

## NOTES

### A PARTIAL COW SKELETON OF THE MIDDLE BRONZE AGE AT WALLINGFORD, OXFORDSHIRE

An archaeological evaluation was undertaken at Wallingford Upper School, Wallingford, Oxfordshire between 9–16 July 2001.<sup>1</sup> The site is centred at National Grid Reference SU 6030 8973 and situated in an area of playing fields approximately 250 m. to the west of the Saxon defences of Wallingford (Fig. 1). The evaluation consisted of 14 trenches located across the east and north sides of this open area. The evaluation, undertaken as a planning condition, was commissioned by CgMs Consulting on behalf of Kingsoak Thames Valley, under the supervision of Timothy Bradley and the project management of Gary Brown.

The underlying geology of the area comprises valley gravel and upper greensand which was recorded on site at heights between 45.73 m.–46.79 m. OD. This was overlain by a layer of gravelly 'brickearth' about 0.40 m. thick.

The evaluation revealed very little archaeological evidence of any period. The partially articulated remains of a single cow skeleton were, however, identified in Trench 6, located at the extreme west of the site. The stratigraphic position of the skeleton within the trench, being sealed by a layer of seemingly natural brickearth, suggested it might be of considerable antiquity. This report discusses in detail the results of analysis of this partial cow skeleton.

#### *Date*

Radiocarbon dating carried out by the University of Waikato Radiocarbon Dating Laboratory produced dates for the assemblage of between 1600 and 1310 cal. BC at two sigma,<sup>2</sup> giving a calibrated date that falls within the Middle Bronze Age period.

#### *General Description and Analysis*

Other than a single isolated premolar tooth from an adult sheep, all the bones recovered were from domestic cattle, and clearly derived from a single adult animal. These bones comprised a small fragment of skull, together with approximately three-quarters of the rib cage, and the central and posterior sections of the vertebral column. Noticeably absent from the assemblage were the lower jaw bones, the fore and hind limb bones, as well as the pectoral and pelvic girdles.

The state of preservation of the bones was generally good, and they did not appear to have been weathered, eroded, or have suffered biological degradation. In particular, the absence of sub-aerial weathering would suggest that the bones had been disposed of by rapid burial. This is likely to preclude burial by natural processes. It is very unlikely that the assemblage would have remained articulated and unweathered unless it had been deliberately buried. Whilst the archaeological investigation did not record the bones as lying within a cut feature such as a pit, the brickearth deposit identified overlying the assemblage

<sup>1</sup> T. Bradley, 'An Archaeological Evaluation at the former Wallingford Upper School, St. George's Road, Wallingford, Oxfordshire' (Pre-Construct Archaeology Ltd. unpubl. report, 2001).

<sup>2</sup> University of Waikato Radiocarbon Dating Laboratory, Wk 10454: 3187±48BP. 68.2% probability: 1515BC (64.7%) 1425BC; 1420BC (3.5%) 1410BC. 95.4% probability: 1600BC (3.2%) 1560BC; 1530BC (89.5%) 1370BC; 1340BC (2.7%) 1310BC.

