

A PREHISTORIC DITCH AND OTHER FEATURES AT PRINCES RISBOROUGH SWIMMING POOL, BUCKINGHAMSHIRE

STEVE FORD

with contributions by

JANET FIRTH and SHEILA HAMILTON-DYER

An evaluation and excavation on a small site to the west of the Medieval manor known to belong to the Black Prince led to the discovery of a prehistoric ditch which contained Iron Age pottery and a human skull. Four other undated features were also discovered. A shallow linear depression to the west of the manorial complex was also investigated but this did not provide enough evidence to confirm whether it was part of the manorial earthworks.

Introduction

An evaluation and small rescue excavation were carried out in advance of the construction of a community swimming pool in Princes Risborough during October and November 1993 by Thames Valley Archaeological Services. The development occupied an area of about 0.5 hectares on the western edge of the town centre (SP804035), adjacent to the site of a Medieval manor which belonged to the Black Prince, from whom the town takes its name (Pavry and Knocker 1957-8, 132) (Fig. 1). Excavations in 1955, which took place within the area known as 'The Mount', revealed a Medieval building likely to be the 'great chamber' referred to in documentary sources (*ibid*) (Fig. 1). These sources also suggested that the manor included a stud farm of considerable importance and that the 'great stable' lay outside the area of the moat. During the excavations of 1955 a number of earthworks, possibly additional elements of the manorial complex, were observed to the west of the main manorial site. One of these, a 'shallow depression', crossed the north-east corner of the proposed development and was still visible as a grass mark during the 1993 work. The site is situated on level ground at a height of about 100m above Ordnance Datum.

There is little evidence of prehistoric settlement listed on the County Sites and Monuments Record (SMR) for the Princes Risborough area (Fig. 1). Three small flint scatters to the south-east and north-west of the site may be evidence of occupation of Neolithic or Bronze Age date. Other evidence for Prehistoric activity includes a Neolithic barrow (Childe and Smith 1954), two round barrows and a cross-ridge dyke (Wise 1991) on Whiteleaf Hill to the east of the town (Fig. 1). Stray finds from the vicinity include Neolithic flint tools, middle and late Bronze Age metalwork, and Iron Age coins and a spearhead. One of two nearby inhumation burials is Prehistoric in date.

Given the proximity of the site to the manorial complex and the lack of evidence of prehistoric settlement in the area, the Buckinghamshire County Archaeologist advised the local planning authority that a field evaluation should be carried out to assess the archaeological potential of the proposal area, as recommended by the Department of the Environment's Policy and Planning Guidance Note, *Archaeology and Planning* (PPG16 1990). In the event, the contractor's time-scale was so limited that a programme of post-evaluation fieldwork took place before the results of the

