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Hindwell Palisaded and Double-palisaded Enclosures, Radnorshire: Excavation 2013

THE CLWYD-POWYS ARCHAEOLOGICAL TRUST

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cover: The trench across the Hindwell Palisaded Enclosure showing the edge of the adjoining palaeochannel. Photo CPAT 3744-0019

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1 INTRODUCTION

1.1 Recent Cadw-funded project work in the Walton Basin under the aegis of the Prehistoric Funerary and Ritual Sites and the Roman Military Vici initiatives, combined with the results of earlier assessment work by the Trust under the direction of Dr Alex Gibson which was funded by Cadw, continues to highlight the importance and complexity of this area of eastern Radnorshire. The area encapsulates the broader archaeology of the Welsh borderland and is, known to contain evidence for multiperiod activity from the early post-glacial period onwards. Recent studies have focused on the complex of prehistoric monuments around Hindwell and Walton, most of which date from the Neolithic, and include some of the largest sites of their type in Britain such as the Hindwell cursus and the Hindwell palisaded enclosure.

1.2 The gradual realisation that the archaeology of the Walton Basin is under varying degrees of threat from continued ploughing in this highly productive agricultural area, as well as from piecemeal development, led to the initiation of a new project which was initially approved for funding in 2012-13 and was design to address a number of pressing management issues relating to agricultural usage and development affecting the important multi-period archaeological resource within the Walton Basin. The project developed a methodology for assessing the vulnerability and level of threat from agriculture to both upstanding and buried archaeology, based upon COSMIC 2, which has become known as *Archaeological Conservation in Rural Environments*, or ACRE (Jones 2014). This is the first practical agri-environment related archaeological assessment methodology to be developed in Wales and has the potential to be of significant value across the country as a whole as a means of predicting the level of agricultural threat.

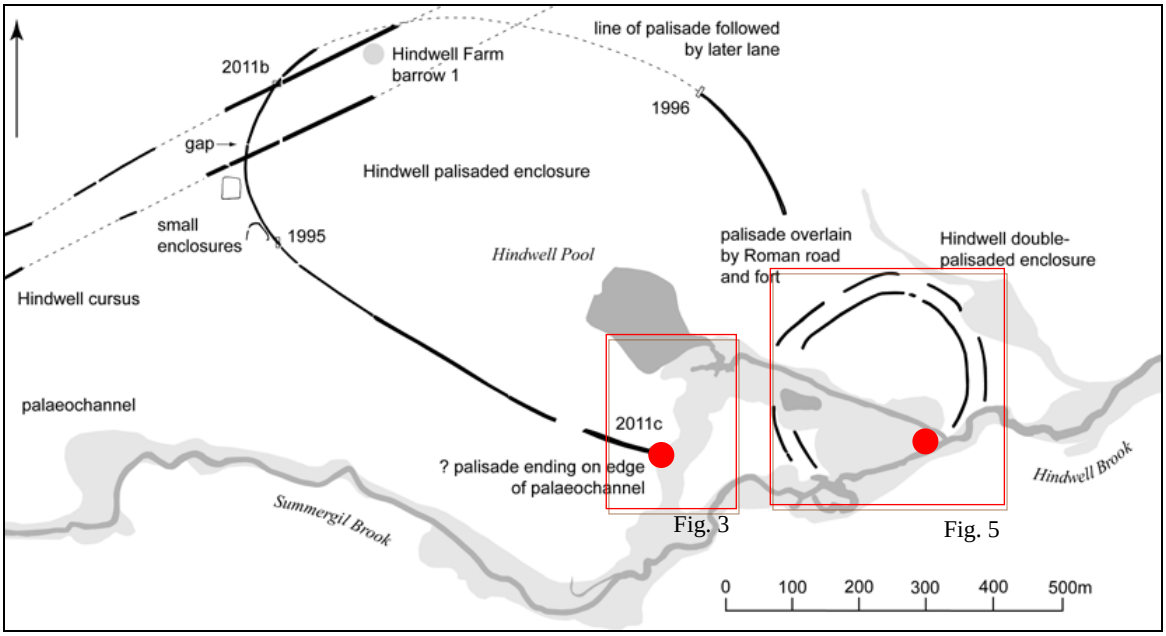

Fig. 1 Plan showing the relationship between the two palisaded enclosures at Hindwell and present day and former watercourses. The locations of the 2013 excavations are shown in red.

1.3 The Neolithic enclosures in the Walton Basin are of a scale and concentration which are unique in Wales and are of national and international significance. Whilst previous work has provided some information regarding their form and dating much still remains to be discovered about how they were built, what they were built for, and where the people that built them lived. The ACRE report concluded with a range of recommendations for future

research objects, amongst which was the relationship between the two palisaded enclosures at Hindwell and a series of prominent palaeochannels, and this formed the focus of small-scale excavations conducted in 2013 with the aid of local volunteers.

