

CPAT Report No 1025

Walton Court Farm Ring Ditch

TRIAL EXCAVATION AND SURVEY 2009-10



THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

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N W Jones
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Report for Cadw

The Clwyd-Powys Archaeological Trust
7a Church Street, Welshpool, Powys, SY21 7DL
tel (01938) 553670, fax (01938) 552179
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1 INTRODUCTION

- 1.1 The large ring ditch near Walton Court Farm lies amid a complex of prehistoric funerary and ritual monuments which occupy the eastern end of Radnorshire's Walton Basin (Fig. 1). In common with other monuments in the complex the ring ditch was first recognised as a cropmark during aerial reconnaissance. Photography taken in July 1967 by J K St Joseph (CUCAP ASS99 and AST3) identified an unusually large ring ditch around 100m in diameter, defined by a very narrow ditch, centred at SO 25235995. The cropmarks also revealed two Roman marching camps which intersect with the ring ditch (Plate 1), leading to one suggestion that the site might be a Roman *gyrus*, an arena for training horses. Later photography by CPAT in 1996 has suggested a possible entrance around 14m in width on the south-east, although the cropmarks are not conclusive (Photos 96-c-0021 and 96-3-12).
- 1.2 The Walton Court Farm ring ditch (PRN 375) is of a similar size to the earthwork bank and ditch at Stonehenge, and is by far the largest such site in mid and north-east Wales, although there are a further 18 ring ditches over 30m in diameter, of which 11 measure more than 40m. These enigmatic sites have recently attracted attention as possible 'formative henges' which, it has been suggested, could date to the Middle Neolithic.



Plate 1 Aerial photograph taken in 1996, showing the large ring ditch, the marching camps, and a small ring ditch to the west. Photo CPAT 96-c-0021

- 1.3 A programme of small-scale evaluation was undertaken during 2009 to investigate the large ring ditch, in the hope of determining its form and dating, with particular reference to its place in the general sequence of prehistoric monuments in the Walton Basin. The ring ditch is partly scheduled where it coincides the Roman marching camps (Rd138) and consent was received from Cadw to excavate one trench to investigate the relationship between the ring ditch and one of the marching camps. A second trench was positioned outside the scheduled area. The excavations were undertaken as part of the on-going project to investigate prehistoric funerary and ritual monuments, with funding from Cadw.
- 1.4 The site lies on the southern edge of a broad depression which runs west to east across the centre of the Walton Basin, and is thought to have been a shallow post-glacial lake (information provided to Dr A M Gibson by Dr J S Milsom, then of University College

London, as part of the Walton Basin Project). Immediately to the north of the ring ditch the land falls by around 2.5m along a terrace which is assumed to be the relict shoreline of the lake (Gibson 1999, 1). At the time of the excavation, in September 2009, the field containing the ring ditch was down to pasture.

