# POSSIBLE POND BARROWS NEAR LLANFYRNACH, PEMBROKESHIRE GEOPHYSICAL SURVEY & ARCHAEOLOGICAL EVALUATION



Prepared by Dyfed Archaeological Trust For CADW





### DYFED ARCHAEOLOGICAL TRUST

RHIF YR ADRODDIAD / REPORT NO. 2010/26 RHIF Y PROSIECT / PROJECT RECORD NO. 100046

> Mawrth 2011 March 2011

# POSSIBLE POND BARROWS NEAR LLANFYRNACH, PEMBROKESHIRE GEOPHYSICAL SURVEY & ARCHAEOLOGICAL EVALUATION

Gan / By

# **Philip Poucher**

Paratowyd yr adroddiad yma at ddefnydd y cwsmer yn unig. Ni dderbynnir cyfrifoldeb gan Ymddiriedolaeth Archaeolegol Dyfed Cyf am ei ddefnyddio gan unrhyw berson na phersonau eraill a fydd yn ei ddarllen neu ddibynnu ar y gwybodaeth y mae'n ei gynnwys

The report has been prepared for the specific use of the client. Dyfed Archaeological Trust Limited can accept no responsibility for its use by any other person or persons who may read it or rely on the information it contains.





Llywodraeth Cynulliad Cymru Welsh Assembly Government

Ymddiriedolaeth Archaeolegol Dyfed Cyf Neuadd y Sir, Stryd Caerfyrddin, Llandeilo, Sir Gaerfyrddin SA19 6AF Ffon: Ymholiadau Cyffredinol 01558 823121 Adran Rheoli Treftadaeth 01558 823131 Ffacs: 01558 823133 Ebost: <u>info@dyfedarchaeology.org.uk</u> Gwefan: www.archaeolegdyfed.org.uk Dyfed Archaeological Trust Limited The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF Tel: General Enquiries 01558 823121 Heritage Management Section 01558 823131 Fax: 01558 823133 Email: <u>info@dyfedarchaeology.org.uk</u> Website: www.dyfedarchaeology.org.uk

Cwmni cyfyngedig (1198990) ynghyd ag elusen gofrestredig (504616) yw'r Ymddiriedolaeth. The Trust is both a Limited Company (No. 1198990) and a Registered Charity (No. 504616) CADEIRYDD CHAIRMAN: C R MUSSON MBE B Arch FSA MIFA. CYFARWYDDWR DIRECTOR: K MURPHY BA MIFA

#### POSSIBLE POND BARROWS NEAR LLANFYRNACH, PEMBROKESHIRE GEOPHYSICAL SURVEY & ARCHAEOLOGICAL EVALUATION 2010

CONTENTS	PAGE
SUMMARY	1
INTRODUCTION	3
Project Commission	3
Scope of the Project	3
Report Outline	3
Abbreviations	4
Illustrations	4
Acknowledgements	4
Timeline	4
SITE LOCATION	5
PREVIOUS ARCHAEOLOGICAL WORK	6
DESCRIPTION OF POND BARROWS	7
METHODOLOGY	10
Geophysical and Topographic Survey Limitations	11
Processing and Presentation of Geophysical Survey Results	11
GEOPHYSICAL & TOPOGRAPHICAL SURVEY RESULTS	13
Topographic and Geophysical Interpretation	13
PRN 3923, Blaen Gors I	13
PRN 3924, Blaen Gors II	14
PRN 8049-8051, Blaenffynnon I – III	14
Field Boundaries	16
Other linear anomalies	17
Circular Features	18
ARCHAEOLGOCIAL EXCAVATION RESULTS OF PRN 3924	20
Trench 1	20
Trench 2	21
Trench 3	22
CONCLUSION FROM EXCAVATION RESULTS OF PRN 3924	24
DISCUSSION	25
SOURCES	27
FIGURES	
Figure 1: Location man	28
	20

-	•	
Figure 2:	Distribution of known and suspected Bronze Age features	
-	and finds in the surrounding area	29

Topographic survey results for PRN 3923.	30
Processed geophysical survey results of PRN 3923	31
Processed geophysical survey results of PRN 3923 in red and blue	32
Geophysical survey results of PRN 3923 overlaid with topographic detail	33
Topographic detail of PRN 3923 overlaid with the main anomalies identified from the geophysical survey.	33
Topographic survey results for PRN 3924. The outline of the monument is drawn as it was seen on the ground surface	34
Processed geophysical survey results of PRN 3924	35
Geophysical survey results of PRN 3924 overlaid with some topographic detail	36
Plan of the PRN 3924 showing the excavation trenches and features recorded within	37
Southeast facing section of Trench 1	38
Northwest facing section of Trench 1	38
Southwest facing section of Trench 3	38
Topographic survey results for PRNs 8049, 8050 & 8051, also showing the smaller circular features identified during the survey	39
Processed geophysical survey results of PRNs 8049, 8050 & 8051	40
Processed geophysical survey results of PRNs 8049, 8050 & 8051, overlaid with local topographical features	41
Topographic detail of PRNs 8049 - 8051 overlaid with the main anomalies identified from the geophysical survey	42
	Topographic survey results for PRN 3923. Processed geophysical survey results of PRN 3923 in red and blue Geophysical survey results of PRN 3923 overlaid with topographic detail Topographic detail of PRN 3923 overlaid with the main anomalies identified from the geophysical survey. Topographic survey results for PRN 3924. The outline of the monument is drawn as it was seen on the ground surface Processed geophysical survey results of PRN 3924 Geophysical survey results of PRN 3924 overlaid with some topographic detail Plan of the PRN 3924 showing the excavation trenches and features recorded within Southeast facing section of Trench 1 Northwest facing section of Trench 1 Southwest facing section of Trench 3 Topographic survey results for PRNs 8049, 8050 & 8051, also showing the smaller circular features identified during the survey Processed geophysical survey results of PRNs 8049, 8050 & 8051, also showing the smaller circular features identified during the survey Processed geophysical survey results of PRNs 8049, 8050 & 8051, also showing the smaller circular features identified during the survey Processed geophysical survey results of PRNs 8049, 8050 & 8051, also 50 & 8051 Processed geophysical survey results of PRNs 8049, 8050 & 8051, overlaid with local topographical features Topographic detail of PRNs 8049 - 8051 overlaid with the main anomalies identified from the geophysical survey

#### PHOTOGRAPHS

Photo 1:	SSW facing shot of Blaen Gors I, PRN 3923	
Photo 2:	SSW facing shot of Blaen Gors I, PRN 3923	43
Photo 3:	SW facing of PRN 3924, Trench 1.	44
Photo 4:	SSW facing shot of PRN 3924, Trench	44
Photo 4:	NE facing shot of PRN 3924, Trench 1. Showing deposits 105 & 102	45
Photo 5:	SW facing shot of PRN 3924, Trench 1. Showing deposits 105 & 102	45
Photo 6:	PRN 3924, Trench 1 - SW facing shot of cut 106 post excavation	46
Photo 7:	PRN 3924, Trench 1 - SE facing shot of cut 106, and 101, 102 & 105	46
Photo 8:	PRN 3924, Trench 1 – NW facing section showing filling deposit 102 and the few large stones found within	47

Photo 9:	PRN 3924, Trench 1 – NW facing section showing deposit 103, the outer bank deposit	47
Photo 10:	PRN 3924, Trench 1 – NW facing section, a close-up of deposit 103	48
Photo 11:	RN 3924, Trench 1 – SE facing section, showing posthole 109	48
Photo 12:	PRN 3924, Trench 2 – NE facing shot of Trench 2, showing deposit 202 filling depression 210	49
Photo 13:	PRN 3924, Trench 2 – NW facing shot of deposit 202	49
Photo 14:	PRN 3924, Trench 2 – NW facing shot of deposit 202, depression 210 and the SE facing section	50
Photo 15:	PRN 3924, Trench 2 – SW facing shot of the section of Trench 2, showing outer bank deposit 203	50
Photo 16:	PRN 3924, Trench 2 – SW facing shot showing a close-up of deposit 203	51
Photo 17:	PRN 3924, Trench 2 – possible posthole/natural feature 206	51
Photo 18:	PRN 3924, Trench 2 – NE facing shot of root action 208	52
Photo 19:	PRN 3924, Trench 3 – SE facing shot of dark deposit 302	52
Photo 20:	PRN 3924, Trench 3 – NW facing shot of dark deposit 302	53
Photo 21:	PRN 3924, Trench 3 – NW facing shot of half-sectioned deposit 302	53
Photo 22:	PRN 3924, Trench 3 – NE facing shot of the possible tree-bowl deposits 307 & 308	54
Photo 23:	PRN 3924, Trench 3 – SW facing shot of a section through the possible tree bowl deposits	54
Photo 24:	PRN 3924, Trench 3 – NW facing shot of the trench, post excavation	55
Photo 25:	PRN 3924, Trench 3 – NE facing shot of bank deposits 309 & 310 visible in the section	55
Photo 26:	PRN 3924, Trench 3 – NE facing shot of deposits 302, 303, 304, 305 and 306 within cut 312	56
Photo 27:	PRN 3924, Trench 3 – NE facing shot, close-up of deposits 302 & 303 within 312	56
Photo 28:	PRN 3924, Trench 3 –NE facing shot of the section showing the bank remains and the edge of cut 312	57
Photo 29:	NE facing shot of PRN 8049	57
Photo 30:	ENE facing shot of PRN 8049.	58
Photo 31:	E facing shot of the interior of PRN 8049.	58
Photo 32:	SW facing shot of the interior of PRN 8049.	59
Photo 33:	WSW facing shot of PRN 8050	59
Photo 34:	SW facing shot of PRN 8050.	60
Photo 35:	SW facing shot of PRN 8051	60
Photo 36:	NE facing shot of PRN 8051.	61

Photo 37:	SSW facing shot of the southernmost unidentified circular feature within the survey area	61
Photo 38:	WSW facing shot of the northernmost unidentified circular feature within the survey area	62
Photo 39:	W facing shot of one of the circular features identified on the common land close to PRNs 5049 – 5051	62
Photo 40:	WSW facing shot of one of the circular features identified on the common land close to PRNs 8049 – 8051	63
Photo 41:	WSW facing shot of one of the circular features identified on the common land close to PRNs 8049 – 8051	63
Photo 42:	WNW facing shot of one of the circular features identified on the common land close to PRNs 8049 – 8051	64
Photo 43:	SW facing shot of possible standing stone remains on the common land close to PRNs 8049 - 8051	64

#### POSSIBLE POND BARROWS NEAR LLANFYRNACH, PEMBROKESHIRE GEOPHYSICAL SURVEY & ARCHAEOLOGICAL EVALUATION 2010

#### SUMMARY

Seven monuments displaying similar characteristics, namely scooped out circular hollows bounded by a single bank and ranging from 30m to 15m in diameter, all lie within a relatively short distance of each other on the Pembrokeshire/Carmarthenshire border. They have previously been recorded as 'scooped settlements', but recent work suggests they may in fact be related to pond barrows, a Bronze Age funerary monument type more typically seen in the Wiltshire and Dorset area, and not previously recorded in Wales.

