

Three Round Barrows at King's Weir, Wytham, Oxon.

By DAVID BOWLER and MARK ROBINSON with a section by H.J. CASE

INTRODUCTION

The three barrows are on the University Farm at SP 477 101, close to King's Weir. Their situation on the Thames floodplain is unusual, but Bronze Age ring ditches occur in the floodplain about 3 km. downstream at Port Meadow.¹ The barrows were not recorded by Benson and Miles,² and their discovery was curious. In the 1960s a soil survey of the University Farm noted Barrows A and B as outcrops of gravel terrace through the alluvium. In late 1975 Mr. G.H. Lambrick noticed from the towpath bumps

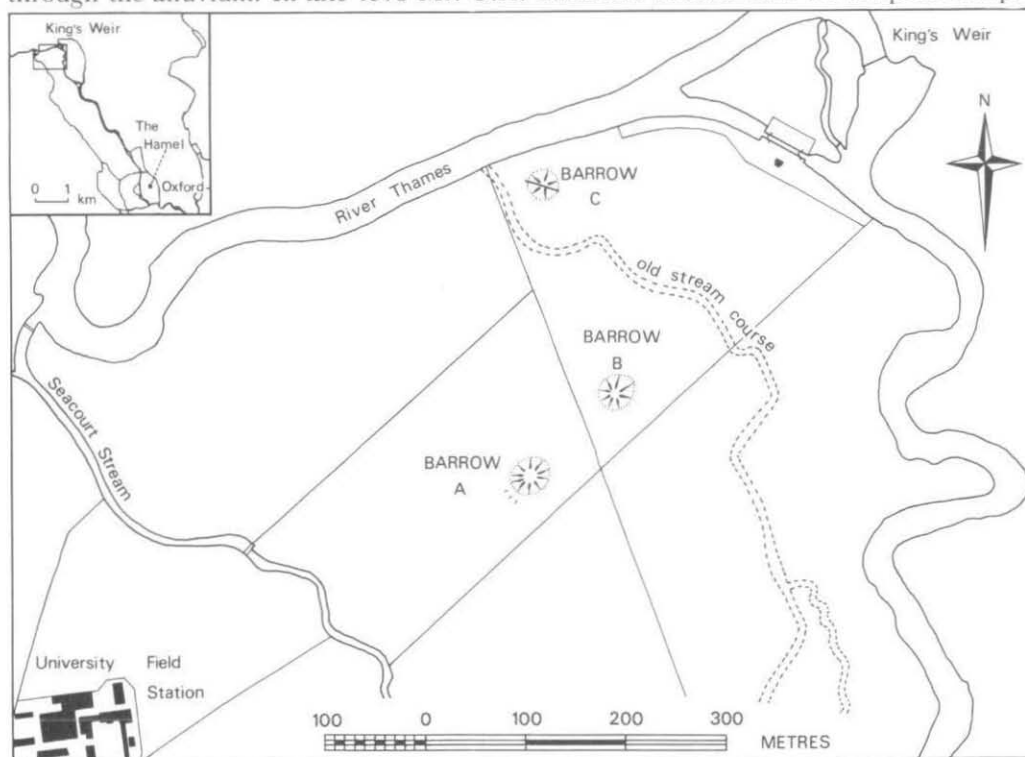


Fig. 1
Location of the barrows

¹ R.J.C. Atkinson, 'Archaeological Sites on Port Meadow, Oxford, *Oxoniensia* VII (1942), 24-35.

² D. Benson and D. Miles, *The Upper Thames Valley, an archaeological survey of the river gravels, Oxfordshire Archaeological Unit Survey 2* (1974).

in the two fields which he suspected to be barrows, while in the dry summer of 1976 Mr. T.G. Hassall photographed from the air ring ditches in the positions of Barrows A and B. However, it was not until 1978, when one of the authors realised that a photograph of the 1947 Thames floods showed three small islands above the waters,³ that the site was walked. The mounds were located and two of them were found to correspond with the ring ditches.