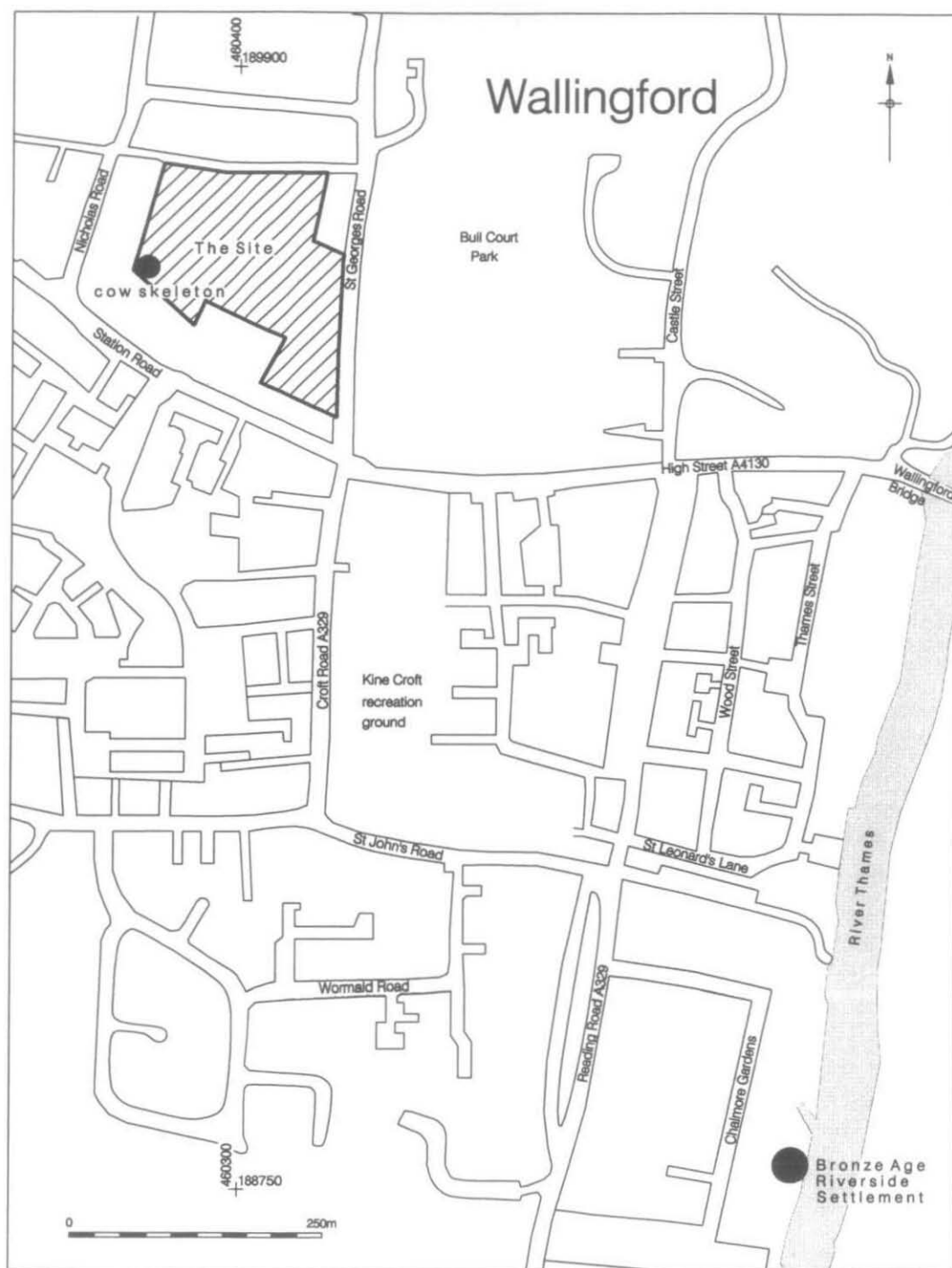


Fig. 1. Location of cow skeleton in relation to Bronze Age riverside settlement.

was recorded as having a slightly more silty matrix. This may suggest that the brickearth in this area was redeposited or disturbed, and that whilst a definite cut feature was not observed during excavation, the skeletal remains had in fact been buried on purpose. Moreover, the distinctive dendritic-patterns formed by root etchings that were identified on almost all the surfaces of the bones would suggest that the bones were likely to have originally been buried in relatively shallow soil. The only possible natural explanation is that the brickearth represented a natural water lane deposit, with the partial cow skeleton having been deposited within it during a flooding event.

#### *Age*

The animal was at least five years old at the time of death as indicated by the cranial and caudal epiphyseal plates, which were fully fused to the body in all the vertebrae represented (criteria of Silver 1971).<sup>3</sup>

#### *Sex*

In the absence of horn cores (if indeed the animal had been horned?) and the pelvis, it was not possible to ascertain the sex of the animal.

#### *Body size*

The absence of long bones from the assemblage made calculation of the original stature of the animal impossible. Some idea of the size of the animal was gained, however, by measuring the length of the lumbar vertebrae, which were all present. The total length of the lumbar region was found to have been c. 32.5 cm., which may be compared with the higher measurement of 48 cm. documented by Getty<sup>4</sup> for a medium size shorthorn cow. This would suggest a comparatively small stature for the animal.

#### *Possible Pathology*

Of particular note within the assemblage was the occurrence of large foramina (vascular canals) in three of the ribs and one of the lumbar vertebrae. Veterinary researcher Dr. J. Holmes MRCVS recorded an almost identical condition in an ox rib among food debris from Whitefriars Church, Coventry (dated to between c. AD 1545 – c. 1557/59).<sup>5</sup> Holmes suggested the notch in the Coventry ox rib had been caused by a vein or artery serving a 'large lesion nearby'. He further surmised that this lesion had probably been an abscess or a tumour. Whilst this sort of pathology might explain the presence of the foramina within the Wallingford ribs, another large foramen was also identified in one of the lumbar vertebrae from the same animal. Considered together, it seems unlikely that all of these anatomical features had developed as a result of a single tumour or abscess, which, if present, would have been an exceptionally massive body to account for the widely divergent locations of the foramina within the assemblage. A more plausible explanation might be provided by Baker and Brothwell's interpretation that the foramina present in the lumbar vertebrae are congenital developmental abnormalities.<sup>6</sup>

<sup>3</sup> I.A. Silver, 'The Ageing of Domestic Animals', in D. Brothwell and E. Higgs (eds.), *Science in Archaeology* (1971), 283-302.

