inhumation 1037 has lesions on the superior side of the mesial right clavicle shaft; no other associated lesions were noted. The surface proximity of the bone suggests a soft tissue wound.

Extensive periostitis was observed in 1179, a young adult male, including areas of the right ventral ilium, both femoral necks and shafts, and the mediodorsal right clavicle shaft. Destructive lesions were also noted in the left acetabulum and left femur head, with bone rarefication/vascularity (the right side bones have not survived). The overall form of the joints remained intact. In this case, the focus of infection may have been in the hip joint(s) and spread to the ilium and proximal femoral shafts. The adjacent body surfaces of the 5th lumbar and 1st sacral vertebrae from 124 showed erosive pitting with slight surface new bone suggestive of infection.

Degenerative disease. Osteoarthritic lesions (osteophytes, eburnation and pitting) were noted in the joints of three individuals. Eight joints were affected in 124, thoracic and lumbar joints were affected in 1005 and 1012, respectively: basically the result of age-related wear-and-tear, whilst other predisposing factors include previous disease, injury and obesity (Adams 1987).

Osteophytes (irregular bone forming on the margins of joint surfaces) and exostoses (irregular bone forming at tendon and ligament insertions) may both reflect age-related wear-and-tear, though they may also be associated with specific diseases or trauma (see above). Extensive lesions were noted in 124, with osteophytes at eleven joints/joint groups, and exostoses at nine (including trauma related, discussed above).

The florid hyperostosis observed on the ventral surfaces of two lumbar vertebrae in 124, may indicate the early stages of diffuse idiopathic skeletal hyperostosis (DISH). Extra-spinal manifestations of the disease may be represented by the extensive exostoses noted (Rogers *et al.* 1987), and hyperostosis in the manubrium.

Deficiency disease. Mild cribra orbitalia (pitting in the orbital vault), believed to result from a metabolic disorder associated with childhood anaemia, was noted in 1179. Slight to mild dental hypoplasia (developmental defects in the tooth enamel: Hillson 1986) was observed in three dentitions. Spina bifida occulta, the lesser, and pathologically insignificant, form of spina bifida (Adams 1985) was present in the inferior sacrum of 124.

Cremated bone

A summary of the cremated bone is given in Table 4. The bone recovered may be divided into two groups: bone, probably already scattered, accidentally redeposited within graves and other contexts; and bone deposited in pyre debris pits 1224, 1240 and 1244.

Table 4. Summary of cremated human bone

Context	total weight	fragments
1145	<1.0g	
1178	<0.1g	vault
1201	1.6g	long bone & articular surface
1217	0.2g	long bone (13mm)
1225	6.5g	vault (25mm); finger phalanges; femur shaft (12mm)
1240	2.2g	long bone & articular surface
1245	9.0g	vault (18mm); humerus (12mm) & distal finger phalanx
<41>	0.1g	

The quantity of bone in each case is very small, and it is not believed that any of it represents the remains of a disturbed cremation burial. There is no evidence of disturbed graves, nor of any associated artefacts. The presence of cremated bone in the three charcoal-rich pits does, however, suggest that cremations took place within the vicinity. The pits, with their charcoal, burnt flint and cremated bone, probably represent dumps of pyre debris such as have been found at the contemporaneous sites of Baldock (Burleigh and Stevenson pers. comm.) and Hooper Street in London (McKinley in prep.).

The bone fragment size is small, as may be expected, but it was possible to identify some fragments which were of older subadult/adult size. The small size of the fragments may be one reason why they were not collected for burial, perhaps having been overlooked. Much of the bone appears incompletely oxidised (blue/black colour).

The dense charcoal deposits within the three pits imply the remains of more than a single cremation pyre. In a recent experiment (Marshall and McKinley in prep.), the writer found that from 900kg of wood used to build a pyre, 3.82kg of charcoal fragment size >2mm (*c.*14 litres) remained. Over time this would break down to smaller sized fragments. The implication is that an unknown number of cremation burials is located within the vicinity of the site.

Animal bone

by S. HAMILTON-DYER

Introduction

The condition of bones varied from excellent, with fine surface details preserved, to chalky and eroded. The assemblage is summarised in Table 5 in which minimum numbers of bones or, where possible, individual animals rather than total fragment numbers, are given for reconstructable bone fragments, the animal burials and the puppy bones from pit 1195.

Results

Grave 1002. Underneath the prone inhumation 1005, included as part of the burial, was the complete skeleton of a dog (1019). The body had been laid on its left side with the head partly under the human skull. The pelvis lay under the lower thorax with the hind legs towards the right elbow of the inhumation. The entire skeleton was recovered including one of the internal ear bones. Some of the smallest elements came from sieved samples, including 23 small fragments of bone, the size and appearance of which suggest that they were gut contents. All the bones, including vertebrae, have fused epiphyses but skull sutures are still visible implying that the animal was old but not extremely aged. This individual was male as evidenced by an os penis.

There are several minor pathological lesions. Three of the smaller teeth had been lost *ante mortem* with the alveolus infilled or in the process of infilling. The 4th and 5th lumbar vertebrae are almost interlocking with the presence of lipping osteophytes. One of the metacarpal bones shows evidence of healed fracture with the foreshortening of the bone. The skull had a small partly healed hole near the right-hand nasal/maxilla suture, and there is a small crack in the left frontal with slight porosity of the surrounding bone.

Measurements of the bones give an estimated withers height of around 46cm based on the factors of Harcourt (1974). This 'medium' size (around the size of a modern border collie) is common in Iron Age and Romano-British material.

Burial pit 1043. This ovate pit contained the skeleton of a calf (1058). The skeleton is essentially complete, including all toes and epiphyses. Two small bones are absent, one fibula and one patella. The skull, although fragmented, had not been chopped or pole-axed, and shows small horn cores developing. None of the bones were fused, apart from the distal epiphysis of the humerus which had begun to fuse to the shaft at the time of death. In the jaws, the deciduous 4th premolar and 1st molar were in wear with the developing 2nd molar just visible in the jawbone. The combined tooth and epiphyseal information indicates that the animal was probably around a year old. The immaturity of the bones

Table 5. Animal bone: species distribution (non-burial contexts)

Feature	*context*	*horse*	*cattle*	*sheep /goat*	*pig*	*LAR*	*SAR*	*unid mammal*	*dog*	*small mammal*	*fowl*	*unid bird*	*eel*	*amph*	*Total*
Topsoil	1000	–	–	–	–	2	–	–	1	–	–	–	–	–	3
Q/L	1269	–	–	1	1	1	–	–	–	–	–	–	–	–	3
pit 1022	1020	–	–	4	–	–	1	–	–	–	–	–	–	–	5
F 1041	1040	–	1	–	–	–	–	–	–	–	–	–	–	–	1
pit 1043	1044	–	1	–	–	1	1	5	–	–	–	–	–	–	8
pit 1059	1109	–	1	–	–	–	1	–	–	–	–	–	–	–	2
F 1060	1061	3	–	3	–	23	14	–	6	–	–	–	–	–	49
F 1067	1070	–	–	–	–	–	–	3	–	–	–	–	–	–	3
hearth 1084	1085	–	–	2	–	–	–	–	–	–	–	–	–	–	2
F 1086	1087	–	1	–	–	2	–	–	–	–	–	–	–	–	3
hearth 1090	1091	–	–	1	–	–	–	–	–	–	–	–	–	–	1
ph 1122	1123	–	–	–	–	–	1	–	–	–	–	–	–	–	1
F 1124	1125	–	–	–	–	–	–	1	–	–	–	–	–	–	1
F 1146	1145	–	–	–	–	–	–	1	–	–	–	–	–	–	1
F 1183	1184	–	–	2	–	1	–	–	–	–	–	–	–	–	3
F 1185	1186	–	1	–	–	–	–	–	–	–	–	–	–	–	1
F 1191	1162	–	1	–	–	–	–	–	–	–	–	–	–	–	1
pit 1206	1207	–	1	2	–	–	1	–	–	–	–	–	–	–	4
pit 1221	1222	–	–	–	–	–	–	2	–	–	–	–	–	–	2
F 1226	1223	–	2	–	–	3	1	–	–	–	–	–	–	–	6
pit 1227	1228	–	–	1	–	–	–	–	–	–	–	–	–	–	1
F 1243	1242	–	2	–	–	1	–	–	–	–	–	–	–	–	3
F 1265	1257	–	1	4	–	3	–	–	–	–	–	–	–	–	8
F 1266	1253	–	–	–	–	–	1	–	–	–	–	–	–	–	1
F 1265	1251	–	–	–	–	–	–	3	–	–	–	–	–	–	3
pit 1195	1196	1	2	12	–	2	1	–	–	–	–	–	–	–	18
pit 1195	1199	–	–	5	–	–	–	59	3(72)	–	3	27	2	2	101(170)
pit 1195	1201	–	–	4	1	–	3	14	–	–	–	–	–	1	23
pit 1195	1201	–	–	–	–	–	1	–	–	–	–	–	–	–	1
pit 1195	1219	–	–	–	–	–	–	1	–	1	–	–	–	–	2
total 1195	No.	1	2	21	1	2	5	74	3	1	3	27	2	3	145(214)
	%	0.7	1.4	14.5	0.7	1.4	3.4	51	2.1	0.7	2.1	18.6	1.4	2.1	
total excl 1195	No.	3	12	20	1	37	21	15	7	0	0	0	0	0	116
	%	2.6	10.3	17.2	0.9	31.9	18.1	12.9	6	0	0	0	0	0	
Grand total	No.	4	14	41	2	29	26	89	10	1	3	27	2	3	261(330)
	%	1.5	5.4	15.7	0.8	14.9	10	34.1	3.8	0.4	1.1	10.3	0.8	1.1	

Key:
LAR=large ungulate (probably mostly cow but may also include horse
SAR=small artiodactyl (probably mostly domestic sheep/goat)

precluded measurement. Examination of the bones did not reveal any butchery or pathology.

Burial pit 1143. This pit contained the articulated skeletons of five piglets. The individual animals were allocated separate context numbers: 1138, 1139, 1140, 1141 and 1142. There was some mixing between these contexts and some bone was also recovered from the pit fill, 1144. Photographs and drawings reveal that the piglets had been placed in the pit entire but slightly overlapping. The skull of 1139 was recovered almost intact and contained the remains of small cesspit/compost fly pupae in the

nasal passages. The piglets were all of similar age and size, but not identical. All the bones were unfused. In the jaws, the 1st molar varied from just erupted to still hidden in the jaw crypt. The deciduous 4th premolar was just in wear in all cases. The piglets were certainly not neonatal but probably died or were killed at less than four months old (Bull and Payne 1982). The variation in size and ageing may indicate that they were from different litters, although litter mates can vary considerably. As with the calf there is no evidence of butchery, dismemberment or cause of death.

Pit 1154. The 76 broken fragments recovered are in poor condition. They comprise 16 cattle bones from a right hind leg, from the tibia down, and more than one set of toes; all epiphyses are fused. A much fragmented cattle rib is also present. The remaining 23 fragments could not be reconstructed or identified. The pit had been truncated by machine stripping and it is unclear whether this bone group represents a complete or partial burial, or disposal of unrelated material. Measurement of the broken but complete metatarsus enabled an estimate of withers height to be made of 112.3cm (von den Driesch and Boessneck 1974).

Pyre debris pits. The 44 animal bone fragments from feature 1224 are a mixture of horse, cattle and sheep. Although eroded, none appears burnt. There are remains of two jaws each of horse, cattle and sheep, from different individuals. Other fragments include: horse pelvis, cattle ulna, pelvis, ribs and foot bones, and sheep femur and upper teeth. Two of the cattle bones had been chopped. Pit 1244 contained one small burnt fragment of unidentified mammalian bone.

Pit 1195. The 214 fragments from this pit constitute the only other large group of bones. Three fragments were recovered from the bottom fills, layer 1219 and 1210; these include a mouse or vole humerus. Layer 1201 contained a pig 3rd phalanx which may have been through the digestive system. Bone from layer 1199 includes 72 bones of three neonatal puppies. This layer also contained many small fragments, including bird, fish and amphibian (including common frog, *Rana temporaria* and common toad, *Bufo bufo*) bones which were not recovered elsewhere on the site. In addition to fowl leg bones, the bird bones include toes, tracheal rings and ossified tendons. The two fish bones are of small eels (*Anguilla anguilla*). Some of the many small fragments of mammal bone have the appearance usually associated with digestion. The only bones from the main domestic mammals were a sheep toe and four sesamoids. Many of the smallest elements in this layer would probably have been missed without sieving. The material from the upper fill is quite different, being a mixture of sheep bones including head, foot and limb bones, together with a horse axis and two cattle humerus fragments.

Other contexts. The remaining 25 contexts contributed just over 100 fragments in total. Forty-nine of these are from feature 1060 and include six bones of a dog, three horse teeth, three sheep/goat bones and unidentified sheep/pig and cattle/horse-sized fragments.

Discussion

Apart from the numerous bones in the animal burials, this group of material is a small assemblage with only a few fragments from each context. Pit 1195 had the largest group of material, some of which is probably associated with human cess, the presence of which may also have aided bone preservation. Overall, sheep is the most frequent animal identified, with cattle second. Horse is present in two contexts. Pig bone, other than the piglet burials, is confined to a maxilla in the quarry pit 1269 and the toe in pit 1195. If repeated on a larger scale this high level of sheep and low numbers of pig bones would resemble the late Romano-British assemblages at Owlesbury and Winnall Down, both in Hampshire (Maltby 1985); however, both these sites had higher numbers of horse bones. The fragment numbers in this assemblage are so small that additional material from the unexcavated deposits could alter these proportions considerably. The age of the animals probably indicates that they were bred at or near the site.

Charred plant macrofossils

by P. HINTON

Charred plant remains were extracted from seven samples recovered from five of the hearths (1034, 1038, 1049, 1090 and 1084), the animal burial 1143 and pit 1195. The assemblage is summarised in Table 6.

Cereals

The condition of many of the seeds is poor and the cereals are mainly very fragmentary grains (Table 6). The overall morphology of some cereals may be compared with *Triticum dicoccum* (emmer wheat) and *T. spelta* (spelt wheat), and the presence of these two wheat species is confirmed by the more readily identifiable chaff fragments in some samples. *Triticum aestivum* s.l. (bread wheat) has not been

Table 6. Charred plant macro-fossils

		Hearths				Pits		
Feature no.		1034	1038	1049	1090	1084	1143	1195
Sample volume (litres)		6	10	5	10	5	10	25
Triticum cf *dicoccum* Schubl. (spelt wheat)	grains	1	10	1	1	10		
	glume bases	1	3					
Triticum dicoccum/spelta (emmer or spelt)	grains	3				4		
	glume bases	1	3	1				2
	spikelet bases	1	6			1		
Triticum sp. (undiff. wheat)		7	16	fr	1	11	2	3
Hordeum vulgare L. emend Lam. (hulled barley)		3	10		3	4		
cf *Hordeum vulgare* L. emend Lam.		1	3		1		1	
cf *Avena* sp. (oats)			1					
Cerealia indet. – fragmentary grains (indeterminate cereals)		*c.*35	*c.*100	c.3	*c.*4	*c.*50	*c.*2	*c.*3
Papaver sp. (poppy)			3					
Urtica dioica L. (common nettle)			1					
Chenopodium/Atriplex sp. (goosefoot or orache)		1		1				
Polygonum aviculare s.l.		1					1	
Rumex cf *crispus* L. (curled dock)							1	
Rumex sp. (dock)						1		
Viola sp. (violet or pansy)			1					
Aphanes arvensis L. (parsley piert)		1						
Vicia cf *tetrasperma* (L.) Schreber (smooth tare)			1				1	
Vicia/Lathyrus sp. (vetch or vetchling)		1	3	1		1		
Trifolium cf *pratense* L. (red clover)			2					
Lithospermum arvense L. (corn gromwell)			21			frs		
Plantago lanceolata L. (ribwort plantain)		1	1					
Odontites vernus (Bellardi) Dumort (red bartsia)			1					
Galium aparine L. (cleavers)		1		1	2			2
cf *Valerianella dentata* (L.) Pollich (marrow-fruited corn salad)			1					
Compositae indet. (small-seeded *Senecio* type)			2					
Luzula cf *campestris* (L.) DC (field wood-rush)			1					
Carex nigra/ovalis (common or oval sedge)		1						
Lolium perenne L. (perennial rye-grass)		2	12					
cf *Phleum pratense* L. (timothy grass)			2					
Graminae indet. (small-seeded grasses)			2					

Key: fr = fragment;
frs = <5 fragments

All records are for seeds/fruits unless otherwise indicated

recognised but even in better condition these grains are not always distinguishable from spelt and the presence of this free-threshing wheat cannot be ruled out.

The barley is slightly better preserved and two samples (13) and (14) include grains which appear to be naturally asymmetrical and therefore indicate the presence of six-row barley. The identification of the one *Avena* (oat) grain is somewhat dubious and is based solely on its size, more or less cylindrical form and trace of radicle depression. None of the outer surface remains.

The numerous indeterminate cereal fragments have been estimated, by volume, to an approximate equivalent number of grains. Larger fragments were selected and smaller ones estimated from sub-samples of the larger flots, e.g. sample 14. The badly degraded condition of these grains, and the main fragments, suggests that a considerable amount of chaff and other more fragile items may have been

lost, either at the time of charring or after deposition. It would be unwise therefore to imply a specific stage of crop processing from the proportions of chaff and weed seeds: it is only possible to suggest that these were not deposits of cleaned, fully prepared grain.

Other species

All the other plants represented are open ground species which could all occur in cultivated soil, but the grasses, vetches, clovers, wood-rush and sedge are perhaps more likely to have a grassland origin. Perennial rye-grass (*Lolium perenne*) and the probable timothy (*Phleum pratense*), are characteristic pasture grasses. The one sedge seed has not been securely identified but is likely to be oval sedge (*Carex ovalis*), which occurs in damp or dry grassland, more frequently the former. Common sedge (*Carex nigra*) which is similar in form (but distinguishable when better preserved) prefers boggy conditions and this context seems unlikely here.

Summary

The plant remains indicate that cultivated cereals included the glumed wheats, emmer and spelt, and barley. The possible oat is more likely to have been a weed. All these could well have been grown in the vicinity, and the chaff and weed seeds suggest that threshing and cleaning operations were carried out nearby. If the grassy species were not associated with the crops then hay might be suggested as an alternative source.

Land Mollusca

by MICHAEL J. ALLEN

Methods

A column of eight samples was taken from the lynchet/colluvium revealed in sondage 1288 (Figure 3) for Mollusca, and processed by standard methods (Evans 1972). A single spot sample from a possible turf line (context 1111) was also taken and assessed for Mollusca. The flots (retained on a 0.5mm mesh aperture) were scanned under a stereo-binocular microscope and the semi-quantitive record of each species identified is presented in Table 7.

Results

Overall shell preservation was good but numbers were relatively low. In the old land surface (context 1111) this may be due to the weakly calcareous nature of the turfline. In the lynchet, however, the low whole shell numbers in the flots are typical of colluvial deposits where shells are broken during the deposition of the hillwash, indicated by the large numbers of broken fragments observed in the residue fractions (2mm, 1mm and 0.5mm). Shell numbers are therefore high enough for valid and statistically viable palaeo-environmental analysis.

Overall, the assemblages almost exclusively comprised open country species. The only shade-loving specimen was from the putative turfline and the only catholic species recorded was *Trichia hispida* which is common in hillwash deposits. The Mollusca from the buried turf line were open country

Table 7. Land snails: semi-quantitive record of species identified

	Turfline		*Lynchet*							
Context	1111		1253				1252	1281	1251	1240
Sample	26		39	40	41	42	43	44	45	46
Open country species										
Pupilla muscorum	C		A	C	C	B		A	A	A
Vertigo spp.	C									C
Helicella itala			C	B		C	C	B	B	A
Vallonia spp.	B		B	C			C	A	A	A
Intro. Helicellids				C			C		C	C
Catholic species										
Trichia hispida			C		C			B		
Shade-loving species										
Discus rotundatus	C									
Burrowing species										
Cecilioides acicula	C	C	C	B	A	A	A	A	A	A
Comment on totals	10		30	25	15	20	15	30	40	60

Key: A = >10; B = 5–9; C= <5 items

specimens typical of very open, dry, possibly bare soil. A single specimen of *Discus rotundatus*, a shade-loving species, was recovered. The deposit was dominated by the Vallonias (of which both *V. costata* and *V. excentrica* were noted) and *Pupilla muscorum*. The assemblages were typical of lynchet deposits but, significantly, species composition changed through the contiguously sampled column indicating that, had sufficient dating evidence been recovered, analysis to detect subtly changing habitats associated with the use of the local landscape during the formation of the natural north–south feature might have been possible. However, as the dating evidence is no more precise than broadly Romano-British, and the quantities of residual prehistoric material and the obvious reworking of the deposits during more than one phase of activity suggest that the deposits are of limited environmental value, more detailed analysis of the assemblage has not been undertaken.

Discussion

The discovery of the previously unknown Romano-British site at Maddington Farm has added to the growing corpus of information on human activity within the area of Salisbury Plain during this period. It has also served to demonstrate the value of maintaining archaeological surveillance of linear construction projects such as pipelines, even when they pass through areas with no prior evidence of archaeological activity. However, the relatively small area of the excavation precludes any wide ranging discussion of its content or significance.

The farmstead

Evidence of 'domestic' activity is confined to the north-western area of the site, to which the linear features 1155, 1156 and 1157 appear to form a boundary. The overall indication is that the area examined is situated on the margins of occupational activity, essentially at the edge of a field. At six metres in diameter, the post-built structure 1118, though undated, is smaller than most other examples of 'native' or Iron Age roundhouses and appears to lack any internal features except for the central post which would be unnecessary on such a small roof span. It is likely, therefore, that it did not have a truly domestic function and may have been no more than a hut. Though undated, it appears to have been respected, spatially, by the hearths and other features dotted about it, the dated examples of which fall within the 3rd to 4th centuries AD.

Charred plant remains were recovered from the hearths associated with the hut. These included cereals, predominantly wheat with some barley, in a not fully prepared state and probably grown locally. The presence of some chaff and weeds of cultivation suggests that threshing and cleaning may have been carried out nearby. Other plant remains are all open ground species, some of which occur in cultivated soils but also including a variety of grassland species, such as vetch, clover, wood-rush and sedge, and characteristic pasture grasses such as timothy and perennial rye grass. Some of these may also indicate the presence of straw on the site, in which case one possible function for structure 1118 could have been as a byre (though no samples were taken from features associated with this structure).

The animal bone assemblage is not large but includes typical domestic and farm animals including young individuals. Sheep/goat, cattle and pig are all present with some horse and several dogs – one buried with, presumably, its master – and three new-born puppies.

The purpose of the east–west ditch 1064 is unclear, as it does not appear to form a boundary. At its western terminus it cuts the edge of the calf burial pit 1043, while 2.5m east in a direct line from the eastern terminus were the truncated remains of another probable animal burial, containing cattle bone. The reasons for these two, and the other animal burials, is unclear; no evidence of butchery was noted on any of the bones from the burials, though this does not preclude the possibility that the animals had been killed rather than died of natural causes; they may simply represent the most convenient method of disposal of carcasses at the edge of a field, or, alternatively, they may be of a less expedient nature. In any case, the alignment of the ditch and the two animal burials is surely too close to be pure coincidence, and for that reason they are considered, here, to be associated. Ditch 1064 was cut or replaced by ditches 1155, 1156 and 1157. These clearly form components of a maintained boundary with an entrance at the south-west end, demarcating or enclosing the majority of the 'domestic' features in the north-west corner of the site, and forming the northern or upslope margin of the quarry pits and lynchet deposit 1269, components of which they cut.

However, the relationship between the quarry pits and colluvium 1269, the boundary ditches and, hence, the 'farmstead' area remains unclear. There are burials sealed by the colluvium (128) and burials cut into it (1026), and though the ditches 1155, 1156 and 1157 appear to form the northern boundary of 1269 thereby pre-dating it, all except

1157 clearly cut into it and 1064, the earliest of the four, disregards it altogether. The conundrum can, perhaps, be best explained by the gradual nature of colluvium deposition, and the particular undisturbed topographic and agricultural conditions necessary for it. The irregular pits, over which it appears to have settled, are most probably marling pits and their occurrence is not surprising in view of the presence of heavy, clay-rich, acidic clay-with-flints soils nearby. Their concentration here in a broad linear sweep across the contours of the hill must indicate marginal land at the edge of cultivation areas, conditions also predisposed to the stabilisation of colluvial deposits. The molluscs sampled from within it are typical of hillwash deposits. The two processes appear to have run more or less in tandem here in an area which was, perhaps, later formally demarcated by the boundary ditches. The intercutting of the pits themselves and the graves with the colluvium, can easily be understood in the light of the time span necessary for this depth of colluvium to develop.

Pit 1195 may have been dug originally as a storage pit, of the sort common on chalkland Iron Age sites, but the series of thin organic silt layers at its base included small fragments of apparently digested animal bone, so that it may have been used from time to time as a convenient latrine. These layers were sealed by deliberately dumped material, above which were upper fills containing bones of three neonatal puppies, other animal bone, pottery, two bone pins and other material consistent with the pit having been used for opportunistic or ritualised rubbish disposal. The function of large pits is open to debate but there is little evidence in rural locations that they were dug for the sole purpose of domestic rubbish disposal. Unfortunately there is no evidence for the primary use of this pit.

Although there is evidence of prehistoric activity on the site in the form of a few sherds of pottery and flint work, this is considered residual or redeposited, mostly occurring with Romano-British material. Dating evidence from the artefacts, particularly the pottery, indicates a predominantly late Romano-British (3rd–4th century) date, with some earlier Roman pottery also present.

The cemetery

The cemetery appears to be that of a normal, small domestic type, associated with an agricultural community containing inhumation and, by implication, cremation burials. Although no cremation burials were found the presence of cremated human bone in the probable pyre debris pits would suggest there are some in the vicinity. Such mixed cemeteries were not unusual in the Romano-British period. The full extent of the cemetery is unknown.

The common burial posture in Romano-British inhumations was supine and extended. Crouched burials, being more common in rural areas, are seen as a persistence in native burial practice in the first two centuries AD (Philpott 1991). Inhumations 1037 and 1179 were crouched in shallow graves, 124 flexed, 1005 extended and prone and 1012 extended on the left side. One of the crouched burials, 1037, and probably a second shallow burial, 1046, were cut by later Romano-British features, which would suggest they are earlier in date than the deeper burials which also contained later Romano-British dating evidence.

Prone burials are relatively rare, and occur more frequently in the late Romano-British period (Philpott 1991). Some demonstrate traits implying execution, others of careless or deliberately disrespectful deposition; those with a more 'formal' appearance are often placed on the edges of the cemetery. Inhumation 1005 was apparently buried with care, implying respect; it was laid in an extended position within a coffin, a bronze coin in the mouth and a small dog placed across/under the chest, head on shoulder. The grave was immediately adjacent to that of 1012, and did not appear to be separated from the others. It is not inconceivable that the coffin was accidentally inverted during deposition, though one might perhaps expect more movement of the body within the coffin during turning if that had been the case. Alternatively, some unknown ritual may be indicated. The pronation of the dead to stop them from rising has been suggested as one possibility (Harman *et al.* 1981). Unfortunately, the crushing of this shallow grave prior to stripping of the site might have destroyed explanatory evidence.

Coins are frequently found in the mouths of inhumations, usually where no other associations are present (Philpott 1991). One inhumation from the rural cemetery at Ilchester (grave 37) was found with an illegible coin in its mouth and was accompanied by a dog, as here. The coin of Faustina II from inhumation 1005 provides an earliest possible date for the burial of AD 161–175, though, as the coin is extremely worn, indicating a long period of circulation, it could be substantially later than this.

Dogs are not uncommon companions in Romano-British graves (Philpott 1991), where they are believed to represent pets or possibly status hunting dogs. The medium-sized, male animal with

1005 was apparently quite elderly, and is most likely to have been a personal pet. Similar associations of dogs with humans in inhumations of Romano-British date have been found at Baldock, Hertfordshire (Hamilton-Dyer forthcoming), Lankhills (Clarke 1979, grave 400) and Figheldean (Graham and Newman 1993, grave 61). Though usually intact, there are a few instances where dogs have been decapitated or otherwise mutilated: for example, Alington Avenue, Dorchester (Maltby forthcoming, graves 3661 and 4389). There are no references to possible fittings/harnesses of the type noted from 1019.

Flexed inhumation 124 had *c.*80 hobnails at its feet, the footwear obviously being worn by the deceased at the time of burial. Hobnails are commonly recovered with burials, especially in rural sites (Philpott 1991). Other types of footwear do not appear to have been recorded in burials, though the presence of leather shoes is considered likely (Philpott 1991). The presence of a type of leather sandal or patten, is demonstrated in inhumation 1012 where five small copper-alloy rivets, one *in situ* in a fragment of leather, were recovered from around the feet. Blue/green and dark brown staining was noted on the posterior surfaces of both 1st and 2nd metatarsals and the left 1st proximal phalanx, which suggests a copper-alloy riveted strap crossing the foot. The rivets probably served a decorative rather than a practical purpose, being confined to the medial side of the feet (Figure 4). The shoes were apparently worn at the time of burial.

Inhumation 1012 was coffined, and in a deep grave cut. Extended on the left side, it appears that, during deposition, the body slid against the right side of the coffin (probably because of the way it was lowered into the deep grave) then slumped forwards, slumping further still during decomposition. Forty-two coffin nails were recovered from the head and foot ends of inhumantion 1012 (Figure 4): the number appears unusually large for purely constructional purposes and may indicate a decorative use for some of them.

The variation in burial posture, including crouched, flexed and extended burials, does not appear to relate to the age or sex of the individuals.

Summary

Together, the structural, artefactual and paleo-environmental evidence points to marginality; the excavation appears to have clipped the edge of a small, Romano-British farmstead, the nucleus of which may lie closer to the top of the spur, probably *c.*140m to the north, adjacent to the east–west bridleway which is believed to follow the line of the Roman road between Salisbury and Devizes. The small round building associated with hearths seems most likely to have had an agricultural use rather than a domestic one. The environmental evidence suggests a typical low-level mixed farming economy with both arable and pastoral elements.

The full extent of the cemetery is unknown, the inhumation burials being fairly widespread across the site, close to edges of the fields. More burials are likely to exist, and certainly the presence of hitherto undetected cremation burials is strongly indicated by the occurrence of cremated human bone within the pyre debris pits. The period over which the burials were made is unknown but since at least one of the graves (128) was sealed by soils associated with the formation of the lynchet, a fairly lengthy timescale within the later Romano-British period is indicated, consistent with the occupation of a small farm over several generations.

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West Chisenbury: Settlement and Land-use in a Chalk Downland Landscape

by GRAHAM BROWN

West Chisenbury, a detached tithing of the parish of Netheravon until 1885, is typical of many tithings along the valleys of the Wessex chalk downland. Each had a proportion of the land resources, the amount dependent on the size of the settlement, with meadow restricted to the valley floor and arable cultivation extending from the settlement towards the downs. At the extremities of the settlement lay the pasture and waste. At West Chisenbury well-preserved settlement earthworks representing a cluster of medieval farmsteads are evident. Since the tithing lies within a military training area it has not suffered from the agricultural improvements of the past century to the same extent as those elsewhere in the county and, consequently, the archaeological landscape can still be studied in detail. This paper attempts to place the medieval settlement of West Chisenbury in its landscape context by combining the data from field survey and field investigation with the available documentary evidence.

INTRODUCTION

The shrunken settlement at West Chisenbury is situated within a broad meander on the west bank of the river Avon at about 92m above OD on Lower and Middle Chalk and valley alluvium (Figure 1). The settlement remains are located partly on the first river terrace above the flood plain, with the remainder spilling out onto the flood plain. On the opposite side of the river is the hamlet of East Chisenbury. This pairing of settlements is characteristic not only of the Avon valley but also of other medieval settlements on the south Wiltshire chalkland. Examples include Steeple Langford and Hanging Langford in the Wylye valley and North Burcombe and South Burcombe in the Nadder valley (RCHME (a) in preparation).

Investigation of the site itself is one element of a research project being undertaken by the author which aims to assess the nature of medieval and post–medieval settlement in the Avon valley north of Salisbury. The area also forms part of a study being undertaken by the Royal Commission on the Historical Monuments of England (RCHME (b) in preparation).

The Avon valley was, and still is, an important route for travel through the chalk massif of Salisbury Plain. A wealth of Roman and Saxon material also points to its longevity as a favoured environment for settlement. A series of finds of Roman building debris and associated building foundations suggests that the Avon valley was the focus of a number of structural complexes (for example, Annable 1968, 119). Given the pattern and nature of Roman settlement of Salisbury Plain it seems reasonable to suggest that these valley bottom complexes functioned in part as estate management centres (RCHME (b) in preparation). There are also finds of Saxon material here (Annable 1967, 125) and the roadway utilising the valley floor has a potential Saxon precursor (Cossons 1959, 254). It is not intended here to claim a direct line of continuity in settlement from the Roman period but, rather, that these earlier estates established a heavily organised and settled landscape which laid the foundations for subsequent exploitation of the valley floor.

HISTORICAL BACKGROUND

At the time of the Domesday survey, West Chisenbury was held by Nigel the Physician as one of three estates that belonged to Netheravon church. It was the smallest of the estates and assessed as having land for only 1 plough, 3 smallholders with ½ plough. With 6 acres of meadow and pasture 4 furlongs long and 2 furlongs wide, it was valued at £3 (Thorn and Thorn 1979, 56.3). In contrast East Chisenbury, the second largest of his estates, was valued at £13. The third estate was some distance from Netheravon, at Stratton St Margaret, and was valued at £16 (*ibid.*, 56.1–2).

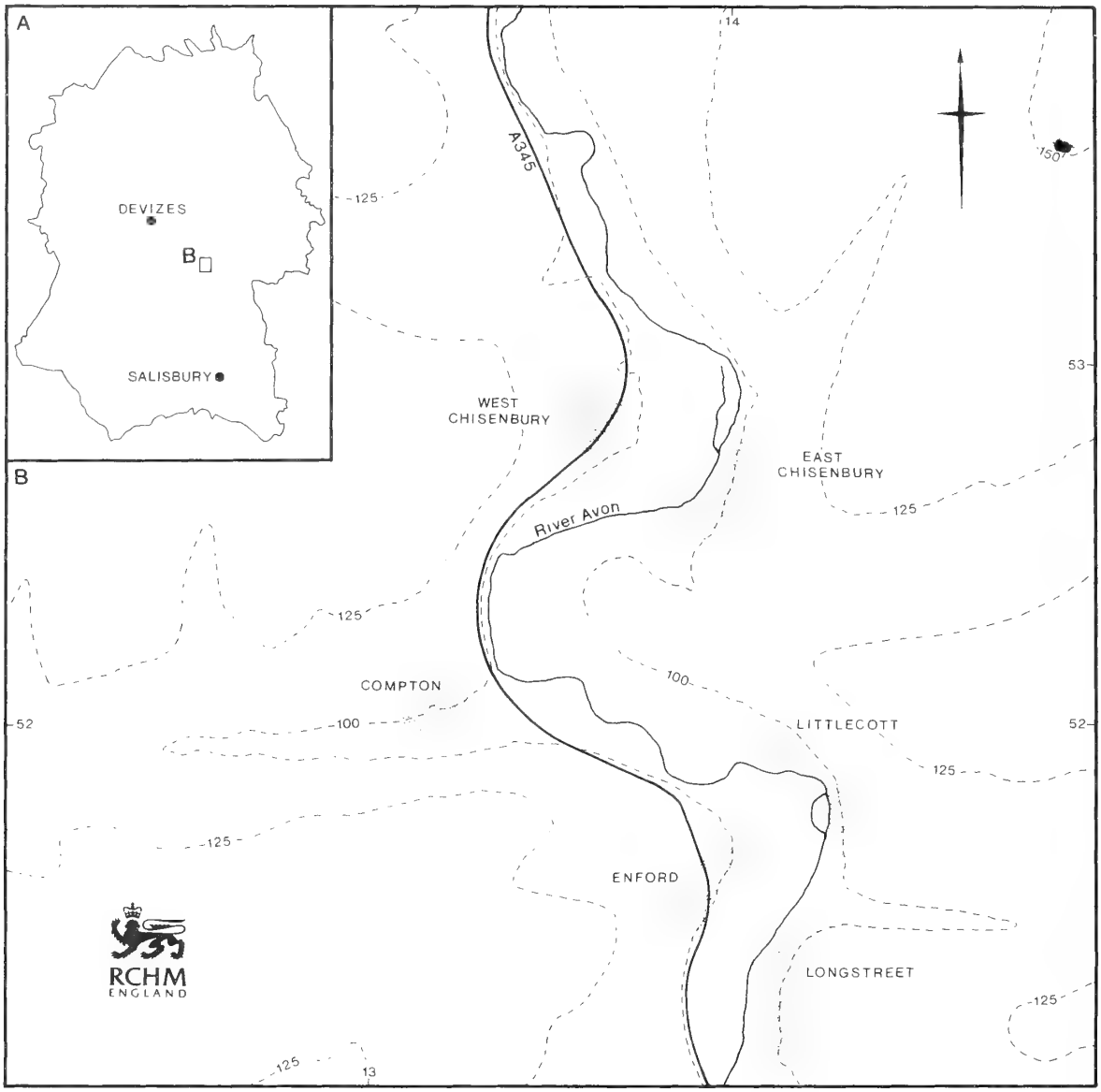

Figure 1. General Location of West Chisenbury, (RCHME, Crown copyright)

By the 12th century West Chisenbury was sub-infeudated and from the beginning of the 13th until the late 14th century it was held by the de la Foyle family. In 1313, 2 carucates and 6 acres of meadow were held by the chaplain, Philip Dyonys, for a rent of 40*s*. (Pugh 1939, 84) until 1337 when this land, including the messuage, reverted to Henry de la Foyle (Elrington 1974, 48). By the mid 14 century the estate had passed to John Breamore and in 1361 the demesne messuage included a dovecote and garden. Additionally there were 240 acres of arable land worth 3*d*. an acre, 12 acres of meadow and common pasture for 6 working cattle, 20 oxen and grazing for 400 sheep (Stokes 1914, 276). In 1428 it was in the possession of Robert Browning when the estate formed part of the Netheravon prebend of Salisbury Cathedral; and in 1649 the holding at West Chisenbury contained an old decayed barn of 4 bays (Bodington 1919, 301). The estate remained

in the Browning family until 1708 when it was sold to John Flower.

Throughout much of the medieval and post-medieval periods a number of grants of land were made at West Chisenbury to various individuals including monastic houses, and it was not until the early 18th century that the estates were finally combined.

The largest of these estates was one of 5½ virgates that was conveyed to Peter Bacon in 1201 by Roger de la Foyle, the mesne lord of the capital manor. Bacon's descendants retained the estate until 1624 when it was sold to William Rolfe (Fry and Fry 1901, 124–6). A year later it was sold to John Merewether and in 1648 it was enlarged by 81 acres. The estate was known as the manor of Chisenbury or Chisenbury de la Folly and was held in free socage (free tenure but no military service) from the Browning family in the early 17th century; it comprised the capital messuage, 180 acres of arable land, 10 acres of meadow, and 12 acres of pasture. It formed part of a much larger estate which included land in Whiteparish, Upavon, and Rushall (*ibid., loc. cit.;* Pugh 1939, 81). In 1720 the land was sold to John Flower.

In the 13th century there is also mention of a tenement at West Chisenbury held by John de la Roches. In 1252 his descendants held a third of a carucate and 2 virgates at Chisenbury and Coombe in Enford. In 1354, not long after the Black Death, the Roche land at West Chisenbury comprised a messuage, 3 virgates of land, and 2 acres of meadow. The estate was eventually sold to John Flower in 1723 and merged with the capital manor (Stevenson 1980, 174).

In 1227 a gift by Richard de la Folie of a messuage and an unspecified amount of pasture to the Augustinian Canons of Maiden Bradley was confirmed; they retained the land until the Dissolution in 1536 (Chettle and Kirby 1956, 296, 301). A small amount of land was also held by the newly founded Preceptory at Ansty, a minor house of the Knights Hospitallers (Stevenson 1980, 174).

By the early 18th century West Chisenbury was worked as a single farm located on the eastern side of the present A345 road. In 1776 West Chisenbury was purchased by William Beach who also owned a substantial estate in Netheravon (Stevenson 1980). In 1861 Beach sold his Netheravon and West Chisenbury estates to Lord Normanton and thirty six years later West Chisenbury was one of the first estates on Salisbury Plain purchased by the War Department. Since this date the estate has been in government ownership; nevertheless, farming continues on the lower slopes in much the same area as at the time of the Domesday survey.

During the 18th century the pattern of land tenure began to change and new farms were built on the downs as more land was cultivated, a process that accelerated after parliamentary enclosure. West Chisenbury was no exception to this process and a field barn was built on the downs sometime after 1796. Farming expansion reached its peak in this region by 1879 and was followed by an agricultural depression which was to last into the early 20th century (Perry 1974). During this period rents on the Beach estate fell by 40 per cent which led to a reduction in arable cultivation and much of the downland reverted to pasture (Stevenson 1980, 177).

A water mill is recorded at the time of the Domesday survey at East Chisenbury; this mill may be the same one that was owned by the Proctor of Ogbourne who, in 1230, had to pay 2*d.* annually to Roger de la Foyle for the use of the leat and sluice which were evidently within the bounds of West Chisenbury (Chibnall 1951, 57).

A chapel of ease is recorded at West Chisenbury in 1405, although a chaplain is mentioned in 1313 (see above); by 1535 it was no longer standing (Jackson 1867, 268). In *c.*1650 a suggestion was made that West Chisenbury should be linked to the neighbouring parish of Enford for ecclesiastical purposes, since attendance at the parish church at Netheravon by the hamlet's residents was so low (Bodington 1919, 300).

Population estimates are difficult to assess for West Chisenbury since it was a detached tithing of Netheravon parish until the late 19th century. Many of the tax returns and other population indicators have been obscured by their inclusion within the parent parish assessment. In the tax list of 1332 East and West Chisenbury were regarded as one vill and 19 individuals are listed, including Henry de la Foyle, who was lord of West Chisenbury manor (Crowley 1989, 65). Since East Chisenbury was the larger of the two estates at the time of the Domesday survey, it seems likely that a little over 200 years later the majority of the 1332 tax payers were from there. The 1377 poll tax lists 111 payers within Netheravon parish but again does not separately identify West Chisenbury (Beresford 1959, 308). Taxation assessments for the 16th century show that Netheravon was the third most highly rated parish in its hundred. By the 19th century West Chisenbury was listed separately and in 1811 the population was 38, rising slightly to 47 by 1891.

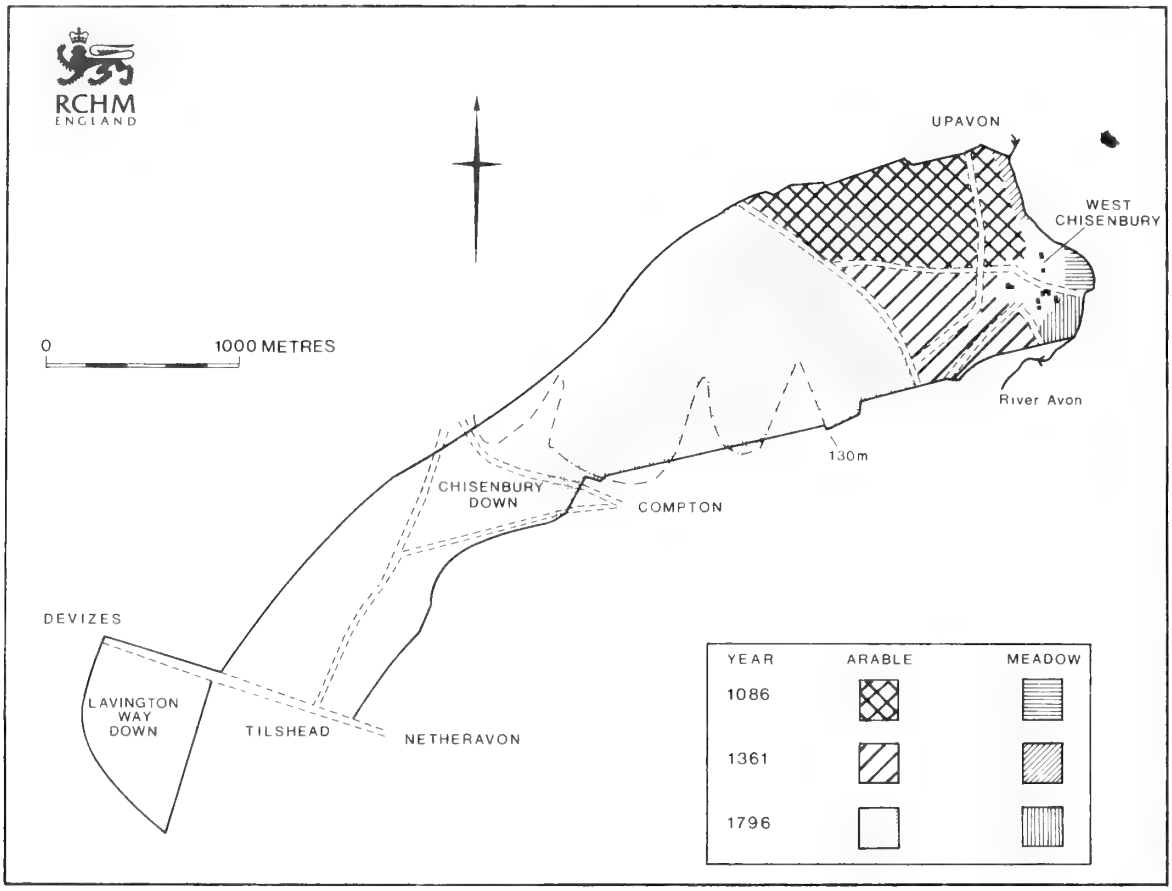

Figure 2. West Chisenbury tithing showing expansion of cultivation onto the downs and extension of meadow along the River Avon. (RCHME, Crown copyright)

ARCHAEOLOGICAL BACKGROUND

In 1926, during the construction of houses 100 metres to the north of the settlement (*t* on Figure 3), a pagan Saxon burial was discovered (Cunnington 1930, 84). The location of this burial, within 300 metres of the tithing/parish boundary is significant, given that Bonney (1966, 25–30) has shown that there is a marked correlation between pagan Saxon burials and land boundaries. Bonney comments 'that those boundaries . . . were in being as early as the pagan Saxon period and they imply the existence of a settled landscape...'. Unfortunately, the bounds of the Enford Saxon charter which, according to Grundy (1919, 228), include West Chisenbury, cannot be ascertained clearly. There is even some doubt as to whether the charter refers to Enford in Wiltshire or a similarly named settlement in Hampshire (Sawyer 1968, 174). In spite of this, the present day boundary of West Chisenbury may still reflect a much earlier, possibly Roman, land holding.