Barrow A is 36 metres in diameter and still stands to a height of about one metre above the modern ground level. There is some ridge and furrow in the field which goes up to the barrow, but it does not seem to have damaged the mound. Barrows B and C are smaller, B being half a metre high and 34m. in diameter while C is only 0.4m. high and 30m. across. Since the 1947 photograph apparently shows the mounds to be of rather similar sizes, it was decided to excavate a section across barrow C to establish whether the old ground surface sealed beneath it was threatened by ploughing. It was also hoped that preserved organic material would be discovered in its ring ditch.

From January to March 1979 the Oxford University Archaeological Society dug a one metre wide trench through Barrow C by hand under the direction of the authors. We are grateful to Professor J.H. Burnett, Mr. M.H.R. Soper and Mr. I. Morton for permission to excavate the site and to those members of the OUAS who helped with the work. We would also like to thank Mr. C.S. Elton for provision of aerial photographs and Mr. H.J. Case for his report on the finds from the site.

STRATIGRAPHY AND INTERPRETATION

The section (Fig.2) shows the barrow to consist of a low earthen mound up 0.5m thick and 17m. in diameter (Layers 7 and 12) with a thin covering of dirty gravel (Layer 2). Sealed beneath it was an old topsoil of a stone-free, red/brown silty loam (Layers 5 and 19) which was itself resting upon the leached and irregular surface of the Pleistocene limestone gravel terrace. Some of the deeper undulations (F 21) may have been made by ancient tree roots.

The ditch had been dug 1.6m. below the Bronze Age ground level. The early fills (Layers 8/5-6 and Layers 15/3-5) probably derived largely from the weathering of the sides, but their upper layers (6, 8/1-4 and 14, 15/1-2) were mostly alluvial clays. The mound had suffered considerably from erosion, with layers 4, 18, 18/1 perhaps being slip from its sides, although the hard-packed, clean gravel towards the proximal ends of Layers 4 and 20 may mark the original extent of the barrow. After a period of alluvial deposition, ploughing seems to have spread much of what remained of the barrow's gravel capping over the now entirely filled in ditches (Layers 3 and 13).

At points X and Y on the section drawing, the ancient topsoil apparently projects upwards, with straight near-vertical outer sides clearly defined by the clean gravel of Layers 4 and 20. These features are surely to be interpreted as a turf revetment encircling the mound.

Lying on the surface of the Bronze Age topsoil near the centre of the barrow was a gravel patch (F23), cut by the northern section of the trench. Its position has been projected onto the drawn (southern) section and it perhaps represents the upcast from a burial pit outside the excavated area.

³ C.S. Elton, *The Pattern of Animal Communities* (1970), Pl. 82.

DISCUSSION

The composition of this small bell-barrow, an earthen mound with a gravel capping, was probably the standard type of construction on the Thames gravels. Barrows 4 and 4A at Barrow Hills were other examples,⁴ although few have escaped total obliteration by ploughing. The use of a turf revetment does not seem to have been observed previously in this area, but a close parallel may be suggested nearby at Cassington, dated to the third quarter of the second millenium.⁵ There, a bank of turfy soil capped with gravel (Layers 1 and 2), perhaps derived from a small ditch, encompassed the area over which the barrow was subsequently built. This the excavator interpreted as a ritual enclosure connected with funeral ceremonies before the mound was built, but it could merely have served the function of defining the area within which spoil for the barrow was to be heaped. A ritual interpretation might be suggested for the King's Weir structure by arguing that the clean gravel of Layers 4 and 20 was a deliberately deposited part of the mound, covering and superseding the turf bank which must therefore have had a purely temporary function.

Using the cross-sectional area of the ditch, it is possible to calculate an approximate volume for Barrow C as 300m.³, if the ring ditch were the only source of spoil for the barrow. If the turf revetment is assumed to have delimited the mound, its height can be calculated for various shapes. As a perfect cone it would have been approximately 3.75m. high while as a flat disc only 1.25m. high. In a more likely shape, a mound with sloping sides and a slightly domed top about 6m. across, the height would have been 2.4m. A partial check upon the accuracy of these calculations can be provided because most of the earthen part of the barrow remains in situ. A 0.2m. covering of Bronze Age topsoil over the natural gravel on the location of the ditch would provide sufficient spoil for the earthen part of the barrow to be just under 0.5m. high. In fact the section shows it to be 0.4m. high for most of its length. This final calculation means that it is unnecessary to postulate that the berm between the barrow and its ditch was stripped to provide extra soil for the core of the mound.

