

EXCAVATION AND SURVEY ON THE  
LLANGORSE CRANNOG IN 1989

AN INTERIM REPORT

By

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## LLANGORSE CRANNOG (SO 129269).

In July and August 1989 the National Museum of Wales and the School of History and Archaeology, University of Wales College of Cardiff, jointly conducted a five week season of survey and excavation both above and below water on the crannog in Llangorse Lake (*Llyn Syfaddan*), Powys.

Initial survey in 1987 and 1988 had confirmed the nineteenth-century identification of the site as a probable crannog with two lines of oak plank palisades, and provided dendrochronological samples of late ninth-/ early tenth-century date (AW 28, 1988, p.68). During further site inspection in November 1988, several exposed areas of roundwood were noted on the south-eastern and western shores of the island and it was clear that detailed underwater and shoreline survey would increase the number of timbers already recognised and planned. Consequently in 1989 further detailed survey was undertaken on the island foreshore on the west, south and east sides and of the submerged and partially exposed timber lines reported on previously (AW 28, 1988, p.67; Campbell and Lane 1988, figs 1 and 2). This was accompanied by resistivity survey of the dry and cleared part of the island in advance of excavation, and detailed contouring above and below the waterline (figure 1). Additional upright oak planks were identified, filling in and extending the two main lines. A regular setting of vertical roundwood piles, c 5-6cm in diameter, lay immediately behind the vertical setting of the inner plank palisade to the south and east of the crannog. A band of vertical piles was discovered in shallow water some 4m south of the outer plank palisade, running parallel to it in an east-west arc.

Selective excavation was undertaken to examine the island's composition, refine the site chronology, and recover environmental data.

**Area A.** This was an L-shaped trench on the eastern side of the crannog. A complex sequence of late rubble deposits at the apex of the trench indicated probable post-medieval activity on the island, perhaps associated with fishing. Beneath these layers, two lines of vertically set hardwood planks running approximately E-W divided the trench into two discrete areas. The southern arm of the trench contained red sandstone boulders forming the stoney core of the island. These boulders had been carefully laid and in places appeared to have a linear stepped profile suggesting that the mound had been laid in sections. They were clearly bounded to the north by the inner oak plank line. The relationship of the two plank lines to each other and to the lines traceable on the W,S and E of the crannog are not yet clear, though the outer line is inclined outwards and shows evidence of extensive burning. Underlying the rubble was a horizontal bed of roundwood laid in a regular fashion and again bounded by the inner plank line. The roundwood at the northern end had been laid at right angles to the inner plank line, whereas at the southern end it had been set at 90 degrees to this, possibly at right angles to the original edge of the crannog. This roundwood bedding was exposed but nowhere fully excavated. Nevertheless it was clear that its thickness and

quality of preservation varied considerably through the trench. In part of the central area the roundwood did not survive and a degraded peat deposit was exposed underlying the timber. Regularly spaced hardwood beams lay above the roundwood, sometimes held in place by with small split pegs driven through large square joint holes, presumably acting as a timber bracing for the brushwood raft. These hardwood beams were clearly reused from some earlier structure. The eastern arm of the the trench contained silt deposits with abundant evidence of burnt and unburnt timbers as well as other organic deposits, though these were only partly sampled. An upper deposit of bone and frequent finds of carbonised grain suggest the presence of middens external to the crannog. Vertical piles lay some 4m to the north of the plank palisade line and irregularly elsewhere.

*Area B.* This trench ran into the lake from the southern shore. Behind the inner plank palisade line at the northern end of the trench, red sandstone boulders overlay one horizontal hardwood beam, and a bedding of roundwood which continued an orientation recorded in the south-west corner of area A. This stopped behind a line of vertical stakes associated with wattle which had collapsed outwards onto further roundwood. No timber was found between inner and outer plank palisades, which were found to penetrate the 'natural' shell marl by up to 1.3m. Two planks, one from each line, showed clear evidence of reuse from earlier structures.

*Area C.* This formed a preliminary investigation of the northern shore of the island. Due to past use as a landing area and other erosion factors, stratified crannog deposits only survived at the southern end of the trench (stippled area, figure 1). The area was divided into 1m sectors, and all the surface silt from the lake bed within each quadrat sieved using 4mm mesh to establish the degree of bone survival. One large squared timber pile was recorded in its centre.