<sup>4</sup> R. Getty, *Sisson and Grossman's The Anatomy of the Domestic Animals*, i (5th edn. 1971), 745.

<sup>5</sup> J.M. Holmes, 'Report on the Animal Bones from the Resonance Chambers of the Whitefriars Church, Coventry', in C. Woodfield, 'Finds from the Free Grammar School at the Whitefriars, Coventry, c. 1545-c. 1557/58', *Post-medieval Archaeology*, 15 (1981), 81-159.

<sup>6</sup> J. Baker and D. Brothwell, *Animal Diseases in Archaeology* (1980), 35-6.

*Discussion*

Examples of articulated remains of Middle Bronze Age cattle are rare. Assemblages have usually been broken up in order to utilise hides/ribs etc. before disposal or, if deposited naturally, dispersed through activities of scavengers. The lack of gnawing or weathering on the Wallingford assemblage would suggest that it was disposed of quickly, probably through deliberate burial. Alternatively the assemblage may represent a partly decomposed cow deposited in an alluvial soil. Whilst no other archaeological evidence was recovered during the evaluation which might help to shed light on this unusual discovery, other Bronze Age activity has been identified in the area which might help place it in a regional context.

Bronze Age metalwork was recovered from the River Thames to the south of Wallingford Bridge during the 1850s and 1860s, and again in 1963-4. This metalwork ranges chronologically from the early part of the Middle Bronze Age to the end of the Late Bronze Age. Indeed, Wallingford exhibits the largest concentration of Bronze Age metalwork in the Upper Thames.<sup>7</sup> A riverside settlement has also been recorded on the west bank of the Thames about 1.4 km. below Wallingford Bridge. This site consists of a layer of dark 'occupation' soil containing abundant pottery, animal bone, flint flakes, burnt pebbles and bronze metalwork dating predominantly to the Late Bronze Age, although the site may represent a longer period of occupation.<sup>8</sup> Whilst it was originally assumed that the metalwork from the Thames had been deposited in the river by being eroded out of this settlement site, several factors make this at the very least uncertain.

Firstly, it is not clear exactly where the metalwork was recovered from. The impression is given that most of it came from just south of Wallingford Bridge, at least 1 km. north of the settlement. It is also interesting to note that not all of the finds were of the same date as the settlement. Four dirks or rapiers, a basal-looped spearhead, a Ballintober sword, and a palstave all date to the Middle Bronze Age<sup>9</sup> and are therefore contemporary with the cow skeleton and not the settlement. It is therefore perhaps more likely that the metalwork is the result of separate ritual deposition rather than erosion from the riverside settlement.

As an isolated find, the unusual deposition of the Middle Bronze Age cow skeleton recorded during the archaeological evaluation of the former Wallingford Upper School is hard to explain. It would, however, suggest that there was activity in the area at this time, which may have been associated with larger scale settlement in the area of Wallingford during the Middle Bronze Age. As discussed above, at least some of the metalwork recovered from the Thames south of Wallingford may also be associated with this phase of activity. Its geographical position between the upper and lower Thames would certainly have made the area of Wallingford favourable to settlement, as is evidenced by the Late Bronze Age riverside site, and the cow skeleton does suggest it was preceded by at least some Middle Bronze Age settlement activity.

<sup>7</sup> R. Thomas, 'Bronze Age Metalwork from the Thames at Wallingford', *Oxoniensia*, xlix (1984), 9-19.

<sup>8</sup> R. Thomas, M. Robinson, J. Barret and B. Wilson, 'A Late Bronze Age Riverside Settlement at Wallingford, Oxfordshire', *Archaeol. Jnl.* 143 (1986), 174-200.

<sup>9</sup> *Ibid.*

It may also be the case that the burial of the cow skeleton represents an example of ritual deposition. As has been discussed, metalwork finds recovered from the Thames in the vicinity of Wallingford Bridge dating to the Middle Bronze Age indicate that ritual activity was a contemporary concern. It is rare to find cattle remains in an articulated state in a prehistoric context. Cattle was a valuable commodity and its disposal in burial has been noted in a ritual context during prehistoric and Roman times.<sup>10</sup> The burial of the remains at Wallingford may therefore have had ritual connotations rather than reflecting natural flood deposition, or the ordinary disposal of rubbish.

