# Excavations on the Cursus at Drayton, Oxon.

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# SUMMARY

Rescue excavations by the Abingdon Area Archaeological and Historical Society, directed by J. Wallis, during 1981 and 1982 on the area of the E. ditch of the Drayton Cursus produced evidence for an internal bank but could not suggest a function for this type of monument. Radiocarbon dates from material in the lower fills of the ditch indicated that it was dug around 2900 bc. The earlier fills contained Peterborough-type pottery and the later ones produced Beaker sherds. However, the cursus ditch remained an influence on land division into the Roman period. The S. part of the site was covered with alluvium, the deposition of which may have commenced in the late Neolithic period. As this is a widespread phenomenon in the Thames Valley it is suggested that many other sites of Neolithic and later dates may also be preserved in this manner. Mesolithic remains, peat deposits, flint-working deposits, Roman ditches and Saxo-Medieval layers were also investigated. The W. part of the cursus has since been excavated by the Oxford Archaeological Unit, and a full report both on its work and on that of the Society will be published in a later volume.



Fig. 1. Location Plan.

# INTRODUCTION

The cursus (Fig. 1) appears on air photographs<sup>1</sup> as two parallel ditches, 100m. apart, which run intermittently north-eastwards from a square end on the second terrace of the Thames down to the first terrace, which is some 6m. lower. Its N. end has not been located. E.T. Leeds investigated Neolithic, Bronze Age and Anglo-Saxon sites near the cursus on the second terrace,<sup>2</sup> and the Abingdon Society has excavated a Neolithic henge and Bronze-Age remains to the north of the cursus.<sup>3</sup> The Society's recent work on Bronze Age and Neolithic sites in the Abingdon area, including this cursus, has been summarised by Thomas and Wallis.<sup>4</sup> A Roman villa has also been excavated at Drop Short some 700m. SE, of the site, and a long barrow has been identified 1km. to its NW.

As comparatively little is known about cursuses, it was decided to open an area, centred on the E. cursus ditch, at the S. end of a field threatened by gravel extraction (NGR SU 491 943), in the hope that this low-lying area might produce some waterlogged remains (Fig. 2). A smaller cutting was designed to investigate the way in which the cursus was formed from ditch segments separated by causeways. Other small trenches were dug across the cursus as time permitted, and two trenches to the S. of the threatened area were designed to ascertain whether the cursus climbed onto the second terrace. Pits and other features were investigated as they were revealed during gravel extraction.

Specialist reports have been prepared on prehistoric pottery (H. Case); Roman pottery (N. Trippett); flint material (J. Wallis) and bones (R. Wilson). The Oxford Archaeological Unit has since recovered more material in further excavations, and will publish the whole site and finds in detail. The reports, finds and archive material from both the Abingdon Society's and the Unit's sites will ultimately be deposited with Oxfordshire County Council's Department of Museum Services. As the Unit's work recovered relatively little bone material, Mr. Wilson's summary of his report is published here as an appendix.

# EXCAVATIONS

The results of these cuttings may be summarised thus:

#### Trench 1 (6 × 1m.)

This trench was positioned over the cursus ditch (4) at the N. end of the threatened area. The cursus ditch had been cut 70cm, into the natural gravel, had a maximum width of 2.5m, and an irregular V-shaped profile. It had been cut by a later gully (6), 4cm, deep and 16cm, wide, which ran along the W, side of the cursus. A ditch-like disturbance (5), 1.5m, wide and 0.4m, deep, was found 7m, to the W, of the cursus ditch.

#### Trench 2 (14.5 × 5m.) (Fig. 3)

This trench was placed over a causeway in the cursus. The cursus ditch was 3.5m, wide and 1.4m, deep below the ground-surface, and cut 1m, into the natural gravel with a U-shaped profile. Its silting pattern indicated that the bank may have been on its W, side. After it had almost completely silted up, it was recut to a depth of 30cm. The causeway between segments was 6m, wide. A Roman ditch (7), 1.3m, wide and 60cm, deep with a V-shaped profile, cut the cursus ditch. A small gully (50), 40cm, to 1m, wide and 20cm, deep with a U-shaped profile, followed the E, side of the cursus ditch and appeared to respect the Roman ditch. The S, segment had been disturbed, probably during the 19th century.

- <sup>1</sup> D. Benson and D. Miles, The Upper Thames Valley (1974), 61.
- <sup>2</sup> E.T. Leeds, 'Recent Bronze Age Discoveries in Berkshire and Oxfordshire', Antiq. Inl. xiv (1934), 264-276.
- <sup>3</sup> Council for British Archaeology Group 9 Newsletter 3 (1973), 40.