THE FINDS

By H.J. CASE

Buried topsoil (Layers 5 and 19)

Beaker ware. Rim and joining sherd (Fig. 3 B; 3 g; Layer 5), light brown surfaces, brownish black core. Linear notched impressions, 2 zones apparent. The inturned rim suggests probably a Late Beaker. A Middle Beaker in northern style such as from Linch Hill, Stanton Harcourt⁶ is a lesser possibility.

10 struck flints (128g), irregularly flaking material with unabraded cortex, probably surface flint from the chalk, whitish patina, including (Layer 5), core (13g) type B3, 4 flakes, and (Layer 19), roughed out side-scraper, L. 4.4cms.; core-changing flake, L. 4.5cms.; flake with use marks, L. 2.5cms.

Earthen mound (Layer 7)

Rim sherd (Fig. 3 A; 15 g), D. about 20cms., light brown exterior, brownish-grey interior, filler predominantly grog. Decorated with 3 linear zones and possibly a fringe. Eroded surface obscures details of decoration, but possibly impressed with side of fingertip and nail: Peterborough ware bowl. Fabric appropriate also to Early Bronze Age 'accessory vessels' but lack of internal rim bevel makes this less likely.

⁴ A. Williams, 'Excavations in Barrow Hills Field, Radley, Berkshire, 1944', *Oxoniensia*, XIII (1948), 1-8.

⁵ R.J.C. Atkinson, 'A Middle Bronze Age Barrow at Cassington, Oxon.', *Oxoniensia*, XI-XII (1946-7), 5-23.

⁶ H.J. Case, 'Beaker Pottery from the Oxford Region: 1939-1955', *Oxoniensia*, XXI (1956), Fig. 4, Oxon. 28.

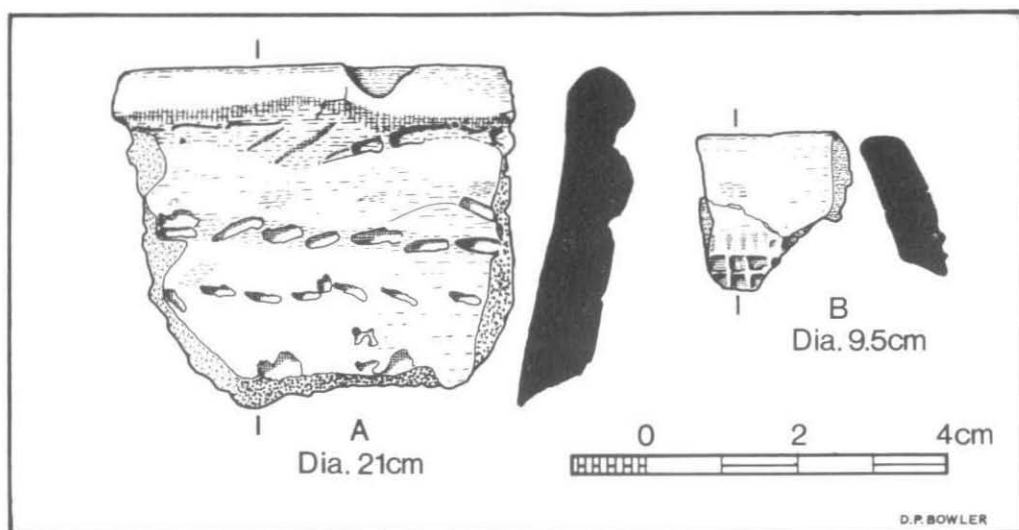


Fig. 3
Pottery (1/1)

Gravel covering (Layer 2)

Body sherd (2g), grey to dark grey surfaces, stone filler including flint to 3mm, indeterminate but possibly Iron Age.

2 struck flints: chip from core, perhaps core-changing flake, used secondarily for flaking, similar flint to those in buried topsoil; flake possibly of different material with ochreous and so-called toad belly patina.

Slip from mound (Layer 18)

5 body sherds, flakes or crumbs (5g), similar to one in gravel covering, sandy, brownish-red exterior, dark brown core.