The monuments consisted of Fron Haul (PRN 1126, SN 2571 3185), Caer Hen Feddau (PRN 1228, SN 2498 3153), Blaen Gors I & II (PRNs 3923 & 3924, SN 2373 2980) and Blaenffynnon I, II, & III (PRNs 8049-8051, SN 2331 2899). An eighth monument is also suggested on historic mapping at Rhos Crug-ebolion (SN 2236 3092). Cadw commissioned Dyfed Archaeological Trust to undertake geophysical and topographical surveys on five of these monuments, followed by limited trial excavation of one in an attempt to understand the nature of this rare group of earthworks.

PRN 3923 consisted of central circular depression 19m in diameter and c.0.7m deep, encircled by a low spread bank up to 4m wide. Geophysical readings suggested the central hollow was filled with material distinct from the surrounding subsoil. This was surrounded by a ring of possible pits or postholes around the inner face of the bank. A possible outer ditch was also suggested in places. Various discrete objects were indicated in the immediate area, including the possibility of a second circular feature.

PRN 3924 was badly plough damaged and survey results were disrupted by the presence of a telegraph post, but this site was subsequently partially excavated. Three trenches revealed the presence of a central circular, dark-silt-filled depression, 14m in diameter and 0.35m deep. This was surrounded by a plough-flattened bank of redeposited subsoil, 3.7m wide. No finds or datable material was recovered. Two possible pits or postholes were recorded within the bank as well as apparent root action.

PRNs 8049 – 8051 all lie in close proximity to each other, straddling an area of common land and improved pasture. PRN 8049 consists of a central circular depression 12m in diameter and 0.65m deep. No internal features were apparent on the geophysical survey results although the depression was part filled with thick ice at the time of survey. This was surrounded by a bank up to 4.5m wide and 0.35m high with a possible outer ditch.

*PRN 8050 consists of a central sub-circular depression 0.7m deep and 14m to 16m in diameter. No internal features were recorded, although the infilling deposit appeared distinct from the surrounding subsoil. Partial remains of a truncated bank surrounded the depression, at most 4m wide and 0.3m high.* 

PRN 8051 consisted of a central ice-filled circular depression 19m in diameter and 0.5m deep. Again geophysical results indicate the infilling deposit is different form the surrounding subsoil, but no individual features were picked out. This was surrounded by an undulating bank at most 3.8m wide, and up to 1m high in places, with a possible outer ditch or unusual facing material on the bank itself. There was also the suggestion of a possible entranceway to the southwest, although this may coincide with more recent attempts to drain water from the monuments.

Earlier pre-19<sup>th</sup> century field boundaries were also identified on the geophysical survey results within the pasture fields to the northwest of PRNs 8049 – 8051. Several smaller circular features were identified on the common land. These ranged from 4m to 6.5m in diameter, and were visible mainly as low mounds 0.2m high surrounded by possible ditches. At present it is not clear if these are archaeological features or are related to more recent activity. A possible standing stone was also recorded adjacent to Crugelwyn round barrow (PRN 3931).

The five monuments surveyed and excavated all revealed features that appear consistent with known examples of pond barrows investigated in the Wiltshire and Dorset area. It is suggested therefore that these monuments do in fact represent a group of pond barrows on the Carmarthenshire/Pembrokeshire border, close to the Preseli Hills. However, this is clearly at some distance from the traditional focus of pond barrow activity in southern England, which have previously been thought to represent elements of the 'Wessex culture', and date from the early to mid Bronze Age. There are also slight, but clear variations within this surveyed group of possible pond barrows, and therefore further more intrusive archaeological investigations would be required to better understand their function, date and associations.

#### INTRODUCTION

#### **Project Commission**

Seven monuments displaying similar characteristics, namely scooped out circular hollows bounded by a single bank and ranging from 30m to 15m in diameter, all lie within relatively short distance of each other on а the Pembrokeshire/Carmarthenshire border. All seven monuments are recorded on the regional Historic Environment Record (HER) as 'scooped settlements' and as such were visited as part of the Cadw-funded Defended Enclosures Project during 2007 and 2008. However, upon visitation they were considered not to represent defended enclosures, but probably earlier prehistoric funerary and ritual earthworks, similar to pond barrows found mainly in the Wiltshire and Dorset area.

It was agreed that these sites should be recorded more fully by undertaking geophysical and topographic survey, followed by limited trial excavation in an attempt to understand the nature of this rare group of earthworks. The project was undertaken funded by grant-aid money from Cadw (Project Code No. DAT 63).

The seven monuments consisted of the named sites Blaenffynnon I, II, & III in Carmarthenshire (PRNs 8049-8051, SN 2331 2899) along with Blaen Gors I & II (PRNs 3923 & 3924, SN 2373 2980), Caer Hen Feddau (PRN 1228, SN 2498 3153) and Fron Haul (PRN 1126, SN 2571 3185) all in Pembrokeshire.

#### Scope of the Project

This project addresses a number of general research objectives for the Neolithic and Early Bronze Age and the Later Bronze Age and Iron Age set out in *Introducing a Research Framework for the Archaeology of Wales*:

- Understanding monuments
- Ritual and Burial

The project will also aid the understanding of the nature of activities that took place between individual monuments, and to inform the process of designating scheduled areas around individual sites.

#### Report Outline

This report describes the location of the sites along with their archaeological background before summarising the geophysical and topographical survey results and the archaeological evaluation results and the conclusions based on those results.

#### Abbreviations

Sites recorded on the Regional Historic Environment Record (HER<sup>1</sup>) are identified by their Primary Record Number (PRN) and located by their National Grid Reference (NGR).

SAM - Scheduled Ancient Monuments NW – northwest NE – northeast

SW – southwest SE – southeast NNE – north-northeast ENE – east-northeast etc

#### Illustrations

Photographic images are to be found at the back of the report. Printed map extracts are not necessarily reproduced to their original scale.

#### Acknowledgements

The geophysical surveys were undertaken by P Poucher, M Ings and H Wilson, the archaeological evaluation was undertaken by P Poucher, S Ratty, M Bell and N Henwood of the Dyfed Archaeological Trust. Thanks are expressed to the landowners, Mr Bill Davies, Mr Rees and Mssrs Davies for allowing access to their land.

#### Timeline

The following table illustrates the approximate dates for the archaeological periods discussed in this report:

PERIOD	APPROXIMATE DATE
PALAEOLITHIC	<i>c</i> .120,000 BC – <i>c</i> .10,000 BC
MESOLITHIC	<i>c</i> .10,000 BC – <i>c</i> .4400 BC
NEOLITHIC	<i>c</i> .4400 BC – <i>c</i> .2300 BC
BRONZE AGE	<i>c</i> .2300 BC – <i>c</i> .700 BC
IRON AGE	<i>c.</i> 700 BC – <i>c.</i> 43 AD
ROMAN	<i>c.</i> 43 AD – <i>c.</i> 410 AD
EARLY MEDIEVAL	<i>c.</i> 410 AD - <i>c.</i> 1066
MEDIEVAL	c.1066 - c.1536
POST MEDIEVAL	<i>c</i> .1536 – <i>c</i> .1900
MODERN	<i>c.</i> 1900 onwards

Table 1: Archaeological and historical timeline

<sup>&</sup>lt;sup>1</sup> Held and managed by Dyfed Archaeological Trust, Shire Hall, Llandeilo.

#### SITE LOCATION

The site consists of seven identified monuments spread along the border between northern Carmarthenshire and north Pembrokeshire to the east of Llanfyrnach (Figure 1). They lie in an undulating landscape between 200mOD and 240mOD on the southern fringes of the Preseli Hills. The peaks of the Preselis, including Foel Drygarn, Carn Meini and Frenni Fawr are clearly visible from these sites.

Blaenffynnon I, II & III (PRNs 8049-8051, SN 2331 2899) survive as a cluster of upstanding earthworks, no more than 25m apart (Photos 29 - 36), and lie 225m NW of a large Bronze Age round barrow (PRN 3931, SAM CARM131), known as Crugelwyn. They stand on the western side of a local summit of grazed common land that is currently under disputed ownership, partly lying within the fields of improved pasture along its northwestern edge. The fields are divided by earthen banks topped by fences and hedgerow remnants, and the features themselves appear to have been used as boundary markers, or at least span both the fields and the common land. Crugelwyn lies on the summit of the hill.

Approximately 900m to the NNE lie Blaen Gors I & II (PRNs 3923 & 3924, SN 2373 2980). They are situated in neighbouring fields on farmland *c*.300m SSW of a scheduled standing stone (PRN 1070, SAM CARM094) and have both been reduced to differing extents by regular ploughing. These features also lie close to the summit of rising ground with clear views to the west and south. PRN 3923 is the better preserved of the two (Photos 1 & 2), lying in a field currently used for hay and pasture. PRN 3924 is greatly denuded, with a telegraph pole in its centre, and lying in a field used for pasture and in recent years as a festival campsite.

Lying *c*.2km away to the NE is the single earthwork site of Caer Hen Feddau (PRN 1228, SN 2498 3153). It lies in a field of improved pasture on the south-facing slope below the summit of the high ground, which falls away steeply to the south.

A further c.800m to the NE is the site of Fron Haul (PRN 1126, SN 2571 3185), which has been extensively plough damaged, but is still visible as a circular cropmark within a field of regularly ploughed, improved pasture. It occupies a point on the south-facing upper slopes of a rounded spur, but below the summit of the spur itself.

Just over 1km to the SE of Fron Haul lies another potential site that is not recorded on the HER. This currently comprises one of two water-filled ponds close to the summit of Rhos Crug-ebolion (SN 2236 3092). It stands in the corner of a field of improved pasture.

The geology of the area consists mainly of a wide expanse of Nantmel Mudstones, described as silty mudstones with dark burrow mottles with some areas of laminated hemipelagite, the occasional blocks of thin sandstones and some interbedded conglomerates (BGS 1994, <u>www.bgs.ac.uk</u>). Areas of polymict deposits, gravels, sands and clays, have collected in local valley bottoms, such as the one in front of Henfeddau fawr. To the west, beyond the Afon Taf, the geology begins to change into the Drefach group of mudstones and Abermawr shales, and to the NW lies the igneous rocks of the Preselis. The mudstones are mostly overlain by freely draining acid loamy soils.

#### PREVIOUS ARCHAEOLOGICAL WORK

No known intrusive archaeological work has been undertaken on these sites prior to the current project.

