

## ***Caldicot Castle Lake***

1991 saw the completion of the second season in a planned three year excavation programme funded jointly by Cadw, Gwent County Council and Monmouth Borough Council. The results of the first major season were summarised in the last year's annual report (Parry 1990). At that stage the site was seen to comprise a sequence of silted river channels with associated wooden structures and artefactual material dating both stylistically and by radiocarbon to the Bronze Age. The most notable find from that season was a large timber worked to form a strake for a plank sewn boat (Parry and McGrail 1991).

Excavations during the 1991 season fell into two phases dictated by the logistics of working on waterlogged deposits under threat from desiccation.

In the first half of the season, work concentrated on completing and extending previously opened areas in the western half of the lake (Figure 3). A rhomboid shaped trench 22111 (6 m by 4 m) was excavated through a spread of stone and the lower elements of a previously excavated timber 'platform' to examine the nature of underlying sediments (Figure 4). A southwest-northeast oriented trench 22022 (6 m by 1.5 m) was run from the findspot of the boat strake to clarify the sequence of palaeochannel deposits here and confirm their relationship with a cluster of piles. The latter feature, comprising a group of driven roundwood hazel uprights had been only partially lifted in 1990 and was briefly examined to assess the need for further investigation.

An outline sequence previously proposed remains largely valid, although this season's investigations have resulted in a number of refinements suggesting the following phases:

- (1) A pre-channel sequence of blue grey clays deposited in presumably estuarine conditions contains several clearly defined 'peaty' organic clays. These may reflect periods of relative stability in sea level and possible salt-marsh formation.
- (2) Within the southwest-northeast trench 22022, the upper fills of a steep-sided channel were glimpsed at the very lowest extent of excavation. Only its eastern edge (surviving at 2.6 m OD) was observed. This is the earliest channel identified to date being truncated by the scouring of a subsequent channel associated with the pile structure.
- (3) The pile structure 472 appears to have been driven into a sequence of sloping grey clays and organic clays, probably the fills of a channel. A small area of excavation has revealed at least one roundwood pole running from the pile cluster towards the centre of this channel which is pegged down onto the contemporary channel base. This suggests that the piles stood at least 0.75 m proud of these deposits and probably formed only one element of a more complex structure than previously appreciated. Excavation to the north-east will be essential if its function is to be determined.

- (4) The deposits sealing the latter structure have been cut by a later channel, the basal organic fills of which contained the boat strake. A sample from this timber has given an uncalibrated high precision radiocarbon date of  $3439 \pm 19$  BP (UB-3472). Comparison with the radiocarbon dates for the timber 'platform' (which cluster around 2900 BP) suggest deposition some centuries earlier.
- (5) This 'platform' comprising dense spreads of stone, wood, timber and driven piles and interpreted as a possible hard occupies a subsequent channel.

Later deposits excavated in the west side of the site in 1990 were not re-examined this season.

The organic sediments surviving in the base of the modern lake represent the truncated basal fills of a succession of channels rather than a single main channel. Clearly there have been cycles of scouring and sedimentation with the watercourse tending to shift to the east over time.

The second phase of excavation concentrated on the east half of the lake involving the opening of three new trenches; a long trench 22300 (17 m by 2 m) cutting perpendicular to the succession of channel deposits, designed to test and refine the stratigraphic sequence (Figure 6); a square trench 22255 (3 m by 3 m) at the south-east extreme of channel deposits in the base of the lake; and a rhomboid trench 22280 (4 m by 5 m) cutting into the south edge of the lake to examine the upper fills of the palaeochannel and its eastern slope.

#### *Trench 22300*

Excavation of the long trench 22300 revealed a series of channel bases cutting into the grey clays and organic 'peaty' bands, with their fills truncated by spoil removal during the lake construction to a depth of c. 3.6 m OD.

As in the west half of the lake, the earliest channel sediments identified comprised grey clay fills of a steep-sided channel (here surviving to 2.9 m OD). Only its east edge lay within the area of excavation and its base was not reached. Its uppermost surviving fill contained a spread of roundwood and occasional wood chips.

