CPAT Report No 1078

Pentrehobin Ring-ditch, Mold, Flintshire

TRIAL EXCAVATION AND SURVEY

THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

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Report for Cadw

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1 INTRODUCTION

1.1 A programme of small-scale excavation and geophysical was conducted on the site of a large ring-ditch at Pentrehobin, to the south-east Mold, in Flintshire (Fig.1; SJ 24616240), in August 2010. The work was funded by Cadw as part of a study of unusually large ring-ditches which was undertaken following the completion of the pan-Wales survey of prehistoric funerary and ritual monuments. Previous work included a trial excavation on the site of a 100m-diameter ring ditch at Walton Court in the Walton Basin which indicated that the monument had been constructed before 2570-2300 BC (Jones 2010). Across Britain a class of supersized ring-ditches has been recognised which appear to fall within the category of so-called 'formative henges', dating to the Middle Neolithic. The Clwyd-Powys area has 14 sites which are around 40m or more in diameter, including the exceptionally large example at Walton Court, all of which are known only from cropmark evidence and are considered to be under threat from ploughing.

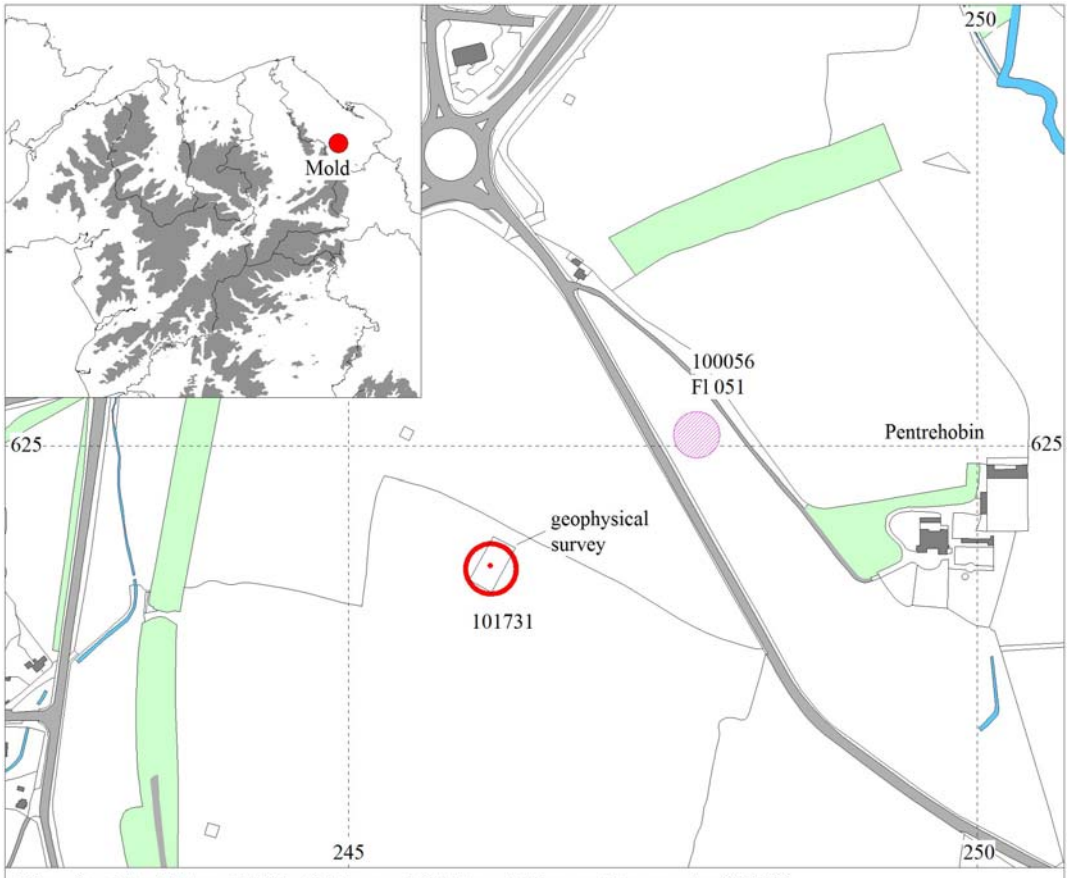


Fig. 1 Location of the Pentrehobin Ring-ditch

1.2 The cropmark evidence had identified a ring-ditch around 44m in diameter, with a ditch perhaps 4m wide and what appeared to be a large pit positioned slightly off-centre. The upstanding remains of a large, scheduled round barrow (PRN 100056; SAM Fl 051) lie 190m to the north-east.