THE TITHING LANDSCAPE

The tithing boundary is formed by the river Avon on the east while to the west it extends in a finger-like projection onto the open downland of Salisbury Plain. Much of the remainder of its perimeter is marked by a bank and elsewhere, as on Chisenbury Down and Lavington Way Down, its course was formerly indicated by boundary mounds and a double linear ditch. In places, the tithing boundary clearly follows the lynchets of ancient fields. This is particularly evident near the linear ditch where the boundary divides Compton and West Chisenbury. The use of ancient fields as boundaries can be seen elsewhere on Salisbury Plain: for example, the

southern boundary between Bratton and Edington is stepped as it negotiates a prominent lynchet. By contrast, in the Till valley the parish boundary of Berwick St James near the deserted village of Asserton ignores a series of massive strip lynchets which it crosses (C. Dunn pers. comm.).

The communication pattern close to the settlement was dominated by tracks either running between the settlements on the west bank of the river Avon, or by those leading out to the arable fields and pasture. A major track, (*a–b* on inset to Figure 3) lay above the first river terrace and was the route between Netheravon and Upavon. However, this track became less important when the A345 road was constructed 200 metres to the east and through the abandoned settlement earthworks, some time between 1849 and 1889. Another track led north close to the river towards Upavon. Branching from the track (*a–b*) were three further tracks. The southerly one is followed by the A345 road. To the north, the second track survives as a hollow way and hedge-line that led directly to West Chisenbury Farm. The third track (*c–d* on Figure 3 and inset) led from the settlement onto the downs. Formerly this track continued east at *d*, through the medieval settlement, and on to the flood plain (*m* and *n* on Figure 3). However, it has been diverted at *d* to follow the hedge-line in a south-easterly direction towards West Chisenbury Farm.

Beyond the settlement a number of tracks crossed the tithing landscape of which the most notable are the two in the extreme west. The first was the drove track between Netheravon and Devizes which lies beside a linear ditch, perhaps the *Ealdan Dic* (Old Ditch) of the Enford Saxon charter (Grundy 1919, 234). Crossing this track, with a corresponding break in the linear ditch, was another track that led from Upavon to Tilshead; in the north it survives as a deeply incised hollow way cutting diagonally through an ancient field system. Further south it lies parallel to ridge and furrow and later becomes a slight hollow way beside a prominent field lynchet.

Three types of land-use have been identified within the tithing: meadow, arable, and pasture and waste. The Domesday arable was probably located to the north-west of the settlement in a natural bowl with relatively steep slopes on three sides. By 1361 cultivation had expanded south onto the higher ground above the settlement. At 3*d.* an acre the West Chisenbury arable was similar in value to that of other downland tithings: for example, at Market Lavington in 1293 there were '374 poor acres upon the hill, and the acre was worth 2*d.*' (Fry 1908, 192). Although there appears to be no evidence for the type of field system in operation here during the medieval period, by analogy with other downland estates in the area, it is likely to have been an open two field system by the 13th century (Tate 1945, 139). There are no further indicators of arable expansion at West Chisenbury during the medieval period. Occasionally, however, there may have been temporary intakes; this certainly occurred on other downland estates in the area such as at Shrewton (Bennett 1887, 35).

By the late 18th century cultivation had spread westwards onto Chisenbury Down. The area here is bisected by three deep valleys which were shown as being uncultivated on a map of 1849 (HRO map, M20). The steepness of the slopes, and the absence of strip lynchets would suggest that they have never been cultivated. It is therefore likely that neither the western part of Chisenbury Down nor Lavington Way Down witnessed substantial episodes of cultivation in the medieval period.

There were three distinct areas of meadow at West Chisenbury. To the north a narrow band of meadow, 7 acres in area, extends from the settlement and terminates at the tithing boundary, whilst to the south of the track leading to East Chisenbury there is a much more extensive meadow of 17 acres. Sandwiched between the two is an area known in 1898 as Saucers Meadow (MoD 1897): this covers 4 acres and may have been named after an eponymous resident of West Chisenbury mentioned in 1329 (Stokes 1914, 44) and may also be a remnant of the 6 acres referred to in the Domesday survey. The meadows to the north and east were later converted to floated water meadows, although the larger meadow in the south does not appear to have been adapted for this purpose.

The two main areas of pasture and waste were on Lavington Way Down (100 acres) and Chisenbury Down (about 518 acres in 1796). The former was probably named from the track that formed its northern boundary. However, by the late 19th century this name and that of Chisenbury Down had inexplicably been changed to Slay Down and Compton Down, respectively. Interestingly, the incongruous shape of Lavington Way Down, projecting as it does into the parish of Upavon, suggests that it may once have been included in that parish.

A breakdown of the land-use in West Chisenbury tithing from the Domesday survey until the late 19th century is given in the Appendix (see page 83).

Figure 3. The earthworks at West Chisenbury. The inset shows the hamlet at the time of Enclosure. (RCHME, Crown copyright)

FIELD SURVEY OF THE EARTHWORK REMAINS (Figure 3)

(The italic letters in the following account refer to the letters on the plan.)

The settlement earthworks extend from the top of the river terrace eastwards on to the flood plain. In places the area of settlement on the flood plain is lower than the present course of the river indicating that as the settlement expanded the river has been canalised and therefore restricted to its present course in the east. In January 1995 after prolonged heavy rain the river burst its banks and temporarily reverted to its former meandering course through the settlement. The creation of later water meadows in the east has also tended to mask the settlement remains.

The Street Pattern Within the Settlement

The principal surviving settlement earthworks are laid out on either side of a former street now represented by a hollow way. This hollow way is best preserved at its western end between *c* and *d*. East of *d* it is traceable as a very broad linear depression crossed by at least three step-like scarps which may represent an extension of settlement (see below), or later agriculture, after this section of the street had been abandoned. Near *m* the former street descends on to the flood plain and survives as a pronounced hollow way which was later used as a main drain for the northern water meadow. It soon changes direction to run south to join a second street (*k–l*) at *n*. East of *n* it remains in use as a track that leads to a river crossing to East Chisenbury.

The second street lies to the south and again leads from the downs to the settlement. At its western end it survives as a hollow way, *c*.5m wide, beside a hedgerow and fence-line, which gradually fades out near the present A345 road. Formerly this street continued east at *k* and *l* to the former farmstead (*w*) to meet the northern street at *n*.

The Settlement

The settlement earthworks appear to fall into three elements. The first is located at the top of the river terrace and extends westwards from *e–f* and is largely confined to the area between the two streets. It also extends on to the northern side of the northern street where scarps representing at least four regularly laid out rectilinear properties are visible, bounded by an irregular scarp (*i–j*) which fronted the former street, and a boundary bank, or headland, *g–h*. These properties are associated with step-like scarps crossing the street suggesting that when this section of the street was abandoned some restructuring of the properties may have taken place with their boundaries being extended to take in the area formerly occupied by the street. The best preserved earthwork is an enclosure at *p* which measures *c*.25m^2 and appears to be the remains of a walled structure; it has been bisected by the present road.

In the area between the streets the earthworks are poorly defined and have been damaged by later quarrying and by the present farmhouse. A prominent sub-square platform, measuring 50m^2, lies at *q*. The earthworks associated with the southern street (*k–l*) are now very fragmentary and have been largely destroyed.

The second element comprises the settlement remains located east of *e–f* on the flood plain. Earthworks representing former rectilinear properties lie chiefly on the north side of the northern street between *m* and *n*. Some are artificially raised suggesting that, as today, this area and that to the north, were prone to flooding. Settlement remains, now represented by amorphous scarps on the eastern side of this street, have been largely destroyed by the construction of the later water meadows. However, a rectangular hollow, clearly the site of a former building, is still visible at *u*.

The third element lies north of and behind the properties near *m*, immediately adjacent to the river. The Inclosure map of 1794 shows a T-shaped feature in this area (inset to Figure 3). The earthworks comprise two platforms. The larger of the two (*r*) is partly surrounded by a ditch 10m wide and up to 1.3m deep which encloses a trapezoidal area measuring 35m by 25m; there are no visible internal details and its southern limit is poorly defined. The second platform, immediately to the north, is smaller and consists of a rectilinear raised area about 0.4m in height which, on the north, has been truncated by the river. To the west, on rising ground, is a circular feature (*s*), 8m in diameter and 0.3m high, enclosed by a slight ditch.

Two houses, each one with an enclosed garden and outbuildings, are shown on an aerial photograph taken in 1925 (NMRC SU1352/3). Their sites can be identified on the earthwork survey: the first is a rectangular structure situated on the former street slightly to the west of *m*, the second is situated on the raised ground at *v* with a small bridge over the hollow way leading towards the farmstead. Map evidence shows that the houses were abandoned between 1925 and 1939, probably after the houses at *t* were constructed.

The Water Meadows

There are two water meadows at West Chisenbury. The first is situated to the north of the settlement, beyond the surveyed area to the north of *t*, and extends as far as the tithing boundary. This meadow was not surveyed since the earthworks, apart from the main drain, are very fragmentary. However, the main drain is an important aid in understanding the chronology of the settlement earthworks on the flood plain since it was laid out through the settlement remains and utilised the hollow way north of *n*.

The second meadow lies within the surveyed area and is bounded by a stream on the east and the hollow way (*n*) to the west. Although this area has been degraded, probably by later agricultural activity, enough of the system remains for an interpretation to be made. The meadow slopes gently in a southerly direction and is of herring-bone construction; it also slopes from the east and west towards the centre. The stream to the east is lower than the main carriage and therefore did not form part of this meadow. Water was supplied to the northern part of the meadow from two sluices, while the southern part was supplied from another sluice to the north of *v*. A channel (*y*), possibly a former hollow way to the settlement in this area, extends from the hollow way *m–n* towards the river. This channel was probably the main carrier for the water meadow in the south. The principle of the water meadow and how it functioned was similar to those described by Cowan further south on the river Avon (Cowan 1982).

DISCUSSION

West Chisenbury was a detached tithing of Netheravon until the late 19th century. It is conceivable that this tithing may once have been part of a much larger Saxon *parochie* centred on the royal vill of Netheravon and included the neighbouring parish of Enford. It has been noted in Hampshire that one of the reasons for the break-up of a *parochie* was the granting of land to the church, particularly in the 10th century (Hase 1994, 62). A similar process may have occurred here when, in 934, King Aethelstan granted to the monks of St Swithun's priory in Winchester 30 hides in Enford (Grundy 1919, 228); this grant would have effectively left West Chisenbury detached from Netheravon. A link between Enford and Netheravon is evident in 1086 since Netheravon church owned land in East Chisenbury in the parish of Enford (Thorn and Thorn 1979, 56.2).

The present arrangement of earthworks and the Domesday evidence appear to suggest that the hamlet of West Chisenbury may have developed as a regular, single row settlement, bordering the north side of the northern street. Alternatively, it may have developed as a settlement between the two streets that later expanded beyond the northern street. The sizes of the properties are similar to those that were excavated at Gomeldon in south Wiltshire (Musty and Algar 1986) and also equate to the sizes of 13th-century buildings given by Dyer (1994, 155). This arrangement of small squat sub-rectangular plots is the normal form of medieval settlement in the Wessex chalklands, quite unlike the crofts and tofts that are seen in some other parts of the country. The settlement on the flood plain mirrors the layout of that on the river terrace and presumably represents later expansion. The area between the two streets, together with the land to the south, may represent the demesne messuage; barns and paddocks may have occupied the lower land immediately to the east on the flood plain. Within this area, the platform at *q* is a likely location for the chapel of ease (see above). This would imply, therefore, that the manorial complex lay wholly within the bounds of the street system, partly on the river terrace with the remainder spilling onto the flood plain between *m* and *n*.

To the north, and separated from the main settlement complex by an area which is susceptible to flooding is a small paired moat-like site (*r*). Moats in Wiltshire are uncommon, particularly on the Chalk (Lewis 1994, 184), and the incidence of a possible one here is therefore of particular significance. The Ordnance Survey recorded a moat at Knighton Farm, 7km south of West Chisenbury on the river Avon, but it is more likely that this feature is an angled hollow way. The interpretation of the site at West Chisenbury is complicated by the use of the channel to the north of *r* as the main drain for the northern water meadow; whether this channel was cut during the construction of the water meadow, or whether it is using an existing feature, is unclear. Moat sites fulfil a variety of functions but were primarily manorial residences (Le Patourel and Roberts 1978, 46). Whether the site here was for habitation or for some other purpose is uncertain; although it is very small, habitation is not unknown on such small sites: at Willoughton in Lincolnshire, for example, a moat 35m x 45m with an associated fish pond was the site of the grange of an alien priory (Everson *et al.* 1991, 218). The site may therefore be another, or an alternative manorial complex – possibly even the demesne messuage of John

Brymmore documented in 1361, with the homestead occupying one platform and a garden the other, and with the dovecote lying to the west. Alternatively, it may represent a monastic holding, possibly that of the Augustinian estate recorded here in 1227. It appears to lie on the edge of the main settlement complex, indicating that it is presumably later in date than the main part of the hamlet. A further possibility is that it could represent a post-medieval ornamental water garden feature associated with the river. The development of ornamental gardens in this area is not uncommon: across the river at East Chisenbury, for example, a leat was constructed in the 17th century in order to create a water garden in the newly emparked estate. A similar process may have taken place at West Chisenbury at this time when considerable water management of the meadows was being undertaken.

During the post-medieval period there were a number of agricultural improvements, the most important of which in this area was the floating of the water meadows. The importance of water meadows has been described in detail elsewhere (Davis 1811; Kerridge 1953; Bowie 1987). Although the date of their establishment along the river Avon in unknown, it is likely to have been sometime in the 17th century when they were also in use along the Wylye valley. Two types of water meadow construction have been recognised along the river Avon north of Amesbury. They were either constructed with side carriers that were set at right angles to the main drain, or they were herring-bone shaped with perhaps additional subsidiary carriers. It is unlikely that these two types represent a chronological development even though the herring-bone type appears less well developed and more haphazard; rather, they were constructed to suit the topography of the particular area. For example, the northern meadow at West Chisenbury is long and narrow with the main drain in the centre, and parallel to the river. This provided enough space for the construction of the side carriers at right angles to the ditch. In contrast, herring-bone meadows appear to have been constructed in less uniform topographies such as in areas of river meander. An unusual feature of the water meadow to the east of the settlement is that it overlies some abandoned properties and also utilises the hollow way as a main carrier. This indicates a date, possibly in the 17th century, by which time the eastern part of the settlement was abandoned.

The stream which formed the eastern boundary of the water meadow did not form part of the meadow and appears to be more substantial on the 1794 map than it is today. It is conceivable, therefore, that this stream may have been a leat for a water mill, possibly the one recorded in the 11th and 13th centuries at East Chisenbury (see above). The later site of the East Chisenbury mill was at the river crossing between the two hamlets.

Beyond the settlement, the tithing landscape mirrors that of other chalk downland riverine estates with meadow on the flood plain, arable close to the settlement and extending on to the downs, and pasture beyond. This division of land resources has been dated to at least the later Anglo-Saxon period (Hooke 1988, 140). However, a notable difference in this area in comparison with others on the Wessex chalkland is that the downs have not been cultivated in modern times and the pattern of ancient and later fields is still largely extant.

Prehistoric and Romano-British fields covered much of Lavington Way Down and Chisenbury Down, although in the areas on the lower slopes near the settlement that have been regularly cultivated since the medieval period, little trace of these fields survives. Ridge and furrow is also evident on parts of Chisenbury Down, beyond the area of 'permanent' arable, and extends west over much of Thornham Down and Charlton Down. These fields are arranged in a rather haphazard fashion, varying in area from 300–500 acres, with 5–7m between ridges. They have clearly been superimposed on the ancient fields and do not respect their layout; they also encroach on parish and tithing boundaries (Crawford 1935, 91). Since the ridge and furrow has not destroyed the ancient fields it is likely that it represents temporary intakes during periods of stress on land resources, possibly during the Napoleonic Wars.

The plan of West Chisenbury shows a large, roughly rectangular area, probably the manorial area, with the modern farm set in the middle and large scarped closes to the south which were clearly once paddocks. Further traces of paddocks are evident to the north-west of the farm with earthworks to the north and north-east, possibly including the site of the chapel. To the north of this rectangular area is a regular single row settlement, containing perhaps four properties. Later settlement expansion occurred over the flood plain with a curving hollow way leading to the river-crossing.

West Chisenbury may have originated as a Saxon settlement on the site of the later manor and lying directly opposite the ancient river crossing. This developed into the manorial area with the remainder of the hamlet to the north, probably during the late Saxon or 11th–12th centuries, causing the dislocation of the track to the river-crossing and thus the

development of the curving hollow way or street from the settlement to the river crossing. Later, possibly during the 12th or 13th centuries when land was granted to various individuals, the settlement expanded in the only direction possible, over on to the flood plain, since the manor lay to the south and the arable fields to the north and west. What effect the Black Death had at West Chisenbury is unknown; however, it was not deserted at this time since there was a land transaction in the mid 14th century. The settlement probably began to shrink in the mid 16th century and continued into the 17th century with the demise of the chapel, the manorial barn recorded as being in decay, and the construction of the water meadows over former properties. In the early 18th century the settlement became a single farm with a few isolated cottages. Although this sequence of development is paralleled in many other places in England, the water management on the flood plain is unusual, first by canalising the river to restrict its course and secondly by the creation of a water meadow over an area of former settlement.

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Survey Methods and Archive. The site was surveyed at a scale of 1:1000 using a Wild TC 2000 theodolite and intrigated EDM for the main control framework; the archaeological detail was recorded using taped offsets. The archival report and survey diagram (NAR No. SU15SW 44) have been deposited in the National Monuments Record at the National Monuments Record Centre, Kemble Drive, Swindon, SN2 2GZ and are open to the public for consultation.

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Appendix

The table below provides an indication of land-use and is an attempt to dissect the workings of the tithing from the Domesday survey until its acquisition by the Ministry of Defence (MOD) in 1897.

	Arable	*Pasture/Down*	*Meadow*
1086	1½ plough 150a.(62½ ha)*	4 x 2 furlong	6a.
1361	240a.(100ha)	(400 sheep)	12a.(demesne)
1648	the capital manor was c.246a.		
1796	518a.(216ha)	447a.(186ha)	5a.(demesne)
1898	505a.(210ha)	469a.(195ha)	26a.

* This presumes the demesne plough cultivated 100 acres and a tenant plough cultivated 50 acres (Dyer 1991, 67, note 34).

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Royal Itineraries and Medieval Routes

by NORMAN HIDDEN

Edited records have been published of itineraries made by the monarch and his court in connection with the royal dispensation of justice during the reigns of Henry I and Edward III. Various factors determined the royal routes taken and in particular the stopping places chosen. Additions to, or deletions from, the list of places visited may have occasional significance in indicating a township's development or decline; and apparent changes of route may suggest an extension or improvement to certain roads. The routes covered in this brief examination mainly are those between royal residences in or near the capital to Wiltshire, with special reference to Salisbury, Marlborough and Hungerford.

One of the earliest ways in which the Plantagenets dispensed justice throughout their kingdom was by the monarch himself travelling about the country with his court (*Curia Regis*), both taking local counsel and settling important legal cases in the region visited. Records of these royal itineraries have been carefully compiled[1] and it is possible, from the reign of Henry I onwards, to ascertain most of the routes journeyed. They included royal visits to Wiltshire, particularly to Marlborough and Salisbury, as well as to other places in the region which lay en route or within reach. As early as 1100 Henry I made overnight stops at Salisbury and Marlborough. In 1106 a 'return' journey from the west proceeded from Alveston in Gloucestershire via Marlborough, Ludgershall, and Salisbury, and thence to the royal residence at Windsor.*

Overnight stoppage at a particular place could be dictated by a number of factors. These included whether any business had to be conducted there, and whether suitable accommodation existed in the locality where the monarch might lodge and be entertained. The first choice of royal stopping places was obviously one of the king's own residences; hence the frequent mention of Ludgershall, Marlborough and Clarendon Park near Salisbury. A second choice might be an ecclesiastical house (e.g. Sandelford Priory near Newbury) or the substantial residence of a local landowner. Failing this, there were the local resources offered by a township with its inns, taverns and other miscellaneous accommodation. A major factor, however, was the distance which the monarch and his accompanying household might be able to accomplish in a day's ride, taking into consideration both the time of the year and the hours of daylight. Where the king had finished his business and was returning homewards on the last stage of his journey, he could ride well ahead of his commissariat; and with his time unconsumed by any further business en route, he might cover a good fifty miles or more, as Richard I did from Marlborough in 1189. Having stayed the night of 29 August there, he arrived back at his residence at Windsor the next evening.* The frequent number of instances of a day's journey from one stopping place at Marlborough to another at Newbury (or vice versa) shows not only the importance of these two towns, but also that the distance between them, somewhat less than twenty miles, on a more or less flat road was reasonable for a one-day journey with all the royal baggage involved.

In 1222 Henry III set out from Woodstock on 28 December, stayed two nights at Oxford, spent New Year's Eve at Hungerford, and arrived the following day at Marlborough.* His decision to stop at Hungerford rather than travel another eight miles or so seems likely to have been determined solely by the logistics of the situation. He had ridden from Oxford that morning, which was a good thirty miles away, with a steep ascent over the Downs, and may have felt, in the short daylight of mid-winter, that it would be unwise to push on to Marlborough either through the forest of Savernake or along the narrow road via Ramsbury, north of the river Kennet, that same evening.

1. *Itinerary of Henry I* (ed.) W. Farrer (Oxford, 1920); *Court, Household and Itinerary of Henry II* (ed.) R.W. Eyton (London 1878); *Itinerary of King John* (ed.) T.D. Hardy (London 1835); 'Itineraries of Henry III', Theodore Craib (typescript, P.R.O. 1923); *Itinerary of Edward I* (ed.) E.W. Safford (List & Index Society, vols. 103, 132 and 135 (1925)); *Itinerary of Edward II and his Household* (ed.) Elizabeth M. Hallam (List & Index Society, vol. 211 (1984)).

* Unless otherwise indicated, specific references to royal itinerary details (marked *) have been derived from the appropriate volume listed above.

He could not have found Hungerford a convenient stopping place, for there is no record of his stopping there on any subsequent occasion, even when travelling homewards from Marlborough via Newbury (e.g. in 1223, 1225 and 1226), nor on those occasions when he travelled from Marlborough to Reading (e.g. 1234, 1235 and 1236) and stayed the night at Sandelford Priory.* Nevertheless, the stop at Hungerford is the first mention in any reign of this town's location along the royal routes and is good evidence that by this date the town had come into substantial being.

In a later journey in 1241 Henry III, returning homewards, passed through Hungerford again. That he may have experienced an involuntary and probably infuriating hold-up there, would seem to be suggested by a mandate he dictated on his arrival at Sandelford, expressing his dissatisfaction with the state of the bridge over the river Kennet, and slapping a fine of 5 marks on the township (*villatam*) for the inadequacy of its bridge.[2] The phrase used ('*pro defecto pontis*') presumably refers to the bridge's ill-repair, but may mean the absence of a bridge at all, entrance to the town itself having traditionally been across a ford in the river. The issue is confused, since the ford was across what was then known as 'the Bedwyn stream' and is now known as the river Dun, a tributary of the Kennet, at a point near its confluence with the major river. The Kennet would be very much more likely to have needed a bridge to cross by, and there is evidence of one at Eddington at this date which crossed to Charnham Street. The responsibility for its upkeep lay with the lord of the manor of Hidden-cum-Eddington[3] and not with the town of Hungerford, for neither Hidden-cum-Eddington in Berkshire nor Charnham Street in Wiltshire were incorporated in the town and for centuries fiercely maintained their independence.[4] Was Henry III's irritation in connection with the bridge, or lack of it, due to his knowledge that the lord of both Hidden and Hungerford was none other than his former friend but now adversary Simon de Montfort?

Later royal itineraries to Wiltshire resulted in overnight stops at Hungerford without complaint. Thus Edward I stopped in the town on no less than three occasions: in 1286, 1289 and in 1302.* His son Edward II stopped there in 1308.* As his journey was merely from Newbury to Marlborough, which he would have done comfortably in a day, it would seem that some business was awaiting him at Hungerford. His next visit was in 1320 en route to Marlborough, another short day's journey. Disappointingly, none of these visits by Edward I or Edward II has been chronicled by the *Victoria County History* for Berkshire, which is able to record only that Edward III passed through the town in 1331 and again early the next year.[5]

Edward I's journeys in this area are particularly interesting because whereas the itineraries of his father Henry III had been mainly along the old-established route from London to the west on which Hungerford, and more particularly Charnham Street, lay, Edward I made use of Hungerford also as a stopping off place on journeys to or from the south. Thus in 1286 he came from Amesbury to Upavon and thence to Hungerford.* Some specific business clearly brought him there, for he then turned west to Marlborough (which he could have reached direct from Upavon), staying there three nights before returning eastward to Reading. Similarly, in 1289 he journeyed from Reading to Hungerford, and thence by a direct north–south route to Amesbury and Clarendon Park near Salisbury.* It would thus seem that a southern route to Salisbury via Hungerford had come into regular use by the latter part of the 13th century.

It is noticeable that in the previous century royal itineraries had shown a more complicated north–south route, such as via Marlborough and Ludgershall, to Salisbury, a route which was considerably more circuitous. In 1189 Richard I had returned to Windsor from Winchester via Salisbury and Marlborough, and in 1203 King John came back home from Portsmouth via Burbage, Marlborough and Newbury.* Evidently, the recognised north–south route was via Marlborough at this date. Of course Marlborough was an important centre; it had royal connections and doubtless there was always business to be done there, but had there been an alternative suitable route, it is unlikely that travel-worn monarchs would not have made use of it whenever possible, especially on their homeward journey when they would be unfettered by the need to conduct local business.

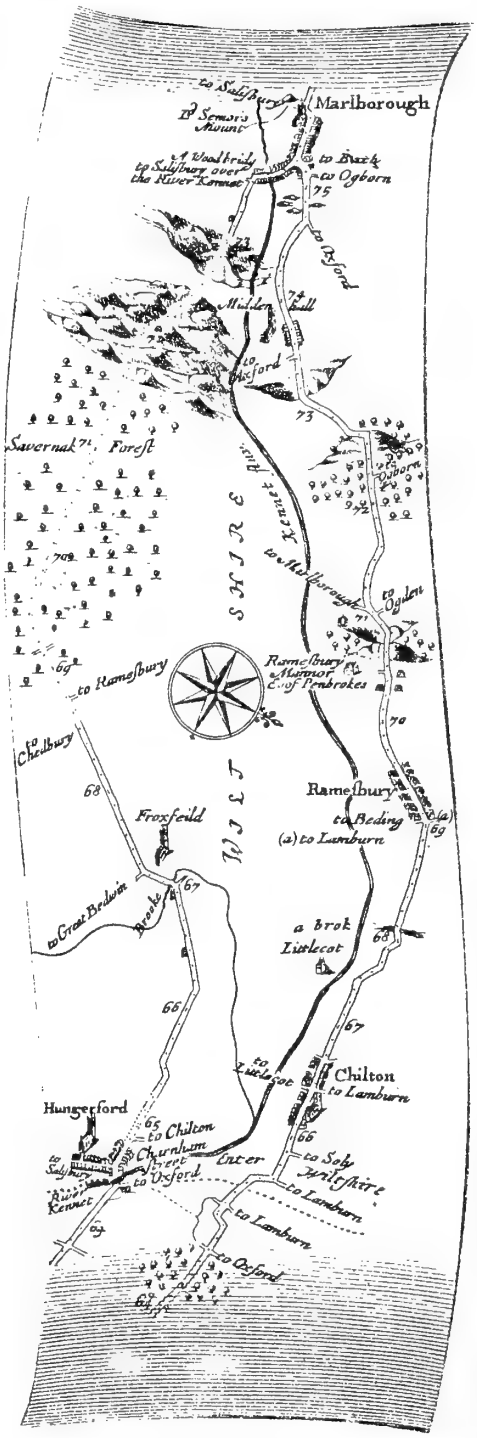
It will be noted that the routeing of royal itineraries through Hungerford in a north–south direction occurs at a date by which the town had been replanned, the little village higgled around the parish church having been superseded by a long wide street (present day Bridge Street and High Street) a quarter

2. *Calendar of Close Rolls 1237–1241*, p. 375.
3. S.F. Wigram (ed.), *The Cartulary of St. Frideswide's* (Oxford 1895), ii, p. 337.
4. See, for example, P.R.O. ASSI 2/1, f. 188.
5. *V.C.H. Berks*, vol. iv, p. 185.

of a mile to the east with spacious burgage sites on either side. This road pointed straight to Salisbury and in later years was often referred to as 'Salisbury Street'. At the junction where it crossed an older road leading from Kintbury and going westwards past the church, the town held its market. Historians have been unable to date this development precisely, cautiously offering an outside time range of between 1170 and 1296.[6] The evidence of the town's appearance (or non-appearance) on the royal routes fits well into this. Henry III's stop overnight in 1222 confirms that the town was in existence then, and Edward I's use of the north–south route in 1286 suggests that a new road system had developed which could provide an impetus for a successful market prior to the earliest documentary evidence of such a market in 1296.[7]

King Edward's journey from Downton (or possibly Dinton) and Salisbury to Hungerford in late January 1286, via Amesbury and Upavon, is revealing in other ways too. The wardrobe waggon train took four days to make this winter journey, of about 40 miles, struggling over steep hills. The King and his household went on ahead, reaching Amesbury and Upavon on 20 January and Hungerford the next day. Here the royal household divided, the King, the Queen and their immediate attendants going on to stay at Marlborough with the Queen Mother (22-24 January). The rest of the household remained at Hungerford during the King's visit to Marlborough, and were joined there by the wardrobe waggon. The King then returned to London via Denford and Crookham on the 25th. The location of Crookham suggests that the route taken homewards was along the old Kintbury road, south of the river Kennet. In a further journey in 1289 Edward I travelled from Newbury to Marlborough via Hampstead Marshall and Hungerford. There can be no doubt that to do so he would have used the route to Hungerford via Kintbury. A map centuries later[8] refers to the road from Hungerford via Kintbury as 'the old and great Market road', suggesting a function that had become eclipsed in the 18th century by the Bath road north of the river, which in its turn is today overshadowed by the M4 motorway.

In considering the information provided by the royal itineraries which concerns routes and roads, the



Hungerford to Marlborough section of the London to Bristol road (scale in miles). Reproduced from J. Ogilby's *Britannia* (London 1675) by kind permission of the Guildhall Library, Corporation of London

6. Greville C. Astill, *Historic Towns in Berkshire* (Berks Arch. Ctee. Publication no. 2 (Reading 1978), p. 29.
7. *V.C.H. Berks*, iv, p. 187.
8. Berks R.O. D/EB P1: sketch map by Wm. Watts *c.*1750.

human factor should be borne in mind. Royal visits must have caused great excitement in a small market town, with their glamour, bustle and activity; they must have caused also a good deal of disruption, some anxiety and probably not a little fear. On all these journeys, demands were made on local inhabitants by a small advance guard of royal officials purchasing or requisitioning food and lodgings for the arriving party and fodder and stabling for their horses. Some idea of the sweat and effort which went into making the royal governance work successfully may be seen in the accounts of the royal Wardrobe and Household.[9] Thus, payment is made to porter Hicke for one cart drawn by five horses, which took four days to carry the wardrobe equipment from Downton in Wiltshire to Hungerford, a journey of under forty miles. This represents an average speed over the hills of less than ten miles a day. The whole journey from Exeter to Hungerford may have been some 130 miles and porter Hicke was paid for eleven days on the road. Local purchases on this journey in 1285-6 included 10lbs of grain at 4*d.* a pound, and 1*d.* for a sack to contain the purchase; 16lbs of vetch at 1*d.* a pound; 5lbs of liquorice at 4*d.* a pound; 1 inkwell and a supply of ink for the scribe (total cost 4*d.*); 2*d.* for some spice; and another 2*d.* for some white powder required by porter Hicke. No one would have been busier than the royal clerk of the court for he would be visiting, in advance of the king, towns within a radius of ten miles, issuing summons to local officials, empanelling juries, obtaining information about breach of the assizes and the sale of sub-quality goods.[10]

The records of royal itineraries on these court journeys are valuable accounts of the administration of justice *coram rege*, and also throw occasional fascinating illuminations on the social history of the time. In addition, as this article tries to show, they may provide an extra means of dating the rise or fall in importance of small towns which lay along their route, as well as being an indicator of the possible changes in east–west and north–south routes leading into Wiltshire and the south west.

9. B.F. and C.R. Byerley (eds.), *Records of the Wardrobe and Household: 1285–6*, (HMSO 1977), p. 15.

10. *Ibid.*, p. xxv.

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Wiltshire Deer Parks: An Introductory Survey

by KENNETH WATTS

W.G. Hoskins suggested that 'the reconstruction of medieval deer parks and their boundaries is one of the many useful tasks awaiting the fieldworker with patience and good local knowledge'.[1] This paper provides an introduction to the subject of the early deer parks and attempts to locate all known and probable examples in Wiltshire. It is written in the hope that local historians will be encouraged to make use of their local knowledge and contacts to research their local parks and add to our knowledge of this worthwhile, but neglected, subject.

INTRODUCTION

Although medieval Wiltshire was heavily forested and contained many deer parks, these early parks have generally been neglected as a subject for modern research. Parks were significant elements in medieval, Tudor and Stuart landscapes and society, providing sport, an important means of social distancing, skins, and fresh meat at all seasons at a time when it was not readily available in winter.

Deer parks normally occupied large areas of undeveloped land and have consequently tended to be lost as pressures of increasing population led to parks being entirely disparked or reduced in favour of agriculture. Many 'home parks' around country houses were converted into ornamental landscaped gardens in the 18th century. Evidence for the former existence of many early deer parks survives in early document rolls and in place-names. Occasionally signs may be seen on the ground in old field boundaries or in eroded linear banks and ditches surviving from the park pales which surrounded early parks. The aim of this paper is to establish the locations of all the Wiltshire deer parks. It must be emphasised that its subject is the pre-1700 deer parks, the functional parks created to provide sport and venison. It is not concerned with later ornamental landscaped parks, except where they superseded and occupied sites of earlier deer parks.

The word 'park' is used today in a wide variety of applications, for example in car park and for places of public recreation. During the 18th century it was used for the landscaped 'parkland' which surrounded country houses, but in the early medieval period a park was a fenced area devoted to the keeping of deer. The word derives from the Old English *pearroc* meaning enclosure, the essence of a park being that, unlike a forest or a chase, it was physically separated from the surrounding countryside by a fence or barrier. In the early medieval period it was usually *parco* or *parcum*, and early references in the Close Rolls include:

1230: *parco de Wutton* at Wootton Bassett (33);
1242: *parco suum de Corsham* at Corsham (16);
1253: *parcum suum de Knoel* at East Knoyle (80); and
1256: *in parco regis de Divisas* at Devizes (30).[2]

During the Tudor and Stuart periods the word became *parke*.

A park may be defined as an area of at least 30 acres enclosed to retain deer. *A* warren was an enclosure for small game such as rabbits and hares, and was inferior to a park. 'Rights of free warren' were rights to take small game, but not deer which were royal animals. Owners of deer parks were at times required to breed horses in the national interest and the term 'horse park' was occasionally used. Early bishops and abbots were often men of action and enthusiastic hunters, and monasteries and abbeys frequently had deer parks associated with them. In the early medieval period deer parks were created and owned by bishops at Ramsbury (43), Downton (60), East Knoyle (80), and Potterne (71), and by abbots at Malmesbury (3), Garsdon (4), and Stanton St Quintin (10). After the Dissolution the deer parks attached to former monastic establishments provided admirable areas for their new secular owners to convert into landscaped grounds.

1. W.G. Hoskins, *The Making of the English Landscape* (London 1955), p.76.

2. Numbers in brackets after references to individual parks refer to the numbering in the Schedule and Distribution Map appended to this paper.

ORIGIN OF DEER PARKS

The Romans hunted deer in England and contained them in enclosures called *haye* which became the *haga* of the Saxon Charters. Isaac Taylor suggested that *hay* or *haigh* was of similar meaning to park, being 'a place surrounded by a hedge . . . usually an enclosure for purposes of the chase'.[3] The *haga* of the Anglo-Saxons were often palisaded enclosures, and it is likely that the first true deer parks were those of Kings Aethelstan and Cnut. Anglo-Saxon references to *deer-falds* are also known, *fald* being Old English for a staked-off enclosure. Many deer parks were created by kings, nobles and prelates in the 12th century, and even more in the 13th and 14th centuries when most great men owned at least one park or chase. Later lords of the manor aspired to owning a park, such parks being often created on waste land away from the manor house at the extremity of the parish, for by this time there was growing pressure on productive land from an increasing population. Deer parks continued to be made through the Tudor period; although most enclosure was to create sheep pasture and increase arable, some was to continue the medieval practice of emparking to accommodate deer. The Commission appointed in 1548 to enquire into enclosure was directed to investigate engrossing, enclosing and emparking, and parks for deer continued to be made into Stuart times.

FORESTS AND CHASES

A forest was a royal hunting-ground, not necessarily wooded, which was unfenced and administered by royal officials according to a severe code of Forest Laws which protected the deer as royal beasts belonging to the monarch. The forest was effectively an area over which Forest Law was applied in addition to common law. Some forests included parks from which deer were released to be hunted. Sometimes a subject was licenced to create a park within an area subject to Forest Law. The Norman and Angevin kings constantly extended their forests, and this practice was a major cause of friction between King John and his barons in 1215. The reason for extending forests was not for hunting considerations alone. Mutilation or death, the early punishments for offences, had gradually been superseded by a system of fines which provided a lucrative source of revenue.

An open area used for hunting deer by a subject, who was normally a great noble to enjoy such rights, was called a chase. Examples in Wiltshire are Aldbourne, Cranborne, and Vernditch Chases, together with the former Collingbourne Chase. If a chase was acquired by the Crown it became a forest, as technically happened at Aldbourne Chase in 1399 when its owner, the son of John of Gaunt, usurped the throne as Henry IV.

Forests formerly covered a large proportion of Wiltshire. During medieval times the English countryside consisted of islands of cultivation within the general waste, and Speed's map (1610) shows many forests then surviving. Both Elizabeth I and James I leased off great areas of forest, but Charles I attempted to reclaim them and it was this fact, together with his attempts to re-afforest large areas and revive Forest Law, which contributed to the Civil War.

Forest Law was imported by the Normans and enforced at special Forest Courts. It was a code of regulations which promoted the welfare of deer as royal beasts to the detriment of the local people. By the late 12th century, when Forest Law was at its peak prior to crumbling under Richard I and John, it is believed to have applied over about one third of England. In the 13th century it was administered over nine Wiltshire forests: Selwood, Melksham, Chippenham, Braydon, Savernake, Chute, Clarendon, Grovely and Melchet.[4] Forest Law created great tension between monarch and subjects because great areas were being preserved for deer at a time when more land was needed for agriculture to feed an increasing population. It was terminated by the 1640 Act for the Limitation of Forests which was passed to counter Charles I's attempts to revive Forest Law and re-afforest substantial areas.

LICENCING AND SIZE OF PARKS

A subject wishing to create a park in or near a royal forest required a licence to impark because parks relied on attracting deer – which despite being wild were regarded as the king's beasts – through deer-leaps or *lypiatts* (leap-gates) which allowed deer to enter but not escape from the park. A proposal to include a deer-leap was often included in the licence

3. I. Taylor, *Words and Places* (London 1911 edn.), p. 102. Taylor, who wrote in 1864, may be regarded as suspect by modern etymologists, but The Hague in Holland was formerly a hunting lodge of the Princes of Orange.
4. Melchet Forest was transferred to Hampshire by boundary change in 1895.

for a park. An example is the 1267 licence for deer-leaps at the parks at Wootton Bassett (33 and 34):

> Grant for life to Philip Basset that he may have a deer-leap at his new park under his town of Wotton and another at his old park under his manor of La Fasterne, within the metes of the forest of Bradene, so that if any deer enter the parks by the said deer-leaps, they shall remain to him.[5]

Areas of deer parks vary considerably. Licences suggest that they covered a minimum area of 30 acres, such small parks being used for stockholding. A hunting park needed to be at least 100 acres, and a large park would contain 500 acres or more.[6] Some very large parks such as Clarendon (59) were several miles around their perimeter. A very small park of 30 acres could be contained within a simple circular area 440 yards in diameter, a small to medium park within a circle 790 yards diameter, and a large 500-acre park within a 1750 yards diameter circle. Parks were of course invariably irregular in shape as dictated by terrain, but such rationalisation into circles is a simplification which is useful as a rough guide to areas to be anticipated.

NUMBERS OF PARKS

Many more parks existed than are shown on the early county maps. Saxton's map of Dorset showed eleven parks, but in their investigation into Dorset deer parks Professor Cantor and J.D. Wilson immediately found 44 parks and later increased their findings to 49 definite and 42 possibles.[7] Speed's map of Wiltshire has 22 parks, but Professor Cantor's gazetteer in *The Medieval Deer Parks of England* (1983) lists 42 parks (plus one possible) in Wiltshire. Research by the present writer has unearthed evidence for the existence of over 90 Wiltshire parks. The parks shown by Saxton and Speed (by a ring fence symbol) were those which survived into the Elizabethan and Jacobean periods, but there can be no doubt that by the 16th century very many medieval deer parks had been disparked. The Schedule and Distribution Map appended to this paper show 90 parks, some of them multiples. If it is assumed that each was an average park of 200 acres, the total area of Wiltshire parks amounted to 18,000 acres in a county of about 864,000 acres, representing about 2.1 per cent of the county area. It has been estimated that at the beginning of the 14th century there were about 3,200 parks in England covering about 2 per cent of the country,[8] an assessment which is consistent with the above calculation for Wiltshire which was arrived at independently. Today deer parks are seldom recognised and their boundaries are not much in evidence. Consequently, in Wiltshire only one park pale (Devizes Old Park: 30) is shown on the 1:50 000 map, and only one more (Ramsbury: 43) at the larger scale of 1:25 000.

CHARACTERISTICS OF PARKS

The topography required for a deer park was a mixture of woodland and pasture, the former to harbour the deer, the latter to provide open areas over which they could be hunted after being unharboured with all the traditional rites of venery. A secondary use of parks was to grow timber for building, and some park trees were allowed to grow uncoppiced into large timber trees with clear trunks and their lower foliage was browsed as high as the deer could reach. Such trees were typical of parkland. A further feature was the keeper's lodge which was often provided, particularly when the park was an 'out-park' remote from its home establishment. Lodges were often moated, the moats being stocked with fish for the table, as were the ponds and lakes frequently found in deer parks. In the early 1260s the Constable of Marlborough Castle was twice instructed to stock the ponds at Elcombe Park (38) with bream.[9]

Very early deer parks were no doubt surrounded by simple high fences to enclose the deer, but at the time early deer parks were being created a long tradition existed of delineating boundaries with banks and ditches, from the Bronze Age through the Iron Age and Romano-British periods to the Dark Ages and into early medieval times. There was a similar tradition of building stockade fences for various forms of enclosure. These two elements of linear bank and ditch and stockade fencing soon came to be combined in the park pales which enclosed early deer parks (see Figure 1 which illustrates the development of the park pale). In early

5. *Calendar of Patent Rolls, 1266-1272*, p. 177.
6. Imperial measure has been used throughout this paper as all historical references used imperial units.
7. *Proceedings of the Dorset Natural History and Archaeological Society*, Vols. 83–100 (1961–1978).
8. J.M. Steane, *The Archaeology of Medieval England and Wales* (Beckenham 1985), p. 168.
9. *Calendar of Close Rolls 1261–1264*, pp.7 and 321.

STAGE ONE

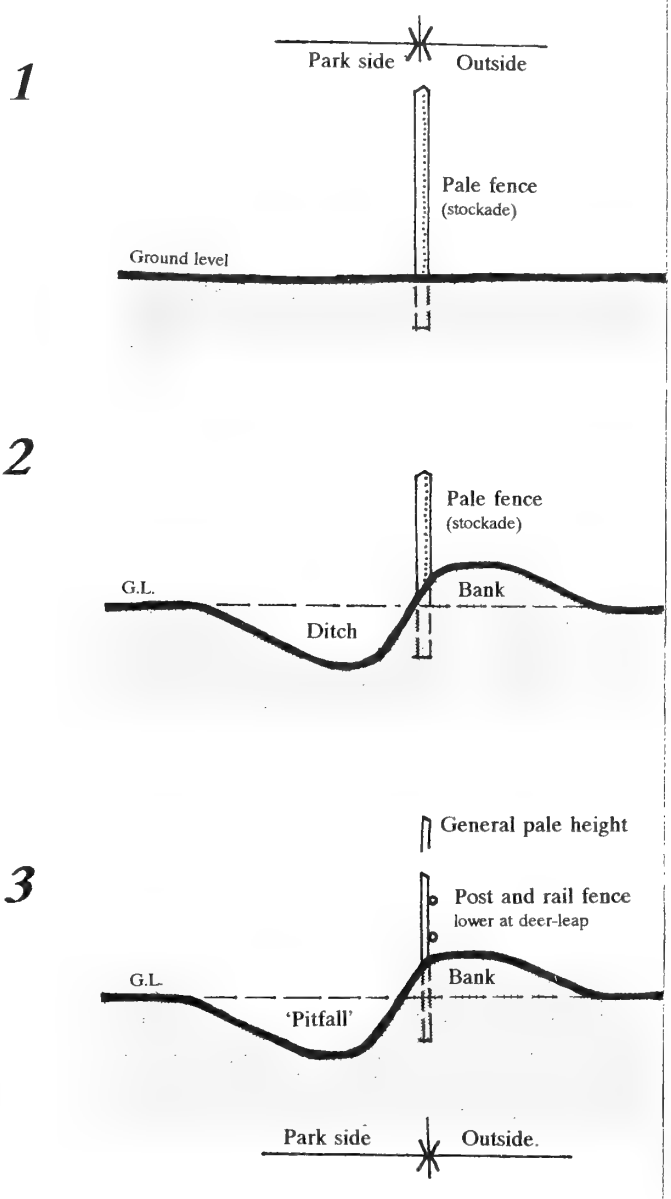
Early deer parks were probably surrounded by stockade fences of oak logs 8 or 9 feet (2.4m or 2.7m) high which prevented deer from entering or leaving the park. Such fences required huge amounts of timber.