<sup>4</sup> R. Thomas and J. Wallis, 'Recent work on Neolithic and Early Bronze Age Sites in the Abingdon Area', Council for British Archaeology Group 9 Newsletter 12 (1982), 181-191.



Fig. 2. Trench Locations and Main Features.



#### Area 3 (Fig. 4)

Although this was the main area of investigation the nature of the gravel extraction dictated the method adopted. Work was carried out in three stages:

(1) Cleaning and recording of sections produced by mechanical excavation:

This stage located the cursus ditch and found an antler in its fill. The upcast was shown to be on its W. side, and to have sealed various small features and the old ground-surface. This surface was cut by various features: the earliest filled with a clayey loam similar to its own composition, later ones with a fill containing some alluvial clay, and the latest filled solely with alluvial clay. This clay had filled the cursus ditch after a humic layer had accumulated; it covered the upcast and the old ground-surface, and itself had features cut into it.

There must have been many features which were not recognised as they were filled with the clay into which they had been cut. Those cut into the underlying gravel could only be identified by their differing backfill, but fortunately these could be assigned a stratigraphic relationship as the height of their gravel upcast in the section indicated the level of the ground-surface at the time they were dug. For example, gully (14) was cut after 25cm, of clay had been deposited, and ditch (11), dated by Roman pottery, was dug after a further 10cm, of silt had been laid

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Fig. 4. Area 3. Plan and Sections.

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down. The alluvial clay was some 60cm. deep, with its surface at 50m. O.D.; reducing conditions appeared to have developed 20cm. below the ground-surface, for there were no molluscan remains beneath that level.

Whilst of help in establishing the stratigraphic sequence, this stage did not greatly assist either the identification of the type of features shown in section, or the recovery of artifacts to establish their date and purpose.

## (2) Cleaning and excavation of the old ground-surface:

Some 140 square metres of the old ground-surface sealed by the alluvial clay were uncovered, and the ditches excavated. Unfortunately the area flooded several times during excavation, and could not be investigated with the care which its complexity deserved. The cursus ditch was found to be some 2.5m. wide and cut 80cm. into the former ground-surface, with a U-shaped profile. One of its lowest fills was of a dark grey gravelly clay with traces of organic material, although of this only the shells of a few hazelnuts could be identified. Peterborough-type ware, flints and bones (including those of *bos primigenius*) were also found in this fill, which produced the following radiocarbon dates:

HAR - 6478 (A. M. Lab. No. 834859): Cursus ditch primary silt: animal bone ABDC 822:I Years B.P. 4780 ± 100; II B.P. (1950) = 2830 bc.

HAR - 6477 (A. M. Lab. No. 834858): Cursus ditch primary silt: animal bone (cattle, horse, deer antler, pig) ABDC 821: Years B.P. 4990 +/- 100; II B.P. (1950) = 3040 bc.

Using the High Precision<sup>5</sup> curve for calibration indicates a 95 per cent probability that this deposit was laid down between 3980 BC and 3350 BC.

The gravel underneath the ditch was stained as if water-reeds had been growing there. The upcast of the cursus ditch sealed features of which one (58) contained crumbs and flakes of pottery comparable to Peterborough ware; an indistinct curving gully-like disturbance (71/57), some 5m. long and 50cm. wide, also belonged to this phase.

The upcast covered the old ground-surface unevenly, but some 4.5m. from the lip of the ditch 10cm. of gravel overlay that surface. Phosphate analysis did not indicate any difference between areas on either side of the cursus ditch. No trace was found of any revetment for the cursus bank. The only pottery from the upcast was an undiagnostic, probably prehistoric, sherd 10mm. square and 2.5mm. thick from its upper surface. Pit (28) was located near the junction of cursus ditch (4) and the Roman ditch (11). It contained Peterborough ware, and was probably cut soon after commencement of the deposition of alluvial clay at the N. end of this area, as it was filled with clay, loam and pebbles.

When the clay alluviation had reached the top of the cursus ditch, some Beaker sherds were deposited in it. This may indicate that alluviation had reached that level by the Beaker period, but it is alternatively possible that these sherds were part of the later upcast from ditch (25) which sealed the cursus in this vicinity. This ditch followed the alignment of the cursus ditch before turning E. some 11m. N. of section C-D. It was in turn cut by the Roman ditch (11), which ran in an E.-W. direction, but kinked some 6 m. at its junction with the cursus ditch 30m. N. of section C-D before resuming its original direction.