2 GEOPHYSICAL SURVEY

2.1 As a prelude to the excavation a magnetometer survey was undertaken in order to confirm the location of the ring ditch and identify any potential internal features. The survey investigated an area measuring 40m by 20m, A total of 00ha was surveyed, covering part of the central area of the ring ditch, together with a section of the surrounding ditch (Fig. 2). Part of the ditch circuit was identified together with a large, slightly off-centre pit, and this was used as a guide to position the excavation trench.

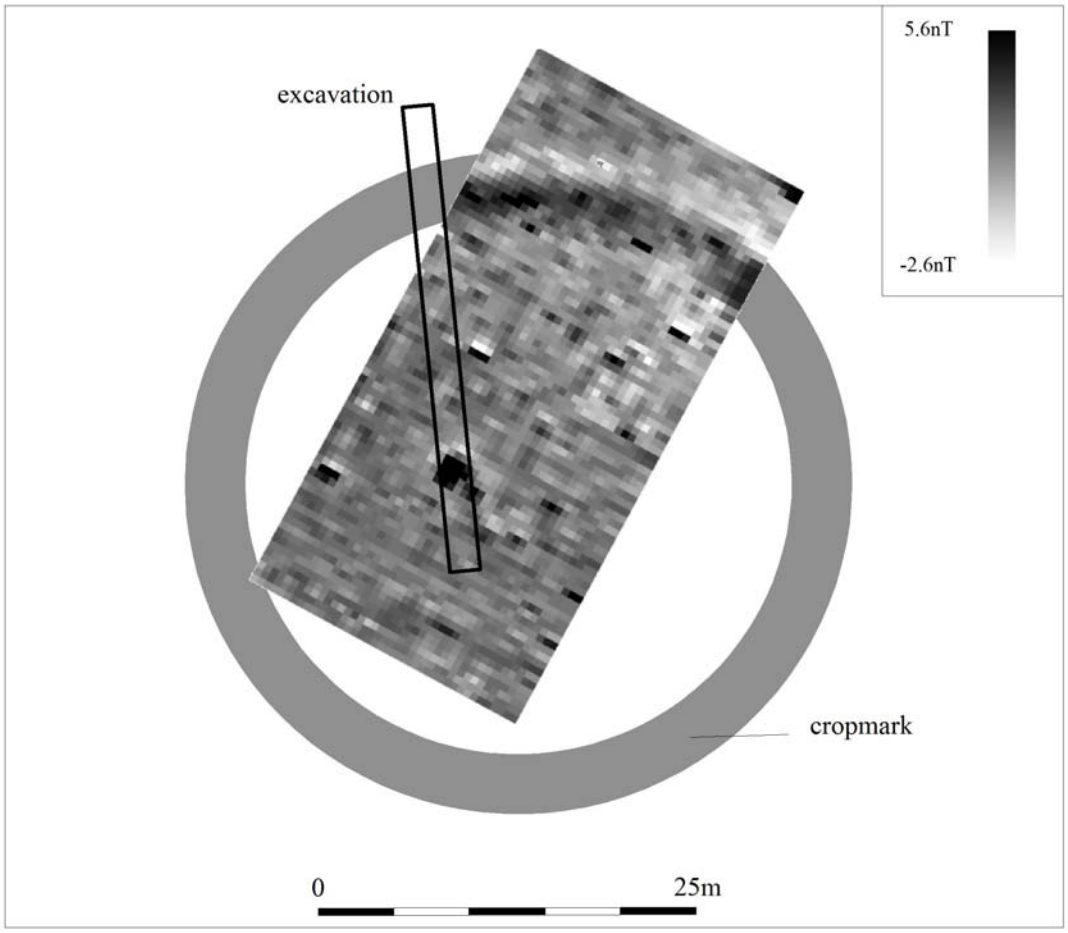


Fig. 2 The results of the magnetometer survey together with a plot of the cropmarks and the location of the excavation trench