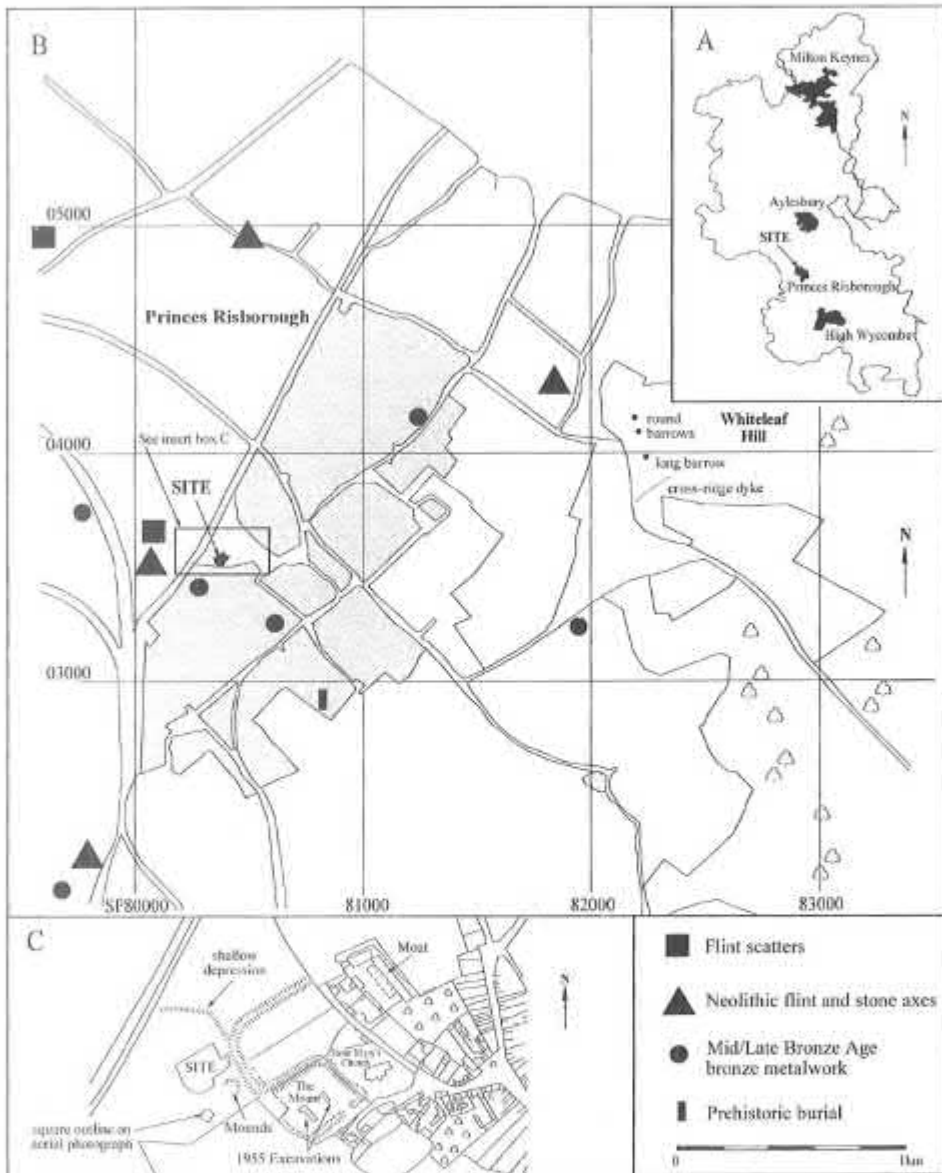


Fig. 1: The location of the site within Buckinghamshire and Princes Risborough, showing the nearby manorial complex and other finds in the vicinity of the town.