STAGE TWO

It was soon realised that economy in fence height could be achieved by providing a linear ditch inside a lower fence, probably about 5 feet (1.5m) high. This had the added advantage of allowing deer to enter but not leave the park for its full perimeter.

STAGE THREE

Later, further economies were made by abandoning stockade fences and providing higher fencing of cleft oak post and rail. Ditches were made discontinuous to save labour, with 'pitfalls' provided at intervals opposite short lengths of lower fencing. These 'deer-leaps' allowed deer to enter but not leave the park at these points.



Development of the Park Pale

KW 1994

Figure 1

medieval times the stockade consisted of narrowly-spaced oak trunks or split oak palings with tops usually pointed to prevent water standing on the end grain. Later, to economise on timber, the stockade construction was abandoned and cleft oak post and rail fencing was substituted in the royal parks. In north-west Wiltshire, where stone was readily available, stone walls were often used for enclosing parks instead of fences. Hedges were also sometimes used as an alternative to fences or walls for park pales. Associated with the pale fence in early parks was a continuous ditch excavated inside the fence which allowed deer to leap into, but not out of the park. The reduction of the full height pale fence to a lower fence with a ditch offered considerable economies in maintaining the pale. Fences required periodic repair and occasionally complete renewal, and it was obviously much less expensive to maintain a lower fence associated with a practically maintenance free ditch.

A good early 14th-century description of a hedged and ditched park pale survives from East Grafton Park (47) where John de Havering was required to

> . . .inclose them on that part towards the foreign lands there lately disafforested with a great dyke 6 feet high and 7 broad, and with a hedge, making the crest of the dyke so that the king's deer could not get out of the enclosure but could enter without hindrance.[10]

Around the middle of the 14th century continuous ditches tended to be dispensed with to save labour, and deer-leaps (also known as *lypiatts* or *saltory* – the latter from the Latin word meaning to leap) were introduced. These consisted of short lengths of lowered fencing with pits called 'pitfalls' opposite and inside them which allowed deer to enter but not escape from the park. It is possible that such deer-leaps led to the expression to 'drop in' as well as the word 'pitfall'. Evidence of deer park ditches on the ground is now rare. They have generally been ploughed out and are at best merely slight swellings in the ground or old field boundaries which have adopted the line of the former park pale.

The dearth of labour which resulted from the mortality of the late 14th century caused by the Black Death may have contributed to the abandonment of laborious continuous ditches and the introduction of deer-leaps, the pale fences being generally increased in height to compensate for the lack of a ditch and to prevent the escape of park deer. As a broad principle it may be assumed that the later the park the less likely are linear earthworks to be associated with it.

Royal forests or groups of forests were administered by a warden. Often a man of considerable standing, he was assisted by a number of foresters and verderers. There were 'riding' and walking' foresters, the former being superior. The principal forester was sometimes an hereditary office paid by modest emoluments but carrying rights such as *husbote* and *heybote*, rights to timber for the repair of buildings and fences. His authority sometimes enabled him to procure additional unofficial benefits. The parker was an official appointed to look after one or more deer parks. The common names of Forester, Forster and Parker arose from the occupations of the officials responsible for administering forests and deer parks.

Three types of deer were protected by Forest Law and encouraged into parks. Red deer, being the largest, were regarded as the noblest and most prized, but fallow deer were the most usual park deer. After the mid 14th century the smaller roe deer were neither protected nor encouraged because it was felt that their presence discouraged red and fallow deer. Inferior deer were known as 'rascals'. Fallow deer fawn in late June or early July and during the 'fence month' from 20 June to 20 July it was illegal to enter the forest and disturb the deer. Throughout the medieval period deer prospered under royal protection, but a decline in deer numbers set in during the 17th century as a result of more land being taken into cultivation and was accelerated as a result of the Civil War. There is evidence that deer parks suffered during the war, for example at Wardour (85) where the deer were turned loose during the siege of the castle, and at Bromham (29) where house and park were destroyed.

DECLINE OF DEER PARKS

In the Tudor period attitudes to deer parks began to change. From being sources of sport and meat, parks now began to be regarded as decorative settings for the ostentatious houses which were being built, often from the spoils of the Dissolution of the monasteries. Some new deer parks were founded during the reign of Henry VIII, but by the early 17th century parks were under pressure from an increasing population and its need for more agricultural land. So great was James I's love of hunting that there was a final flourish as he encouraged the founding of new parks at, for example, Bowood (21), Savernake Great Park

10. *Victoria County History, Wiltshire*, Vol. 4, p. 424.

(44), and Savernake Brimslade Park (45). When the Commissioners for the Sale of Crown Lands were appointed in 1604 they were instructed that no forest, chase or park was to be sold, and Charles I continued this policy when raising funds in 1628.

Many deer parks were converted to farms during the Tudor and early Stuart age, and by the beginning of the 17th century Forest Courts had been abandoned in many Wiltshire forests, although Charles I tried to revive them. The pursuit of deer gradually gave way to the hunting of foxes and by the end of the 18th century the deer hunt had become unusual except in the few areas, all outside Wiltshire, where it has survived to the present day.

SOURCES

The principal sources used to research the former deer parks listed at the end of this study are as follows:

Maps. The initial search was into maps, old and new, beginning with the maps of the 16th and 17th centuries when demand arising from widespread re-allocation of land led to great advances in surveying and mapmaking. Large scale maps were produced, to be followed by county maps to a smaller scale. The county maps of Saxton, Speed and Morden indicate the parks which had survived into Tudor and Stuart times by a stockade symbol. Saxton was the first cartographer to show deer parks in his county atlas of 1579, and he was followed by Speed and Morden with their maps of 1610 and 1695, respectively. Speed plotted 22 parks in Wiltshire, although according to John Aubrey[11] he was aware of 29. On his 1695 map for Camden's *Britannia* Morden also indicated 22 parks, omitting Speed's Oaksey Park (1) but adding a park at West Lavington (72). Other maps consulted were Andrews and Dury's 1773 map of Wiltshire, the relevant sheets of the first edition of the Ordnance Survey, and many Tithe, Enclosure and estate maps.

Archival sources. The second primary source was provided by early documents. A single reference – for example a licence to impark or a royal gift of deer – is often the only positive evidence for a deer park ever having existed. Two particular problems arise in searching the transcripts of the early documents. Although they are frequently available in printed form, the early rolls are in Latin. The second problem is the inadequacy of the indexing. Many more references to deer parks are found by simply scanning the printed transcripts than by relying on the indexes, probably in the proportion of four to one. Research into documentary sources was generally restricted to the printed volumes of extracts from document rolls, but the *Victoria County History*: *Wiltshire* and the many volumes of this *Magazine* occasionally draw attention to early documentary references to deer parks.

Place-names are vitally important indicators for the former existence of deer parks. Relevant place-names were discovered by close scrutiny of old and new maps, and by detailed reference to the invaluable *The Place-Names of Wiltshire* (see note 13 of this paper). Etymology is a particularly specialised subject, but the following place-name elements provide useful indicators for the former existence of deer parks:

Park is an obvious indicator although it is often applied to landscaped grounds of the 18th century and is sometimes a fanciful modern name. In my own experience it is, however, surprising how often a 'park' name which has been dismissed as unlikely to indicate a deer park is ultimately proved by documentary sources to have survived from an authentic park.

Lypiatt in all its variant spellings is an early name for a leap-gate. It appears in connection with many deer parks, for example at Corsham (16).

Haye or *Hey* was an enclosure, often for keeping deer. Isaac Taylor wrote 'a haigh or hay is a place surrounded by a hedge, and appears to have been an enclosure for purposes of the chase'.[12] Many *Hayes* names occur around East Knoyle Park (80) and elsewhere.

Lodge names frequently survive from parkers' lodges in deer parks. Examples include Lower Lodge Farm and Great Lodge Farm at Chippenham (19), Great Lodge Farm at Savernake Great Park (44), and 'Collingbourne Lodge', the last marked on the Andrews and Dury 1773 map at Collingbourne (53).

Bower is an old name for a lodge or arbour for ladies and is sometimes associated with a park. Bowerhill at Seend Park (27) was shown by Andrews and Dury as a moated site with the name 'Bower Island'.

Lawn derives from *launde* meaning an open glade. It survives on the site of several former parks, for example Lawn Farm at both Tisbury (83) and at Wootton Bassett Vastern Great Park (33).

11. J. Aubrey, *Natural History of Wiltshire* (Newton Abbott 1969 reprint), p. 58.

12. I. Taylor, *op. cit.*, p. 102.

Brail or *Broyle* is 'a common forest term for a park or wood stocked with deer or other beasts of the chase and enclosed as a rule with a wall or hedge'.[13] Several examples occur around Bedwyn in Bedwyn Brail, Brail Farm, and Wilton Brail.

Stalls may possibly survive from 'buckstalls' which were framed nets used to catch deer. The name appears at Stalls Farm at Longleat (74), and in several places (Bournelake Stalls, Spackman Stalls, and Bushy Leaze Stalls) around Hailstone Park (32) at Cricklade.

Bers or *Bars* were barriers for enclosing deer.[14] The name survives in Bars Bottom near Bedwyn (50) and 'Bar Ground' (which is now Park Grounds Farm) on Andrews and Dury at Vastern Great Park at Wootton Bassett (33).

Dog Kennel has been suggested as 'probably originally a nickname given to some very small or insignificant dwelling or hovel'.[15] This may sometimes be the case, but 'dog' and 'kennel' names are often found associated with known former deer park sites where they probably indicate the places where deerhounds were kept. The many examples include Kennel Farm (formerly 'Dog Kennel') at Clarendon (59), Dog Kennel at Farleigh (63), and 'Dog House' on Andrews and Dury at Savernake Great Park (44).

Breach is generally taken to mean 'land newly taken into cultivation',[16] but its frequent appearance at known deer park sites suggests that it may sometimes commemorate deer-leaps which were effectively breaches in the park pale. The many examples include Breach Lane at both Wootton Bassett Vastern Great Park (34) and Southwick Park (65), and Breach Farm at Compton (90).

Rail or *Rayles* may be a recollection of the post and rail fencing of a park pale, as at Rodbourne Rail Farm (formerly 'Rayles') at Malmesbury Cole Park (3). 'The Rayles' on a 17th-century map of Wardour Park (85) had become 'Rails' on an 18th-century map.

Pale is an obvious indicator word for a deer park, for example in Park Pale Pond at Wardour (85).

Castles or sites of former castles, are a good starting point in searching for deer parks. It is no coincidence that O.G.S. Crawford combined 'Medieval Castle Mounds and Parks' in Chapter 10 of his *Archaeology in the Field* (1953), for as he pointed out they were often related. Many castles were founded in Norman and Plantagenet times when the monarchs and their nobles were addicted to deer hunting. Consequently a deer park was a usual concomitant to an early castle and at least one deer park is to be found associated with most of the early castles of Wiltshire.

General reading. The early topographers such as Leland and Aubrey often mentioned deer parks, but after such parks went out of fashion all but the most obvious examples such as Clarendon (59) were ignored by later writers, and knowledge of the location of deer parks was lost. During the 1950s the work of pioneering fieldworking local historians such as O.G.S. Crawford and W.G. Hoskins, together with an awakening interest in medieval archaeology, led to the recognition of the important place deer parks had occupied in medieval society. More recently, Leonard Cantor and Christopher Taylor have pursued the subject and drawn attention to the extent to which deer parks have gone unrecorded.

Fieldwork. O.G.S. Crawford observed that 'the final test of all documentary sources is in the field' and exhorted all who were interested to 'Go and walk along what looks, on the map, like the boundary of a park, and mark it in'.[17] Fieldwork is a most rewarding activity, but in connection with deer parks there are particular problems. Most archaeological sites are recognised and access is usually provided, but deer parks are generally not acknowledged and by their nature occupied large areas of land which have subsequently been taken into cultivation. Access is therefore often difficult. Public rights of way may provide restricted access to the sites of most former parks, but such restriction limits investigation in the field.

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The only published recent work on Wiltshire deer parks is by Professor L.M. Cantor whose work includes 43 parks in Wiltshire. An earlier record is the 1583 *Note of Parks in the County of Wilts* in the State Papers which briefly described the deer parks which existed at that time. This was extensively drawn upon by E.P. Shirley whose work (also listed below) described the parks existing in 1867, many of which were early examples. In 1892 J.Whitaker produced a study describing the parks which existed towards the end of the 19th century. The major publications are:

13. J.E.B. Gover, A. Mawer, and F.M.Stenton, *The Place-Names of Wiltshire* (Cambridge 1939), p. 332.
14. H.C. Brentnall records that 'Bers means a deer enclosure, a park in fact': 'The Metes and Bounds of Savernake Forest', *WAM* 49 (1941), p. 423.
15. Gover, Mawer and Stenton, *op.cit.*, p. 376.
16. *Ibid.*, p. 423.
17. O.G.S. Crawford, *Archaeology in the Field* (London 1953), p. 199.

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Schedule of Wiltshire Deer Parks

(Numbers refer to the distribution map, Figure 2)

The following schedule lists all the known and probable early deer parks in Wiltshire. The reference numbers are common to both the schedule and the distribution map. Most of the parks are authenticated by documentary references. Several are included on grounds of probability rather than conclusive evidence. The degree of probability for the inclusion of each park is indicated on both the schedule and the distribution map. The writer of this paper is preparing descriptions of the individual parks and would be interested to hear from anyone who has information on any of the parks, particularly those classified C (probable) and D (only possible).

Key:
Number and Name of park / Map reference / Probability: A–definite, B–almost certain, C–probable, D–only possible / Date of first documentary reference found to date / Notes

1. *Oaksey* / 990926 / A / 1336. Became first Duchy of Lancaster, then Royal park. Disparked 17C.
2. *Charlton* / 970900 / B / 1580. Late park replacing an earlier one at Stonehill to its east.
3. *Malmesbury* / 941853 / A / 1235. Several parks owned by the Abbots of Malmesbury.
4. *Garsdon* / 967873 / A / 16C. Abbot of Malmesbury's park, acquired by Richard Moody.
5. *Corston: West Park* / 971843 / B / 1453. Park probably belonged to the Abbot of Malmesbury.
6. *Somerford: Maunditt's Park* / 956851 / B / 1451. Park associated with Great Somerford Castle.
7. *Dauntsey* / 009801 / B / 16C. Formerly Abbot of Malmesbury's park.
8. *Clack (Bradenstoke)* / 997796 / C / 1538. Park associated with Bradenstoke Abbey.
9. *Draycot* / 935785 / A / 16C. Created by the Cernes. Acquired by the Long family.
10. *Stanton St Quintin* / 895798 / A / 1602. Owner Abbot of Cirencester. Disparked 16C.
11. *Castle Combe* / 838775 / A / 1327. Created by Dunstanvilles beside their castle. Disparked 17C.
12. *Yatton Keynell* / 866779 / C / 1354. Probable short-lived park associated with Castle Combe.
13. *Kington St Michael* / 899773 / C / 17C. Belonged to Abbot of Glastonbury. Disparked 16C.
14. *Colerne* / 836729 / C / 1311. Mystery park possibly associated with castle mound to its east.
15. *Hartham* / 861721 / D / none. The name suggests an early park, possibly associated with Corsham.
16. *Corsham: East* / 880710 / A / 1242. Earl of Cornwall's park. Became Royal park. Disparked 16C.
17. *Corsham*: West / 856700 / B / 1300. Second Earl of Cornwall's park. Probably disparked early.
18. *Easton* / not known / D / 1292. There may be confusion with Crux Easton in Hampshire.
19. *Chippenham (Pewsham)* / 937714 / B / 1299. Crown park. Pewsham and Chippenham probably same.
20. *Bremhill* / 985743 / C / 1592. Probably illegal park created by Sir Henry Bayntun.
21. *Bowood* / 987701 / A / 1619. Royal park known as 'King's Bowood'. Broken up after Civil War.
22. *Lacock* / 912675? / C / 1260. Tentative. Possible Longespée deer park. Location uncertain.
23. *Bowden* / 940675 / B / 1583. No early references. May once have been part of Spye Park.
24. *Spye* / 950675 / A / 1605. Probably an early park acquired by Bayntuns after Civil War.
25. *Monkton Farleigh* / 819656? /B / 12C. Park associated with Cluniac Priory and de Bohuns.

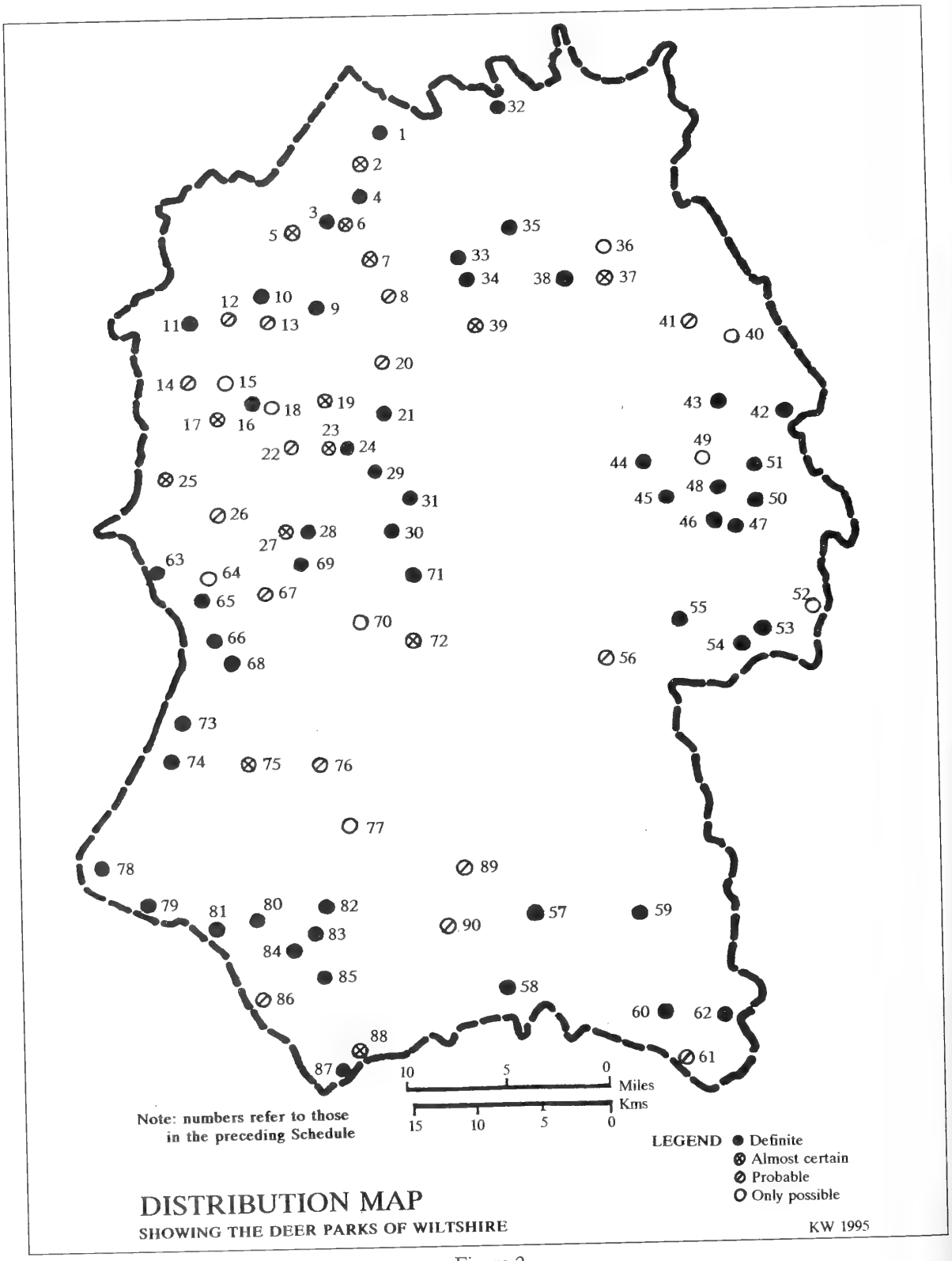
Note: numbers refer to those in the preceding Schedule
10 5 0
Miles
15 10 5 0
Kms
LEGEND
Definite
Almost certain
Probable
Only possible
DISTRIBUTION MAP
SHOWING THE DEER PARKS OF WILTSHIRE
KW 1995

Figure 2

26. *Holt* / 856626? / C / 1316. Existed 1316 when owner was John de Holte. Site uncertain.
27. *Melksham* / 910610 / B / 1299. Crown park given to Despensers.
28. *Seend* / 925610 / A / 1309. Royal park granted to Despensers, then given to de Bohuns.
29. *Bromham* / 976659 / A / 1583. May be early. Belonged later to Bayntuns. Wasted in Civil War.
30. *Devizes Old Park* / 995609 / A / 1149. Very early Royal park. Disparked by 1595.
31. *Devizes New Park* / 008632 / A / 1157. Second early Devizes park at Roundway.
32. *Hailstone (Cricklade)* / 083944 / A / 1236. Early Fitzwarin park. Probably disparked very early.
33. *Wootton Bassett : Vastern Great Park* / 049822 / A / 1230. Created by the Bassets. Very large.
34. *Wootton Bassett : Little Park* / 053803 / A / 1267. Second Wootton Bassett park.
35. *Lydiard Tregoze* / 089850 / A / 1256. Owned by Tregozes, then the St Johns. Landscaped 18C.
36. *Swindon* / 163833? / D / 1247. Tentative, although there is a 13C reference to park at Swindon.
37. *Burderop* / 166802 / B / 1583. May be early. Existed 1583. Good park pale ditch.
38. *Elcombe* / 138803 / A / 1260. Created by the Lovells, forfeited and granted to Comptons.
39. *Woodhill* / 061769 /B / 1304. Early park owned by de Besylles. Probably disparked early.
40. *Aldbourne* / not known / D / 1307. Earl of Lincoln had a park here in 1307. Position not known.
41. *Snap and Upham* / 229771 / C / 1606. References indicate a park here. In Aldbourne parish.
42. *Littlecote* / 300700 / A / 1520. Park of the Darells. Henry VIII hunted here.
43. *Ramsbury : Old Park* / 255710 / A / 1246. Early park of the Bishops of Ramsbury. Large.
    Ramsbury : New Park / 260703 / A / 14C. An early second park of the Bishops.
44. *Savernake : Great Park* / 190660 / A / 1622. Large late park created early 17C.
45. *Savernake : Brimslade Park* / 209634 / A / 1625. Late park created early 1600s.
46. *Savernake : Suddene Park* / 245614 / A / 1547. Early park at Wolfhall.
47. *Savernake : East Grafton* / 256610 / A / 1347. Existed in early 14C.
48. *Savernake : Tottenham* / 246644 / A / 1547. Replaced Suddene as principal Savernake Park.
49. *Savernake Lodge* / 233667 / D / none. Some evidence of park around Savernake Lodge.
50. *Savernake : Bedwyn Parks* / various / A / 1231. Several early parks around Bedwyn.
51. *Savernake : Chisbury* / 273654 / A / 1260. Created by Matthew de Columbers mid 13C.
52. *Conholt* / 320546 / D / none. Possibly early deer park, but uncertain.
53. *Collingbourne* / 275528? / A / 1253. Emparked mid 13C by William de Valence.
54. *Ludgershall* / 263516? / A / 1216. Royal park beside castle. Granted to Despensers.
55. *Everleigh* / 215538? / A / 1234. 13C deer park owned by de Montfort, then Duchy of Lancaster.
56. *Coombe* / not known / C / 1288. Tentative. There may be confusion with Castle Combe Park.
57. *Wilton* / 100305 / A / 1578. Late creation of the Herberts in 1540s. Landscaped in 16C.
58. *Faulston* / 073423 / A / 1618. Emparkment by Bayntuns in 1387 may have replaced earlier park.
59. *Clarendon* / 181302 / A / 1223. Very large Crown park, largest park in Wiltshire, 7 miles round.
60. *Downton* / 200227? / A / 1283. Park of the Bishops of Winchester. Existed 1283. Site uncertain.
61. *Loosehanger* / 213912 / C / 1684. Mentioned as park in 1684, but could be earlier.
62. *Newton* / 242226? / A / 1253. Imparked 1253 by William de Valence, Earl of Pembroke.
63. *Farleigh (Wiltshire Pk)* / 809582 / A / 1431. 1431 reference to the park at Farleigh Castle. (Farleigh Hungerford was in Somerset, but its park was in Wiltshire, hence its name).
64. *Trowbridge* / not known / D / none. Speculative. There should be a park associated with the castle.
65. *Southwick* / 845558 / A / 1246. Adam de Grenville enclosed unlicenced park here in 1246.
66. *Brook* / 851525 /A/1323. Park here in 1323. Lord Willoughby de Broke took his name from Brook.
67. *Rood Ashton* / 888563 / C / 1248. Uncertain. There is a licence for a park at 'Little Aston' (1248).
68. *Westbury* / 861509? / A / 1230. Deer park at Westbury in 1230. Location not known.
69. *Keevil* / 920584 / A / 1318. Earl of Arundel owned a deer park here in 1318. Location uncertain.
70. *Erlestoke* / 965535? / D / none. Possible early deer park. Landscaped early 18C.
71. *Potterne* / 010574 / A / 1353. Park of the Bishops of Salisbury. Existed 1353. Probably very large.
72. *West Lavington* / 006523 / B / 1695. Probable late park enclosed by Sir John Danvers in 17C.
73. *Corsley* / 825460 / A / 1572. Late park created by Sir John Thynne in 1570s. Shown by Saxton 1579.
74. *Longleat* / 815430 / A / 1422. 'Parco de Hornyngesham' in 1422. Probably earlier.
75. *Warminster* / 877423? / B / 12C. Deed refers to 'parks' at Warminster. 1327 Crown park.
76. *Heytesbury* / 932428 / C / 1320. Lord Badelesmere imparked here 1320. Went through many hands.

77. *Sherrington* / 955375? / D / none. Possible park of the Giffords towards Great Ridge Wood.
78. *Stourton* / 967343 / A / 1427. 1427 Lord Stourton licenced to impark 1000 acres. Landscaped 18C.
79. *Zeals* / 795313 / A / 1246. Geoffrey de Zeals imparked illegally in 13C. Later licenced.
80. *East Knoyle* / 877301 / A / 1253. 'Parco suum de Knoel' (1253). Owned by Bishops of Winchester.
81. *Mere* / 849298 / A / 1268. Earl of Cornwall created park late 13C. Records of park breaks 1296.
82. *Fonthill* / 933315? / A / 1373. Many successive parks here. 'Le parke' in 1373.
83. *Tisbury* / 927297 / A / 1376. In 1376 Sir Thomas West was licenced to add to his park here.
84. *West Hatch* / 909280? / A / 1280. In 1280s there was a park here. Location uncertain.
85. *Wardour* / 930260 / A / 1382. Reference 1382 to 'Parkmede'. Later two parks.
86. *Donhead (Wincombe)* / 880241 / C / 1552. 1552 Lord Pembroke probably created park at Wincombe.
87. *Tollard Royal* / 945173 / A / 1227. Park mentioned 1227. 1615 recorded as hedged and ditched.
88. *Rushmore* / 956189 / B / 17C. Some evidence that Robert Cecil in 17C created park here.
89. *Grovely Lodge* / 046340 / C / 1589. Drawing of 1589 shows park fence enclosing deer at Grovely.
90. *Compton (Chamberlayne)* / 031299 / C / 1274. Reputed to be an early deer park but uncertain.

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William Lisle Bowles: The Making of the Bard of Bremhill

by DOREEN SLATTER

William Lisle Bowles was fortunate in attaining a way of life in which he could fully exercise his many talents. Early success and his attractive personality brought him many friends and made him known to a wider social circle than other literary Wiltshire clergymen at the time enjoyed. Although his personal papers have been dispersed, his poems and books contain autobiographical and topical allusions. These, together with the letters and memoirs of those who knew him, provide material for an understanding of his career and of the importance of its background setting at Bremhill. This paper attempts to establish Bowles' development as a parson poet and to suggest the ways in which his family and friends contributed to it.

William Lisle Bowles' appointment as vicar of Bremhill in 1804 placed him in possession of an interesting church, standing on high ground, with a comfortable old house just below it, commanding an extensive view towards the Marlborough Downs. Bremhill was a well endowed living, providing the means and opportunity for him to enlarge the scope of his activities. He seems to have determined, as a resident parson, to take his new responsibilities towards his parishioners more seriously than had previously been the case. He saw acting as a county magistrate as a proper extension of his functions and, from time to time, his voice was heard on larger issues affecting the Church. But he continued to write poetry and historical works and took his place in social gatherings. In spite of extreme absent mindedness, and probably many absences from home, he seems to have been popular with his parishioners. It is hoped, by considering incidental references to his surroundings, family and friends, to present a larger view of Bowles in West Country society. Two contemporary accounts of his garden at Bremhill Vicarage provide further information about the scene in which he moved. However, any present appreciation of Bowles must be limited by the fact that his papers have been dispersed and many are in the United States of America.

Bowles came to Bremhill with a considerable reputation as a poet and with antiquarian and artistic tastes ready to profit from his new situation. The background details of his early career are little known. He prefaced his small book, *Scenes and Shadows of Days Departed* . . . (1837) with some autobiographical notes about his early childhood in which he referred to the influence of his parents upon his character. However, his remarks included no references to his education at Winchester and Oxford, where he came under the influence of Dr Joseph Warton, headmaster of Winchester College, and then of Thomas Warton, his brother, Camden professor of Ancient History at Oxford and poet laureate, 1785-90. Their poems and teaching must have stimulated Bowles' own talent, so that he began to publish his poems as early as 1789. At the same time, he was embarking on a career in the church, following the example of his father, grandfather and great grandfather.

After being ordained, he lived for some time in a house in the parish of Donhead St Andrew while holding preferments elsewhere.[1] The influence of various people in the vicinity of Donhead may have contributed to the development of his career. His younger brother, Charles, who had established himself as a lawyer in Shaftesbury, becoming Recorder of the town in 1804, was one of these. Charles Bowles had probably developed an interest in local history at an early stage as his profession enabled him to handle ancient documents.[2] He

1. First the curacy of East Knoyle, then the rectories of Chicklade, and Dumbleton, Glos. See D. Slatter, 'The Revd William Lisle Bowles (1762–1850: The Need for a Re-appraisal', *WAM* 86 (1993), p. 138. An examination of the parish registers might reveal how far Bowles was resident.
2. In 1798 Charles Bowles published a translation of the custumal of the manor of Gillingham, Dorset, and the confirmation of the charter of Gillingham by Elizabeth I. In it he is described as notary public. He went on to write the *History of Chalk Hundred* (1833) for Sir Richard Colt Hoare. His obituary notice appeared in *The Gentleman's Magazine*, n.s. vol.8 (1837), pp.90–1.

provided information for the second edition of John Hutchins' *The History and Antiquities of the County of Dorset* (1796-1815), an undertaking supported by Sir Richard Colt Hoare.[3] It may also be relevant to mention another relative, the Revd Peregrine Bingham, rector of Edmondsham, Dorset, and later of Berwick St John, a brother-in-law of Charles and William. In 1804 Bingham published a *Memoir* of his father, the Revd George Bingham, who had been a collaborator of Hutchins.

It is important that the Bowles brothers became acquainted with Sir Richard Colt Hoare of Stourhead, probably in about 1800. Hoare, who had returned from travels in Italy and Wales, then decided to devote himself to the investigation of the early history of his county. His *Ancient History of Wiltshire* (1812-21), recorded the excavation of long barrows and other tumuli, with detailed drawings by Philip Crocker, a surveyor from the Ordnance Survey, of the sites and objects discovered. Unfortunately the work did not give full dates of the different excavations and seldom mentioned the names of those present. Hoare relied primarily upon William Cunnington of Heytesbury,[4] and different friends and neighbours, such as the botanist A.B. Lambert of Boyton,[5] who happened to be available. Exceptionally, in Volume I, there is a description of the excavation of a tumulus at which William Lisle Bowles and Richard Fenton, the Welsh poet and topographer, were present.[6] A dramatic thunderstorm broke out during the proceedings, forcing those who had been watching to take shelter in the pit that had been dug. On his return home, Bowles was inspired to write a poem which Hoare, his artist's eye similarly affected by the drama of the scene, included in his published account.

Colt Hoare's work has earned him recognition as a distinguished pioneer of field archaeology in this country. But the legacy of William Stukeley's ideas about the Druids continued to affect the appreciation of the pre-Roman past. This was reinforced by a new interest in Welsh history and culture, which Hoare shared, and an attempt to connect the traditional Welsh bards with the Druids.[7] In his poem, Bowles supposed that the tumulus was the last resting place of a 'white hair'd Druid Bard sublime'. Richard Fenton had witnessed the excavation and the *Dictionary of National Biography* article about him states that he was a friend of Bowles as well as of Hoare. Hoare remained a friend of Fenton until he died in 1821 and a portrait of him still hangs at Stourhead.

The lore of the Druids surely contributed to enhance the mystique with which Bowles was surrounded as a poet, famous since the success of his *Fourteen Sonnets Written at Picturesque Spots on a Journey* in 1789. Colt Hoare wrote to him as 'My dear Bard'[8] and he, Crabbe and Moore were referred to as the three Wiltshire bards.[9] When Bowles moved to Bremhill in 1804, he found no difficulty in reconciling his role as a famous poet with that of a country clergyman. He set out to make his vicarage reflect his personality and his idea of the place of the parish clergyman in society. He therefore decided on certain alterations to the appearance of his house and started to create a garden on Shenstonian principles which would convey a moral message. He justified his inclusion of a description of the garden in his book *The Parochial History of Bremhill* (1828)[10] by saying 'One of my objects besides miscellaneous information on parochial objects, was, in the present age of clerical obloquy, to exhibit the clergyman and his abode in their proper moral position in English Society'.

Very little is known about the construction of the vicarage garden but it is evident that Bowles must have begun the work soon after his appointment. By 1810 he was in a position to give information to the third Lord Lansdowne who was restoring the house and gardens at Bowood. Writing to Bowles on 4 September, Lord Lansdowne acknowledged his advice and added that he remembered Josiah Lane, previously employed bv Bowles, as 'an excellent executive workman' but one needing to be supervised.[11] Presumably Lane was the builder of rock work and what Bowles called 'a kind of cave

3. J.Hutchins, *The History and Antiquities of the County of Dorset* (1861–64), 3rd edn., vol.3, p.11. The editors of this edition acknowledged that the editors of the former edition were under 'particular obligation' to Charles Bowles.
4. See R.H.Cunnington, *From Antiquary to Archaeologist, A Biography of William Cunnington, 1754–1810*, ed. J.Dyer (Princes Risborough, 1975).
5. Aylmer Bourke Lambert (1761–1842), original Fellow of the Linnean Society and Vice President, 1796–1842. Volume 2 of his work on the genus *Pinus* (1824), was dedicated to Colt Hoare.
6. Sir R.C. Hoare, *The Ancient History of Wiltshire* (1812–21), repr. EP Publishing Ltd., 1975, vol. 1, pp.238-41.
7. By Edward Williams (1747–1826), a Welsh bard. See 'Druids' in *British Heritage*, eds. A. Isaacs and J.Monk (Cambridge, 1986).
8. Sotheby & Co., *Sale Catalogue*, 24 March 1936, p.54, no. 143.
9. E.g. when they attended a dinner at the opening of the Bath Institute, Jan. 1825: *WAM* 34 (1905–06), p.230.
10. *The Parochial History of Bremhill* (London, 1828), (hereafter *Bremhill*), p.xvi.
11. G. Greever, *A Wiltshire Parson and his Friends* (London, 1926), p. 99.

with a dripping rill which falls into the water below',[12] the subject of a poem by Bowles in 1808. After he had taken up residence at Bowood in 1812, Lord Lansdowne began the practice of taking some of his house guests to see Bowles in his garden, 'one of the prettiest spots in the county'.[13] By 1814, the attractions of the place had become sufficiently well known to be recognised by an article in *The Gentleman's Magazine*, probably written by Bowles' friend, Archdeacon Robert Nares.[14] This claimed it as an abode of genius, comparing it with The Leasowes and Hagley. *The Biographical Dictionary of Living Authors* (1816) also referred to the garden.[15] The description by Nares and Bowles' own later account were written as perambulations of the site though starting from different sides of the vicarage. Changes or additions to the garden had probably been made during these fourteen-year interval between the two and these perhaps account for some difficulty in reconciling the two versions. Furthermore, the number of features mentioned does not coincide.

A letter to Bowles from Hannah More, probably written in 1809 when she was living at Barley Wood, Somerset, touches on one feature of the garden, an urn commemorating Bowles' brother, Henry, who had died prematurely in 1804.[16] It appears that Hannah More had commissioned a similar um to the memory of a person not named in the letter, but presumably her friend Bishop Beilby Porteus of London, who died in 1809. She wrote to Bowles asking his advice about details of the dedication, her words suggesting something more formal than the inscription eventually used on the pedestal. Bowles was asked to make arrangements with Mr King, the statuary, probably a member of the firm established in Bath and London,[17] to execute her order; possibly the same person had supplied the urn in Bowles' garden. Mounted on a pedestal, it is illustrated on p.224 of Henry Thompson's *The Life of Hannah More* . . . (1838). It was of a very simple form, without handles, but with a lid. The monument stood in a group of trees on a high point in the Barley Wood garden. In contrast, Geoffrey Grigson, who saw Bowles' urn at Bremhill in about 1948, said it was shaded by dark trees, just beyond the rill and the water.[18] He quoted a Latin inscription in memory of Henry Bowles, apparently on the urn itself, which the description implies was standing on the ground. According to the account in *The Gentleman's Magazine*, the urn stood 'on a gentle ascent' above 'a pleasing cascade'.

A friend who made a definite contribution to the garden was Samuel Rogers, the poet. Rogers entertained Bowles in London and they also met as guests at Bowood, but it is unclear how they came to know each other. According to the writers of *Reminiscences and Table Talk of Samuel Rogers* (1903), who give no dates to their anecdotes, Rogers found Bowles excessively timid.[19] He himself, however, could be a somewhat forbidding person. Maria Edgeworth wrote after breakfasting with him in 1830 that he was 'not more yellow than ever nor more satirical, for both are impossible'.[20] Nevertheless, this contrasting pair shared an interest in garden design. For example, Rogers had considered buying Pope's villa at Twickenham when it came on the market.[21] In 1817 Bowles invited him to make a contribution to the Bremhill garden by sending him white sticks with which to mark spots selected by Rogers for planting trees.[22] Bowles' description of the garden in his *Parochial History of Bremhill* mentions a large 'Indian shell' given by Rogers and marked by an inscription by his nephew, Peregrine Bingham the younger.[23]

It is significant that both Bowles and Rogers knew Sir Uvedale Price of Foxley, Herefordshire, though again it is not clear how this came about. Writing to Rogers in 1824,[24] Price said that he had known Bowles for some considerable time. He went on 'I

12. *Bremhill*, p.256.
13. Greever, *op. cit.*, p.99.
14. *The Gentleman's Magazine*, vol. 84 (1814), pt.2, pp.203–04.
15. J.Watkins and F.Schoberl, *A Biographical Dictionary of Living Authors of Great Britain and Ireland* (London, 1816), pp. 35 and 416.
16. *The Gentleman's Magazine*, n.s. vol.4 (1835), pt.2, p.246.
17. R. Gunnis, *Dictionary of British Sculptors, 1660–1851* (London, 1968), pp.228–29. See: 'King, Charles' and 'King, Thomas & Sons'.
18. G. Grigson, *Places of the Mind* (London, 1949), p. 12. The Latin inscription is included in the account of Henry Bowles by W. Munk (ed.), *The Roll of the Royal College of Physicians of London* (London, 1878), vol. II, p.445. There is a memorial tablet to Henry and his wife, Penelope, on the wall of the north aisle of Winchester Cathedral. I am grateful to Dr P.Robinson of Compton, near Winchester, for this information.
19. *Reminiscences and Table Talk of Samuel Rogers . . . Collected from the Original Memoirs of Dyce and Sharpe*, ed. G.H. Powell (London, 1903), pp.200–01.
20. E.Inglis-Jones, *The Great Maria* (London, 1959), p.230.
21. *Table Talk of Samuel Rogers*, p. 13.
22. P.W. Clayden, *Rogers and his Contemporaries* (London, 1889), vol. 1, pp.250–51. In the same letter, Bowles refers to his boat 'with flag, gardener and pony'.
23. *Bremhill*, pp.251–52. The inscription was said to be by the author of *The Pains of Memory* (1811), but the text goes on to make it plain that the author was the younger Peregrine Bingham (who later became a lawyer), not his father, the clergyman, to whom the poem is generally attributed.
24. 6 Oct. 1824. Clayden, *op. cit.*, vol. I, pp. 387–88.

Bremhill Parsonage, from an engraving by R. Sands, after W. Bartlett, *c.*1820, reproduced in Bowles' *Parochial History of Bremhill* . . . (1828). (Photograph by Derek Parker)

should have been very glad to have met him, and heard him perform his water-music and do the honours of his water-party', possibly upon a barge on the canal below the house. Price was the author of the long and detailed *Essay on the Picturesque as Compared with the Sublime and the Beautiful* . . . (1794), a work which must certainly have affected Bowles' taste. Writing to J.B.Nichols, Bowles called it 'the sweetest book in the English language on the picturesque and beautiful'.[25] Rogers and Price knew Sir George Beaumont, named by Bowles as one of the visitors to his garden.

The chief inspirations of the Bremhill garden must have been the surrounding landscape and a re-awakening of his boyhood interest in garden planting. As he surveyed the prospect from his study window, Bowles would have been reminded of different ages of English history. In the valley immediately below were the remains of Stanley Abbey, recalling the development of monasticism in the medieval church. The borough of Calne with its fine Perpendicular church, enlarged by prosperous clothiers, and Bowood Park not far away, the centre of enlightened patronage, lay in the foreground to the south. In the distance were the Downs, with famous prehistoric monuments beyond, evidence of an ancient past then hardly understood. Bowles put on record that he owed his feeling for music to his mother and his appreciation of landscape and the beauty of nature to his father whom he had watched, as a boy, planting trees and shrubs at Uphill Rectory, Somerset, and at Barton Hill House, Shaftesbury.[26] Bowles seems to have been particularly attached to Uphill, which he returned to visit in later life. Although the grand gardens at Stourhead and Fonthill must have interested him, Uphill was on the scale of his own grounds.

Bowles clearly wished the vicarage garden at Bremhill to be judged as part of a larger scene, in conjunction with the vicarage, church and churchyard. By the time he had published his *Parochial History of Bremhill*, he had made certain embellishments to the vicarage 'in consonance with ideas of picturesque propriety'.[27] He was referring to the power of architecture to affect the imagination by means of association of ideas, a subject much discussed by writers of the time.[28] Bowles explained

25. I am indebted to Mr R. Hatchwell for this quotation from a letter now in the USA.
26. *Scenes and Shadows of Days Departed* . . . (London, 1837), p.xix.
27. *Bremhill*, p.249.
28. E.g. by Sir Joshua Reynolds in his Thirteenth Discourse first delivered in 1786 to students of the Royal Academy.

in his *History* that by 'parapetting the whole [the vicarage and buildings] with a simple gothic ornamental railing, such as appears on the church at Stourhead, unity has been given to the exterior, and the long low roofs have put on an ecclesiastical appearance'.[29] Both Bowles and Colt Hoare may have had in mind the exterior of Lacock Abbey, where the Gothic Revival work of Sanderson Miller had adapted and enlarged a medieval ecclesiastical building. The effect was not lost upon Maria Edgeworth when she was taken to Bremhill by the third Lord Lansdowne in September 1818. She was more impressed by the 'very pretty old parsonage newly done up with good taste' than she was by the 'little shrubbery, stuck full of inscriptions and grottos'.[30] Slightly later, as Pevsner noted,[31] Bowles also added small Gothic turrets and pinnacles to the vicarage, one being dated 1820. He wrote to Thomas Moore on 1 July 1820: 'I am making quite a priory here; Gothic arches, turrets, pinnacles etc. . . .'.[32] *The Parochial History of Bremhill* has an engraving of the vicarage and outbuildings viewed from the front[33] with, on one side, a glimpse of the distant hills showing the Cherhill horse. There is also a plan of the rooms indicating a conservatory next to the drawing room.

The Bremhill garden covered only $2\frac{1}{2}$ acres and, even so, Grigson suggested that Bowles might have included in it part of his glebe. The descriptions of it are imprecise and give no idea of proportions. A green lawn and gravel path went round the vicarage on the garden side, the carriage entrance being on the north. As the ground fell away sharply, the few trees and shrubs at a little distance from the house would not have obstructed the views. The garden consisted of alternating bands of shrubbery and flowers, including rose beds, descending finally to a field of sheep, the bells of which, we are told by Thomas Moore, were tuned in thirds and fifths.[34] According to *The Gentleman's Magazine*, the terrace of flowers some way down the slope contained small flower beds and trellis-work arbours, a Reptonesque feature. The shrubs and flowers were connected by winding paths, with opportunities to pause at various seats or larger features. Near these vantage points were inscriptions (published with Bowles' poems) disposed to assist visitors to contemplate the view in a proper mood. Bowles' interest seems to have been in feelings only and there is no indication that he had any concern with botany or cultivation technique as had his friends Colt Hoare, the Revd Edward Duke[35] and A.B.Lambert. He casually mentioned a few trees – thorns, hazels and poplars and an 'old ivied elm', described for its picturesqueness.