Ditch, upper alluvial (Layers 8/3, 14)

31 sherds or crumbs, some joining (40g: Layer 8/3), brownish grey to grey throughout, fairly sparse shell filler to about 6mm.; including plain upright rim sherd, D. about 12cm., likely to be from jar of later Bronze Age as at Stanton Harcourt ring ditch XV/4 with secondary cremation burials⁷ or at Long Wittenham urnfield;⁸ rounded shoulder from another pot. 2 sherds and crumbs (10g: Layer 14), similar to those in gravel covering and slip from mound. 2 flint flakes (14g), both slightly ochreous patination, one (5g: Layer 8/3), L. 4.6cms. with use marks.

Also found

Layer 13, flint flake (2g.), fire-marked.

Modern topsoil (Layer 1)

4 Medieval sherds (20g.), 14th century or later glazed ware. Sherd, flake and crumb (6g.), similar to those in gravel covering and slip from mound. *Unstratified*, Medieval or later Iron nail (105g.), head 5 by 4 cms. (from cart or waggon?); sherd (5g.), similar to those in gravel covering and slip from mound. Flint flake (10g.), similar to those in burial topsoil.

⁷ H.J. Case, 'Notes on the Finds and on Ring-Ditches in the Oxford Region', *Oxoniensia*, XXVIII (1963), 29.

⁸ H.J. Case, *et al.* 'Excavations at City Farm, Hanborough, Oxon.', *Oxoniensia*, XXIX/XXX (1964/5), Fig. 28, 5-8.

The finds indicate use of the flood plain over several millennia. The probable Late Beaker sherd is most interesting in view of the similarly stratified material from the Hamel and provides a *terminus post quem* for the barrow. The sherd of Peterborough ware should be related similarly to pre-barrow activity, not necessarily much earlier than that associated with the Beaker pottery. The struck flints from the buried topsoil and similar flints in other layers are not inconsistent with similarly dated activity; but the ochreous patinated flints from the gravel covering and elsewhere are more blade-like and may possibly be earlier in origin. The later Bronze Age sherds from the ditch are similarly stratified to others in the region as at Stanton Harcourt XV/4 and can be taken to provide a *terminus ante quem* for the barrow. The small relatively featureless sherds from the gravel covering, the slip from the mound and elsewhere would appear anomalous, if correctly dated to the Iron Age, but they may be intrusive; their containing layers are not sealed and may all have been moved in levelling the barrow. There are no Roman or Late Saxon finds, but Medieval finds were to be expected.

THE ENVIRONMENT

A series of samples from the site listed in Table 1 were sieved to an aperture size of 0.5mm. and the residues examined for plant and animal remains.

TABLE 1

Layer	Sample size		Description
19	6.8	Kg	Red/brown silty loam with a few charcoal flecks
15/4	6.8	Kg	Organic brown silty clay
15/3	1.13	Kg	Dark grey silty clay
15/2	1.13	Kg	Grey, brown-flecked clay
14	1.13	Kg	Buff clay
8/2	1.13	Kg	Pale grey/buff gravelly clay

Results

The molluscs from the samples are listed in Table 2. The only organic remains preserved by the anaerobic conditions of Layer 15/4 were roots. Fragments of oak (*Quercus* sp.) charcoal were present in the sample from Layer 19.

The soil of all the samples showed evidence of past decalcification. The molluscs from the ditches were in poor condition. Indeed, only because of the presence of limestone gravel in Layer 8/2 (probably eroded from the mound) were so many shells preserved in it. The fine grit and sand from Layer 19 was almost calcium carbonate free, but there were secondary carbonate deposits on the artifacts from this layer, presumably caused by downwashing from the barrow, and some of the snail shells from it were in good condition.