3 EXCAVATION

3.1 The excavation consisted of a single machine-excavated trench, 1.5m wide and 31m in length (Fig. 3). The topsoil (1) and a layer of old ploughsoil (2) were mechanically removed onto the surface of the natural subsoil, which consisted of a mixture of glacial gravels and sand. Numbers in brackets in the following text refer to individual context records in the site archive.

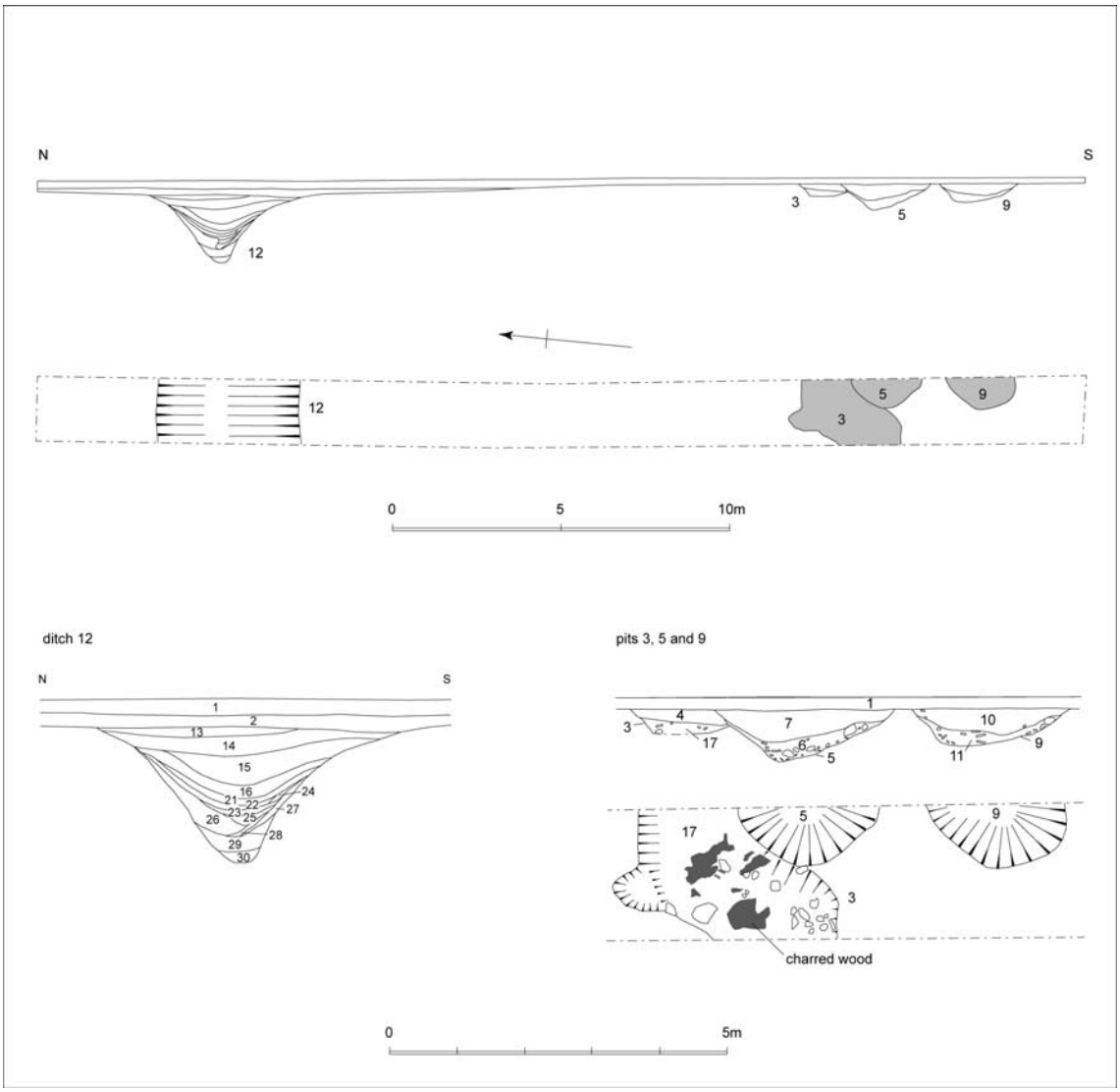


Fig. 3 Plans and sections of the excavation

The ditch

3.2 The encircling ditch (12) was around 4m wide and up to 2m deep with steeply sloping sides and a narrow, rounded base. The primary fills consisted of a 0.15m-thick layer of stiff, pale grey, clay silt (30), sealed beneath a deposit of loose gravel in a silt matrix (29) which was up to 0.25m thick. Together these layers represent a period of initial weathering and later stabilisation.

3.3 Subsequent infilling appears to have been derived initially from the inner edge of the ditch with the deposition of a thin layer of peaty silt (28) and a layer of sandy silt (27). These were then sealed by a layer of grey brown sandy silt (26), up to 0.22m thick, which was derived from the outer edge of the ditch, and a thin deposit of grey-brown clay silt from the inner edge. At this stage there appears to have been a second period of stabilisation, with the ditch infilled to

around one third of its depth. Later infilling consisted of further deposits of clay silt (22, 23 and 24), followed by a thin layer of stony clay silt (21) which was heavily iron panned, possibly suggesting a buried turf deposit.

3.4 The uppermost fills consisted of a grey clay silt (16), which was sealed beneath an orange-brown sandy silt (15) up to 0.45m thick, which contained several sherds of prehistoric pottery. Final infilling came with the deposition of a layer of brown sandy loam (14). At some point after the ditch had become completely infilled a thin layer of glacial gravel (13) was deposited across most of its width, extending beyond the ditch to the north.