The most important of the garden features was the hermitage or oratory, created by Bowles with a distinctive ecclesiastical if not monastic character. It was a late example of a building which had been constructed in large and small gardens in the latter part of the 18th century, sometimes made more realistic by an actual inmate. The hermitage at Stourhead, known as the Druid's cell, was built of timber with its bark left on. It was put up in 1771 but taken down in 1814.[36] The 1814 account of Bremhill refers to a 'root house hermitage' but Bowles' description suggests that later there were two buildings. Neither description specified the materials used for the walls; both concentrated on the fittings. Bowles mentions a window filled with stained glass;[37] and according to *The Gentleman's Magazine*, the interior held 'a rude stone table' and a wooden chair. Presumably just outside was a small sundial on a fragment of twisted column and probably on top a 'rustic cross which St Bruno, the Hermit, is supposed to have erected'. Bowles gave more information about the sundial, saying the plate was dated 1688.[38] An anecdote of Thomas Moore's relates that, on the arrival of visitors, Bowles would send a servant to start the fountain and place a 'missal and crucifix' in the oratory.[39]

Also in the oratory were 'shattered fragments' of pillars from Stanley Abbey.[40] It seems that Bowles must have carried away a number of objects from the site, even if he may not have undertaken an actual

29. *Bremhill*, p.249.
30. C. Colvin (ed.), *Maria Edgeworth. Letters from England 1813–44* (Oxford, 1971), p.98.
31. N. Pevsner, revised B.Cherry, *The Buildings of England: Wiltshire* (Harmondsworth, 1981),pp. 140–41.
32. Lord J. Russell (ed.), *Memoirs, Journal and Correspondence of Thomas Moore* (London,1860), p.261.
33. *Bremhill*, opp. p. 245.
34. *Moore Memoirs*, p. 161: 1 Sept. 1816.
35. The Revd Edward Duke (1779–1852) of Lake House, Wilsford near Amesbury, elected a Fellow of the Linnean Society in 1809, A.B. Lambert being one of the proposers. I am indebted to Miss G. Douglas, Librarian of the Society, for this information. Duke was also a diligent investigator of prehistoric remains. He exchanged letters with Bowles about the Wansdyke and Avebury in *The Gentleman's Magazine*, between 1827 and 1829. Bowles published his views in chapter II of his *Parochial History of Bremhill*. Duke published *The Druidical Temples of the County of Wiltshire* (London, 1846), maintaining the existence of a planetarium on the downs.
36. K. Woodbridge, *The Stourhead Landscape* (The National Trust, 1991), p. 58; plan and section, p. 54.
37. *Bremhill*, p. 251.
38. *Ibid., loc. cit.*
39. *Moore Memoirs*, p. 161.
40. *Bremhill*, p. 251.

excavation. Knowing the care taken by Colt Hoare to have plans and drawings made of the sites he excavated, it is disappointing that there are no such plans and drawings in Bowles' chapter on Stanley Abbey in his *Parochial History of Bremhill*.[41] His research was otherwise detailed, devoting much attention to original medieval documents in local custody, which were transcribed with the assistance of Charles Bowles. It would be interesting to know whether William Lisle's interest in Stanley Abbey predated or followed that of his brother in Shaftesbury Abbey. Charles Bowles undertook a small excavation at Shaftesbury of which he made a brief report in *The Gentleman's Magazine* (1817).[42] William Lisle published an article about Stanley Abbey in *The Gentleman's Magazine* (1823),[43] his findings being used by the editors of the revised edition of Dugdale's *Monasticon*.[44] Perhaps his work on the abbey caused him to construct a new hermitage, the original one becoming the root house? According to the description of 1828, the root house contained an 'old carved chair', in which visitors were placed to admire the view. There were also two specially built 'rural seats' in the garden. Bowles mentioned a Gothic stone seat at the end of the terrace of flowers.[45] It was presumably over this seat that the 1814 account gives the inscription:

> Rest, stranger, in this decorated scene
> That hangs its beds of flowers, its slopes of green:
> So from the walks of life the weeds remove,
> But fix thy better hopes on scenes above.

In another part of the book, Bowles mentions a second seat incorporating painted Norman tiles and pillars of Portland stone.[46] Only the 1814 description refers to 'a small neat obelisk' inscribed 'Anno Pacis 1814'.

Bowles was already known to the third Lord Lansdowne before he took up residence at Bowood. Thereafter he was regularly invited to join the house guests and eventually became a friend of the family there and at Lacock, the home of Lord Lansdowne's nephew.[47] Guests at Bowood included not only Wiltshire neighbours, especially Lady Lansdowne's sister and her children from Lacock, but also men and women nationally and internationally famous in the fields of literature, art and science. Yet it is only possible to identify those who went to see the garden and to hear Bowles take a service at Bremhill church when they are named in the letters and memoirs of others. Bowles proudly listed those who had sat in the 'old carved chair' as Sir Samuel Romilly, Sir George Beaumont, Sir Humphrey Davy – poets as well as philosophers, Mme de Staël, Dugald Stewart, and Christopher North (John Wilson), Esq.[48] Samuel Rogers, Maria Edgeworth, and Thomas Moore have already been mentioned and it is possible to add a few more names. Sir Thomas Phillipps, the collector, visited Bremhill in order to examine a pedigree of the Lisle family.[49] It may be presumed that friends and colleagues in the church came there, including Archdeacon Nares while he was vicar of St Mary's church, Reading. Hannah More and John Rutter, printer and local historian, were invited.[50] A charming memory of visits to Bremhill was described in a poem by the young writer Louisa Costello, who published a volume dedicated to Bowles in 1825.[51] Her poem begins:

> Sweet Bremhill! When last in thy garden I stray'd
> The trees were all green and thy skies were bright;
> The spray of the fountain 'midst roses that play'd,
> Reflected their colours and glistened with light.

Coleridge, a greater poet, visited Bowles in 1815 while he was staying with his friends, the Morgans, in Calne. In a letter to Wordsworth, he wrote enthusiastically that Bowles had 'a paradise of a place' at Bremhill.[52] Bowles had remained in touch

41. *Ibid.*, pp. 83–123.
42. *The Gentleman's Magazine* vol. 87 (1817), pt. 1, p. 209. Charles Bowles employed a workman to dig and a floor with remains was found at a depth of *c.*6ft. A plate of the objects discovered faces the report.
43. *The Gentleman's Magazine* vol.93 (1823), pt. 1, pp. 24–6. Mainly a summary of documents.
44. Sir W. Dugdale, *Monasticon Anglicanum* (London, 1825), new edn. by J. Caley, H. Ellis and the Revd B. Bandinel (8 vols., London 1817–30) repr. Gregg International Publishers Ltd., 1970, vol.5, pp. 563–64. Bowles' article cited above was used, followed by additional extracts from charters etc. Bowles acknowledged the help of Bandinel and Cayley in his *Parochial History of Bremhill*.
45. *Bremhill*, p.252.
46. *Ibid.*, p. 122.
47. Lady Lansdowne's eldest sister, Elizabeth, married firstly, William Davenport Talbot of Lacock and secondly, Captain William (later Rear Admiral) Charles Fielding. She was the mother of William Henry Fox Talbot and had two daughters by Captain Fielding. Caroline, the elder girl, married Ernest, Viscount Valletort (later Earl Mount Edgcumbe) at Bowood in 1831.
48. *Bremhill.*, p.253.
49. Bodleian Library, MS: Phillipps - Robinson, d 68 f.56.
50. I am indebted for this information to Mr F.C.Hopton of Shaftesbury.
51. L.S. Costello, *Songs of a Stranger* (London, 1825), p. 132.
52. Coleridge to Wordsworth, 30 May 1815: H.J.Jackson (ed.), *Samuel Taylor Coleridge, Selected Letters* (Oxford, 1988), p. 190.

with Wordsworth and Southey, who like Coleridge, had admired his early poetry. In the course of a tour in the West Country, Southey, with his son Cuthbert, visited Bowles in November 1836 and parted from him in his garden.[53] Perhaps one of the last visits of a nationally famous person to Bremhill was made in 1837 when Lord Lansdowne brought the Prime Minister, Lord Melbourne, with Lord John Russell, over there from Bowood.[54]

There was a peculiar aptness about Bowles' arrival at Bremhill. As his friend Nares wrote, 'Who will not wish that the Poet may long enjoy the Place, and the Place the Poet, so worthy of each other'. In fact, Bowles held the living for over forty years and was an acknowledged celebrity until the infirmities of age overtook him. His church, house and garden made a sympathetic background from which he would emerge to move into different social spheres. There was his parish work as a clergyman and a magistrate and his interest in simple rustic characters, exemplified in epitaphs for aged parishioners.[55] At a higher social level, he and his brother belonged to the small group of scholars and antiquarians who enjoyed the hospitality of Sir Richard Colt Hoare at Stourhead towards the end of his life.[56] At the same time Bowles was able to enjoy the wider and more brilliant circle of the guests at Bowood. The three historical works of Bowles, *Hermes Britannicus* . . . (1828), *The Parochial History of Bremhill* . . . (1828), and *Annals and Antiquities of Lacock Abbey* . . . (1835), may readily be connected with people and places that have been mentioned. Work could still be done, however, to expand and explain in greater detail the interest of Bowles' career and to identify more of his friends.[57]

53. Kenneth Curry (ed.), *New Letters of Robert Southey 1811–38* (New York and London, 1965), vol.2, p.457 f.n. His visit was referred to by Bowles in *Scenes and Shadows*...(1837), p.xlv.
54. *Moore Memoirs*, p. 635. The visit took place on 16 Oct. 1837.
55. An epitaph for Benjamin Tremblin, d. 1822, aged 92, can still be seen on the church wall.
56. Revd J.Hunter, 'The Topographical Gatherings at Stourhead 1825–31' in *Memoirs Illustrative of the History and Antiquities of Wiltshire* . . . (London, 1851). The names mentioned include Richard Fenton, George Matcham, Robert Benson, the Revd Thomas Leman, the Revd Richard Warner, Sir Thomas Phillipps, the brothers Bowles and others.
57. My attention has only recently been drawn to the journals of the Revd John Skinner, rector of Camerton, near Bath. Skinner knew Bowles, Colt Hoare and others of the Stourhead circle. He drew the map of Bremhill and its vicinity facing p.1 of Bowles' *Bremhill*. His journal for the autumn of 1812 mentions two visits to Bowles: on 29 Oct., when he was shown the garden, and on 31 Oct., when he dined at the Parsonage and enjoyed a musical evening in which Mr Lewis West, pastor of the Moravian Church at Tytherton, and Mr and Mrs Bowles took part (B.L. Add. MS. 33645 f.36). Bowles' interest in music is a subject capable of further study.

Wiltshire Archaeological and Natural History Magazine, Vol. 89 (1996), pp. 106–115

A Provisional Checklist of Fossil Insects from the Purbeck Group of Wiltshire

by A.J.ROSS *and* E.A.JARZEMBOWSKI

Over seventy species of insects are known from the Wiltshire Purbecks; the fauna is listed and a selection is photographically illustrated. The fossil localities in this historically important area, and the work of the Revd P.B. Brodie are summarised.

INTRODUCTION

Just over 140 million years ago, the late Jurassic sea retreated from southern England and, with the exception of some brief encroachments, did not return for some 20 million years until the late Lower Cretaceous. The geological deposits that accumulated during this interval are predominantly non-marine and are known as the Purbeck and Wealden Groups ('Beds' of earlier authors). Whilst Dr Gideon Mantell was looking for dinosaurs in the Wealden of Sussex, the Revd P.B. Brodie was collecting much smaller terrestrial animals in the Purbecks of Wiltshire. Brodie (1839) is the first account of fossil insects from the Purbecks and these were found in the Vale of Wardour. Later, Brodie (1847) recorded insect remains in the Purbecks of Swindon. The Vicar then went on to become the most important British collector of fossil insects in the 19th century. Early in his career, he published a book on the subject, *A History of the Fossil Insects in the Secondary Rocks of England* (1845), in which many species from the Vale of Wardour are described and illustrated. Goss (1878: 285) pointed out that Brodie 'produced the *only book* [*sic*] on fossil insects which has appeared in this country' and his remark could be repeated today.

Nowadays, the student of British palaeoentomology is more likely to find modern information on the subject dispersed in the foreign literature. We have therefore attempted to bring together current information on this historically important material and summarise it in the form of a species checklist. Following common practice in geology, we have tried to include figured as well as named and type material, based on literature survey and examination of Brodie's collection at the Natural History Museum, London. The study has revealed that published figures are not necessarily accurate and, in some cases, species have even been described twice (Scudder 1886). More exact stratigraphic and provenance data have been incorporated wherever possible. In consideration of the former, the listings by Woodward (1895) have been rejected. This is because of varying opinions by different collectors as to the location of the Middle Purbeck/Lower Purbeck boundary; also, some of Woodward's ranges are enigmatic (e.g. references to the Wealden) or even wrong (attribution of species from the *Archaeoniscus* Bed at Dinton to the Lower Purbeck). However, examination of fossil insect collections at the British Geological Survey, Keyworth, may well add useful data in the future.

A more general stratigraphical problem is that the Purbeck insect fauna straddles the Jurassic/Cretaceous boundary if the latter is taken conventionally at the Cinder Bed in the Middle Purbeck. On this basis, Purbeck insects from the 'Lias' beds and *Archaeoniscus* Bed are referable to the late Jurassic and early Cretaceous respectively (see localities, below). Allen and Wimbledon (1991) have, however, proposed a neat solution by attributing the whole of the Purbeck Group to the early Cretaceous (Berriasian) as a formation, but it remains to be seen if this will be generally accepted. A likely consensus is that the boundary will be drawn low in the Lower Purbeck.

Much work remains to be done on the Purbeck insects, and systematic revision of the cockroaches (Blattodea) is under way (A.J.R.). This year (1995) is the 150th anniversary of the publication of Brodie's classic book, and we hope this compilation will help stimulate new interest in his pioneer work.

THE REVD P.B.BRODIE IN WILTSHIRE

Peter Bellinger Brodie (1815–1897) developed an interest in geology as a teenager, becoming a Fellow of the Geological Society at the age of nineteen, prior to entering the church ([Besterman] 1992).

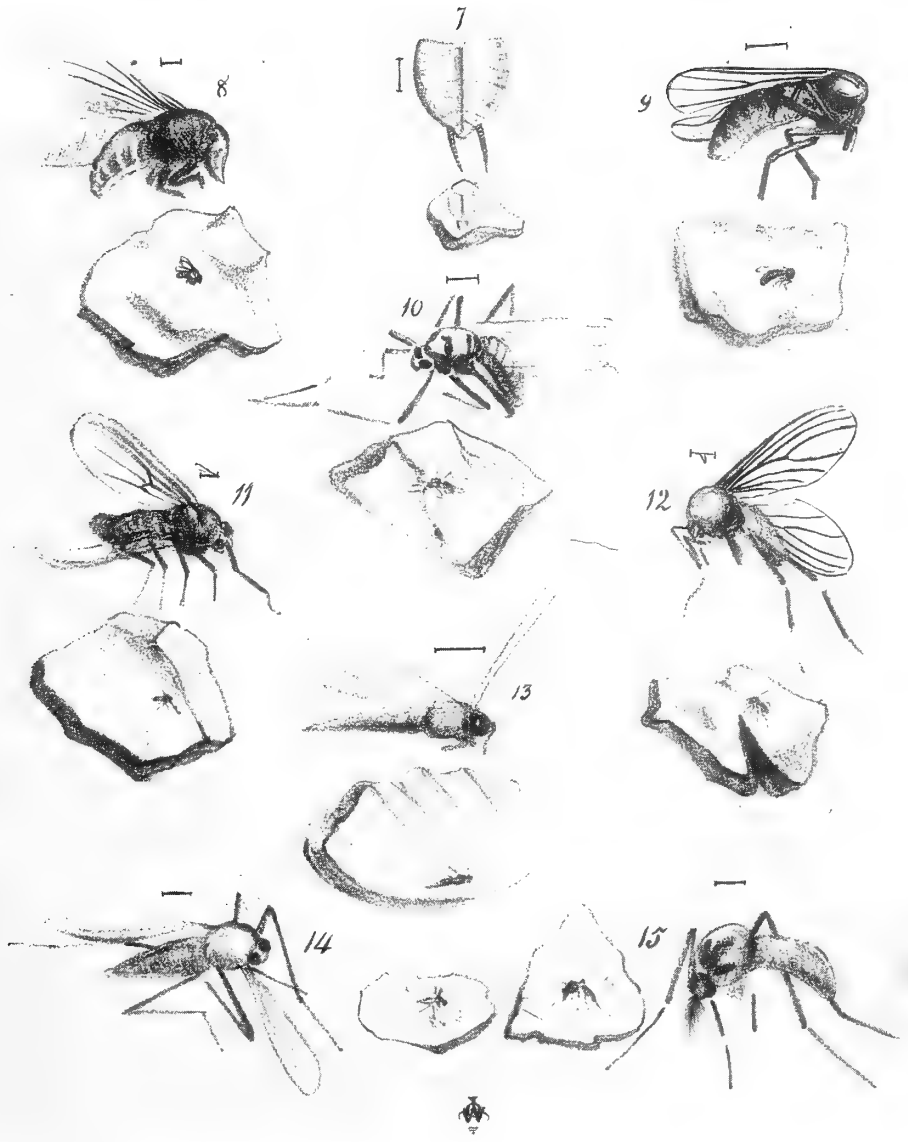


Figure 1. Reproduction from Brodie (1845), plate 3. Scale *c.* 6: 5. (For identifications, see checklist)

His first appointment as curate of Wylye was short- lived (1838–1840); in that time, however, he was first to discover insects in the Purbecks and the characteristic sea slater *Archaeoniscus brodiei* Milne Edwards which is named after him. He subsequently served as curate and rector in Buckinghamshire and Gloucestershire, gathering further material on fossil insects to produce his unique book of 1845 which established many Mesozoic insect genera and species. Privately published, the book was dedicated to the Revd Adam Sedgwick, his unofficial instructor at Cambridge University. Brodie's early work was significantly facilitated by Professor J.O. Westwood, an eminent 19th-century entomologist, who drew the illustrations (see Figure 1, this paper). It seems that Brodie had some disagreement with Dr Gideon Mantell of Sussex who described some Liassic insect material whilst Brodie was preparing the text of his book; it may thus be no coincidence that useful study of Cretaceous insects in southeast England was delayed until the present century.

LOCALITIES

Brodie discovered two major and five minor localities in the Purbecks of the Vale of Wardour. A field survey by Ms J.B.E. Jarzembowski and E.A.J. in 1978 and 1980 showed that, with one possible exception, they have long since disappeared. Brodie (1845:18) described one quarry site as 'about two miles south-east of Dinton'. Comparison of his section with the more detailed accounts of later geologists (Andrews and Jukes-Browne, 1894) shows clearly that 'south-east' is a misprint for 'south-west' and that the site was near Teffont. With the permission of Sir Edgar Keatinge, E.A. and J.B.E.J. were able to visit the present exposures in that area and, like Brodie and Andrews, found insect fossils in the 'Jurassic' part of the Purbecks. These were in fine-grained, grey limestone called 'Lias' by the old quarrymen. Subsequently, E.A. and J.B.E.J. found insects in a similar lithology near Ridge. Another horizon which yielded insects during the last century was the *Archaeoniscus* Bed (Isopod Limestone) at Dinton, in the Cretaceous part of the Purbecks. E.A. and J.B.E.J. found a few insect remains in this bed near Dashlet and on Ladydown but, like the Victorians, concluded that they are rare at this level.

The first fossil insects from the Purbeck Group were found by Brodie at Dinton but later workers failed to find the main horizon or 'Insect Limestone' (Andrews and Jukes-Browne, 1894). An excavation at Dinton sponsored by the Nature Conservancy Council in 1983 showed that the horizon must lie below the Cinder Bed and was probably a local development of 'Lias'. Tantalisingly, Mr A.A. Mitchell (Gillingham, Kent) has, in 1995, found insect remains here in weathered limestone. It is hoped that with the assistance of English Nature, the old site at Dinton may be reopened following the withdrawal of the Ministry of Defence.

CHECKLIST

Explanation

The Odonata checklist updates Jarzembowski (1988). The family classification follows Carpenter (1992), Clifford, Coram, Jarzembowski and Ross (1994) and Rohdendorf and Davis (1991). An asterisk (*) indicates genus excluded from Carpenter (and not discussed by Clifford *et al.*, or Rohdendorf and Davis). Locality (in round brackets) indicates record by Woodward (1895). Specimen registration numbers, stratigraphical and additional locality and systematic data are given in square brackets.

Abbreviations

AB	*Archaeoniscus* Bed (Isopod Limestone)
B'45	Brodie, 1845
D	Dinton
det. WRD	determined by Mr W.R. Dolling
I.	specimen registration number, Natural History Museum, London
IL	'Insect Limestone' of Brodie
Sc'86	Scudder, 1886
T	Teffont
VW	Vale of Wardour

Order Odonata (Dragonflies)

Aeschnidium antiquum (Brodie);
[IL D] B'45: pl. 5, fig. 10 [I. 3526] Aeschnidiidae

Aeschnopsis perampla (Brodie);
T B'45: pl. 5, fig. 7 [I. 12780] ?Family

?Necrogomphus jurassicus (Giebel)
[T] B'45: pl. 5, fig. 9 [I. 12782, I. 12778] ?Family

Necrogomphus petrificatus (Hagen)
[T] B'45: pl. 5, fig. 8 [I. 12779] ?Family

Order Blattodea (Cockroaches)

Blattula disjuncta (Scudder);
[IL D] Sc'86: pl. 46, fig. 14 [I. 12791] Blattulidae

Ctenoblattina arcta Scudder;
[IL] D Sc'86: pl. 46, figs. 1,2 [I. 12789, I. 12695] Mesoblattinidae

Elisama kneri Giebel; Figure 2A;
[IL D] B'45: pl. 5, fig. 1 [I. 3528] Mesoblattinidae

Elisama minor Giebel; Figure 2B;
[IL D] VW B'45: pl. 5, fig. 20 [I. 12805] Mesoblattinidae

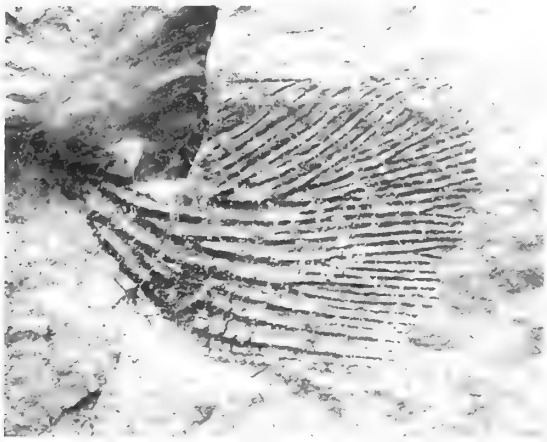
?Mesoblattina kollari (Giebel) (=*?Mesoblattina eatoni* (Scudder)); Figure 2C;
[IL D] B'45: pl. 5, fig. 14; Sc'86: pl. 48, fig. 19 [I. 12812] Mesoblattinidae

?Mesoblattina recta (Giebel); Figure 2D;
[D] B'45: pl. 5, fig. 3 [I. 12734] Mesoblattinidae

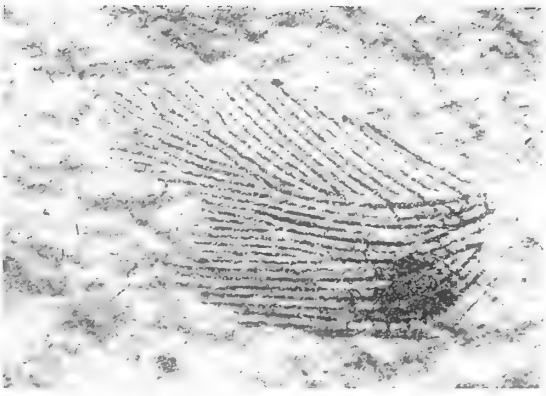
?Mesoblattina scudderiana Handlirsch;
[IL D] Sc'86: pl. 46, fig. 13 [I. 12763] Mesoblattinidae

?Mesoblattina sp. Handlirsch;
[D] B'45: pl. 3, fig. 7 [I. 3507] Mesoblattinidae

?Mesoblattina sp. Handlirsch;
[D] Sc'86: pl. 46, fig. 8 [I. 12031] Mesoblattinidae



A



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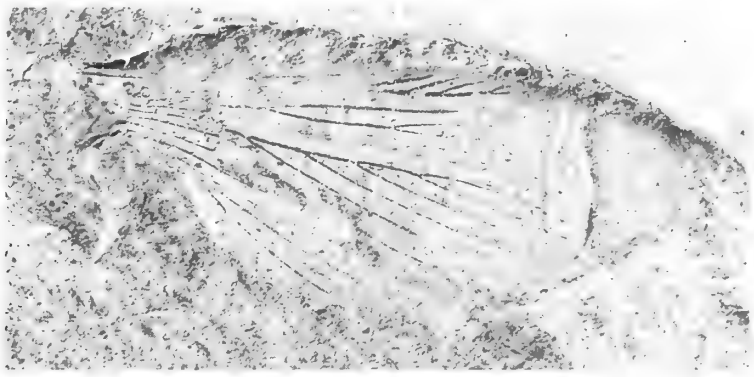
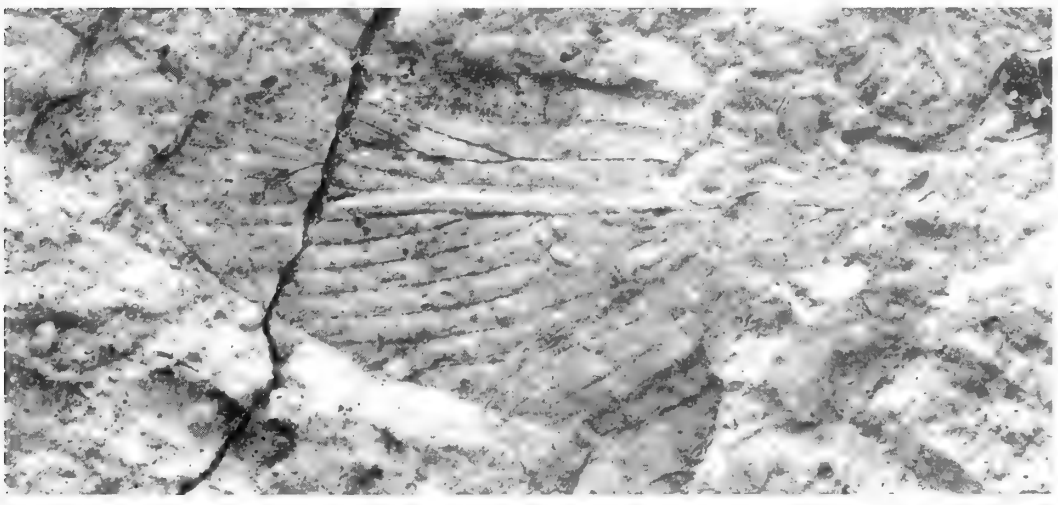


C



D

Figure 2. Blattodea: A. *Elisama kneri* Giebel, holotype x8; B. *Elisama minor* Giebel, holotype x10; C. *?Mesoblattina kollari* (Giebel), holotype x5; and D. *?Mesoblattina recta* (Giebel), holotype x 15

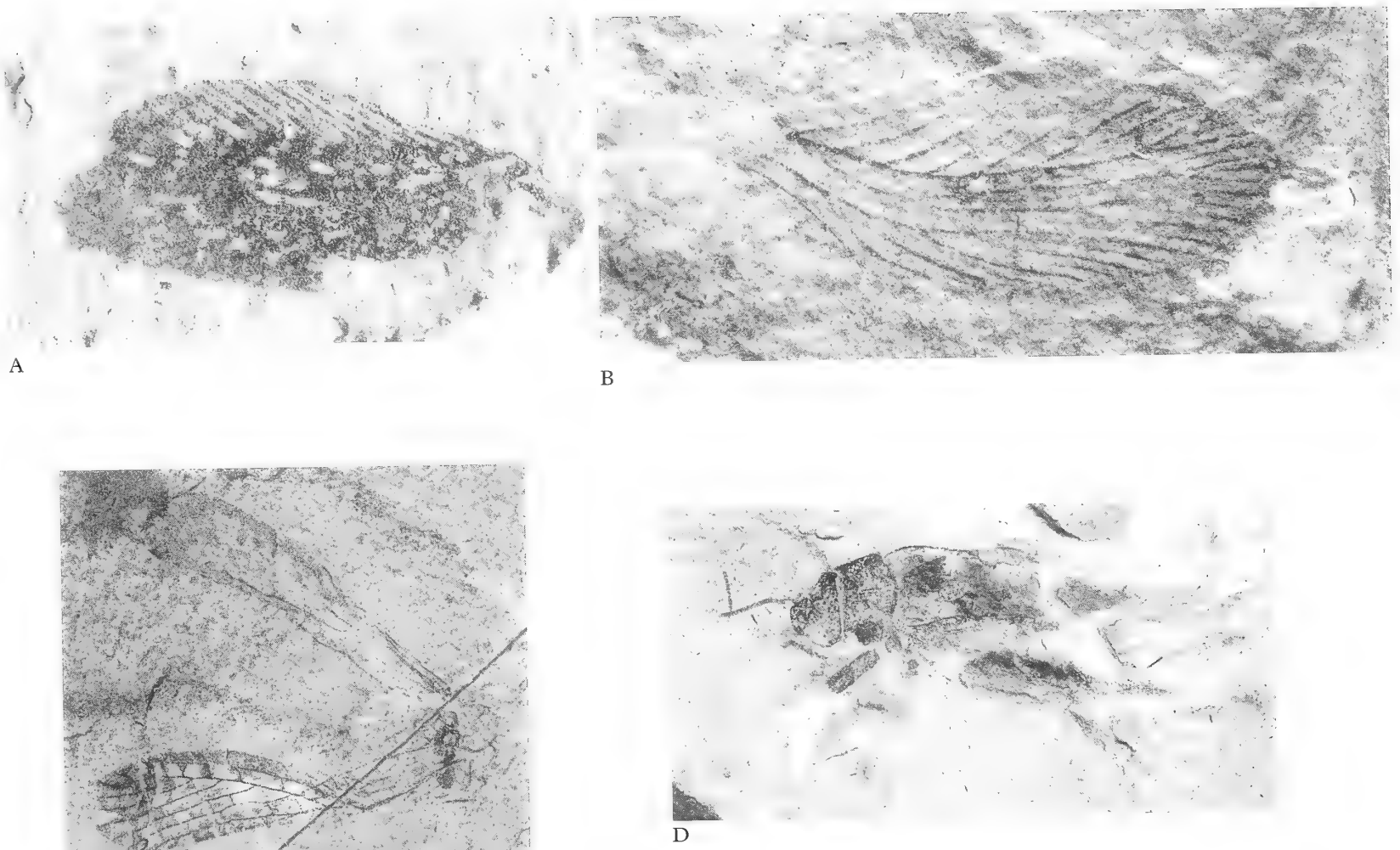


Figure 3. Blattodea: A. *Nannoblattina pinna* (Giebel), holotype x16; and B. *Nannoblattina similis* (Giebel), holotype x 15; Orthoptera: C. *Panorpidium dubium* (Giebel) **comb. nov.**, holotype x6.5; and D. *Protogryllus sedgwicki* (Brodie), holotype x5

?Mesoblattina sp. Handlirsch;
[D] Sc'86: pl. 47, fig. 6 [I. 12744] Mesoblattinidae

?Mesoblattina stricklandi (Brodie);
[IL D] B'45: pl. 4, fig. 11 [I. 3497, I. 3977] Mesoblattinidae

?Nannoblattina brodiei Handlirsch;
[D] B'45: pl. 5, fig. 16 [I. 12732] Mesoblattinidae

Nannoblattina pinna (Giebel); Figure 3A;
[D] B'45: pl. 5, fig. 5 [I. 11977] Mesoblattinidae

Nannoblattina similis (Giebel) (=*Nannoblattina prestwichii* (Scudder)); Figure 3B;
[IL D] B'45: pl. 5, fig. 2; Sc'86: pl. 48, fig. 3.
[I. 12810] Mesoblattinidae

?Nannoblattina woodwardi Scudder;
[IL D] Sc'86: pl. 48, fig. 6 [I. 3501] Mesoblattinidae

Unnamed:

[D] B'45: pl. 5, fig. 6 [I. 12750] Mesoblattinidae
[D] B'45: pl. 5, fig. 11 [I. 12733] Mesoblattinidae

Order Orthoptera (Grasshoppers and Crickets)

Panorpidium dubium (Giebel) **comb. nov.**;
Figure 3C;

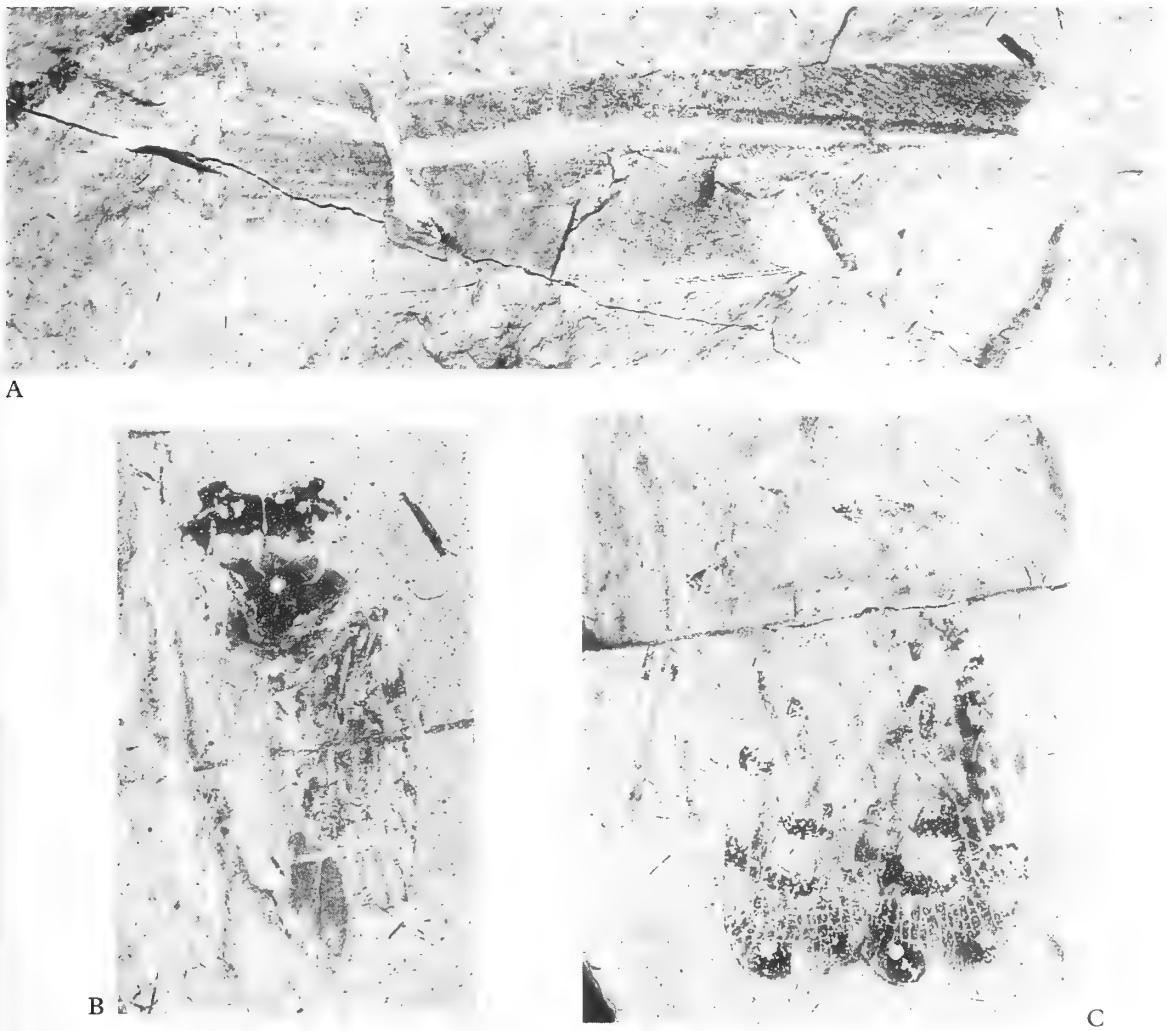


Figure 4. Phasmatodea: A. *Ensiferorum* sp., I. 12724, x5; Hemiptera: B. *?Cixioides maculatus* (Brodie), holotype x10; and C. *Ricaniites fulgens* (Brodie), holotype x5

[AB D] B'45: pl. 5, fig. 21 [I. 3496] Elcanidae

Protogryllus sedgwicki (Brodie); Figure 3D;
[AB D] B'45: pl. 2, fig. 4 [I. 11990, I. 3525] Protogryllidae

Zalmona brodiei Giebel;
[IL] Dinton B'45: pl. 5, fig. 13 [I. 3533] ?Haglidae

['**Order Phasmatodea** (Stick insects)']

'*Ensiferorum*' sp.; Figure 4A;
[D] B'45: pl. 5, fig. 19 [I. 12724, I. 12723] ?Family

Order Hemiptera (True bugs)

?Aphis plana Brodie;
[D] B'45: pl. 2, fig. 10 [I. 12702] ?Family

Cercopidium lanceolata Heer;
(Wilts) ?Family

Cicadellium pulcher (Brodie);
VW B'45: pl. 5, fig. 17 [I. 12729] ?Family

?Cixioides maculatus (Brodie); Figure 4B;
[IL D] B'45: pl. 2, fig. 8 [I. 3498, I. 3984] ?Family

Genaphis valdensis (Brodie);
[IL D] B'45: pl. 4, fig. 3 [I. 3522] Genaphididae

Jassites punctatus (Brodie);
[IL D] B'45: pl. 5, fig. 4 [I. 3510] Cicadellidae

Lygaeid sp. det. WRD;
[D] B'45: pl. 2, fig. 11 [1. 3517]

Psychodites egertoni (Brodie);
[IL D] B'45: pl. 4, fig. 7 [I. 3502, I. 12623] ?Family

Psychodites kenngotti (Giebel);
[D] B'45: pl. 4, fig. 8 [I. 12691] ?Family

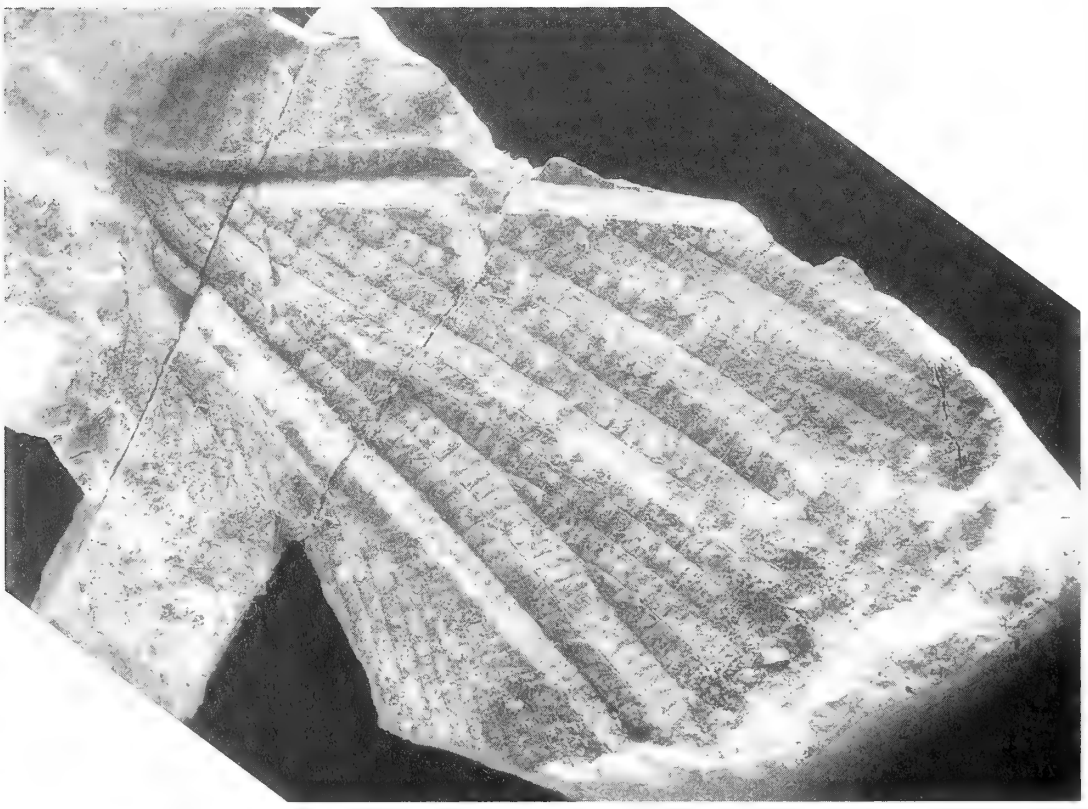


Figure 5.Neuroptera:
unnamed kalligrammatid, Lulworth Formation, Teffont, Revd. W.R. Andrews' coll. no. 15, Devizes Museum, x3

Ricaniites fulgens (Brodie); Figure 4C;
[IL D] B'45: pl. 4, fig. 12 [I. 3505, I. 3995] Ricaniidae

Order Neuroptera (Lacewings); Figure 5

Order Coleoptera (Beetles)

Anapiptus brodiei Handlirsch;
[IL D] B'45: pl. 3, fig. 4 [I. 3515] ?Family

Apistotes purbeccensis (Giebel);
VW B'45: pl. 6, fig. 6 [I. 11963] ?Family

Cerylonopsis striata (Brodie);
[IL D] B'45: pl. 3, fig. 1 [I. 3514] ?Family

Coleopteron rugostriatus (Giebel);
[T] B'45: pl. 6, fig. 2 [I. 11959] ?Family

Coleopteron spp.;
[D] B'45: pl. 6, fig. 1 [I. 3534] ?Family;
[D] B'45: pl. 3, fig. 5 [I. 3529] ?Family

Coleopteron vetustus Giebel;
[IL D] B'45: pl. 3, fig. 3 [I. 3516] ?Family

Diaperidium mithrax Westwood;
(VW) ?Family

Helophoropsis brodiei (Giebel);
[IL D] B'45: pl. 3, fig. 2 [I. 3524] ?Family

?Helopidium brodiei (Giebel);
VW B'45: pl. 6, fig. 5 [I. 11962] ?Family

Helopidium westwoodi (Giebel);
[IL D] VW B'45: pl. 6, fig. 3 [I. 3500, I. 3946] ?Family

Hydrobiites purbeccensis (Giebel);
[IL D] B'45: pl. 6, fig. 12 [I. 11966] ?Family

Hyperomima antiqua (Giebel);
[IL D] B'45: pl. 6, fig. 4 [I. 3504] ?Family

Kakoselia angliae (Giebel);
[IL D] B'45: pl. 6, fig. 8 [I. 3528] ?Family

Kamaroma breve Handlirsch;
[IL D] B'45: pl. 6, fig. 14 [I. 11968] ?Family

Katapontisus brodiei (Giebel);
VW B'45: pl. 6, fig. 9 [I. 11964] ?Family

Omma elongata (Brodie);
[IL D] B'45: pl. 2, fig. 1 [I. 3527, I. 12149] Cupedidae

Pseudocymindis antiqua (Giebel);
VW B'45: pl. 6, fig. 10 [I. 11965] ?Family

Stictulus brodiei Handlirsch;
[IL D] B'45: pl. 6, fig. 11 [I. 3519] ?Family

Tychon antiquum (Giebel);
VW B'45: pl. 6, fig. 13 [I. 11967] ?Family

Order Mecoptera (Scorpionflies)

Orthophlebia bifurcata Giebel; Figure 6A;
[IL D] B'45: pl. 5, fig. 12 [I. 3532] Orthophlebiidae

Stenopanorpa gracilis (Giebel); Figure 6B;
[D] B'45: pl. 5, fig. 18 [I. 12721] ?Family

Order Diptera (True flies)

'Aphis' dubia Giebel;
[IL D] B'45: pl. 2, fig. 9 [I. 3530] ?Diptera

**Asuba dubia* (Brodie);
[IL D] B'45: pl. 3, fig. 10 [I. 3545] ?Family

**Bibionites prisca* (Giebel);
VW B'45: pl. 5, fig. 15 'Fungivoritidae'

**Bria prisca* (Brodie)
[IL D] B'45: pl. 4, fig. 10 [I. 3503] ?Family

Chironomopsis arrogans (Giebel);
[IL D] B'45: pl. 3, fig. 14 [1. 3493] ?Family

Chironomopsis extinctus (Brodie);
[IL D] B'45: pl. 4, fig. 5 [I. 3520, I. 12757] ?Family

**Dara fossilis* (Brodie); Figure 6C;
[IL D] B'45: pl. 3, fig. 15 [I. 3509] ?Family

**Hasmona leo* Giebel;
[D] B'45: pl. 3, fig. 11 [I. 12751] ?Family

Olbiogaster fittoni (Brodie); Figure 6D;
[IL D] B'45: pl. 3, fig. 9 [I. 12753] Anisopidae

**Pseudosimulium humidum* (Brodie);
[IL D] B'45: pl. 3, fig. 8 [I. 3952] ?Family

Remalia sphinx Giebel;
[IL D] B'45: pl. 4, fig. 4 [I. 12711] ?Family

**Sama rustica* (Brodie);
[IL D] B'45: pl. 3, fig. 13 [I. 3495] ?Family

**Sciophilopsis brodiei* Handlirsch;
[IL D] B'45: pl. 4, fig. 2 [I. 3975] 'Fungivoritidae'

'Termes' grandaevus Brodie;
[IL D] B'45: pl. 2, fig. 5 [I. 3512, I. 12703] 'Bibionidae'

**Thimna defossa* (Brodie);
[IL D] B'45: pl. 3, fig. 12 [I. 3586] 'Fungivoritidae'

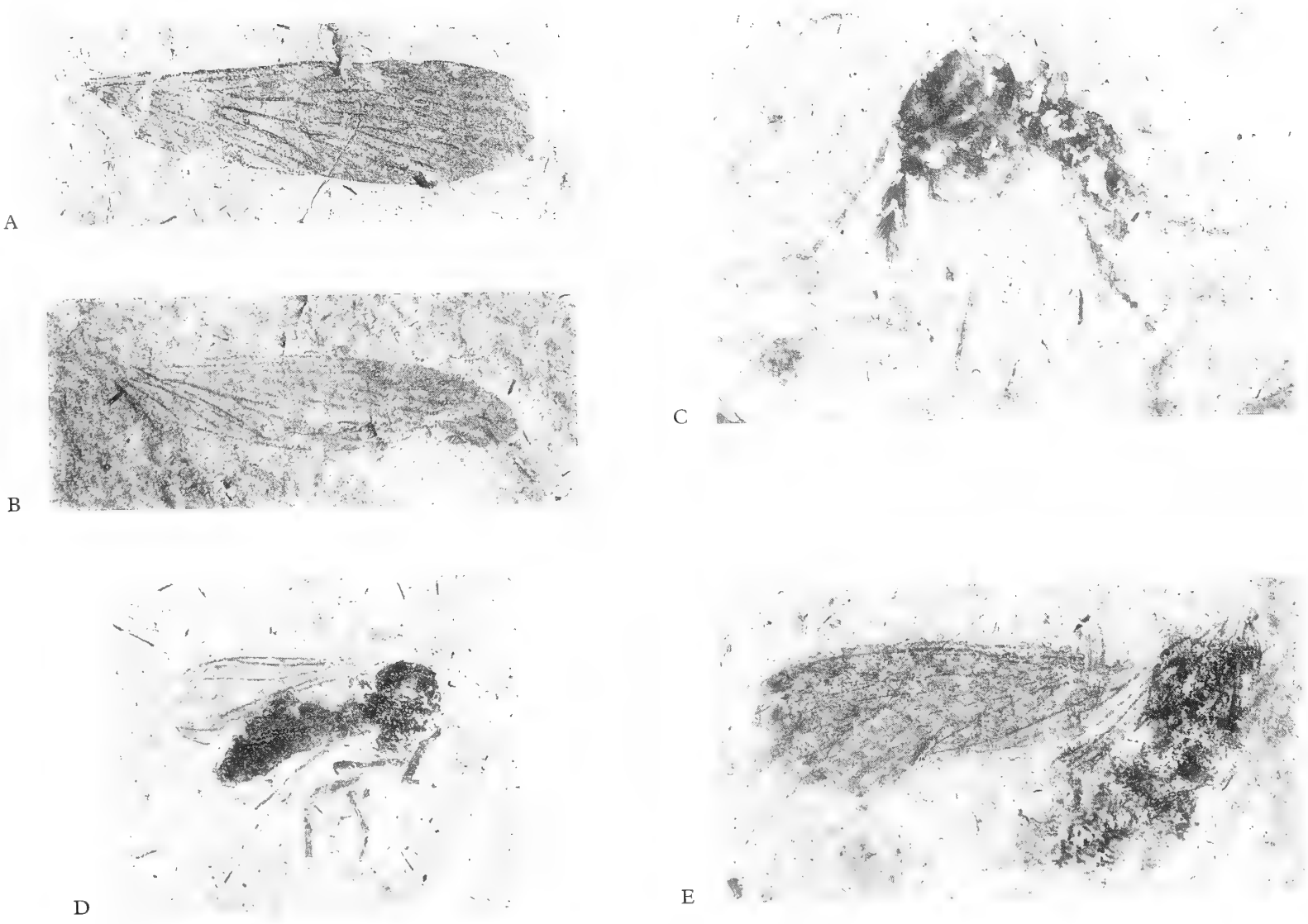


Figure 6. Mecoptera: A. *Orthophlebia bifurcata* Giebel, holotype x5; and B. *Stenopanorpa gracilis* (Giebel), holotype x6; Diptera: C. *Dara fossilis* (Brodie), holotype x12; and D. *Olbiogaster fittoni* (Brodie), holotype x10; and Trichoptera: E. *Pseudorthophlebia brodiei* Handlirsch, holotype x8

Order Trichoptera (Caddisflies)

Pseudorthophlebia brodiei Handlirsch; Figure 6E;
[IL D] B'45: pl. 2, fig. 7 [I. 3551, I. 4002] ?Family

'Flata' haidingeri Giebel;
[IL D] B'45: pl. 2, fig. 6 [I.3494] ?Trichoptera

Insecta incertae sedis

'Diechoblattina' ungeri (Giebel)
(VW)

'Meloe' hoernesi Giebel;
[IL D] B'45: pl. 2, fig. 12 [I. 3508]

'Philonthus' kneri Giebel;
[IL D] B'45: pl. 2, fig. 2 [I. 3511]

Prognatha crassa Giebel;
[D] B'45: pl. 2, fig. 3 [I. 3978]

Unnamed

VW B'45: pl. 3, fig. 6 [I. 3521, ?Hemiptera]

[D] B'45: pl. 4, fig. 1 [I. 3506, ?Diptera]

[D] B'45: pl. 4, fig. 6 [I. 3513, I. 12759, ?Hemiptera]

VW B'45: pl. 4, fig. 9 [I. 3531, ?Hemiptera]

Acknowledgements. We would like to thank Messrs Crabb, Richens and Taylor (NHM) for photographic help. This is P. R. I. S. Contribution No. 436 for E. A. J.