*Area D.* The foreshore within this area was cleared of weed and modern surface silts prior to planning. The inner plank palisade was found to continue around the east side of the island. At a point some 3m from the northern limit of area D, it made a 90 degree turn westward towards the present centre of the island. Vertical roundwood piles 8-19cm in diameter lay to the north of area D, and at regular intervals in a line 1m to the east of the vertical plank palisade. One area of exposed roundwood inside the palisade line was examined in detail (area D1). Evidence was found for a vertical post-and-wattle revetment within and parallel to the plank palisade. The piles supporting the wattle extended approx 1.8m into the shell marl. To the west, sandstone boulders lay above a deposit of roundwood which had been set in a regular fashion perpendicular to the revetment and which in turn overlay a deposit of peat. The revetment had collapsed outwards towards the lake and foreshore.

#### *Finds.*

Apart from a small quantity of medieval and later pottery, glass and lead net weights, few artefacts were found, and none were recognisably Dark Age. Carbonised grain from areas A, B, and D, and the animal bone

from the silts in area A, the foreshore deposits, and beyond the timber lines underwater suggest a mixed economy. The good preservation of timber exhibiting cut marks and cut joints from earlier usage, will provide important information on woodland management and Dark Age wood technology in Wales. A quantity of worked flint is of late Mesolithic date (*pers comm* Dr S Green), though none is yet securely derived from pre-crannog deposits and its significance remains obscure.

### *Discussion*

The 1989 excavation and survey season at Llangorse has confirmed the essential validity of the Dumbletons' nineteenth century description of the site and identified many of the key features of the 1870 plan (Dumbleton 1870, fig 1). The island is artificially constructed though a shallow deposit of peat underlying part of the present island suggests that the crannog may have been built on a natural shallow area or low island. Exploration of that peat deposit and environmental assessment of the peat and peat/shell marl boundary should provide evidence on the water depth in which the crannog was built. The careful planned pattern of construction of the site implies an ability to call upon a high level of specialist knowledge, labour and materials. The 1989 evidence suggests that the crannog may not be of single phase construction. The initial phase may have comprised approximately 50% of the island's present area, with subsequent extensions into the lake on the south and west. The location of the two plank palisade lines bounding the stoney mound with silts outside to the north in trench A confirms that the crannog is enclosed by planking and is not merely the shoreside revetment of a lake promontory. Initial dendrochronological analysis of these new planks confirms their contemporaneity with the other plank revetments of the mound. The apparent absence as yet of deep midden deposits and of evidence for internal structures may be explained by a combination of erosion and the location of the 1989 excavation areas. Sapwood survives on many of the oak palisade planks where buried in shell marl, and the planned dendrochronological dating of selected timbers should clarify the present dating of the site, and whether it is to be associated with the tenth-century court of Twdwr ap Elisedd, or is earlier in date (Campbell and Lane 1989). All four dendrochronological dates from both the inner and outer plank palisades indicate late ninth-/early tenth-century cutting of the timber though clearly the evidence of re-used timbers could add an unknown time span onto the crannog construction date. It is hoped to continue with the underwater survey of the site and to complete the excavation of areas A and B in 1990.

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*References.*

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Caption. *Llangorse crannog 1989. Contours in metres OD.*