This was overlain by a complex of laminated organic clays reminiscent of those in an equivalent stratigraphic position in the southwest-northeast trench, 22022, to the west. A scatter of wood within this contained a trimmed oak pole and a spread of fine rods, possibly collapsed remnants of wickerwork or basketry.

The latter deposits were cut by a relatively narrow channel (c. 4 m wide) filled by predominantly inorganic grey silty clays. Finds included two faceted roundwood points very similar to those on the uprights from the pile structure 472. These were not *in situ* so may have been washed downstream from their original position.



Figure 5 Caldicot, earliest palaeochannel encountered in Trench 22300, partly excavated.



Figure 6 Caldicot, view of excavation in progress.

This channel had in turn been substantially truncated by a broad flat-bottomed channel (c. 6.5 m wide) filled by laminated organic silty clays containing dense spreads of stone, wood and bone. The varied wood assemblage included a number of large oak pieces exhibiting toolmarks and conversion, cut roundwood, working debris and uncut roundwood. A coiled copper alloy strip (possibly a bracelet fragment) lay within this group of cultural material.

Just below the lake bed and cut into the latter sediments, a small channel contained a near complete and partially articulated canid skeleton (Figure 7). This would appear to have been fully articulated when deposited but had then undergone disturbance. Given extreme tooth wear, widespread arthritis, and a healed femoral fracture it was probably a domestic dog. There were no indications of ritual activity.

The latest channel encountered (c. 3 m wide) lay at the east end of the trench and contained a finely laminated sequence of alternately organic and inorganic silts and clays. Cultural material was concentrated in the organic sediments comprising numerous roundwood pieces many with cut ends, oak chips, bone and a collapsed split oak post with a faceted point and a tenon at its upper end (Figure 8). Artefacts included a poorly preserved wooden trough and several sherds of pottery with incised chevrons and horizontal lines.

Excavation in this long trench has enabled characterisation and location of the succession of river channel bases which mirrors the picture seen in the west half of the lake. Detailed correlation between the two stratigraphic sequences remain tenuous, however, and will only be confirmed by future excavation of intermediate areas.

#### *Trench 22255*

The square (3 m by 3 m) trench, 22255, was positioned close to the findspot of a wooden ladle uncovered last year during machine clearance of spoil tips to test the hypothesis that a midden might be located nearby. The now familiar pattern of channels filled by laminated organic silty clays cutting into a succession of horizontal blue grey clays with 'peaty' clay horizons recurred. In spite of considerable disturbance resulting from the lake construction works, two channel groups were recorded with scatters of stone and spreads of poorly preserved roundwood, much of it aligned with the channels' course and some possibly pegged down. Higher concentrations of artefactual material than encountered elsewhere included incised decorated pottery very similar in style and form to that recovered in the long trench, antler, a perforated tooth and a perforated tusk (both probably decorative objects).

#### *Trench 22280*

Due to rapid progress in the previously mentioned trenches, it proved possible to open an additional trench cutting into the slope of the modern lake at its southern edge. Although still partially truncated by machining, the eastern edge of the late palaeochannel survived up to 4.5 m OD, a metre higher than in the base of the lake. The uppermost channel fills, sealed