Fron Haul (PRN 1126) was visited by Ordnance Survey inspectors in 1966 and 1977, who considered it to be comparable to the Blaenffynnon monuments, and also noted that it was approached by a sunken track from the NW. The site was then recorded in more detail during the Defended Enclosures Project in 2007. It was described as a series of linear and curvilinear hollows surrounding a slightly raised platform from which land falls away to the west and south. A semi-circular scarp defines the down-slope, west and south sides, and a very shallow ditch to the north side. The platform measures c.30m north – south and 25m east – west. The site was not visited during this current project.

Caer Hen Feddau (PRN 1228) was first described by the RCAHMW in 1925, as well as being shown on early Ordnance Survey maps. It was also visited by Ordnance Survey inspectors in 1966 and 1977. It was visited and recorded during the Defended Enclosures Project in 2007, when it was described as a circular hollow *c*.29m in diameter and 0.6m to 1m deep, with a clear bank up to 0.3m high on the north side. A roughly concentric, slight bank lies 18m to the north, east and west sides of the hollow. A possible further bank lies beyond this. It was considered that this might be a related site, although the occurrence of a possible second bank is an unusual feature for a pond barrow monument. The site was recommended for scheduling and was visited by Cadw in 2009 (Groom 2009) and subsequently scheduled (Pe561) in 2010. The site was not visited during this current project.

Blaen Gors I & II (PRNs 3923 & 3924) were visited by the Ordnance Survey inspectors in 1965 and 1976, who described the sites much as they currently appear. Of interest is a note stating that the farmer claimed to have recently (in 1976) infilled PRN 3924 with soil and stones, and previously it had been a similar depth to PRN 3923, this was not however evidenced in the current excavation. Both sites were also visited during the Defended Enclosures Project in 2007.

The three Blaenffynnon monuments (PRNs 8049-8051) were visited by the Ordnance Survey inspectors in 1974, and recorded in more detail by A S Maill of Dyfed Archaeological Trust in 1984. At that time they were described in much the same state as they currently appear, although mention is made of a small raised platform in the eastern half of PRN 8051 that is not as apparent today. All three sites were visited during the Defended Enclosures Project in 2007. The landowner indicated at least one of these features may have been artificially drained in recent years, to prevent it flooding lower lying land, but no details were provided on which of the three monuments it was, nor how the drainage was achieved.

The potentially new site at Rhos Crug-ebolion has not previously been examined, and only became apparent by an examination of mapping evidence as part of the current project. The site currently consists of a sub-oval, water-filled pond measuring c.23m by 19m in the corner of a field of improved pasture, and adjacent to a larger oval pond. However, the 1<sup>st</sup> edition Ordnance Survey map of 1890 shows a single circular pond 16m in diameter and lying within an extensive area of common land, very similar in form, dimensions and topographic location to the other sites examined during this project (Figure 2).

#### DESCRIPTION OF POND BARROWS

The character and date of these sites is unclear. If, as is considered most likely, they are prehistoric pond barrows, then they would be considered very important monuments, as less than 100 are known in Britain and these are confined to south and east England, particularly concentrated in Dorset and Wiltshire. If they are not pond barrows, then it is considered likely that they represent some other form of prehistoric funerary and ritual site and are equally important monuments worthy of further protection (following further investigation to understand a potentially new monument type better).

Relatively few pond barrows have been investigated using modern archaeological techniques, but common characteristics have been identified and some dates have also been obtained. A description of the sites is provided by the monument class descriptions in English Heritage's Monuments Protection Programme (<u>http://www.eng-h.gov.uk/mpp/mcd/mcdtop1.htm</u>), written in 1989, as follows:

Pond barrows range in size from small examples such as Wilsford 1a with a diameter of about 5.4m and a depth of only 0.2m to large examples such as Winterbourne Abbas 17, Dorset, which is about 27m in diameter and 0.3m deep. Within this range the majority of examples are either between 9m and 12m across or between 12m and 15m across.

The most distinctive feature of any pond barrow is the central depression. As surface features these range from less than 0.2m deep to about 1.1m deep when measured as depth below the surrounding ground level outside the monument. The depressions are generally regular in outline and mostly circular but just occasionally slightly oval in plan.

Around the central depression there is usually a continuous rim bank. These vary in size from about 0.1m high to some 0.6m high and may be up to 5m wide. They were built from soil and redeposited bedrock derived from the digging of the central depression and any internal pits and shafts. The size of the bank therefore relates to the quantity of material extracted from the central features. There is no evidence for any sort of revetment to the rim banks so far examined, and it is assumed that they were of dump construction and thus of rounded cross-section.

An entrance through the rim bank is visible at a few pond barrows (eg. Kingston Russell 26a, Dorset) and equally rare are outer ditches (eg. Winterbourne Came 24a, Dorset). [A possible inner ditch is also suggested at Lake Down, nr Wilsford, Wiltshire (EH 1996)].

Excavations within the interior of excavated pond barrows have usually revealed one or more pits and/or shafts, although early accounts of excavations at Ballard Down, Dorset, suggests that the interior was featureless. At Winterbourne Steepleton, Dorset, there were 35 pits in the interior, raging in size from just 0.15m across by 0.15m deep to some 1.2m across by 0.78m deep. In plan these pits ranged from square through to circular. Eight contained only soil, seven contained simple cremations (one perhaps in a basket), two contained unburnt inhumations of infants with pottery, two contained cremated human remains with pottery, two contained pottery with only scraps of burnt human bone, and fourteen contained pottery (some broken and incomplete vessels) with no bones. All the pits lay beneath the flint pavement, but not all of them were necessarily of the same date. There was some evidence for the recutting of pits.

At Wilsford, Wiltshire, excavations revealed the presence of a single large shaft, probably the deepest such prehistoric shaft known from England. When fully excavated it was found to be about 30m deep and the main part was some 1.8m in diameter. The presence of finds scattered through the central fill of the shaft suggests, however, that other features were originally present and that as they eroded their contains contributed to the fill of the shaft.

Pits have also been identified at Kingston Russell 26 a and b, Dorset (Grinsell 1959, 19), and early accounts suggest some kind of circular cist with burnt bones in at Lake Down, Wilsford, Wiltshire.

Pond barrows do not seem to have been used for other purposes subsequent to the loss of their original functions, perhaps partly because as earthwork features they do not lend themselves to many other uses and also partly because for some time at least they were somehow considered sacred or special places.

The function and role of pond barrows is not fully understood. It has been suggested that the shaft at Wilsford was simply a well which was used by the local community for obtaining water for livestock and other purposes. This might be so and would certainly accord with the presence of rope and wooden buckets in the bottom and also with the environmental evidence from the fill. Wilsford, like other sites in the pond barrows tradition is closely associated with other round barrows and burial monuments of the second millennium RCYBC and so on relational grounds it is hard to divorce this site or any others from a ritual or ceremonial context. The care taken to dig such a deep shaft and dress the sides most carefully may be a reflection of the non-prosaic purpose of the monument at Wilsford, and in other respects the presence of a shaft may be nothing more than the extreme extension of the idea of digging pits within the enclosed space as seen very clearly at Winterbourne Steepleton.

Burials do not seem to be especially important features of pond barrows, and in this respect the monuments differ considerably from the broader category of round barrows. Human remains are found at pond barrows, but only in small quantities. For these reasons, pond barrows are generally interpreted as being ceremonial foci which might have involved mortuary rituals. Culturally they are generally grouped with the burial traditions of the so-called "Wessex culture" and certainly their distribution and associations are appropriate to this. The presence of pits and shafts has led to some speculation that such sites were connected with communications with the underworld (Young 1934; Ashbee et al 1989, 135-7); their shape has led others to the suggestion that they were used for dancing in (cf. Atkinson et al 1951, 13).

Very few of these sites have been securely dated but those that have, all within the Dorset and Wiltshire area, suggest they were mainly built in the early to mid Bronze Age. The date range of finds and rate of silting up recorded in some monuments suggests the use of some barrows extended to two or three centuries. As mentioned, the sites are mainly confined to the Dorset and Wiltshire areas, with three main concentrations around Stonehenge, Avebury and Winterbourne Abbas, although other examples are known in Berkshire and as far afield as Norfolk. They are mostly located on rolling downlands in prominent locations, but rarely on hilltops, and they usually occur in association with other Bronze Age barrows. Often they occur singly, but groups of up to three are known. To date no examples have previously been recorded in Wales although such monuments are perhaps difficult to identify if plough damaged, and a concentration in Dorset and Wiltshire is perhaps unsurprising given the intensity of barrow studies in that area.

#### METHODOLOGY

A combined geophysical and topographical survey was undertaken across the Blaenffynnon and Blaen Gors group of monuments, a total of five individual monuments. The objective was to record the remaining earthworks topographically and detect any buried archaeological features within the monuments and their immediate environs geophysically. Initially it was intended for a trial excavation to be undertaken following these surveys, however, due to issues of land access and field crops the excavation was undertaken before the surveys had been completed.

A fluxgate gradiometer was used for the geophysical survey, which detects variations in the earth's magnetic field (full specifications are in Appendix 1). Readings were taken on traverses 0.5m wide and every 0.25m within a 20m x 20m grid. All sites were topographically surveyed used a Trimble TST, which was also used to tie the geophysical surveys into the Ordnance Survey grid.

The Blaen Gors monuments were surveyed as two separate areas. Blaen Gors II (PRN 3924) was the first to be surveyed in June 2010 (Figures 8, 9 & 10). Both the geophysical and topographical surveys covered the same area, measuring 40m by 60m (0.24ha).

The Blaen Gors I (PRN 3923) geophysical survey (Figures 4, 5 & 6) covered an area of 60m by 60m (0.36ha). The accompanying topographical survey (Figure 3) covered a wider area of c.110m by c.160m (1.8ha). These surveys were undertaken in September 2010.

A continuous area measuring 140m by 80m was geophysically surveyed across the Blaenffynnon monuments, covering a total area of 0.9ha (Figures 16 & 17). Small strips close to the field boundaries were left un-surveyed due to the presence of post and wire fencing that would have obscured any geophysical results, dense vegetation and the deep water-filled nature of sections of the interior of some monuments prevented readings being taken. The topographical survey (Figure 15) initially covered a similar area, but was then extended over a much wider area of  $c.300m^2$  in order to record the nearby Crugelwyn round barrow (PRN 3931) and numerous circular features identified within the area of common land that had been cleared of gorse. These surveys were undertaken in December 2010.

Neither Caer Hen Feddau (PRN 1228) nor Fron Haul (PRN 1126) were surveyed during this period of works. Caer Hen Feddau has recently become a scheduled monument and therefore was not regarded as a survey priority. The timing of access to Fron Haul was not considered convenient and therefore it was decided to concentrate on the other five monuments within the given time.