Addendum. Since this paper was prepared, the BGS collections have been examined by AJR and contain no Wiltshire Purbeck insects; the unsupported records by Woodward (1895) are therefore open to doubt. The Purbeck and Wealden Groups are now referred to as Purbeck Limestone Group and Wealden Supergroup, respectively. *Zalmona* is ?Prophalangopsidae following A. V. Gorokhov and *Psychodites* is a protopsyllidiid *Sinopsocidium* according to D. Y. Shcherbakov. The last entry in Insecta incertae sedis above was originally referred to '?*Cercopis* larva' Figure 3D is I. 3525; 4B, I. 3498; 4C, I. 3505; 6E, I. 3551.

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The Common Stinging Nettle (Urtica dioica L.) in Wiltshire, 1994

by JACK OLIVER

Nettles have always been common in Wiltshire, but are now more ubiquitous and abundant than 40 years ago, when they were the seventh commonest flowering plant in the county. Urtica dioica is now possibly Wiltshire's second most common flowering plant. The results of four main sets of investigations by the author and members of the Wiltshire Botanical Society on the abundance of common stinging nettles (Urtica dioica) in Wiltshire are detailed. Special aspects and implications are discussed in relation to land use and biology.

INTRODUCTION

Two species of stinging nettle are detailed in *The Wiltshire Flora* (Gillam 1993), the common nettle (*Urtica dioica*) and the small nettle (*U. urens*). The first is an abundant plant in Wiltshire, and was the subject of widespread media coverage nationally in October and November 1994. This had followed an article on Wiltshire nettles in *New Scientist* which was concerned with the frequency, size, spread, some aspects of the biology, and the probable ecological significance of nettle abundance in Wiltshire (Pearce 1994). Widespread over-enrichment with phosphates was implicated.

The *New Scientist* special feature was based on work by the Wiltshire Flora Mapping Project (WFMP), the Wiltshire Botanical Society (WBS) the Wiltshire River Monitoring Scheme (WRMS), and the author. This article brings together the relevant publications and the combined evidence of increased prevalence for one of England's, and certainly Wiltshire's, most ubiquitous, successful and frequently monopolistic flowering plants.

BIOLOGY

Wiltshire has five members of the *Urticaceae* (Nettle family). These are the two aforementioned species of stinging nettle, pellitory-of-the-wall (*Parietaria judaica*), mind-your-own-business/baby's tears/hundreds of thousands (*Soleirolia/Helxine soleirolii*) introduced from Corsica or Sardinia, and a third *Urtica*, the very rare stingless nettle (*Urtica galeopsifolia*, recently found at new sites) which may occur in only three or four places in Wiltshire, perhaps mainly in hybridised forms back-crossed with *U. dioica* (Last 1995).

U. dioica is 'A coarse hispid perennial 30–150 cm. Roots much branched, very tough, yellow. Stems creeping and rooting at the nodes .... Leaves opposite, 4–8 cm . . . coarsely serrate . . . inflorescence up to 10 cm . . . flowering June–Aug . . .'. (Clapham, Tutin and Moore (CTM) 1987). It spreads by roots, rhizomes, stolons, rooting stems and seeds. The flowers are small, green, unisexual with four perianth segments, with male and female usually in different plants (dioecious). Dioecy in the *Urticaceae* has evolutionary significance (Lahav-Ginott and Cronk 1993). *U. dioica* is nearly always tetraploid (2n = 48 or 52), and may not be the original native British plant. Our most vigorous nettles may have evolved from complex hybridisations involving *U. dioica* and *U. galeopsifolia* (2n = 26) (Q.C.B. Cronk pers. comm.; Geltman 1992). Wheeler (1995) refers to 30 species of insect specifically associated with *U. dioica*, which is also the food plant for the larvae of five beautiful Vanessid butterflies: Red Admiral, Painted Lady, Small Tortoiseshell, Peacock and Comma. Nettles are so resistant to fungal infections that they are being used in genetic engineering to confer fungal resistance on the taxonomically related English Elm, to protect against Dutch Elm Disease. Nettles are, however, associated with 50 species of microfungi, 11 of which are specific to *U. dioica* (K. Wheeler pers. comm.).

U. dioica is a typical monopolistic plant, one which excludes other species (Crawley 1989). Whilst all authors agree on the importance of the dense leafy shading created by nettlebeds, the emphasis varies between tough branched roots (CTM 1987)

and rhizomes (underground or sub-surface stems) (Stace 1991), or stolons/creeping surface stems (CTM 1987) as the reason for out-competing other plants at and below ground level.

The nutritive importance of nitrates has in recent years given way to emphasis on phosphates as highly influential in the spread and vigour of nettles. New patterns of agricultural, roadside, riverside and woodland management also may be crucial considerations, as are the influences of soil disturbance on seedling survival and the scatter of viable shoot, root, rhizome and stolon fragments.

INVESTIGATIONS IN WILTSHIRE

The main studies undertaken concerned measures of frequency in relation to biology and land use. Study I was an intensive series of counts and observations within 9sq.km; II involved measures along 250 miles of Wiltshire roads; III took numerous river sites; and IV, sites along the entire length of the Kennet and Avon Canal. Study V highlights some special features contributing to the vigour, spread and frequent dominance of nettles.

Study I: all routes in a 9km square, and surrounding areas

IA

Every path, track, road and riverbank was walked in July 1994 within the 9 x 1km square centred on Lockeridge, west of Marlborough (SU 145675; see maps, Figures 1 and 2). Actual nettle counts were made per 100 metres, applying to either or both sides, including nettles insinuating flanking fences, ditches, riverbanks and hedges (Oliver 1995).

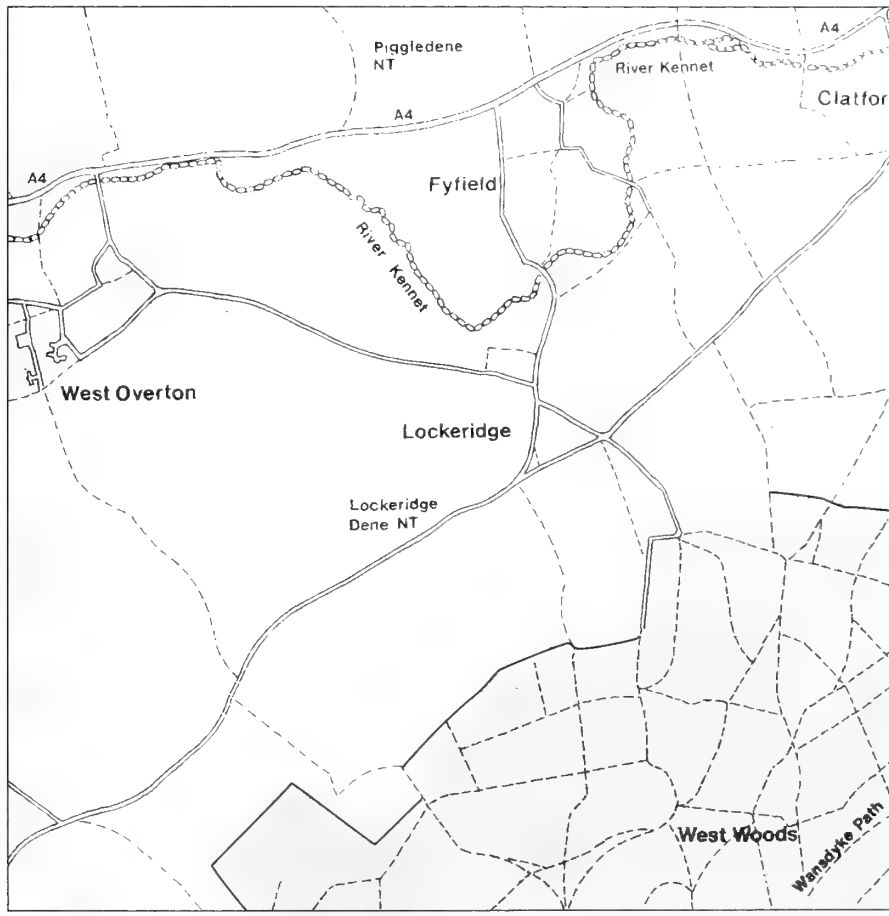

Figure 1. Nettle survey route map, centred on Lockeridge, west of Marlborough (SU 145675). Scale: 4mm = 100m
Key: ═══ roads; ------ tracks or rights of way

Figure 2. Nettle density route map, July 1994. Scale: 4mm = 100m
Key: no coded numbers on routes: no nettles; **1**: 1 nettle (or 2 seedlings) per 100m (either side); **2**: 2–10 nettles per 100m; **3**: 11–100 stems per 100m; **4**: 101–1000 stems per 100m: (semi-interrupted) fringes on or near both sides of route; **5**: 1001+ stems per 100m: (semi-interrupted) bands 1.5m thick on or near either side (or sometimes obstructing route or invading river bed), or substantial adjacent nettlebeds

Horton (1975) refers to three roadside habitats: the 1–10-metre wide cut grassy verge, uncut vegetation, and the hedge, scrub or fence borders on the far side. Roadside habitats could be more complex than this; for instance, the A4 has a cycle path on the south side, and cutting can be close, roughly strimmed or intermittent. The general rule applied was to consider 5 metres out from road verge, path or river edge. More than 1000 stems per 100 metres indicates either (semi-)interrupted nettle bands 2 or more metres thick, and/or adjacent nettlebeds. From 100 to 1000 stems per 100 metres indicates either the (semi-)continuous fringing curtain of nettles by hedge/fence/path edge; or (semi-) continuous infiltration by nettles of coarse-cut grass or coarse vegetation; or interrupted but fairly frequent denser clumps, or re-sprouting strimmed stalks and stolons.

Forty-six out of the total 53km were nettled to a greater or lesser extent (Table 1, map, Figure 2 and Oliver 1995). Most flanking fences had between 10 and 1,000 nettle shoots per 100 metres, and the same applied to the roadside hedges (usually hawthorn, compare Grose 1957, 700–03). Some tracks and riverbanks were so overgrown with nettles that stinging was inevitable, without protection, from some of the 2-metre high riverside and wet woodland nettles.

Table 1. Prevalence of *U. dioica* along all routes within 9 x 1 km square centred on Lockeridge, west of Marlborough (SU145675). Lengths in kilometres. (Reproduced with permission from *B.S.B.I. News* 68.17 (Oliver 1995))

	COUNTED, PER 100 METRES FOR ENTIRE LENGTHS							
	Nettle-free	*1 nettle or seedling*	*2–10*	*up to 100 plants*	*101–1000 stems*	*1000+ stems*	*All nettled lengths*	*Total lengths*
River Kennet banksides	0	0	0.50	0.75	1.25	2.25	4.75	4.75
A4, fringes to verges	0	0	0	0	2.00	1.25	3.25	3.25
Minor roads, fringes to verges	0.25	0.50	0.90	1.25	6.00	3.10	11.75	12.00
Track-sides, rights of way (villages, farmland, N. Trust)	1.25	0.35	0.50	1.50	3.85	6.40	12.60	13.85
Track-sides, rights of way (West Woods)	5.75	4.25	3.00	2.00	1.75	2.25	13.25	19.00
All routes	7.25	5.10	4.90	5.50	14.85	15.25	45.60	52.85

Wayside nettles did not appear in the following four habitats:

1. deep-shaded paths through the bluebell expanses under dense beech (*Fagus sylvatica*), *Thuja* or spruce plantations in West Woods;
2. some paths *across* (in sharp contrast to *alongside*) fields, *in the absence* of sarsens, fences, ditches, dumps, wire or obstructions where nettle rhizomes and stolons abound;
3. sections of intensively mown, strimmed, weeded and/or weed-killed verges; and
4. undisturbed mixed woodland with a ground cover of bracken, bramble, *Dryopteris* spp., or large woodland grasses, as alongside the ancient Wansdyke West Woods path.

In general, the most dense wayside nettle concentrations were:

1. where paths, roads or river ran next to agricultural land, especially near cattle, farm buildings, etc.;
2. on paths and roads *between* fields (compare item 2 of the preceding list);
3. in, alongside and near ditches: the ground between ditch and track/hedge/path/road was usually dominated by nettles; ditches and hedges functioned as permanent reservoirs from which nettle stolons and rhizomes re-colonised mown, strimmed, grazed and weed-killed areas;
4. on paths near dumps and waste areas; dumps also served as permanent reservoirs for nettle rhizomes and stolons, from which nettles colonised adjacent areas;
5. on many riverbanks, quite often fringing the immediate water's edge; again, nettlebeds were most dense where cattle fences or ditches were close to the river;
6. on some damp tracks through and alongside disturbed areas in and around West Woods; often seedlings were seen after tree felling, but the dense nettlebeds could appear in subsequent years before the beech or spruce canopies became dense again (compare items 1 and 4 in the preceding list);
7. on paths near rabbit warrens and badger setts (compare Grose 1957, 714); and
8. on paths through or alongside Piggledene National Trust (sarsen) reserve (at least in July 1994).

Nettle stolons can be found under rough grass from late December to March, but vertical nettle growth starts to dominate other vegetation from late May, and is usually obvious until early December unless there have been a number of early frosts. Competing herbaceous vegetation conspicuous in this study included: cow parsley (*Anthriscus sylvestris*, to 150cm), which dominated stretches of roadside (but seldom tracks or paths) from April to early June; false oat-grass (*Arrhenatherum elatius*, 50-150cm high when uncut), the dominant rough roadside verge grass; rough meadow-grass (*Poa trivialis*, 70-90cm high); cocksfoot grass (*Dactylis glomerata*, 150cm uncut); and large vigorous agricultural strains of a perennial rye-grass (*Lolium perenne*).

Sometimes any of these, including nettles, could be invaded by brambles, docks or thistles, or become festooned in high summer by cleavers (*Galium aparine*) and/or hedge bindweed (*Calystegia sepium*).

Small grasses (such as annual meadow-grass, *Poa annua*) and small or rosette wayside herbs such as dandelion, daisy, creeping buttercup, clovers, knot-grasses (*Polygonum aviculare* and *P. arenastrum*), plantains (*Plantago major and P. lanceolata*), mayweed, silverweed and shepherd's purse (*Capsella bursa-pastoris*) were still common on stony edges and in closely and regularly manicured grass verges. However, these little wayside plants were always pushed to the edges by the tall wayside species listed above and, in these nine square kilometres, were no competition for either the big wayside and agricultural weeds in general, or nettles in particular.

IB

Both literally and metaphorically, it would have been narrow to ignore the abundant nettling away from the routes in these nine square kilometres, even though no systematic counts were made. Nettles were frequent, abundant or continuous in most hedges, by most field-sides and ditches, and usually abundant on and around farmland, waste areas, dumps and rabbit warrens in general. There were huge nettlebeds on National Trust land, especially Piggledene, and nettles surrounded or infiltrated sarsens and fencing. Some downland localities were invaded by nettles, especially when cattle-trodden.

The dense beech tree cover in the bluebell areas of West Woods precluded nettles, as did the spruce and *Thuja* plantation shading, but nettles surround West Woods and often became abundant in tree-felled areas as well as dominating many edges, clearings and open forestry tracks. Bluebells rely on rapid spring photosynthesis before the beech trees come into leaf and cast too deep a shade for nettles to persist.

White dead-nettle is very common in Wiltshire as a whole, and tends to persist (and even flower) throughout the winter in this 9 km square, including West Woods. Another two members of the mint family, ground ivy (*Glechoma hederacea*) and the naturalised silver-leafed archangel (*Lamiastrum galeobdolon ssp. argentatum*) covered large areas of ground in and at the edges of West Woods. These three plants are mentioned because they all can persist as an under-storey beneath the summer canopies of stinging nettles. They all seem to have a five-week window of rapid photosynthesis and/or growth in March and April *before* becoming overtopped by May or June. They therefore can seem to be the dominant ground cover in winter and spring but disappear entirely from view beneath stinging nettles in summer and autumn. A similar seasonal transition occurs with various grass species seemingly dominant in winter, but overtopped in high summer and autumn by the nettles.

Some fields had fairly pure crops, and other pasture fields were dominated by almost pure monocultures of vigorous strains of perennial rye grass (*Lolium perenne*, and the hybrid *Lolium x boucheanum*), which thrive on soil enrichment. However, many fields had numerous blebs of nettles within the pasture grass. This feature is illustrated, without comment, for Sheepscombe in the Cotswolds on the front cover of the journal *British Wildlife* (du Feu 1994). In other fields the nettles were dominant and TV cameras in October 1994 tracked two of the four vistas south of the A4, down embankments into the Kennet Valley. Fringing nettlebands south of the A4 were linked by vast agglomerations of pasture nettlebeds, and pastures heavily infiltrated by cattle-tramped nettles, to the dense ribbons of nettles fringing the River Kennet. Many hectares at each vista were severely affected.

Study II: 250-mile Wiltshire roadside nettle survey

Study I was very intensive but limited to a small part of Wiltshire. As the Lockeridge area could have been rather exceptional, an area was surveyed further afield, and this time by car. Horton (1975) referred to 2,365 miles of metalled roads (excluding the M4 motorway) in Wiltshire. He estimated that the associated verges represented 5,000 acres of roadside habitat, mainly grassland. One-tenth of the total mileage seemed a reasonable sample, providing that measurements were continuous, unselective and geographically diverse.

Some verges, especially on certain stretches of A-roads and bypasses, could be very broad, so 10 metres out from the road edges or roadside paths were allowed. As in Study I, lengths with the thin fringe of nettles in boundary fences or hedges and/or nettles infiltrating the grassy verges, as well as the more conspicuous roadside clumps were counted. Two mileometers, continuous and resetting, were used to measure road verge-side nettling along a spread of Wiltshire's main and some minor roads, but not including the M4. Actually, outside urban areas, the reverse process was easiest: measurements of any one-tenth of a mile stretch *without* nettles on

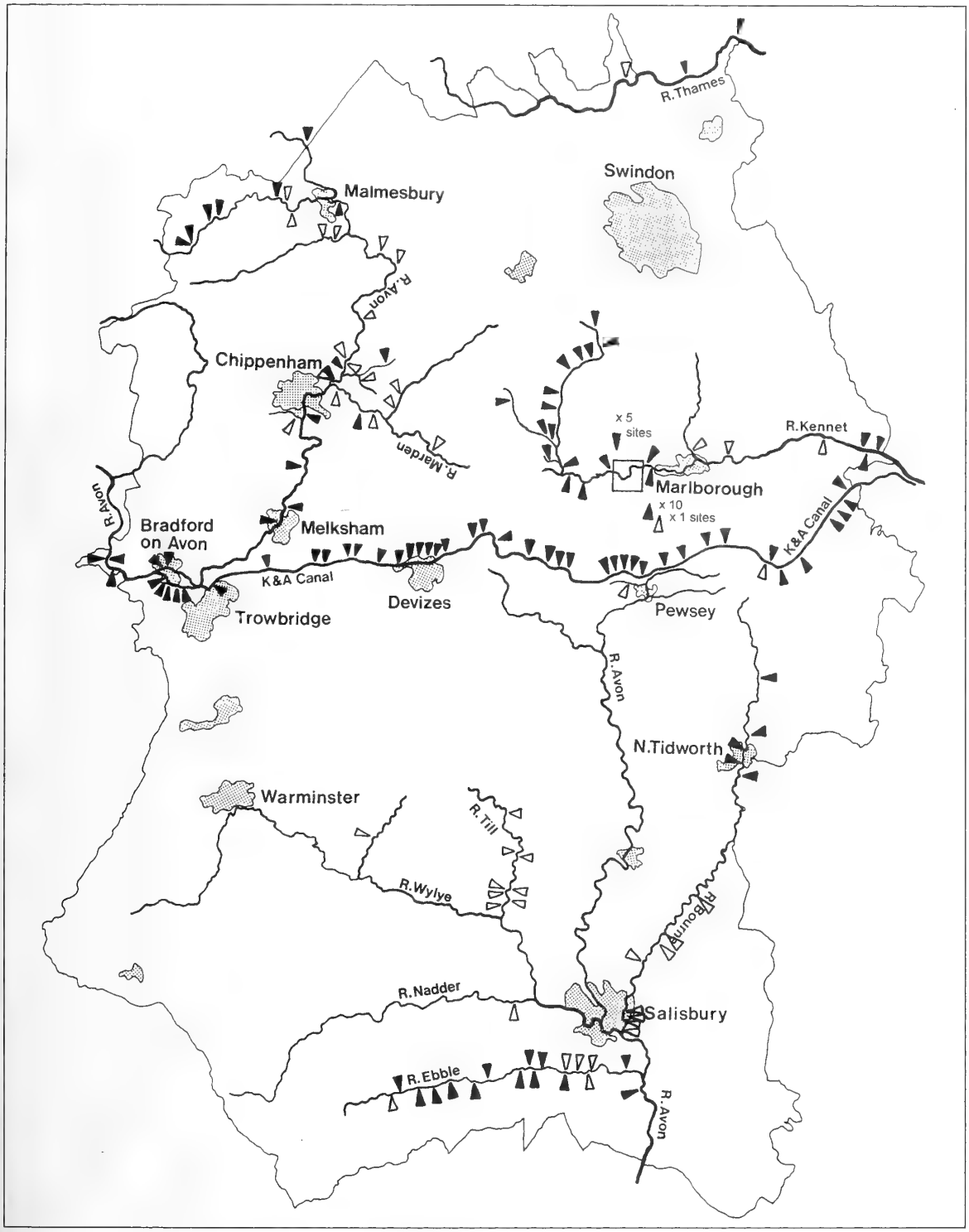

Figure 3: Map showing nettle survey sites in Wiltshire, including 9km square for Study I (west of Marlborough).
Key: ▽ sites; ▼ including subsites surveyed by Dec. 1994

either side. It was not difficult in October 1994, even when some nettles had been blackened by an early frost, and others had been strimmed; no mistakes were made even at 20–40 miles an hour, in discriminating between the very common white dead-nettle (*Lamium album*) and occasional patches of hedge woundwort (*Stachys sylvatica*), even when these vegetatively-similar plants were not in flower. Annual dog's mercury (*Mercurialis annua*) on roadside stonework or in gutters could look like a small frosted nettle if not seen clearly, and caused several awkward stops in towns and villages.

There were six main sets of data gathered from the following routes (the towns being shown on the map, Figure 3):

1. A4 road from east of Savernake Forest (east of Marlborough) to near the county boundary west of Chippenham. Contiguous minor roads east of Marlborough and west of Chippenham.

2. A363 north-west of Bradford-on-Avon, south-east through Trowbridge, Westbury, Warminster (bypass); A36 to Wilton west of Salisbury. Minor roads around Bradford-on-Avon.

3. A3094 south-west of Salisbury. Minor roads north, south and west of Salisbury.

4. Main roads around Devizes: A360, A361 (to the A4), part of A342. Minor roads linking these.

5. A429 Chippenham to Malmesbury; A420 towards Swindon. Minor roads linking these.

6. A345 and A338, both linking Marlborough and Salisbury; A338 and A36 south and south-east of Salisbury. Contiguous minor roads south of Marlborough, and south-east of Salisbury and to south Wiltshire borders.

Table 2 shows the results. Only the A363/A36 route (item 2 above) had less than two-thirds total roadside lengths nettled to a greater or lesser extent. There were usually considerable and varied lengths of dense roadside nettling, especially on the minor roads. Nettle bands and fringes tended to be set back beyond the grass verges on most of the A-roads. For these, and along B-roads, the most continuous plant was false oat-grass (*Arrhenatherum elatius*). Also very common were perennial rye-grass (*Lolium perenne*) and cocksfoot (*Dactylis glomerata*). Occasionally, fescue and meadow grasses (*Festuca* and *Poa spp.*) dominated the most carefully manicured verges. This was an autumn survey, but non-flowering shoots of cow parsley (*Anthriscus sylvestris*), a conspicuous spring-time road verge plant, were easily identifiable from the car in October. Nettles were often dominant right up to the tarmac on some minor roads and lanes and were, in 1994, more continuous on all roadsides than ribwort plantain, cocksfoot grass, dandelion, smooth meadow-grass (*Poa pratensis*) and cow parsley (compare Grose 1957, 723).

The five main nettled roadside situations were:

1. infiltration of coarse grass verges;

2. fringing verge edges, hedges and fences;

3. clumps and bands semi-continuously monopolising other roadside vegetation;

4. roadside ditches, nettles spreading out to dominate continuously all other species together; and

5. scattered or dotted individual roadside nettle plants.

Nettle-free lengths were mainly:

1. urban/suburban/village locations (although nettle seedlings and plants could often be seen on stonework, by neglected gardens and in streets);

2. past industrial estates with close-mown lawns (as for parts of route 2 preceding, A363 industrial estates);

Table 2. Wiltshire road verge-side nettle survey. Length in miles for A-roads (A) and minor roads (BC)

	ROUTES														
	1A	*1BC*	*2A*	*2BC*	*3A*	*3BC*	*4A*	*4BC*	*5A*	*5BC*	*6A*	*6BC*	*All A*	*All BC*	*All Roads*
Lengths studied	32.25	6.75	35.5	7.5	4	17	26	17.25	13	8.25	65	17.75	175.75	74.5	250.25
Nettled lengths	28.25	6.5	22	6	3.5	15.5	21.5	15.25	11	7.5	56.25	16.5	142.5	67.25	209.75
% nettled	88	96	62	80	88	91	83	88	85	91	87	93	81	90	84

3. some bypasses or other embankments with thin soil, or thin scrub showing chalk, *away* from agriculture (again mainly route 2); and

4. a few dark-shaded roadsides dominated by ivy.

Study III: river surveys

IIIA

In 1994 Wiltshire River Monitoring Scheme (WRMS) workers completed simple plant checklists for 32 riverside sites. The WRMS had been set up because of concern about the state of Wiltshire rivers, especially those drying out. Measurements included flow rates, depths, chemical analyses and invertebrate counts, together with a plant survey for each site.

The common nettle was found to occur at 31 out of the 32 sites (97%). It was not only more prevalent than any other single riverbank/riverside species, but surpassed combined counts for groups such as 'thistles' which comprise four common and several less common riverbank species. This 97% corresponded exactly to the much more detailed results of the 1992–4 Wiltshire Botanical Society (WBS) quantitative research covering 119 sites and 253 subsites throughout Wiltshire (see map, Figure 3 and Study IIIB ensuing).

IIIB

The barriers of nettles around village and farm ponds, lake margins, canal banks and even dewponds were familiar obstructions during the Wiltshire Flora Mapping Project (WFMP) surveys in the six years before publication of the 1993 *Wiltshire Flora*. For each of the 119 sites and 253 associated subsites (see Figure 3) the WBS survey (1992–4) used the simple 5-point scale as used by Grose (1957, 677–79) to assess the relative frequencies of all riverbank and channel vascular plant species: A = Abundant (10), F = Frequent (6), O = Occasional (3), P = Present (1) and Absent. Areas and methods were comparable to Grose's studies, but WBS workers usually credited more A scores than Grose. Reasons for this include four seasonal visits and the three habitats (at least) at every site: water (or channel), water-margin, and vertical, sloping or marshy riverbanks. Water-margin emergent aquatics such as water mint (*Mentha aquatica*) or water forget-me-not (*Myosotis scorpioides*) might only become dominant in autumn, and like any of the common reed or flote-grass species, could invade channel and/or river banks depending on varying water levels. Nettles do not like their roots continuously in water, when the leaves go yellow, but thrive on intermittent inundation. They could therefore infiltrate river margin vegetation in cow-poached meadows or down steep or vertical slopes, and invade the channels of dried-out winterbournes, but did less well in riverside marshland. Further up the banks, there could be a seasonal sequence of dominant grasses flowering from June to September: rough meadow-grass (*Poa trivialis*), yorkshire fog (*Holcus lanatus*), couch (*Elytrigia repens*) and creeping bent (*Agrostis stolonifera*). Any of these, or any one of the three common reeds could dominate one bank at different times in summer or autumn. Another bank might be a grazed perennial rye-grass (*Lolium perenne*) river margin. On the other side of the bridge, one bank might be 90% nettles draped with cleavers (*Galium aparine*) or bellbind (*Calystegia sepium*). The fourth bank might be in deep shade with ivy ground cover. However, the same site in January to April could have one or more banks dominated by snowdrop, celandine or cow parsley in turn.

From May to November, nettles were ubiquitous, poking through riverside brambles, competing with ivy, terrestrial or aquatic grasses, infiltrating reeds, amongst stands of great willow-herb (*Epilobium hirsutum*), or branched bur-reed (*Sparganium erectum*), on stonework, lining water margins, dominating slopes and tops of banks, forming narrow semi-continuous fringes, broad parallel bands or dense nettlebeds between field fences and water margins (Oliver 1993 a+b, 1994 a+b, 1995). Table 3 shows that *U. dioica* is now the dominant riverbank and riverside species in Wiltshire, both in distribution and abundance. This is true for little (sometimes ditch-like) tributaries, and also beside the Thames, both Avons and the Kennet where these are greater than 10 metres across. Some 97% of the sites and 97% of the subsites were nettled to a greater or lesser extent, and in 67% of the sites, the stinging nettle was either the most common, or equally most common riverbank/riverside species. No other riverside or riverbank plant, however abundant over limited stretches, now approaches the *repeated* frequencies or abundance of nettles. Second to eighth places in frequency go to cleavers, reed canary-grass, great willow-herb, rough meadow-grass, false oat-grass, creeping bent and cow parsley (*cf.* also Grime *et al.* 1989 for nutrient-loving species associated with nettles).

Table 3 and map, Figure 3, show that there were many upstream sites studied where the channel was less than 10 metres across, including winterbournes. Three types are here mentioned:

Table 3. Nettles at river sites (and subsites) throughout Wiltshire, and their frequency relative to the other riverbank/riverside species, 1992–1994. See also map, Figure 3

River systems	*Widths (metres)*	*Nos. of sites*	*Nettles*		*Orders of nettle commonness per site*						*Subsites*		
			Present	*Absent*	*1st*	*1st equal*	*2nd*	*3rd*	*4th*	*Less frequent*	*Nos. of subsites*	*Nos. nettled*	*% nettled*
Salisbury Avon	10+	2	2	0	1	1					3	3	100
and tributaries	<10	40	38	2	10	11	4	4	5	4	58	55	95
Bristol Avon	10+	15	15	0	6	8		1			31	30	97
and tributaries	<10	20	18	2	5	9	1	1	1	1	33	30	91
Kennet and	10+	19	19	0	10	2	4	1	1	1	58	57	98
tributaries	<10	20	20	0	12	3	3	1	1		72	72	100
Thames	10+	3	3	0	1	1	1				6	6	100
Totals		119	115	4	45	35	13	8	8	6	261	253	97

1. channels traversing old-fashioned water meadows or marshes - such channels are now very uncommon;
2. steeper-sided channels or ditches, created to improve agricultural drainage and intermittently flowing hard only after storms or heavy winter rains or snow melts (very common); and
3. grassy winterbournes, often cattle-poached, mapped as rivers but dry for half to three-quarters of the year (very common).

Nettles were only occasional alongside 1, common in the grassy banks of 3, but invariably superabundant for 2. The uppermost 13½ miles of the River Kennet in summer and autumn have been described as converted to '... huge, almost continuous, double ribbons (or broad single ribbons where the channel is invaded) of dense stinging nettles. Broken ribbons of riverside nettle growth even survive on pasture treated with selective weedkillers favouring grasses (Oliver 1991a). This was the case for nearly all ditch-like upper tributaries, even when moderately (but not totally) shaded.

Study IV: canal survey

The Kennet and Avon canal is 65km (40 miles) long in Wiltshire; 44 sites and several lengths between them were studied in 1994 (see map, Figure 3). All sites but one were divided into four subsites, making 173 in all, each about 200 yards long. Thirty-seven of the 44 sites were by bridges or wharfs, and seven were simple lengths.

On the non-towpath side, between May and late November, nettles often fringed the water and commonly insinuated other vegetation up the bank to the fences or field boundaries. On the towpath side, nettles again often fringed the water and were common up the bank, but were usually separated by the grassy or hard towpath (and grassy verges) from the strip of rough ground with coarse vegetation (often nettled, even if strimmed) and another fringe of taller vegetation around fences, hedges or other boundaries, where nettles were again frequent or often abundant. Bridges, locks and wharfs were often closely manicured for 100 yards or so, but with nettles frequent beyond and outside the mown or weed-killed walks and working areas. The very common mown grass on towpaths and by locks, wharfs and bridges was usually perennial rye-grass (*Lolium perenne*). Common water's edge vegetation included, amongst other species, reed sweet-grass (*Glyceria maxima*), reed canary-grass (*Phalaris arundinacea*), great willow-herb (*Epilobium hirsutum*), branched bur-reed (*Sparganium erectum*) and some sedges (*Carex acutiformis, C. riparia, C. paniculata, C. hirta and C. otrubae*). Nettles could be interspersed amongst any of these except in continuous standing water. On the whole, they were denser up the banks in competition with bramble, coarse grasses like cocksfoot, couch and false oat-grass, and other common weeds such as cow parsley, docks and dandelion.

No site was free from nettles. One hundred and sixty-three out of 173 subsites (94%) were nettled, at least beyond and outside mown and weed-killed wharf and lock areas. Nettles were abundant at 63, and frequent at 65, of these subsites. The fringes of nettles *between* chosen sites were more continuous than those *at* the (mainly bridge and wharf) sites in 1994, and water margin fringes were frequent. In contrast to the findings of Grose in the 1950s, nettles now form fringes along the Kennet and Avon canal by waterside, banks and towpath in a 40-mile waistband across the middle of Wiltshire from eastern to western county boundaries.

Study V: special features

Roadside and hedgerow nettles in Wiltshire generally grow within the 2–4 (occasionally 5) ft height limits given in national floras. However, many riverside, ditch and woodland nettles in Wiltshire are well over 6ft. The writer has recorded a 3.38m (11ft 3½in) nettle from Bodenham in south Wiltshire which was growing from the rising waters of the Salisbury Avon with others of comparable height (Oliver 1995). Nettles from the Kennet and Bristol Avon were often taller than 6ft, and some members of the WBS were discouraged from river surveys because of the height and density of nettle beds.

Nettles in many agricultural, riverine, woodland and waste sites showed remarkable regenerative powers both by seedlings and vegetative reproduction. In particular, stolons (not mentioned in most British floras) could grow over 1 metre in length in the winter months. These aspects are detailed in three papers (Oliver 1993 a+b, 1994 a+b and 1995). Formidable underground networks of rhizomes were frequently so dense that few or no other plants could compete. These, which are usually 3-45cm below the surface, were not measured. Wheeler (pers. comm.), however, sampled the nettle rhizomes under 1sq. metre of riverbank: the total length was an astonishing 63.41 metres!

SUMMARY OF PREVALENCE IN 1994

The four main studies show repeated or sometimes continuous abundance of stinging nettles in summer and autumn months on Wiltshire river and canal banks, often fringing water, in and by ditches, along field-sides and hedgerows and fences, amongst dumps and rabbit warrens and badger setts, and as usually the major component of track-side vegetation. On roadsides, nettles now form the usual fringing curtains behind the cut grass verges, but frequently form thicker bands and usually infiltrate rough-cut roadside grasses (mainly *Arrhenatherum elatius*, false oat-grass) to a greater or lesser extent. The findings from Studies II, III and IV show county-wide *networks* of nettles, and therefore represent more than *patchy* abundance. Such networks are most continuous in agricultural areas but thin out and can almost disappear in unenriched habitats. Wiltshire is however mostly heavily farmed.

Fields of grass, the plants of open downland, or the masses of grasses and buttercups conspicuous in early summer might preclude consideration of *U. dioica* as a main contender for one of the top three most common of Wiltshire's flowering plants. Fields cover greater areas than field margins. However, Study I noted the invasion of some fields by nettles in the Kennet valley, either as numerous 'blebs' amongst the rye-grasses, or as more continuous heavy infiltration obvious in mid summer and autumn. Some National Trust grassland was even more heavily nettled than adjacent farmland. Fences, obstructions, margins, sarsens, depressions and, above all, ditches create 'reservoirs' for nettle rhizomes and stolons to invade and re-invade grassland and downland. Perhaps nettles were well controlled in three-quarters of the fields, but could be seen to be occasional, frequent or abundant in the remainder, covering more ground than any one species of grass, buttercup, dock or clover when such infiltration occurred.

In woodlands, the nettles showed equal opportunism. The deep summer shade of the mature beech canopies allowed large areas of ground to be almost exclusively covered by bluebells in West Woods. However, wood margins, tracks and clearings could become densely filled with nettles within two years, and nettles often thrived in lesser shade as a frequent or even dominant summer and autumn ground cover over wider areas of woodland. After tree-felling, the few nettle seedlings could progress to immense nettlebeds in due course.

From 1992, the WBS has had numerous field days, and the writer cannot recall one in Wiltshire when nettles were not seen. Even when visiting heathland, marsh or Salisbury Plain chalk downland, nettles can be found along roads, watersides, parking areas, tank ruts, cattle troughs, areas with rabbits or badgers and wherever there has been farming. Thus nettles are now found in virtually all of the 65 Wiltshire habitats described by Grose (1957), even if mainly confined to margins such as track-sides, around cattle troughs or car-parking areas. This ubiquity of nettles throughout the county is backed

by the findings of the WFMP that *U. dioica* is now found in at least 96% of the Wiltshire tetrads (Gillam 1993). This county coverage is matched by six other species: hawthorn, elder, cleavers, dandelion, yarrow and the creeping thistle (*Cirsium arvense*). None of these six species covers the ground as densely as nettles frequently do. The four studies in this paper demonstrate that in 1994 *U. dioica*, as well as being ubiquitous, is frequent, continuous or abundant as a network throughout the county of Wiltshire, and that this has been obvious from May to early December throughout the 1990s.

DISCUSSION I: INCREASED PREVALENCE BETWEEN THE 1950s AND 1990s

'. . . I've lived here 50 years [Bodenham, S. Wilts]. . . every year more nettles, especially these past few years . . .' Unprompted comments by farmers and others should be heeded, but actual measurements are preferable.

The Wiltshire Flora (Gillam 1993) data showing *U. dioica* to be (equally) the most widely recorded single species merely indicates *ubiquity over* rather than *density within* the county tetrads. The 96% for nettle and the other six very common species may just mean feeble coverage of the remaining 4% of the tetrads rather than having specific significance. From Wiltshire's 30 common grass species, only cocksfoot (*Dactylis glomerata*) was recorded as reaching 95% tetrad coverage; but this is, in any season, the most easily identifiable grass!

Donald Grose (1957, 671–767) made a determined and comprehensive quantitative study of the vegetation of Wiltshire in the 1950s. Nettle did not feature very high on most of his 65 habitat lists, and consequently he seemed surprised that it came as high as seventh in his overall final frequency list (*ibid.*, 765). He explained this by its occurrence '. . . in a very wide range of habitats', but by this he meant 23, just over one-third of the total. Combining the findings of the preceding four studies with the numerous WBS and WFMP field days over the last five years in varied habitats throughout the county, it can be said with confidence that *U. dioica* is *at least* occasional, if not frequent or abundant in at least three-quarters of the Wiltshire habitats. It is seen on every outing, usually in quantity.

Grose (*ibid.*, 734–41) never recorded nettles in any of the top 30 species in any of his water/riverside lists. Even if allowance is made for his main attention being directed at channel and water-fringe rather than bank-side species (a hard enough discrimination), it is inconceivable that he would not have mentioned nettles in the 1950s, even if they were only one-tenth as abundant as they now are in the 1990s. They now, after all, often fringe the water's edges as well as sometimes invading the channel and frequently dominating the sloping banks.

Study III was concerned with rivers rather than lakes or pools, but the latter in the early 1990s were often just as densely nettle-fringed as the rivers, if not more so. This often applied even to dew ponds on the downs. Grose (*ibid.*, 737–41) included water margin and bank-side species in his 12 canal lists, including the Kennet and Avon Canal. Nettles again were not mentioned in Grose's top 30 species. Study IV shows their ubiquity and frequency now at all canal sites, and often they were even more continuous and/or abundant between (rather than at) the sites. As with the rivers' immediate waterside fringes, nettles commonly occurred at the canal water edge. Substantial stretches of the canal in October 1994 had nettles touching the water (although not usually growing from it). Direct inter-species quantitative comparisons were not made for Study IV, as had been done in Study III, but the writer's firm impression was that nettles were the commonest canal bank species, and the commonest fringing species in the fences and hedges bounding the canal. *U. dioica* also seemed the strongest contender for the commonest single species amongst the canal immediate waterside vegetation (see Study IV for other possible contenders). Only on the mown areas, by bridges, locks and short-cut grassy verges was perennial ryegrass (*Lolium perenne*) dominant, the most continuous flowering plant on the manicured parts of the canal towpath. Once again, the contrast between current findings and Grose's studies is extremely pronounced. Nettles frequently reign in the 1990s and even when controls are attempted, they are awaiting their opportunities to colonise and recolonise most waterside habitats.