1.4 The large palisaded enclosure at Hindwell was originally identified from cropmark evidence in 1994 and then through further aerial reconnaissance in subsequent years. Trial excavations were conducted at two locations in 1995, followed in 1998 by an extensive programme of detailed geophysical and ground survey under the direction of Alex Gibson. The investigations demonstrated that the enclosure was defined by intercutting post-pits, each of which would have held an oak post around 0.8m in diameter. The ends of the posts had been charred, possibly as an aid to preservation, and radiocarbon dates from the outer growth rings indicated a construction date of around 2700 BC. The palisade enclosed an area of around 34ha, and it has been estimated that some 1400 mature oak trees had been used in its construction. To date, this is the largest Neolithic enclosure in Britain. A similar enclosure lies further to the south, at Walton (Gibson 1999a; 1999b).

1.5 The 1998 geophysical survey terminated to the west of a prominent palaeochannel and further survey carried out by CPAT in 2010 (Hankinson 2011) revealed no evidence for the continuation of the palisade on the eastern side of the palaeochannel, suggesting that the enclosure may have incorporated the palaeochannel into its circuit. In 2011 trial excavations investigated the palisade just to the west of the palaeochannel, revealing that at this point the palisade had been largely removed by a large ditch, probably defining an annexe on the south of the Hindwell Roman fort (Jones 2011).

1.6 The 1998 and 2010 geophysics, together with cropmark evidence, also identified two sets of curving ditches to the east of the Hindwell Roman fort. One double-ditched circuit could be traced beneath the fort and this was investigated to the south of the fort in 2011 as part of a Cadw-funded project focusing on prehistoric funerary and ritual monuments. The results revealed that this was a Neolithic double-palisaded enclosure constructed of closely spaced oak timbers, about 0.25m across, set within a broader foundation trench. Charcoal from one of the timbers has been dated to 2866–2574 cal. BC (SUERC-35386). Further investigations were undertaken in 2012, investigating a partial section through the inner palisade and also confirming its position where it had been cut be a canalized section of the Hindwell Brook (Jones 2012). There was evidence to suggest that the posts had been burnt in situ and samples of charcoal from the posts, and a fragment of burnt bone from the post-pipe, provided four radiocarbon dates with ranges that lay between 2624-2297 cal. BC (SUERC-43280, 43281, 43282 and 43284).

2 HINDWELL PALISADED ENCLOSURE

2.1 A hand-excavated trench (trench C; SO 25642 60325) was positioned on the west side of an obvious palaeochannel, to investigate its relationship with the Hindwell Palisaded Enclosure (PRN 19376). The trench was T-shaped with the main arm measuring 10.9m north-north-east/south-south-west by 1.0m wide, parallel to and about 3.0m to the east-south-east of the trench excavated in 2011, which had revealed a large Roman ditch cutting the post-pits for the palisade. The other arm of the trench formed a spur running east-south-east for 4.7m, extending down the slope of the palaeochannel.