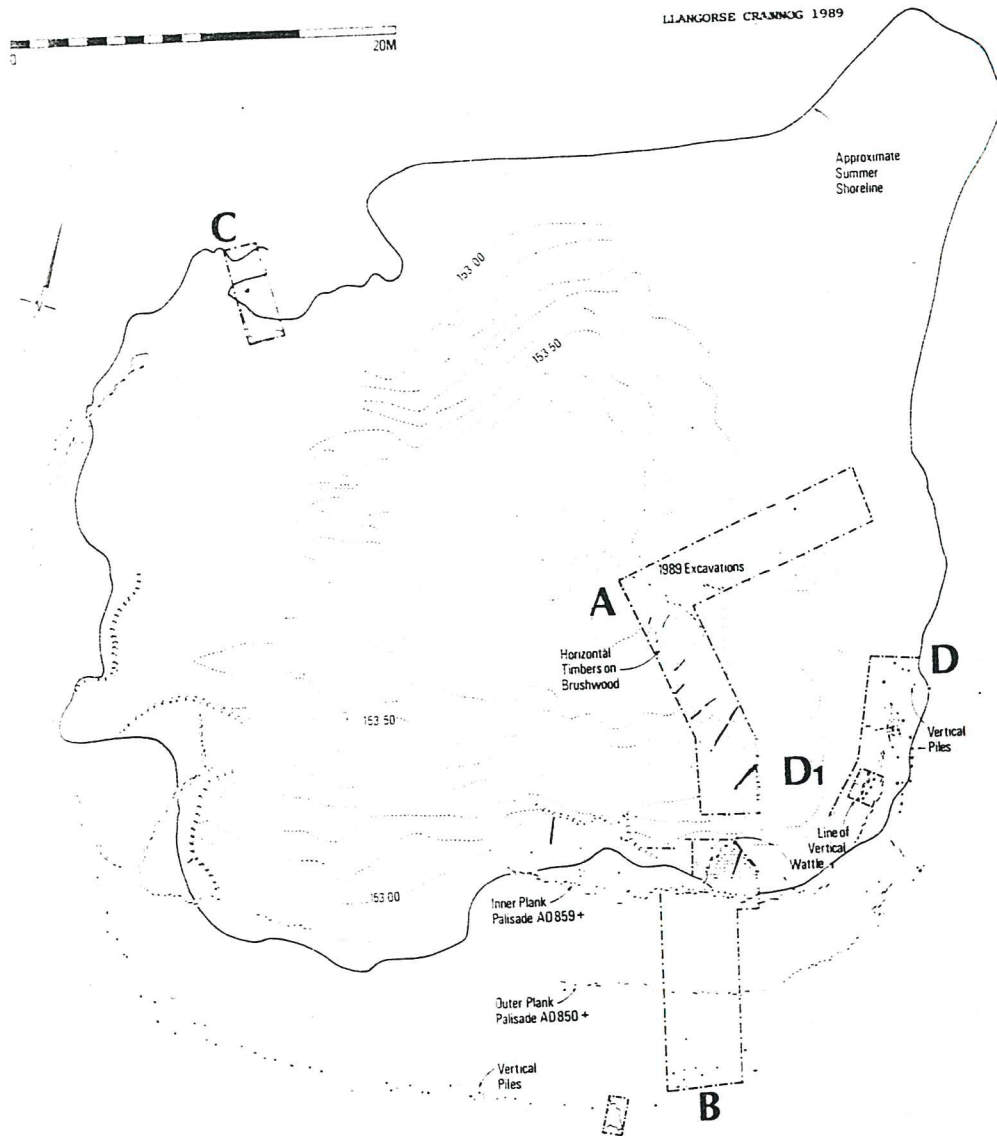


Fig. 1 Llangorse Crannog Survey and Excavation 1989

# ORDNANCE SURVEY

SO 1227-1327

BRECKNOCK DISTRICT



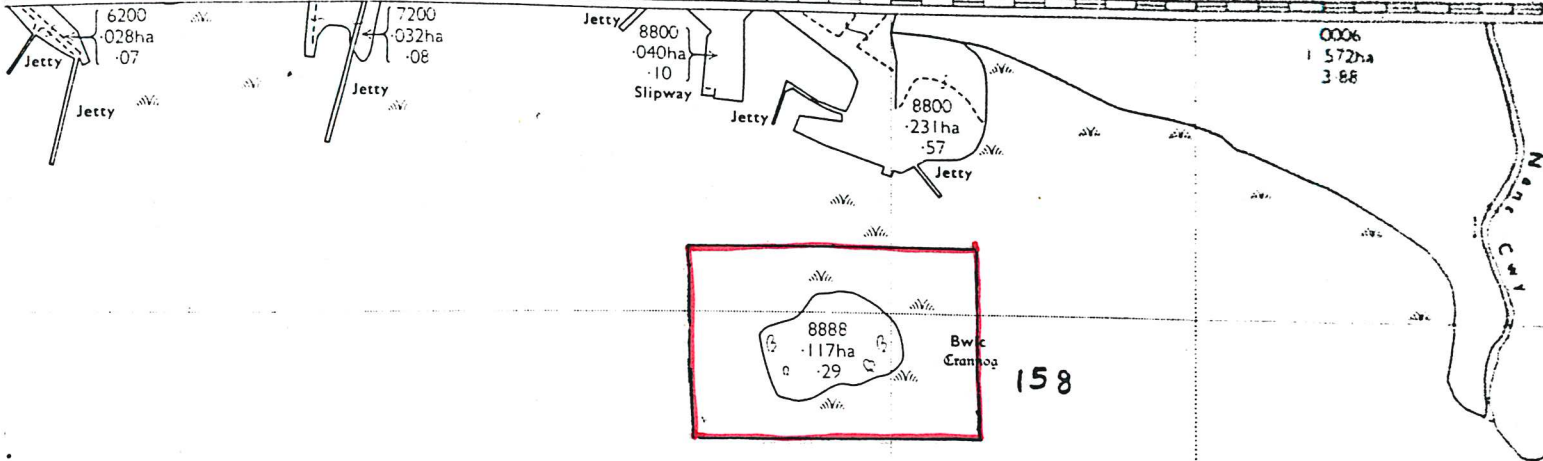
127 Llangorse Common

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