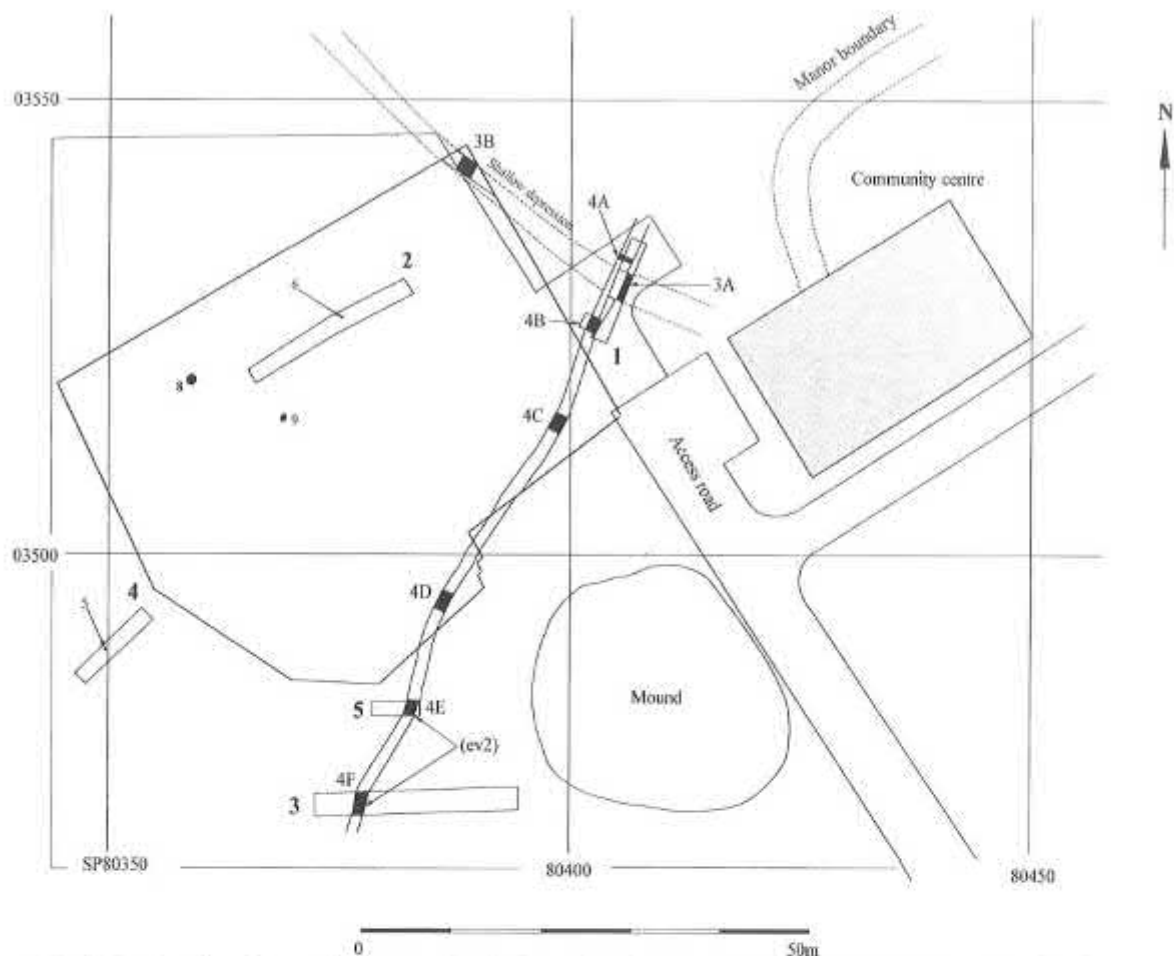


Fig. 2: The location of the evaluation trenches 1–5 (numbered in bold type), the excavated area, and surface features.

evaluation were formally presented. Both stages of the fieldwork were carried out to specifications drawn up in consultation with the Buckinghamshire County Archaeologist. Full details of the project are to be found in the site archive which, together with the finds, has been deposited with the Buckinghamshire Museum Service (Accession No. 1996.100, CAS 6179).

Results of the Evaluation and Excavation

The evaluation consisted of a desk-based assessment followed by five machine-excavated trenches, one of which (1) was positioned across the 'shallow depression' (Fig. 2). The depression was still visible for *c.* 7.5m as a grass mark at the time. The trenches varied in length from 5m to

21m and were typically 0.45m deep. The solid geology shown on the geological map for the district is Lower Chalk (BGS 1994) and the fieldwork located a lumpy chalk-wash (?head) capped by 0.2m of flinty clay. The evaluation targeted the shallow depression (ditch 3) which ran approximately north-west – south-east, and which was found to cut a second ditch (ditch 4) which crossed the site from north-east to south-west and was noted in Trenches 1, 3 and 5 (Fig. 2).

The follow-up excavation comprised an area strip of the area of the new building, about 1670m². The topsoil and subsoil were removed, under archaeological supervision, by a machine fitted with a toothless bucket. Apart from the two ditches already located by the evaluation, only four possible archaeological features were recorded (5, 6, 8