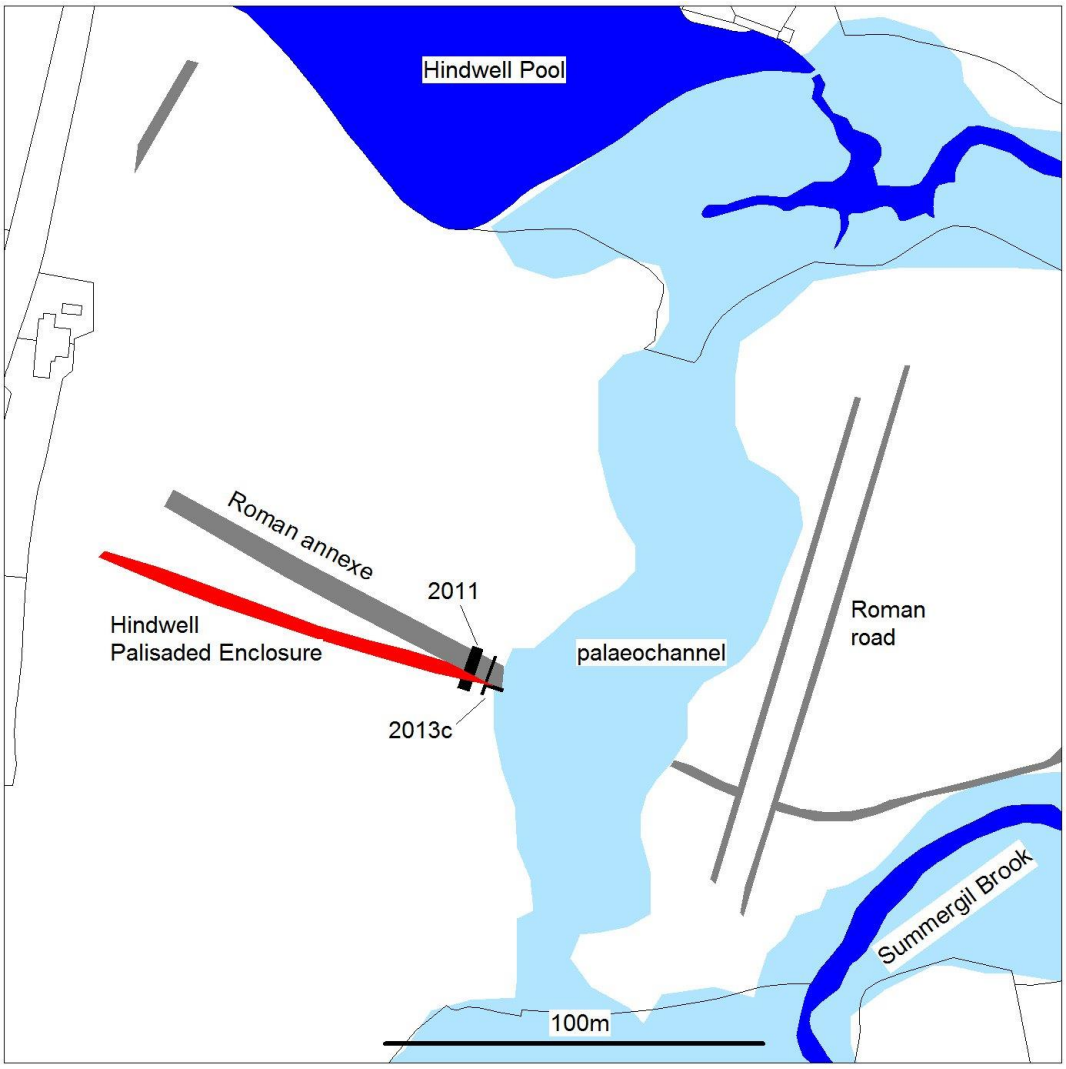

Fig. 2 Plan showing the intersection between the Hindwell Palisaded Enclosure, the Roman annexe ditch and the palaeochannel

2.2 The topsoil, a grey-brown stony silt (101) up to 0.14m thick, sealed a 0.3m-thick layer of orangey-brown stony silt (102) and an underlying layer of orange-brown stony silt (103), up to 0.1m thick. The topsoil also sealed an accumulation of dark grey-brown silt (104) at least 0.48m thick which had formed on the slope of the palaeochannel and contained 19th and 20th-century finds.

2.3 The natural subsoil (111) comprised rounded gravel in an orange silt matrix and was found at an average depth of about 0.4m. It had clearly been cut by the stream that had created the palaeochannel at the east-south-east end of the spur trench, and this edge was also found to be steeper than it appears on the surface. A possible pit (107), at least 1m in diameter and cutting the natural subsoil, was revealed at the north-north-east end of the main part of the trench, and this was filled by brown silt (108) without any diagnostic finds. The pit may match a feature seen in the 2011 excavation, but any relationship remains unproven.

2.4 The natural subsoil was also cut by the Roman ditch (105) identified in 2011, which measured approximately 6m wide and was filled by a deposit of orange-brown stony silt (106) containing some flecks of brick and tile. The intercutting post-pits for the palisaded enclosure were not readily evident, having been disturbed by the Roman ditch, although the southern edge of the palisade (109) was tentatively identified, filled by an orange silt (110). Unfortunately, any relationship between the palisade and the palaeochannel had been completely removed by the Roman ditch.

Fig. 3 Trench C viewed from the north-east with the western slope of the palaeochannel visible to the left. Photo CPAT 3744-0019