Blaen Gors II (PRN 3924) was chosen as the site for the archaeological trial excavation, as the site was not under crop and the permission of the landowner had been established at an early date. The site was also the most denuded and had revealed little information on the previous surveys, therefore it was felt an excavation could establish more information about this monument and better assess the potential for agricultural damage.

The excavation consisted of three trenches, sited to investigate the central depression, any potential bank and areas outside the monument (Figure 11). The presence of a telegraph post close to the centre of the monument prevented the trenches being excavated up to the centre of the central depression. Trench 1 was located to the south, aligned SW – NE and measured 14m by 2m. Trench 2 was located to the north and was L-shaped, measuring 15.5m by 2m NW – SE and 5m by 2m NE – SW. Trench 3 was placed in between the two, aligned NW – SE and measured 8m by 2m. All three trenches were opened by machine, removing the topsoil under archaeological supervision and subsequently

excavated by hand by a team of professional archaeologists and local volunteers. Archaeological features and deposits were excavated and recorded using standard archaeological techniques, plans were drawn at a scale of 1:20, sections drawn at 1:10, digital photographs were taken of all archaeological features, and features and deposits were recorded on pro-forma sheets. Bulk samples were taken of some soil deposits, but these have not yet been processed or environmentally analysed. A detailed survey was undertaken and the site located on the national Ordnance Survey grid by using a Trimble TST.

#### Geophysical and Topographic Survey Limitations

The geophysical and topographical surveys were undertaken simultaneously but each monument or group of monuments were surveyed on different days and under differing weather conditions throughout 2010.

Blaen Gors II (PRN 3924) was the first to be surveyed in June 2010 when conditions were dry, sunny and warm. The area was bounded to the east by a post and wire fence, which may have obscured some of the readings taken in their immediate vicinity. Overhead power lines also crossed directly above the site, with one telegraph pole having been inserted close to the centre of the monument. The post is clearly visible on the results and appears to have caused a shadow obscuring readings taken in its vicinity. The field itself had also been used as a festival campsite the previous year and several items of camping detritus could be seen scattered over the surface, some of which may contain metallic items likely to produce spikes in the readings. The area itself was relatively level and covered in short grass.

Blaen Gors I (PRN 3923) was surveyed in September 2010 when conditions were also dry, sunny and warm. The area was bounded to the east and north by post and wire fencing amongst the hedgebanks, which may have obscured some of the readings taken in their immediate vicinity. The overhead power lines also crossed this field but offset slightly from the monument and at a higher level, consequently they do not appear to have had an affect on the survey results. The field has recently been cut for hay and was under short grass at the time of survey. The area was relatively level but with moderate slopes indicating the site of the monument.

The three Blaenffynnon monuments (PRNs 8049 – 8051) were surveyed over a period of three days in December 2010 when conditions were cold and occasionally wet (snow). The gradiometer was unable to operate during periods of heavy snowfall. A large field bank topped by post and wire fencing ran across all three monuments, likely to obscure readings taken in its immediate vicinity. Small trees and areas of gorse prevented some areas being accessed on the common land along the SE side of the monuments. The cold conditions meant the centres of all of the monuments were iced over, requiring a slower pace of data capture over the centre of the monuments, and some monuments also had prominent and steep edges, again requiring a slower pace of data capture. Pacing lines were used throughout the survey and any variations in the data collections due to ground slope and change in pace are likely to have been small.

The underlying geology and pedology do not appear to cause any distortions of the geophysical survey results.

#### Processing and Presentation of Geophysical Survey Results

Processing of the geophysical surveys was performed using *ArchaeoSurveyor 2.5*, detailed explanation of the processes involved are described in Appendix 1. The data is presented with a minimum of processing but the presence of high values

caused by large ferrous objects and wire fencing tends to hide fine details and obscure archaeological features, thus the values were 'clipped' to differing ranges between 10nT and -10nT to remove the extreme values allowing the finer details to show through.

The processed data is presented mainly as grey-scale plots (Figures 4, 9 & 16) although PRN 3923 (Blaen Gors I) is also presented as a blue and red plot (Figure 5). These have subsequently been overlaid on local topographical features with varying degrees of further interpretation (Figures 6, 7, 10 & 17).

Processing of the topographical surveys was performed using Geosite software and illustrated and combined with the geophysical survey images using Adobe Illustrator ver.9 (Figures 3, 8, 15 & 18).

#### **GEOPHYSICAL & TOPOGRAPHICAL SURVEY RESULTS**

#### Topographic and Geophysical Interpretation

#### **PRN 3923, Blaen Gors I** (Figures 3 - 7)

Topographically this monument survives as a circular depression 19m in diameter, but surrounded by a denuded and spread bank 6m wide to the SW and SE where it is then truncated by the current field boundary. It is 3 - 4m wide to the NE and NW. The bank is at most 0.4m high from the surrounding field surface. The centre of the monument is concave, although the base is slightly off-centre to the SW, and *c*.0.7m deep from the surface of the field, and 0.8m from the top of the surrounding bank (although due to the NE-SW slope of the field there is a drop of 1.1m from the top of the bank to the north into the lowest point of the hollow).

The surrounding ground surface falls gradually to the SW, with a slight but more pronounced drop c.20m to the SW of the monument, and vague undulations in the more level ground on the north-western side of the monument. There is no clear entranceway through the bank, although the bank itself is less obvious to the west.

On the geophysical survey the central depression of the monument shows up as a slightly lighter coloured circular area, where the underlying deposits are giving off a more magnetically negative response than the surrounding soils. Typically magnetically negative responses are indicators of buried banks, walls, mounds and generally more 'positive' archaeological features. Clearly this is not the case here, the magnetic responses therefore must be due to the type of material that has collected, or been deposited within the central hollow.

Within the monument, around the northern edge of the central depression, is a large curvilinear area of magnetically positive responses, visible as a dark band on the survey plot. Such features are often indicative of cut archaeological feature such as pits and ditches. It follows the curve of the northern edge of the monument and therefore appears associated with it. Following this curve are several discrete areas of positive magnetic responses spaced at relatively regular intervals. These features are suggestive of a ring of pits or postholes around the monument. It is also of note that topographically these features occur around the inner edge of the surrounding bank, close to the top (but below the summit) of the concave edges of the central hollow. In general these discrete areas, including the curvilinear feature, give readings of between 1.5 and 8 nT, however two, the easternmost and westernmost, give readings of beyond 25nT.

Located slightly off-centre, but topographically within the lowest part of the central hollow, is a discrete area of strong bipolar responses, associated positive and negative magnetic readings. Such responses are often indicative of ferrous objects although the type of metal cannot be ascertained from this survey alone. Numerous of these readings are visible throughout the area surveyed and can often represent a range of metallic objects from modern agricultural detritus such as nails and pieces of farm machinery, through to more archaeologically significant objects.

The surrounding bank that is visible topographically, is not immediately obvious in the geophysical results. However, there is a band of slightly (up to -0.9nT) more negative magnetic response that encircles the monument to the north and east, which appears to represent this surrounding bank. Around the eastern side of the monument a faint curvilinear band of magnetically positive readings suggest a possible outer ditch, although this is less apparent to the west. There is a suggestion of two such linear features to the NE that may represent two ditches, although the readings are very faint and an interpretation as a ditch is very speculative. Immediately to the SE of the monument are distinct bands of dark magnetically positive responses, some with associated bands of magnetically negative responses. It is not clear what these features may represent, their almost irregular appearance may be suggestive of natural geological or cut features, but no similar potentially natural features are visible in the rest of the surveyed field and their location next to the monument may indicate these are uncharacterised archaeological features.

There are numerous areas of discrete positive and bipolar magnetic responses from within the area surveyed. These could potentially represent a variety of features from genuine archaeological features through to modern detritus in the topsoil and naturally occurring features within the subsoil or geology. However, there is a suggestion of a possible circular pattern of these discrete features on the western side of the monument that may represent another archaeological monument, although it is also possible that such an arrangement may be entirely fortuitous.

#### **PRN 3924, Blaen Gors II** (Figures 8, 9 & 10)

The earthwork lies c.70m to the NE of PRN 3923 in a neighbouring field. This monument was subsequently partially excavated, the results of which are described below, but topographically it is one of the less distinct monuments. It has clearly been significantly denuded through plough activity, indeed the farmer recalled the last time it was deep ploughed in the 1970s when a ring of white or lighter coloured stones appeared in the plough soil. There is also a mention in a description of the site from 1977 (OS 1977) that the centre had been artificially filled with soil and stone to level it out, although this was not apparent in the excavation. It survives as a slight circular or oval concave hollow c.15m in diameter and up to 0.7m deep. There are faint suggestions of a surrounding bank more prominent (up to 0.2m high) around the western and southern edge of the monument. Due to the denuded nature of the monument it was difficult to pick out more precise measurements.

The denuded nature of the monument also appears to have affected the geophysical survey results, further disrupted by the presence of a telegraph post in the centre of the monument and overhead lines. As a result the feature itself is very difficult to distinguish from the background readings. There is a large number of discrete strong dipolar responses spread throughout the area surveyed. These appear to relate to metallic objects, most likely detritus from the recent use (in the past two years) of the field as a festival campsite, and a variety of such objects are visible spread across the surface of the field. Amongst these readings there is relatively clear area *c*.15m in diameter that appears to mark the site of the monument, although any specific readings in this area are obscured by a group of dipolar responses that may encircle the monument, but the interference from the modern features makes it very difficult to associate archaeological importance to them.

#### **PRNs 8049 – 8051, Blaenffynnon I – III** (Figures 15 - 18)

These three adjacent monuments survive as clear earthworks straddling the boundary of pasture fields and rough-grazed common land. The pasture fields slope gradually down to the NW, divided by a straight earth bank 2.5 – 3m wide, broken in several places allowing cattle free access between the fields. The boundary between the fields and the common land consists of a straight 2.5m – 3m wide earthen bank, topped by modern post and wire fencing. This bank

crosses all three monuments, but at different points on their circumference. There is a gateway through the bank 19m to the NE of PRN 8049, and a 12.8m wide section of the bank has also been removed where it crosses PRN 8050, although the fence-line continues. The common land rises gradually to the SE on to the crest of the hill. Crugelwyn round barrow (PRN 3931) lies c.175m to the SE of the monuments, standing on the crest of hill, 1.8m high, and 24m in diameter. Large areas of the common land are still obscured beneath gorse and vegetation, and vehicle ruts have cut through the ground immediately SE of the monuments, which is most pronounced to the south.