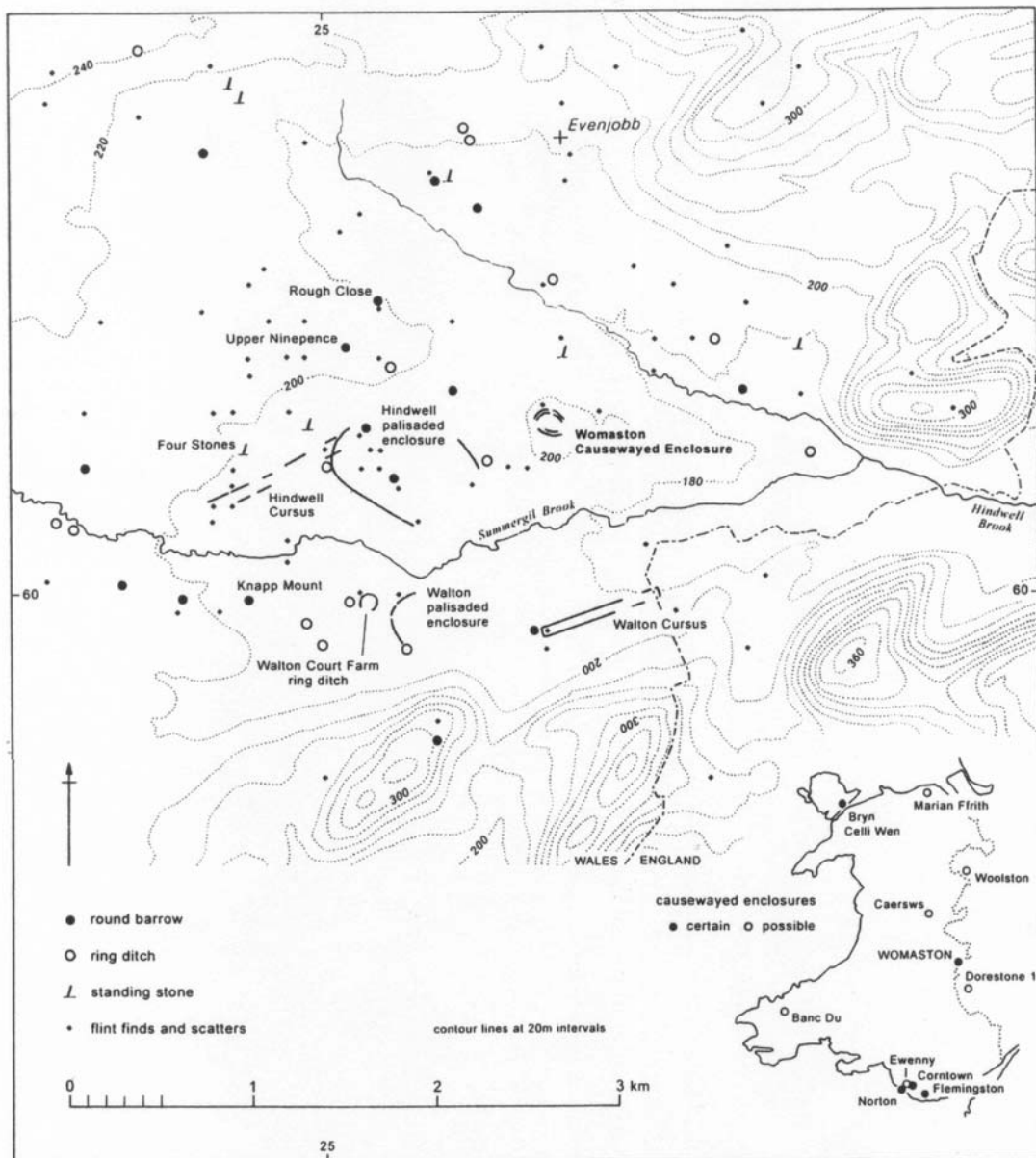


Fig. 1 The prehistoric monument complex in the Walton Basin, showing the location of the Walton Court Farm ring ditch

2 EXCAVATION

- 2.1 The trial excavation consisted of two trenches, one positioned at the intersection of the ring ditch with one of the marching camps, and the other 8m to the north (Fig. 2). Both trenches were stripped by machine onto the surface of the natural subsoil which was composed of gravels containing bands of silty clay. Numbers in brackets in the following text refer to individual contexts recorded in the site archive, which has been deposited with the regional Historic Environment Record.