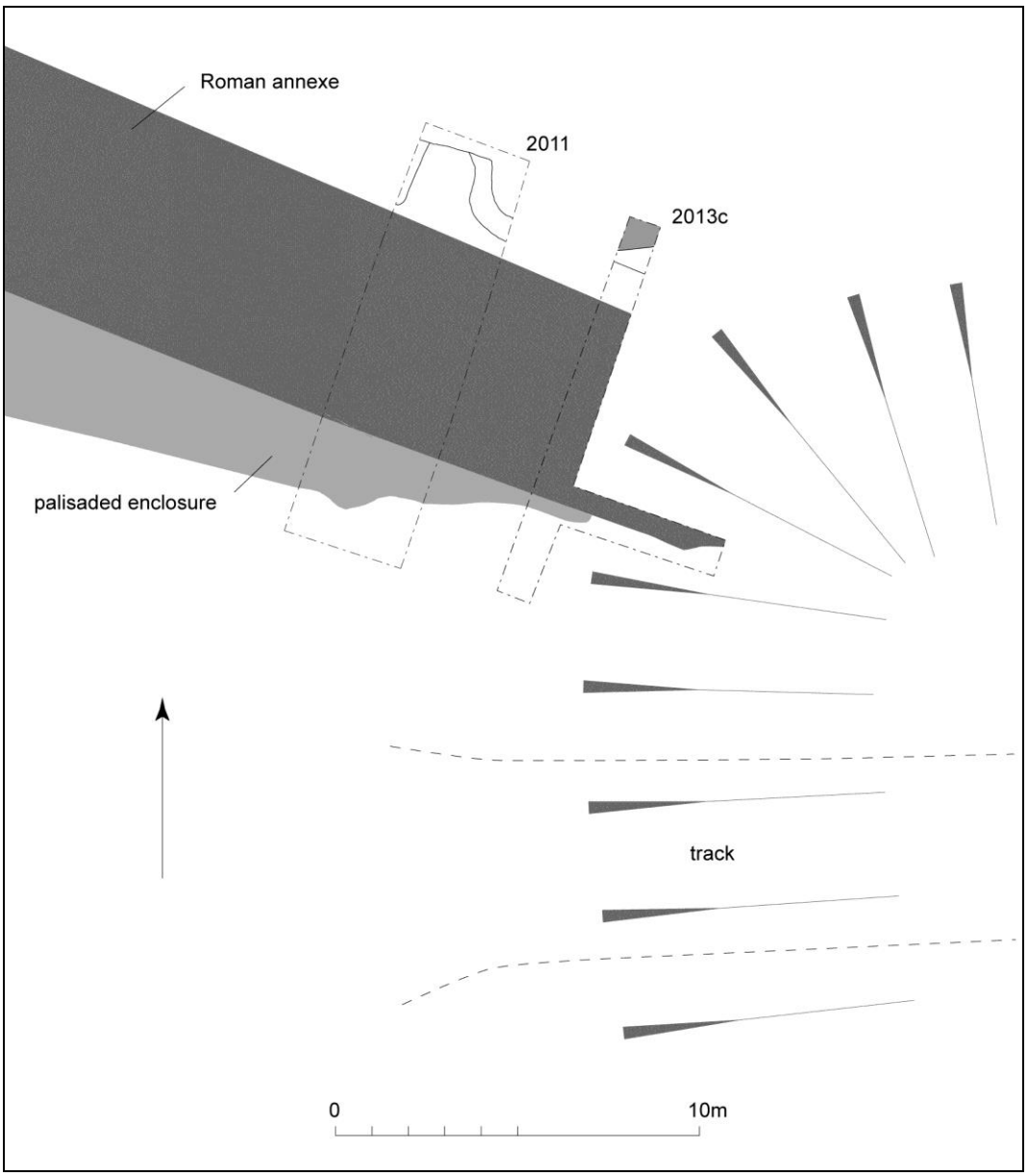

Fig. 4 The results of the 2011 and 2013 excavations, showing the relationship between the Hindwell Palisaded Enclosure, the Roman annexe ditch and the palaeochannel

3 HINDWELL DOUBLE-PALISADED ENCLOSURE

3.1 The inner circuit of the double-palisaded enclosure (PRN 114489) was investigated by two hand-excavated trenches located adjacent to the confluence of the Hindwell and Summergil Brooks (Figs 5-6, 2013a and 2013b).