Grose had nettles as his most common single species for waste ground (*op.cit.*, 756), but even so, averaging just over 'occasional' status, and first-equal for rabbit warrens (with 'abundant' status, *ibid.*, 714). Other high levels were third for scrub (p. 697), equal third for much disturbed chalk grassland ('occasional' status, p. 717), eighth for woods ('occasional' status on average, p. 692) and ninth for hedgerows (less than 'occasional' status, p.703). Except for the last two, these are in line with current findings. With respect to hedgerows and woods, nettles are now much more common. Many, perhaps most, hedges are now nettled. The only hedgerow

species now likely to exceed nettle in frequency is hawthorn, the usual main hedging plant.

The most striking differences between the 1950s and 1990s are illustrated by the four studies here. Little wayside weeds, annual meadow-grass (*Poa annua*) and ground-rosette plants are still very common, but the dominant wayside weeds are bigger in the 1990s than they seem to have been in the 1950s (compare Grose 1957, 720–29). Lush enriched meadows nurture large or vigorous and rapidly seeding strains of perennial rye-grass which colonise waysides whether cut, mown or left to seed in the fields. In such agricultural areas, other coarse grasses such as rough meadow-grass (*Poa trivialis*), cocksfoot, tall or false oat-grass (*Arrhenatherum elatius*) and couch also coexist with other big nutrient-loving farmyard weeds such as cow parsley, docks, thistles and, above all, nettles. Tall oat-grass formed continuous main roadside verges in the 1950s (Grose 1957, 721-23). This is still so, but all these large wayside weeds, especially nettles, are squeezing the mosaics of smaller ones to the margins. The little weeds, plantains, dandelions, daisy, creeping buttercup, annual meadow-grass etc., mostly still do very well on stony and mown margins and verges, and in some well-grazed meadows, but stand less chance in competition with the mass of the taller wayside weeds, especially when these are blanketed by the (also often abundant) bindweeds and cleavers in high summer.

In short, observations in the 1990s indicate frequent summer and autumn nettling in most Wiltshire habitats, rather than the occasional occurrences in the 35% found by Grose in the 1950s. Even within Grose's 35%, nettle frequency levels seem to have very much increased. Fields are invaded by nettles in the absence of effective controls, and nettles abound in farmland. *U. dioica* was not noted to be a dominant roadside species in Wiltshire in the early 1970s by Horton (1975), although he did refer to its increased spread at one of the verges under study. Specific measurements in the studies I–IV preceding prove nettle ubiquity and vastly increased abundances in the 1990s by A-roads, lesser roads, tracks, footpaths, rivers and canals.

References to problems caused by the spread of dominance of big grasses like creeping bent (*Agrostis stolonifera*), upright brome (*Bromopsis erecta*) and false oat-grass (*Arrhenatherum elatius*) in the new *Wiltshire Flora* (Gillam 1993, 22, 28, 85, 87, 91, and 341) makes the present writer hesitate to place nettle firmly first in *abundance* amongst all flowering plants in Wiltshire in the 1990s, but it is now the most ubiquitous, and has certainly overtaken ribwort plantain (*Plantago lanceolata*), Grose's number one. On the basis of studies I–IV, *U. dioica* might be even more abundant than *any one* of Wiltshire's 30 or so very common grass species, with the probable exception of the agriculturally abundant perennial rye-grass. There is therefore a case to be made for *U. dioica* being, in 1994, Wiltshire's second, rather than seventh, commonest wild flowering plant – or first if agricultural strains of grass (especially perennial rye-grass) are excluded.

DISCUSSION II: POSSIBLE REASONS FOR INCREASED NETTLE PREVALENCE

The ensuing points are tentative. They are linked as far as possible to direct observations.

1. *Chemical enrichment*

Phosphate (with nitrate) excess from farming, sewage, animals and man has been blamed for the spread of nettles in Southern and Central England in the 1990s (Pearce 1994). Grant (1994) compared this abundance to marine or other aquatic 'algal blooms' but implied permanency rather than a transient phenomenon.

These studies I–IV certainly confirm heavy nettling to be associated with agriculture. The habitats emphasised by Donald Grose with thin soils, the swards of little rosette and low ground cover plants, old-style hay pastures, or hedges and woods with only sparse, occasional or no nettling, all only occur away from enriched farmland and top-dressed fields. The problem is that measurements of phosphates and nitrates by the National Rivers Authority and others do not show excess levels. Is it possible that phosphates are held in *organic chemical reservoirs* or that nettles (like lichens) provide a more reliable measure as biological indicators than direct chemical testing?

Intensive testings of the physiochemical environments of lichens on the Fyfield Down sarsens were made in 1986 and 1987 (Dillon *et al.* 1992). Lockeridge Dene and parts of Fyfield Down and Piggledene sarsen National Trust reserve fell within the area of Study I. Nettles abound around the sarsens on these reserves, but were kept under some control in Lockeridge Dene in 1994. In Piggledene, numbers of sarsens were submerged in nettlebeds, presumably influencing lichen survival. Comparable studies on nettles show such facilitating or competing variables for field-side nettles to be much more violent than for terricolous lichens. These are outlined by Grime *et al.* (1989) and detailed by

Wheeler (pers. comm., 1995). In short, phosphates encourage nettle seedling establishment, and nitrate enrichment stimulates the very vigorous growth rates.

2. *Ditching and drainage*
Study III showed nettles to be abundant by the Wiltshire rivers. Most rivers, like the Kennet, have been much changed since the 1950s by greatly increased surrounding drainage, causing rapid agricultural and roadside run-off. There are now ditches rather than flattened streams in marshy meadows in the upper reaches. This change favours nettles rather than the older patterns of sedges, rushes and reeds because of the rapid inundation and drying-out sequences. 'Meargealle', the old English marsh marigold, which may have given its name to Merleberge in the Domesday Book (Grose 1957, 97), now stands little chance along the Upper Kennet in competition with nettles in the environs of Marlborough today. The river Bourne, also very heavily nettled in many stretches, can be, over many miles, either quite dry or heavily flooded (Delair 1991).

These rapidly alternating *river* water levels, dry → wet → dry → flooding → dry, do not explain why nettles so often also fringe the *canal* watersides (Study IV) in such abundance, although there may be a bank-side zone of rising and falling canal water in the summer months, which favours the spread of nettle rhizomes and the health of nettle roots. Human activity, whether fishing or enrichment or disturbances such as dredging and wash from boats, will also favour canal-side nettle spread.

3. *Disturbed ground*
This is given in floras and ecology articles as a (or the) main cause of nettle spread, but there are contradictory elements. On the one hand, the tranquil ancient West Woods Wansdyke path has a mixed flora free from nettles (see Study I), whereas nettles can rapidly colonise clearings in logging areas of West Woods. Also, nettles abounded around badger setts, rabbit warrens, neglected gardens, neglected urban and village stonework and often where earth had been recently dumped. However nettles also formed permanent fringing curtains to hedges, roadsides and track-sides well away from hooves (Studies I and II); they often dominated dry ditches, ancient dumps, sarsens, fences and wire entanglements a quarter of a century old or more. Nettles have, of course, long been associated with human settlement and stock keeping, as evidenced by their persistence on a number of archaeological sites.

Seedlings were most often seen in gardens, dry riverbeds, cleared forestry areas (second year), around farm out-buildings and on bare margins. Re-growing vegetative fragments, stolons and rhizome sections seemed to be moved around by cows (Oliver 1993a) and abounded at field edges, riverbanks, some downland depressions and on clods of earth in field centres. These competed well with grass. By contrast, other nettlebeds were permanent, excluding all other vegetation until very deeply shaded by trees. The vigour and persistence of these spreading nettlebeds owed nothing to disturbance. However, Wheeler (pers. comm.) considers disturbed ground crucial to the initial seedling establishments.

4. *Genetic vigour*
Under the heading 'Special Features' (and see Oliver 1993 a+b, 1994 a+b, 1995), attention is drawn to variations from standard flora descriptions. Some colonies had huge specimens. Others produced very long stolons, especially in winter months. Recent evolution of successful strains seems likely, with the possibility of other advantages than those already highlighted in competition with other species. These could, for instance, include the very tough and rapidly expanding root and rhizome networks, persistence in shade, seedling vigour, frost-resistant stolons and numerous other possible improved potentials. Wheeler (pers. comm.) attributes the success of *U. dioica* in diverse English habitats to the highly successful genetical outbreeding system. This permits extremely plastic responsiveness and consequently great modifications in growth: for instance, large thin leaves as well as giant stems in partial shade. The present study strongly supports Wheeler's arguments.

5. *Changed grazing patterns*
Grazing patterns, timings and preferences of stock may have changed since the 1950s, and it is possible that past patterns were more effective in controlling nettles than the combined onslaughts of herbicides, cutters and strimmers in the 1990s.

6. *Expanding reserves of propagules*
One theory is simply that nettles (like sparrows and house-mice) are suited to man and his animals. Once established, seeds, stolons, rhizomes, root-networks or any vegetative fragments persist. Each year men, machines and cattle all create new colonies. Once established, these persist, with long term potential for further colonisations.

None of these categories is exclusive. It is probable that there are subtle but strong interactions between them, perhaps also involving other unknown factors, to explain the increased May to November dominance of *Urtica dioica* in Wiltshire in the 1990s.

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Notes

An Early Anglo-Saxon Wrist-clasp from the Parish of Baydon

by JOHN HINES

A simple copper-alloy object found by Douglas Wilson just inside the parish of Baydon, close to the village of Aldbourne, is an early Anglo-Saxon artefact that is of considerable interest for having been found here in the north of Wiltshire. It is the catch-piece of a wrist-clasp, a metal dress-accessory used to fasten the slit cuff of a sleeved woman's garment on the hook-and-eye principle (Figure 1). This artefact-type was first developed in southern Scandinavia during the third century A.D. and was eventually introduced into eastern England, apparently from Norway, late in the fifth century (Hines 1993).

The example here belongs to form B 7, the simplest and most common type found in England (Hines 1993, 39–43). This form consists of clasp-halves that are simple copper-alloy plates with two holes for them to be sewn to the garment. These plates are usually decorated, on this form only with simple surface ornament of repoussé moulding, punch marks or incised lines, if not some combination of these types of decoration. The Baydon example carries only stamped ornament, one of the less common decorative schemes, occurring on less than one in ten of the 280 or so examples of form B 7 now recorded in England. Examples combining punch marks with repoussé bosses are at least three times more numerous. While it is possible that this item was made very late in the fifth century, it was most probably produced in the earlier or mid-sixth century.

Wrist-clasps are of particular importance in Early Anglo-Saxon archaeology because their distribution defines a distinct zone of material culture in the Midlands and north-east of England very sharply (see Figure 2). This province coincides closely with the early area of the Anglian English kingdoms as identified by historical sources. It has consequently been argued that the use of wrist-clasps was adopted as an identity-marking feature of the costume of Anglian English women in England (Hines 1993, 76–93). The southern boundary of this province of material culture is a line running due east of the mouth of the River Stour in Suffolk; several hundred examples of wrist-clasps have been found north of this line and very few south of it. Apart from the

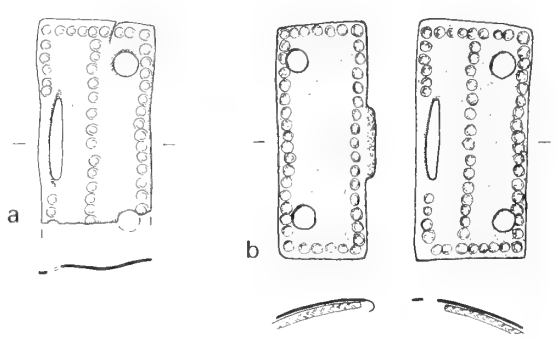

Figure 1. a: The clasp-half from Baydon, Wiltshire (Devizes Museum 1992.192), drawn by Nick Griffiths (scale 1:1); b. a reconstruction of the complete pair of clasps represented at Baydon, drawn by the author (nominal scale 1:1)

Baydon find there are only three southern outliers, all of them of a form different from that of the Baydon example, an elaborate cast type classified as Class C. Two of these are from the cemetery site of Bifrons, Patrixbourne, Kent and the third from a grave at Saxonbury, East Sussex. It seems likely that in all three of these cases the bodies of the clasp-pieces had been refitted for use as brooches. There is no reason to believe that this was so in the case of the Baydon clasp-half, which is the only example of a Class B clasp found outside the Anglian area in England. It is therefore reasonable to conclude that this item, very unusually, had been worn as a wrist-clasp in northern Wiltshire in the sixth century.

The Baydon clasp's closest known neighbour to the north is a form B 7 clasp found at the cemetery of Marston St Lawrence in the south of Northamptonshire, some 42 miles away; not a huge distance even by Early Anglo-Saxon standards, although one must appreciate the strength of the cultural boundary the clasp must have passed through. The Baydon clasp appears a little less strange in its local context, however, in the light of other finds that provide clear evidence of connexions between this area and the Anglian culture province in the southern Midlands. There are no other Early Anglo-Saxon finds from Baydon, and just a handful from the neighbouring parish of Aldbourne. Just to the east, however, in the valley of the River Lambourn in Berkshire, there are some known Early

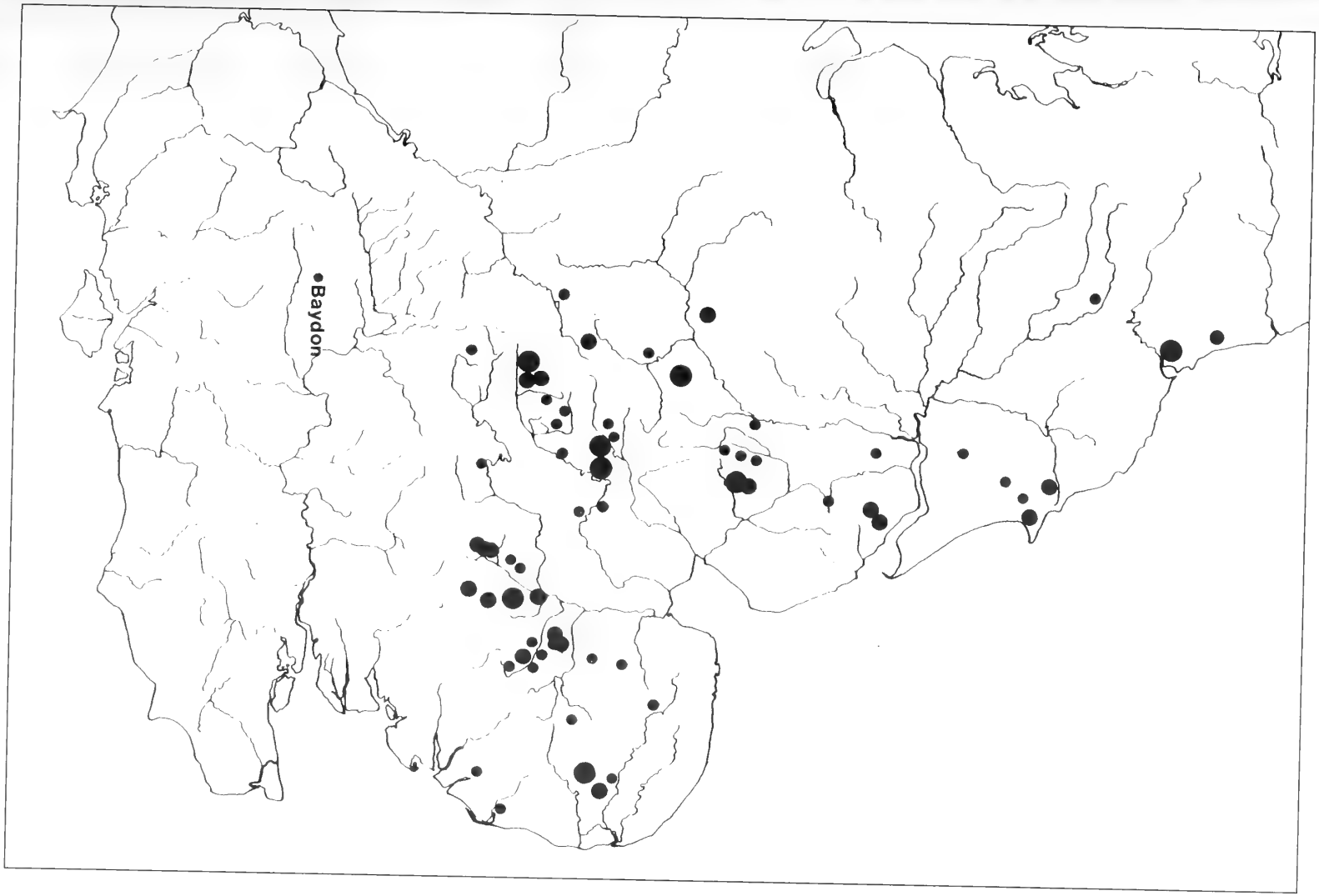

Figure 2. The distribution of form B 7 clasps in England: small circles represent sites with 1–2 examples; medium-sized, 3–6; and large, 7 or more. (Adapted from Hines 1993)

Anglo-Saxon cemetery sites. Finds from these sites include great square-headed brooches – an expensive and elaborate brooch-type – from East Garston Warren and East Shefford that have practically identical counterparts at Norton in Northamptonshire and Bidford-on-Avon, Warwickshire (1990 excavations, grave 26), respectively (all to be illustrated in Hines forthcoming; East Garston Warren: MacGregor and Bolick 1993, 116–17; Norton: Leeds 1949, fig. 90; East Shefford: Leeds 1949, fig. 123; Bidford-on-Avon: not yet published).

It is consequently quite reasonable to postulate that there was a line of communication of some significance from Saxon North Wiltshire through the Upper Thames area to the southern central Midlands in the sixth century, presumably via the Roman road system known as Akeman Street and its branches (Margary 1973, 155–70). It is interesting that the cluster of sites at the southern end of this line lies close to the likely route of the Roman road (Margary *op. cit.*, 170, Route 164) which almost certainly branched off Akeman Street at Alchester, Oxfordshire, and ran south-westwards to Mildenhall (Cunetio), near Marlborough. The Baydon clasp ought to have been made in the Anglian Midlands. It is difficult to imagine that such a humble object as this entered into a system of material exchange for its own sake; that it could have done so as part of what may have been a fine garment is more credible. However, while the Baydon wrist-clasp cannot be taken as automatic evidence of the ethnic identity of its owner, the use of wrist-clasps is strongly marked as an Anglian characteristic, and it is a realistic possibility that this find represents the presence, and death, of an Anglian woman in the area of Baydon in the sixth century. In that case exogamy would provide an obvious underlying explanation.

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The Identification of Alentone/Allentone in Wiltshire Domesday

by JASON ST. JOHN NICOLLE

Among the Wiltshire lands held by the nuns of Amesbury abbey in 1086 was a small estate, assessed at 4 hides, which is described by Domesday as *Allentone*.[1] This place-name is identical to *Alentone*, a royal estate which was also assessed at 4 hides, for the Domesday entry for *Alentone* includes the following note:

> *in eadem villa sunt iiii hidae terrae quas injuste abstraxit Heraldus ab aecclesia Ambresberie. testimonio tainorum scirae. Modo tamen habet aecclesia.*[2]

Alentune had previously been held by Earl Aubrey, and by Harold before him. But where was *Allentone/Alentone*?

Allentone/Alentone has usually been identified as Allington, about 4 miles to the east of Amesbury in the valley of the river Bourne.[3] However, one scholar has expressed some doubt over this identification,

1. Domesday Book [D.B.], f. 68b.
2. D.B., f. 69a.
3. R.C. Hoare, *History of Modern Wiltshire. Hundreds of Everley, Ambresbury, and Underditch* (London 1826), p. 107; W.H. Jones, *Domesday for Wiltshire* [Jones] (Bath 1865), p. 196; R.R. Darlington, 'Translation of the Text of the Wiltshire Domesday' in R.B. Pugh, *et al.*, eds., *The Victoria History of the Counties of England. A History of Wiltshire* [*V.C.H. Wilts*] (14 vols., London 1957–1991), ii, pp. 131, 134; H.C. Darby, G.R. Versey, *Domesday Gazetteer* [Darby] (Cambridge 1975), p. 44; *Domesday Book. Wiltshire*, C. Thorn, F. Thorn (Chichester 1979) n.p., entries 16.3, 23.7; J.E.B. Gover, A. Mawer, F.M. Stenton, *The Place-names of Wiltshire*, English Place-Name Society, xvi (1939) [E.P.N.S. Wilts], p. 90 identifies the place-name as Allington in Chippenham, but provides no authority to support this identification. They are followed by E. Ekwall, *The Concise Oxford Dictionary of English Place-names* (4th. edn., Oxford 1960) [Ekwall], *s.v.* Allington.

suggesting that the correct identification might possibly be Alton in the parish of Figheldean, about 4 miles due north of Amesbury.[4] The purpose of this note is to develop this suggestion further, and to argue that *Allentone/Alentone* can indeed be identified with Alton and, furthermore, that such an identification is preferable to the traditional identification of this place-name as Allington.

First, there is the evidence from toponymy. All the medieval forms of the Allington in question begin with the letters 'Ald'; no form without the letter 'd' is recorded before modern times.[5] Although the letter 'd' might have been added to the spelling of the place-name at some date between Domesday and 1179, the earliest datable spelling, it is hard to see any philological reason why this might have happened. On purely philological grounds, if the Allington in question were being sought in Domesday, *Aldintone* or *Ellatune*, not *Allentone/ Alentone*, would be expected.[6]

Eltone does occur in Wiltshire Domesday. John the Doorkeeper held an estate there, assessed at 5 hides.[7] This has been identified as Alton in Figheldean, apparently solely on the grounds that the Geld Rolls indicate that John's estate lay in the Hundred of Amesbury, and that Alton lay in this Hundred in the later Middle Ages.[8] However, there is no early form of the Alton in question with an initial 'e'.[9] Philologically, *Eltone* is much more likely to be Allington, which also lay in the Hundred of Amesbury in the later Middle Ages. The form is close to *Ellatune*, the Domesday form of Allington in Hampshire, which appears to have the same philological history as the Allington near Amesbury.[10]

Secondly, there are arguments based on Domesday geography. The first is merely suggestive. If *Allentone/Alentone* were to be identified with Alton, rather than Allington, it might explain why Harold had held an estate there, and why he had also taken the nuns' estate, for Alton is contiguous with Netheravon, where Harold held a substantial estate.[11] Domesday does not record Harold holding land contiguous with Allington. The second argument based on Domesday geography is stronger. Domesday notes that Earl Aubrey had held $4\frac{1}{2}$ of the $11\frac{1}{2}$ hides which Harding held at Figheldean in 1086.[12] As noted above, Alton lay in Figheldean parish. If *Alentune* is ignored, the only estate which Domesday states that Earl Aubrey had held in or near Figheldean was Ablington; but Ablington was assessed for Geld at $1\frac{1}{2}$ hides short of the required $4\frac{1}{2}$ hides.[13] The difficulty disappears if *Aletone* is identified as Alton, because Alton was assessed at 4 hides, and thus Alton and Ablington together would be sufficient to provide the unidentified $4\frac{1}{2}$ hides which Earl Aubrey is said to have held at Figheldean.

Finally, there are arguments based on the subsequent estate history of Alton. The nuns of Amesbury certainly held the manor of Alton (*Alletona*) by 1179, when it was confirmed to them by Henry II. There is nothing in the confirmation charter, or elsewhere, to suggest that it had been acquired since 1086.[14] It was retained until the Dissolution.[15] The charter of 1179 distinguishes clearly between the *manerium de Alletona*, and *Aldintona* (Allington), where the nuns held 4 acres.[16] The only other reference to the nuns holding property at Allington comes from the *Taxatio* of *c.*1291, which records a pension of 2*s.* due to the nuns from the parish church.[17] The evidence therefore presents two possibilities. Either the nuns had lost an estate at Allington and gained one at Alton, at some date between 1086 and 1179; or they had never held an estate at Allington at all, and had simply retained their estate at Alton, which they had held since at least 1086. In the absence of any evidence to support the former explanation, and given the fact that the nuns retained all the other estates which they had held in 1086 until the Dissolution, the latter explanation would seem preferable.[18]

It has also proved possible to trace the descent of the estate which Earl Aubrey had held at *Alentone*.

4. *VC.H. Wilts*, iii, p. 243n (R.B. Pugh).
5. E.P.N.S. Wilts, p. 358.
6. This argument is based on the Domesday forms of Aldington (Kent) and Allington (Hampshire): Ekwall, *s.v.* Aldington, Allington; R. Coates, *The Place-Names of Hampshire* [Coates] (London 1989), p. 21.
7. D.B., f. 74b.
8. Jones, p. 214; *VC.H. Wilts*, ii, pp. 166, 194, 195; E.P.N.S. Wilts, p. 366; Darby, p. 449; Ekwall *s.v.* Alton. For Amesbury Hundred in 1334, see *The Lay Subsidy of 1334* ed. R.E. Glasscock, *British Academy Records of Social and Economic History* N.S. ii (1975) [Glasscock], pp. 345–346.
9. E.P.N.S. Wilts, p.366.
10. D.B., f. 48b; Glasscock, p. 345; Coates, p. 21; Ekwall *s.v.* Allington.
11. D.B., f. 65a.
12. D.B., f. 74a.
13. D.B., f. 69a.
14. The charter survives in the form of an Inspeximus from 1270: *Calendar of the Charter Rolls Preserved in the Public Record Office* [*Cal. Chart. Rolls*] (6 vols., London 1903–1927), ii, p.158.
15. *Valor Ecclesiasticus Temp. Henr. VIII. Auctoritate Regia Institutus* [*Valor*] (6 vols., London 1810–1834), ii, p. 94.
16. *Cal. Chart. Rolls*, ii, p. 158; E.P.N.S. Wilts.
17. *Taxatio Ecclesiastica Angliae et Walliae Auctoritate P. Nicholai IV circa A.D. 1291* (London 1802), p. 180.
18. Compare D.B., ff. 60a, 68b with *Valor*, ii, 93–95.

The Earl's lands appear to have been acquired by the king in *c.*1080. They were then granted to Hugh de Grentmesnil, whose lands were later appropriated by Robert, Count of Meulan and Earl of Leicester (d.1118).[19] Thus the fee of Earl Aubrey, or at least part of it, became incorporated into the great Honor of Leicester. The Honor of Leicester was later partitioned, in 1206–7, to form two new Honors, known respectively as the Honor of Leicester and the Honor of Winchester.[20] Of the 9 estates which Earl Aubrey had held in Wiltshire, 4 appear in 1242–3 as fees of the Honor of Leicester, and 4 as fees of the Honour of Winchester. Among the fees of the Honour of Leicester was 1 knight's fee at *Aletune*, which is clearly to be identified with the estate which Earl Aubrey had held at *Alentone*.[21] The identification of *Aleton* as Alton is put beyond doubt by two 15th-century surveys of the fees of the Duchy of Lancaster, which by that date incorporated much of the old Honor of Leicester.[22]

The cumulative weight of these arguments, based as they are on three different types of evidence, must surely put the identification of *Allentone/Alentone* beyond doubt. The suggestion that this place-name may represent Alton, rather than Allington, is more than a mere possibility. It is a certainty, or as near to a certainty as it is possible to come, in the perplexing world of Domesday studies.

19. *VC.H. Wilts*, xi, pp. 120, 240; L. Fox, 'The Honor and Earldom of Leicester: Origin and Descent', *English Historical Review* liv (1939), 385–402.
20. Fox, *loc. cit.*, p. 391.
21. *Liber Feodorum: The Book of Fees commonly called Testa de Nevill* (2 vols. in 3, London 1920–31), ii, pp. 730, 731, 732, 746; D.B., f. 69a.
22. *Inquisitions and Assessments Relating to Feudal Aids* (6 vols., London 1899–1920), v, pp. 240, 242; vi, p.627.

The Silver Seal-matrix of Geve of Calstone

by JOHN CHERRY

This silver seal-matrix was discovered by Mrs N. Taylor at Manor Farm, Calstone Wellington, a village two and a half miles south-east of Calne, in 1992. Since the name of the owner of the seal, Geve of Calstone, is engraved on the matrix, it is a remarkable find of a seal-matrix of a lady on her home manor. Its acquisition by Devizes Museum (accession no. 1992. 371) was made possible by the aid of grants from the Victoria and Albert Museum/ Museums and Galleries Commission Purchase Grant Fund and the Beecroft Bequest.

The matrix (38 by 24mm), pointed oval in shape, was cast and then engraved with a figure and inscription on the front. The back is plain. There is a loop at the back for the attachment of the matrix to a chain (see Figure opposite).

On the front there is a lady, standing on a bracket, dressed in a wimple and a cloak which was fastened by a cord across the breast and which, by the hatching attempting to show *vair*, was probably lined with fur. In each hand she holds a shield by its point. In her right hand (dexter) the shield is barry of two with in chief two lions rampant. In her left hand (sinister) she holds a blank shield. The figure is divided from the legend by a pearled border which extends to the outer pearled border to include the two shields. The legend reads * SIG ILLUM.GEVE * DE * CALESTON'.

This inscription identifies the owner of the seal-matrix as Geve of Calstone. Calstone in Domesday Book includes three so-called manors, and Manor Farm at Calstone occupies the site of the capital messuage of the manor.

It is clear from the representation of the lady that Geve is here used as a feminine name. While Geva or Geve can be used as a masculine name, here it is an Anglo-Norman version of the Anglo-Saxon feminine terminal element *-gefu* or *-gifa* (Searle 1897).

The shield in her right hand is that of the Wiltshire family of Calston or Calstone. Two other seals are known with these arms. They were used by Thomas Calston of Wilts in 1392 and Thomas Calston in 1409 (Chesshyre and Woodcock 1992, 36–7, from New Sarum City Deeds seals and from a deed in the Button Walker Heneage Muniments). The Wiltshire Record Office also has a manuscript of 1392 of Thomas Calstone 'of Wiltshire' concerning land at Enford and his attached seal has the Calstone arms. The sinister blank shield indicates that Geve's father did not bear arms.

Ladies are usually shown standing on medieval seals. Some of the finest and earliest representations of ladies on seals are those of the Queens of England and of France in the 12th century, who often hold a sceptre, an orb or a fleur-de-lis. One of the finest is the silver seal-matrix of Isabella of Hainault (Johnes

Silver seal-matrix of Geve of Calstone, with impression. Scale 2:1

1960, 73–6). In the 13th century noble ladies are often shown with a hawk, a fleur-de-lis or a shield or shields. At the same time, they begin to be clothed in their husband's armorial bearings. On her seal, Margaret de Quincy, widow of Saher de Quincy, Earl of Winchester, of *c.*1220, is robed in the lozenges of de Quincy and stands under an arch, next to a tree on which hang the shields of de Quincy and Fitzwalter (Hunter Blair 1943, pl. XVc). Sometimes the lady is shown holding one or, occasionally, two shields with the other, or others, suspended in air or hanging on a tree. The development of the design of ladies' seals in the middle of the 13th century is illustrated by the two seals of Ela, the daughter of William Longespée, Earl of Salisbury (died 1226), who was the illegitimate son of Henry II. Both seals are two sided. On her first seal as Countess of Warwick she is shown standing holding a hawk while the arms of Longespée are on the reverse within a sexfoil (Bowles 1835, pl. III). On her subsequent seal, as the wife of Philip Basset, she is shown holding her father's shield of Longespée in her left hand while that of her former husband hangs in the air to her right (Birch 1892, no. 6579). On the reverse is the shield of Basset, her current husband. She married Basset after 1242 and before 1271 (Bowles 1835, pl. III)

The earliest lady to hold two shields appears to be Agnes de Percy who, in 1244, holds two shields by cords from above (Antiquaries seal collection, drawer F32). The earliest appearance of a lady holding two shields by their points is on the seal of Emmeline, wife of Stephen Longespée, in 1250 (Hunter Blair 1943, pl. XVI and Birch 1892, no. 6680). She is followed in 1274 by Ela, daughter of William Longespée, Earl of Salisbury, widow of James Audley (Bowles 1835, pl. II and Birch 1892, no. 6573 from BL Add. Ch. 10, 619 dated 1274). Other examples are the seals of Philippa of Lancaster 1284 (Hunter Blair 1912, no. 1536), Joan Achard 1292 (Antiquaries seal collection, drawer F1), Margaret Basset (Birch 1892, no. 6586, from BL Cotton ch. xxiii. 2 dated to the time of Henry III or Edward I) and Eleanor de Zouche, wife of Alan, Lord Zouche, of 1294 (Birch 1892, no. 6742, and also Antiquaries seal collection, drawer F44). The latter is one of the closest comparisons to the seal of Geve, since she holds her husband's shield in her right hand and her father's shield in her left. Although the material of these seals is not known they were probably silver.

The only surviving comparable silver seal-matrix of a lady is of Hawys, Lady of Cyfeiliog, which was found in Oswestry in 1853, and is now in the

Shrewsbury Museum. Hawys is shown holding a shield with a rampant lion for Powys in her right hand and a shield with two lions passant for l'Estrange in her left. In this case the two shields represent her two husbands (Siddons 1991, 291 and fig. 93; casts are in the Antiquaries seal collection, drawer F25, and in the British Library, Birch 1892, no. 6670).

Geve is shown with her husband's shield on her right, and if her father had been armigerous, that would have been on the left. One of the grandest displays of heraldry and genealogy is on the two-sided seal of Dervorguile, wife of William of Balliol, of 1284. Standing in her widow's weeds, she holds in her right hand her husband's shield of Balliol and in her left her father's shield. From a tree on her right there hangs a shield of the earldom of Chester while on the tree on the left there is the shield of her maternal grandfather. On the reverse there hangs from a tree a shield which shows her father's and husband's arms dimidiated, with smaller shields of Chester and her maternal grandfather hanging from branches above it. It is interesting that on the obverse of the seal she gives the precedence to her husband but on the reverse to her father (Hunter Blair 1943, pl. XVg from Balliol Deeds 565).

Since there are no impressions of the seal-matrix found at Calstone attached to documents, the only way of dating it is by epigraphy. It is most likely that the seal of Geve of Calstone dates from the second half of the 13th century, and the shape of the letters, especially the form of the letter G which has a long upper arm overlapping the lower part of the letter (Kingsford 1929, 155, 168), would support this. It is possible that Geve may have been a widow when the seal was engraved.

The value of the seal is in the insight it gives into the portrayal of women on their seals in the 13th century. One of the most famous later medieval representations of a lady holding a shield occurs in the Luttrell Psalter of 1340–50, where Sir Geoffrey's daughter-in-law holds his shield. This representation has recently been studied by Professor Richard Marks (Marks 1993–4, 343–355).

It may simply be the coincidence of survival but a large number of the surviving ladies' seals of this type are connected with the Longespée family and it may be that they had set a fashion in Wiltshire which Geve of Calstone was imitating.

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A Medieval Heraldic Roundel from Potterne

by PAUL ROBINSON

An heraldic roundel made of copper alloy with a flat back and a hammered surface was found at Ryeleaze in Potterne in 1983 and subsequently acquired by Devizes Museum (accession number 1983.90; Figure 1). With a very slightly convex upper side, it measures between 43 and 45mm in diameter and 1.7mm in thickness. The heraldic design is inlaid with enamel over a gilded base; the decorated border and frame of three groups of a straight-sided, pointed trefoil flanked by two leaves are similarly gilded.

Because of corrosion caused by long burial, the detail of the design cannot be properly seen on an ordinary photograph but it does appear very clearly on the x-radiograph, kindly supplied by the Wiltshire County Council Conservation Officer, as a cross engrailed ermine with a crescent in dexter chief (Figure 2). Degradation of the enamel makes its original colour uncertain. The arms shown are, however, certainly those of Robert Hallam, Bishop of Salisbury (1407–1417), whose arms also appear on his tomb at Konstanz Cathedral (The Right Rev. the Bishop of Salisbury (John Wordsworth) 1889, 234ff., which supersedes Kite 1860, 97ff. and p1.32) as well as upon his seal attached to British

Library Add. Charter 19648 (Birch 1887, vol. 1, 344). Since at least 1254 the Bishop of Salisbury had been Lord of the Manor of Potterne, prebendary, rector and owner of the advowson. A manor house was built in the village for the bishops' use and Bishop Robert is known to have resided in the village on a number of occasions.

Originally the roundel would have been enclosed in a circular rim attached by lugs or studs to the surface of another object to identify its owner. Heraldic roundels clearly marked prestigious objects and have been discussed most recently by Egan and Pritchard (1991, 181–84) who suggested a number of alternative functions for them. They may have been attached to a case carrying a travelling chalice and paten, as proposed by Dunning (1965, 54ff.); they might be from morses, i.e. the clasps for ecclesiastical copes; they may have been set in the base of a maplewood mazer; or they may have embellished an elaborate sword belt of a type similar to that illustrated on the effigy of the Black Prince at Canterbury Cathedral.

The roundel from Potterne is one of a small group which shows the arms of important churchmen of the first half of the 15th century. Other examples include that from Rievaulx Abbey with the arms, it is believed, of Abbot John III (Dunning, *op. cit.*); and an unprovenanced roundel with the arms of Henry Beaufort, Bishop of Lincoln and Winchester (Catalogue, Spinks coin auction 40, 6–7 Dec. 1984, lot 665). These may have come from objects which had an ecclesiastical function. In passing it may be noted that the only other medieval heraldic roundels from Wiltshire are those found at Minety (Devizes Museum Day book 807) apparently showing the arms of a member of the Bassett family, and at Norton Bavant (*ibid.*, 1679) showing the arms of a member of the family of Berkeley of Beverstone, both of which possibly came from objects which had a secular function.

What seem to be the same arms as those on the Potterne roundel also appear on a late medieval floor tile found at Milton Lilbourne and presented to Devizes Museum by Mr Hungerford Penruddocke (accession number M 158c). This object is at present unique; it has not previously been illustrated and is shown below in its present worn state and with the design reconstructed (Figures 3 and 4). The arms were originally identified as those of William Wotton, Abbot of Cirencester Abbey who died in 1440 (*WAM* 10, 328). There is, however, no evidence to show that William Wotton bore the arms shown on this tile, although Burke (1884) does cite one Wotton coat of arms as 'sable, a cross engrailed ermine', or that Cirencester Abbey held Milton

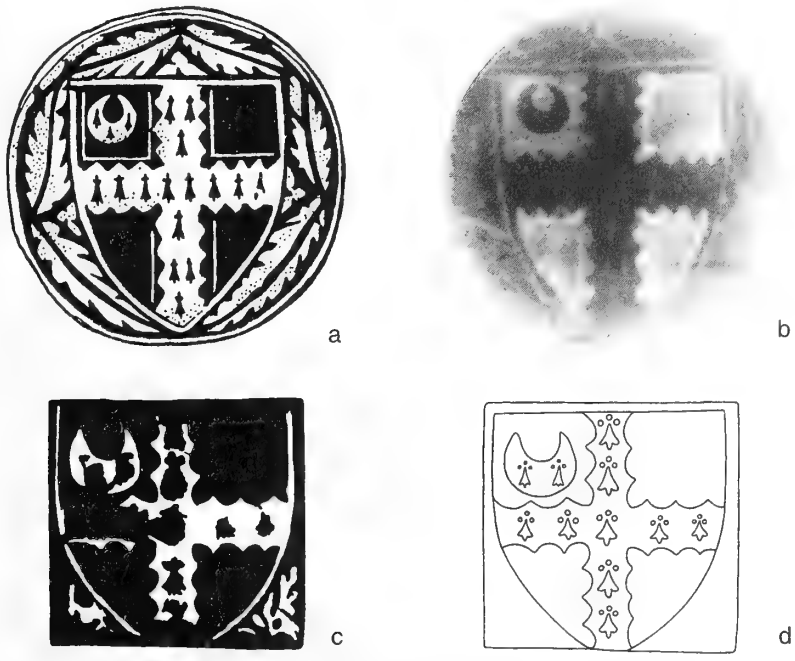

Figure 1. a: enamelled roundel from Potterne, scale 1:1; b: x-radiograph; c: inlaid floor tile from Milton Lilbourne, scale 1:4; d: reconstruction of the arms of Bishop Hallam, based on c, scale 1:4

Lilbourne in the later Middle Ages. It is much more likely that the tile from Milton Lilbourne also depicts the arms of Robert Hallam, Bishop of Salisbury, and that it belongs to a small group of early 15th-century tiles with the arms of senior churchmen of the Salisbury diocese. Other tiles in this group display the arms of William Alnewyke, Archdeacon of Sarum from 1420 to 1426 and Simon Sydenham, Dean from 1418 to 1431.

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An Addition to the Stourhead Canon

by ROBERT J. MAYHEW

The links between Samuel Johnson and the Hoares of Stourhead are few. Johnson's only reference to the Hoare family comes in a letter to Mrs Thrale and refers to their bank: 'a draught on Hoare for one hundred and twenty six pounds'.[1] It is almost certainly the case that Johnson never visited Stourhead. His only visit to Wiltshire came in 1783 when he stayed with William Bowles at Heale House. Johnson was impressed with Heale: 'A good house is it, but rather too modern and too convenient to serve the imagination, but the lawn and the hill, and the thickets, and the water, are almost equal to the fancy of a TROUBADOUR.'[2] This stay also included trips to Salisbury and Stonehenge.

If Johnson did not visit Stourhead, the recipient of his letter referring to the Hoare family, Mrs Thrale, did, subsequent to his death and her second marriage to Gabriel Piozzi. Mrs Piozzi mentions briefly her 'lean accounts of Stourhead, Wilton, Southampton, &c.' in her letters,[3] a reference which becomes more significant in the light of her *Observations and Reflections made in the course of a journey through France, Italy, and Germany.* Mrs Piozzi had gone abroad partly to avoid the criticism (including Johnson's) of her marriage, and partly to see Italy, the birthplace of her new husband. After her return to England she published her *Observations and Reflections*, which she tidied up for publication in 1789, just after the tour which took her to Stourhead (the above cited letter is dated 17 July 1787). Mrs Piozzi 'loved prospects'[4] and used her recent visit to Stourhead in two places in her travel account. Reflecting on the view from the tower at Cremona, she was led to a comparison with the view from Stourhead:

> Prospects, however, and high towers I have seen; that in Mr. Hoare's grounds, dedicated to King Alfred, is a much finer structure than this, and the view from it much more variegated certainly; I think of greater extent; though there is more dignity in these objects, while the Po twists through them, and distant mountains mingle with the sky at the end of a lengthened horizon.[5]

Writing of Verona, Piozzi is led to another such comparison in 'an agreeable garden belonging to some man of fashion'. She continues, 'the grotto disappointed me: they had not taken such advantages of the situation . . . and I recollected the tasteful creations in my own country, *Pains Hill* and *Stour Head*.'[6]

1. Bruce Redford (ed.), *The Letters of Samuel Johnson* (5 vols., Oxford 1992–4), iii, p. 86.
2. *Ibid*, iv, p. 194.
3. Edward A. and Lillian D. Bloom (eds.), *The Piozzi Letters: Correspondence of Hester Lynch Piozzi, 1784–1821* (3 vols. to date, Newark, N.J. 1989–) i, p. 238.
4. James L. Clifford, *Hester Lynch Piozzi (Mrs. Thrale)* (2nd. edn, corrected, Oxford 1968), p.115.
5. Hester Piozzi, *Observations and Reflections made in the course of a journey through France, Italy, and Germany* (2 vols., London 1789), i, p. 116.
6. *Ibid.*, i, p. 130.

These references seem to have eluded Kenneth Woodbridge, who does not cite Mrs. Piozzi in *Landscape and Antiquity* or *The Stourhead Landscape*.[7] Piozzi has a further claim to the attention of those interested in the Hoare family. Her daughter, Sophia Thrale, married Henry Merrick Hoare, brother to Henry Hugh, 3rd Baronet.[8] Given the sensitivity to landscape aesthetics Mrs. Piozzi demonstrated throughout her journals and published writings, this seems a worthy if minor addition to the Stourhead canon. As Johnson himself put it, 'There is nothing, Sir, too little for so little a creature as man. It is by studying little things that we attain the great art of having as little misery and as much happiness as possible'.[9] Lovers of Stourhead and of Johnson would probably agree.

7. Kenneth Woodbridge, *Landscape and Antiquity: Aspects of English Culture at Stourhead, 1718 to 1838* (Oxford 1970), and *idem*, *The Stourhead Landscape* (no place, 1982).

8. Clifford, *op. cit.*, p. 419.
9. James Boswell, *Life of Johnson*, G.B. Hill (ed.) and L.F. Powell (rev.) (6 vols., Oxford 1934–50), i, p. 433.