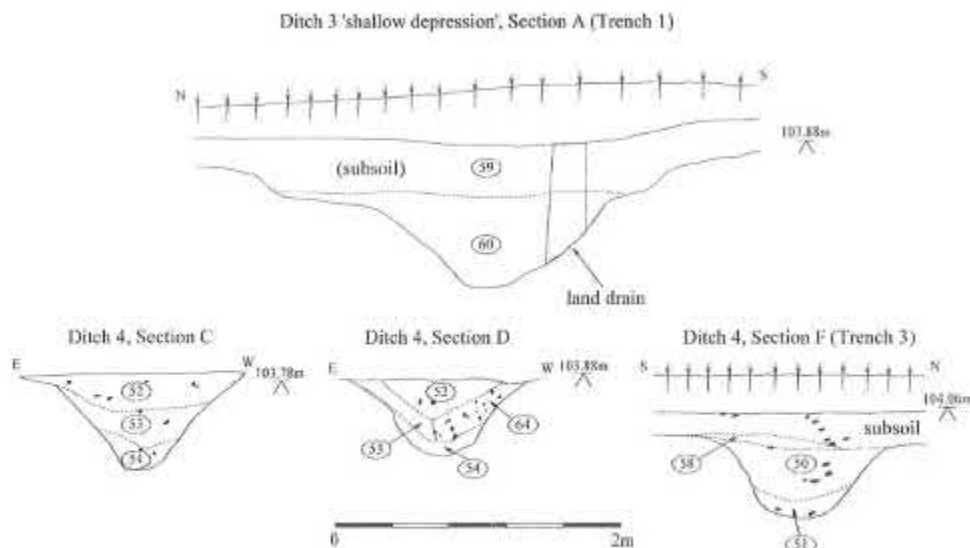


Fig. 3: Selected sections of ditches 3 and 4 (heights are in metres above Ordnance Datum).

and 9). A few pieces of burnt flint were observed on the stripped surface, but the site was generally notable for the lack of finds of any date.

The excavation revealed more of ditch 4 and this was examined by four additional slots (Fig. 2, 4A–D). In the event, this was the most interesting feature on the site. It was 0.6m deep below the base of the subsoil and up to 1.5m wide, with a U-shaped profile. As well as Iron Age pottery, the ditch contained a human skull and finger bone (4B, Trench 1). The skull lay in the lower fill of the ditch (Fig. 3, 54) in an inverted position. There were no teeth or lower jaw but otherwise the skull appeared intact, if somewhat poorly preserved. There were no articulated remains. The ditch extended for a minimum of 65m across the site and beyond. There was no indication of a bank to accompany it. The profile and fill of the ditch varied little at the various points examined (Fig. 2, A–F; Fig. 3). However, deposit 64, which formed the secondary fill of the ditch in section D only (Fig. 3, 4D), included a low density of burnt flint and charcoal and could be the remains of a deliberate deposit on the eastern side of the ditch.

The intersection between ditches 3 and 4, seen in evaluation Trench 1, clearly showed that ditch 3 (the 'shallow depression') cut ditch 4. Ditch 3 had a V-shaped section with a rounded base and was

0.9m deep, below the base of the subsoil, and c. 2m across (Fig. 3). The upper levels had been filled in during the creation of the playing field surface. The fill (59) produced some post-Medieval artefacts but was cut by a 19th century land drain at the point of excavation, causing some doubt as to its date. An additional section in the north-eastern corner of the excavated area (Fig. 2, 3B) revealed a shallower section than that recorded in the evaluation trench (Fig. 2, 3A) but a similar stratigraphy. It contained a few sherds of post-Medieval pottery and tile, from the middle and upper levels, together with a quantity of bone, possibly from one animal. The bone, several large flint nodules (<0.2 m) and a few post-Medieval tile fragments were concentrated on the eastern side of the ditch and may represent the fill of a pit cutting the ditch. However, it was not possible to explore this feature fully as it continued beneath the baulk.

A small feature (9) in the middle of the excavated area was 0.75m x 0.5m and kidney-shaped in plan, with an irregular profile 0.2m deep. It contained no finds or charcoal and may be a root or burrow. A small charcoal patch (8), 0.5m in diameter and just 30mm thick, was located on top of an unburnt flinty clay patch in the north-west corner of the site. There were no associated finds and no dating evidence. Two shallow depressions examined in Trenches 2 and 4 (6 and 5) were not thought