### (3) Excavation of features revealed by mechanical stripping:

This stage mainly recovered remains of pits and gullies. Most of these were no doubt totally destroyed by the machines, while even those which could be identified had lost their upper layers and their stratigraphic context. It was possible to locate two main areas of pits, one of 25 pits within 35m. of the junction of ditch (11) and the cursus ditch, the other of 30 pits in an area 100m. E.–W. by 40m. N.–S. centred on a point some 150m. E. of the cursus ditch and 25m. N. of ditch (11). Three curving and two straight gullies were also located.

The presence of alluvium in the fill of the pits could be taken to indicate their age, but as the alluvial clay was deposited over the years it gradually spread northwards up the slope. A consequence of this was that a feature on the S. side of the area could have a clay fill, whereas a feature contemporary with it on the N. side would have a loamy fill. South of the Roman ditch (11), 9 out of 13 pits had clay fills, but N. of that ditch only 9 out of 51 pits had clay fills. Several of the pits contained orange and black silty fills. These were initially interpreted as the result of burning, but since no charcoal or other burnt material was found it is possible that these colours were caused by natural processes. There were relatively few finds in these pits: only 7 produced flints, one (87) produced fragments of collared urn, and a large, indistinct, mainly gravel-filled pit (73), produced Bronze-Age pottery. This dearth of finds, and the amount of gravel in the fills of these pits, could indicate that many were in fact tree-holes. They ranged from 10cm. to 1.2m. in depth, although 84 per cent were less than 50cm. deep. Their diameters ranged from 40cm. to 3.2m. and of these 80 per cent were between 40cm. and 1.6m.

<sup>5</sup> G.W. Pearson, J.R. Pilcher, M.G.L. Ballie, 'High Precision 14C Measurement of Irish Oaks to show the Natural 14C Variations from 200 BC to 4000 BC', *Radiocarbon*, xxv.2 (1983), 179-186.

Only one of the curving gullies (83) was at all well-preserved. Its ditch was 75cm, wide and 15cm, deep, with a clay fill, and its curvature indicated a diameter of 10m. Unfortunately it contained no finds. Another gully (48) was clay-filled, but only some 1.5m. of its length remained. A possible gully (110) produced 4 quartered flint cores, indicating flint-working in its vicinity. The two straight gullies (95 and 100) were almost parallel, *c*. 9m. apart, and were to the N. side of the main area of pits. They were 10m. long, 40cm, wide and 10cm, deep; one (100) produced a rought-out for a flint adze or hammer from its lowest layer.

#### Trench 4 (15 $\times$ 2m.)

This trench was approximately 40m. S. of Area 3. It showed no sign of the cursus ditch which, if it was ever there, must have been destroyed by later water action. Approximately 1m. of alluvium had been deposited on the gravel in this location.

#### Trench 5 (10 $\times$ 1.5m.)

This was dug 126m. to the S. of Trench 4, on the alignment of the cursus ditch and on the steep slope where the cursus should have risen from the first to the second terrace. No trace of the cursus was, however, found. On this slope Kimmeridge clay has been exposed, and this has given rise to springs and slumping. At a depth of 60cm. was located a layer of peat some 75cm, thick, in which microliths, including a non-geometric point, a crested blade and a microburin, were found. Above this bones and pottery of Saxo-Medieval date were found, and an iron 8-point spur rowel indicates a post mid-13th century date for the upper layers.

#### Other Areas

Auger soundings located a bed of peat between Trenches 4 and 5. This underlay the alluvial clay and was 40cm. thick 30m. S. of Trench 4, thickening to 1m. thick 100m. S. of that Trench. A cutting through the cursus ditch between Trenches 1 and 2 recovered remains of flint-knapping which had taken place shortly after the primary fills had accumulated. The air photographs and observation following mechanical topsoil removal showed that to the N. of Trench 2 the cursus had been formed from a series of ditches with causeways between them; the ditch sections were approximately 45m. long and the causeways 5m. wide. Two flint arrowheads, one kite-shaped, the other tanged, were found close together during topsoil removal, indicating late Neolithic or early Bronze Age activity.

An Iron Age ditch (114), 3.5m. wide and 1.3m. deep, dated by sand-tempered pottery, was found. This formed part of an enclosure which ran underneath the E. boundary of the field.

Roman ditches were located in the N. part of the field. Unlike the others they do not follow the alignment of the cursus, with ditch (1) differing by some 7 degrees and ditch (51) by 20 degrees. Air photographs, however, indicate that ditch (1) does respect the W. cursus ditch further S. These ditches contained pottery dated by a mortarium stamp, attributed by Mrs. Hartley to the Oxfordshire kilns, to between 100 and 130 AD. This pottery was dumped in small areas of the ditch fill, with 1.9 kg. in (1) and 1.5 kg. in (51). This is not a pattern normally associated with casual loss, and may indicate Roman domestic occupation in the immediate vicinity.