Topographically monument PRN 8049 exists as a roughly circular feature measuring 19m to 21m in total diameter. As with all the monuments, this feature straddles both the field of improved grazing and unploughed common land, consequently the features are better preserved on the common land. A bank encircles the monument, 4.5m wide where it is better preserved, and 0.35m high, with steep internal sides, more slight or spread on its external side. West of the field boundary the bank has clearly been plough-flattened but is still visible as a slight rise 0.25m high. In total the bank encloses a relatively flat circular area 12m in diameter. The measured internal ground surface was 0.65m below the top of the bank, and 1m below the surrounding ground level, but had partly filled with iced-over water. There is no surface evidence of an entranceway through the bank. The interior of the monument retains an unknown depth of water that had frozen at the time of survey. The site has been cleared of much vegetation although a small tree grows against the field boundary within the centre of the monument and reeds grow within the water-filled interior.

The geophysical survey shows the bank represented by a circular curvilinear feature of negative readings. This also appears to be encircled by a curvilinear band of positive readings, possibly associated with a surrounding ditch now buried beneath the spread of the bank and not visible on the ground surface. There is a suggestion of a possible break in the circuit of the bank and ditch to the NW, although this is not apparent on the ground surface and may coincide with the line of a later field boundary (see below) obscuring the readings from the monument. No features are apparent within the monument itself, but the presence of water and reeds within the bowl suggests there is likely to be a significant amount of silting up within the monument, hence archaeological features may have been at too low a depth from the probes to be detected.

PRN 8050 is the central of the three monuments, which lies mostly in the corner of the field of improved pasture and consequently is the most denuded of the three. It is still clearly visible due mainly to the reeds that are growing in the wet soil covering the central depression. This depression is 0.7m deep, 14m to 16m in diameter, but truncated by field boundaries to the SE and SW. A low (0.3m high) bank, 4m wide, surrounds the northern part of the depression, although it is seemingly ploughed flat to the NW. It has also been flattened to the SE where a 13m wide section of the large field boundary that crosses the monument has subsequently been removed, although faint traces of a bank survive to the SE of this, 3.6m wide and 0.25m high. The smaller field boundary crosses the southwestern edge of the feature, but again faint traces of the outer bank can be discerned SW of this, 4.5m wide and 0.2m high. A small mound measuring 3m by 2m, and 0.5m high is visible slightly offset from the centre of the monument, close to the southwestern field boundary.

The central depression is clearly visible on the geophysical survey as a circular area that, similar to PRN 3923, is recorded as having slightly more magnetically positive responses, and also lacks any of the small discrete areas of magnetic responses that appear to characterise the surrounding subsoils. This would appear to be due to the material that has filled the depression. Mixed readings indicate the surrounding bank around the northern and western sides of the

central bowl, although these are clearly obscured and confused by readings from the existing small field boundary and by a possible former field boundary connected to features to the north and west of the monument (see below). Higher readings from the modern post and wire fence obscured the readings taken along the eastern and southeastern edge of the monument. The small mound close to the centre of the monument returned very high bipolar readings, typical of a metallic item likely to be of modern origin.

PRN 8051 is the southernmost and most prominent of the three monuments. Roughly  $\frac{2}{3}$  of the monument lies within the common land, where an undulating bank 0.4m high defines a circular monument in total 23.5m to 26.5m in diameter. The bank has spread out to the NE and east, whilst to the south it is becomes indistinguishable on the surface from a bank defining a linear feature on rising ground to the south (see below). To the west, in the area lying within the pasture field, the bank has clearly been plough-damaged but is still clearly visible 3.8m wide and at most 0.4m high, with a possible break c.5.5m wide midway along the curve visible within the field. This break, however, may be a result of a relatively recent attempt to drain the water from the central part of the monument. The inner face of the bank, within the area of common land at least, remains very steep. It drops down 1m onto a slightly concave base at least 0.5m below the surrounding ground level, although the base of the bowl was filled with an unknown depth of water that had iced over at the time of the survey. As with the other sites, much of the large vegetation within the area of common land has been cleared from within and around this monument, leaving a covering of tufts of grass and bracken with some interior weeds and a small tree growing against the field boundary.

As appears typical, the central depression is defined on the geophysical results by a circular area of magnetically more negative responses. The only possible internal feature identified is a small discrete area of positive magnetic responses against the southern edge of the depression that may represent a cut archaeological feature such as a pit. As mentioned with PRN 8049, it is possible that the depth of silting and the covering of ice at the time of the survey prevented the survey reaching an adequate depth to record internal features. This central bowl is clearly defined within the area of common land by a curvilinear 'rim' of magnetically negative responses, itself bounded to the east by a wide band of positive responses. Such readings seem typical of a surrounding bank with an external ditch, although when compared to the topographical survey results, both readings appear within the area of the bank. This may be a result of the bank spreading out across the line of the outer ditch, or it may even be an indication of a facing material on the outer edge of the bank that is giving a more magnetically positive response.

The results to the NW of the large field boundary are a little more confused but appear to mirror the topographical indications of the outer bank continuing, but then with a gap into this field. There is no clear indication in this area of the darker band of positive magnetic responses continuing into the field. This may be a result of a clear intensity of later agricultural activity within this field, or the suggested removal of this bank in recent years to aid drainage, or it may even be an indication that the gap in the bank is an entranceway.

#### Field boundaries

Map evidence indicates that the boundary between the common land and the agricultural fields, and the layout of the fields themselves, has been in existence in much the same form since at least the early 19<sup>th</sup> century (Ordnance Survey 1810). Topographically this area slopes gradually to the NW until it meets the next field boundary, at which point the slope begins to steepen. One field

boundary runs NW – SE through the area, consisting of an earth bank with remnants of a hedge in places, but the hedge has mostly been removed and the bank broken through in several places allowing animals free access between the two fields. Roughly 20m to the NE of this boundary are faint surface traces of a ploughed out bank, *c*.2m wide, running parallel to the field boundary. The boundary between the fields and the common land consists of a straight 2.5m – 3m wide earthen bank, topped by modern post and wire fencing. This bank crosses all three monuments, but at different points on their circumference. There is a gateway through the bank 19m to the NE of PRN 8049, and a 12.8m wide section of the bank has also been removed where it crosses PRN 8050, although the fence-line continues.

The geophysical survey results clearly show a concentration of activity within the pasture fields, compared to the relatively 'quiet' results from the common land. Several linear features are discernible all running parallel to the existing NW – SE field boundary. The existing boundary is clearly visible as the strongest linear anomaly in the centre, running up to the current common land boundary. To the NE the faint traces of a bank visible on the surface correspond to the clear indications of a bank and possible accompanying ditch on the geophysical survey results, represented by parallel lines of positive and negative magnetic responses. To the NE of this lie two further possible boundary features, whilst to the SW of the existing boundary lie three or possibly four further boundary features.

What is less clear is if these possible boundary features run up as far as the current common land boundary, as there appears to be a linear anomaly running NE – SW consisting of slight magnetically positive responses, often indicative of bank remains. This line is set slightly in front of the current common land boundary, and runs against the northwestern edge of PRN 8049 and also appears to angle off in front of the northern edge of PRN 8050 as well. There is an indication in the southeastern ends of some of the possible boundary features within the neighbouring field that this NE - SW boundary extends in front of PRNs 8050 and 8051 in that field as well. This suggests an earlier common land boundary, with gaps along its line that may represent entranceways through onto the common land.

Taken together, these linear features appear to represent a series of rectangular field enclosures between 15m to 25m wide terminating at an earlier common land boundary that respects the edges of the three possible barrow monuments. The date of these boundaries is unclear, but map evidence would suggest it predates the early 19<sup>th</sup> century at least.

There appears to be a distinct change in the nature of the magnetic readings within the southwestern field. This was not due to difference in data collection as the traverses extended over the dividing boundary and the data was collected continuously on the same day. This change in the readings may therefore be as a result of agricultural practices within that field, possibly through the introduction of different fertilisers for example.

#### Other linear anomalies

There appear to be at least three linear anomalies extending in a roughly east – west direction within the surveyed area.

The southernmost linear anomaly consists of a band of positive magnetic responses that extends from within the area of common land, 3.5m to the south of PRN 8051, into the pasture field. It is accompanied along its northern edge by a linear band of magnetically negative responses with a further area of magnetically positive responses to the north of this within the pasture field. Such an arrangement of linear responses can often indicate a banks and ditch, and as

it straddles both the field and common land along a different alignment to the field boundaries, it appears to predate the layout of these fields. Topographically this feature corresponds to a raised bank, 5.8m wide, 16m long and 0.5m high, visible within the area of common land. There is no surface indication of an accompanying ditch at this point however. The bank does not extend into the pasture field, possibly deliberately removed or ploughed-out in this area, although an almost semi-circular sunken area next to the current field boundary appears to mark its location on the surface.

Some 30m to the north of this lies a second linear anomaly consisting of associated positive and negative magnetic responses along a similar alignment. This feature, however, is not apparent within the area of common land and it becomes a somewhat curvilinear feature as it extends westwards. It is not clear what this feature represents, its curvilinear nature may be an indication of a natural origin although it does also appear to begin at a point in between PRNs 8050 and 8051.

At the northern edge of the survey area lies a third linear feature represented by a line c.16m long of magnetically positive responses. The somewhat irregular nature of its alignment would suggest this is likely to be an indication of a natural origin, such as former stream course or geological feature.

#### Circular features

Located *c*.16m to the east of the monuments, within the grid that had been laid out for the geophysical survey, two circular features were noted and recorded. The northernmost consisted of a circular bowl 6.5m in diameter and 0.1m deep, with an off-centre raised area 2.6m to 2.8m in diameter, and 0.2m high. Frozen water had collected within the shallow bowl, but it appeared to have relatively steep edges and a flat base.

The second circular feature lay c.36m to the SW. This consisted of slight bowl or encircling ditch 1.3m to 2.2m wide, and 0.15m deep enclosing a total area 6.5m to 7.3m in diameter. Reeds and higher greener vegetation growing within it picked out the bowl or ditch distinctly. In the centre was a raised area 0.3m high and 3m to 3.4m in diameter.

The central mound of each circular feature was clearly picked out on the geophysical survey results giving off very strong bipolar responses. The remainder of the features, such as the bowl or ditch were less readily visible although there are faint traces on the survey plots of a roughly circular area of slightly more magnetically negative responses representing the northernmost feature, and a possibly curvilinear area of magnetically positive responses representing the surrounding bowl/ditch of the southernmost feature. Such high bipolar readings from the centre of each feature however, are unusual from archaeological features and may be an indication of a modern element to them.

Prior to the examination of the geophysical results it was thought these features may represent associated prehistoric archaeological sites, particularly as known examples of pond barrows in Wiltshire and Dorset appear to mainly occur within more extensive barrow cemeteries. Large areas of gorse had been cleared from the common land in recent years and a rapid walk-over of this area revealed numerous similar circular features, both within the cleared areas and still partly covered in vegetation. As a consequence, these features were topographically surveyed as part of an extended topographical survey. In total 19 similar circular features ranged from 4m to 6.5m in diameter, and were mainly visible as low mounds 0.2m high surrounded by ditches picked out by the taller and greener vegetation. The standing stone consisted of a large block of quartz, 0.4m by 0.5m and 1m

high, but lying recumbent and part broken. It was located 38m to the east of the prominent round barrow of Crugelwyn (PRN 3931).