Fig. 4 The west-facing section of the ring-ditch. Photo CPAT 3148-0056

Internal features

3.5 Both the geophysical survey and cropmark evidence had suggested the presence of a large pit within the interior of the ring-ditch, located to the west of the monument's centre. The excavation, however, revealed three pits in this area, two of which were intercutting. The earliest feature was an elongated pit (3) which extended beyond the limits of excavation but was around 2m wide and at least 3m in length, with a shallower pit extending from its northern side which appeared to be contemporary. A small quantity of charcoal was noted on the surface of the pit which, as the fill was removed, resolved into a number of substantial pieces of charred timber. The timber appeared to be part of a deliberate structure, possibly a wooden coffin, the form of which had become distorted by the weight of overlying material.

3.6 Since the aims of the excavation were to evaluate the potential and dating of the ring-ditch in an essentially non-destructive manner it was decided that no further excavation should be conducted within the pit and the charred structure was left intact and was covered with a plastic membrane to provide some protection before backfilling. However, a sample of charcoal was taken for analysis, which revealed it to be oak, and this was then submitted for AMS dating, producing a radiocarbon date of 2400 – 2130 cal. BC.

Fig. 5 Pit 3, showing *in situ* charred timber, and pit 5. Photo CPAT 3148-0029

3.7 The pit containing the charred timber was later cut by another pit (5) which was around 2m across and 0.75m deep, extending beyond the excavation to the east. The primary fill consisted of a stony silt (6), with a secondary fill of soft silt (7). A further pit (9) lay just to the south and measured around 2m in width and up to 0.55m deep, also extending beyond the excavated area. The fills (10 and 11) were similar in character to those of the adjacent feature. Neither pit produced and cultural material.