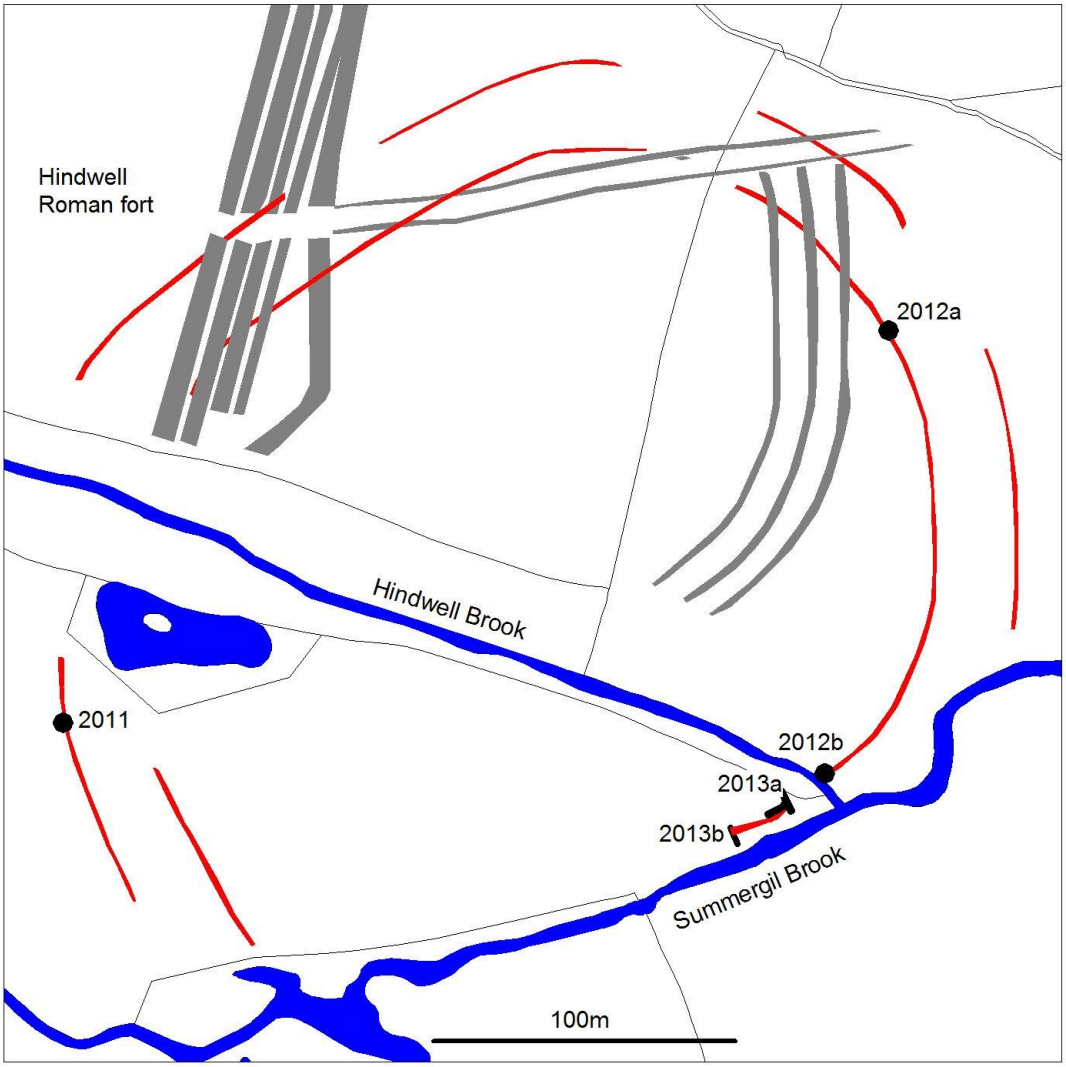

Fig. 5 The Hindwell Double-palisaded Enclosure showing the location of excavation trenches.

Trench A (SO 2606 6035)

3.2 The excavation initially focused on a single trench (2013a) positioned on a prominent rise which had been interpreted as a remnant of an earlier river bank that had been cut by a canalized section of the Hindwell Brook to the east, and sloped down to a possible palaeochannel to the west (see Fig. 7).

3.3 The modern topsoil (01), a dark brown loam 0.1m thick, was removed exposing, a mid yellow-brown silty clay (02), up to 0.2m thick, containing a high percentage of small gravels and from which a small piece of burnt flint was recovered. This sealed a 0.2m-thick layer of brown clayey silt (03), around 0.2m thick, containing occasional river gravel, which overlay the upper fill (04) of the construction trench (05) for the inner palisade of the Neolithic

enclosure; this consisted of a mid grey-brown silty clay with frequent charcoal flecks. At this point the palisade was around 2.3m wide with the irregular edges giving the impression of a series of intercutting post-pits, similar to those observed in 2012 (Jones 2012). The edge of the palisade was clearly visible where it cut into the natural river gravels (06) and there was evidence within the fill for occasional concentrations of charcoal as well as some burnt gravel. The trench was subsequently extended to the south-west, following the inner edge of the palisade trench.