The circular features appeared reminiscent of either prehistoric hut circles or small barrows. Given that some appeared to lie partially within the cleared area and partly within the thick vegetation it was assumed these feature were genuine archaeological features of some antiquity. However, on examination of fairly recent aerial photographs (Google Earth) these features are clearly visible (not visible on other aerial photographs) and extend into the fields to the NW where they are laid out in regular rows evident on the steeper, lower slopes close to the field entrance. The clear presence of worn vehicle tracks around some of these features may suggest they are therefore connected with the landowners attempt to set up a possible quad-biking track in this area. The opportunity has not yet arisen to discuss this with the landowner, although it is hoped that this information will be forthcoming to determine the origin of these features and ascertain if they are of archaeological origin or not.

#### Discrete features

Spread throughout the area surveyed, but perhaps more visible on the common land where there is less geophysical 'noise', are numerous small discrete areas of positive magnetic readings. Such readings may be indicative of cut features such as pits, but they could also represent naturally occurring depressions and burrows. There is no obvious regularity to these features.

#### ARCHAEOLOGICAL EXCAVATION RESULTS OF PRN 3924

The topsoil was uniform throughout the three trenches and consisted of a mid grey-brown clayey-silt loam ploughsoil between 0.2m and 0.4m thick. It increased in thickness towards the centre of the monument where underlying soils were softer allowing the plough to bite deeper. No finds were recovered from this deposit.

#### Trench 1 (Figure 11, 12 & 13)

This trench was machine excavated down to the natural subsoils, which revealed clear evidence for the central depression (photos 4 & 5). This depression had been deliberately cut (106) with a slightly curving upper edge in plan, and a gentle straight or slightly concave edge in profile, 0.75m to 1.6m long giving away gradually to a flat base (photos 6 & 7). This depression was 0.3m deep, below the original ground surface (105), and visible beneath the bank material (103). No features appeared to be cut into the depression within the confines of the trench at least.

The depression (106) was filled to a depth of 0.3m by a single fill (102) of dark grey-brown fine silty-clay with the occasional small angular stone and the a few pieces of larger quartz and flat stones up to 0.25m long visible in the NW facing section (photos 4, 5, 7 & 8). There was no indication of layering within this deposit, but the fine silty-clay nature of the fill would suggest a gradual silting up of the interior. This does not appear to account for the presence of larger heavy lumps of quartz and flat stones however, which are not indicative of silting and are more likely to have been thrown into the deposit. No finds were recovered from this layer.

Revealed within the sections was a thin (0.06m) deposit of firm light-grey sandyclay (103) overlying the natural subsoil (105). This deposit was mottled with an orange sandy-clay in places and it contained moderate amounts of small to medium sized angular sand/mud stones, all appearing to derive from the natural subsoil (105). The deposit begins *c*.0.4m to 1m beyond the upper edge of cut 106 and extends back for at most 3.7m (photos 9 & 10). It would appear to represent the plough-damaged remains of an outer bank of clay mixed with redeposited subsoil encircling the central depression (106). The pale colour and the appearance of the stone inclusion when scraped may account for the farmer's memory of a circle formed of 'white stones' when he last deep-ploughed this area in the 1970s. A similar separate deposit (104) is also visible in patches overlying the upper edges of cut 106, and overlaid by deposit 102. This would appear to be a continuation of the bank material washed/slumped into the central depression.

The only other feature identified within this trench was a small possible pit or posthole (109) revealed in the SE facing section (photo 11). It was located roughly midway along the bank material (103), and below the topsoil 101. On excavation, this was revealed to be a sub-circular pit or posthole 0.3m wide and 0.23m deep, with almost vertical straight sides breaking moderately onto a concave base. It contained two fills, the lower fill (108) consisted of a mid-grey clayey-silt with the occasional charcoal fleck but no finds. This was the most visible part of the feature, the upper fill (107) was a mid orangey-grey silty-clay, very similar in appearance to the bank material, which meant initially it was not clear if it cut through the bank or was an earlier feature. On closer examination it appears that bank material has either been redeposited into the top of the feature, or has washed into it, and therefore it is likely to be a later cutting, but its function and date remains unclear. It may be of note that this feature appears to correspond closely to a discrete area of positive magnetic readings on the

geophysical survey results (Figure 10), often indicative of cut features such as pits or postholes.

Several darker brown curvilinear anomalies were identified in plan occurring within the natural subsoils (105). Initially it was thought these could represent plough marks or early agricultural activity, but the irregular nature of the marks distinguished them as more likely from natural root action that was visible throughout the revealed subsoil.

#### Trench 2 (Figure 11)

Trench 2 was L-shaped and located to investigate an area mainly external to the possible barrow site, but as with Trench 1, there was clear evidence of a central depression surrounded by a clay bank (photo 12 & 13).

The cut of the central depression (210) was consistent with the cut revealed within Trench 1. It had a slightly curving upper edge in plan with a gently sloping, slightly concave side (over a distance of 1.9m) in profile with a gentle break of slope on to a flat base, making the depth of the cut 0.14m below the topsoil (photos 12, 13 & 14). There were no features cut into the depression. It had two fills, the lower deposit (209) consisted of a dark grey-brown, silty-clay mottled with subsoil inclusions. This deposit was at most 0.1m deep and appears to have derived from material gradually washed in from the north extending 1.53m into the central depression. No finds or inclusions (other than the subsoil elements) were visible within this deposit. This was overlaid by a 0.14m thick deposit of dark brown-black humic clayey-silt (202) with the occasional inclusion of small to medium sized angular stones. This deposit appears very similar in its make-up to the depression fill noted in Trench 1 (102) but is noticeably darker in colour. As with the lower fill, and that of Trench 1, this appears to be a natural silting up of the depression, its generally dark colour and humic content an indication of rotting vegetation in wet conditions.

The plough-damaged remnants of the encircling clay bank (203) are visible in patches within this trench, although somewhat more fragmentary than in Trench 1. It appears to have been ploughed-out completely to the east (photo 15 & 16). Due to the ploughing horizon there is a 1.2m gap between the visible edge of the depression cut (210) and the first evidence of the clay bank (203), so a direct relationship is not certain, but clearly implied. The bank material is very similar to that recorded within Trench 1 (103), consisting of a firm light-grey sandy-clay, at most 0.04m thick. The width of the bank is uncertain at this point, as it was only visible in the western section and at a point where the trench turned a right-angle, so a width relative to the central depression could no be measured.

No cut archaeological features were recorded within the revealed subsoil outside the line of the bank, but two features (206 & 208) were recorded within the line of the bank itself. As the bank had been ploughed away at this point a relationship between these features and the bank could not be established, although the features clearly underlay the topsoil (201). Feature 206 was a somewhat irregular, but generally sub-oval, feature with shallow irregular sides and a concave base (photo 17). It measured 0.34m by 0.22m and 0.06m deep. It contained a single fill (205) of dark grey-brown clayey-silt with the occasional small to medium sized angular stone and charcoal fleck. No finds were recovered from 205. The irregular nature of this feature may be an indication of a natural origin, such as the remnants of burrowing or root activity for example, although this remains the only possible archaeological feature other than the bank (203) and depression (210). Charcoal flecks also appear to be a characteristic of the natural fills in this specific area, see below. Feature 208 was an irregular curvilinear feature with steep but irregular sides and an irregular base (photo 18). It measured 1.55m long, 0.5m wide and 0.29m deep. It contained a single fill (207) of light-grey mottled sandy-clay. The clearly irregular nature of this feature is such that it is considered to represent root action.

As was noted within Trench 1, the subsoil within this trench (204) included short (up to 0.4m long) irregular curvilinear dark-brown soil patches suggesting evidence of root action within the subsoil. However, these soil patches commonly contained small amounts of charcoal fleck inclusions, possibly evidence of the vegetation having been burnt (which could happen through organised vegetation clearance or even natural causes).

Two large anomalies were identified within the line of this trench on the geophysical survey results (Figure 10), often indicative of cut features such as pits. However no such features were revealed cutting into the natural subsoils in these areas.

#### Trench 3 (Figures 11 & 14)

Trench 3 was the shortest trench, and located to investigate more of the interior of the monument. The sequence of stratigraphy within this trench was perhaps the most complex of the trenches.

In common with the other trenches, the cut of the central depression (312) showed a slight curve in plan along its upper edge, although this edge was uncertain in places due to the material through which it cut (see 307/308 below). In profile the slope was moderate to shallow over a distance of 1.2m, slightly stepped and concave with a gentle break of slope on to a flat base with the occasional undulation and a very slight and gradual rise towards the centre. The central area appears to have been originally dug down through the subsoil layers (314) and onto the harder mudstone bedrock layers (315) that were revealed across the base of the cut (photos 19, 20, 24, 26, 27 & 28).

The central depression (312) contained five fills (photo 19, 20, 21, 26 & 27). The lowest fill (306) was a thin (0.05m thick) layer of dark brown-black humic clayeysilt, with the occasional mottling caused by inclusions of orange sandy-clay subsoil. This appears to represent a naturally washed in deposit from the NW covering the slope and collecting in the slightly deeper areas at the point where the slope of the edge and the base of the feature meet. This in turn overlaid a 0.12m thick deposit of light brown-grey silty-clay (305). This was very similar in appearance to the lower subsoil/bedrock layer, which also appears to have been used to create the surrounding bank (see below 309/310). It is considered most likely that this deposit represents collapsed bank material washed into the central area. The deposit contains patches of brown-grey soil and the occasional medium sized sub-angular stone. Above this is a 0.12m thick mottled layer of mid grey silty-clay and mid brown-grey soil (304). The grey silty-clay appears to have derived from the same source as the underlying deposit and therefore may represent a further period of washed in bank or subsoil material into the depression. These deposits, for all their thickness, do not appear to have washed into the central area very far, extending at most 2.1m, which may be an indication of a later period of partial re-clearing of the central depression. The bulk of the central area contains two similar, and sometimes indistinguishable fills. The lower fill (303) was a dark brown-black, humic silty-clay, 0.15m thick, with very few inclusions except the unusual occurrence of the occasional large block of guartz and large flat slab of stone, as was also seen in Trench 1. This was overlaid by a dark grey-brown humic silty-clay (302), slightly lighter in colour and less humic than 303, with the occasional small angular stone inclusion. The

fine nature and humic content suggests these deposits developed gradually under wet conditions. No finds were recovered from any of these deposits.