Pen Pits and Sir Arthur Bliss

by RAYMOND J. SKINNER

Writing over a century ago about Selwood Forest, which has now disappeared from most maps, Canon J.E. Jackson observed:

> A mile or two beyond Stourhead, there is . . . on the high ground thereabout, a large square-shaped piece of table-land, a sort of platform, the sides of which are steep declivities. On this platform stands the little scattered village of Penselwood. Pen is a very commonly-found Welsh word, meaning head, and so the name signifies, not improperly, the head of Selwood. On the slope of this platform, facing east, lie the celebrated Pen Pits.[1]

Geographically, Penselwood in Somerset is adjacent to the point at which the three counties of Wiltshire, Somerset and Dorset meet, and the neighbourhood contains much of interest, not only for antiquaries, but also for those interested in music and musicians. Around the village of Penselwood on Pen Common and partly in Wiltshire, there is a series of curious mostly conical pits in the ground which it is now thought, may have been excavations made by those in search of Greensand which could be used for querns or millstones. Jackson described Pen Pits rather prosaically:

> The surface of . . . the common is scooped out very irregularly into hollows or pits – some large, some small, some roundish, basin-like, others more of a square or oblong shape. They are in no sort of order, but occur at intervals; some are close together, divided by a partition bank, along which you may find your way about from one to the other.... The pits on this ridge are said to be spaced over 100 acres. But they did, within memory, spread also over the platform at the top, covering altogether 700 acres; a vast number have been filled in and levelled for agricultural use.[2]

Sir Richard Colt Hoare of Stourhead was perhaps the first antiquary to write on Pen Pits and to ponder over their purpose. He never quite made up his mind what they were:

> either 1) excavations for simple purpose of procuring stone, or
> 2) that the ancient Britons may have made them in searching for mill or grind-stones, or
> 3) they were inhabited as places of refuge in times of danger.[3]

That Colt Hoare was not the first to advance the habitation theory, however, can be seen in the following excerpts from a paper read to the Society of Antiquaries on 29 April 1784. On this occasion the Hon. Daines Barrington was speaking of 'certain remarkable Pits or Caverns in the Earth, in the County of Berkshire'. These were situated just

1. Revd. Canon J.E. Jackson, 'Selwood Forest', *WAM* 23 (1887), p. 269.
2. *Ibid.*, p. 270.
3. Sir Richard Colt Hoare, *Ancient Wiltshire*, vol. 1 (London 1810), p. 35.

across the Wiltshire border, about half a mile west of Little Coxwell near Faringdon. They were, it is said, referred to in a survey of 1687 as Cole's Pits and extended over 14 acres, being 273 in number and from 7 to 22 feet deep and up to 40 feet in diameter. Barrington continued:

> . . . having thus endeavoured to show what could not have been the cause of digging so many pits i.e. mining, as suggested by the name, clay for bricks or tiles, or stone quarries. I shall now risque [sic] a conjecture as to what may have been the original inducement for removing so many thousand cubical yards of sand. I conceive this area to have been a considerable city of the Britons in the time of the earliest inhabitants of this island, which at an average of five souls (to be accommodated in each pit) would amount to nearly 1,400.[4]

In the later 19th century, excavations were undertaken at Pen Pits by members of the Somerset Archaeological and Natural History society, as well as by the celebrated archaeologist General Pitt Rivers. Members of the Somerset society disagreed about the purpose of the pits: some inclined to the view that they were quarries, whilst others found this theory untenable for, as was observed, 'would anyone have worked a bed of stone in this way?'. Jackson, too, found the quarry theory to be dubious, and inclined to an argument propounded in great length and detail by T. Kerslake of Bristol, that the pits were used in some way for the accommodation of inhabitants, particularly those taking refuge from an invader, and would have been protected with a superstructure of wood. Kerslake associated Penselwood and its pits with 'A Long Lost UnRomanised British Metropolis', Caer Pensauelcoit, the latter part 'coit' being Welsh for wood, and the whole having, as he noted, a striking similarity to the present-day name of Penselwood.[5]

In the year 1016 there was a battle between Edmund Ironside, King of the English, and Cnut, who had invaded England in the previous year. On Aethelred's death in 1016, both became rivals for the English crown, and after several battles made peace, Cnut taking Mercia and the North and Edmund the South of the country. When Edmund died shortly after, Cnut became King of the whole of England. Writing on the parish of Gillingham, Dorset, J. Hutchins observed:

> The first mention . . . of this place is in the Saxon Chronicle, A.D. 1016, on account of the battle fought between Edmund Ironside and Canute, at Peona, or Penn, co. Somerset.... This action happened so near this place, that some less exact historians style it the battle of Gillingham; in which the Danes were entirely defeated.... At Penn are very remarkable pits, where the field of battle is supposed to have been; they are very numerous and regular, made for offence and defence; some for the main body, some for advanced guards. Tradition says they were made by Canute, which is confirmed by an old MS. in the hands of the late Mr. Biggen, one of the lords of the manor.

A footnote by a subsequent editor of this work observed that 'Hutchins' account of the Pen-pits, which were probably much more ancient, is very doubtful. The most generally accepted opinion is, that they are the remains of early habitations'.[6] Notwithstanding Pitt Rivers' failure to find evidence of human habitation, this does seem to be the theory favoured by most early writers and investigators on the subject. Canon Jackson, particularly, enjoyed the idea of 'half-subterranean wigwams with conical roofs', and 'the idea of our ancestors having shown a preference for burrowing, like rabbits, in dry chalk and soft sand'.[7] Though recent researches support the suggestion that they are quern stone quarry pits,[8] it is not impossible to suggest that some of the Pen Pits may actually date back to the prehistoric period as a site of human activity, probably therefore being in existence over the long period stretching from early antiquity into the centuries of Anglo-Saxon England. Pen Pits may thus have seen both the warriors of Caractacus and the Roman legions, as well as the men of Edmund Ironside and the invading Danes.

In 1934, about nineteen years before his appointment as Master of the Queen's Music, Sir Arthur Bliss (1891–1975) bought a thirty-acre wooded site on the south-eastern edge of the plateau, and had a house built there in the then avant-garde 'International Style', for which the architect was a close friend, Peter Harland. Bliss

4. The Hon. Daines-Barrington, 'An Account of Certain Remarkable Pits', *Archaeologia* 7 (1785), pp. 235–243.
5. T. Kerslake, *Caer Pensauelcoit – A Long Lost UnRomanised British Metropolis* (London 1882), Wiltshire Tracts 89/30, WANHS Library.
6. J. Hutchins, *The History and Antiquities of the County of Dorset* (3rd edn., 4 vols., Westminster 1861–70), 3, p. 615.
7. Rev. Canon J.E., Jackson, 'Notes on the Border of Wilts and Hants', *WAM* 21 (1885), p. 340.
8. M. Rawlings, 'Archaeological Sites Along the Wiltshire Section of the Codford–Ilchester Water Pipeline', *WAM* 88 (1995), pp. 42–44.

had, for some time, wished for a country retreat, and here the composer with his wife and two daughters escaped the London scene for many springs and summers to live there for about twenty years. It was at Pen Pits – or rather in a small studio set in the midst of the pits in the adjacent woods – where some of his most effective music was created: scores for the ballets *The Miracle of the Gorbals* (1944), and *Adam Zero* (1946) and an opera, *The Olympians* (1949). As Bliss explained in his autobiography, the Pits were very evocative:

> In some places the rims of the craters touched, giving the ground the appearance of having been shelled by howitzers.[9]

This comparison was an understandably poignant one for Bliss, who had indelible memories of his experiences not twenty years before, during the Battle of the Somme, in which he had seen his brother, Kennard, as well as many of his comrades, killed. The time at Pen Pits was a very productive period in Bliss's life, and the strange and beautiful surroundings of the house, to which his thoughts often turned when on his many foreign tours, no doubt inspired much of his work. Understandably, Sir Arthur Bliss seems to have kept his semi-retreat at Pen Pits something of a secret.

The studio, about fifty yards from the house, still exists – an idyllic spot – although the timber-framed structure today wears a rather forlorn and neglected air.[10] As the composer himself wrote:

> From my windows I saw nothing but trees, and the only sounds were those made by the wind passing through them. Pheasants would make their rough nests within a few yards, and quite likely a fox, unconscious of my presence, would lollop by; badgers had their setts within view.[11]

The studio is built on the edge of one of the pits, supported by a brick-built column which rises from the bottom of the pit. Because of its sylvan situation and the building materials used, the interior suffered from damp, which badly affected the composer's piano, strings tending to rust and then to snap with an alarmingly sudden noise. An open grate and a chimney only partially remedied matters. In late May and early June, the ground is still covered by a mass of bluebells, which supersede the earlier prolific snowdrops and daffodils.

It is paradoxical that Pen Pits, with a history stretching back into obscure antiquity, should have become Bliss's home just at the time when he was asked by H.G. Wells if he would be prepared to collaborate by writing the score for a projected film based on the author's futuristic vision of the world, *The Shape of Things to Come*. As with many film projects, the financial pressures of having to appeal to mass audiences caused a dilution of the powerful vision of its creator, and the film eventually became just an exciting entertainment. As Bliss explained:

> I knew he (H.G.Wells) wanted his story of the probable future to be an educative lesson to mankind, to emphasise the horror and uselessness of war, the inevitable destruction of civilised life, the rise of gangster dictatorship and oppression. He felt that only the direction of far-sighted planners with the use of scientific inventions in the cause of peace could lift the world into a new era of prosperity and enlightened leisure.[12]

Wells' vision of the future has come to pass very much as he prophesised, but the film did not have the influence on world events for which its author had sincerely hoped.

Bliss later formed a suite of pieces from the film music (1936), including the famous *March* and the *Ballet for Children*, The *March* in particular, is exciting, highly-coloured music with a fine swagger to its Elgarian tune and perhaps serves as the best introduction to Bliss's music. Like Elgar, too, he could write successful 'popular' music; a popular note, however, has little place in the major works of either composer. Further parallels with Elgar also exist in the rich texture of both composers' works and these elements, together with a mastery of orchestration and a fine musical craftsmanship, suggest reasons for the choice of Bliss to succeed Sir Arnold Bax as Master of the Queen's Music in 1953. This post, often perhaps an 'establishment' sinecure, found, however, in Bliss, a composer willing to expend much care on ceremonial works. His achievement, exemplified in a work such as the *March of Homage in Honour of a Great Man* – for Sir Winston Churchill's funeral – is an outstanding piece of such occasional music.

9. Sir Arthur, Bliss, *As I Remember* (London 1970), p. 103.
10. The present owners of the house have informed the writer that the interior of the studio was restored in 1991, for the 100th anniversary of the composers' birth, and that it is hoped to restore the exterior in due course (letter, 23 June 1994).
11. Bliss, *op. cit.*, p. 103.
12. *Ibid.*, p. 105.

Another interesting collaboration occurred during the period that Bliss was living at Pen Pits after the last war when, as a result of a meeting with J.B. Priestley at the 1945 Cheltenham Festival, the idea of an opera was born. This, later to be known as *The Olympians*, was composed between 1945 and 1948. As Bliss stated:

> To compose a full-length opera is a long and fatiguing task, and it took me the best part of the next two and a half years to complete the three-act score. Most of it was composed in the quiet remote music-room that has been built for me in the woods of Pen Pits.[13]

The work's evolution was the subject of many interesting and detailed letters between the composer and librettist – those of Bliss written from Pen Pits and Priestley's from his house on the Isle of Wight. This correspondence was initiated by Priestley in a letter dated 1 August 1945:

> Dear Arthur,
> I enclose a very rough synopsis of the opera plot. I don't want to work out the story in any greater detail until you feel fairly satisfied about the rough outline. I am still uncertain about the exact form of the finales to Acts I & III, and it is possible that you might have a musical idea you favour that would help me to find the kind of 'curtain' you need musically. . . . I see a great deal more in these scenes than I have put down here, but I want to get the rough outline first, particularly as I dislike typing out synopses and have no secretary here.[14]

In a reply dated 18 August, Bliss commented at length on Priestley's suggestions; his concluding paragraph reads:

> I am back in London September 1st. If by any chance you go to Russia earlier, wire me, and I will come up to London for a couple of hours' discussion before you go. I think it is important that we meet before you get filled with new visions inspired by the Bolshoi theatre![15]

A recent biography of Priestley observed that:

> Priestley's cantankerous, grumbling image dissolved into that of the perfect collaborator described by Bliss as 'generous and sensitive'. Nine months were to elapse before music and libretto began to fuse into the first act, and in that interval Priestley visited Russia.[16]

Back in England, and about a year later, composer and librettist were concerned about the title of the opera. Priestley's letter of 8 April 1947 read:

> Dear Arthur,
> I am still worrying about the title. 'The Gods Grow Old' has much to recommend it. . . . But . . . it has a rather melancholy ring that in fact does not suit our piece. . . . I have spent so much time – an unusual thing with me, by the way – on this title, that I seem to have gone stale on it, and perhaps we need some fresh minds on the problem.
>
> Yours ever, J.B.P.[17]

A further year of hard work continued until on 5 May 1948 Bliss wrote:

> Dear Jack,
> Today at 2.30 I brought down the final slow Curtain on a beautifully poised A major chord. I am very pleased with this last Act. . . . I am going up to London for a week on Monday next, and after that re-immerse myself in the orchestral scoring. I am determined to cut nothing from Acts II and III, and am with you over all the love scenes.
> Perhaps shortly I could spend a couple of days at Billingham, [Priestley's house on the Isle of Wight] or you come here, for a final appraisement.[18]
>
> Arthur

The opera was accepted for production by Covent Garden in 1949, but a less propitious time for the mounting of a large-scale work such as *The Olympians* could hardly have been chosen. Just after the war, when austerity was a major factor and when conditions at Covent Garden, as Bliss observed, were not really favourable to the production of a work of these dimensions, it was hardly surprising that the opera was in general poorly received. Apportionment of blame for this is now a redundant exercise, but at the time there was apparently dissension between the musical director

13. *Ibid.*, p. 170.
14. *Ibid.*, p. 171.
15. *Ibid.*, p. 172.
16. V. Brome, *J.B. Priestley* (London 1988), p.294.
17. Bliss, *op. cit.*, p. 178.
18. *Ibid.*, p. 179.

and the production and design team. It is difficult enough, particularly in the 20th century, to bring to birth a successful opera; and many are the examples of works which failed at their first performances. Some, like Puccini's *Madama Butterfly*, later became successful after revision, but unfortunately *The Olympians* was not accorded a second chance. The composer's feelings at seeing the result of two and a half years' work nullified can only be imagined. Bliss, however, bore the very mixed criticisms of the work with great fortitude: He later wrote resignedly:

> . . . I had urged that the final dress rehearsal should be open to the critics. This was disastrous. What they saw was a well rehearsed and produced first Act, even an exciting one, a second Act that obviously needed a few more days' polish, and then a third Act which looked exactly, in its raw state, like some village charade. Difficulties in this final Act were not lessened by the mysterious absence of the scene designer.
>
> I knew we were lost, and on the first night sat gloomily in the Garrick Club, only going to the Opera House in time to thank those to whom under difficult conditions, genuine thanks were due.[19]

Another major work conceived during the years spent at Pen Pits had been the *Piano Concerto* commissioned for the 1939 World Fair in New York. The *Concerto* was dedicated to the people of the U.S.A. and there is much of Bliss's own ancestry moulding his musical thoughts in this work for, although born in England, Bliss was American on his father's side. Furthermore his wife, Trudy Hoffman, was American, having been born in Santa Barbara, California. The music of the *Concerto* reflects a certain transatlantic verve and 'get up and go' and, like its composer, was energetic and forthright. It has proved to be one of Bliss's most enduring works.

In general, it is valid to observe that no artist can live for long in any environment without at least some of its ambience colouring his works. Numerous examples of such influence might be cited from widely differing sources. In Sir Arthur Bliss's case, the so-called abstract works, such as certain parts of the *Piano Concerto*, and some of the chamber and string works seem, to one listener at least, to encapsulate something of the English countryside of Hardy's Wessex, particularly in the bitter-sweet feeling of nostalgia which pervades certain passages in these works.

There exist many more works than could be listed or discussed here. *The Times*, in the composer's obituary, mentioned one hundred and thirty from his prolific pen, with the *Colour Symphony* (1922) – inspired by a book on heraldry – marking the start of the mature works. Sir Arthur Bliss conducted his last concert in January 1975, about two months before his death.[20]

At present, Sir Arthur Bliss's music has apparently temporarily fallen out of fashion, as the paucity of current performances demonstrates. No doubt this trend will change, however, for there is too much of value in his work for it to be permanently neglected. As he wrote of his predecessor as Master of the Queen's Music, Sir Arnold Bax (1883–1953):

> The rapidity with which one musical fashion succeeds another has for the moment relegated Bax's music to some lumber-room, where it lies awaiting a new generation that will admire its uninhibited musical flow and romantic expression. . . . I have seen many reputations rise and sink, and some which before my birth seem buried for ever now exhumed with full honours. Musical reputations seem to move around like the slats on a water mill, first ascending to a peak of admiration, then descending to a depth of neglect, before once more climbing the ascent towards renewed appreciation.[21]

It is to be hoped that the twentieth anniversary of Bliss's death in 1995 will herald the ascent of this mill-wheel to a position more commensurate with his musical achievements.

Acknowledgements. The writer is indebted to Mrs Pamela Colman, Sandell Librarian, WANHS, for the suggestion that Sir Arthur Bliss's house and its surroundings deserved closer investigation.

19. *Ibid.*, p. 179–180.
20. Sir Arthur Bliss died 26 March 1975: *The Times*, obituary, 29 March 1975. At a memorial service in Westminster Abbey held in the following May, at which the Queen was represented, one of the lessons was read by ex-Prime Minister Edward Heath: *The Times* 21 May 1975.
21. Bliss, *op. cit.*, p. 192. Bax had been Master of the King's Music (1942–52), and of the Queen's (1952–3).

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Excavation and Fieldwork in Wiltshire 1994

Amesbury: Countess Road (SU 1542);
Multiperiod
A field evaluation programme was undertaken between October and December 1994 over an area of approximately 30ha between the River Avon and Countess Road to the north of the A303, and along a 40m wide corridor immediately north of the A303 between Countess Roundabout and King Barrow Ridge. The work was undertaken by Wessex Archaeology and Alastair Bartlett Associates on behalf of English Heritage and The National Trust as part of the assessment of a series of possible sites on which the Stonehenge visitor centre and associated facilities could be relocated.

On the Countess Road site 415 test-pits, each 1m square, were hand excavated and the content of the topsoil quantified. Magnetometry was also applied here and along the corridor linking Countess Road with King Barrow Ridge. None of the areas investigated were found to contain extensive archaeological deposits of such importance as to preclude development; all, however, contain some archaeological remains.

At Countess Road evidence of Saxon and medieval activity was found in the southern and southeastern sector of the investigated area as might be expected near the town of Amesbury. An area of ill-defined prehistoric settlement represented by a low-density flint scatter was identified south of the former military railway running through the site. North of the old railway the lower ground was found to be badly disturbed by an extensive gravel pit exploited during the construction of the A303 north of Amesbury. At the far north end of the site, on slightly elevated ground, there was an area of low-density flint scatter. Augering suggested that any prehistoric land surfaces beside the Avon were deeply buried and below the present water-table.

The corridor linking Countess Road with King Barrow Ridge was found to contain a number of geophysical anomalies towards the western end, including some linear features, part of the encircling ditch of a round barrow, and the parallel earthworks of the Stonehenge Avenue. At the eastern end very few anomalies were revealed, most being explained as old field boundaries and agricultural features.

A full report, which also contains the results of earlier evaluations on King Barrow Ridge, has been submitted to the County Sites and Monuments Record.

Amesbury to Berwick Down: A303 improvement;
Prehistoric and Romano-British
As part of the examination for a suitable route for upgrading the A303, additional field evaluation using fieldwalking (surface artefact collection) was undertaken by Wessex Archaeology. The work was commissioned by Sir William Halcrow and Partners on behalf of the Highways Agency. Three areas were examined amounting to 43 hectares, centred on SU 103435, SU 093424 and SU 064041, respectively. Concentrations of worked and burnt flint were noted within each of the three areas. The majority of datable finds were flint artefacts of Bronze Age date. Other finds included a small quantity of pottery and ceramic building material, and a concentration of Romano-British sherds occurred at the western end of the study area. Geophysical surveys of nine areas were also undertaken by Geophysical Surveys of Bradford. These showed, in the case of the westernmost area (SU 067410) that amongst other features, a settlement identified earlier on aerial photographs was larger than previously known. The responses in the other survey areas were, in general, poorly defined.

Amesbury: Stonehenge (SU 123 422);
Prehistoric (Neolithic and Bronze Age)
The Ancient Monuments Laboratory of English Heritage carried out a series of geophysical surveys at Stonehenge during 1994 as part of a project commissioned by English Heritage from Wessex Archaeology to publish an account of the structural development of Stonehenge based on the primary records of all the 20th-century excavations. A magnetometer survey of the whole triangular area of land containing Stonehenge was undertaken and this was supplemented by a detailed resistivity survey of the monument itself. The aim of the magnetometer survey was to provide evidence of archaeological features in the immediate landscape setting of Stonehenge, while the resistivity survey aimed to verify details of previously excavated features and the location of former archaeological interventions at the monument.

The magnetometer survey provided valuable new detail of the 7 barrows comprising the Amesbury 4–10 group, west of Stonehenge, and mapped the course of a linear ditch crossing the north-west corner of the Triangle. The latter feature is a

continuation of the palisade ditch (probably of later Neolithic date) excavated by Vatcher and Vatcher in 1967 at SU 1217 4228 in the area now occupied by the pedestrian underpass (Vatcher, H. and L, 1968). The resistivity survey did not produce any momentous new discoveries about Stonehenge itself but was nonetheless able to confirm the presence and arrangement of several previously poorly understood features of the monument. These include entrance causeways across the ditch to the south of the stone-settings, the circuits of Y and Z holes and the counterscarp bank. The resistivity data also provides a useful and complete plan of the current condition of the sub-surface monument, which will act as an aid to its management in the future. The geophysical surveys are to be fully published in the forthcoming English Heritage Archaeological Report 'Stonehenge in its Landscape' (R.M.J. Cleal *et al.*, 1995).

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Ashton Keynes: Cotswold Community School (SU 033 962); Late Bronze Age/Romano-British; Medieval and Post-medieval

In advance of proposed sand and gravel extraction, an archaeological evaluation was made on land to the north of the school at Somerford Keynes by Wessex Archaeology in May and June 1994.

The archaeological significance of the site was indicated by an extensive set of cropmarks. Located within the proposed development area, these cropmarks appeared to represent a series of rectilinear enclosures and associated trackways, with one particular concentration representing a possible Romano-British settlement. In addition, a ring-ditch of possibly prehistoric date was located in the western portion of the proposed extraction area. In 1983, a field-walking project recovered a scatter of Romano-British pottery from an area of possible settlement. In 1988, a machine trench evaluation of this area confirmed that the concentration of cropmarks was a small Romano-British nucleated settlement, consisting of a series of adjacent small enclosures, surrounded by a network of larger field enclosure ditches. To the north and north-west of the current evaluation area, a Late Bronze Age settlement was excavated in 1992. Several post-built round-houses were recorded, along with a circular gully and several other circular and rectilinear structures. There was also a group of very large pits, closely associated with the occupation areas. Along with an important ceramic assemblage, the finds from the site provided evidence for metalworking, textile production, and crop processing.

The most recent evaluation revealed numerous archaeological features, predominantly ditches, pits, and post holes, with dating evidence suggesting both Late Bronze Age and Romano British activity. Although recorded across the entire area, these features were generally concentrated within the northern and central southern part of the site. Many of the linear features were already recorded as cropmarks during the 1988 evaluation which examined the northern half of the proposed extraction area. The remains of extensive medieval and post-medieval 'ridge and furrow' were found cutting the natural subsoil, particularly within the western portion of the evaluation area.

Avebury and its environs

Preparatory work by RCHME on this project began during the year. The study area includes much of the north Wiltshire chalk downs, as well as the greensands and clays of the Pewsey Vale and much of north Wiltshire south of the Upper Thames Valley. A desk-top study involving limited field reconnaissance, aerial photographic assessment and documentary research has been undertaken to assess the potential of the region. This has revealed a staggeringly rich earthwork environment with considerable potential for ground survey. The prehistoric monuments on the chalk, such as Avebury, Windmill Hill and West Kennet have already been surveyed by RCHME; additional work will record for the first time the well-preserved medieval and post-medieval settlement pattern, including the remains of a number of monastic houses. So far, after the initial sample reconnaissance, a number of new sites have emerged, including prehistoric and Roman enclosures and settlements, extensive areas of shrunken medieval settlement and in at least one case a completely deserted example to the west of Rowde. Intensive fieldwork will begin in the autumn of 1995.

Bradford-on-Avon: Greenland Mills (ST 83106060); Post-medieval

An archaeological evaluation by AC *archaeology* in advance of potential redevelopment of the site. Several trial pits revealed deposits of archaeologically

sterile flood silts adjacent to the river Avon and confirmed documentary evidence for former quarrying on the south side of the site.

Bradford-on-Avon: Winsley Road (ST82056113); Romano-British
An archaeological evaluation by AC *archaeology* in advance of a proposed housing development. A natural, largely undisturbed, soil sequence was recorded across the site and no subsoil features of archaeological interest were present. A single sherd of Romano-British pottery and a modern coin of Arabic origin were recovered from the topsoil.

Broad Chalke: Bury Orchard (SU 041252); Prehistoric
An archaeological field evaluation was carried out by AC *archaeology* in November 1994 on the site of a proposed development. Four machine-excavated trenches were dug south of scheduled ancient monument AM451 (the presumed medieval boundary of the village or manor). The investigations revealed no evidence for medieval activity within the application area, but did locate a linear ditch (tentatively dated to the Bronze Age), and an area of formerly waterlogged deposits which may be the remains of a (natural) pond, also of prehistoric date. These lower-lying parts of the site were sealed by colluvial (hillwash) deposits which contained very small quantities of late prehistoric worked flint.

Bulkington: land at Lawn Farm (ST 3941 1584); Medieval
A field evaluation was carried out by the Oxford Archaeological Unit in January 1994 on a development site adjacent to Christ Church, Bulkington, north of the Bulkington to Keevil road. Three trenches were excavated and revealed a number of ditches and pits containing medieval pottery. The majority of the pottery was early medieval, dating from the 11th to 13th centuries. Most features were concentrated away from the road, towards the centre of the development site.

In April 1994 Chris Bell excavated an area extending 65m back from the main village street. A ditch ran most of the length of the site, evidently marking out a plot parallel to the east side of the churchyard. There was no clear evidence of a building on the street frontage, although a stone surface may have included remains of a building. To the rear were cross ditches dividing the plot, one of which extended across the adjoining plot. The most intensive area of medieval activity was well back on the plot and included pits and curving ditches, with glazed roof tile; one ditch had poorly preserved organic deposits. The distribution of features confirms the evaluation results, with most features identified in the trench lying across the centre of the site.

Calne: land adjacent to Oxford Road (SU 0049 7280); Roman and Medieval
The Oxford Archaeological Unit undertook a field evaluation at the beginning of July 1994. The site lies west of the road and 2 miles north of Calne. The work was done on behalf of Dalton Warner Davis Associates, in connection with the proposed construction of a roundabout, a new section of road and a straw-to-energy plant. Five trenches were excavated.

A particular concern of the evaluation was to locate any activity contemporary with the deserted medieval village of Beversbrook, which survives as an area of extensive earthworks immediately north of the site. The only archaeological features found were two shallow ditches, one of which contained a piece of Roman tile, along with several sherds of Roman pottery and the remains of some medieval ridge and furrow ploughing. The absence of medieval features indicates that the village of Beversbrook did not extend into the area of investigation but that this area was used for cultivation.

Cherhill: Cherhill Down, (around SU 04806975); Modern
A watching brief was carried out by AC *archaeology* during the laying of a new water pipeline across Cherhill Down. The work revealed archaeologically sterile colluvium or modern deposits associated with previous pipe trenches and former military buildings.

Chute: Tibbs Meadow (SU 2984 5392); Late Medieval, Post-medieval
Wessex Archaeology was commissioned by Halsall Construction Ltd to conduct an archaeological evaluation of land situated on the south-eastern edge of the village in advance of proposed housing development. Work consisted of a detailed earthwork survey, five hand-dug test pits and three machine trenches. The archaeological features revealed were directly associated with the earthworks in the eastern area of the site. These comprised a 'platform' to the south which was linked, by an area of amorphous, shallow earthworks in the north, to a linear feature.

Late prehistoric, late medieval, post-medieval and modern artefacts were recovered from the topsoil in all five test pits. Late medieval and post-

medieval finds were recovered from archaeological features associated with the linear earthwork.

Compton Bassett: Compton Farm (SU 036722); Prehistoric to Post-medieval
A programme of test pitting, by the Compton Bassett Area Research Project (CBARP), was undertaken to complement earlier exploratory fieldwork (see *WAM* 88 (1995), 149). The area investigated lies at the foot of the scarp of the lower chalk shelf and has undergone continual geomorphological change. In certain trenches, up to four buried land surfaces were recorded separated by deposits of hillwash material. Finds from buried land surfaces included pottery of probable Early Bronze Age date and worked flints, including a barbed and tanged arrowhead.

Compton Bassett: Dugdales Farm (SU 029736); Post-medieval and Modern
Trial excavations were undertaken by CBARP to test for the presence of an oval feature observed as a soil mark on post-war RAF aerial photographs. No features were present and finds were limited to post-medieval and modern material.

Compton Bassett: Freeth Farm, Mill Pond (SU 029727); ?Medieval
A section was cut by CBARP through the more north-easterly of the two probable mill dams identified in 1986 (Currie 1994). The dam was largely composed of sand and clay and the section indicated episodes of repair and consolidation. No dating evidence was recovered.

REFERENCE

CURRIE, C.K., 1994 'Earthworks at Compton Bassett, with a Note on Wiltshire Fishponds' *WAM* 87, 96–101

Compton Bassett: Freeth Farm, Oak Bed (SU 022725); Roman
A programme of test pitting was undertaken by CBARP with the aim of providing a context for material collected casually by Mr J. Henly. Although no features were located a ceramic scatter was isolated and may represent the site of a small farmstead.

Compton Bassett: Manor Farm (SU 034731); Medieval
Earthworks to the south of Manor Farm were surveyed by CBARP as part of the study of the development of the road network of the locality. The survey revealed further evidence for the course of the former route parallel and to the west of the present village street (see *WAM* 88 (1995), 149).

Corsham: Easton village (ST 891706); Medieval
Planning of a group of earthworks opposite Easton Court Farm was undertaken by the Chippenham College Practical Archaeology Group (CCPAG). The remains appear to be of one of the medieval farms of the village which, unlike Easton Court Farm, has not survived to the present day.

Cricklade: Prior Park School (SU 101935); Medieval
Field evaluation by the Cotswold Archaeological Trust on behalf of Prior Park School, identified two 12th–13th-century pits.

Devizes: Drews Pond (SU 006 597); Post-medieval
An archaeological excavation of the supposed site of an old hostelry was requested by the Drews Pond Wood Project, prior to the area being converted into a sensory garden. A thatched cottage which occupied the site was demolished in 1955.

The excavation produced no evidence of this having been the site of a hostelry and indeed produced very little in the way of small finds or building material from any period.

The work was carried out by the Archaeology Field Group of WANHS as a training excavation for its members, under the leadership of Chris Chandler.

Donhead St Mary: Church of St Mary (ST 90672445); Romano-British/Medieval
A limited archaeological watching brief was carried out by AC *archaeology* during the installation of a new heating system in the church. The work revealed the line of the original north wall of the nave and produced a number of stray finds from beneath the nave floor, including Romano-British pottery of second to third century date.

Everleigh: Beach's Barn (SU 184 510); ?Prehistoric, Roman
Geophysical survey was undertaken by the Ancient Monuments Laboratory of English Heritage (EH) at Beach's Barn in response to a request from the EH Monuments Protection Programme (MPP). The villa (discovered by William Cunnington in the late 19th century) was under consideration for protection as a Scheduled Ancient Monument (SAM) but the full extent of the site was unclear. Test pitting work,

undertaken by Reading University in 1993 (Entwistle *et al.*, in press) as part of the EH funded 'Salisbury Plain Project', located the edge of a potentially substantial building beneath approximately 0.8m of flinty colluvium. Considerable quantities of Iron Age and late Roman pottery as well as fragments of limestone were also recovered from an arable field to the west of the site in a spread which extended about 100m beyond the main excavations. Resistivity and magnetometer surveys were carried out in March 1994 with the aim of placing the partially excavated building in its wider context and also investigating the artefact scatter in the field to the west.

The results of the resistivity survey were rather disappointing and, although three different mobile probe separations (each looking progressively deeper) were employed, no buried walls were detected. The lack of response was presumably due to a poor contrast between the foundations and their surroundings, and/or to their depth of burial. The magnetometry, which covered an area in excess of 3ha, proved far more successful and a range of interesting features was mapped. The most striking of these was a 5m-wide ditch running straight through the survey, dividing it into an area of intensive occupation-type activity to the north (including pits and enclosures) and a distinctly 'quieter' area to the south. A rectilinear pattern of negative anomalies was also detected within the northern area, in a region of generalised magnetic disturbance, which may well represent the foundations of a former building. Further geophysical survey would help to confirm this.

REFERENCE

ENTWISTLE, R., FULFORD, M.G., and RAYMOND, F. (in press) The work of the Salisbury Plain Project, English Heritage monograph

Grafton: Batts Farm (SU 268616)
Field evaluation near the centre of Wilton village by the Cotswold Archaeological Trust, on behalf of Michael Fowler Architects, obtained negative results.

Horningsham: Longleat Estate (ST 830430); archaeological field inspection
In February 1994 Wessex Archaeology was commssioned by the Longleat Estate to conduct a survey of all archaeological monuments on the Estate. This survey involved field visits to all 28 surviving sites; comment was made on their condition, state of repair, state of land management and on potential threats from modern activities. The survey concluded that the Estate's sites fell into three broad categories: first, those which were well preserved and were under no imminent threat; secondly, those which were under direct threat through the type of land management currently practised; and thirdly, those sites which have been largely destroyed or eroded by agricultural activity. Recommendations for future management aimed at preserving the sites were defined.

Kington St Michael: Churchyard (ST 903772)
At the request of the parish churchwardens, a grave plan was made by CCPAG, in advance of building work.

Latton: Wharf (SU 101942); Roman, Post-medieval
Field evaluation, by Cotswold Archaeological Trust on behalf of the Highways Agency; identified Roman Ermin Street in the expected location. It was 7m wide, although little of its metalling survived above the clay mound upon which it was founded. The ditch on the north-east side of the road proved to have been recut on a number of occasions: beyond it lay a low bank and another ditch and fence line. Spreading out for 9m beyond this was a humic deposit containing 3 coins (latest: AD 350-60), late 3rd–4th-century pottery, and fragments of tile and oyster shell. This might represent midden material redeposited from the settlement at Cricklade. To the north of the present road linear cropmarks proved to be associated with the post-medieval Fairford road.

Ludgershall: Adjutant's Press, Butt Street (SU 263510); ?Medieval
An evaluation was undertaken by Wessex Archaeology in November 1994 within the Ludgershall Conservation Area, close to the standing earthworks of Ludgershall Castle and St James' Church. The work was commissioned by L.J. Sturges Esq.

Two trenches, measuring 10m in length, were excavated by machine. Trench 2 revealed part of a single inhumation burial which rested at approximately 0.90m below the present ground level in a flat-bottomed grave. The inhumation was identified by the presence of a pair of tibiae, probably of an adult in a supine position aligned roughly east–west. No upper leg or torso bones were visible, and the feet were inaccessible under the trench edge. The tibiae were resting in the base of a sub-rectangular grave, the full dimensions of which lay outside the edge of the trench. Detailed cleaning of the trench face

revealed that the grave was in fact cut from immediately below the modern footings, a level higher than that at which it had become visible. The alignment of the inhumation might suggest a medieval date, although neither a Romano-British nor Saxon date can be excluded.

Malmesbury: Market Place, (ST 933873); Post-medieval
An archaeological watching brief was maintained during the later stages of a resurfacing programme in November 1994. Prior to the involvement of AC *archaeology*, deposits up to 500mm below the existing ground surface had been removed from the area north-west of the Market Cross monument; previous archaeological investigations suggest that disturbances at these depths have removed various post-medieval resurfacings of the market place and may have impinged upon medieval levels.

Observations in the remaining north-east area of the Market Cross revealed a homogeneous layer which contained building and resurfacing debris, animal bone and pottery of probable 18th-century or later date. A cobbled surface butting up to the kerb stones of the Market Cross was also recorded; this is believed to be a modern feature.

No features were recorded in the area beneath the road on the east side of Market Cross as this had been heavily disturbed by service trenches.

Melksham: The Hurn Site (ST 902639); ?Prehistoric
An auger survey was carried out, by Cotswold Archaeological Trust on behalf of Meyer Ltd, to determine whether archaeological deposits or sediments of palaeoenvironmental interest existed on land adjacent to the river Avon. A possible palaeochannel was identified running parallel to the present course of the river, while on the higher ground a series of terrestrial erosional deposits were found to have originated from near the church.

Minety: Upper Minety (SU 013911); Medieval
A second season of excavation by CCPAG was undertaken at the medieval pottery production site. No kiln was found but the foundations of a timber building and quantities of wasters were discovered to the west of the road uncovered in 1993.

Orcheston: Tilshead barrow (SU 053482); Prehistoric
A survey of a damaged round barrow on West Down, near Tilshead, was carried out by AC *archaeology*. The survey involved a photographic survey, contour survey of the existing land surface and scanning to record the presence of artefacts on the eroded barrow mound. Sufficient of the mound and ditch remained to be recorded by the contour survey and a low density of worked flint was recorded across the site.

Salisbury: Bishop Wordsworth's School (SU 145 269); Medieval
An archaeological evaluation by Wessex Archaeology was undertaken in March 1994 prior to an application for planning permission for redevelopment within the medieval walled precinct of the Cathedral Close. The work was commissioned by Bishop Wordsworth's School on behalf of Wiltshire County Council Education Service.

A total of six hand-dug and five machine-dug trenches were excavated, and a number of wall footings were located, including the north wall and chalk floor of a building of probable medieval date. Material recovered from excavated layers was predominantly of post-medieval date, although small quantities of medieval material were also present.

Salisbury: Downton Road (SU 147284); Bronze Age
The land subject to a development proposal covers an area of roughly seven hectares and is located approximately 1.5km south of Salisbury city centre. Overall, the site is positioned on a moderately steep north-facing slope which leads down to the floodplain of the River Avon. An evaluation was undertaken by Wessex Archaeology at the request of the Bell Cornwell Partnership. Twenty-nine machine trenches were dug revealing a number of archaeological features.

A ring-ditch recorded on the SMR was identified and partially excavated. A series of ditches was also revealed and the recovered artefacts suggest activity in the area during the Bronze Age, contemporary with or later than the barrow cemetery indicated by the presence of ring-ditches and an extant barrow mound. Trenching in the eastern part of the proposed development area revealed colluvial deposits, over a metre in depth. An assessment of the land snails from this colluvium indicated high potential for detailed analysis of the environmental background and thus a greater understanding of the landscape history. A similar potential can be ascribed to samples extracted from the excavated ring-ditch.

Salisbury: Ivy Street/Brown Street (SU 146298); Medieval

Ivy Street and Brown Street in Salisbury form the south-east corner of Antelope Chequer, one of the blocks of land (or 'chequers') which resulted from the laying out of the new city of Salisbury on a regular grid pattern in or around 1219 AD. Although no previous archaeological fieldwork has been carried out within Antelope Chequer, the site is adjacent to the continuation of New Street (now known in this area as Ivy Street) which was probably one of the earliest streets to be laid out in the new city.

Over a period of four and a half weeks commencing 12 July 1994, Wessex Archaeology conducted the excavation of 320 square metres. These works were commissioned by Salisbury District Council in advance of proposed residential development.

The excavation mainly identified archaeological deposits of the medieval period, specifically those of the 13th and 14th centuries. Buildings of this period lay along the Brown Street frontage with a burgage wall running from the frontage into the backlands. Rubbish pits and cess pits of this period were also found within the backlands, one of the latter being contained within an outhouse at the rear of the buildings.

Very few artefacts of the later medieval period were recovered and activity at this time appears to have been very limited. In the post-medieval period larger pits were dug into the earlier deposits in the backlands. The burgage boundary wall appears to have been superseded and a large building along the frontage spread into the neighbouring burghal plot. A stone-flagged yard may be related to this building. In modern times, much of the area was levelled and used as the forecourt of a commercial garage. A vehicle inspection pit was one of a number of large intrusive features which cut into the underlying archaeological deposits.

Salisbury: Old George Mall (SU 144298); Medieval/Saxon

Three stages of archaeological work were carried out by Wessex Archaeology prior to redevelopment of the southern half of the Old George Mall shopping centre within the city of Salisbury; these included a desk-based assessment, site evaluation, and area excavation between Nos. 60 and 76 New Street. The work was commissioned by Trafalgar House Construction Management Ltd.

The excavation, within a 17x13m perimeter, revealed good sequences of stratified deposits, including substantial 13th-century buildings set broad side on to the street frontage, with associated floors and hearths. There is evidence to suggest that the buildings are, in part at least, commercial rather than simply domestic and are accompanied by external features and structures of an industrial nature. Large quantities of stratified artefacts and ecofacts have been recovered, including organic-tempered Saxon pottery, and an extensive programme of bulk soil sampling has been conducted on *in situ* primary deposits rich in palaeo-environmental materials. The bulk of the structural and depositional evidence survived at the front of the site where nearly 400 separate contexts were identified within an area less than 10m square and 0.40m deep. The rear of the site (where an evaluation trench was located) revealed little other than 17th- or 18th-century cess pits and cellars with evidence of substantial soil reworking and deposit attrition from 19th-century gardening. In summary, medieval deposits and structures survived almost completely undisturbed immediately below the modern ground level at the front of the site but had been almost completely truncated at the rear. Full post-excavation assessment will not commence until all fieldwork is complete, probably in the late spring of 1995.

Salisbury Plain Training Area: Multiperiod

Fieldwork by the RCHME has now been completed on the SPTA. During the year survey work focused on the Bulford Ranges where an important prehistoric landscape was investigated. A number of small enclosures of presumed Late Bronze Age date, an associated field system, linear ditches and round barrows were surveyed.

Other major sites surveyed during the year include the deserted settlement of Imber Coney which is located immediately west of the better known, and larger, Imber village which was evacuated this century. The survey of Imber Coney showed it to have been a small planned settlement comprising up to 6 domestic units belonging to a manorial complex which complements that at the larger sister village.

Other field targets during the year have included the landscape assessment of the Chapperton Down area. This not only included detailed survey of the Romano-British village there, but also looked at the linear ditch which was subsequently used as the main street for the settlement which spread over a distance of 1.5km. Elsewhere, in the vicinity of Chapperton Down, work was carried out on the extensive remains of prehistoric and Roman field systems.

Further to the east, detailed ground examination also took place on the Thornham Down field system which surrounds the Charlton Down Romano-British settlement complex reported last year. As expected, the field system was well-developed and long-lived. It incorporates an earlier, prehistoric core subsequently remodelled in the Romano-British period. Overlying this there is the superimposed weave of ridge and furrow ploughing of medieval or post-medieval date.

The remains of a number of post-inclosure farmsteads on SPTA were also examined. These were tenant farms, built by landowners and following 'model' plans as part of the period of agricultural improvement in the 19th century. Most failed, lasting only one or two generations before abandonment.

The RCHME, in association with Geophysical Surveys of Bradford, has also continued with its programme of geophysical survey on SPTA and has recorded the following sites.

i) The remains of an aisled villa lying immediately to the north of the Salisbury Plain escarpment at Edington.
ii) The site of the destroyed 14th-century chapel at St Joan a Gore. This proved to be a double-celled building 9m wide and 20m in length.
iii) Sheer Barrow, a plough-flattened mound of Neolithic date, was investigated. Geophysical survey confirmed the presence of a mound and encircling ditch, recalling the morphology of a number of long barrows recorded in Cranborne Chase. The survey picked up traces of an internal mortuary enclosure and at least one other oval-shaped enclosure immediately to the north of Sheer Barrow.
iv) Further geophysical survey work was undertaken on the western boundary of the enclosure and villa complex at Figheldean. (See *WAM* 86 (1993), 14). The enclosure can now be seen to follow a rather eccentrically 'zig-zagging' course, suggesting that it is mirroring an earlier landscape feature.

The final component of the RCHME project, the aerial transcription, which has involved the computerised recording of all visible archaeology on the SPTA at a scale of 1:10000 is, similarly, reaching a conclusion. The work has been highly productive, locating a number of previously unknown prehistoric and Roman settlements, as well as adding new detail to those archaeological complexes already known.

Swindon: Haydon Wick (SU 1220–8820); Medieval

A watching brief, by Cotswold Archaeological Trust on behalf of Thames Water, was conducted during the cutting of a new sewer main over a distance of 2km on the northern fringe of Swindon. A pottery scatter of broadly 10th–12th-century date was recovered to the east of an earthwork south of Park Farm Cottage, and known earthworks through which the pipeline cut were recorded in section. The sewer cut deep into geological levels and numerous fossil finds of ammonites and bivalves in the Upper Oxford Clays proved to be of palaeontological interest.

Swindon: Rushey Platt (SU 136837); Bronze Age

The prehistoric barrow at Rushey Platt was investigated in 1922 by A.D. Passmore who located a possible cist slab. The barrow was subsequently scheduled as an ancient monument (Wilts. 668) but it had been assumed that it had been entirely destroyed in recent times during the preparation of this low lying area for development. Accordingly, a field evaluation by Cotswold Archaeological Trust was commissioned by J.J.H. Homes Ltd and Wiltshire County Council to clarify whether the barrow did indeed survive. Trenching revealed a clay mound, representing the damaged remains of the barrow, in the anticipated position; the considerable depth of modern land-fill across the site had protected the mound to some degree.

Swindon: The Hermitage, Old Town (SU 1598375); Roman, Saxon, and medieval

An archaeological excavation was undertaken by Wessex Archaeology for Jephson Homes Housing Association in advance of construction at The Hermitage north of Dammas Lane. The site comprised an area of *c.*725 square metres. A buried topsoil, containing mainly Roman pottery of 1st to 2nd century date, together with nine sherds of Saxon pottery, 34 sherds of medieval pottery, and 100 pieces of worked flint, covered much of the site. Some features, including a north–south ditch at the western side of the site and a possible backfilled quarry to the north-east, may have cut this soil. Several shallow intercutting gullies, possibly associated with buildings, were recorded at the southern side of the site, all truncated by or lying below the soil. Truncated pits and post holes were also recorded, one of which contained an incomplete infant burial. Another incomplete infant burial, possibly marked by displaced natural stone, was found near the base of the buried soil.

Tidworth: Dunch Hill (SU 205486); Early/Late Bronze Age

The area of Dunch Hill is situated near two extant barrows and to the south of a possible Late Bronze Age settlement. The Defence Land Agent commissioned Wessex Archaeology to evaluate a section of earth trackway, on the western slope of the hill, prior to the construction of a new hard-surfaced track. In the evaluation area, a number of important sites are documented on the County's Sites and Monuments Record, including the two round barrows, one of which is Scheduled, and a classic 'Celtic' field system, ploughed but still surviving as earthworks. Within the same field, Reading University had discovered, during field walking, a scatter of later Bronze Age pottery, burnt flint, and bone. At the same time they had excavated a small pit which was exposed within the trackway and contained Late Bronze Age pottery. This led to the assumption that the remains of a Late Bronze Age settlement had been disturbed by the use of the track.

Wessex Archaeology excavated a single trench on the course of the trackway. The evaluation established the presence of a number of archaeological features along the line of the proposed hard surfaced track, seven of which were examined detail; six of them produced artefacts of Early to Late Bronze Age date.

Trowbridge: Court Street (ST 856576); Post-medieval

Four test-pits excavated by Cotswold Archaeological Trust on behalf of Alder King revealed only modern cellar walls, foundations and pipe-trenches.