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#### A ROMANO-BRITISH BUCKLE PLATE FROM EAST CHALLOW, NEAR WANTAGE

A Romano-British type 1B buckle-plate was found recently at East Challow, near Wantage.<sup>11</sup> These late Roman buckles were discussed by the late Sonia Hawkes in a series of papers<sup>12</sup> and although at first ascribed to Germanic migrants she eventually realised that they were used by women in general during the last period of Roman Britain, in the late 4th century, perhaps into the early 5th century AD.

##### *Description*

The plate was cut from a sheet of copper-alloy and measures 16.5 mm. in width by 43 mm. in length (though it has been snapped across and would originally have measured *c.* 70 mm.). The sheet is 0.7-0.8 mm. thick. Two rivet holes were cut in the left end, each approximately 2.25 mm. in diameter.

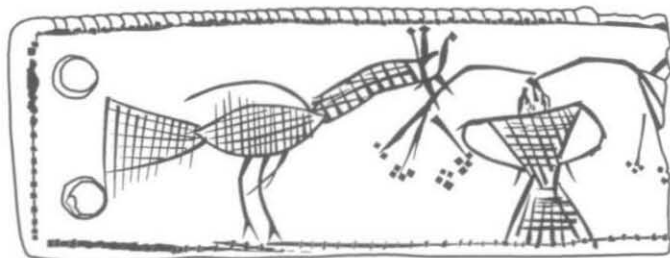


Fig. 1. Part of probable type 1B Romano-British belt buckle-plate from East Challow.

<sup>10</sup> A. Grant, 'Animals in Roman Britain', in M. Todd (ed.), *Research on Roman Britain 1960-1989* (Britannia Monograph, 1989), 11, 135-46; F.M. Meddens and M. Beasley et al., 'Roman Seasonal Wetland Pasture Exploitation near Nash, on the Gwent Levels, Wales', *Britannia*, xxxii (2001), 143-84; G.A. Wait, *Ritual and Religion in Iron Age Britain* (BAR, 1985), 149; B. Wilson, 'Displayed or Concealed? Cross Cultural Evidence for Symbolic and Ritual Activity Depositing Iron Age Animal Bones', *Oxf. Jnl. of Archaeol.* 18 (1999), 3, 297-305.

<sup>11</sup> Found with a metal detector in a field adjacent to the site of the Cornhill Villa, East Challow.

<sup>12</sup> S.C. Hawkes and G.C. Dunning, 'Soldiers and Settlers in Britain - Fourth to Fifth Century', *Medieval Archaeology*, 5 (1961), 1-70; S.C. Hawkes, 'A Late Roman Buckle from Tripontium', *Trans. Birmingham and Warwickshire Arch. Soc.* 85 (1972), 145-59; S.C. Hawkes, 'Some Recent Finds of Late Roman Buckles', *Britannia*, 5 (1974), 386-93.

Ornament consists of notching along the top edge of the plate producing a rope pattern. Running approximately 1 mm. inside the edge of the piece is a border of punch marks along a guide line. This is complete along the left, top and bottom edges as far as they survive.

In the centre is engraved a two-handled waisted vessel, intended for a cantharus, its body accentuated by cross hatching. From it grows a plant with two stems which fall to the left and right, each breaking into sub-branches terminating in flowers or more probably fruit, possibly grapes. On the left there are three branches but four bunches of fruit; on the right the broken edge runs along one of the branches but the disposition was similar. There is a large bird in profile on the left. It has a long neck, a head supporting a 'crown' of three crest feathers, an oval body and a triangular tail. The tail, body and neck (but not the head) are cross-hatched like the cantharus. A line above the base of the neck and arched over the body suggests its wings are raised. The legs are long and terminate in two toes. The bird's beak seems to be grasping the branch of the plant. A mirror image of the bird was shown opposing on the other side but only the beak and the line of the front of the head remains.