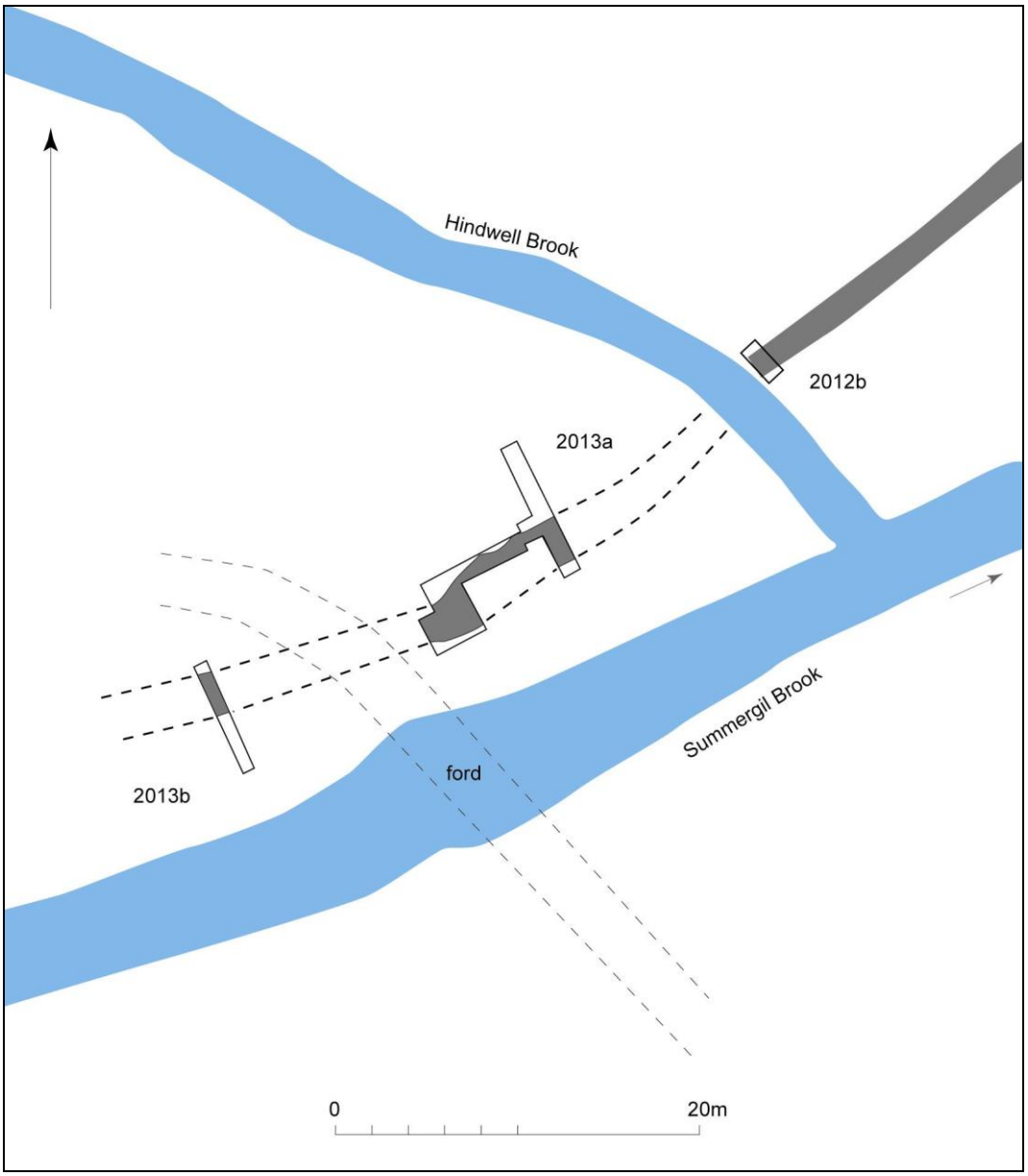

Fig. 6 The course of the inner palisade of the Hindwell Double-palisaded Enclosure near the confluence of the Hindwell and Summergil Brooks.

Fig. 7 Trench 2013a viewed from the south-west, showing the proximity of the inner palisade to the present course of the Summergil Brook. Photo CPAT 3745-0025

Trench B (SO 26043 60337)

3.4 Following a re-examination of the topography it was determined that the western side of the natural rise on which the excavation was positioned could have been truncated by a trackway leading to a ford, rather than respecting the edge of a palaeochannel. A second trench (2013b) was therefore excavated further to the west to investigate the potential line of the inner palisade beyond the track.

3.5 The natural subsoil, a clean grey gravel (10), appeared at a depth of 0.20m where it was seen to have been cut by the palisade trench (08), here some 2.5m in width. The fill of the palisade consisted of a pale orange-yellow silt (09), within which were two potential post-pipes, although these were not investigated further and remain unconfirmed.

Fig. 8 The construction trench for the inner palisade with the Summergil Brook in the background.
Photo CPAT 3745-0018

4 CONCLUSIONS

4.1 These small-scale excavations have further strengthened links with the local community, providing an opportunity for volunteers to participate and gain a greater understanding of both archaeological techniques and the range of monuments in the Walton Basin.