# INTERPRETATION

The evidence indicates the following phases:

(1) The pre-cursus occcupation. The evidence for this is the finds sealed by the cursus upcast and the Mesolithic material under the peat. The peat sealed by alluvium possibly belongs to this phase.

(2) The cursus was constructed and a humic layer accumulated in its ditch during the earlier 4th millenium BC.

(3) The area remained in use, and during the Later Neolithic period there began the alluvial deposition of clay which gradually buried the former ground surface. Certain ditches dug until the early Roman period respected the alignment of the cursus ditch where it had not been covered with alluvium.

(4) By the mid-2nd century AD ditches were being constructed at the N. end of the area without any obvious regard to the alignment of the E. cursus ditch.

# DISCUSSION

Essex County Council has recently carried out work on the Springfield cursus,<sup>6</sup> and the Oxford Archaeological Unit has also excavated the cursus at Dorchester-upon-Thames, the western side of the Drayton cursus and part of that at Lechlade. The Dorset cursus has also recently been investigated.<sup>7</sup> We do not intend to interpret cursuses in this report and have only recorded here what we consider to be the main features of importance. The probability that the bank was internal would make this cursus fairly typical; the segmental construction of the N. end of the cursus is, however, of interest. Environmental evidence and organic material may be preserved in the bed of peat underlying the alluvium, although these will deteriorate should that area be drained. The radiocarbon dates make this cursus contemporary with the causewaved enclosure at Abingdon, which has produced radiocarbon dates from 1500 bc to 3110 bc.8 Little can be said of the Bronze Age and Roman periods, although it is probable that domestic occupation was taking place in the vicinity at this time. The date of the commencement of alluviation is given a Later Neolithic date, which is earlier than the Late Iron Age date proposed by Robinson and Lambrick,<sup>9</sup> and the post-Early Bronze Age date of the alluviation excavated by Palmer at the Hamel, Oxford.<sup>10</sup> The Drayton evidence does, however, appear to agree with the sequence excavated at Wallingford, where it was found that some 37cm. of alluvium had been deposited before the 8th century BC, possibly a millenium earlier.<sup>11</sup> This is probably because the slow alluviation covered and preserved surfaces of differing heights at different dates.

## THE BONES by BOB WILSON

Some 400 bone fragments were obtained, most from Saxo-Medieval contexts but small groups from prehistoric and Romano-British contexts. Bones from the early deposits are mostly preserved poorly. Those from higher levels of the gravels are whitened and eroded by leaching. A few bones from waterlogged deposits in the cursus, and many from the Saxo-Medieval gully, are better preserved. The bones from the Neolithic features are mainly from cattle, 24, with a further 2 from *Bos primigenius*. Four bones are from pig, one scapula is from horse, and one metacarpal and a piece of antler are from red deer. The Romano-British bones consist of 9 sheep bones and 3 each of cattle and horse. The Saxo-Medieval group consist of 59 cattle bones, 10 sheep, 12 pig, 5 horse, 1 dog and 1 piece of antler. Most of these bones appear to be larger fragments from the peripheral areas of settlements. The wild species bones among those of the Neolithic indicate a partly wooded landscape.

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<sup>6</sup> J.D. Hedges and D.G. Buckley, 'Springfield Cursus and the Cursus Problem', Essex County Council Occasional Papers No. 1 (1981).

<sup>7</sup> M. Bowden, R. Bradley, V. Gaffney and L. Mepham, 'The Date of the Dorset Cursus', *Proc. Prehist. Soc.* xlix (1983), 376–379.

<sup>8</sup> H. Case and A.W.R. Whittle, Settlement Patterns in the Oxford Region: The Abingdon Causewayed Enclosure and Other Sites (C.B.A. Research Rep. 44, 1982).

<sup>9</sup> M.A. Robinson and G.H. Lambrick, 'Holocene Alluviation and Hydrology in the Upper Thames Basin', *Nature*, cccviii No. 5962 (26 April 1984), 810.

<sup>10</sup> N. Palmer, 'A Beaker Burial and Medieval Tenements in the Hamel, Oxford', Oxoniensia, xlv (1980), 122-134.

<sup>11</sup> <sup>•</sup>R. Thomas and M. Robinson, 'A Late Bronze Age Riverside Settlement at Wallingford, Oxfordshire.' Archaeol. Jnl. cxliii (1986), 174–200.

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