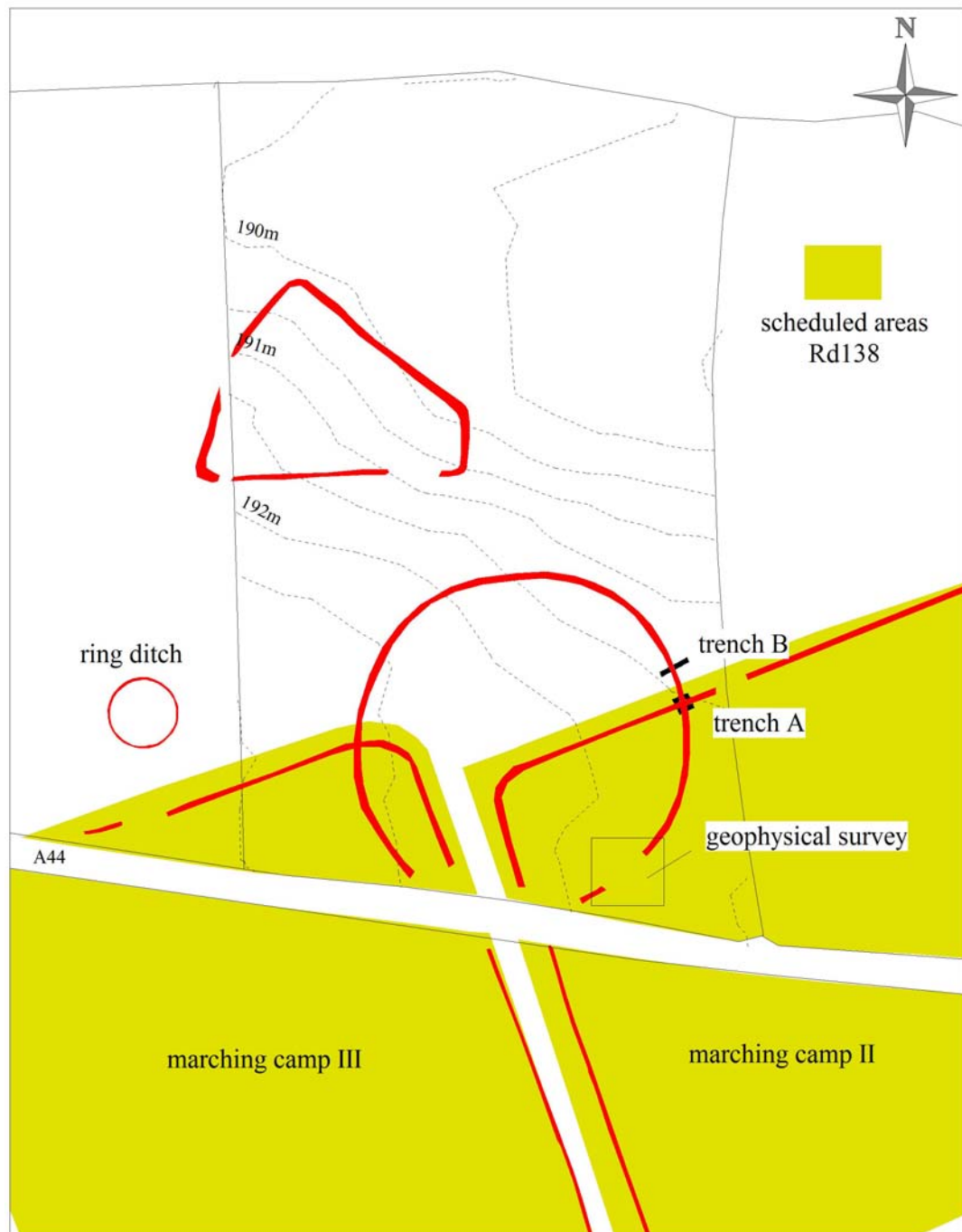


Fig. 2 Plot of cropmarks showing Walton Court Farm ring ditch and Walton marching camps, together with the location of trial trenches and geophysical survey. Scale 1:2,000