4.2 The investigation of the Hindwell Palisaded Enclosure produced disappointing results in that it was not possible to determine the relationship between it and a prominent palaeochannel owing to the point of intersection coinciding with a large Roman ditch. This had been identified in previous excavations in 2011 and is thought to define an annexe on the southern side of the Hindwell Roman fort. Despite this lack of a discernible relationship, however, it is not unreasonable to assume that the palisade stopped at the edge of the palaeochannel. Whether this was an active river course in the Neolithic or a post-glacial landform has yet to be established. Evidence from previous geophysical surveys clearly shows the line of the palisade and the Roman ditch to the west of the channel, while the Roman ditch alone reappears to the east (Fig. 9). The enclosure encompasses the Hindwell Pool, sited on a natural spring which flows throughout the year and forms the source of the Hindwell Brook, while the apparent incorporation of the palaeochannel into the circuit further strengthens an association

with water, a feature which is also common to other Neolithic enclosures in Britain (Britnell and Jones 2012, 70).

Fig. 9 Geophysical survey results showing the Roman annexe ditch on either side of the palaeochannel (in pale blue), but with no evidence for the palisade to the east of the channel.

4.3 The recent excavations have further aided our understanding of the double-palisaded enclosure, extending its inner circuit by around 35m. More importantly, however, the palisade is now know to extend to the south-west of the canalized Hindwell Brook. Despite this the southern side of the enclosure is still a matter for conjecture, particularly regarding its relationship with the Summergil Brook. The excavations have demonstrated that at least part of the inner circuit runs parallel to the brook and the angle at which the western side approaches the watercourse suggests that either there was an abrupt change in direction, or the brook was incorporated into the layout. This area was tested by geophysics in 2011, producing no evidence for the enclosure, although it now seems likely that the inner palisade lies in the 7m-wide gap between the southern edge of the survey and the Summergil Brook.

4.4 The constant meandering of the brook may well have eroded part of the inner palisade and of the outer circuit there is no trace at all. There is at present no evidence to suggest the courses of either the Hindwell or Summergil Brooks at the time that the two palisaded enclosures were

constructed. As we have seen, although the Hindwell palisaded enclosure appears to have incorporated a large palaeochannel, it is uncertain whether this was an active watercourse at the time. It is possible that the Summergil originally flowed along this channel, perhaps forming a large meander, and than the Hindwell Brook only came into existence at a later date, either as a result of natural river movement or perhaps through human intervention. Whichever may have been the case the double-palisade is likely to have always been bisected by a watercourse (Fig. 10), inviting parallels with the West Kennet I palisaded enclosure in Wiltshire which is bisected by the River Kennet and also observes an earlier palaeochannel (Whittle 1997, 90).