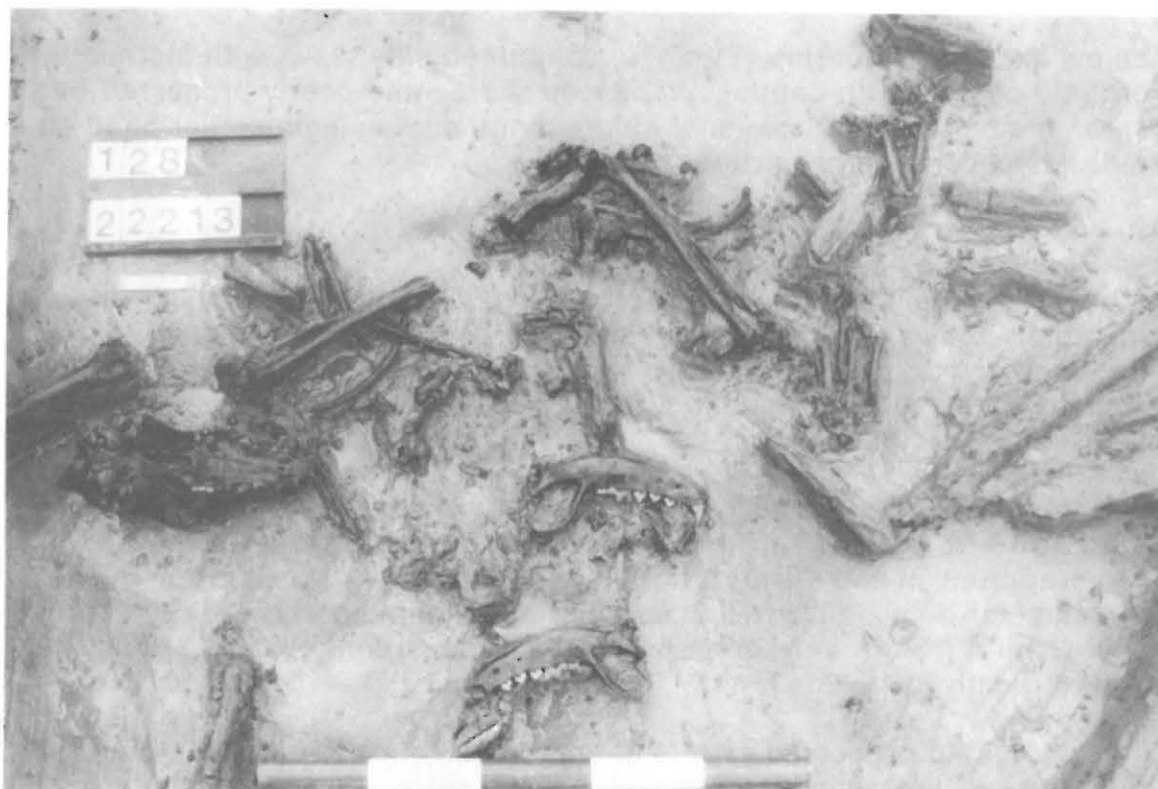


Figure 7 Caldicot, canid skeleton under excavation.



Figure 8 Caldicot, latest palaeochannel encountered in Trench 22300 during excavation. Split oak post with faceted point and tenon *in situ* and bagged pottery sherds.

below oxidised estuarine (?) clays, comprised silty clays with increasing organic content with depth. Wood was scarce and poorly preserved but spreads of charcoal, occasional animal bone and a single amber bead all reflect continuing human activity.

### *Analysis*

The excellent preservation of a number of environmental indicators, including pollen, diatoms, ostracods, Mollusca, and beetles, within the predominantly fluvially-derived sedimentary sequence has encouraged considerable specialist attention. Interim results from a single column of samples taken to the west of the timber platform suggest that the channels were freshwater, relatively sluggish and on occasion even static. Monolith columns and contiguous bulk samples have been taken from all the deposits described above. Given the refinement in our understanding of the development of the series of palaeochannels on site, these offer the potential for detailed characterisation of their contemporary environment. The results from a series of associated radiocarbon samples should be received early in 1992.

Organic preservation has enabled the recovery of considerable quantities of both animal bone and wood. Approximately 1200 animal bones will undergo initial study this winter providing an unparalleled insight into animal husbandry during the Late Bronze Age in the region. The wood assemblage excavated this season comprises some 1500 pieces: ongoing analysis will provide further data on species selection, possible woodland management and woodworking technology.

The inorganic assemblage is dominated by the spreads of stone deposited in the channel bases. Many of these show signs of heat damage suggesting probable use as 'pot boilers'. Initial examination of their geology (Jana Horek pers. comm.) suggests the majority could be relatively local in origin, but given the indicated low flow rates for the river channels, deposition by natural processes does not seem plausible. This interpretation combined with the increasing assemblage, both inorganic and organic, of artefactual material, strongly suggest at least seasonal riverside occupation if not permanent settlement.

Interpretation of the site is hampered somewhat by the limits of the rescue area and the widespread truncation of the upper fills of the palaeochannels. A programme of auger surveys has been instituted which, even given the labour intensive nature of this work, should enable broader mapping of the palaeochannels within the Nedern Valley. Much depends on the analysis of material recovered this season and the completion of excavation in the rescue area through a final season next year.

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