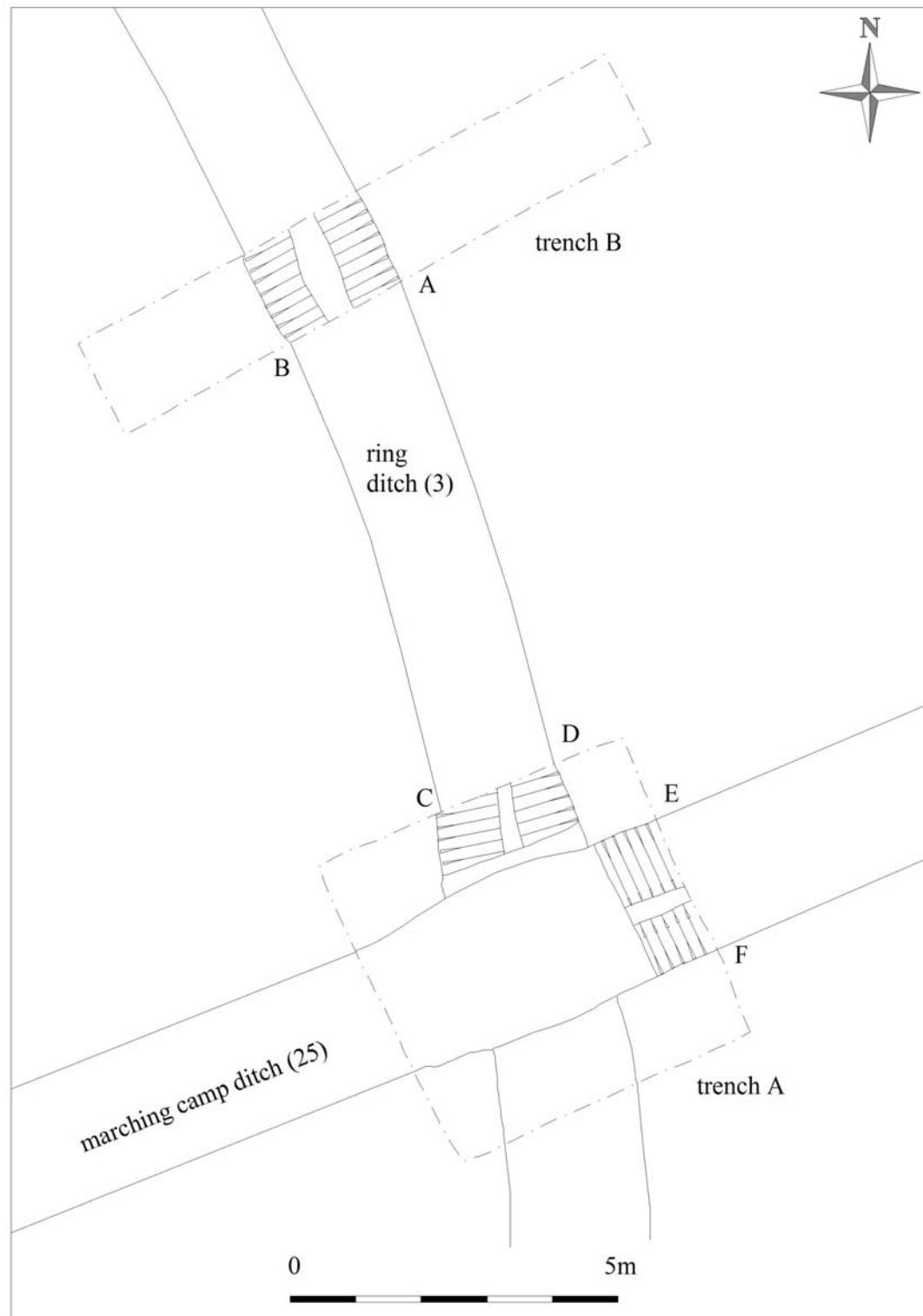


Fig. 3 Plan of trial excavations

Trench A

- 2.2 Trench A measured c. 5m by 5m and was located within the scheduled area at the intersection of the ring ditch and marching camp ditch. The topsoil (1) and a layer of old ploughsoil (2) were removed by machine onto the surface of the natural river gravels at a depth of around 0.35-0.42m below the present ground surface. Both ditches were readily apparent, although their relationship was not certain, and in order to confirm this 0.1-0.15m of the upper fill (27)

was removed from the marching camp ditch across the width of the trench. This revealed that the marching camp ditch had been cut through the fills of the large ring ditch. Narrow sections were then excavated across each feature to determine their form and date (Figs-4).

- 2.3 At this point the ring ditch measured 2m in width and was 1.42m deep, below the surface of the natural gravel. The outer edge was relatively straight-sided and steeply sloping, while the upper 0.5m of the inner edge had a fairly gentle slope, before steepening considerably to the base, which was only 0.25m in width.