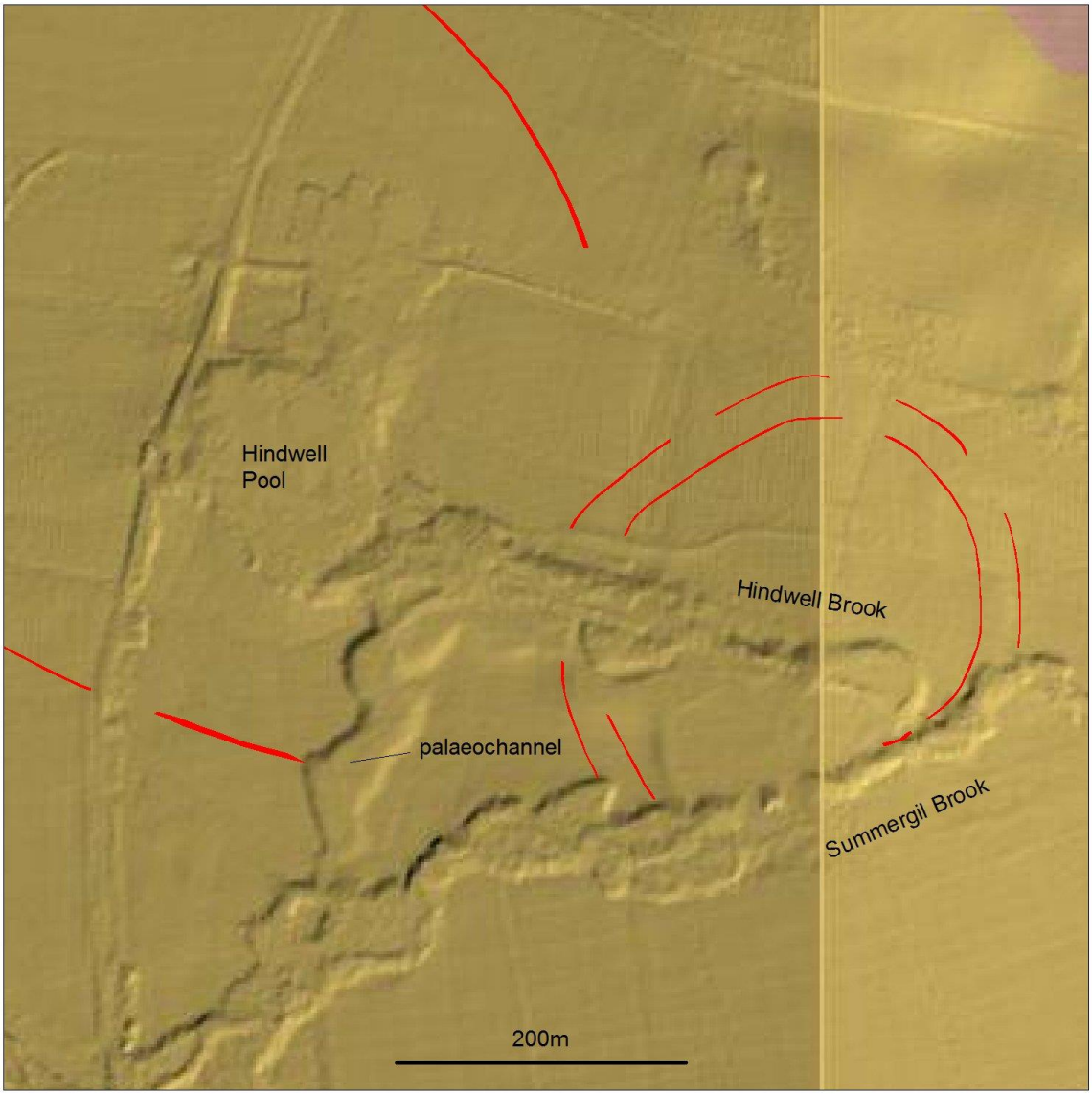

Fig. 10 2m-resolution LiDAR data for Hindwell showing the spatial relationships between the two palisaded enclosures and watercourses. Copyright Geomatics Group.

5 ACKNOWLEDGEMENTS

5.1 The excavations were supervised by Richard Hankinson and Kate Pack and thanks are due to their colleagues Jenny Britnell and Viviana Culshaw as well as students from the University of Worcester for their assistance with the excavation. The writers would particularly like to thank the landowner, Mr John Goodwin, for permission to carry out the work as well as for his overall assistance and enthusiasm for the project.

6 REFERENCES

Britnell, W. J. and Jones, N. W., 2012. Once upon a time in the west: Neolithic enclosures in the Walton basin, in W. J. Britnell and R. J. Silvester (eds) *Reflections on the Past: Essays in honour of Frances Lynch*, 48-77. Welshpool: Cambrian Archaeological Association.

Gibson, A. M., 1999a. *The Walton Basin Project: Excavation and Survey in a Prehistoric Landscape 1993-7*, CBA Research Report 118. York: Council for British Archaeology.

Gibson, A. M., 1999b. *The Walton Basin, Powys, Wales: Survey at the Hindwell Neolithic Enclosure*, Welshpool: CPAT.

Hankinson, R., 2011. *Hindwell Roman fort and vicus, Walton, Powys: Archaeological Investigations 2010-11*. CPAT Report No 1092.

Jones, N. W., 2011. *Excavations at Hindwell, Radnorshire, 2010-11*. CPAT Report No 1089.

Jones, N. W., 2012. *Hindwell Double-palisaded Enclosure and Roman Vicus, Powys: Archaeological Investigations 2012*. CPAT Report No. 1138.

Jones, N. W., 2014. *Walton Basin Project 2012-13: Archaeological Conservation in Rural Environments (ACRE)*. CPAT Report No. 1195.1.

Whittle, A. W. R., 1997. *Sacred Mound, Holy Rings. Silbury and West Kennet palisaded Enclosures: a later Neolithic complex in north Wiltshire*. Oxbow Monograph 74. Oxford: Oxbow Books.

APPENDIX 1

Radiocarbon dates for the Hindwell Palisaded Enclosures

Hindwell Palisaded Enclosure

Context	Lab No.	C14 Date BP	Cal BC 95%
Charred oak post	SWAN-231	4130±80	2892-2491
Charred oak post	SWAN-230	4040±80	2876-2348
Charred oak post	SWAN-117	4070±70	2872-2471
Charred oak post	SWAN-116	3960±70	2835-2208

Hindwell Double Palisaded Enclosure

Context	Lab No.	C14 Date BP	Cal BC 95%
Charred oak post	SUERC-35386	4110±30	2866-2574
Burnt bone	SUERC-43284	4035±28	2624-2474
Hazel charcoal	SUERC-43280	3983±29	2575-2463
Charred oak post	SUERC-43281	3989±29	2574-2466
Charred hazel nutshell	SUERC-43282	3983±29	2468-2297