INTERPRETATION

The stone-free nature of the soil under the barrow and the undulating surface of the limestone gravel beneath suggest that prior to the construction of the monument the soil had never undergone deep cultivation. Had the site been suffering frequent flooding from the calcareous waters of the Thames at the time the barrow was built, the presence of

TABLE 2

MOLLUSCA	19	15/4	15/3	15/2	14	8/2
<i>Theodoxus fluviatilis</i> (L.)	—	—	—	—	—	3
<i>Valvata piscinalis</i> (Mull.)	—	—	—	—	—	7
<i>Bithynia tentaculata</i> (L.)	—	—	—	—	—	4
<i>Bithynia</i> sp.	—	—	—	—	3	8
<i>Lymnaea truncatula</i> (Mull.)	—	2	—	—	5	2
<i>L. palustris</i> (Mull.)	—	—	—	—	—	1
<i>Lymnaea</i> sp.	—	—	—	—	—	2
<i>Succinea</i> or <i>Oxyloma</i> sp.	—	—	—	—	—	1
<i>Cochlicopa</i> sp.	1	—	—	—	—	—
<i>Pupilla muscorum</i> (L.)	1	—	—	—	—	—
<i>Vallonia</i> cf. <i>pulchella</i> (Mull.)	1	—	—	—	—	—
<i>V. excentrica</i> Sterki	6	—	—	—	1	—
<i>Vallonia</i> sp.	2	1	—	—	—	—
<i>Arion</i> sp.	+	—	—	—	+	+
<i>Limax</i> or <i>Deroceras</i> sp.	—	—	—	—	1	3
<i>Trichia hispida</i> (L.)	1	—	—	—	—	—
<i>Cepaea</i> sp.	—	1	—	1	1	1
<i>Pisidium</i> spp.	—	—	—	—	—	4
Total	12	4	0	1	11	36

some aquatic and marsh species would be expected on the old ground surface. Whatever the subsequent history of the site, their shells would be preserved from leaching by the calcareous gravel in the mound. This was not so; indeed the molluscs from Layer 19 are all terrestrial species.⁹ However, the concentration of snail shells in the sample was low and they are all small, so they could have been introduced by worm activity at a later date from the top of the barrow and preserved for the reason given above. It is possible that at the time of the barrow's construction there was not frequent flooding so the soil may have been lime-free and therefore unsuitable as a habitat for shell-bearing molluscs.

The lack of contemporaneous organic material preserved in the ring ditch (15/4) despite the anaerobic conditions shows that the permanent water table was below the bottom of the ring ditch for a period. When the water level rose, all that remained to be preserved were roots. It is unlikely that this rise was due to the construction of the King's Weir because the present-day effect of the lock (at normal river level) was to cause the modern water table to be a further 0.6m. above the top of Layer 15/4.

Possibly related to this rise in water table, at some date after the construction of the barrow alluvial deposition occurred on the site causing the ditches to be filled in and the general ground level of the area to be raised. The molluscs from Layer 8/2, for example,

⁹ J.G. Evans, *Land Snails in Archaeology*, (1972), 138-9, 146-150, 161-2, 177.

include *Theodoxus fluviatilis*, *Bithynia tentaculata* and *Valvata piscinalis*, all species of clean flowing water which are common in the Thames at present.¹⁰ The post-barrow alluvium had a higher clay content than the more silty material beneath it. The poor state of preservation of shells in the alluvium, however, indicates that the inundations of lime rich waters were not always sufficient to counter the decalcifying effects of rainwater and perhaps plant material decaying in the ditch.

The wider implications of the environmental evidence are considered along with those from a Beaker burial in Oxford elsewhere in this volume (p.133).

MODERN PLOUGHING AND FLOODPLAIN SITE

The King's Weir barrows emphasise the importance of archaeological sites on the Thames floodplain even when there are no waterlogged organic remains. Until recently, most of the floodplain has been permanent pasture and this sometimes combined with the protection afforded by an alluvial covering means that such sites are very much better preserved than their counterparts on the gravel terraces. Indeed, Barrow A is probably the largest prehistoric monument still upstanding in the immediate vicinity of Oxford.

Recent ploughing has eroded the top of Barrow C but at present the grass ley in the field is being direct drilled. The alluvial accumulation means that it is unlikely that ploughing will ever disturb the sealed ground surface but further ploughing would undoubtedly flatten the mound in time and remove the interesting details of the barrow's construction. Barrow B has suffered some damage of a different sort. It is at present the summer residence of a badger.

¹⁰ A.E. Boycott, 'The Habitats of Fresh-Water Mollusca in Britain', *J. Animal Ecology*, 5 (1936), 139-141. L.W. Grensted, 'Land and Fresh-water Mollusca of the Oxford District', *The Natural History of the Oxford District*, ed. J.J. Walker (1926), 308-9.