West Overton: Park Farm (SU 155653): Mesolithic

A scatter of Mesolithic flint debris was found during fieldwalking by CCPAG in a field to the south of West Woods long barrow.

West Tisbury: Tisbury Golf Course (centred on ST 937288); Prehistoric/Romano-British

A fieldwalking survey was carried out by AC *archaeology* at Wick Farm, Tisbury, in advance of a proposed golf course development. A concentration of pottery and worked flint was identified around ST 935289 and is considered to be the southerly extension of an area of Iron Age and Romano-British activity recorded around ST 935291 (Wilts County Council SMR ST92NW550). The survey failed to provide any surface evidence for activity associated with the medieval settlement of Wyck (Scheduled Ancient Monument 838).

Wilton: 13a Russell Street (SU 0976 3126); Medieval

In September 1994 the OAU undertook a field evaluation where it was proposed to build three terraced houses. The work was carried out on behalf of Peter Borchert Architectural Design Consultants. The site lies within the Saxon town of Wilton which, during the 8th century, was the capital of Wessex and remained an important town in the region until the late 13th century.

Four small trenches were excavated to a maximum depth of 1.2m. Alluvial clay was located at the bottom of all of the trenches, and this was overlaid by a uniform layer of slightly organic clay containing quite large quantities of early medieval pottery, oyster shells, and small fragments of animal bone; this appeared to indicate the dumping of domestic refuse. The only archaeological features located were an undated pit and a post-medieval ditch. No Saxon remains were found during the evaluation, and none of the medieval deposits were related to structures. The presence of alluvium perhaps indicates that this area was too prone to flooding for occupation in the early medieval period. The apparent dumping of domestic refuse at this period may have been an attempt to raise the level of the site, but more probably is to be seen as evidence of manuring for agricultural or horticultural purposes.

Winterbourne: Salt Lane, Winterbourne Gunner (SU 18253521); Prehistoric and Anglo-Saxon

Two further phases of investigation of the Anglo-Saxon cemetery have been undertaken by AC *archaeology*. This has involved evaluation of the west portion of a former house plot, known as Camerton, and of adjacent land to the north. An area excavation within the house plot site, behind the Salt Lane frontage, was subsequently undertaken.

The excavation revealed two further graves of Anglo-Saxon date, along with a single, probably prehistoric, crouched inhumation adjacent to a previously unknown pond barrow. It can be shown that the position of the pond barrow had been respected and avoided by the Saxon cemetery. The barrow was not further excavated and has now been protected as a Scheduled Ancient Monument. To the north of the pond barrow evidence of a Middle Bronze Age urn field and a second, ploughed-out, round barrow was recovered. Two cremation urns were removed but the site was not further disturbed. A full report is in preparation.

Yatesbury: All Saints Church (SU 063715); ?Late Anglo-Saxon and Medieval

Excavations by CBARP were undertaken to the south of the church with the aim of investigating the boundaries and interior of the sub-rectangular enclosure whose north-west quarter is occupied by the churchyard.

At its western end the interior of the enclosure is up to 1.5m above the ground level outside. A cutting through the western boundary revealed a series of steps marking subsequent re-cutting of a holloway. The latest holloway of the observed sequence was surfaced with tightly packed pebbles placed directly on top of the chalk bedrock. Two horseshoes of 14th-century date were found lying on this surface. At the eastern end of the cutting approximately one quarter of a substantial sub-rectangular pit, containing domestic rubbish, was excavated and is provisionally dated to between the 10th and 12th centuries.

A second cutting immediately to the south of the present southern boundary of the churchyard revealed a shallow gully running parallel to the existing boundary and, further south, a sarsen stone set into a circular pit which is interpreted as a post-pad. Both features were sealed by a layer of chalk rubble which contained medieval pottery with a 12th – 14th-century date range. A fragment of glazed floor tile dated to the first quarter of the 14th century was recovered from the topsoil and it is suggested that this and another plain glazed fragment, from the holloway sequence, may be debris related to alterations to the adjacent church.

Yatesbury: Manor (SU 062715); Medieval

Two trenches were cut by CBARP across the bank and ditch enclosure parallel and to the west of that which contains the churchyard (*WAM* 88 (1995), 154). The composition of the bank and the filling of the ditch indicated one major phase of construction. Deposits within the enclosure comprised apparently water-lain silts and the feature is interpreted as a pond of medieval date, based on sherds recovered from the ditch.

Yatesbury: Manor Farm (SU 065716); Prehistoric to Post-medieval

Excavations by CBARP were continued within and around the earthwork enclosure and other associated earthworks first identified in 1992 (*WAM* 87 (1994), 157-8; 88 (1995), 154). A series of trial trenches was cut with the aim of elucidating the nature of activity within the enclosure. Evidence for its northern limit was found in the form of substantial intercutting ditches similar, but fewer in number, to those recognised in previous cuttings to the south and west. The ditches appear to belong to the later part of the sequence, *c.*1750 and earlier. Further trenches revealed dense post-medieval occupation debris, including two enigmatic rectangular chalk rafts, measuring 1m x 2m, set side by side. A cutting was made through the western tail of the east–west mound, the eastern part of which has been shown to be an Early Bronze Age round barrow (*WAM* 88 (1995), 154). This revealed a sequence of burnt deposits, containing medieval and ?late Anglo-Saxon pottery, within a ditch or pit. This feature was sealed by ploughsoil in the form of a headland which has given the mound its elongated appearance.

A cutting was made in the south entrance of the enclosure as indicated by surviving earthworks. The primary objective of locating ditch terminals, to establish the presence of an entrance, was achieved. The enclosure has been related to the early road system of the region and research has indicated that the Anglo-Saxon *herepath* (army way) which runs into Avebury from Marlborough continued to Yatesbury and beyond, following the line of the Lower Chalk Shelf. The evidence is discussed in greater detail elsewhere (Reynolds 1995).

A cutting through ridge and furrow to the south-west of the enclosure was intended to provide a broad date range for cultivation based on examination of material deposited by manuring from domestic middens. Very little medieval pottery was found, but a ditch of late Roman date, running east–west, was sectioned.

To the south-west of the enclosure, between the church and the ridge and furrow, trial excavations were undertaken to evaluate the archaeological potential of the site. Substantial archaeological remains were encountered, including groups of intercutting pits, part of a masonry structure apparently constructed upon a chalk raft and concentrations of post holes. One 2m x 1m test trench revealed eight post holes, three of which were set along the bottom of a narrow trench. Excavations in 1995 are to be concentrated in this area.

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Wiltshire Archaeological and Natural History Magazine, Vol. 89 (1996), pp.154–160

Reviews

Michael Aston and Carenza Lewis (editors). The Medieval Landscape of Wessex. Oxbow Monograph 46, 1994; viii + 280 pages; illustrations and maps. £28, hardback. ISBN 0 946897 78 6.

This is a collection of thirteen papers by different hands, with an admirable introduction by the editors, an index, and a beautifully crafted preface by that most eloquent of landscape historians, Maurice Beresford. The Wessex described is essentially Dorset, Hampshire, Somerset and Wiltshire. Five chapters concern counties other than Wiltshire, and are not considered here. Another (of which more below) is exclusively about Wiltshire, and the rest are regional in scope. The generous Oxbow format, of double-column A4 pages, and the illustrated board binding (rather than conventional casebound), make this book not over-priced. But I should have preferred to see fewer proof-reading errors and confused citations, and a better standard of indexing. For example, poor old Andrews and Dury (creators of the 1773 map of Wiltshire) appear in four different spellings in the course of one paper, and the only index entries for the Mount at Glastonbury, and the Ridgeway, are under 'The'.

Two excellent surveys of pre-conquest archaeology in the region begin the proceedings. Bruce Eagles tackles the earlier period, and suggests a late Roman date for East Wansdyke. David Hinton's survey of the later period includes discussions of recent findings from Trowbridge and Cowage, and some timely scepticism about the theory of specialised functions within multiple estates. Then there is a masterly exposition of church organisation from Roman times to the 19th century, by Patrick Hase. This is based largely on Hampshire evidence (as one would expect from the author's previous research), but is also of considerable relevance to Wiltshire. Another highlight of the volume is a comprehensive discussion of forests, chases, warrens and parks in medieval Wessex, by James Bond.

Two shorter papers, by Della Hooke on the administrative and settlement framework derived from Saxon charters (drawing especially on evidence from Teffont and Bradon), and by John Hare, on medieval chalkland agriculture and settlement, are also very stimulating. The latter has a particularly good discussion of settlement shrinkage and desertion. I am less happy about Michael Costen's attempt to analyse terms in Saxon boundary charters. Apart from irritation that many of the Old English terms are not translated, Dr Costen appears not to have consulted the various papers written about Wiltshire charters. Thus he speaks of the Langley Burrell charter, which was shown conclusively by Avice Wilson in this magazine (vol. 77) to relate to Kington St Michael and Kington Langley; worse, he assumes that, because Wansdyke occurs as a boundary feature in the East Overton and Stanton St Bernard charters, that those estates were divided after the construction of the monument. In fact, the boundaries here cross Wansdyke and do not follow it, convincing G.M. Young, Desmond Bonney and others that precisely the opposite conclusion was appropriate.

Carenza Lewis writes on 'patterns and processes in the medieval settlement of Wiltshire'. Her starting point is a map of the county, showing different settlement forms, which she has laboriously compiled by analysing the 1773 map of Andrews and Dury. It shows, with striking clarity, the contrast between the regular and compact settlements of the chalklands and Cotswolds, and the irregular, dispersed pattern found in the claylands. To account for this she explores historical land use, medieval demography, evidence of desertion and shrinkage, and the distribution of moats; but none of these appears to her to explain the cause and origin of the regional differences. She therefore turns to the very problematical evidence of Roman and early Saxon settlement in Wiltshire, and suggests that, although there were periods of change between 400 and 1500 AD, the origins of the medieval distribution are, 'set firmly in preceding patterns of settlement and boundaries'.

Stimulating though such a discussion undoubtedly is, Ms Lewis's paper is open to criticism and comment on a number of fronts. She exaggerates the importance of clothmaking to west Wiltshire by the early 14th century. In her discussion of moats she ignores the explanation that many Wiltshire moats (including the one she illustrates) are related to medieval parks. She underplays the number of regular linear settlements on the northern side of Salisbury Plain – in the Vale of Pewsey, in fact, such regularity is the norm. Her density maps, 1332 and 1377, appear to use civil, not ancient, parish boundaries, so that (for example) the entire recorded populations of the extensive medieval parishes of

Calne, Melksham, Bradford and Malmesbury St Paul are plotted in the urban portion, with 'no data' recorded for the rest.

Such observations do not affect the main drift of her paper. But in another respect her argument, in my view, is fatally flawed. She believes that the pattern and form of settlements mapped in 1773 were virtually the same as those which existed at the end of the middle ages, and that the map, 'pre-dates most of the changes in the landscape which occurred with enclosure'. But this is true only of the chalklands; on the claylands the process of enclosing the former open fields had been proceeding apace since the late middle ages, and was all but complete by 1773. Thus what she has actually mapped are the settlement patterns and forms of the chalklands before enclosure, and the claylands after enclosure. Is not the simplest explanation the correct one – that the process of enclosure itself, between the 15th and 18th centuries, has created the form of dispersed settlements to be found in 1773 on the claylands?

Aubrey recognised this process at work. Commenting on the consequences for the poor of the disafforestment and enclosure of Pewsham Forest in the 1620s, he noted (*Natural History of Wiltshire*, 1847, p.58), 'Now the highwayes are encombred with cottages, and the travellers with the beggars that dwell in them'. Anyone who delves into the evolution of the clayland villages (via *VCH Wilts.*, for example) will continually find examples of roadside and common-edge squatter hamlets springing up, especially during the 17th and early 18th centuries. It may well be, as Ms Lewis argues, that clayland villages such as Bradenstoke and Tockenham exhibit elements of continuity from Roman and Saxon times; but the *form* in which clayland settlements existed in 1773 was largely post-medieval.

Indeed, at one point Ms Lewis presents evidence in support of just such a view. Referring to deserted settlements on the claylands, she writes: 'The fact that so many of these deserted sites take the form of regular villages, which are generally uncommon in this part of the county, is also very interesting: furthermore very few *dispersed* [her italics] settlements have recorded evidence for shrinkage around them.' Precisely. The effect of late- and post-medieval enclosure on the claylands was to attack the old-established (?late-Saxon, according to current orthodoxy) regular villages surrounded by their open fields, and to replace them with a dispersed pattern of farmsteads and hamlets. No need for any Romans in the equation, at all.

The length of my rebuttal of a single paper in this volume will, I hope, be taken as a measure of the intellectual stimulation that it fuels, rather than as an indictment of the field in general. The landscape history of Wessex is an important, fascinating and rapidly developing subject, and Mick Aston and Carenza Lewis have done it, and us, an immeasurable service by bringing together this collection of papers. Long may the debates continue.

JOHN CHANDLER

Richard Bradley, Roy Entwistle, and Frances Raymond. Prehistoric Land Divisions on Salisbury Plain: The Work of the Wessex Linear Ditches Project. English Heritage Archaeological Report 2, 1994. 181 pages; 78 illustrations (line and photographic); 58 tables. Price £28, paperback. ISBN 185074 647 X.

Salisbury Plain is an area of great archaeological value and sensitivity which has been the subject of two major studies in recent years. The first, an archaeological landscape analysis by RCHME, derived from air and ground survey, covers the entire area under military ownership and is currently being prepared for publication. The second, a detailed study of the later prehistoric land divisions to the east of the River Avon is the subject of this review. Conceived as a three year project funded by English Heritage and executed by a small but skilled team from the University of Reading, this volume has been prepared and published with exemplary speed. The results will be of considerable interest to all students of prehistoric Wessex.

The opening chapter by Bradley gives a detailed resumé of the study of the Wessex linear ditch system from Pitt Rivers to the present day (an excellent example of archaeological synthesis), and the criteria governing the selection of the study area. This is followed by Entwistle on the development and application of the methodology. Fieldwalking strategies were designed primarily to identify areas along the linear ditches which could be targeted for excavation. The lack of intensive modern cultivation in the project area was largely responsible for the recovery of large quantities of prehistoric ceramics which contributed to the identification of many new sites. In all thirty small scale excavations were undertaken. The majority were across ditches, although a number of lynchets adjacent to the ditch system, notably on Dunch Hill (where an extensive

settlement was also located) were investigated. This reviewer wishes that more work could have been undertaken on field lynchets to gain a greater insight into the chronological relationships between field systems and linear ditches.

The results of the fieldwork have led the authors to identify a broad morphological scheme and chronological sequence which they use as the basis for a detailed analysis of the social and economic factors behind the division of the landscape between *c.*1200BC and *c.*500BC. Two 'core territories', defined by linear ditches, are postulated between the Bourne Valley and Dunch Hill. The dating evidence is convincing for an origin *c.*1200BC and a ceramic association between unenclosed Late Bronze Age settlements and linear ditches in the study area is established. The authors argue for a sequence of ditch system maintenance which undergoes a radical alteration *c.*800BC–500BC, with the amalgamation of 'territories' culminating with the emergence of the hillfort of Sidbury and enclosed settlements associated with All Cannings Cross ceramics.

Discussion of the finds and environmental data is of great importance for the region, complementing and expanding on the work of the Danebury Project. Raymond's pottery analysis is lengthy but well argued, linking the primary phase of ditch construction with post Deverel-Rimbury 'Late Bronze Age Plain Wares' and noting the rarity of all but the earliest All Cannings forms from the unenclosed settlements. Molluscan analysis by Entwistle has given a detailed picture (fig.70) of the changing environment between the second and first millennia BC and will be a welcome addition to the data gathered by the Stonehenge Environs Project.

The arguments throughout this volume are considered and well presented. How far they can be applied across Wessex is more problematic. There is little discussion of the remainder of Salisbury Plain west of the Avon where a somewhat different configuration of ditch systems has been recorded which, contrary to the examples examined east of the river, appear to retain an important landscape role into the Romano-British period. Indeed the Late Bronze Age and Early Iron Age archaeology of the study area seems to have closer associations with the chalklands of the Quarley/Andover area than central and western Salisbury Plain. It is this reviewer's impression that there are highly localised and specialised components within the Late Bronze Age and Iron Age landscape of Wessex which desperately require further research.

This volume has demonstrated the value of fixed-term problem-specific projects and should be seen as a model for similar investigations. As with all research it has posed as many questions as it has provided answers. The exceptional preservation of the field archaeology on Salisbury Plain makes it ideal for a wide range of research projects and the results of the current investigation by the Reading University team into the late Iron Age and Romano-British landscape east of the Avon are awaited with interest.

The authors are to be congratulated on the execution of the project and the speed with which it has been made available in publication. The volume has few typographical errors and the line illustrations are crisp and clear although the photographs were rather dark in the review copy.

MARK CORNEY

D.A. Crowley (editor). A History of Wiltshire, Victoria History of the Counties of England Series, Volume 15: Amesbury and Branch and Dole Hundreds. Oxford University Press for Institute of Historical Research, 1995; xxii + 338 pages; illustrated. Price £70, hardback. ISBN 0 19 722785 6

The publication of this volume brings the Wiltshire series to three more than the next largest *V.C.H.* series (Oxfordshire), and at its launch there was discussion about whether Wiltshire now has the most copious county history ever produced. None of those who took part offered to put the matter to the test by making detailed word-counts to compare our *V.C.H.* with such giants as Nichols's *Leicestershire* or Hasted's *Kent*, so the matter remains in doubt. What is not in doubt is the quality and quantity of the research embodied in these recent *V.C.H.* volumes.

The two hundreds treated cover a compact area to the north of Salisbury in the valleys of the Wylye, the Avon and the Bourne, still largely rural. The only towns, Ludgershall and Amesbury, were small, and it was only the advent of the army from 1897 onwards that led to an increase in population around Tidworth, Bulford and Larkhill camps. It is pleasing to see that various official sources still in government hands were made available to the editors so that the growth and use of the various military establishments could be described in detail. This volume also sets out very clearly the growth of such places as Amesbury and Durrington in the present century. Few Wiltshire people, I guess, would be able to

identify a settlement called Tin Town in Brimstone Bottom; answer on page 156.

In detail a reviewer can only comment on points that interest him or catch his eye. No new light is cast on the mysterious burghal status of Tilshead in 1086 – the sources are lacking – though it is plausibly suggested that its wide main street near the church may have been the borough's focal point. New and unusual is the information on the development of Wylye on a grid pattern, though I am sorry that the origin of the name of Teapot Street there did not come to light (nor, presumably, that of Coffee Farm in Great Durnford). The Demon Drummer of Tidworth is dismissed rather summarily as 'a poltergeist' – what has the *V.C.H.* to do with such imponderables? – and it is a pity that it has not been possible to identify the house which he troubled. It could have been worth mentioning the tradition of the seven children at one birth at Great Wishford which, however implausible, has been current in the village since at least the 17th century.

It is pointed out in the Editorial Note that the support which Swindon Borough and then Thamesdown District Councils have given over the years (more than one fifth of the cost of compilation) has now ceased. All interested in Wiltshire's past hope that this is only a temporary withdrawal.

K.H. ROGERS

A.P. Fitzpatrick and Elaine L. Morris (editors). The Iron Age in Wessex: Recent Work. Published by the Trust for Wessex Archaeology Ltd, 1994, on behalf of the Association Française D'Etude de L'Age du Fer; 124 pages, line drawings and photographs. Price £15, paperback. ISBN 1 874350 11 6.

The publication comprises papers presented in April 1994 at a conference of the Association Française D'Etude de L'Age du Fer, on the theme of the Iron Age in Wessex. In the foreword, John Collis indicates how the interest of archaeologists has shifted during the course of this century from the mighty hill-top sites such as Maiden Castle to the smaller enclosed settlements visible both as earthworks and as cropmarks and soil marks. Much of the detail of these settlements has emerged through excavation, whilst survey work by the RCHME has given a picture of the landscape within which these sites were situated.

The conference report is in two parts. The first consists of ten essays on various themes of Iron Age archaeology, ranging from social organisation (Colin Haselgrove) to the production and distribution of Iron Age pottery (Elaine Morris). The second part, with twenty-three contributions, presents information on settlements and landscapes obtained from archaeological excavation and survey.

In both sections, each report has been kept brief and succinct and the references for all contributions are presented in a single section at the end of the volume. The publication is of particular value in the range of themes and settlement types which are represented. In part one, there is a particularly interesting contribution by J.D. Hill which looks at the evidence for ritual behaviour on Iron Age settlements, examining such things as the assemblages of bones and artefacts in pits and ditches. The strength of part two is in the variety of plans and photographs illustrating what has emerged from recent excavation about the internal arrangements on small settlements. Of particular interest to the Wiltshire reader are the essays on two midden sites: Andrew Lawson's on Potterne and that of a team from the RCHME reporting on East Chisenbury.

The volume is well illustrated and well produced. My single criticism is that the contributions have been too severely limited in length, presumably because of the editorial nightmare of overruns by thirty-three different contributors! As an example, Mark Corney, in reporting on the RCHME tasks in Wessex, has been limited to about 1200 words and one illustration. Nevertheless, the editors are to be congratulated on extracting contributions speedily from those who attended the conference and presenting the results so professionally. At £15, this is good value for money.

ROY CANHAM

J.L.Kirby (editor). The Hungerford Cartulary: A Calendar of the Earl of Radnor's Cartulary of the Hungerford Family. Wiltshire Record Society, Vol. 49, 1994; xix + 300 pages. Price £15, hardback. ISBN 0 901333 26 4.

By the time of Walter, first Lord Hungerford (1378–1449), the family of that name had risen within a generation to become one of the most important families in Wiltshire, having provided, in Thomas Hungerford, the first Speaker of the House of Commons. They held extensive estates in Wiltshire, Somerset, Berkshire and London, and, not surpris-

ingly, in line with practice common among religious houses and land-owning families, Walter had a cartulary drawn up of the deeds of these estates in order to record title and rights, thus protecting them from challenge or threat. What is perhaps surprising, and, in the light of the loss of so many medieval cartularies, something of an extravagance, two versions of the Hungerford cartulary, albeit with some significant differences, survive.

It is to the version belonging to Lord Radnor of Longford Castle and held with his archives in the Wiltshire Record Office that Mr Kirby has brought his considerable editorial skills, maintaining an interest in the family which dates from his researches at university in the 1930s. The Radnor cartulary presents a clear view of the Hungerford estates centred in Wiltshire at Heytesbury although the ancestral home was established just over the border in Somerset at Farleigh Hungerford. The deeds of each estate, expertly calendared and indexed, provide rich seams of topographical, genealogical and toponymical material common to medieval deeds although, of course, unique in each case. The Wiltshire estates were dispersed throughout the county, from Heytesbury in the west to Cricklade in the north, and Hungerford (now entirely in Berkshire) in the east. In the introduction, Mr Kirby announces his intention to publish the Hobhouse version, or more accurately the 45 folios of material not in the Radnor version, deposited in the Somerset Record Office together with the surviving section of another family cartulary. It is unfortunate that it was not considered feasible to produce a composite text of all three documents. Furthermore, the decision to omit the deeds of the chantry of Farleigh Hungerford on the grounds that they were published *in extenso* by Canon Jackson in 1879 is regrettable. A modern edition of the Hungerford material in a single volume would have provided a complete and readily accessible source.

The deeds document the ownership of the estates up to and after their acquisition by the Hungerfords and contain much of interest about other families. Of particular note are three *Inquisitiones Post Mortem*, two for Thomas Seyntomer in 1365 (51, 52) and one for Hugh Wake held in 1312 (80) which do not appear among the Public Records. That of Bartholomew de Badelesmere held in 1329 (632) lacks a footnote confirming that it exists among the Chancery *Inquisitiones Post Mortem* Edw.III, file 9, no.12. There is a little inconsistency in the handling of undated documents. On occasions, for example, in numbers 1–29 they are left unassigned for any period whereas elsewhere, such as 463–475, several approximate dates are offered. Similarities in witness lists with dated documents and assessment of other internal evidence might have allowed the editor to be more positive. As it is, those undated deeds appear rather exposed and adrift and would have benefited from some form of anchorage however crude.

The cartulary contains a large number of personal names which will allow many individuals to be identified and placed more clearly, particularly when their offices are stated. William Brygon, a clerk of Exeter diocese who was also a public notary and registrar of William Ayscough, Bishop of Salisbury, is such an example.

The occurrence of Richard Whittington, in a deed of 1435, not in his more familiar role as Lord Mayor of London, but as Mayor of the Staple of Westminster, is of wider interest to all of us who received our first smatterings of history in fairy tales.

The most unusual documents in the cartulary are pedigrees of the Hussey family, the maternal line of Walter, first Lord Hungerford (737, 738) and of the de Montfort family of Wellow and Farleigh (749). The source of the former two pedigrees has not been identified which makes their appearance in print of particular note.

All three elements of the volume, introduction, text and index, are dealt with skilfully by Mr Kirby. The introduction is a little brief and would have benefited from more of the content of the editor's unpublished thesis. By saving the Hobhouse cartulary for a possible publication at a later date, the opportunity to discuss and compare both versions is avoided. Thus on both counts the reader is left feeling slightly unsatisfied and possibly a little confused. The most important element, the text, is superbly presented by one whose editorial skills have been developed over many years' work on medieval sources such as *Inquisitiones Post Mortem and Wiltshire Feet of Fines 1377-1509*, also published by the Wiltshire Record Society. The 950 documents have been calendared to a consistently high standard. The text is more than adequately supported by an excellent index, both of which received the critical examination of Dr Roy Hunnisett – in itself a stamp of quality if one were needed.

One typographical criticism is that the titles to each group of deeds might have been emboldened, and the index of estates printed as a separate section in the introduction. Also, reading through the text or following up references from the indexes, it is not easy to identify the estate referred to. But this is a minor quibble which must not detract from the

notable achievement of the publication of this major source for the medieval history of Wiltshire for which both the editor and the Record Society deserve our gratitude and praise.

STEVEN HOBBS

Michael Parsons. Farley with Pitton. L. M. Parsons, 11 volumes to date, 1989–1995; various paginations and prices; paperback.

It is unusual to find one person with the time, energy, knowledge and enthusiasm to research exhaustively the history of a parish and its environs. Rarer still is it to find that person able to publish his work. Such a rare bird is Michael Parsons who, in addition to the eleven volumes reviewed here has produced two other works on Pitton and Farley since 1985. His contribution to our knowledge of this portion of south-east Wiltshire is especially important as the parish has not yet been researched for the *Victoria History of Wiltshire*.

The series began with four books on religious matters, charities and benefactions. Included is a history of Sir Stephen Fox's beautiful hospital which was begun in 1680 and which remains a notable building for this area although almost all the trees which were included in 'landscaping the gardens and planting trees' have long disappeared. Sir Stephen, who replaced Sir John Evelyn as lord of the manor, also set out to build a fine new church to replace a chapel in a sad state of repair; the church, of rosy red brick with stone dressings, was completed in 1690.

Noble Achievements, Honest Men (1993) looks further at the Fox family and their contemporaries in the 17th century while *A Certain Rule of Wisdom* (1993) covers the period 1700–1819 for manorial history up to and including the Inclosure Award. Earlier manorial history, 1100-1699, can be found in the next volume, *The Little Manor of Pitton and Farley* (1994) which contains useful descriptions of the open fields, tenants and lessees. Michael Parsons is descended from many generations of landowners and farmers in the parish and has carried out good comparisons of landowning and the state of agriculture at different periods.

The Saxon Inheritance (1995) is a recently published work on the earliest period of history in the area which was a favoured site of the Romans with several villas being built in the Dean Valley. A theme running though many of the books is the land, agriculture and the forest. In the latest volume, Michael Parsons considers *The Royal Forest of Pancet* (1995), later called Clarendon, its influence upon Pitton and Farley and its economic importance to a wider area.

This is a considerable body of work and one which might normally be expected to emanate from many members of a local history society. It is valuable not only for the information on one particular parish but also as a comparative study and guide for other parish historians. A good range of primary sources, held at both a local and national level, has been used, while much of the writing shows that detailed fieldwork has been undertaken to amplify the archival record. My only major criticism is the lack of an index in any volume but it may well be that an index volume will be produced when the saga is completed.

MICHAEL MARSHMAN

F.E.Warneford (editor). Star Chamber Suits of John and Thomas Warneford. Wiltshire Record Society, Vol.48, 1993; xix + 108 pages. Price £15, hardback. ISBN O 901333 24 7.

This volume comprises full transcripts of documents pertaining to five cases involving John Warneford of Sevenhampton in Highworth between 1539 and 1551 and his grandson, Thomas, in 1611, which the editor unearthed during his exhaustive genealogical researches. They are presented with little attention to their administrative or archival background and their interest lies exclusively in the glimpses they provide into the lives of the central litigious characters which reflect familiar themes of the mid 16th and early 17th centuries. Maurice Beresford, in his pioneering work *History on the Ground*, warned of the dangers of studying history from court records which offer as distorted a picture of society as the current tabloid press. This is emphasised in the cases revealed in this volume since a verdict is only known in one case, thus making it difficult to discern truth from fiction and accuracy from distortion in the depositions. Nevertheless, the ease with which the parties apparently resorted to violent and intimidating behaviour is not untypical for the period.

The cases, although very specific and local, nevertheless reflect tensions and issues that were played out on the wider stage of 16th- and 17th-century life. Thus, we are presented with disputes over common rights, one involving the destruction of

hedges of newly enclosed land and another over the creation of a rabbit warren on common land, each to the alleged loss of rights by Warneford's neighbours. The violence in the latter case led to the death of the ferret belonging to the Warnefords' warrener. A dispute in Highworth church between Warneford, the lay rector and the churchwardens over the ownership of the stone of the high altar, pulled down as a result of the Protestant laws of Edward VI, is an interesting example of the effects of the Reformation. A case over fishing rights provides a rare if not unique reference in Highworth to the name Swannesnest which was, presumably, a stretch of the river Cole near Sevenhampton.

The decision to publish the documents virtually *in extenso* is regrettable on two counts: their verbosity and repetition cry out for the editor's red pen which, judiciously exercised, need not have detracted from the form and flavour of the originals yet would have made their contents more accessible. The result is that considerable powers of concentration are required to follow through each case, and the reader is required to adopt skills of summarising more often associated with studying an original not an edited text. Furthermore, the cases are adequately summarised with extensive extracts in the editor's book *The Warnefords* (privately published 1991) which can be used as a useful commentary alongside this volume.

The index is small, due to the limited nature of the text. It is sadly a little uneven: the unfortunate ferret, killed in the dispute over the warren, is included but not the watchmen called to respond to an affray (pp. 8–9). Reference to the bailiff of Highworth (p.54) is omitted yet is vital in making sense of the indexed references to the method of his election (p.60). It is regrettable that the index was not extended to include the few occupations of witnesses. Collectively the woollen draper, mercer, victualler and shoemaker, all from Highworth, provide evidence of the social make-up of that town in the mid 16th century. Finally, the unidentified Glebepeppar (p.58) must be a corrupt version of Clyffe Pypard. Despite these reservations, the editor does a good job in evaluating and analysing the motives of the central characters and their evidence. There is much of interest from the illustrations of social and religious tensions to the earthy insults of the protagonists, notably John Warneford, who emerges as a devious and dangerous opponent, for which historians of Highworth and areas further afield will be grateful. This is a volume slight both in size and content, and is not one of the Record Society's more significant publications. Nevertheless, it fulfils the Society's aim to present a wide variety of Wiltshire material to as large a readership as possible.

STEVEN HOBBS

Wiltshire Archaeological and Natural History Magazine, Vol. 89 (1996), pp. 161–164

Obituaries

Richard Atkinson, CBE (1920–1994). Normally to be seen sporting a bow tie, Richard Atkinson was a man of striking personality with a wide range of interests and talents. His professional career in archaeology spanned nearly forty years, beginning at the Ashmolean Museum in 1944. This was followed by a move to Edinburgh in 1949 to join Professor Stuart Piggott. In 1958 he took up the Chair of the newly created Department of Archaeology at Cardiff, where he remained until his retirement in 1983.

Son of a Dorset farmer, Professor Atkinson was educated at Sherborne and Oxford. His widely acclaimed first book, *Field Archaeology*, was published in 1946. It was followed ten years later by *Stonehenge*, and it is his excavations at this monument and Silbury Hill which are his best known connection with Wiltshire. Less well known is his involvement with the experimental earthwork on Overton Down. Atkinson was keen on experimentation to explore ideas and techniques, and his oft-used words 'I know because I've tried it' in ancient technology lectures became a catchphrase amongst his students. As one of the founder members of the Experimental Earthworks Committee he was deeply involved with the design and building of the sites.

As his career at Cardiff developed so did the amount of administration both within and outside the University. Bodies with which he became involved included the Council for British Archaeology, the Ancient Monuments Board and the University Grants Committee. The increasing load of this work, together with ill-health, prevented him from completing his work on his two Wiltshire sites, though *Stonehenge* was revised in 1979.

Atkinson's work on Stonehenge, including his discovery of the carvings on some of the stones, together with his ability as a communicator, led to work with television which culminated in the BBC2 funded excavations at Silbury Hill in 1968–70. It was not the most straightforward 'dig' to direct, requiring the welding of a team which consisted of archaeologists, mining engineers, caterers and publicity staff with, in the background, one television crew recording day-to-day events and every now and then the descent of the Outside Broadcast Unit to transmit live. With charm and strength of personality this was achieved.

Though not an active member of the Society in recent years, Professor Atkinson served as a distinguished member of our Council from 1967 to 1971.

GILLIAN SWANTON

Grace Fairhurst (1928–1995) was the Society's Treasurer from 1989 until 1995. Born and brought up in Accrington, Grace was known to her headmaster as the cleverest girl he had had in his school. After taking her Higher School Certificate, she took an office job and then came down to Wiltshire to work for the Avon Rubber Company. By then, it seems she had been a champion swimmer for Lancashire, and considered for the English Olympic team. During her time with Avon Rubber she became a Chartered Secretary, taking her examinations by correspondence course, and travelled abroad for the firm.

Already a member of the Society and having retired from Avon Rubber, Grace became our Honorary Treasurer in 1989. The successful running of a Society like ours depends upon the expertise, commitment and sheer love of the institution of its voluntary officers and helpers. Grace Fairhurst was one of those extraordinarily generous givers of their time and expertise. The time she gave was really impressive. Hardly a day went by when she was not at her desk, and while seemingly oblivious of the discussions and chatter and movement all around her, playing her own highly individualistic part in it. And once back home, more often than not she continued with some aspect of her duties. The expertise, which was crucial to our recovery from difficult times, can be seen at a glance in any of her sets of accounts. It can also be demonstrated through her briefing and amiable bullying of our fund managers, Cazenoves, who have given us such a reliable investment portfolio.

When word processors and micro-computers reached the world of Long Street, Grace quickly acquired her own equipment, seeing the advantages it could bring to her work for the Society. Her last accounts were visually impressive – as well as masterful, in content – because she had learned rapidly to exploit the presentational potential of the

new technology. To have this at her fingertips, which she clearly did, delighted Grace. When curators came to her to seek ways in which the Society could find *its* half of the funding to re-equip the Museum with the latest computer hardware, she cast innate suspicion of new expenditure aside and made the project possible. Its first two phases have been completed now, and in many ways this equipment is a monument to our late Treasurer's wisdom and guarded flexibility.

How she loved to talk! The driving voice fired with enthusiasm for whatever the instant topic was, and intoned as a true Lancastrian, often betrayed great wisdom and an extraordinary breadth of interests and general knowledge. These are reflected clearly in her fine collection of books, now bequeathed to us, containing volumes on travel, history, archaeology, natural history, literature and many other subjects. She regularly went abroad on holiday, latterly with her friend Gladys Bland who shared Grace's love of travel, fine food and wine, and who kindly supplied the details of Grace's early life which appear above.

I think that Grace saw Long Street and all its people, young and old, as her family. She could be critical. She could heave sighs of frustration, she could even shout – as she did at me once because, so far as I can remember, I had described the very modest cost of something or other, unbudgeted for, as a peanut. But she was straight, dedicated, generous, humorous, loving to be amused, warm hearted, and so successful in our service.

We can never forget Grace, not just because of her reputation and the success of her reign as our Honorary Treasurer. She has left us a most generous legacy and we will use it to perpetuate her memory in a way that would win her approval. A true Northern lass, Grace loathed pomposity, so perhaps she should be remembered by her own characteristically pithy summary of herself: 'I may be a Miss – but I've missed nothing!'

NICHOLAS THOMAS
(Adapted from the obituary in the Society's *Newsletter* 32, August 1995)

Leslie Grinsell, OBE, MA, FSA, FMA, field archaeologist and museum curator, died on 28 February 1995 aged 88. He was born on 14 February 1907.

Leslie Grinsell grew up lonely and unfulfilled. It was his discovery of prehistory among the ancient field monuments of Sussex that changed his life, starting him on a 69-year road of discovery and publishing for which, in 1972, he was appointed OBE, having received an honorary MA from the University of Bristol a year earlier. A book of essays in his honour, *Archaeology and the Landscape*, edited by Peter Fowler, was published in the same year.

His life's work was to record every upstanding Neolithic and Bronze Age burial mound in southern England, measuring, classifying and mapping them. A huge corpus of meticulously published data is his permanent memorial and a primary source for the county sites and monuments records that have become a normal adjunct of local government.

Starting in about 1926 and armed with rucksack, timetables (he did not drive), notebook, tape and folding rule, this self-taught archaeologist went into the field every weekend from spring to autumn. The admission that several months elapsed before he discovered the tape's retractable metal winding handle showed what a loner he was. By 1944 he had made more than 12,000 barrow visits and surveyed and published the resulting barrows data for ten counties. After retirement in 1971 he added Somerset, Avon, most of Devon, Kent and Herefordshire, with supplements to several earlier surveys. The amazing fact is that apart from his three Wiltshire years, all Grinsell's fieldwork was done in his spare time and, of course, at his expense.

At his death, the work extended from Norfolk to the Tamar and the Welsh Marches. The records he drew up were not just a matter of dimensions and classifications (for which his early bank training was priceless). He additionally included barrow names and folklore, early published references, details of finds and the physical state of the monuments. *The Ancient Burial Mounds of England* (1936, 1953 and 1975) remains a classic work.

In the course of this pilgrimage Grinsell rediscovered countless barrows and a Neolithic causewayed camp. A visit to Stonehenge on foot, with the writer, within hours of Atkinson's recognition of carvings there, soon led to his own astonishing discovery of the series of engraved feet on a burial slab in the barrow at Pool Farm, Mendip, which is now a remarkable exhibit in Bristol Museum.

Leslie Valentine Grinsell was for 19 years a bank clerk with Barclays and for 20 more a curator at Bristol Museum. But it was his intensive study of prehistoric burial mounds that made him pre-eminent in British field archaeology. Having first met LVG while a student in London, the writer took over his prehistory class at the City Literary Institute after Grinsell had been invited by the editor of the *Victoria*

County History, R.B.Pugh (soon to become WANHS President), to leave London, turn professional archaeologist and compile their gazetteer of Neolithic and Bronze Age barrows in Wiltshire (*VCH Wilts.* I, pt. 1 (1957)) – a work which was to become his greatest accomplishment and a landmark in the publication of field monuments.

When the writer became Curator at Devizes Museum in 1952, it was Grinsell who took him, on his first weekend at Devizes, to inspect the barrow cemetery at Snail Down. They went by bus to Upavon, then up the Avon's valley side, past one of the oldest flying schools in the world to Everleigh – where, at the Crown Hotel, Hoare and Cunnington had stayed in 1805 while digging those barrows – then via Weather Hill Firs to Snail Down; and afterwards, so characteristically of Leslie, to the Sally Lunn at Collingbourne Ducis for cream tea.

Field archaeology was not a total preoccupation, however. Other interests motivated his enthusiasm: folklore, place names, numismatics, Egyptology, and piano playing, teaching and lecturing, drawing, sketching, photography, love of the countryside and 'the tonic properties of the air'.

Grinsell's fieldwork was not limited to these islands. A wartime posting to the Air Photographic Branch of the RAF in Cairo (he had been a pioneer in this field) led inevitably to a Grinsellian survey of the Pyramids (1947) and, during his last years, his annual Christmas holiday to the larger Mediterranean islands spawned *Barrow, Pyramid Tomb* (1975, 1977; Italian edn. 1978).

Grinsell was fascinated by medieval British coins. His studies of the mints at Bath and Bristol are major contributions to a specialist field in which, like Egyptology, he made himself expert.

Leslie Grinsell's circle of friends included several women but he eschewed personal female attachments. Only when working for organisations such as the Prehistoric Society, or in his painstaking help given to anyone with similar interests, did he betray that deep, selfless generosity which, with those flashes of wit and the shy smile, made his friendship so valued. Had he married, he might not have had the freedom to achieve what he did and we would know so much less about our past.

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Cecily Margaret (Peggy) Guido, FSA (1912–1994) Vice-President and benefactor of the Society, died on 8 September 1994, aged 82. She had lived in Devizes since 1975, and been a most active supporter of the Society, from her quiet assistance with the Museum's new galleries and acquisitions to her lively and popular leadership of our outings to places of interest. Her published work, some of it for *WAM*, made a significant contribution to research in the county.

Like many an archaeologist, Peggy was captivated by the past from a young age. Given a Roman coin when she was about 11, she was thrilled by the idea of the ancient hands through which it could have passed – perhaps those of a Caesar himself. She dug with Mortimer Wheeler at Verulamium, and was taught by the young Christopher Hawkes at Wheeler's field-school at Farnham, where she heard stories from the country women who had known General Pitt Rivers at Rushden. She had an adventure in driving in a little car with a friend across Europe towards Greece, quite innocent of how rough the roads and life would be in the Balkans. Ancient Greek helped them decipher the Cyrillic road-signs, and drawings substituted for spoken words: 'Not being able to draw very convincingly, we bought rather too many eggs!'

Once home, she resolved to become an archaeologist and took the diploma in western European prehistory at University College London. Kenneth Oakley was a fellow-student, and Robin Collingwood and Bernard Ashmole were among her teachers. She dug at Whitehawk and met Stuart Piggott. They were married in 1936, and set up house at Rockbourne, on the downs south of Salisbury. When C.W. Phillips called on colleagues to help with the treasures in the famous ship-burial at Sutton Hoo, under great pressure in the last summer weeks before war, Peggy went to Suffolk and did photography for the excavation.

Peggy stayed at Rockbourne during the war, while her husband was on service in India. In the winter of 1941–42, she excavated enormous prehistoric barrows on Beaulieu Heath in the New Forest, as rescue work in advance of war construction; the contractors' workmen did not see the point of it, so she dismissed them and faced the frozen mass of the barrows instead with volunteer help. A fine Bronze Age mortuary house was identified. There were congenial friends in Rockbourne or near by: David Cecil, L.P. Hartley the novelist, G.M. Young the historian. Young suggested William Cobbett's domestic classic, *Cottage Economy*, as a guide for those times of rationing; Peggy followed that old advice, keeping geese and raising piglets. Acting as billeting officer for the village, and getting

to know the travelling *didikai*, gave her a sense of how other lives were lived.

In 1948 Stuart Piggott became Abercromby Professor in Edinburgh, and they began dividing the year between Rockbourne and Edinburgh. Peggy dug in the Borders and the Western Isles. Her excavation of a crannog remains a landmark in the study of these puzzling Scots structures, and she always remembered how miserably cold that dig was: the complexities of the crannog's stratigraphy were explored in the shallow waters of a loch, which made for very cold feet! She was not comfortable with the social place of a 'Mrs Professor', but came to like Edinburgh in winter, the Castle rock so black in the darkness.

Her marriage ending, she moved to a little mill cottage in Suffolk, with her niece whom she had brought up from early childhood as if her daughter. On marrying again, she moved to Sicily, and lived in the Spanish-baroque old town of Syracuse. Writing a guide-book to the ancient city was a rewarding pleasure to compensate for personal sadnesses during those years, and so was the work of three other books commissioned by Glyn Daniel, guide-books to the archaeology of Sicily and of southern Italy, and the volume on Sardinia in the Ancient People and Places series.

Returning to England, she continued to study, working when time allowed on ancient beads. Beads are one of those classes of small finds which are the real stuff of archaeology – but only if the scattered facts from many an excavation report or museum accession are brought together with intelligence in a structured form. Peggy joined in ordering the Beck beads, the great reference collection that was safely housed in the archaeology museum at Cambridge but not given much curatorial attention there, and wrote a fundamental account of British prehistoric and Roman glass beads. This was published in 1978 as a Research Report of the Society of Antiquaries, of which she had been a Fellow since 1944; a second volume, on the glass beads of Saxon Britain, was completed before her death.

Peggy Guido had a difficult personal life. She grew up without a mother, and her father was drowned on holiday when she was 8, ending all hope of happiness or security for the rest of her childhood, as she felt it. Perhaps a full confidence in herself never came, and familiarity with the things of the past instead offered a security. Introduced to Mortimer Wheeler, she was terrified by his suavity and assured comportment. She found no fulfilment in either of her marriages. In a memoir, she wrote, 'Feeling without intelligence to control it is inadequate; intelligence without feeling is frightening.' Yet when I came to know her in Devizes, first from coming to the Society to explore Stonehenge matters in the Library and picture collections, I enjoyed the enthusiasm, hospitality and support Peggy showed to me, as she did to everyone – and especially the young – whom she discerned as attempting scholarly work of the right quality and in the right spirit. Her late years in Devizes were happy, I believe, but friends saw flashes of the insecurity; and she was not readily persuaded that her own work – whether the old excavations or her bead corpus – was noticed and could be of an enduring value.

For a few years an old friend, the classical archaeologist A.W. Lawrence, came to share Peggy's house in Long Street when Lawrence became too infirm to live on his own. I warmly remember an evening at Peggy's when I brought a group of Cambridge students; the twilight in the handsome long drawing-room sparkled when the freshness of their youthful interest brought out the lively spirit in both of them. One could say of Peggy, as Peggy said of the young Tessa Wheeler, 'she seemed to me... to have the qualities I would like to have had – integrity, charm, kindness, clarity of intelligence, and the power to express her thoughts articulately'.

CHRISTOPHER CHIPPINDALE

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