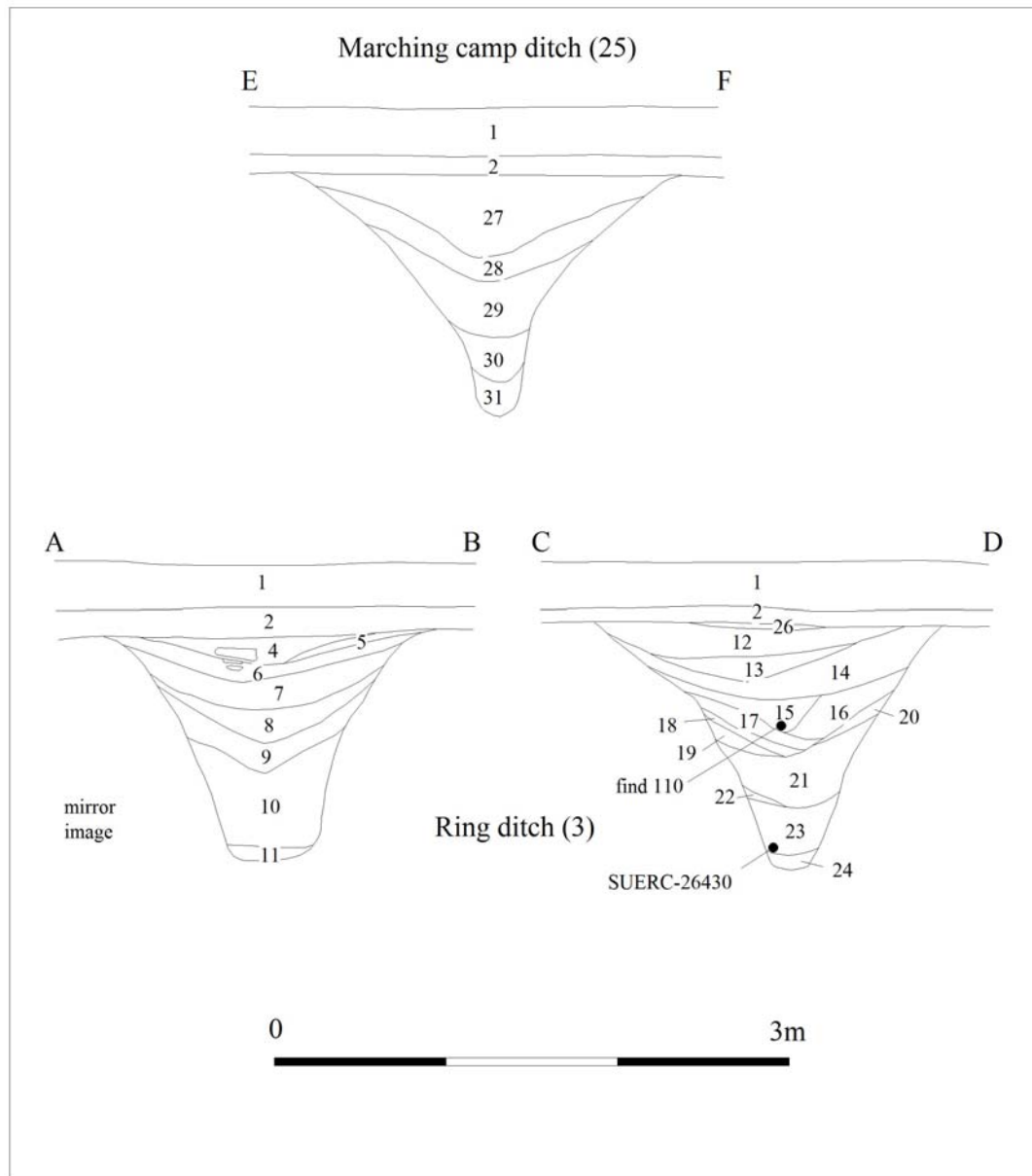


Fig. 4 sections of the large ring ditch and Roman marching camp ditch

- 2.4 The lower half of the ditch was filled with layers of loose gravel (21, 23 and 24), interspersed at one point with a fine silty clay (22). It seems likely that these fills were deposited relatively soon after the ditch was excavated, having been formed by rapid weathering of the ditch sides. The upper surface of context 21 may indicate the level at which the ditch stabilised before further infilling occurred. A fragment of hazel charcoal was recovered from the base of context 23 which produced a calibrated AMS date of 2570-2300 BC at the 95% confidence level.



Plate 2 Trench B viewed from the east showing the marching camp ditch cutting the ring ditch. Photo CPAT 2942.059

- 2.5 The upper fills, above context 21, were predominantly composed of orange to grey-brown clay silts, with the exception of a layer of loose gravel (16) which had been deposited from the outer edge of the ditch. The upper part of context 15 contained a significant amount of iron panning which may indicate a second stage of stabilisation following the deposition of this layer and context 16. A single worked flint (find no. 110) was recovered from context 15. There was no clear indication for the position of an associated bank, and although it was notable that in general the fills appeared to have come more from the outer edge of the ditch than the inner, this may be due to the steeper profile of that side of the ditch.



Plate 3 Ring ditch, section C-D. Photo CPAT 2942.047

- 2.6 The Roman marching camp ditch (25) was 2.25m wide and 1.4m deep with a V-shaped profile which narrowed to a slot around 0.12m wide at the base. Although the ditch had been cut through the natural gravels, the successive fills were largely composed of silty clay, but with variable amounts of fine gravel and small stones. The only find consisted of a sherd of probable Roman tile from the upper fill (27).



Plate 4 Roman marching camp ditch, section E-F. Photo CPAT 2942.054

Trench B

- 2.7 Trench B measured c. 9m by 1.5m and removal of the overburden revealed the ring ditch cutting into the natural gravels, with no other features being identified. A section through the ditch revealed it to be of a similar width and depth to that in Trench A, although with a broader base at 0.4m in width and a more symmetrical profile, with both sides sloping steeply. Again, two periods of stabilisation were suggested by the pattern of infilling, one following the deposition of gravel as the primary fills (10 and 11), and the other after the deposition of context 8, which contained notable iron panning similar to context 15 in Trench A. One feature of this section which was less obvious in Trench A was that the primary fill, a fine pea gravel (11), appeared to have been compacted, possibly as a result of trampling.

Finds

- 2.8 The only find recovered from the ring ditch was single piece of flint from context 15 (Find No. 110). The unretouched flake probably came from a small nodule with a rough, irregular 'pebble' cortex (identification by Philippa Bradley).
- 2.9 A single sherd of Roman pottery was recovered from the upper fill of the marching camp ditch (context 27).
- 2.10 Bulk soils samples were collected from various levels in both ditches and await palaeoenvironmental analysis.