TABLE 1:
Pottery from features by fabric type

<i>Feature</i>	<i>Context</i>	<i>Fabric 1</i>		<i>Fabric 2</i>		<i>Fabric 4</i>		<i>Fabric 5</i>		<i>Fabric 6</i>		<i>Fabric 7</i>		<i>Fabric 8</i>		<i>Fabric 9</i>		<i>Fabric 10</i>	
<i>Evaluation:</i>		<i>No.</i>	<i>Wt.</i>	<i>No.</i>	<i>Wt.</i>	<i>No.</i>	<i>Wt.</i>	<i>No.</i>	<i>Wt.</i>	<i>No.</i>	<i>Wt.</i>	<i>No.</i>	<i>Wt.</i>	<i>No.</i>	<i>Wt.</i>	<i>No.</i>	<i>Wt.</i>	<i>No.</i>	<i>Wt.</i>
Trench 1																			
3	59/60	1	4																
4	top	1	2																
4	top 7/1	F	2										F	1					
4	top 8/0					1	26												
4A	52	F	1																
4A	53	F	<1					F	<1										
4B	top	F	<1																
4B	52	2	13			2	24	F	<1	F	<1								
Trench 5																			
2	51	F	<1																
<i>Excavation:</i>																			
3	top																		1 108
4	top	1+F	<5					1	20	2F	<2			F	1				
4C		Fx2	<2	F	<1														
4C	52	2+F	19			1+F	5					1	<1			1	<1		
4C	53							1	34										
4D	52	1	30									F	<1						
Total		17	81	1	1	5	55	4	56	3	3	2	2	2	2	1	1	1	108

F = fragment *Weights are given in grammes*

to be of archaeological origin.

The spoilheaps of all trenches were examined for finds but only a few pieces of burnt flint were recovered.

The Finds

Human Bone

by Janet Firth

The human bone consisted of about 100 fragments of one adult skull found in the lower fill of ditch 4, 4B (Trench 1). These fragments were mostly from the vault of the skull, but included pieces of frontal bone adjacent to the two orbital sockets, the left orbital ridge and facial sinuses. No other facial bones were present, nor the bones from the skull base. Nothing of the post-cranial skeleton was definitely present, although one fragment of long bone could have come from the lower end of a human radial shaft.

A small area of the vault was partially repaired from sixteen fragments, including parts of the right and left parietal bones and the obliterated sagittal suture between them. This section of vault extended from the coronal to the lambdoid suture edges from front to back and also included two fragments of the left parietal bone extending to the left squamous suture on that side of the head. The remaining 60 or so vault fragments were not included in the reconstruction because of their small size and lack of identifiable characteristics.

Five fragments of the frontal bone, the left orbital ridge and part of the two orbital sockets, including the glabella between them, were repaired. The frontal and ethmoidal sinuses were present, but these could not be reconstructed because of their delicate nature.

The conclusions which can be drawn from this small quantity of human material are limited. The purported size of the skull estimated from the partial reconstruction is that of an adult; the thickness of the bone of the vault and the obliteration of the sagittal suture confirm this. The calculation of age from the obliteration of suture lines can only be tentative because of the wide range of ages between which the process begins and ends. It may

begin from the ages of thirty to forty years along the inner surface of the vault, but about ten years later on the outer surface. The obliteration of the sagittal suture tends to follow the coronal and to begin at the posterior end (Johnston and Whillis 1958, 342). The age of this individual might, therefore, have been in a wide band, from about 50-70 years. The bone in the vault retains the thickness achieved in early and middle adult life; it usually thins in increasing age. This fact can be used as an argument for the age of this individual to have been in the lower range of this band, say 50-60 years.

The size of the one left orbital ridge is hardly enough to determine the sex of this individual, yet it appears to be characteristic of a male.

The bone fragments are very clean-looking and light in colour and bear no post-burial deposits; the bone cortex flaked a little and in all these respects resembles other human bone material from chalk graves.

To summarise, it appears that the skull is from an elderly, possibly male adult; these human remains were not found in a distinct grave cut, but a ditch, probably dating to the Iron Age.

Pottery

by Steve Ford

Some 36 sherds and fragments were recovered during the course of the project, together with four post-Medieval tile fragments from ditch 3. None are illustrated.

The sherds recovered were both small and abraded with few exceeding 15gms in weight. Ten fabrics were identified (see below), nine of which (1-9) describe the Prehistoric sherds from ditch 4. Given the small size of the sherds, it is likely that only four or five fabrics are actually present. All of the sherds were from hand-made vessels.

There were only two featured sherds, both of which had weak shoulders. One sherd was slipped and burnished; one had both surfaces highly oxidised to a deep red and may be intended to mimic early Iron Age haematite-coated pottery (Middleton 1987).