4 PREHISTORIC POTTERY

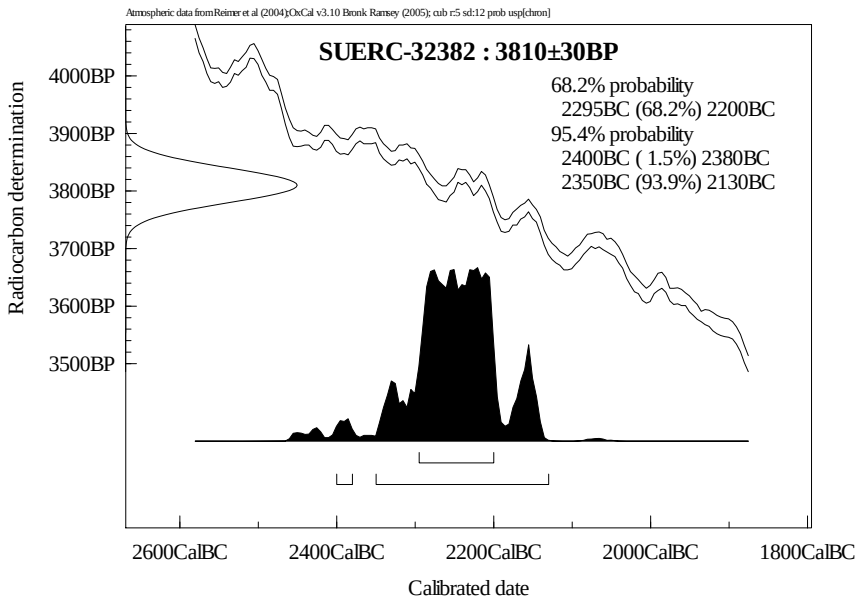
4.1 Several small sherds of prehistoric pottery, recovered from the upper fill of the ditch (15), were provisionally identified by Frances Lynch.

Find 1002, context 15. Four undecorated body sherds from a mid-late Bronze Age vessel.
Find 1003, context 15. Eight undecorated body sherds from a mid-late Bronze Age vessel similar, or the same as 1002.
Find 1012, context 15. one sherd and several crumbs, perhaps from a late Bronze Age or early Iron Age vessel.

5 RADIOCARBON DATING

5.1 A single sample of oak charcoal was submitted for AMS dating to SUERC in East Kilbride. The calibrated dates are calculated by OxCal v3.10 (Bronk Ramsey 2005) using the IntCal09 atmospheric calibration curve with Atmospheric data from Reimer *et al.* (2004).

SUERC-32382
Context 19, charred oak
Find No. 1011
Radiocarbon age 3810 ± 30
Calibrated date at 68.2% probability: 2295 – 2200 cal. BC
Calibrated date at 95.4% probability: 2400 – 2130 cal. BC



6 CONCLUSIONS

6.1 The excavations have demonstrated that the ring-ditch, which was initially known only from cropmark evidence, represents the remains of what was originally an impressive burial mound. The surrounding ditch was about 4m wide and 2m deep, with an external diameter of around 44m. The upcast from the ditch would have formed a substantial mound, sealing at least three internal features, one of which contained what may have been a coffin fashioned from charred oak timbers which has been dated to 2400 – 2130 cal. BC. Further dating evidence was provided by several sherds of mid-late Bronze Age pottery, as well as one sherd which could belong to the early Iron Age.

6.2 The site should not be viewed in isolation, however, as the upstanding remains of another large round barrow lie 190m to the north-east (PRN 100056, SAM Fl 51), and the round barrow (PRN 100055) which contained the impressive Mold cape was found is 1.5km to the north-north-east. The unusual splendour of this object, together with the size of the two round barrows may indicate that this area was of special significance during the Bronze Age.

6.3 The excavations have revealed that despite the large size of the ring-ditch the monument does not fall within the group of 'formative henges', but is rather one of a number of unusually large burial mounds scattered across the Flintshire plateau.

7 ACKNOWLEDGEMENTS

7.1 The writer would like to thank the following: Richard Hankinson, Wendy Owen, George Luke and Ian Davies for their assistance with the excavations; Mr A E P Clarke and Mr V Edwards for allowing access to the site; Astrid Caseldine, University of Lampeter; and Cadw for funding the excavation.

8 REFERENCES

Jones, N W, 2010. *Walton Court Farm Ring Ditch. Trial Excavation and survey 2009-10*. CPAT Report No. 1025.