3 GEOPHYSICAL SURVEY

- 3.1 The position of the possible entrance on the south-eastern side of the ring ditch was investigated by caesium vapour magnetometry in March 2010, with the survey being conducted by ArchaeoPhysica on behalf of CPAT (Lewis and Roseveare 2010). Unfortunately, as elsewhere in the Walton area, there appears to be very little magnetic difference between the natural river gravels and the fill of the ditch so that the survey was not able to identify the ring ditch at all. Consequently, the potential entrance remains unconfirmed.

4 RADIOCARBON DATING

- 4.1 A fragment of hazel charcoal from the base of the secondary fill of the ring ditch (context 23, find no. 111; see Fig. 5) was submitted to the Scottish Universities Environmental Research Centre (SUERC) for Accelerated Mass Spectrometer (AMS) dating, the result from which is presented in Fig. 5. The charcoal was identified by Astrid Caseldine, University of Lampeter, prior to submission.

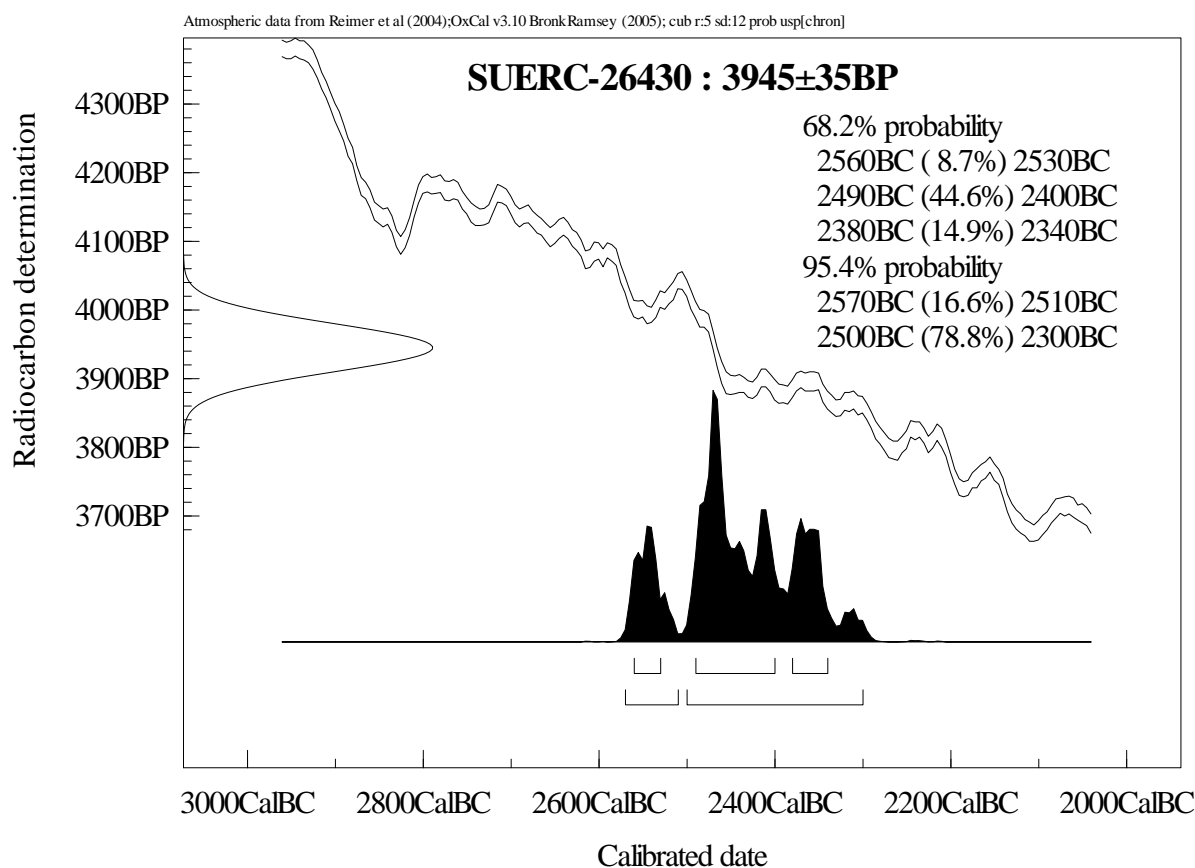


Fig. 5 Calibration plot for charcoal from ditch fill 23.