The small size of the assemblage and a lack of diagnostic forms make dating difficult but the fabrics and surface treatment provide a few pointers. The sherds are generally quite hard, using sand with relatively little calcined flint. One sherd is slipped and burnished and one is highly oxidised. This suggests that the sherds are largely of early-middle Iron Age date (Saunders 1971). One sherd, tempered with grog, may be of early Bronze Age date (Fabric 2) and a second, tempered with mica, may be late Iron Age (Fabric 9).

Fabric descriptions

Prehistoric

1. Calcined flint 1–2mm, fine black sand, hard.
2. Grog, soapy, soft (?early Bronze Age).
3. –
4. Sand, rare quartz grains 1–2mm, hard.
5. Medium density fine black sand, rare poorly sorted calcined flint 1–2mm, mica, hard.
6. Fine rare sand, soft.
7. Virtually gritless, rare quartz grains, medium hard.
8. Fine black sand, very rare calcined flint and shell, medium hard.
9. Calcined flint 1–2mm, mica, hard.

Post-Medieval

10. Sand with rare flint, orange, hard.

See Table 1 for Pottery from features by fabric type.

Animal Bone

by Sheila Hamilton-Dyer

Approximately 100 animal bone fragments were examined (freshly broken pieces and teeth from jaw fragments have been counted as originally one bone). A few of the smaller, badly preserved, fragments could be either animal or human but most of the unidentified fragments have the appearance of cattle-size and sheep-size animal bones. None of the bones are mature or sufficiently complete for measurements to be taken.

The material from the Iron Age ditch 4 is poorly preserved and surface details, such as any butchery

marks, have not survived. Small bones and bones from juvenile animals may have been completely eroded.

The species identified are horse, cattle, sheep/goat and pig. There are also a number of fragments which can be identified only as cattle/horse-sized and sheep/pig-sized. Despite the probable taphonomic bias there are several sheep/goat bones. These are usually common in Iron Age deposits, as Wilson (1978; 1980; 1993) has reported for several larger groups of material from the neighbouring Oxford area.

The bones from the post-Medieval ditch, ditch 3, are reasonably well preserved and include bones from immature sheep/goat, pig and cattle in addition to the partial skull and jaws of a horse, estimated to be aged ten years (Levine 1982). One of the sheep/goat bones showed evidence of dog gnawing.

Struck Flint

by Steve Ford

Only two struck flints were found, both flakes, one from the top of ditch 4 (Trench 1) and the other from ditch 4, section 4D (53).

Conclusions

Despite the proximity of the Medieval manor and documentary references to extra-mural buildings, the only significant feature located by this project is the prehistoric ditch. The dating evidence for the ditch consists of several sherds of early/middle Iron Age pottery from the upper and middle fills. The ditch is likely, therefore, to pre-date this pottery, although it is not known by how long. It seems unlikely, however, that these finds are residual and it is doubtful that a ditch of this size would remain open for any great length of time.

There are three possible interpretations of the function of the ditch. Firstly, it may have been a field boundary or a territorial boundary (linear earthwork). Linear earthworks functioning as territorial markers are widespread on the chalklands of

the Chilterns, the Berkshire Downs, and in Wessex (Dyer and Hales 1961; Bradley and Richards 1978; Bowen 1978; Davis 1981; Wise 1991). They are much less common in lower-lying areas, although pit alignments in the North and Midlands may have had a similar role (Wilson 1978). The small linear earthworks on the Berkshire Downs have recently been shown to be of late Bronze Age–early Iron Age date, whereas larger examples, including some of those on the Chilterns, are of middle/late Iron Age and Roman date (Ford 1982a; Ford 1990; Hinchcliffe 1975). On the basis of size, ditch 4 belongs to the smaller, earlier category. The least likely explanation is that it was a settlement enclosure, on account of its great length (at least 75m), although occupation of some sort is likely to the east of the ditch.

The discovery of the human skull may be quite dramatic but the presence of disarticulated human bone in non-funerary contexts, particularly in the Iron Age, is not unusual (Wilson 1980); two linear earthworks investigated on the Berkshire Downs have produced similar finds (Ford 1982b, 19; Lovett 1990, 19).

Acknowledgements

I would like to thank Mr Martin Cox of Bowmer and Kirkland (London) Limited for commissioning the project, Mike Farley and Mr J Parkhouse of Buckinghamshire County Museum Service for their advice and comments, and Rachel Bellamy and Melanie Hall who assisted with the field and post-fieldwork.