#### *Discussion*

The buckle-plate is of a well known type, best represented in the county by an example from a female burial at Dyke Hills, Dorchester, though the type is also represented at Shakenoak near Wilcote.<sup>13</sup> These like many other Type 1B buckle-plates, such as that from Houghton Down, Hampshire, are purely geometric.<sup>14</sup> A small number of buckles have figured decoration on their plates normally representing confronted peacocks on either side of a plant. The classic and best example is the Tripontium buckle discussed by Hawkes in 1972.<sup>15</sup> Others came from Stanwick, North Yorkshire and Wortley, Gloucestershire – which are iconographically similar, Penycorddyn, Clwyd – where fish are shown above the peacocks, and Harlow, Essex – with just a single peacock.<sup>16</sup> Similar symbolism appears on strap ends, often with peacocks.<sup>17</sup>

There is little doubt that the East Challow birds are intended for peacocks and the plant can be seen as a Tree-of-life or more probably the 'Good Vine'. The new element is the cantharus which can be interpreted as the Christian chalice, as represented by the two-handled silver cup from the Water Newton treasure.<sup>18</sup>

Although none of the images would have offended a pagan, for whom the peacock would have been associated with Juno and the cantharus would have Bacchic connotations as might the burgeoning plant, the combination of images and late date suggests it is Christian. The 'eyes' in a peacock's tail suggested the vault of heaven and this, together with the belief that the flesh of the peacock was incorruptible, established it as a suitable item of Christian iconography. A 6th-century marble slab from the presbyterium of Sant'Apollinare Nuovo,

<sup>13</sup> J.R. Kirk and E.T. Leeds, 'Three Early Saxon Graves from Dorchester, Oxon', *Oxoniensia*, 17/18 (1952/3), 63-76, Fig. 27; M. Henig and P. Booth, *Roman Oxfordshire* (2000), 190-1, 196-7.

<sup>14</sup> M. Henig, 'Zoomorphic belt-buckle', in B. Cunliffe and C. Poole, *Houghton Down, Stockbridge, Hants*, 1994 (Oxf. Univ. Committee for Archaeol. Monograph No. 49, 2000), 104-7.

<sup>15</sup> Hawkes, op. cit. (note 2, 1972); C.F. Mawer, *Evidence for Christianity in Roman Britain – The Small Finds* (BAR Brit. Ser. 243, 1995), 61, 124 no. D1. Br.1.

<sup>16</sup> Ibid. 61-2, nos. D1. Br.4, D1. Br.5, D1. Br.3, D1. Br.2.

<sup>17</sup> Ibid. 63-5, nos. D2. Br.2-10.

<sup>18</sup> K.S. Painter, 'The Water Newton Silver: Votive or Liturgical?', *JBA*, 152 (1999), 1-23, pl. iiiA: item no. 6 in the Treasure.

Ravenna depicting two peacocks perching, one each on the twin branches of a vine which issues from a cantharus/chalice is confirmed as Christian by the chi-rho on the relief as well as by its incorporation in a church screen.<sup>19</sup>

The relative crudity of the workmanship of the engraving of the East Challow plate compared with the Tripontium example, though not with some others (notably the rather incompetent work from Wortley), shows that these buckles do not emanate from a single workshop. On the East Challow plate the handle on the right of the chalice is made up of three almost straight lines in order to approximate to a curve, so also are the branches of the vine. Another indication of the lack of control over the engraving is the way the hatching goes beyond the outlines of the peacock's tail and body. Indeed had the person responsible studied other examples of the design? The bird more closely resembles a cockerel - albeit one with a long neck - than a peacock and one can imagine instructions being given to him to draw a large bird with a big tail and a crest on its head. In any case the execution is amateurish.

A peculiarity is that the buckle here was on the right side rather than, as seems to have been normal, on the left. Admittedly it is only possible to specify the direction of the belt on figured examples.

The broken edge has a pronounced 'hook' to it showing that it was bent with some effort until it broke. This looks as though it was done deliberately. It is of course possible that the buckle and its plate were merely destined to be melted down by a smith, though there are other scenarios. A plaque with Christian scenes on it from Uley, Gloucestershire was bent over twice probably to 'kill' it and make it suitable for deposition at the still-functioning temple of Mercury.<sup>20</sup> It is possible, therefore, that here too the presence of 'Christian' objects actually attests a period of spiritual turmoil when individuals were as able to turn back to the old gods as to turn forwards to new ones - a process which has been suggested for the emergence or re-emergence of a pagan cult (of Faunus) at Thetford, Norfolk.<sup>21</sup>

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<sup>19</sup> W.F. Volbach, *Early Christian Art. The Late Roman and Byzantine Empires from the Third to the Seventh Centuries* (1961), 346 no. 181.

<sup>20</sup> M. Henig, 'Copper alloy casket sheeting depicting biblical scenes', in A. Woodward and P. Leach, *The Uley Shrines* (Eng. Her. and Brit. Mus. 1993), 107-10.

<sup>21</sup> D. Watts, *Christians and Pagans in Roman Britain* (1991), 146-58.