There was one possible feature (316) cut into the underlying subsoil/bedrock (315) within the central depression 312. This consisted of a small pit or posthole, 0.1m by 0.15m, and 0.12m deep. It appeared to be filled with deposit 303, or at least its fill was indistinguishable from 303 and no finds were recovered. The shallow nature of the feature and the possible lack of individual fill may indicate this was a naturally occurring depression in the underlying deposit 315.

After a gap of 0.8m from the upper edge of cut 312 are two deposits that appear to represent the remains of the surrounding bank material (photo 25 & 28). The natural subsoil (314) appears to drop away at this point, or has been cut with a gradual shallow straight cut, dropping away at least 0.16m from its highest point in between the bank material and the start of cut 312. As it drops away it is overlaid by a 0.07m thick light-grey sandy-clay (310), very similar in appearance to the natural subsoil/bedrock (315) that is revealed along the base of the central depression. As this natural subsoil/bedrock underlies the subsoil (314) on which 310 lies, it appears to have derived from redeposited material taken from the excavation of the central depression (312) used to form part of the bank makeup. This in turn was overlaid by a light brown-grey sandy-clay (309) representing a more mixed deposit of redeposited subsoil/bedrock material.

The sometimes uncertain edge of cut 312 is caused by apparent changes in the subsoil at this point, however these subsoils in turn were shown to be elements of a the fill of an elongated hollow (313). This hollow was located midway within the trench comprising an irregular concave hollow *c*.1m wide and 0.32m deep (photo 22 & 23). Towards the base of the hollow was a series of thin dark-grey gritty-clay deposits (311) overlaid by a firm light orange sandy-clay (308) that was also visible as a thick deposit within the illustrated section (Figure 14). This in turn was overlaid by a very mixed light grey-brown sandy-clay (307), into which the edge of 312 was cut. Due to its mixed nature the limits of 307 were often difficult to determine, and the interface with 308 is uncertain at the point at which they appeared in the illustrated section. Both 307 and 308 appear to be mixed subsoil deposits, and their occurrence on top of the darker soil of 311 is reminiscent of the processes of deposition caused by a collapsed tree bowl. What is unclear is if the occurrence of the edge of 312 at the point of this possible tree bowl is fortuitous or not.

#### CONCLUSION FROM EXCAVATION RESULTS OF PRN 3924

The monument consists of a central circular hollow, 14m in diameter. The edges were cut away with a very gradual slope down through the softer subsoil on to the upper reaches of the bedrock. The maximum depth recorded was 0.35m and the original ground levels visible in the sections suggest it is unlikely to be too much deeper than that originally. The base of the hollow was relatively flat and in the areas excavated, was devoid of any definite cut features. In every trench a clay bank, made up principally from the material excavated from the central depression, surrounded the central hollow. The bank has been severely damaged by past ploughing, to a point where it is rarely greater than 0.04m in height. Two possible postholes were recorded, both within the area of the surrounding bank, although the northernmost lay in an area of root disturbance and may be a continuation of that. Given its location, the southernmost possible posthole may be related to the use of the monument, but a lack of finds or any distinctive fill makes this inconclusive.

The fine nature and humic content of the fills of the central hollow indicate it gradually silted up in wet conditions, with the occasional period of bank collapse/slippage evidenced to the west. Although the hollow no longer collects water, it appears from these fills that it would have been wet inside, certainly after it fell out of use. The very dark colour of the fills may be as a result of decaying vegetation in wet conditions, but the occurrence of charcoal in root hollows within Trench 2 may be an indication of the occasional burning of the surrounding vegetation that may have resulted in the darker colour of the fills, although the date and deliberate nature of this is still debatable.

On the surface earthworks such as this are often interpreted as shafts and wells of various periods, hengi-form monuments, collapsed mines or extraction pits, old ponds, natural sink holes and of course pond barrows. Excavation has proved this is clearly not a natural feature, neither does it represent a collapsed mine, extraction pit, shaft or well. The central hollow and lack of external ditch suggest it is not a hengi-form monument. It remains a possibility that the feature may represent an old pond, however the careful nature of its construction would perhaps argue against this, a pond has been dug in the corner of the field a short distance to the NE, which is both deeper and more irregular in shape.

A general description for pond barrows, as included on p6, consists of a central depression ranging from 0.2m to 1.1m deep, mostly circular and occasionally oval, with a flat centre and regularly sloping sides. Around the depression is usually a continuous bank varying from 0.1m to 0.6m high, and up to 5m wide, constructed mainly from material derived from the excavation of the central depression. There are a few known examples with entrances through the banks and outer ditches, although these are rare. Most excavations have revealed internal pits or shafts, although the distribution of these is varied. An early excavation at Ballard Down, Dorset suggests the interior may have been featureless, other excavations have revealed pits with pottery, some containing cremations, and one site at Wilsford revealed a single central shaft up to 30m in depth, which had produced a weathering cone at the top 12m wide.

There is a clear correlation between the known characteristics of pond barrows with this excavated monument, although it does lack any clear evidence of internal pits and an accompanying barrow cemetery. There is clearly an unusual cluster of these monuments in this area. It must be noted however that relatively few pond barrows have been excavated, and none have been identified in Wales to date.

#### DISCUSSION

Topographically the pond barrows of southern England tend to be sited on rolling landscapes in prominent locations, but rarely on hilltops or elevated positions. All seven monuments examined during this project, and the eighth suggested site at Rhos Crug-ebolion, follow the topographic pattern of being sited on prominent locations in an undulating landscape, but not on the hilltops themselves. Clusters of pond barrows, as would be suggested here, are unusual, but not unknown in southern England. However, a common characteristic of the known pond barrows is a spatial association with clusters of other Bronze Age barrows. Dependent on the identification of the numerous circular features at Blaenffynnon, associated Bronze Age ritual sites are known, but relatively sparse compared to the clusters identified in southern England. A prominent round barrow (PRN 3931) occupies the summit at Blaenffynnon, with a possible adjacent standing stone, a further standing stone (PRN 1070) lies within 300m of the Blaen Gors monuments, and round barrows lie within 700m to the NW of the Caer Hen Feddau (PRN 1228) and Fron Haul (PRN 1126) monuments. Several isolated round barrows have been recorded throughout the landscape within c.2km of these monuments, which may be an indication that further as yet unidentified or destroyed barrow sites are present in the area (Figure 2).

Archaeologically investigated examples of pond barrows in the Dorset and Wiltshire area display a range of uniform attributes, namely a circular or oval central hollow encircled by a bank. However, even in the relatively few that have been investigated archaeologically, there appears to be a subtle but wide variety of features, from the occurrence of pits and shafts within the hollows, to entrances and external ditches at some sites. The size also varies considerably from 5m to 27m across, and 0.2m to 1.1m deep. The excavated monument here (Blaen Gors II, PRN 3924) displays clear correlations with pond barrows recorded in the Wiltshire/Dorset area, albeit with an absence of internal pits, although given the area sampled within PRN 3924 and the suggestion of some pond barrows being devoid of pits anyway, this is perhaps not so surprising. The cluster of these sites within 4km of each other clearly suggests an association between them, although the geophysical survey results of the remaining four monuments (PRNs 3923, 8049, 8050 & 8051) appear to display characteristics that distinguish them from the excavated monument. There are suggestions of external ditches at the Blaenffynnon monuments (PRNs 8049 - 51), and a circle of internal pits or postholes and possible outer ditch at Blaen Gors I (PRN 3923), all of which are relatively rare (although not unheard of) characteristics of pond barrows. It must be noted, however that these features suggested on the geophysical survey results do not easily correspond to features visible topographically, for instance geophysically-suggested ditches occurring in areas clearly visible as banks on the surface.

Overall there appears to be clear correlations between the known pond barrows of southern England and the monuments surveyed during this project. In terms of distribution many of the known examples of pond barrows occur in Dorset and Wiltshire, with some in Berkshire and Oxfordshire and as far east as Norfolk. There appears to be three main concentrations, around Avebury and Stonehenge in Wiltshire and Winterbourne Abbas in Dorset. Because of these concentrations they are often thought of as distinctive features of the "Wessex Culture", suggesting a social or cultural link between these sites. It should be noted that the Wiltshire/Dorset area has been the centre for barrow studies and perhaps it is not surprising the greatest concentrations lie in that area, and such monuments would be difficult to recognise when ploughed-damaged, but a cluster of such monuments as far west as the Carmarthenshire/Pembrokeshire border appears remarkable. It may be of note that these monuments lie within clear visual range of the Preseli hills, which themselves contain a wide range of significant Bronze

Age sites and is regarded as an area of some significance during that period. The outcrops of Carn Meini are clearly visible from the Blaenffyynnon and Blaen Gors monuments at least, and it is from that area that the bluestones of Stonehenge may have originally been quarried (albeit possibly at some point between 2400 BC and 2000 BC, 500 years or more before the supposed date of pond barrows in the Stonehenge area).

Only one pond barrow has been radiocarbon dated, which came from the Wilsford shaft, dated to 1201±29 RCYBC, although one early date of 2690±80 RCYBC also came from one of the lower fills. The occasional pottery find and associations with other barrows tends to place these monuments in the second half of the 2<sup>nd</sup> millennium BC, the Early to Mid Bronze Age. The rate of deposition within the Wilsford shaft and pottery range at Winterbourne Steepleton suggests a life-span of perhaps two or three centuries. The relative isolation of these Carmarthenshire/Pembrokeshire monuments from other pond barrows of the Wessex culture may be an indication that these monuments, although related, do not necessarily date to the same period of use or perform an identical function. Indeed, there appears to be enough of a distinction about these monuments, from the lack of pits at PRN 3924, the circle of pits at PRN 3923 and possible ditches and clustering of monuments at Blaenffynnon (PRNs 8049 - 8051) to indicate possible differences from those normally associated with the Wessex Culture. The distinctions between the individual monuments in this Carmarthenshire/Pembrokeshire area also highlight a need for further intrusive archaeology in order to better understand their function, date and associations and possible identification of a new monument type.