References

- BGS, 1994 *British Geological Survey, Sheet 237, Solid and Drift Edition*, 1:50000 series, Keyworth
- Bowen, H C, 1978 'Celtic fields and ranch boundaries in Wessex', in S Limbrey and J G Evans (eds), *The effect of man on the landscape: the lowland zone*, CBA Research Report 21, London, 115–132
- Bradley, R J and Richards, J C, 1978 'Prehistoric fields and boundaries on the Berkshire Downs' in H C Bowen and P J Fowler (eds), *Early land allotment in the British Isles*, BAR 48, Oxford, 53–60
- Childe, V G and Smith, I, 1954 'The excavation of a Neolithic barrow on Whiteleaf Hill, Bucks', *Proc Prehist Soc*, 20, 212–230
- Davis, J, 1981 'Grim's ditch in Buckinghamshire and Hertfordshire', *Recs Bucks*, 23, 23–31
- Dyer, J F and Hales, A J, 1961 'Pitstone Hill – a study in field archaeology', *Recs Bucks*, 17, 49–56
- Ford, S, 1982a 'Linear earthworks on the Berkshire Downs', *Berkshire Archaeol J*, 71, 1–20
- Ford, S, 1982b 'Fieldwork and excavation on the Berkshire Grim's Ditch', *Oxoniensia*, 47, 13–36
- Ford, S, 1990 'The archaeology of the Cleve–Didcot pipeline, South Oxon, 1989', *Oxoniensia*, 55, 1–40
- Hinchcliffe, J, 1975 'Excavation of Grim's Ditch, Mongewell 1975', *Oxoniensia*, 40, 122–135
- Johnston, T B and Whillis, J (eds), 1958 *Gray's Anatomy*, London
- Levine, M A, 1982 'The use of crown height measurements and eruption-wear sequences to age horse teeth', in B Wilson, C Grigson and S Payne, *Ageing and sexing animal bones from archaeological sites*, BAR (British series), 109, Oxford, 223–250
- Lovett, J, 1990 'Faunal remains' in S Ford, 'The archaeology of the Cleve–Didcot pipeline, South Oxon, 1989', *Oxoniensia*, 55, 13–19
- Middleton, A, 1987 'Technological investigation of the coating on some haematite coated pottery from southern England', *Archaeometry*, 29, 250–261
- Pavry, F H and Knocker, G M, 1957–8 'The Mount, Princes Risborough, Buckinghamshire', *Recs Bucks*, 16, 131–178
- PPG16, 1990 *Archaeology and Planning*, Department of the Environment, HMSO
- Saunders, C, 1971 'Pre-Belgic Iron Age in the central and southern Chilterns', *Archaeol J*, 128, 1–30
- Wilson, B, 1978 'The animal bones', in M Parrington, *The Excavation of an Iron Age Settlement, Bronze Age ring ditches, and Roman features at Ashville Trading Estate, Abingdon (Oxfordshire) 1974–1976*, (Oxfordshire Archaeological Unit Report 1) Council for British Archaeology Research Report 28
- Wilson, B, 1980 'Bone and shell report', in J Hinchcliffe and R Thomas, 'Archaeological Investigations at Appleford', *Oxoniensia*, 45
- Wilson, B, 1993 'Reports on the bones and oyster shell', in T G Allen and M A Robinson, *The Prehistoric landscape and Iron Age enclosed settlement at Mingies Ditch, Hardwick with Yelford, Oxon*, Oxford University Committee for Archaeology
- Wilson, C E, 1981 'Burials within settlements in southern Britain during the pre-Roman Iron Age', *Bull Inst Archaeol*, 18, 127–169
- Wilson, D, 1978 'Pit alignments: Distribution and function', in H C Bowen and P J Fowler (eds), *Early land allotment in the British Isles*, 3–7, BAR 48, Oxford
- Wise, J, 1991 'A survey of Prehistoric and later earthworks on Whiteleaf Hill, Princes Risborough, Buckinghamshire', *Recs Bucks*, 33, 108–113

This project, including a grant towards the cost of publication, was funded by Bowmer and Kirkland (London) Ltd.