5 DISCUSSION

- 5.1 The large ring ditch at Walton Court Farm stands apart from other ring ditches in the Walton basin by virtue of its exceptionally large diameter. With an external diameter of around 98m it is currently the largest such feature in Wales, and by virtue of its size it might appear to fall within a category of monuments known as 'formative henges', which have been identified across Britain and are thought to date to the Middle Neolithic (Harding 2003). Such sites are defined not only by their diameter, but also by the presence of an internal, rather than external bank, a feature which separates them from 'classic' henge monuments.
- 5.2 The recent excavations have demonstrated that at Walton Court Farm the ditch was around 2m wide and 1.4m deep. The absence of cropmark evidence for a section of the ditch on the south-eastern side of the site suggests the presence of a possible entrance, although geophysical survey was unable to shed further light on this and consequently this has yet to be confirmed. The excavations provided no evidence for the position of an accompanying bank which could, therefore, have been either internal, in the manner of 'formative' henges, or external, as with the 'classic' henges. Fragments of hazel charcoal from the secondary fill have produced a date of 2570-2300 cal. BC which, although not providing a construction date for the monument, indicates that it may have been built not long before this owing to the presumed rapid weathering of the ditch sides to form the initial infilling.
- 5.3 The Walton example is of a comparable size to the encircling bank and ditch forming the first phase at Stonehenge, which had a diameter of 107m. The ditch was originally around 4.2m in width and 1.2m to 1.6m deep (Darvill 2007, 96), and seems to have been excavated as a series of short, fairly straight, segments (Cleal *et al.* 1995, 24, 67). The upcast from the ditch was used to form an internal bank over 5m wide, and also a slight counterscarp bank (Cleal *et al.* 1995, 94 and 501). It is possible that the differing profiles of the two sections excavated across the Walton Court Farm ring ditch could suggest that the feature was also excavated as a series of interconnecting segments, rather than a uniform, continuous ditch. Stonehenge Phase 1 has been dated to between 3020 and 2910 BC from antlers recovered from the base of the ditch, which were presumably used in its construction (Cleal *et al.* 1995, 531).
- 5.4 In Wales, the Walton site is paralleled by one of the monuments in the complex at Llandegai, near Bangor, which included a cursus and classic henge, as well as a large ring ditch known as Llandegai A. Excavations in 1966-7 investigated the 80m-diameter ring ditch, which was thought to have originally been 8.5m wide and 3.3m deep, with an internal bank and a narrow entrance on the south-west side. There was no dating evidence from the primary ditch fills, although sherds of Fengate Ware were recovered from a stabilisation layer which also produced a radiocarbon date of around 3000 BC. Dates from a series of pits within the interior indicate that the monument is likely to date to around 3200-3100 BC. A smaller hengiform monument was also identified nearby – Llandegai D – which was around 38m in diameter, with a shallow ditch 1.5m to 1.8m wide. An internal pit produced a date of 2630-2460 cal. BC (92.7% probability), suggesting that the site should belong to the Late Neolithic (Lynch and Musson 2001, 36-55 and 81-83).
- 5.5 In some respects, however, the Walton Court Farm ring ditch is perhaps more similar to the 'classic' henge known as Llandegai B. This had an external diameter of around 76m with a ditch which may originally have been 3-3.6m wide and 2m deep. These dimensions are much closer to those at Walton than the ditch surrounding Llandegai A. Although there was no direct evidence for the bank it has been assumed to be external, based on the positioning of other features which were set 8-8.5m beyond the outer edge of the ditch, with other features close to the internal edge. Radiocarbon dates suggest a period of activity for the henge of around 2700-1900 BC (Lynch and Musson 2001, 56-77).

- 5.6 A third Welsh example, at Holywell Racecourse, Ysceifiog, may also belong to the category of ‘formative’ henge. The monument survives as a slight earthwork which has been incorporated into a linear earthwork once thought to be part of Offa’s Dyke, but now more generally considered to be a separate early medieval boundary feature. The site was excavated by Fox in 1925, confirming a henge 96-110m diameter with an external bank, and within the enclosure an off-centre barrow (Lynch 2003, 26; Fox 1926).
- 5.7 The results from a series of excavations during the past 20 years have gone some way towards placing the major monuments within the Walton Basin complex into chronological order (Table 1).