#### SOURCES

#### Published

Anon, 1996, Lake Down, Near Wilsford, Wiltshire. Report on geophysical survey of three pond barrows. <u>http://www.eng-h.gov.uk/reports/wilsford/</u>
British Geological Survey, 1994, The Rocks of Wales 1:250,000.
Clark A J, 1996, Seeing Beneath the Soil (2<sup>nd</sup> edition). Batsford, London.
Lynch, F., Aldhouse-Green, S & Davies, JL, 2000, Prehistoric Wales. Sutton
Parker Pearson, M, 2005, Bronze Age Britain. Batsford, London

RCHME, 1979, Stonehenge and its Environs. Edinburgh

### Unpublished

Murphy, K, 2004, Assessment of Prehistoric Defended Enclosures 2004-5, Dyfed Archaeological Trust Report No. 2004-100

#### Maps

Anon 1841 *Clydey Parish Tithe Map* Anon 1844 *Llanfyrnach Parish Tithe Map* Anon c.1850 *Llanwinio Parish Tithe Map* Ordnance Survey 1810 *Original Surveyors Drawing, Sheet 185* Ordnance Survey 1890 1<sup>st</sup> edition 1;2500 Carmarthenshire XXI.15 Ordnance Survey 1890 1<sup>st</sup> edition 1;2500 Pembrokeshire XIX.3 Ordnance Survey 1890 1<sup>st</sup> edition 1;2500 Carmarthenshire XXI.12 Ordnance Survey 1890 1<sup>st</sup> edition 1;2500 Pembrokeshire XII.16 Ordnance Survey 1907 2<sup>nd</sup> edition 1;2500 Pembrokeshire XII.15 Ordnance Survey 1907 2<sup>nd</sup> edition 1;2500 Pembrokeshire XIX.3 Ordnance Survey 1907 2<sup>nd</sup> edition 1;2500 Pembrokeshire XIX.12 Ordnance Survey 1907 2<sup>nd</sup> edition 1;2500 Pembrokeshire XIX.12

#### Websites

English Heritage's Monuments Protection Programme 1989 <u>http://www.eng-h.gov.uk/mpp/mcd/mcdtop1.htm</u>

PFRS Follow-up: Possible Pond Barrows Geophysical Survey & Archaeological Evaluation 2010



Figure 1: Location map, based on the Ordnance Survey

Reproduced from the 1995 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No AL51842A

Dyfed Archaeological Trust



Figure 2: Distribution of known and suspected Bronze Age features and finds in the surrounding area.

Reproduced from the 1995 Ordnance Survey 1:50,000 scale Landranger Map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright Dyfed Archaeological Trust, The Shire Hall, Carmarthen Street, Llandeilo, Carmarthenshire SA19 6AF. Licence No AL51842A



Figure 3: Topographic survey results for PRN 3923. Contours are at 0.2m intervals. The field slopes down from north to south.





Figure 4: Processed geophysical survey results of PRN 3923 in greyscale. Measurement scale is in metres.







**Figure 6:** Geophysical survey results of PRN 3923 overlaid with topographic detail. Red marks the top of slope, yellow the base of the slope.



**Figure 7**: Topographic detail of PRN 3923 overlaid with the main anomalies identified from the geophysical survey. Red marks magnetically positive anomalies, blue marks magnetically negative anomalies and green marks magnetically bipolar anomalies.



**Figure 8**: Topographic survey results for PRN 3924. The outline of the monument is drawn as it was seen on the ground surface. Figure 11 shows the dimensions of the monument as recorded by excavation. Contours are at 0.1m intervals. The field slopes down from north to south.

PFRS Follow-up: Possible Pond Barrows Geophysical Survey & Archaeological Evaluation 2010



Figure 9: Processed geophysical survey results of PRN 3924 in greyscale. Measurement scale is in metres.

Dyfed Archaeological Trust



**Figure 10:** Geophysical survey results of PRN 3924 overlaid with some topographic detail, as the changes in surface heights are so slight only the outline of the monument is included (red marks the top of bank, yellow marks the base of slope), and these are the pre-adjusted outline based only on surface topography. The excavation trenches are shown in blue, and the red dot represents the modern telegraph post.







Figure 12: Southeast facing section of PRN 3924 Trench 1, showing the central depression and outer bank.

2m

0







Figure 14: Southwest facing section of PRN 3924 Trench 3.

Dyfed Archaeological Trust

38

PFRS Follow-up: Possible Pond Barrows Geophysical Survey & Archaeological Evaluation 2010



**Figure 15:** Topographic survey results for PRNs 8049, 8050 & 8051, also showing the smaller circular features identified during the survey, and nearby Crugelwyn round barrow (PRN 3931). Contours are at 0.25m intervals. Green marks the edge of thick vegetation.



Figure 16: Processed geophysical survey results of PRNs 8049, 8050 & 8051 in greyscale. Measurement scale is in metres.

Dyfed Archaeological Trust



Figure 17: Processed geophysical survey results of PRNs 8049, 8050 & 8051 in greyscale, overlaid with local topographical features.

Dyfed Archaeological Trust



**Figure 18:** Topographic detail of PRNs 8049 - 8051 overlaid with the main anomalies identified from the geophysical survey. Red marks magnetically positive anomalies, blue marks magnetically negative anomalies.

Dyfed Archaeological Trust



Photo 1: SSW facing shot of Blaen Gors I, PRN 3923



Photo 2: SSW facing shot of Blaen Gors I, PRN 3923.



Photo 3: SW facing of PRN 3924, Trench 1.



Photo 4: SSW facing shot of PRN 3924, Trench 1.



**Photo 4**: NE facing shot of PRN 3924, Trench 1. Showing deposits 105 & 102. 2 x 1m scale.



**Photo 5**: SW facing shot of PRN 3924, Trench 1. Showing deposits 105 & 102. 2 x 1m scale.



**Photo 6**: PRN 3924, Trench 1 - SW facing shot of cut 106 post excavation. 2 x 1m scale.



**Photo 7**: PRN 3924, Trench 1 - SE facing shot of cut 106, and 101, 102 & 105. 3 x 1m & 1 x 0.5m scales.



**Photo 8**: PRN 3924, Trench 1 – NW facing section showing filling deposit 102 and the few large stones found within. 1 x 1m & 1 x 0.5m scale.



**Photo 9:** PRN 3924, Trench 1 – NW facing section showing deposit 103, the outer bank deposit. 3 x 1m & 1x 0.5m scale.



**Photo 10:** PRN 3924, Trench 1 – NW facing section, a close-up of deposit 103. 1  $\times$  1m & 1  $\times$  0.5m scale.



**Photo 11**: PRN 3924, Trench 1 – SE facing section, showing posthole 109. 1 x 0.5m scale.



**Photo 12**: PRN 3924, Trench 2 – NE facing shot of Trench 2, showing deposit 202 filling depression 210. 2 x 1m scale.



**Photo 13**: PRN 3924, Trench 2 – NW facing shot of deposit 202 filling depression 210. 3 x 1m scale.



**Photo 14**: PRN 3924, Trench 2 – NW facing shot of deposit 202, depression 210 and the SE facing section. 3 x 1m & 1 x 0.5m scale.



**Photo 15**: PRN 3924, Trench 2 – SW facing shot of the section of Trench 2, showing outer bank deposit 203. 3 x 1m & 1 x 0.5m scale.



**Photo 16**: PRN 3924, Trench 2 – SW facing shot showing a close-up of deposit 203.



**Photo 17:** PRN 3924, Trench 2 – possible posthole/natural feature 206. 1 x 0.5m scale.



Photo 18: PRN 3924, Trench 2 – NE facing shot of root action 208. 1 x 1m & 1 x 0.5m scale.



Photo 19: PRN 3924, Trench 3 – SE facing shot of dark deposit 302 filling 312. 2 x 1m scale.



Photo 20: PRN 3924, Trench 3 – NW facing shot of dark deposit 302 filling 312. 2 x 1m scale.



**Photo 21**: PRN 3924, Trench 3 – NW facing shot of half-sectioned deposit 302. 2 x 1m scale.



**Photo 22**: PRN 3924, Trench 3 – NE facing shot of the possible tree-bowl deposits 307 & 308, confusing the edge of 312. 1 x 1m scale.



**Photo 23**: PRN 3924, Trench 3 – SW facing shot of a section through the possible tree bowl deposits. 1 x 1m & 1 x 0.5m scale.



**Photo 24**: PRN 3924, Trench 3 – NW facing shot of the trench, post excavation. 3 x 1m scale.



**Photo 25**: PRN 3924, Trench 3 – NE facing shot of bank deposits 309 & 310 visible in the section. 1 x 1m & 1 x 0.5m scale.



**Photo 26**: PRN 3924, Trench 3 – NE facing shot of deposits 302, 303, 304, 305 and 306 within cut 312. 1 x 1m & 1 x 0.5m scale.



Photo 27: PRN 3924, Trench 3 – NE facing shot, close-up of deposits 302 & 303 within 312. 1 x 1m & 1 x 0.5m scale.



**Photo 28**: PRN 3924, Trench 3 –NE facing shot of the section showing the bank remains and the edge of cut 312. 3 x 1m & 1 x 0.5m scale.



**Photo 29**: NE facing shot of PRN 8049.



Photo 30: ENE facing shot of PRN 8049.



Photo 31: E facing shot of the interior of PRN 8049.



Photo 32: SW facing shot of the interior of PRN 8049.



Photo 33: WSW facing shot of PRN 8050.



Photo 34: SW facing shot of PRN 8050.



Photo 35: SW facing shot of PRN 8051.



Photo 36: NE facing shot of PRN 8051.



**Photo 37**: SSW facing shot of the southernmost unidentified circular feature within the survey area.



**Photo 38**: WSW facing shot of the northernmost unidentified circular feature within the survey area.



**Photo 39**: W facing shot of one of the circular features identified on the common land close to PRNs 5049 – 5051. 1 x 1m scale.



**Photo 40**: WSW facing shot of one of the circular features identified on the common land close to PRNs 8049 – 8051. 1 x 1m scale.



**Photo 41**: WSW facing shot of one of the circular features identified on the common land close to PRNs 8049 – 8051. 1 x 1m scale.



**Photo 42**: WNW facing shot of one of the circular features identified on the common land close to PRNs 8049 – 8051, partly covered in longer vegetation.



**Photo 43**: SW facing shot of possible standing stone remains on the common land close to PRNs 8049 – 8051. 1 x 1m scale.

# POSSIBLE POND BARROW NEAR LLANFYRNACH, PEMBROKESHIRE GEOPHYSICAL SURVEY & ARCHAEOLOGICAL EVALUATION

## RHIF YR ADRODDIAD / REPORT NUMBER 2010/26

## Rhagfyr 2010 December 2010

Paratowyd yr adroddiad hwn gan / This report has been prepared by Philip Poucher

Swydd / Position: Archaeologist

Llofnod / Signature .....

Pom

...... Dyddiad / Date 31/03/11

Mae'r adroddiad hwn wedi ei gael yn gywir a derbyn sêl bendith This report has been checked and approved by James Meek

ar ran Ymddiriedolaeth Archaeolegol Dyfed Cyf. on behalf of Dyfed Archaeological Trust Ltd.

Swydd / Position: Head of Field Services

James Musle

Llofnod / Signature .

Dyddiad / Date 31/03/11

Yn unol â'n nôd i roddi gwasanaeth o ansawdd uchel, croesawn unrhyw sylwadau sydd gennych ar gynnwys neu strwythur yr adroddiad hwn

As part of our desire to provide a quality service we would welcome any comments you may have on the content or presentation of this report