Table 1 Radiocarbon dates from major monuments within the Walton Basin complex

Site	Context	Lab No.	C14 Date BP	Cal BC 95%
Hindwell Cursus	Upper ditch fill / deliberate infilling	SUERC-24618	5030±30	3950-3710
	Upper ditch fill / deliberate infilling	SUERC-24834	4900±45	3790-3630
	Lower ditch fill	SUERC-24619	4815±35	3660-3520
Womaston Causewayed enclosure	Basal fill of inner ditch recut	BETA-254592	4800±40	3658-3384
	Lower fill of inner ditch	BETA-254593	4660±40	3625-3360
	Feature cut into upper fill of outer ditch	BETA-254594	4630±40	3621-3342
	Shallow pit within interior	SUERC-26461	2410± 35	750-390
Hindwell Palisaded Enclosure	Charred oak post	SWAN-116	3960±70	2900-2800 or 2700-2200
	Charred oak post	SWAN-117	4070±70	2880-2800 or 2780-2460
	Charred oak post	SWAN-230	4040±80	2900-2350
	Charred oak post	SWAN-231	4130±80	2910-2500
	Combined dates		4045±37	2870-2810 or 2740-2720 or 2700-2470
Walton Court Ring Ditch	Secondary ditch fill	SUERC-26430	3945±35	2570-2300

- 5.8 On the basis of existing radiocarbon dates, and comparison with other monuments, the earliest of the large-scale monuments is likely to be the causewayed enclosure at Womaston, which was first recognised as a cropmark from aerial photography in 2006. Excavation and geophysical survey in 2008 confirmed a double circuit of interrupted ditches sited on the summit of a low hill and enclosing an area of around 180m by 130m. Dating suggests a construction date in the Early Neolithic, around 3660-3340 BC, although with later activity during the Iron Age (Jones 2008 and forthcoming). A possible cursus near Hindwell may be broadly contemporary with the causewayed enclosure, with charcoal from the lower fill of the southern ditch producing a date of 3660-3520 cal. BC. The site consists of two ditches between 55m and 75m apart which, on the basis of cropmark evidence, could extend for as much as 1.5km. A second cursus, at Walton Green has yet to be dated, although evidence from cropmarks and trial excavation has confirmed that it is 660m long and 60m wide, with square terminals at either end.

- 5.9 At the time of its construction the most impressive monument in the Walton Basin would have been the very large Late Neolithic palisaded enclosure at Hindwell, which has been dated to around 2700 BC. Defined by closely set posts, the palisade enclosed an area of around 34ha, some 1400 mature oak trees having been used in its construction. To date, this is the largest Neolithic enclosure in Britain. A similar, although smaller enclosure associated with an avenue of pits lies further to the south at Walton, and remains undated.
- 5.10 Stylistically, it had been assumed that the Walton Court Farm ring ditch might belong to the Middle Neolithic, around 3300-2900 BC, an era to which the 'formative' henges have been ascribed. The radiocarbon date from the secondary ditch fill was rather later than this, however, suggesting a date of construction which could be around 2600 BC, placing the monument in the Late Neolithic, along with the palisaded enclosure at Hindwell.
- 5.11 The true nature of the ring ditch has yet to be determined. The diameter and relative narrowness of the ditch are perhaps most similar to the class II henge at Llandegai B, although there is no conclusive evidence for the position of the bank, and the postulated entrance has yet to be confirmed. It could be argued that the size of the ditch is more likely to be associated with a ritual monument, such as a henge, than a burial monument. Although there are a number of well known Neolithic burial monuments which are surrounded by ditches with a large diameter, such as Maes Howe on Orkney (150m), and Duggleby Howe in Yorkshire (350m), these ditches are on a much larger scale, providing material for substantial burial mounds. Interestingly, however, it has been suggested that the large earthen mound at Knapp Farm, only 600m west of the site at Walton Court Farm, might belong to this tradition of large Neolithic burial mounds (Gibson 1999, 9-10).

Roman marching camp

- 5.12 The trial excavations investigated a small section of the central of the three marching camps which lie to the west of Walton village. Cropmarks have revealed virtually the whole of the defences, which comprise a single ditch, 2.25m wide, defining a camp (PRN 371) measuring around 190m west-south-west/east-north-east by 161m north-north-west/south-south-east, with four entrances (St Joseph 1973). The excavations demonstrated that the ditch had a V-shaped profile and was around 1.4m deep with a narrow slot in the base. Immediately to the west-south-west, and separated by only 14m, is another marching camp measuring 167m by 143m, with the third camp to the east-north-east, measuring 167m by 120m.

6 ACKNOWLEDGEMENTS

- 6.1 The writer would like to thank the following: Richard Hankinson and Wendy Owen for their assistance with the excavations; Mr VG Price for allowing access to the site; Astrid Caseldine, University of Lampeter; Dr Steve Burrow, National Museum Wales; Philippa Bradley for identifying the flint; Martin Roseveare and Dan Lewis, ArchaeoPhysica; and Cadw for funding the excavation.

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